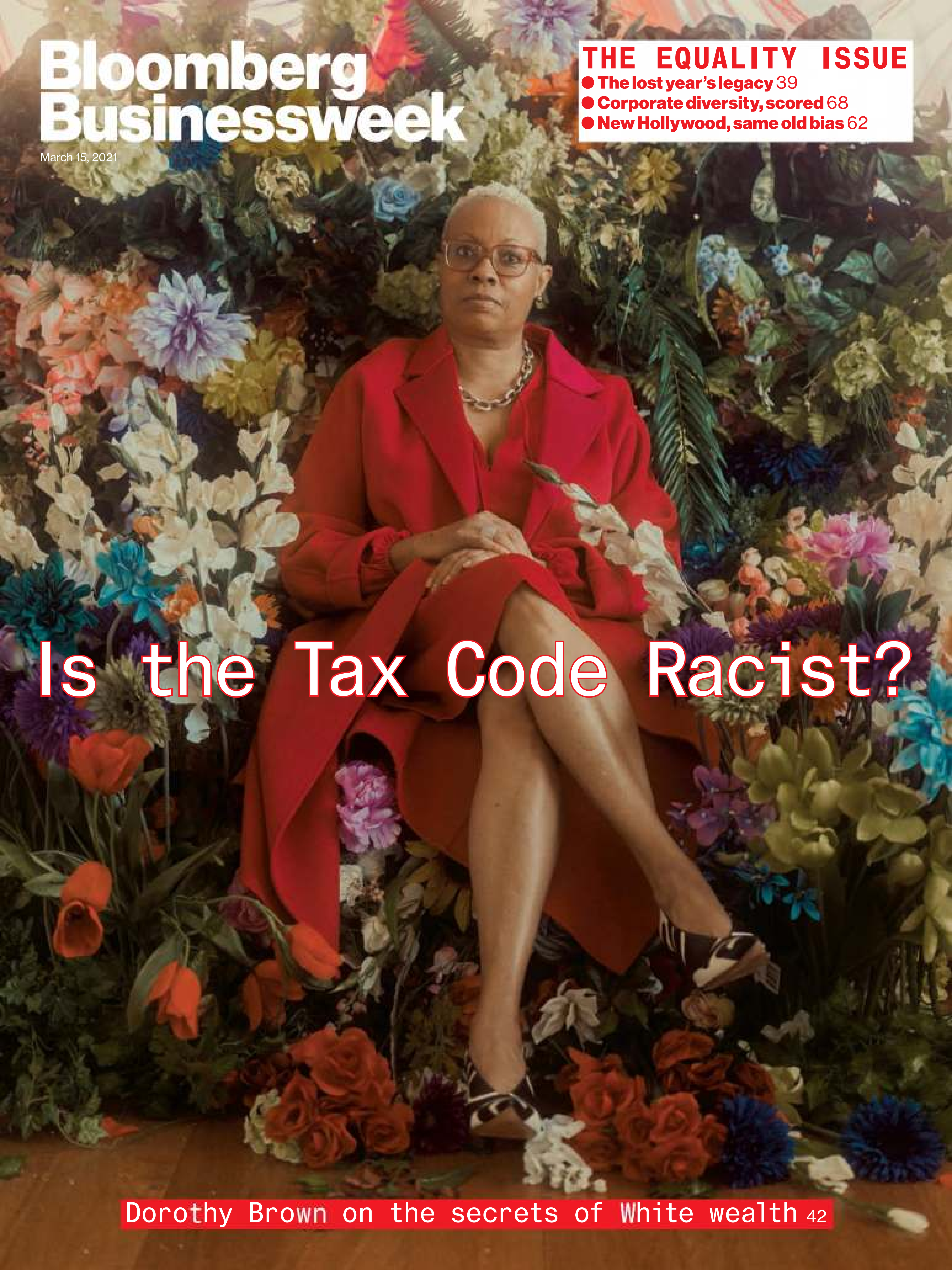
Bloomberg Businessweek
March 15, 2021

THE EQUALITY ISSUE



Is the Tax Code Racist?

Dorothy Brown on the secrets of White wealth 42

HOW RYDER IS SOLVING TALENT MANAGEMENT CHALLENGES WITH SAFETY, INNOVATION, AND COMMUNICATION

The key to developing a best-in-class talent management plan is to understand the challenges the supply chain industry is facing. According to the US Bureau of Labor Statistics, it is estimated that the industry needs to fill about 1.5 million jobs through 2022. However, demand for supply chain talent outpaces supply six to one. Moreover, keeping up with the demands are tough especially when it is exacerbated by a global pandemic.

At Ryder, overcoming challenges companies are facing such as recruiting, training, and retaining a strong driver and warehouse workforce, and investing in innovative technology that creates a productive workforce has allowed the company to become an "Employer of Choice" in the industry.

Focus on Safety and Appreciation

Safety of employees, customers, and the communities we work in has always been a top priority at Ryder. And, with the coronavirus pandemic changing how we all work, safety continues to be at the top of our list. Even pre-covid, our focus on safety has decreased employee turnover. Today, that focus continues with new measures to protect our workers now and in the future.

For example, in direct response to the pandemic we leveraged our vast supplier network to procure personal protection equipment (PPE) to keep all warehouse workers and drivers safe. New protocols were also put in place including daily temperature checks, contactless deliveries, as well as cab and trailer safety measures. Ryder is also giving workers six hours of paid time off to get the COVID-19 vaccine.

Additionally, we have developed programs that reward our employees for exemplary work - including incentive pay, Driver of the Year, Top Tech, and Warehouse Employee of the Year. Additionally, because our drivers and warehouse workers are essential employees we provided $30 million in bonuses to nearly 30,000 of our frontline employees in appreciation for their extraordinary efforts in 2020.

Investing in Technology

Investments in new technology for labor management is also critical. This technology provides performance metric visibility, labor management, and data automation within that enables stakeholders to build labor strategies that improve recruiting, training, and efficiency.

One technology is Ryder OpsBox™, an analytics platform for labor management that provides floor visuals for employees, daily metrics, workforce planning, and customer visibility dashboards. Furthermore, Ryder OpsBox provides an automated, accurate platform that drives analytics and increases labor productivity more than 10%.

As a result of implementing technologies, companies can gain visibility into performance metrics down to the single employee level, performance analysis, and contractual key performance indicators. This can result in double-digit labor productivity improvements, as well as increased employee engagement and improved retention.

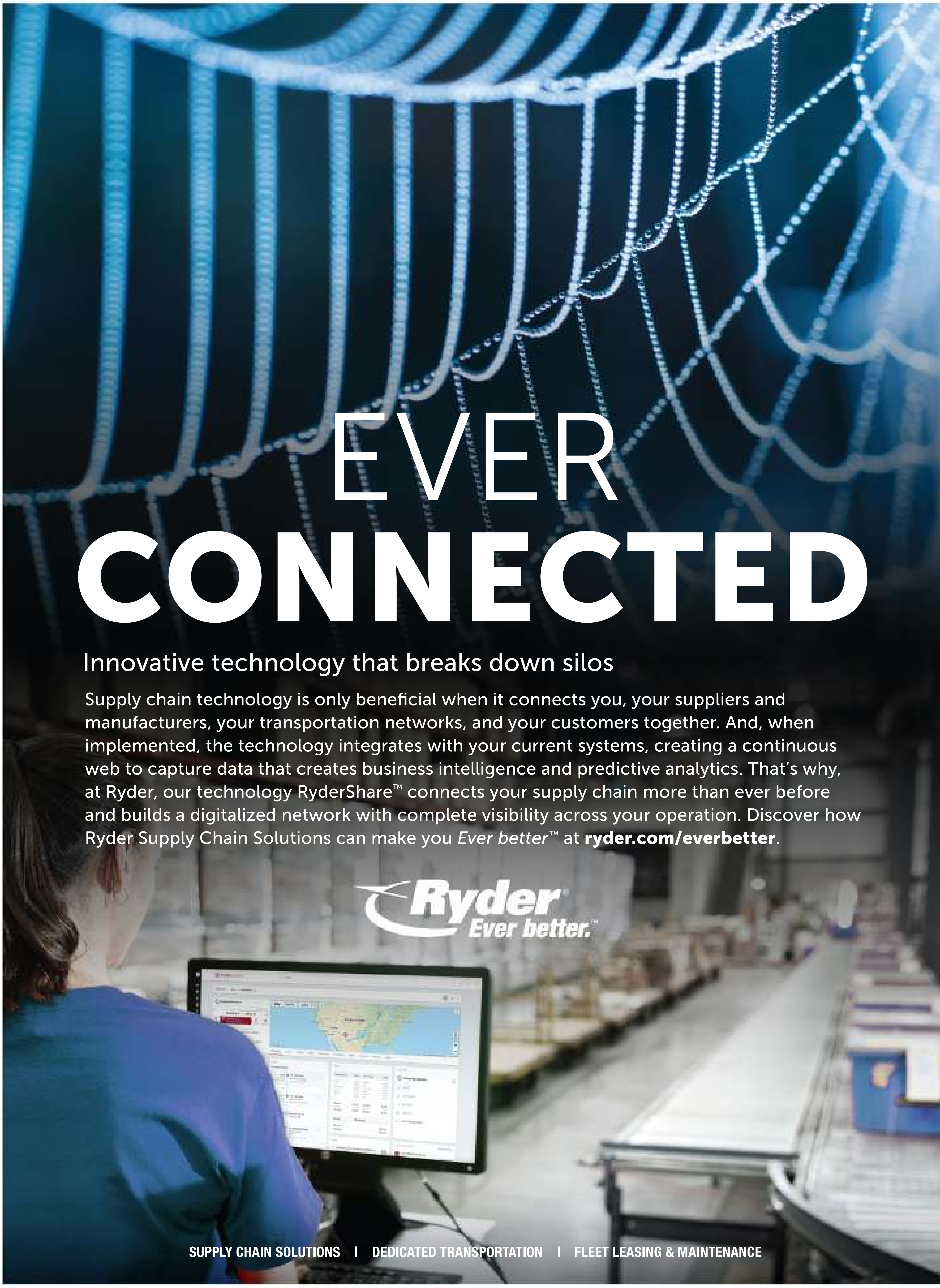
Surveys Pinpoint Challenges and Gains

Opening the lines of communication with both new and veteran drivers and warehouse workers ensures expectations are met and concerns addressed. At Ryder, we do this by conducting entrance, stay, and exit surveys.

Entrance surveys ensure the on-boarding process is smooth and the new employee's expectations are consistent based on a clear job description. Stay surveys allow Ryder to continuously improve the working environment for drivers and warehouse workers, which has led to an increase in retention. Exit surveys, like stay surveys, allow us to correct challenges that may exist. Surveys are provided during online training, and we have experienced a greater than 85% completion.

Become an Employer of Choice

The strategies highlighted above have been tested and proven over the years in complex, diverse, and global supply chains. And, are why Ryder is regularly recognized as an Employer of Choice in the industry. By continuously improving and investing in a talent management strategy, as well as communicating regularly with employees, companies can maintain a strong pool of qualified recruits, streamline training, and lower turnover rates. The strategies highlighted above have been tested and proven over the years in complex, diverse, and global supply chains. And, are why Ryder is regularly recognized as an Employer of Choice in the industry. By continuously improving and investing in a talent management strategy, as well as communicating regularly with employees, companies can maintain a strong pool of qualified recruits, streamline training, and lower turnover rates.


EVER
CONNECTED
Innovative technology that breaks down silos
Supply chain technology is only beneficial when it connects you, your suppliers and manufacturers, your transportation networks, and your customers together. And, when implemented, the technology integrates with your current systems, creating a continuous web to capture data that creates business intelligence and predictive analytics. That's why, at Ryder, our technology RyderShare™ connects your supply chain more than ever before and builds a digitalized network with complete visibility across your operation. Discover how Ryder Supply Chain Solutions can make you *Ever better*™ at **ryder.com/everbetter**.
Ryder
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SUPPLY CHAIN SOLUTIONS | DEDICATED TRANSPORTATION | FLEET LEASING & MAINTENANCE

Photographed responsibly by Kimmy with a tripod


When everything around us has been interrupted. Uninterrupted service is peace of mind.
Kimmy from Customer Support is responding to a **500%** increase in daily call volume. No matter what.
We keep on. So you can keep on.
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Bloomberg Businessweek

March 15, 2021

Clockwise: Marco Castillo and Rodrigo Campos Hernandez, Kerdchoke Kasamwongjit, and Dalia Al Faghal encountered homophobia in Costa Rica, Thailand, and Egypt, respectively

CLOCKWISE FROM TOP: PHOTOGRAPH BY OZZIE HOPPE FOR BLOOMBERG BUSINESSWEEK. PHOTOGRAPH BY WATSAMON TRI-YASAKDA. PHOTOGRAPH BY REBECKA UHLIN FOR BLOOMBERG BUSINESSWEEK

SPECIAL ISSUE

The Equality Issue

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■ COVER TRAIL

How the cover gets made

❶

"So this week is our annual Equality Issue!"

"Kind of a huge bummer that we haven't figured this out yet."

"Yep, and turns out some of these problems are much more deeply entrenched than we ever thought. Even the tax code is racist."

"Well, that's a cover line right there!"

"Good thought, and the subject of our story is going to sit for a shoot."

[Next week]

"The shoot just came in, and…it is SO GOOD. Like, fashion-magazine good. Four wardrobe changes. Flowers galore. It's pure 'chef's kiss.'"

"For once, I am speechless."

"If only a cover shoot could solve the world's inequities."

Cover: Photograph by Braylen Dion for *Bloomberg Businessweek*

TECHNOLOGY: PHOTOGRAPH BY KELSEY MCCLELLAN FOR BLOOMBERG BUSINESSWEEK

By Benedikt Kammel

● Global coronavirus cases have exceeded

117m

and more than 2.6 million people have died. After a sluggish start, vaccination campaigns are gaining momentum in many countries; 319 million shots have been given worldwide. Germany says it aims to inoculate 10 million people a week by the end of March.

● Joe Biden's $1.9 trillion Covid relief bill cleared its final hurdle in the House on March 10. The president plans to sign the legislation, his first major political victory, on March 12.

● Soldiers guarded the Hennepin County Courthouse in Minneapolis, where the trial of former police officer Derek Chauvin, accused of murdering George Floyd, began on March 8.

● Tesla is building a more than 100-megawatt energy storage project in Angleton, Texas, the state whose ailing electric grid almost collapsed in February.

● Saudi Arabia said on March 8 that some of the world's most protected oil infrastructure was attacked by missiles and drones.

While the strikes were intercepted, the barrage of assaults, claimed by Iran-backed Houthi rebels, helped lift oil above $70 a barrel.

● General Electric plans to sell its aircraft leasing business to AerCap Holdings for about

$30b

The transaction signals the end of GE Capital, the once-mighty finance unit, whose remnants will be folded into the broader company.

● Brazil's former president, Luiz Inácio Lula da Silva, 75, is on the cusp of rehabilitation.

A supreme court judge tossed out criminal convictions against Lula, as he's known, on March 9. The former leader is revered for lifting millions out of poverty, but his administration was plagued by scandal.

● "I just didn't want to be alive anymore. And that was very clear and real and frightening."

Meghan Markle, interviewed with her husband, Prince Harry, by Oprah Winfrey on March 7, spoke about her oppressed life inside the British royal family.

● Switzerland narrowly voted to ban face coverings, including the niqab and burqa worn by Muslim women, in almost all public places.

The March 7 vote was put forward by the right-wing Swiss People's Party. The government opposed the ban, arguing that the state shouldn't dictate what women wear.

● Italy's Agnelli family agreed to buy a stake in French luxury shoemaker Christian Louboutin for

€541m

($645 million). Louboutins gained a global cult following for their trademark red soles, with models such as the popular Pigalle stiletto retailing for about $840.

MINNEAPOLIS: DAVID JOLES/GETTY IMAGES. TESLA: MARK FELIX/BLOOMBERG. MARKLE: JOE PUGLIESE/HARPO PRODUCTIONS. SHOE: CHRISTIAN LOUBOUTIN

Congress Is Broken. Earmarks Might Help Spark Compromise

Just don't call them earmarks.

Plans are in the works to revive a legislative procedure in which lawmakers can tie funding in appropriations bills to specific projects–airports, bridges, museums–in their home state or district. The process will now be referred to by the serene euphemism of "community project funding," because the traditional terms (earmarking, pork, horse-trading) have come into disrepute. Whatever it's called, it's a good idea.

Earmarking got a bad rap over the years, and not without reason. Total spending on such measures rose from less than $3 billion in 1991 to $29 billion at its peak in 2006. Tales of misspent money proliferated. Favors were exchanged. Crimes were committed. You might recall a $223 million set-aside for connecting a remote Alaskan town to a yet more remote island. An uproar over this "bridge to nowhere" was one reason both parties suspended earmarks in 2011.

Such boondoggles were the exception, however. Lawmakers generally requested small amounts to solve local problems or fund workaday projects. The process often made Congress more responsive to regional needs and legislators more attentive to what they were passing. Because earmarks merely directed funds that were already being appropriated, they required no new spending and didn't add to budget deficits.

More important, they created incentives for compromise. A lawmaker looking to advance a general-interest bill could sweeten the pot by funding local initiatives favored by an opposition member. This gave the minority an interest in governing, encouraged bipartisanship, and helped resolve collective-action problems. It was often quite consequential: Both George W. Bush's Medicare expansion and Barack Obama's Affordable Care Act relied on earmarks (broadly defined) for passage.

Restoring the practice might also help Congress reclaim the power of the purse from anonymous executive branch bureaucrats. It might ease the drama and chaos that's attended budget fights in recent years. It might even encourage moderation by giving congressional leaders more tools to discipline the loony fringes.

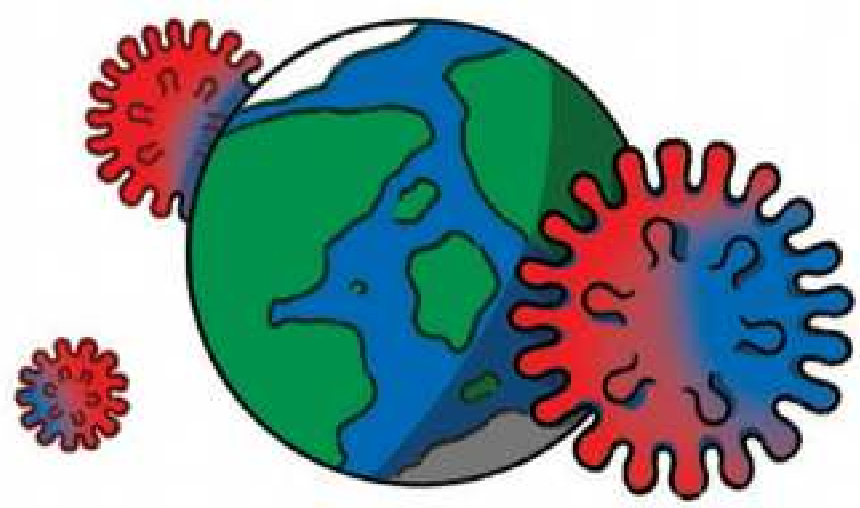
Conceivably, upholding the earmark moratorium might still be worth it to get government spending under control. Yet no one would mistake the years that followed the ban for an era of fiscal discipline. Partly that's because lawmakers have devised more opaque and informal methods of wrangling bureaucrats to their ends. But mostly it's because the vast majority of federal spending–Medicare, Social Security, and so on–proceeds on autopilot; earmarks have never made up more than a minuscule fraction of a given budget.

On balance, the benefits to earmarking far outweigh the drawbacks. Many prudent reforms had already been put in place before the ban, including requirements that lawmakers attach their names (and those of any beneficiaries) to earmarks and publish the details on their websites. These should be reinstated as the practice is phased back in. House Democrats are mulling further reforms, including capping the total funding for such projects at 1% of discretionary spending, limiting the number of requests per lawmaker, requiring evidence of community support for such initiatives, and prohibiting members and their relatives from financially benefiting from them. Such rules amount to codifying common sense.

Restoring earmarks won't resolve all of the U.S.'s political problems, of course. But from the Compromise of 1790 to pandemic relief, getting things done in Congress has always required pragmatism, compromise, and highly imperfect solutions. There's no shame in that. B

For more commentary, go to bloomberg.com/opinion

■ AGENDA



▶ A Masked World

One year ago this week, the world went into lockdown, ushering in the stay-at-home era. After the U.S. declared a state of emergency, authorities on March 15 cautioned to limit public gatherings, and schools began closing.

▶ Dutch general elections on March 17 are a referendum on Mark Rutte's handling of the pandemic. The prime minister just extended restrictions to the end of the month.

▶ China releases key economic data on March 15, including industrial production, fixed-assets investment, and retail sales, pointing to a continued recovery.

▶ The Federal Reserve sets interest rates on March 17. Chair Jerome Powell will likely reaffirm his looser-for-longer stance, with no room for tightening of policy.

▶ The U.S. House Committee on Financial Services meets virtually on March 17 on the retail trading bonanza that drove shares up and burned many investors last month.

▶ FedEx reports earnings on March 18. Courier services have benefited from record package deliveries, but the cost of dropping off parcels at private homes has also shot up.

▶ Nike posts earnings on March 18. With more people around the world emerging from their homes and gyms reopening, sportswear sales stand to improve.

ILLUSTRATION BY JACKIE FERRENTINO

How the SPAC Era Will End

● A fever has swept Wall Street, and it's stretching all the limits

● By Heather Perlberg

Whenever greed meets reality and giddy markets collapse, Wall Street pros usually say they sensed the end was coming. The warning signs were so familiar, they belatedly confess, that it was difficult to believe anyone could miss them. The chain of fools was running out.

This can't last. Today those sober words are being whispered again in American finance, this time about one of the biggest money grabs in the business, SPACs. Once dismissed as sketchy Wall Street arcana, these publicly traded shells are created for one purpose: to merge with real businesses that really make money. Nowadays everyone who's anyone seems to be doing one, from Alex Rodriguez to Paul Ryan. The count from the past 15 months stretches to 474 SPACs. Together they've raised $156 billion.

Picture GameStop Redditors meet *The Wolf of Wall Street*, and you get the idea. The celebrity-studded spectacle will prove that either SPACs—officially, special purpose acquisition companies—are transforming the way finance gets done or the market mania is spiraling out of control. Maybe both.

Privately, and increasingly publicly, financial professionals warn this will end badly for the investing public. To cynics, the only questions are when and how badly. More and more members of the SPAC ecosystem—a matrix of hedge funders, private equity dealmakers, bankers, lawyers, and assorted promoters—see the excesses building. They point to you've-got-to-be-joking valuations, questionable disclosures, and, most worrisome, a growing misalignment of interests.

On one side of the divide are the people minting SPACs and getting rich now. On the other side are the people buying into them and hoping to get rich later.

The bad omens are all around. A private equity executive who was eyeballing a list of about 20 SPACs, a mere week's worth at the time, told me he figured five might be worth investing in. An analyst at a major bank told me he's thinking

PHOTO ILLUSTRATION BY 731; PHOTOS: GETTY IMAGES (6)

about doing a SPAC. He asked, half-joking, if I wanted in. "It's just so easy," he told me.

How did we get here? Short answer: slowly, and then all at once. SPACs, also known as blank-check companies, first emerged in the 1980s and for a long time were relegated to the pink sheets, where penny stocks lurk. Until recently, they were viewed mostly as a last resort for dealmakers looking to raise money.

The pandemic changed all that, as it has so many things. On today's work-from-home Wall Street, traditional roadshows—those traveling, if-it's-Tuesday-it-must-be-Dallas sales pitches for new stocks and bonds—have become scarce. Rock-bottom interest rates have fueled the historic "everything rally" in equities, Bitcoin, what have you. Propelled by greed and boredom, millions of amateur investors, cheered on by social media, have piled into meme stocks like GameStop—and SPACs.

The numbers tell the story. In 2019, 59 SPACs raised $13.6 billion. In 2020 those figures leaped to 248 and $83.3 billion. So far this year, the totals are already 226 SPACs and almost $73 billion, with SPACs making up more than 70% of the market for initial public offerings. Along the way, such prominent financial players as Apollo Global Management Inc. and KKR & Co. have lent SPACs the legitimacy they long lacked.

Naturally, SPACs that can find great private companies to buy will pay off for all concerned. They typically have two years to do a deal and enable businesses to bypass the laborious, detail-heavy process of reaching the stock market via an old-fashioned IPO. Among the biggest of late: electric vehicle maker Lucid Motors Inc., which merged with a SPAC founded by Wall Street rainmaker Michael Klein. Their combined value at the time of the announcement quickly rose to about $57 billion—bigger than Ford Motor Co.

The dangers are the usual ones, whether the investments are meme stocks, dot-coms, subprime mortgages, or tulip bulbs: greed and hubris. Fund managers say some SPACs are betting on companies that not long ago were struggling to raise money from risk-loving private investors. It's become a seller's market; some businesses are going from one SPAC to another, shopping for better terms. Bankers have a term for the play: a SPAC-off. "People have made a ton of money, and they don't realize it's not sustainable," says Sahm Adrangi, founder and chief investment officer of Kerrisdale Capital Management, a New York hedge fund that makes short bets against companies, including SPACs.

"Sustainable" might be too generous a word for Archer Aviation Inc., the young company hoping to build helicopter-type vehicles that can whisk passengers quickly and quietly above earthbound traffic for the price of an Uber. "The flight of a lifetime, every day," its website promises. For now, from a business perspective, the aircraft is about as viable as the artist's rendering on the site. A money manager at a brand-name investment firm told me that Archer came to him last year looking for private financing. He passed. In fact, he didn't even take a meeting. As he pulled up a PowerPoint outlining the proposal, he remembered why: To him, the ▶

company looked more like a science project than a business.

Such skepticism aside, Archer Aviation has managed to land on the venerable New York Stock Exchange as if it were a Boeing Co. or Airbus SE. It got there via a SPAC orchestrated by Ken Moelis, another prominent dealmaker, who has started to raise money for three others.

Archer's good fortune is a testament to the agility of SPACs, which have a lot of wiggle room in valuing the businesses they buy. Unlike traditional IPOs, where detailed financial reports are required, SPACs can base entire deals on projections. When I reached out, a spokeswoman for Archer said it's been testing an 80%-to-scale prototype at private airfields in California. It hasn't carried pilots or passengers. The company says it will turn out 500 flying taxis by 2026. United Airlines Inc. has promised to buy at least 200, provided a range of conditions are met, to spirit passengers from Hollywood to Los Angeles International Airport. Archer says it's the only company in its space—that is, electric vertical takeoff and landing (eVOTL) aircraft—that's secured a commercial contract for orders. It also has a major auto manufacturing partner with plans to make electric cars. That, essentially, is enough for a SPAC.

The math is staggering. Only last April, a round of seed funding valued Archer at $16 million. Moelis's deal has placed a higher value on the company: $3.8 billion. In other words, in less than a year, the valuation has jumped 23,650%. "There are a significant number of SPACs betting on concepts rather than looking at real and projectable revenues," Mark Attanasio, co-founder of the $30 billion Crescent Capital Group and principal owner of the Milwaukee Brewers, says of SPACs broadly. Crescent, of course, has a SPAC, too.

On Twitter there are countless accounts fueling the SPAC boom. Dr. SPAC's features a woman in a blue bikini swimming in slow motion, her derriere framed amid a swirl of bubbles. The subject of this GIF and accompanying Twitter post: Lucid Motors, the would-be Tesla of the SPAC world. There's also Spac Tiger, Spac Guru, SPACzilla, and Bill SPACman (a nod to billionaire investor Bill Ackman, whose new SPAC has gained 30% while still searching out a deal). I direct-messaged Spac Guru, asking to talk. He got back in one minute. Six months ago, Spac Guru told me, he had one follower on Twitter. Now he has more than 75,000. He declined to divulge his identity, saying people on the internet can be crazy and unpredictable. He did say he was a retired investment banker and spends his days at a desk with nine screens, managing money for himself, his elderly mother, and his teenage son. He drums up interest in SPACs by directing followers to everything from regulatory filings to *Harvard Law Review* articles. Spac Guru said he's had followers tell him they've made enough money from SPACs to pay off their mortgages, dig out from under credit card debt, or put a family member through college. "When the sun is out, you make hay," he said.

Exuberance aside, the history of SPACs isn't on the side of the investing public. According to Bain & Co., 60% of SPACs that acquired businesses from 2016 to 2020 have lagged the fast-rising S&P 500. As of late January, about 40% of these were trading below their starting prices. (Some have fared better. DraftKings has soared almost 450% since its deal was announced in late 2019.) Many have done far worse, despite seemingly illustrious pedigrees. A SPAC backed by billionaire Tilman Fertitta and Wall Street grandee Richard Handler crashed after acquiring Waitr Inc., a would-be Grubhub. The result was a class-action lawsuit. The backers deny the allegations. No one in the SPAC game thinks this suit will be the last.

However acquisitions pan out, the odds favor SPAC sponsors and their Wall Street enablers. Sponsors typically collect a 20% bounty, known in the trade as the "promote," as well as other perks that minimize their downside. Take Lucid, the EV startup. Under its SPAC deal, Klein and his partners got 51.8 million shares and bought 42.9 million warrants at $1 a piece. At going market prices, their stock is worth about $1.3 billion. They stand to make $553 million more on the warrants.

Enthusiasm was so high that several big investors told me they had to decide within a day whether to put money down, with no chance for the usual follow-up questions. No sooner did Lucid confirm its deal than the company announced its first model would be delayed until the second half of 2021. The stock promptly swooned. Klein, for his part, just raised his seventh SPAC. He didn't return phone calls seeking comment.

"The economic incentives for serial SPAC sponsors are that if they win one and lose one, they usually still win," Crescent's Attanasio says. The economics are also good for Wall Street banks. They collect lucrative fees for advising SPACs, providing still more incentive to keep the SPAC game going. Citigroup Inc. has collected about $200 million in recent years for advising on various Klein SPACs.

Only a year ago, as the pandemic roiled world markets, shut down economies, and emptied cities, few would have predicted that SPACs would explode. Today many sense that time is running out. The U.S. Securities and Exchange Commission has been making noises about SPACs for months. After warning about potential problems in September, it came back in December with new guidance for clarifying potential conflicts and exactly how much money sponsors stand to make. "The rapid increase in the volume of SPACs represents a significant change, and we are taking a hard look at the disclosures and other structural issues surrounding SPACs," says John Coates, acting director of the SEC's Division of Corporation Finance.

Sober-minded bankers foresee this: In 12 or 18 months, as today's crop of SPACs approach the end of their 24-month life cycle, some founders will stretch for acquisitions rather than hand money back to investors. Having to lock down deals, whatever the terms, will bring an end to the days of easy money. Eventually much of the market will be washed out. Many SPAC buffs predict a kind of biblical deluge, with an ark only big enough for Wall Street A-listers. SPACs, many say, will once again fade into the background, overshadowed by IPOs or the next shiny new thing that comes along.

"Whatever stops this bull market will lay its first sights on SPACs," says Steven Siesser, a partner with law firm Lowenstein Sandler. "They'll be the first casualty." B

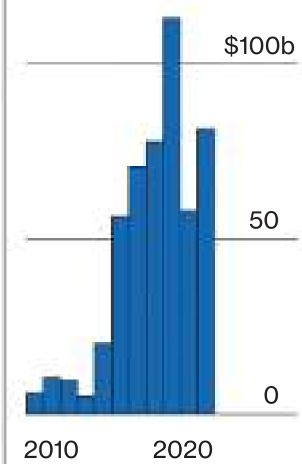
BUSINESS

China's Big Chill

Edited by
James E. Ellis

● Following its crackdown on star capitalist Jack Ma, entrepreneurs grow cautious

▼ Value of venture deals in China



In barely 40 years, China has dramatically opened up its economy and become one of the world's primary growth engines. Now, President Xi Jinping is making ambitious plans to pull ahead of rivals by turning his country into a digital powerhouse. But Xi's drive toward tech dominance is being threatened by an unexpected speed bump: China's forceful crackdown on Jack Ma's business empire.

The abrupt fall from grace of the Alibaba Group Holding Ltd. co-founder has cast a chill over parts of China's technology sector, according to local entrepreneurs and venture capitalists, even as Xi prepares to pour trillions of dollars into making the country self-sufficient in everything from semiconductors to software.

One startup founder in Ma's home province of Zhejiang says he no longer aspires to Alibaba-size success, fearing the risk of unwanted government attention. Another says he's stopped speaking in public and plans to focus on expanding his robotics business overseas. A venture capitalist who's backed dozens of startups says the Ma saga will make entrepreneurs less aggressive, especially those who compete against state-owned companies. All three requested anonymity to speak freely about a politically sensitive subject.

"The Jack Ma incident could be a turning point" for China's tech sector, says Rebecca Fannin, founder of research group Silicon Dragon Ventures.

There are proponents of the crackdown on Alibaba, Ant Group Co. (also founded by Ma), and other Chinese tech giants both in and outside the Chinese government who argue that it was necessary to snuff out monopolistic tactics and nurture innovation at startups that would otherwise struggle to compete. But interviews with more than a dozen Chinese founders and investors found widespread concern over the government's lack of transparency and heavy-handed suppression of different opinions. Some suggest they will dial back their ambitions and think twice about entering strategically important industries.

For Xi, whose government unveiled its latest five-year economic blueprint on March 5, the risk is that a jittery entrepreneurial class holds back his campaign to reduce the country's reliance on U.S. technology. China's increasingly top-down model of innovation stands in contrast to that of the U.S., where technological progress has long been fueled by the independence of founders such as Jeff Bezos, Bill Gates, and Elon Musk. No country has built a world-class technology industry while muzzling its entrepreneurs.

"Facing the Chinese government is a trade-off between innovation and regulation," says Lizhi Liu, an assistant professor at Georgetown University who's researched e-commerce and economic policies in China. "It is difficult to strike the right balance: How much regulation is enough and how to avoid over-regulation that can dampen innovation and growth?"

Ma's stature in China before the clampdown was hard to overstate. He was sort of like Bezos, Gates, and Steve Jobs put together, given how few successful Chinese founders there had been before Ma left his job as an English teacher to start Alibaba in 1999.

When the company made its debut on the New York Stock Exchange 15 years later in what was then the world's largest initial public offering, it set off a gold rush among venture capitalists in China. They flooded startups with cash, boosting the value of deals in the country to $56.4 billion by 2015, from $5.2 billion in 2013, according to market researcher Preqin.

That money turbocharged China's growth, helping the world's second-largest economy become the first viable rival to the U.S. for tech leadership since the early days of Silicon Valley. By 2018, China pulled in essentially the same amount of venture money as the U.S. and created about the same number of unicorns, or startups worth at least $1 billion that haven't gone public. Companies that emerged from the boom, such as ByteDance, Meituan, and Pinduoduo, have turned into some of the biggest names in global tech.

Now, however, Ma has become a cautionary tale. After he criticized China's financial regulators in a speech last October, the government pulled the plug on Ant Group's $35 billion IPO just days before it was due to take place. Beijing launched an antitrust investigation into Alibaba a few weeks later. Ma dropped out of public view, except for one carefully choreographed appearance in January where he promoted rural education—a policy priority for China's Communist Party. Rumors about Ma's status continue to swirl, even though he was spotted playing golf as recently as last month.

The founder from Ma's home province says he and other local entrepreneurs no longer discuss him in their WeChat group. Before the crackdown they would regularly celebrate the billionaire, China's fourth-richest man, as *Ma Laoshi*, or "Teacher Ma." ▶

PHOTO ILLUSTRATION BY 731; PHOTOS: GETTY IMAGES (2). DATA: PREQIN. EXCLUDES ADD-ONS, GRANTS, MERGERS, SECONDARY STOCK PURCHASES, AND VENTURE DEBT

◀ But the founder and his management team have now concluded that Ma isn't an isolated case. So they're steering clear of services that could hit a nerve in Beijing and plan to hire more specialists in government relations. Salespeople have been told to stop calling the company "the biggest" or "the best" in the industry to avoid unwanted attention.

"The government says that private enterprises play an important role in China's economy and that they will support us with all their heart, but the reality is that the government doesn't trust private enterprises," the founder says.

Beijing officials didn't respond to a request for comment.

Another entrepreneur who runs a software startup says he's cozying up to the government to protect his company. He's invited state-owned investment funds to buy stock, perhaps even a majority stake. The founder, who also asked for anonymity for fear of reprisal, says he thinks it's inevitable that government bureaucrats will take control of companies like his.

The venture capitalist says Beijing's antitrust crackdown may have a positive impact on startups in the short term because they won't have to worry as much about getting crushed by giants such as Alibaba or Tencent Holdings Ltd. But over the long term, he says, government interference will hurt growth and innovation.

The industry's wariness stems in part from the fact that modern China has never been through anything like the current situation. The private sector is so new, growing out of Deng Xiaoping's reforms starting in the late 1970s, that it lacks any precedent for antitrust reviews. It doesn't help that authorities have given little guidance on how to interpret the new regulations.

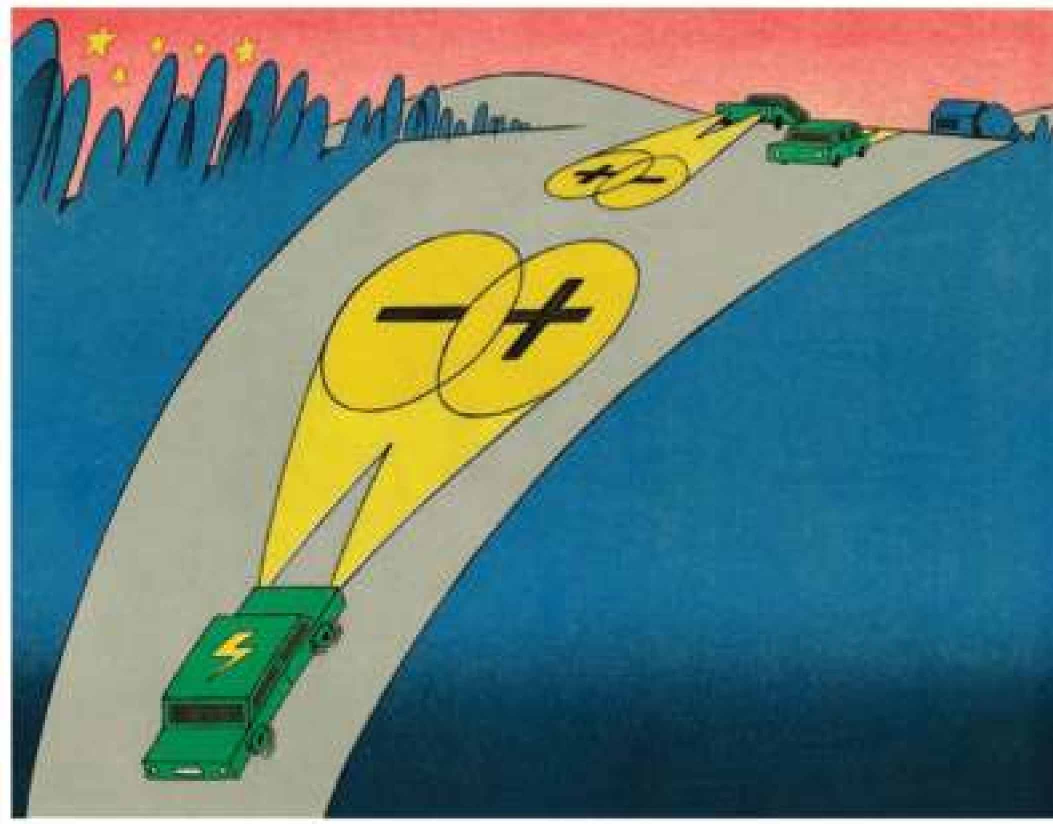
China has sought to reassure entrepreneurs in recent weeks, with mixed success. One state-owned newspaper praised Tencent's Pony Ma, Huawei Technologies' Ren Zhengfei, Xiaomi's Lei Jun, and other billionaire founders for breathing "new life into China's economic reforms." Jack Ma—by far the nation's most famous businessman—wasn't mentioned.

"The Jack Ma incident shows that nobody is safe," says the entrepreneur who's spending more time on overseas expansion. "As an old saying goes: 'Accompanying a monarch is like accompanying a tiger.' You cannot predict when the tiger will turn against you." —*Peter Elstrom and Coco Liu, with Edwin Chan and Shiyin Chen*

THE BOTTOM LINE China wants to become self-sufficient in tech areas like chips and software. But the government's takedown of its most famous entrepreneur has shown the risk of too much success.

Where EVs Aren't Only For the Affluent

● Rural China has become ground zero for the democratization of electric-vehicle ownership



Chinese factory worker Weng Changqing knew he wanted an electric car before he even had his driver's license. Living in a small town in eastern China and looking to start a family, he figured the savings on gas and maintenance would allow him to afford to buy his first ride.

He wasn't in the market for a Tesla Model 3, which starts at about $38,000 in China. Instead, the 37-year-old bought a 66,900-yuan ($10,000) crossover from local electric-vehicle maker Hozon Auto. It's one of a growing number of vehicles that run on batteries and electric motors gaining popularity in lower-income parts of the country because of their modest prices and lower running costs. (EVs don't need oil changes, spark plugs, or the various belts that have to be replaced periodically on gasoline cars.)

Cheap, reliable EVs like Changqing's have the potential to open car ownership—and the increased mobility that brings—to a whole class of people who previously couldn't afford to have their own wheels. Changqing estimates the cost of electricity to charge his car for an entire year to be less than $400, which would buy only 377 liters (100 gallons) of gasoline in China—enough to drive about 6,300 kilometers (3,915 miles) in a 2020 Trumpchi GS3

ILLUSTRATION BY JO ZIXUAN ZHOU. COURTESY SUBJECT. *INCLUDES FEDERAL TAX CREDIT FOR ELECTRIC VEHICLES. DATA: CARBONCOUNTER.COM crossover from Guangzhou Automobile Group Co.

"These ultracheap EVs are reaching a new customer in China, as they likely will in other markets as prices come down," says BloombergNEF analyst Siyi Mi. EV prices are on track to reach parity with fossil fuel-powered cars in the next four to six years, at which point annual sales will start to skyrocket, reaching 25 million in 2030, up from about 2 million a year currently, according to BNEF.

This shift could have far-reaching social effects, especially for people living outside city centers and in rural areas where access to public transport is limited, says Selika Talbott, a professorial lecturer at American University in Washington and founding partner of an automotive consulting firm.

Over the past decade, car prices have far outpaced wage growth in the U.S., leaving the lowest-earning fifth of the population spending as much as 30% of their income on transportation costs. "Taking into account people's access to transportation, it's very important to see a greater diversity of models like EVs being offered on the lower end of the price range," Talbott says.

In China, Hozon Auto's Neta N01 is one of a slew of low-cost EVs, including the $8,950 e1 minicar from Warren Buffett-backed BYD Co. There's also the SAIC Motor Corp.-General Motors Co. joint venture's Hongguang Mini, which entered the market last year at a base price of just $4,230 and quickly became a hit. In the first half of 2020 the average retail price of an EV, excluding incentives, was $55,233 in the U.S., compared with $29,895 in China, according to automotive research firm Jato Dynamics.

Automakers are able to churn out the mainland's budget EVs by keeping frills to a minimum in the interior and under the hood. The cars are often only capable of traveling at low speeds. And Changqing's electric crossover gets about 187 miles per charge—about half the distance of a Tesla Model 3 Long Range.

The low prices allow an increasing number of people—often young, lower-income, and living outside major cities—to buy their first car. These EVs are especially popular in more rural parts of China, where more than 500 million people live but fewer than 1 in 5 have until recently owned a car. Some models are flying off lots at a pace industry executives say they've never seen before.

In the month after the Hongguang Mini EV made its debut in July it was the top-selling new-energy vehicle in China, with 15,000 units sold. In September its sales hit more than 20,000, almost double that of Tesla Inc.'s Model 3 that month.

Still, a number of obstacles stand in the way of an EV-led democratization of the car market spreading outside regional areas of China. The nation's low-cost EV industry has benefited from government subsidies and other incentives such as low-interest loans in villages, towns, and smaller cities.

China is also the world's biggest battery manufacturer, so its EV makers benefit from access to a low-cost supply of the most expensive part of a plug-in vehicle. With automakers and parts suppliers in other countries unable to manufacture at such low costs, they may not be able to offer such affordably priced EVs for some time, BNEF analysts say. And for the rollout of electric vehicles to be equitable, there needs to be widespread access to charging facilities, Talbott says. Today, charging stations often end up concentrated in affluent metropolitan areas, and some apartment dwellers without off-street parking don't have access to at-home charging.

Nonetheless, low-cost EVs have already started to gain traction in many markets over the past five years. Massachusetts Institute of Technology professor Jessika Trancik says that in the years since her team began evaluating vehicles in 2016, she's seen more electric cars, with longer range, falling below the average cost of vehicle lifetime ownership in the U.S. "There are already EVs on the market that can save consumers money," she says. "That's something that's important for people to know."

Changqing mostly uses his EV for his daily commute to work. In his bachelor days he got by with a motorbike—a low-cost option popular in many

parts of developing Asia. But about a year ago he found a new need for the car: His wife was pregnant with their first child and had to be driven to her regular checkups.

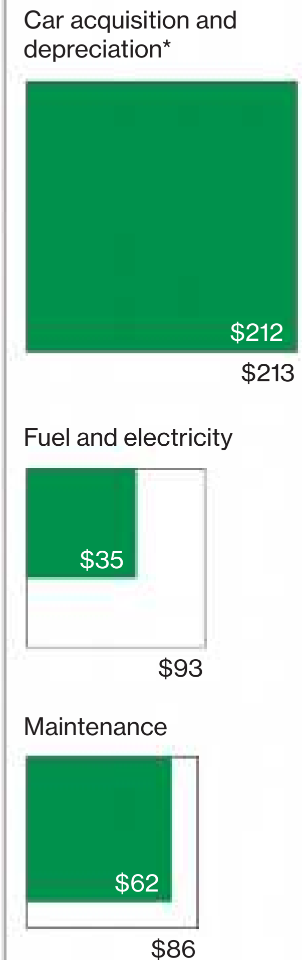
"The reality is it's a necessity for each family to have a car, regardless of their economic condition," Changqing says. "You may have a luxury car, or you may only be able to afford a cheap one, but it's a must." —*River Davis, with Chunying Zhang*

THE BOTTOM LINE Within a decade, annual sales of electric vehicles globally are expected to jump tenfold. Lower-cost models could spur EV use outside urban or high-income areas.

▼ Monthly ownership costs in the U.S.

□ Nissan Altima

■ Nissan Leaf



◀ Changqing and his electric crossover

Flight School For Robots

● A startup is building autonomous cargo planes for FedEx, with the long-term vision of shuttling around people, too

Edited by Joshua Brustein

There's nothing unusual looking about the 38-foot-long cargo plane that's been flying around Northern California for the past month. But the insides of the Cessna 208 have undergone a sci-fi makeover, resulting in a plane that's been taxiing, taking off, maneuvering in the air, and landing without a pilot.

The machinery and software that let it fly on its own come from a startup called Reliable Robotics Corp., which has spent four years working on autonomous flight. The company has a grand total of two planes, but its long-term plan is to fill the sky with pilotless aircraft transporting cargo and passengers.

Reliable's story begins with the self-doubt of its co-founder and Chief Executive Officer Robert Rose. His attempt to become a pilot in college ended for lack of money, but by 2016 he'd earned enough to give the cockpit another shot. Rose, who'd spent his career building autonomous cars and spacecraft for Tesla Inc. and SpaceX, expected that planes would have modernized since he last hopped in a cockpit. But the one he took up had decades-old technology. The shock of how much the flight still relied on a human pilot hit Rose midair as he contemplated his rusty skills and mortality.

"My first thought was, 'Wow, it's insane that a private person is allowed to do this,'" he says. "You have all this navigation that you need to manage and all the communications you have to do between other planes and taking instructions from air traffic control. There's layers and layers of stuff. All the while, you are one mistake away from a fatal accident. I kept thinking, 'How is this OK?'"

Rose founded Reliable in 2017 with Juerg Frefel, an old buddy from SpaceX. The pair set up shop in Rose's garage in Los Altos, Calif., planning to make improved autopilot technology. They hoped to tap into the mechanical and positioning systems available on most planes, buy a couple of off-the-shelf sensors, and tie everything together with clever software that could make the types of decisions usually expected of pilots. Each step of the way, however, they discovered the existing gear for sale wasn't resilient enough for the job. "You just could not have a serious conversation about removing the human from the plane with these parts," Rose says. "That meant we had to build."

These days, Reliable has an office in Mountain View, Calif., where some engineers write software and others craft the electronics, actuators, and other machinery that need to be installed in a plane. The hands-on work takes place at the company's hangar at the nearby San Martin Airport. During a recent visit, Rose and Frefel revealed the inner workings of their plane to a reporter for the first time, opening up the side of their Cessna to show an aircraft cabin filled with computers and high-precision global positioning systems bolted to the floor. These communicate with custom mechanical devices that control the cables connected to the plane's elevator, rudder, flaps, and throttle. Because the plane needs backups in case something fails, there are duplicates of almost every part.

It's typical, of course, for planes to have an autopilot system. Pilots for large passenger jets often perform the takeoff and then let software handle flying and landing. In smaller planes, the pilot can take off, plot a course, and then have the autopilot system manage the adjustments needed to get from point A to point B. The pilots do, however, need to take care of the communications with air traffic control and their compatriots in the air—and step in if something unusual happens. All autopilot systems have been designed with the pilot safeguard in mind; for Rose and Frefel, building a system that reached full autonomy felt more like tackling a whole different problem than making one last incremental step.

▲ Elissa Zavora pilots remotely from Reliable Robotics' control center

PHOTOGRAPHS BY KELSEY MCCLELLAN FOR BLOOMBERG BUSINESSWEEK

Pilot error accounts for more than 70% of fatal accidents, according to federal and commercial data. Reliable's thesis, which is shared by others in the aviation industry, is that computers can react more quickly and safely than people in an emergency. Pilots are trained to assess problems with a troubleshooting checklist, which can mean fumbling through a physical manual during flight to find the page that addresses whatever midair issue they've encountered. Software, which uses sensors and computer chips to figure out the issue, should be able to spring into action and address it immediately.

Reliable's technology is a long, long way from facing that kind of test. At the moment, a test pilot sits inside its plane to deal with emergencies—and to make the Federal Aviation Administration happy. Communications with air traffic control are handled by a remote pilot at the company's headquarters. This pilot clears the plane for takeoff with the tower, gives it a route, and then makes sure all goes according to plan. In its test flights in February, Reliable ▶

◀ proved for the first time that this long-distance remote operation worked.

The prototype Cessna belongs to FedEx Corp., and Reliable intends to begin flying cargo routes in remote areas first. The idea is that FedEx's fleet of small planes could be run more often and at a lower cost if the company didn't need to shuttle pilots around the country and deal with safety regulations limiting how long they can fly. Instead of three pilots flying three round trips in a day, a single remote pilot could oversee the journeys of all the aircraft from behind a computer, Rose says. (The U.S. military already operates drones in a similar fashion.)

Reliable's systems cost six figures and take weeks to install. The company expects the price to drop as its technology matures and plans to outfit and operate planes for customers and possibly to run its own fleet. It also wants to graduate from remote routes to sending cargo planes above cities, then even to picking up human passengers. People could tap into the U.S.'s vast network of smaller airports and hop about almost as if they had a private plane. "It's going to take a minimum of 10 years to make this vision realistic, but why can't regular people just go to the airport, swipe their credit card, get on a plane, and have the thing fly itself?" Rose asks.

He expects that one day Reliable's mission control will be run by people trained for the job, much like an air traffic controller today, rather than pilots. It's a less romantic version of flying than the one that draws most people to the job, though some pilots admit there's a practical reality at play. "An autonomous plane is a great thing," says Dezso Molnar, an aircraft designer and pilot. "Flying a plane is not difficult, but managing all the rules that can get you thrown in jail is the challenge that most people find daunting."

Before it can fly autonomous planes at any scale, Reliable needs to prove to the FAA that its technology can deal with all kinds of emergencies through a combination of computer simulations and flights. It also has to get the agency to buy into the use of remote pilots, a concept that has its skeptics. "Remote pilots don't have contextual understanding when problems occur and can often cause as many problems as they can fix," says Mark Moore, an aerospace expert who spent decades at NASA and later worked on Uber's flying taxi technology. "Plus, their survival instincts are not engaged."

The FAA is under pressure to address not just Reliable's technology but also an increasing number of new aircraft. Dozens of startups have appeared in the past five years, making electric planes that can take off and land vertically, new types of rockets, and other vehicles. In the robotic realm, Reliable's competitors include Xwing and Merlin Labs Inc. In a statement, the agency said it was up to the challenge. "The FAA has many initiatives in place to ensure skills of our technical workforce adapt to the ever-changing aerospace system," said spokeswoman Crystal Essiaw.

For the foreseeable future, Reliable, which has raised more than $30 million, will focus on conducting its autonomous tests and gathering data to present to the government. It also needs to reduce the cost and weight of its equipment. There are other details to sort out, too, such as building computer vision systems that will let the planes drive themselves from the hangar to the runway and back.

Despite these obstacles, Rose hopes to conduct cargo flights by the end of 2022 and considers it inevitable that robotic planes will one day be commonplace. "Pre-Covid, we were moving more stuff and more people around through the air than ever before," he says. "I think as the costs come down, because of this technology, you are going to see four to five times more flights per day." —*Ashlee Vance*

"Why can't regular people just go to the airport, swipe their credit card, get on a plane, and have the thing fly itself?"

THE BOTTOM LINE Reliable Robotics has built much of the technology needed for a fully autonomous passenger plane, but government-approved flights remain far away.

For more stories about autonomous vehicles, go to Bloomberg.com/hyperdrive

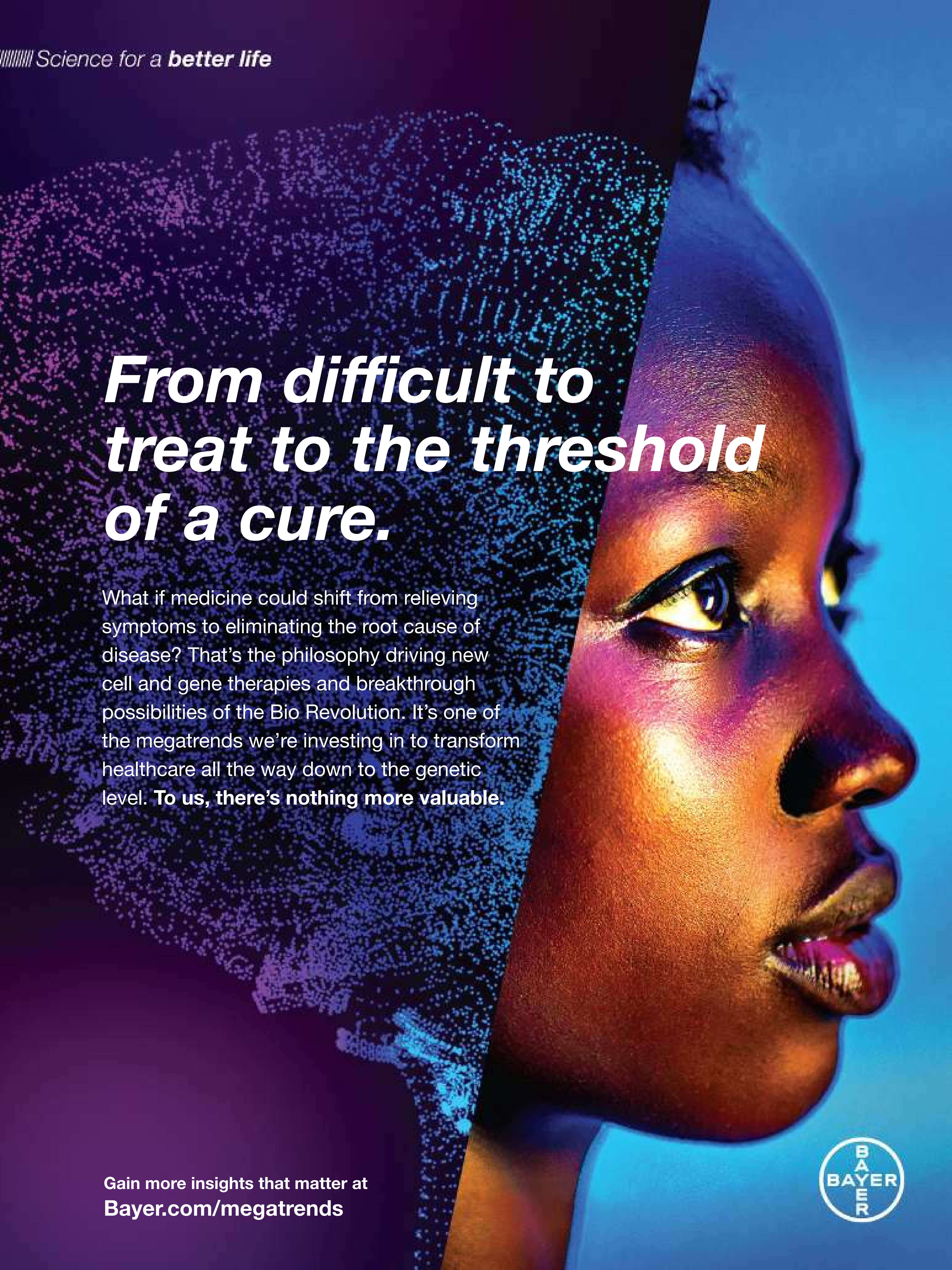
Amazon's Long Game on Labor

● If workers accept a union, the company may still try to avoid the bargaining phase

It's impossible to predict the outcome of the union vote under way at Amazon's warehouse in Bessemer, Ala. As Bloomberg recently reported, workers are sharply divided about the benefits of organizing in a town where Amazon's $15-an-hour starting wage goes a long way. But one thing is almost certain: Even if the union emerges victorious, Amazon's own campaign is far from over.

Winning recognition of a union "is sort of like a sports team getting to the playoffs," says John Budd, who tracks labor issues at the University of Minnesota's Carlson School of Management. "It's important, but it really isn't the end goal."

The Retail, Wholesale and Department Store Union (RWDSU), which is running the ▶


Science for a better life
From difficult to treat to the threshold of a cure.
What if medicine could shift from relieving symptoms to eliminating the root cause of disease? That's the philosophy driving new cell and gene therapies and breakthrough possibilities of the Bio Revolution. It's one of the megatrends we're investing in to transform healthcare all the way down to the genetic level. To us, there's nothing more valuable.
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◀ organizing campaign, says its goal is a contract with Amazon.com Inc. But Amazon has fought hard to keep unions out of its U.S. operations and will have a menu of options if the vote doesn't go its way, such as contesting the result, dragging out talks with the union, or closing the 855,000-square-foot warehouse entirely, a prospect already on the minds of some Bessemer workers and politicians.

An Amazon spokesperson declined to comment on its plans should its workers vote to unionize. The company has defended its working conditions and says it doesn't believe the RWDSU represents the views of most of its employees. RWDSU President Stuart Appelbaum has said that even getting to a vote is a victory for labor because it sets an example for other unions.

Labor organizing in the U.S. is refereed by the National Labor Relations Board, the New Deal-era creation whose staff will tally ballots from the warehouse's 5,800 eligible workers beginning on March 30. If a majority of votes favor the union, Amazon and the RWDSU will be required to enter bargaining talks.

But Amazon could postpone talks by filing charges with the NLRB of unfair conduct by the union during the vote. "You can get six months to a year out of that sometimes, if you're really good," says Sally Klingel, who teaches labor-management relations at Cornell's ILR School.

Talks between union and company negotiators often wind up at an impasse, fueling additional rounds of NLRB rulings.

Unions have long criticized the NLRB's enforcement of the bargaining process as weak. It's usually not labor law but solidarity and public pressure that make collective bargaining work, says Kate Andrias, a law professor at the University of Michigan. "First contracts are won not because of an effective legal regime but because of workers' decision to stick together and demand improvements in their workplace, combined with public and political pressure on employers to behave responsibly," she says.

That kind of pressure is already building on Amazon. The union drive has drawn wide support from labor groups, including the union representing NFL players, and Democratic politicians all the way up to President Biden. The frenzy has made the vote a flashpoint in debates about the beleaguered U.S. labor movement and the power of one of the world's most valuable companies. Amazon executives tend to brush off outside critiques as misunderstandings of its values and intentions. But the company has bowed to public pressure in the past, as it did in 2018 when it raised its starting wage to $15 an hour or

in 2019 when it retreated from a planned corporate campus in New York amid local opposition.

Companies have been successful in waiting things out. A 2009 study found that one year after voting to unionize, in 52% of cases workers hadn't yet won a collective bargaining agreement. That's significant because if there is no contract a year after the NLRB certifies a union, workers can call a vote to decertify it.

Amazon could also pull the plug on the facility entirely, something that happened after 15% of successful union drives, according to the study, which analyzed elections from 1999 to 2003. The company has a pattern of steering work away from labor hot spots. It closed a Seattle call center in 2001 after workers began a union drive, built warehouses in Poland after being challenged by powerful German labor groups in 2013, and earlier this year closed a small Chicago depot that had been a locus of worker organizing. In each case, Amazon cited factors other than worker organizing in explaining the decisions.

Labor law protects employees from dismissal for advocating changes to their working conditions, and workers can allege that such closures were motivated by retaliation against the union. But even winning those cases doesn't mean victory. When Walmart Inc. shut down a store in Quebec and all its meat-cutting departments in the U.S. after successful union drives, it sparked legal action that dragged on for years. By the time it was resolved, workers had moved on or settled with the company, and unions were still on the outside looking in. "It's often too late, the deed is done," Cornell's Klingel says of challenges to closure decisions. "It's very hard to win those." *—Matt Day and Josh Eidelson*

THE BOTTOM LINE Amazon has always fought against unionizing efforts, and it will likely not easily accept it if workers in an Alabama warehouse vote to form one.

▼ Share of National Labor Relations Board elections from 1999 to 2003 where employer used a tactic

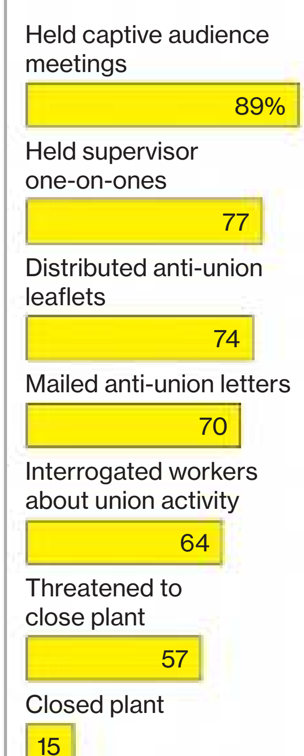


ILLUSTRATION BY SAMANTHA SLINN. DATA: ECONOMIC POLICY INSTITUTE AND AMERICAN RIGHTS AT WORK EDUCATION FUND

The New Market Next Exit

● Investors are struggling to work out what a recovery from the pandemic means

Before we talk about what's going on in the stock market—and why it's whipsawed so many investors even though the S&P 500 index is near a record high—we have to talk about bonds.

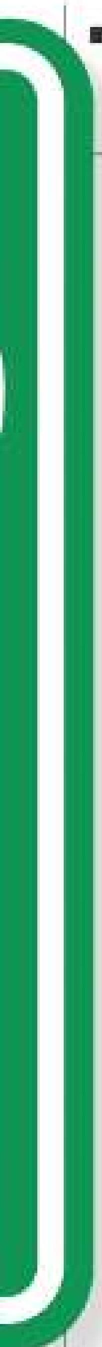
U.S. Treasuries are probably the world's most important financial market, but it's easy to forget about them when they're well-behaved. When prices suddenly drop, which causes their yields to rise, for many professional investors it can seem like Godzilla poking his head above water off the coastline: Time to run and hide—trouble may be coming.

The yield on the benchmark 10-year Treasury climbed this month to as high as 1.62%, up from less than 1% at the start of the year. That's still very low by historical standards, but it was high enough to spread pain in the most popular and rewarding parts of the stock market. The Nasdaq 100 Index, which is dominated by the likes of Amazon.com, Apple, and Microsoft, fell as much as 11% from Feb. 12 before rebounding in recent days as the bond market selloff subsided. Cathie Wood's ARK Innovation ETF, which surged 153% last year and attracted more than $15 billion in cash in 14 months, plunged almost 30% and then climbed back part of the way. Likewise, Tesla tumbled and so did special purpose acquisition companies.

Why would a bond yield spike have that kind of effect on high-flying tech stocks? Partly because of the role Treasury yields have in setting the so-called risk-free rate, a yardstick against which other investments are measured. When a safe Treasury delivers a scant 1% per year, investors may be willing to pay up for speculative assets to get a higher return. The increase in bond yields changed the math, making stocks look relatively more expensive. It didn't help that valuations of Nasdaq 100 stocks were already high because investors had piled into tech-driven companies during the pandemic, betting that the lockdowns would be good for revenue from online shopping and streaming services.

"It feels like an attitude adjustment for tech and growth stocks," Mike Bailey, director of research at FBB Capital Partners, told Bloomberg News.

Edited by Pat Regnier and David Rocks



"Investors have decided that these Covid winners just got too expensive, and now it's time for a valuation haircut."

The yield on Treasuries also plays an outsize role in influencing interest rates on everything from mortgages to corporate debt. And because innovation and disruption are often brought about with borrowed money, higher rates can be bad news for companies with big plans that need to raise money to make them happen.

But perhaps most important is what the rise in yields signifies to markets: an economy poised for a major growth spurt as more people get vaccinated. Wait—that's supposed to be a good thing, right? It absolutely is, but markets and the economy don't run on the same timeline. That was clear as stocks surged despite mounting Covid-19 deaths and waves of unemployment and business closures. Now bond investors see consumers with swollen savings getting ready to spend again while companies rehire, and to them that looks risky. A hotter economy could mean inflation and rising interest rates, which can hurt bondholders. So investors drive up yields to give themselves a buffer.

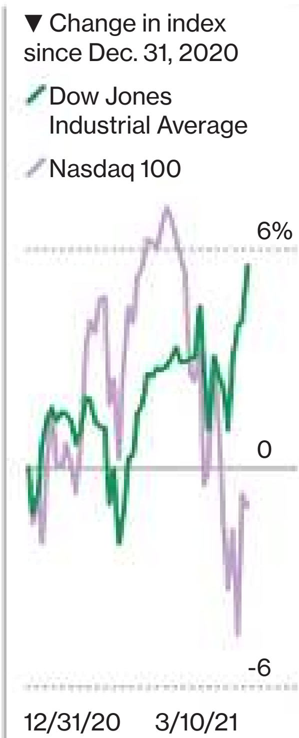
Equity investors, meanwhile, start rethinking their picks. Expensive growth stocks may not look as attractive when you can make decent profits in any business that can ride a reviving economy. Stocks in the energy, financial, and industrial sectors have been doing just fine recently, and so-called value stocks with modest prices have seen a long-awaited revival. The Dow Jones Industrial Average—which includes traditional businesses sensitive to the economy such as American Express, Caterpillar, and Chevron—is up 5.5% this year, while the Nasdaq 100 is slightly down.

What happens next hinges not only on the continued vaccine rollout and effectiveness of President Biden's $1.9 trillion relief package, but also on the delicate back-and-forth between U.S. Federal Reserve Chair Jerome Powell and the markets. The spike in 10-year yields suggests that efforts to revive the economy are working, but if those rates rise too quickly, there's a risk they'll nip the recovery in the bud.

The Fed has signaled that it will likely keep monetary policy accommodative for years to fight the pandemic's long-term damage. In his recent public remarks, Powell has acknowledged that the rise in yields had caught his attention, but he stressed that overall financial conditions are more important. He also said he would be concerned if the yield rise was accompanied by disorderly conditions in markets.

The latest gyrations in tech stocks don't qualify as disorder. With many investors warning that equities are still in bubble territory, and the Fed serving as the usual suspect for getting them there, some minor hits to richly valued stocks might be welcomed by Powell. He and his predecessor, Janet Yellen—now the U.S. Treasury secretary—both indicated some wariness last month about exuberant markets. Policymakers face a dilemma: While they recognize that loose policies can fuel financial excess, they believe the virus-damaged economy still needs substantial help.

Mark Zandi, chief economist at Moody's Analytics, anticipates that the rise in yields will take some froth out of the equity and housing markets. That could reduce the risk of a harder landing later on. "I would see that as a positive thing," he says. "It's reducing the risk that bubbles develop to the point where they become existential to the recovery." —*Michael P. Regan and Liz Capo McCormick, with Claire Ballentine*



THE BOTTOM LINE Stock markets have been roiled by spikes in Treasury yields, which might signal some fundamental changes in the economy.

Four Private Planes. No Business

● Lex Greensill was aiming for a valuation of $7 billion but his business ended up in insolvency

It took Lex Greensill two decades to ascend from the red dirt of his family's sugar cane and melon farm in Australia to heading his own finance firm and traveling the world on a fleet of private jets. His fall back to Earth took just a week.

On March 8, his company, Greensill Capital, which boasted billions of dollars in backing from investors such as SoftBank Group Corp. and General Atlantic, collapsed into insolvency. In October, Greensill predicted he would soon sell a small stake of the company for hundreds of millions of dollars, implying a valuation of roughly $7 billion. Finance house Athene Holding Ltd., picking through what's left of the company, found little of interest beyond computer systems and some intellectual property, which it offered to buy for only $60 million—though that deal now appears questionable. "There were red flags everywhere," says Stephen Clapham, a forensic accountant who's examined some of Greensill's packaged loans. "If I were a professional investor, it would literally take me five minutes to decide that this was uninvestable." ▶

PHOTO ILLUSTRATION BY 731. PHOTO: ALAMY STOCK PHOTO. DATA: COMPILED BY BLOOMBERG

◀ The collapse was triggered a week earlier, when Credit Suisse Group AG froze redemptions from a $10 billion suite of funds that had invested in Greensill's products. After an insurance policy protecting against defaults on debt issued by Greensill lapsed, the assets could no longer be valued with any certainty. A last-ditch legal effort to compel the insurer to continue coverage of the notes failed, setting off a chain reaction, with German regulators seizing control of a Greensill-owned bank, another fund freezing redemptions, and the firm's founder desperately seeking a white knight to bail him out.

Greensill Capital said it specialized in financing invoices, a humdrum form of lending typically dominated by financial giants with the scale needed for such a low-margin business. Greensill insisted he could compete by "making finance fairer" via faster payments to producers such as his family's farm and even far smaller operations. But questions about the extent of Greensill's lending to one customer in particular, steel magnate Sanjeev Gupta, drew scrutiny from Germany's financial regulator. Greensill could legitimately claim blue-chip clients such as Airbus, General Mills, and Vodafone, but documents submitted to a London court show that 90% of the company's revenue was from only five customers, the biggest of which was Gupta's GFG Alliance.

Lex Greensill had a reputation for indulgence, with a fleet of four private planes and a sumptuous suite of offices across the street from London's Savoy Hotel. And he successfully tapped into the global power elite to facilitate his rise: He won strong endorsements from A-list tech investors and counted former U.K. Prime Minister David Cameron and former Australian Minister for Finance Julie Bishop as advisers. The extravagance caught the attention of Lord Paul Myners, a member of Britain's House of Lords, who submitted a slew of questions in parliamentary proceedings about the company's dealings. In late 2019, Greensill invited him to a chat to explain the operation, but Myners walked away from the meeting with little understanding of what the company was up to. When pressed for details of how his relatively small firm was able to successfully face off against the titans of global finance in a hypercompetitive business, Greensill responded with "talk about how he was traveling so much that he'd had to add another private jet," Myners says.

As well as the more prosaic invoice financing Greensill specialized in, court filings show his company had begun a practice called "future accounts receivable finance." The term refers to loans against sales that haven't yet occurred—for instance, examining a year's worth of credit card receipts at a pharmacy and then offering cash in exchange for a claim on the income the store expected to receive in the coming months. Smaller or less financially stable borrowers such as independent pharmacies—or Gupta—would typically pay a bank several times as much interest for an unsecured, short-term loan as Greensill was charging them. The extent to which Greensill did this is unclear, but court documents show that GFG had become increasingly reliant on that form of financing in recent weeks. Greensill declined to comment.

In the end, it may have been the close ties to Gupta that tripped up Greensill. An audit of an affiliate, Greensill Bank AG, by Germany's financial regulator, BaFin, turned up no evidence of some receivables the bank said it had purchased from Gupta's GFG, suggesting the loans weren't secured with past sales. The bank says it's always been transparent with regulators, and Greensill himself has argued that basing interest rates on past financial results should be replaced by his method of examining near-real-time data such as recent invoices. The credit business today "is kind of like trying to drive your car at 100 miles an hour by looking only in the rearview mirror," he said in a December Zoom call, "which seems like a fairly crazy thing to do." For regulators, it turns out, that's not half as crazy as the business Greensill built. —*Lucca de Paoli, with Harry Wilson and Luca Casiraghi*

● Greensill

THE BOTTOM LINE Greensill had blue-chip clients such as Airbus, General Mills, and Vodafone, but 90% of its revenue came from just five customers, the biggest of which was Gupta.

Keep Singapore's Books Clean

● The city-state wants to prove it's safe not just for wealthy tycoons but for investors, too

A series of scandals at Singapore-based companies has regulators tightening oversight and pushing for more disclosure. At stake is the city-state's role as a global wealth hub, which has become all the more significant as Beijing tightens its grip on Hong Kong.

About $3 trillion in assets are managed in Singapore, with more than 76% of the total coming from overseas. Singapore aspires to be a place where tycoons and their families can set up business and companies can list their shares under the protection of a well-developed financial and legal system. But being an attractive haven can conflict with the transparency and disclosure that global investors are looking for. "It's a complex balance," says Bryan Goh, chief investment officer at Tsao Family Office Pte, the Singapore-based investment arm of an Asian shipping fortune.

Ravi Menon, head of the Monetary Authority of Singapore and the country's top financial regulator, in December acknowledged the need for greater scrutiny. "There have been several failures that are due to lapses in accounting, auditing, and some fraudulent activities are not as easily detected," he said.

Some high-profile Singapore companies have collapsed in recent years, with consequences that can drag on. Commodity trading house Noble Group Ltd. has been under investigation for its accounting practices by local authorities for more than two years. The company has stood by its accounting but is now a shell of its former self after restructuring. Hyflux Ltd., a water-treatment company, owes about S$2.8 billion ($2.1 billion) to banks and 34,000 retail investors who held securities it issued before it fell apart. Authorities also announced an investigation last year into Hyflux for suspected false and misleading statements. Its court-appointed manager didn't respond to a request for comment.

The failures have ensnared some of the world's biggest investors. HSBC Holdings Plc is among the banks still seeking to recoup about $3.5 billion from Singapore oil trader Hin Leong Trading Ltd. Founder Lim Oon Kuin has denied allegations by HSBC in a court case that he used forged documents to obtain financing, saying that documents had been "mistakenly" issued without his knowledge.

In January the regulatory arm of Singapore Exchange Ltd., known as RegCo, tightened qualification rules for auditors working with publicly traded companies. It also expanded its powers to ask a company to appoint a second auditor when it's not satisfied with the initial audit. Some think this isn't enough. "The new rules catch outliers—where the auditors with less expertise or standing are appointed," says Stefanie Yuen Thio, joint managing partner at Singapore-based legal firm TSMP Law Corp. But the scandals also seem to have caught major accounting firms off guard, she says.

Separately, RegCo last year proposed changes that will allow it to quickly take on cases that call for public sanctions. It also wants the power to ask a director or executive officer of a listed company to resign, and to require companies under investigation to seek approval before directors can be appointed or reappointed. "We've become more aggressive over the years," says Tan Boon Gin, a former policeman who now heads RegCo, who notes the exchange is a relatively young one. "We've been building our toolkit and needed time to figure out how to use it. Now we're flexing our muscles more."

Singapore's Accounting and Corporate Regulatory Authority is also exploring whether businesses held in private hands should disclose their finances to the public. Such a move may help trading partners and banks dealing with such companies. The oil trader Hin Leong, for example, was exempt from disclosure partly because it had fewer than 20 shareholders, even though its 2019 revenue totaled $20 billion.

Singapore is hardly alone in dealing with corporate scandals: In Germany, Wirecard AG filed for insolvency last year after it was discovered that €2 billion ($2.4 billion) of its assets didn't exist. The U.K. government is promising audit reform in the wake of the 2018 failure of construction

giant Carillion Plc. But more than most other rich countries, the city-state is always conscious that wealth can move elsewhere. "It's the issue of reputation for Singapore," says Mak Yuen Teen, associate professor of accounting at National University of Singapore and a longtime advocate of strengthening local corporate governance. —*Chanyaporn Chanjaroen and Ishika Mookerjee*

THE BOTTOM LINE A series of corporate failures has Singapore authorities pushing for greater transparency, but some wonder if the reforms would have caught some of the biggest problems.

● Total assets managed in Singapore

$3t

GREENSILL: GREENSILL. PHOTO ILLUSTRATION BY 731. PHOTOS: SHUTTERSTOCK (3)

An Industrial Policy With U.S. Characteristics

● Biden's $4 trillion Build Back Better plan faces plenty of hurdles beyond Republicans

President Biden and his economic team are about to test whether Americans can accept a more interventionist role for government in the economy. Now that his $1.9 trillion Covid rescue plan has cleared Congress, Biden is gearing up to roll out a "Build Back Better" plan that envisions spending at least $4 trillion over 10 years on infrastructure and strategic industries such as semiconductors, renewable energy, and electric vehicles. He promises that government action will not just generate millions of jobs and help the U.S. compete with China but also reduce inequality and help battle climate change.

The timing for a new, muscular U.S. industrial policy might never be better. The pandemic and anxieties over the perceived growing threat from China have focused minds in Washington, fostering a rare bipartisan consensus on the need for measures to secure supply chains for semiconductors and other strategic goods such as surgical masks.

Biden and his allies in Congress want to rewrite an economic narrative that has seen U.S. manufacturing employment slide since 1979 even as industrial output has continued to grow. "I don't accept the defeatist view that the forces of automation and globalization can keep union jobs from growing here in America," the president told reporters a few days after taking office in January. "We can create more of them."

ILLUSTRATION BY DEREK ZHENG

Edited by Cristina Lindblad

Biden's plan is designed to be more holistic and longer-lasting than Donald Trump's often improvised efforts to bolster U.S. industry, which hinged on cuts in tax rates and regulations and a protective wall of tariffs. The Build Back Better blueprint Biden campaigned on calls for $300 billion in new federal investment in research programs and $400 billion in federal government procurement of American-made goods. It also includes tax incentives and credit facilities to spur manufacturers to invest in domestic plants and repatriate supply chains.

The long-term stakes are enormous for the U.S., says Jonathan Gruber, an MIT economist who with colleague Simon Johnson laid out a prescription last year for a government-led push to reinvigorate the economy in their book *Jump-Starting America*. In too many vital industries "we're just not at the top of the game anymore," Gruber says, pointing to once proud areas of U.S. achievement such as robotics and synthetic biology. "At the end of the day if you are worried about competing with China, it is not tariffs that's the answer, it's out-inventing them."

Concerns about America's fading dominance in strategic sectors have been pushed to the fore by a chip shortage that has forced several U.S. automakers to idle plants. On Feb. 24, Biden signed an executive order launching a review of supply chains for semiconductors, batteries, and strategic minerals. The White House also has asked Taiwan, the world's leading chip producer, for help. Administration officials, though, admit there likely isn't a short-term fix to the problem.

Biden supports funding a bill to create incentives for semiconductor research and production in the U.S. But building new fabs is extraordinarily expensive and takes years. At the same time, members of his administration have been vague about what actions will result from the supply chain reviews, some of which will take as long as a year to complete.

Then again, getting away from the rash policymaking of the Trump years is part of the point. The previous administration's efforts to force a repatriation of supply chains via tariffs yielded a host of unintended consequences. U.S. farmers were targeted for retaliation by China and other countries and drew billions of dollars in government assistance. The uncertainty created by the import duties also put a damper on hiring and investment—not what you want in an economy trying to recover from the worst economic contraction since 1946.

The U.S. federal government is the world's largest purchaser of consumer goods, so Biden's Jan. 25 executive order to close loopholes in Buy American procurement rules may go some way toward furthering his goal of shoring up domestic manufacturing. But governments have only limited powers to influence decisions by private businesses on where to produce their products, even within industries Biden might consider strategic.

A year ago, things were looking up for employees at the GE Lighting plant on the southern edge of Bucyrus, Ohio, that's been operating for more than 60 years. A new line installed in 2020 to manufacture energy-efficient A-19 LED lightbulbs seemed to guarantee a future beyond the tenuous one offered by the factory's existing production of fluorescent tubes and other legacy products. But GE's sale of its lighting unit to smart-home company Savant for an undisclosed sum a few months later changed that. The new owners, who previously had no manufacturing facilities in the U.S., shut down the LED line on March 5, laying off almost 50 workers. The plan now is to import the bulbs from China. "Honestly, I feel like Savant has no interest in manufacturing in the U.S.," says Will Evans, president of Chapter 84704 of the IUE-CWA union, which represents workers at the Bucyrus factory.

Savant says it invested millions to try to make the only U.S. production facility for the LED bulbs cost-competitive. "We've turned over every stone in our attempt to lower the cost of assembly," says Ben Sabol, a spokesman for GE Lighting, a Savant Company, as the business is now known. But "it's no longer economically viable to continue to operate the line."

Biden's Made in America plan includes several items on the National Association for Manufacturers' wish list, including a surge in infrastructure investment as well as tax breaks to encourage domestic production and more spending on R&D. On top of that, the NAM is asking for more federal dollars to fund worker training programs. But Aric Newhouse, who runs the trade group's policy team, says shoring up U.S. competitiveness also means addressing rising healthcare costs and not reversing Trump's reduction in the corporate tax rate—something Democrats say may be needed to pay for new spending on roads, bridges, and the like. There "is not a silver bullet," Newhouse says. "It's tax policy. It's health care."

There is also the question of what, if anything, to do about the dollar. U.S. exporters have long complained they pay a price for the greenback's status as both a reserve and a safe haven currency. The upward pressure put on the dollar by foreign investors' flows into U.S. Treasuries and equities hurts exporters' ability to compete ▶

"If you are worried about competing with China, it is not tariffs that's the answer, it's out-inventing them"

◀ internationally by making American-made goods and services more expensive overseas.

Speculation that the Biden administration may target the dollar has grown with the appointments of noted proponents of a weaker greenback, such as Jared Bernstein, who's on the Council of Economic Advisers, and Brad Setser, a member of the new trade team. A former Treasury staffer who spent the Trump years at the Council on Foreign Relations, Setser regularly called for more action against economies he accuses of keeping their currencies artificially weak.

Even advocates of a tougher currency policy—one that would have the U.S. Treasury buy bonds denominated in other currencies to weaken the dollar, say—are not convinced a traditionalist like Treasury Secretary Janet Yellen will be altering the playbook very much. And a more aggressive stance may not further the Biden camp's stated goal of repairing strategic alliances frayed by four years of Trump's pugilistic "America First" economic policy. "I wouldn't rush into it," says Joseph Gagnon, who from his perch at the Peterson Institute for International Economics has for years argued for U.S. intervention to weaken the dollar and the introduction of a transaction tax to discourage short-term capital inflows.

The problem Biden will face, says Gagnon, is that the fiscal rescue plan he just pushed through Congress, and the promise of more spending to come, will be fuel for an economic boom of the sort America has not seen since the 1960s. That will bolster the dollar, which could act as a powerful brake on any industrial policy push.

It's hard to feel upbeat about Biden's odds of making good on his pledge to create millions of blue-collar jobs when you look at recent history. Since the 1970s, the U.S. has never managed to recoup the manufacturing jobs lost in each recession; in February it was still down 561,000 from a year earlier.

Government incentives for renewable energy and electric vehicles will plump up payrolls in those industries, but they'll also wipe out jobs in rival or even adjacent ones. Electric cars, for instance, require fewer parts than gas-powered vehicles, so on a net basis will the U.S. gain or lose? "A lot of what industrial policy is about is shifting the composition of jobs and not necessarily adding jobs," says Todd Tucker of the left-leaning Roosevelt Institute, who served on Biden's trade transition team.

Biden's Made in America job creation goals may be undermined by some of the very innovation he is eager to promote. Model No. (pronounced "Number"), a three-year-old Bay Area company, makes lounge chairs, tables, and other home furnishings on 6-foot-tall 3D printers that use polymers made from vegetable waste such as corn husks. Its supply chains are 95% domestic. (The vegan "leather" comes from Europe.)

Model No. operates on-demand, meaning it fires up its 3D printers only when an order comes in through its website, though Chief Executive Officer Phillip Raub says he's in talks with a few retailers who've expressed an interest in stocking the company's wares. Raub says he's certain the company will eventually produce customizable, environmentally friendly furniture at mass-market prices that can compete with products from lower-cost factories in Asia. To do so, the company plans to establish a U.S. network of 25 to 30 "microfactories" each employing 25 to 50 people, so it can quickly fill orders when they come in. "You can start to bring back these things," Raub says. "There is a better way." Just not one that might create the millions of factory jobs Joe Biden is promising. —*Shawn Donnan, with Jenny Leonard*

THE BOTTOM LINE Biden's ambitious plan to reinvigorate manufacturing may be powerless to alter a trend in which the U.S. never fully recoups blue-collar jobs lost in recessions.

Mexico's Covid Codependency

● U.S. stimulus flows to Mexico in the form of remittances and increased export demand

Andrés Manuel López Obrador came to power promising to make Mexico's economy less dependent on its giant northern neighbor. His pandemic policies are having the opposite effect.

The Mexican president has run one of the world's most austere budgets through the Covid-19 crisis, declining to borrow extra money as the economy slumped. The stimulus that prevented an even deeper recession, and is set to drive a rebound this year, is coming from the U.S. instead.

Mexico has benefited in two pivotal ways from U.S. pandemic spending, which is set to exceed $5 trillion with the Biden administration's bill. Remittances surged to an all-time high as Mexicans authorized to work in the U.S. received stimulus

● López Obrador

FROM LEFT: HENRY ROMERO/REUTERS; DANIEL BECERRIL/REUTERS. DATA: JPMORGAN CHASE & CO.

checks and sent some of the money home. Exports also hit a record, because Mexican factories make a lot of the things Americans wanted to buy in the era of lockdowns and working from home—such as televisions and computer gear.

The result is that U.S. stimulus added about 3.5 percentage points to Mexico's gross domestic product growth in 2020—seven times as much as the fiscal measures taken by the country's government, according to calculations by JPMorgan Chase & Co. That Mexico is having "any sort of recovery is precisely because of the stimulus package in the U.S.," says Gabriel Lozano, JPMorgan's chief Mexico economist. It "to some extent compensated for what wasn't delivered from the government."

What López Obrador promised to deliver, before and after he was elected in 2018, was an economy with a stronger domestic engine that would make it less reliant on exports to the U.S.—and one where the poor, agrarian south would get a fair share of the proceeds of growth. "We live in an interconnected, globalized world, but we have to care for our own," the president said in 2019.

Now he's presiding over a two-speed recovery propped up by U.S. demand—and skewed toward Mexico's wealthier north, where most of the factories are. After last year's 8.2% GDP contraction, the worst in more than a century, the domestic economy has been slow to recover.

Tourism remains hobbled by travel restrictions. But exports were up 11.5% in December from a year earlier. By January, formal employment in the industrialized northern border states had more than recouped its pandemic losses, climbing 1.9% from a year earlier. In the rest of the country, employment was down 3.9%. Meanwhile, remittances reached $41 billion last year, about 4% of GDP. Almost all of that money came from the U.S. López Obrador hailed Mexicans living there as "heroes" for their financial support.

By standard measures, Mexico has room to provide more budget support for its own economy. Its national debt is moderate by emerging-market standards at 52% of GDP, and with an investment-grade credit rating it can sell 10-year dollar bonds at about 3%.

López Obrador has allocated some extra cash for investments, especially in the state oil company, and for social programs. But in general he's outlined a philosophy completely at odds with the borrow-and-spend policies that have become the norm for much of the world in the pandemic. The president, who's known for his frugal lifestyle, invokes past bailouts—when he says politicians ran up public debt to help private cronies—as examples of the kind of corruption his government will fight.

▲ Trucks line up at the U.S. border crossing in Nuevo Laredo, Mexico

There's not much evidence that López Obrador's stinginess with stimulus has hurt his standing with the public. His approval rating remains above 60%. Much of his support is concentrated among workers in the informal economy, who benefited from an expansion in social programs earlier in his presidency and have low expectations for other government help.

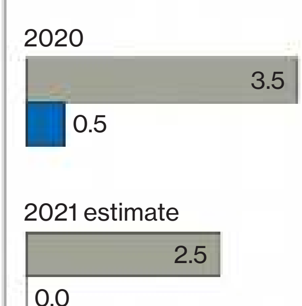
Deputy Central Bank Governor Gerardo Esquivel, a López Obrador appointee, maintains that there will be a payoff in the longer term for the government's budget restraint. Mexico "will exit the pandemic much stronger than other emerging economies," he says. He acknowledges that the country is getting plenty of help from its northern neighbor, saying external demand "really helped stop the contraction from being so drastic in 2020."

Still, López Obrador would be wrong to bet on a continued lift from U.S. growth, because the conditions that led to surging demand for goods manufactured in Mexico won't last, according to Alonso Cervera, chief Latin America economist at Credit Suisse AG. Mexico's tourism sector will see an improvement as vaccination rates climb, but the country stands to lose as American consumers shift some of their spending from goods to services. "People in the U.S. will be demanding services—restaurants, museums, concerts, sports events," Cervera says. "In that case, Mexico won't participate significantly." —*Max de Haldevang*

▼ Contribution to Mexican GDP growth, in percentage points

■ U.S. stimulus

■ Mexican fiscal policy



THE BOTTOM LINE The Mexican government's decision to spend little on pandemic aid has made the country's economy even more dependent on its northern neighbor.

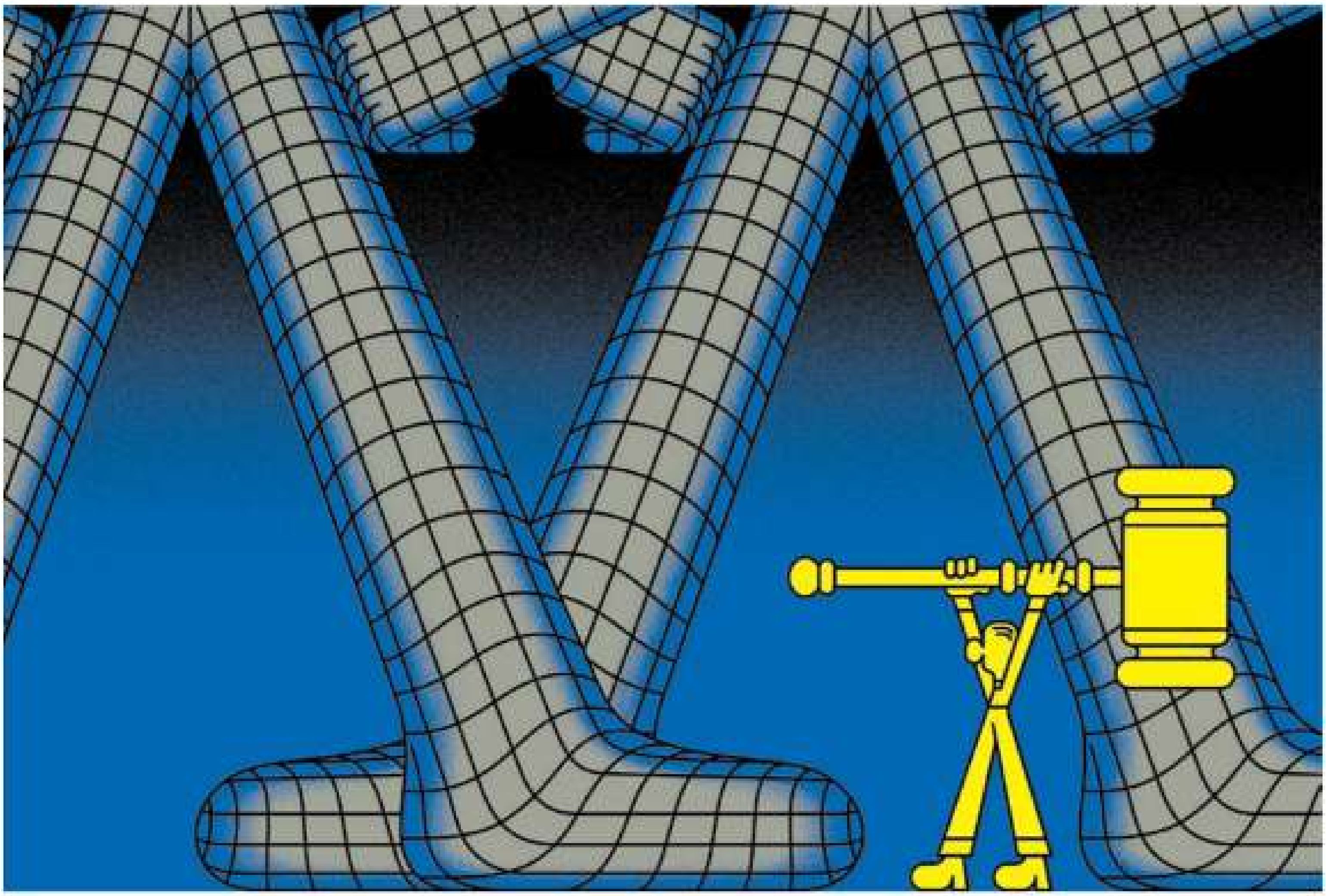


ILLUSTRATION BY ARNE BELLSTORF

Biden Moves to Take On Big Tech

● His pick for antitrust chief will signal how aggressively he'll challenge monopoly power

Filling out Joe Biden's administration was expected to be a contentious process. Every big job would spark a battle between the progressive and centrist camps vying for control of the Democratic Party. It hasn't turned out that way: For the most part, Biden has managed to navigate intraparty tensions by finding broadly acceptable candidates, such as Secretary of the Treasury Janet Yellen, and to maintain party peace.

But one job looms that can't elide the progressive-moderate split and carries enormous stakes for the future of Big Tech and American business generally: the Department of Justice's antitrust chief. Biden's choice for this role will signal whether his administration is going to try to limit growing corporate consolidation, especially among technology companies, or, as some critics fear, follow the more deferential path of the Obama administration.

"That pick is going to be the most important thing that Biden does on antitrust," says Daniel Crane, a professor at the University of Michigan Law School.

The president's appointments to the Federal Trade Commission will be significant as well. Biden plans to nominate Lina Khan, a Columbia legal scholar and proponent of muscular antitrust enforcement, to serve as a member of the FTC, *Politico* reported on March 9.

Even before last fall's landmark antitrust lawsuits against Google and Facebook Inc., brought by Donald Trump's Justice Department and the FTC respectively, the question of how aggressively to regulate U.S. corporations had emerged as a major point of contention among Democrats. The biggest fault line is the market power amassed by Amazon, Apple, Facebook, Google, and other marquee tech firms.

Until fairly recently, the size of these companies wasn't a cause for concern in establishment legal ▶

Edited by Amanda Kolson Hurley, Paula Dwyer, and Sara Forden

◀ circles, both Democrat or Republican. Since the 1970s, antitrust law has judged anticompetitive behavior mainly by its effect on consumer welfare. Popularized by the libertarian law professor Robert Bork, this approach argues that antitrust law should be concerned only with "price effect"—whether an action lowers consumer prices. By this measure, big isn't necessarily bad: Amazon may be huge, but its efficiency produces low prices.

Throughout the Obama administration, Democrats tended to share this view. "Under U.S. antitrust law, we don't punish lawful monopolies," Renata Hesse, Obama's last antitrust chief, said in a 2016 speech. "When monopoly profits flow to an entrepreneur because she has made a better product or developed a better service, society still benefits from the competition that produced that better product or service." This benign outlook on bigness made it easy for officials to cycle, as Hesse did, between working for tech giants (her past clients include Alphabet Inc.'s Google and Amazon.com Inc.) and serving in government. She may soon get another chance. Biden officials have floated her name for the antitrust job.

Since Obama left office, a new wave of populist reformers has sought to reinvigorate and expand antitrust law in a way that takes direct aim at the big tech companies. Rejecting Bork, these reformers embrace former Supreme Court Justice Louis Brandeis, who famously decried "the curse of bigness." Led by Barry Lynn and the Open Markets Institute, and echoed by liberal politicians such as Senators Elizabeth Warren and Bernie Sanders, the "New Brandeis movement" claims lax antitrust enforcement driven by a narrow consumer welfare approach has allowed monopolies to proliferate across the economy with harmful effects that can't be measured by price alone.

"We now have a world where antitrust has been narrowed substantially in terms of what it considers," Jonathan Kanter, a lawyer who represents several companies that sued Big Tech, said at a recent panel discussion. "It's focused almost singularly on price effect to the exclusion in many instances of competition, innovation, and the effect on our democracy more broadly."

To reform-minded populists, in other words, the pernicious effects of monopoly power aren't limited to Google's domination of the digital ad market or Apple's steep fees for app developers, but also include Facebook's role as a vector of misinformation that undermines elections and stokes political violence such as the Jan. 6 riot at the U.S. Capitol. And they fault Democrats as much as Republicans for producing this state of affairs. "I don't think there's any going back to Obama-era-type enforcement," says Sarah Miller, head of the American Economic Liberties Project, which published a scathing report in January on the Obama administration's weak record on antitrust enforcement. "What's at stake with Biden is how quickly and aggressively we can abandon what I think now is broadly recognized as a failed approach to antitrust."

To redress these shortcomings, Miller and other reformers want the Biden administration to seek a Google breakup, back congressional efforts to strengthen antitrust laws, reverse some mergers, and split up and police dominant corporations across the economy. They'll have at least one prominent ally in the White House. On March 5, Biden named Tim Wu, a Columbia law professor and author of *The Curse of Bigness: Antitrust in the New Gilded Age*, to the National Economic Council. The prominence of Big Tech at the center of the antitrust debate has also made Kanter a candidate for the Justice Department's antitrust chief, one favored by a number of reform groups. "He's the strongest, most viable progressive for this position," says Sean McElwee, co-founder of the progressive think tank Data for Progress. "His experience in making and winning cases for antitrust enforcement is the key factor. Everyone else has mostly dealt with antitrust from the other side."

For Biden, this split in the party is new and presents a fork in the road when it comes to setting antitrust policy. "There are very strong disagreements that didn't exist under Obama that Biden is going to have to resolve," Crane says.

But the divide among Democrats is only one factor, and it may not be the one that ends up weighing most heavily on Biden's thinking. After pledging to govern as a unifier, Biden has failed to win much Republican support. This adds significance to his antitrust pick because the issue is one of a dwindling few that could—were he to choose the right sort of candidate—draw the bipartisan support he craves. The Trump Justice Department's lawsuit against Google drew strong bipartisan approval, as did the FTC's suit against Facebook. A Data for Progress poll in September found 80% of Democrats and 74% of Republicans concerned about monopoly power, with Republicans even more likely than Democrats to agree that the government should prevent tech giants from dominating the internet.

That skepticism extends to Republicans in Congress. "We're in a unique moment where there could actually be agreement between a segment of Republicans and progressive Democrats, in that they both want someone who isn't a shill for Big Tech firms or any other concentrated industry, and

▼ Renata Hesse and Jonathan Kanter, who hold different views on antitrust policy, are both said to be under consideration for antitrust chief

● Hesse

● Kanter

▼ Lina Khan will likely be nominated to the FTC, and fellow Big Tech critic Tim Wu has been named to the National Economic Council

● Khan

● Wu

ILLUSTRATION BY ARNE BELLSTORF. HESSE, KANTER: YOUTUBE. KHAN, WU: NYT/REDUX who is going to take antitrust enforcement seriously and be aggressive about it," says Senator Mike Lee of Utah, the top Republican on the Senate Judiciary Antitrust Subcommittee and a leading proponent of stronger action against concentrated market power.

One way Biden's Justice Department could highlight its commitment to take on tech companies is by expanding the federal case against Google to incorporate a pair of lawsuits brought by coalitions of state attorneys general, one led by Republican Ken Paxton of Texas. Kanter advocated just this approach in October: "Everyone is viewing this as a symphony, not a solo."

Whether Biden agrees should become clear in the next few weeks, as he moves to fill the Justice Department slot and the open commission seat at the FTC. With multiple government antitrust suits under way, reformers such as Lynn say a reckoning for tech giants could be imminent. "I think there's an understanding in this White House that we've entered a new world," Lynn says. "But these picks will tell us exactly how Biden is setting the compass." —*Joshua Green*

THE BOTTOM LINE Biden's stark choice on antitrust policy is whether to accept the power of tech giants, as Obama did, or crack down on them, as progressives—and some Republicans—urge.

The FTC's Feeder School

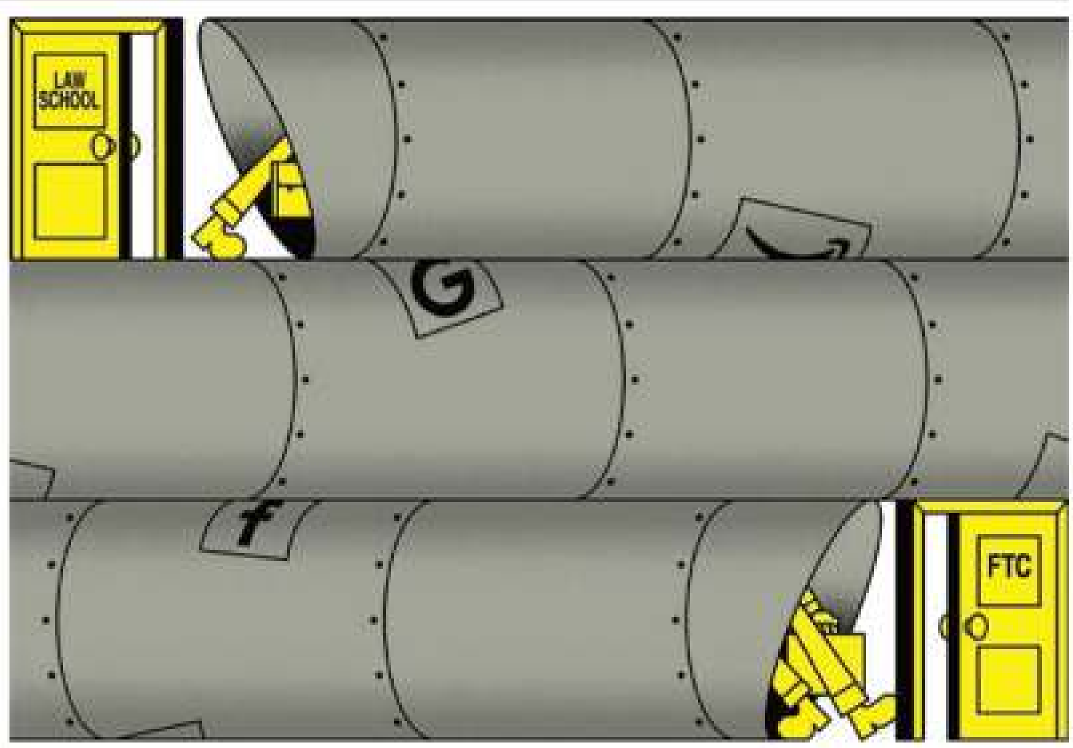
● Laissez-faire George Mason University built a tech-funded pipeline to regulators, critics say

The Tech Transparency Project (TTP), a watchdog group in Washington, details in a new report an unusually close relationship between the law school at Virginia's George Mason University and the Federal Trade Commission. By helping shape the workforce of the FTC, the group claims, the school infused it with a laissez-faire philosophy favorable to the school's tech donors.

The report throws a harsh light on the FTC's hands-off approach to tech companies over the past decade. As the agency prepares to argue the lawsuit against Facebook Inc. that it filed late last year, seeking to break up the social media giant, it must contend with an inconvenient fact: It approved Facebook's acquisitions of Instagram in 2012 and WhatsApp in 2014—the very mergers it now seeks to undo. The FTC's consent to those deals is cited by critics as evidence of a permissive attitude that allowed tech companies to grow into leviathans.

One explanation for its lenience, the TTP report charges, is that the industry used a corner of academia to capture the agency. According to the report, which was set to be published on March 12, Silicon Valley donated substantial sums to George Mason's Antonin Scalia Law School, which built a pipeline of professors and graduates who went to work at the FTC. Dozens of people went from the school to the regulator—commissioners, bureau heads, attorney-advisers, legal interns—during the Obama and Trump administrations.

Under President Trump alone, professors and



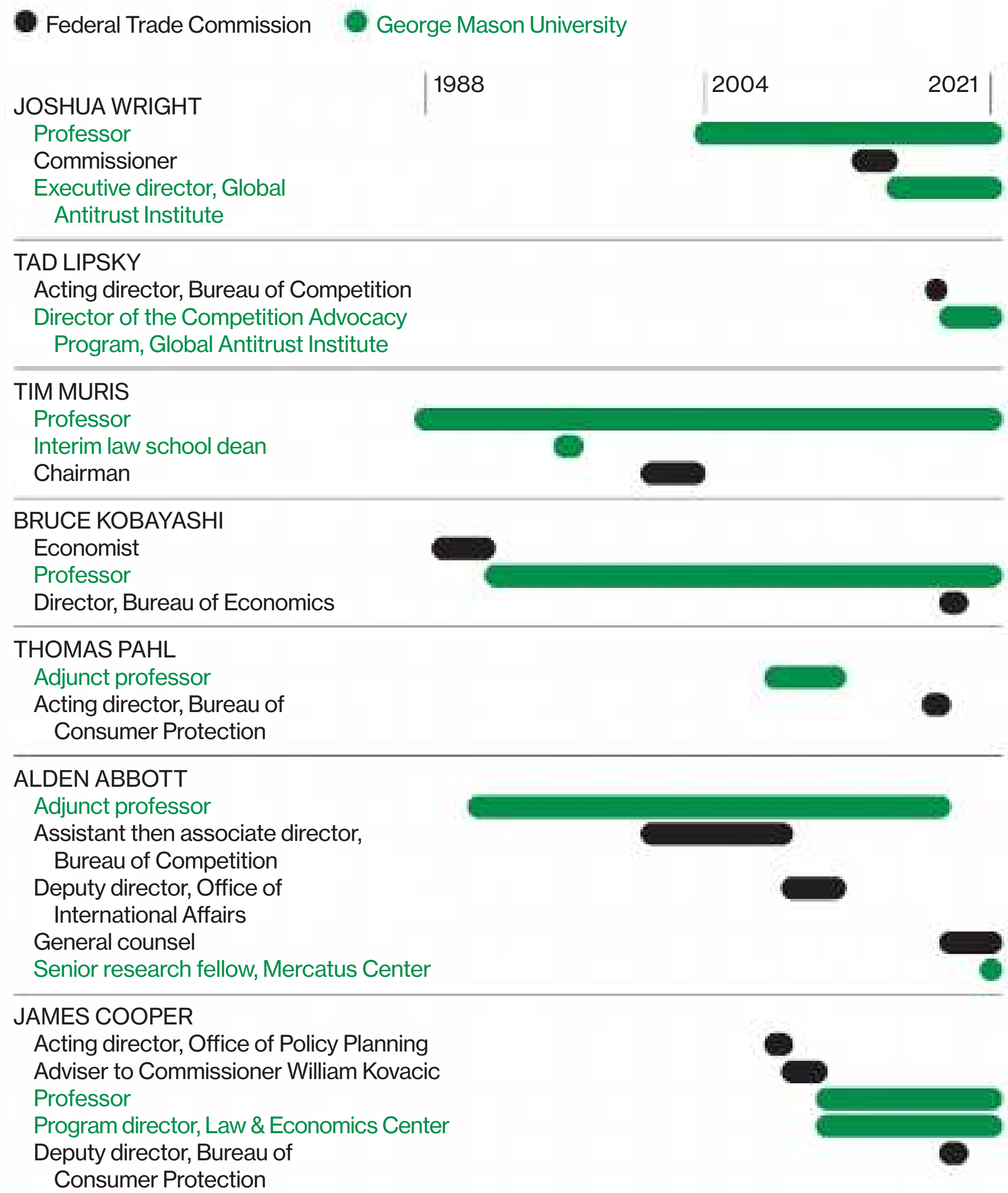
graduates of Scalia Law, and heads of affiliated programs at George Mason, served as the FTC chair, general counsel, policy planning head, and leaders of its three main divisions: the bureaus of competition, consumer protection, and economics.

Katie Paul, who heads the TTP, says an investigation is needed into "whether George Mason University has effectively become Big Tech's back door into the FTC, giving the companies an undisclosed way to sway its decision-making and hobble enforcement action."

Large tech companies have donated to two programs affiliated with Scalia Law, the Global Antitrust Institute and the Law & Economics Center. From ▶

Revolving Door

Numerous George Mason faculty members in recent years joined from or left for the FTC, or held roles at both places simultaneously.



DATA: LINKEDIN.COM; GMU.EDU; FTC.GOV; BLOOMBERG REPORTING

◀January 2018 to the end of last year, Google donated $900,000, Amazon.com Inc. contributed $925,000, and Facebook Inc. gave $675,000, according to documents obtained by *Bloomberg Businessweek* through a public records request. Google, Amazon, and Facebook declined to comment on their donations.

The law school says the ties between its faculty and the FTC aren't unusual. Alison Price, a senior associate dean, says it's common for professors to work for federal agencies and then return to their teaching jobs. "Since Scalia Law has special expertise and a relatively large faculty in antitrust, it's logical that our faculty is called to serve with frequency," she says. "But faculty don't set policy; administrations do."

The Tech Transparency Project is part of a larger watchdog group, Campaign for Accountability. The TTP website cites several philanthropists as donors, including George Soros's Open Society Foundations. Oracle Corp. had been a donor to a TTP predecessor group that focused mostly on Google, but the TTP says it no longer accepts corporate funding.

Both George Mason programs, which host conferences and offer training for judges and antitrust enforcers, promote the consumer-welfare standard articulated by Robert Bork, the late federal judge and Yale Law School professor. That standard, the guidepost for regulators and courts since the 1980s, looks to price increases as a gauge of competitive harm. It is blamed by some antitrust experts for handcuffing enforcers when it comes to policing tech companies.

The tech companies' donations are drawing scrutiny. At a hearing on Feb. 25, New York Democratic Representative Mondaire Jones called Abbott "Tad" Lipsky, a former FTC official now at the Global Antitrust Institute, "a wolf in sheep's clothing." As he testified against proposals to give the antitrust laws more teeth, Lipsky drew Jones's scorn. Programs such as the GAI "have worked to teach judges and regulators to let their guard down as corporate funders like yours came to dominate our economy," Jones said. Lipsky responded that his antitrust views predated "any of these digital technology companies."

A key figure in the law school-to-regulator pipeline is Lipsky's boss, Joshua Wright, an FTC commissioner from 2013 to 2015. He now teaches antitrust law at George Mason while also running the GAI.

Wright wielded outsize influence at the agency, pushing through a 2015 policy statement in an attempt to rein in the agency's enforcement power. After he left he improperly lobbied the agency on behalf of Qualcomm Inc., one of the law school's largest donors, according to a report by the FTC inspector general that was obtained by TTP and verified by *Bloomberg Businessweek*. His name was redacted in the report, but Wright confirmed it was about him. He says he did nothing wrong.

The *New York Times* last year reported that tech companies bankrolled the work of the GAI and that Wright had worked with corporate donors to fend off critics. The extent of the revolving door between the FTC and the law school, and Wright's alleged violation of ethics laws, haven't been previously reported.

Many companies support higher education, and many universities send professors and graduates to Washington. But George Mason is unique in cultivating a specific regulator, says Jeff Hauser, executive director of the Revolving Door Project, which tracks government officials' corporate ties.

"In terms of feeding directly into a government agency, I'm not aware of any equivalent at the SEC or the EPA or anything else," he says, referring to the Securities and Exchange Commission and the Environmental Protection Agency.

A public university in the northern Virginia suburbs of Washington, George Mason is home to the free-market think tank the Mercatus Center. It is a leader in the study of applying economic analysis to the law, emphasizing that markets work best when government regulates less. The university became known as a haven for conservatives at the end of the Reagan administration in 1988. Even Bork taught there after stepping down from the bench in 1988.

The George Mason conduit was steady and robust, according to the TTP, which details dozens of examples of people moving between the FTC and the law school over the past decade. One is James Cooper, who directs an economics and privacy program at the Law & Economics Center. He simultaneously taught at the school and served as a deputy director for the FTC's Bureau of Consumer Protection.

Cooper was among the academics who urged House lawmakers last year to reject proposals to break up tech companies and make merger approvals more difficult. George Mason's Wright, Lipsky, and John Yun, a professor at the law school who was an economist at the FTC, joined the filing. Cooper didn't respond to a request for comment, and Yun declined to comment.

But Wright, the former FTC commissioner, perhaps best embodies the ties linking the FTC to the law school and its donors. After leaving the agency in 2015, Wright simultaneously taught at George Mason, ran the GAI, and worked for the Wilson Sonsini Goodrich & Rosati law firm, where he represented Qualcomm.

The FTC sued Qualcomm in January 2017 in a monopoly case that was developed while Wright was an FTC commissioner. Wright tried to broker a settlement about four months after the case was brought. He met Lipsky, then the acting director of the FTC's competition bureau, for lunch at a steakhouse in Washington and tried to set up an additional meeting with agency officials, according to the inspector general's report.

In doing so, Wright violated an ethics law that bans officials for life from lobbying on issues they worked on "personally and substantially," according to the inspector general. Those findings were referred to the Department of Justice's public integrity section. The Justice Department, which decided not to prosecute, declined to comment.

Lipsky resigned two months after his lunch with Wright, who then hired him at the GAI. Lipsky didn't respond to a request for comment.

"I never made any appearance at the FTC involving its enforcement action against Qualcomm or discussed the merits of the case with any FTC official," says Wright, who declined to elaborate on the specifics of the investigation. "I immediately complied when the FTC ethics office informed me that I should not make any appearance based upon a single preliminary vote I had cast years before the case was filed."

Qualcomm contributed almost $5.8 million to the George Mason law school programs from 2016 through 2020. Less than two months before Wright met with the FTC to try to settle the Qualcomm case, the company gave $525,000 to the GAI. The company didn't respond to requests for comment.

Tech companies that donate to George Mason collaborate with the school's professors on projects, according to emails obtained through a public records request.

Last year, Steve Satterfield, Facebook's policy director for privacy, asked Cooper at the Law & Economics Center if they "could restart the conversation about ways we might work together." Elaine Sedenberg, who also works on Facebook privacy policy, in a separate email invited Cooper to lunch "to brainstorm more ways to work together (or more accurately ways Facebook could help incentivize external and independent work on these topics)." Facebook declined to comment, and Satterfield and Sedenberg didn't respond to requests for comment.

George Mason professors are also taking Facebook's side against the FTC as it seeks to break up the company. One is Tim Muris, a former FTC chairman who teaches at George Mason and served as interim law school dean from 1996 to 1997. He argues in a paper published last year and funded by Facebook that a government lawsuit to undo tech companies' past mergers faces "unusually heavy burdens" that they're "very unlikely to meet." He didn't respond to a request for comment.

No law prevents the FTC from attempting to undo acquisitions it had approved in the past. That's not stopping Facebook from trying to use the flip-flop in its defense. "The FTC wants a do-over," Facebook said in a March 10 federal district court filing in response to the lawsuit. "Facebook is aware of no comparable, much less successful, challenge by the FTC to a long-completed acquisition that the FTC itself cleared." *—David McLaughlin, with Naomi Nix*

THE BOTTOM LINE George Mason's law school supplied dozens of personnel to the FTC over the past decade, which watchdogs say hobbled enforcement efforts against tech companies.

"In terms of feeding directly into a government agency, I'm not aware of any equivalent at the SEC or the EPA"

THE EQUALITY ISSUE

E1

All in It Together? Yes and No

The pandemic has highlighted structural inequalities that have plagued society for decades

By Peter Coy

PHOTOILLUSTRAION BY 731; PHOTOS: GETTY IMAGES (3); SCIENCE SOURCE (1)

COVID

On March 11, 2020, the World Health Organization declared Covid-19 a pandemic. This magazine published a cover-to-cover special issue that week—our last in the office—called "The Lost Year." At the time, though, fear of the disease was leavened with hope that it might bring people together. In one of his eagerly watched press conferences, New York Governor Andrew Cuomo called Covid a "great equalizer." So did Madonna, who released a video of herself mostly immersed in a rose-petal-strewn bathtub saying, "We're all in the same boat, and if the ship goes down we're all going down together."

The ship went down, all right, but we didn't all go down together. Covid amplified inequality—by race as well as income, gender, occupation, and nationality. For many, the lost year threatens to become a lost decade akin to America's doldrums after the deep recession of 2007-09 or Japan's long slump after its asset bubble popped in 1991.

The cumulative future damage is likely to be even greater than the havoc Covid wrought in its first, acute year. Doctors coined the term "long hauler" to describe patients with lingering health problems; society itself will be a long hauler. And the least-advantaged will suffer the most in damaged health, derailed schooling, and wrecked careers.

On the plus side, Covid has stimulated fresh thinking about ways to protect the most vulnerable. The Philippines used its universal health insurance, which was enacted in 2019, to cover testing for and treatment of Covid for everyone, including the 40% of Filipinos working in the informal sector. Rwanda, fearing the virus's impact on its poorest citizens, used robots to take temperatures and drones to deliver medicines. In the U.S., President Biden's $1.9 trillion relief program expands tax credits for low-income Americans with children, bolsters unemployment insurance, pays out $1,400 checks, and expands rental assistance and food stamps.

The pandemic made long-present inequalities impossible to ignore. "A lot has gotten worse, but there's one thing that's gotten better, and that's the opportunity for this nation and indeed the world to address equality seriously," says Dayna Bowen Matthew, dean of George Washington University Law School and author of *Just Medicine: A Cure for Racial Inequality in American Health Care*. "It's almost a reprieve, a mulligan, a do-over," she says. "As a society we want to be better than this, and we have concrete evidence, reasons why and how to be better than this."

Thirty-six Americans had died of Covid in the week that *Bloomberg Businessweek* published "The Lost Year" cover. The death toll is now over half a million in the U.S. and more than 2.5 million worldwide. So it really was a lost year. But for the lucky ones, the loss was felt at a distance—sad stories on the news, forced separation from friends and family. For many there were offsetting advantages, such as working from home for full pay while the rising stock market fattened their retirement accounts. Federal relief dollars benefited a lot of people who didn't need the money.

This issue isn't about those lucky ones. It's about how to help people who are struggling to recover. Just as Covid permanently scars lungs, it can damage earnings potential for a lifetime. In February 2020 unemployment rates were just 3% for Whites, 4.4% for Hispanics, and 6% for Blacks. A year later the respective rates were 5.6%, 8.5%, and 9.9%. The longer you're out of work, the harder it is to rejoin the labor force. The same goes for nations: "COVID-19 could leave lasting economic scars in the poorest countries; It's in everyone's best interest to act now," reads the headline on a Feb. 4 blog post by World Bank officials Ayhan Kose and Akihiko Nishio.

As Kose and Nishio wrote, fixing Covid-induced inequality is more than an act of charity. The global economy needs a productive workforce, so those scarcely grazed by the pandemic have a strong self-interest in helping the less fortunate get healthy, educated, and skilled.

Education is a good place to start. It's been an especially trying year for racial minorities and the poor. Last year, in a paper for the Organization for Economic Cooperation and Development, economists Eric Hanushek of Stanford and Ludger Woessmann of Germany's IZA-Institute of Labor Economics calculated that students in grades 1-12 affected by Covid closures "might expect some 3% lower income over their entire lifetimes" on average—lower still for disadvantaged students who get less help at home. That, they estimated, could reduce their nations' annual economic output by 1.5% for the rest of the century.

Hanushek and Woessmann recommended, among other things, steering teachers toward mainly video or mainly in-person instruction, depending on which they're better at, and "pivoting to more individualized instruction" to make up for the disparity in learning over the past year.

Health precedes even education as a necessity, and the disparities are glaring. Compared with the death rate from Covid for non-Hispanic Whites, the rate is 1.9 times higher for Blacks; 2.3 times higher for Hispanics or Latinos; and 2.4 times higher for American Indians, according to data as of Feb. 18 from the Centers for Disease Control and Prevention. Distributing vaccines in minority communities will be essential. Matthew, the George Washington University Law School dean, says she's heartened that advertising—which excels at pushing unhealthy products—is being used for vaccine outreach. The Ad Council's new message is, "It's Up to You."

Stay-at-home orders to control Covid have been a cruel joke to people with no homes to stay in, says G. Robert "Bobby" Watts, chief executive officer of the National Health Care for the Homeless Council. He credits the CDC with efforts to make homeless encampments safer but says providing actual homes would be better. Because of chronic underfunding, only a quarter of families that qualify for Section 8 housing vouchers receive them.

Laws and regulations don't explicitly give Whites more protection against exposure to Covid, but the practical effect of government policy is often to widen the racial and ethnic divide, says an article in the forthcoming issue of the *Emory Law Journal*, “Systemic Racism, the Government’s Pandemic Response, and Racial Inequities in COVID-19,” by Ruqaiijah Yearby of Saint Louis University School of Law and Seema Mohapatra of Indiana University’s McKinney School of Law. (Emory Law professor Dorothy Brown, our cover subject, is writing the introduction to that issue.)

The solutions are as obvious as the problems: universal health insurance, mandatory employer-paid sick leave, expanded Medicaid eligibility, refundable tax credits for child care and elder care, and stronger job protections, for starters. “My optimism is that the Biden administration has highlighted these disparities” and staked out a plan for fixing them, says Yearby. “They need to do it soon. Don’t wait.”

When schools closed and care workers had to stay home, the burden of caring for children and elderly parents fell largely on women. They typically earn less than their husbands, so the opportunity cost for them to stay home is less, says Stefania Albanesi, an economics professor at the University of Pittsburgh. But they earn less in the first place partly because employers expect them to stay home with the kids. That’s a vicious circle. Helping women stay in the workforce would benefit their employers, Albanesi says. “This should be a nonpartisan issue.”

The inequities within countries are dwarfed by the gaps between countries. Last year 19 global health experts released a plan for the equitable distribution of vaccines that prioritized in the first phase preventing deaths, especially premature deaths. The plan was ignored as big and rich nations rushed to monopolize the supply of shots. As of March 5, according to WHO data, 249 million vaccine doses had been administered—but only 0.1% of those were in Africa, outside of Morocco.

In the poorest nations, Covid’s damage is as much from the knock-on effects as from the infections. “During times of crisis, essential health services often decline, which can ultimately kill more people than the pandemic itself,” said an article last year in *BMJ Global Health*. During the Ebola epidemic, access to health-care services in affected nations fell by half, which increased deaths from malaria, AIDS, and tuberculosis.

Poverty itself can be a fatal condition in poor countries, and Covid was a huge setback. Kose and Nishio wrote in their Feb. 4 blog post that the World Bank estimates the pandemic will push about 60 million people in the world’s 74 poorest countries into extreme poverty—defined as living on $1.90 a day or less—by the end of 2021.

The virus unerringly targets the most defenseless members of society

3%
Amount of income students in grades 1-12 might lose over their lifetimes because of the pandemic

As much as they might like to, rich nations can’t insulate themselves from poor ones. The next Patient Zero is never more than a plane ride away. Recognizing that, Biden’s relief package contains $4.7 billion for global health.

It’s not always possible to justify fixing inequities on economic grounds. For example, there’s no obvious benefit to gross domestic product in restoring hope to people living in institutions who have been isolated by Covid shutdowns. It’s simply the right thing to do.

In fact, hopelessness could be one of the long-haul side effects of Covid-19, according to a pair of working papers published last year by the National Bureau of Economic Research. One, “The Political Scar of Epidemics,” predicts Generation Z will be lastingly disillusioned by the failure of their governments to fight the pandemic. The other, “Scarring Body and Mind: The Long-Term Belief-Scarring Effects of COVID-19,” says fear of a repeat pandemic will lead people to invest less in productive assets like factories, which will harm growth. “We find that the long-run costs for the U.S. economy from this channel is many times higher than the estimates of the short-run losses in output,” the authors wrote.

Biden’s coronavirus relief package and the infrastructure bill that’s next in the legislative pipeline are aimed at accelerating growth and preventing that sort of pessimistic, deflationary mindset. Since Arthur Okun in 1973, economists have explored the idea that running a “high-pressure” economy with exceptionally low unemployment can lead to an upgrade of skills, raising productivity and wages. That seemed to be happening early last year before the coronavirus struck: The Black unemployment rate reached a record low of 5.2% in 2019. Strong growth and low unemployment don’t lift all boats, but they do induce employers to consider job candidates they might otherwise have overlooked. That’s one more solution to Covid inequities.

The SARS-CoV-2 virus unerringly targets the most defenseless members of society. The rich and powerful are better at protecting themselves, for the most part, but they’re not entirely immune from its effects. The virus will remain dangerous as long as it continues to mutate in large, unvaccinated populations. Taxpayers will bear the cost of caring for people whose health or employability have been damaged by the virus and the recession it caused. So Madonna was kind of right. We are all in the same boat. Ⓑ

E2

Tax Code So White

Dorothy Brown has spent her career documenting racism in a tax system that's supposedly colorblind

By Ben Steverman
Photograph by Braylen Dion

Brown

TAXES

Growing up in the Bronx during the 1960s and '70s, Dorothy Brown couldn't escape racism. It was all around. Her father, James, a plumber, being barred from joining the local union. Her mother, Dottie, having to battle prejudiced teachers, including one who marked down Dorothy's sister's grades so the precocious child wouldn't upstage her White classmates. Or the White cop beating a handcuffed Black man in the backseat of a cruiser, something she once observed while waiting to cross a street.

As a teenager, Brown thought she'd found a way out—a loophole in American racism. Taking an accounting class, the self-described math geek discovered the U.S. tax code, a universe governed by intricate rules where race wouldn't matter. In tax law, she thought, "the only color that mattered was green." The assumption carried her through an early career as a tax attorney, an investment banker, and then a political appointee in President George H.W. Bush's administration.

After that, though, Brown spent a quarter century trying to prove the opposite: that although tax laws may appear to be colorblind, they still discriminate against Black Americans. Now the Asa Griggs Candler professor of law at Emory University, Brown is preparing to publish a book that's the culmination of years of research, titled *The Whiteness of Wealth: How the Tax System Impoverishes Black Americans—and How We Can Fix It*.

It arrives at an opportune time. After decades during which the 61-year-old Brown says mainstream tax and policy experts "either dismissed, attacked, or ignored" her, her ideas appear to be finding an audience. "People are starting to pay more attention to her work and what she's been telling us for a while," says Chye-Ching Huang, executive director of New York University's Tax Law Center.

Last summer, after the killing of George Floyd ignited protests around the country, Brown got more calls from reporters than she'd received in her entire career. By the time President Biden promised, on his first day in office, to identify and dismantle systemic racism perpetuated by all federal departments, staffers on Capitol Hill were already consulting Brown about the Internal Revenue Service's impact on racial disparities. "Suddenly people wanted to talk about race and tax," she says.

With *The Whiteness of Wealth*, Brown has turned a notoriously boring topic into a surprisingly accessible and lively 288-page book, relying on examples from real families, including her own, to guide readers through the intricacies of a tax code provisioned for just about every milestone in a person's life—education, marriage, homeownership, childbearing, death, and inheritance. Generations of lawmakers have optimized the system for White people, she argues, with the result that in the U.S.'s supposedly progressive and race-neutral tax code, Black people end up paying more than White people with the same incomes.

The challenge for Brown's research has been all the greater because the IRS doesn't take race into account when it analyzes its giant trove of tax data. So she had to laboriously stitch together information from dozens of other sources to prove her book's thesis. The best evidence that the system is unfair to Black people is the sheer size and persistence of the racial wealth gap. The median White family has a net worth eight times the typical Black family's wealth. According to Federal Reserve figures, that's the same size gap as in 1983, despite higher incomes, educational gains, and extraordinary progress by individual Black people, including to the highest office in the land.

The book also serves as something of a primer on how wealth works in America, showing how the rich pass assets to their children and why those starting from the bottom face such a difficult climb. Brown devotes her final chapter to advice for Black readers trying to navigate a system that disadvantages them at every turn. "Black Americans need to be defensive players," she writes, "choosing strategies in their educations, careers, and family lives that compensate for oppressive practices and policies." She also pushes for major tax changes to erase biases toward Whites and to assist all people, especially Black ones, who are trying to build wealth. Never again should politicians discuss tax reform without considering race, she says. "I literally want to change how America talks about tax policy."

One afternoon in the early '90s, Brown pulled out an essay she'd been looking forward to reading by her friend and mentor Jerome Culp, the first professor of color to receive tenure at Duke University's law school. She'd been feeling isolated at her first academic job, with White colleagues who she says seemed clueless about race, at best. And here was Culp arguing that race should no longer be overlooked in important areas of the law. "There may be an income tax problem that would benefit from being viewed in a Black perspective," he wrote by way of example, "but until you look, how will anyone know?" Brown called Culp and promised to try.

It took several years for her to publish her first research on the question, focusing on the taxation of married couples. Black Americans are more likely to be single, and if they're married, it's more likely both spouses will be working. These considerations wouldn't have mattered when the income tax made its debut in 1913, because all earners were treated the same regardless of marital status. But in 1930 a rich White shipbuilder named Henry Seaborn persuaded the U.S. Supreme Court to lower his tax bill by imputing half his income to his wife. Congress eventually went along, and ever since, couples with only one high earner have paid less. Brown realized this policy had meant higher tax bills for her parents: The tax code essentially treats a plumber and a nurse who are paying for child care and commuting expenses with after-tax dollars the same or worse than it does a banker earning their combined salaries whose spouse stays home with the kids.

In the next 20 years, Brown went on to systematically catalog other ways in which, when Black families like her own tried to hoist themselves up the economic scale, the U.S. tax system pulled them down. Her colleagues, who were overwhelmingly White, expressed skepticism, however. "Dorothy, everybody knows your work is irrelevant, because Black people are poor and don't pay taxes," she says one professor told her, rudely laying bare an assumption she's confronted countless times. (Four-fifths of Black households don't fall below the poverty line.)

Brown's early published work "caused her lots of professional grief," recalls her friend Mechele Dickerson, a law professor at the University of Texas at Austin. "People thought you were just trying to be controversial—that you're just making stuff up." Those on the left asked if this was about class, not race. Conservatives posed a different question: Wouldn't these disparities disappear if Black taxpayers just acted more like White ones?

↓ Brown's father, James, with her nephew Jamaal in the early '80s

COURTESY DOTTIE BROWN (3)

Brown's answer to both is that your class may change but your race can't, no matter how differently you behave. "Blacks graduate from college with more debt, do not get jobs as easily as Whites, are not paid the same wages as their equally qualified White peers, are steered toward lower paying jobs, and have an unemployment rate twice that of Whites—yet are more likely to provide financial support for extended family," she writes in her forthcoming book.

These present-day disparities are piled on top of a shameful history of Black Americans being purposely excluded from landmark federal legislation and programs. "For Whites, there were government interventions that created a middle class," says New School economics professor Darrick Hamilton, an adviser to Senator Bernie Sanders's 2020 presidential campaign who considers Brown a mentor. He points to the Homestead Act in the 19th century and much of the New Deal and the GI Bill in the 20th. "When Blacks were able to amass pockets of wealth, it's been vulnerable to confiscation, theft, and terror," he adds, citing the devastation wrought in Black neighborhoods by predatory subprime lenders as an example.

Brown argues that "tax policy adds insult to injury" by magnifying the financial toll of Blackness. The tax treatment of housing is a textbook case. Interest paid on mortgages is deductible, but there's no comparable perk for renters, who are disproportionately Black. Also, White homeowners tend to pocket gains upon resale, which are largely tax-free. In contrast, Black homeowners are very likely to lose money on their investment, because homes don't usually appreciate much in diverse neighborhoods that are shunned by White buyers. And losses aren't tax-deductible.

Or consider tax incentives the federal government offers on 401(k)s and other types of retirement savings plans, which add up to more than a quarter trillion dollars per year, according to the Tax Policy Center. Only about half of U.S. workers have a retirement account, and they're disproportionately White. Meanwhile, Black people are far more likely to have jobs that fail to provide 401(k)s and other corporate benefits, such as health care and flexible spending accounts, that are heavily subsidized by the tax code.

These discrepancies are nothing new—Brown's father, locked out of the plumbing union for the first 20 years of his career, was employed by a small private company that offered no retirement or health-care plan. Now, though, the gap between different classes of workers might be widening, with the rise of the gig economy and corporations outsourcing more work to contractors. Brown is wary of the trend, seeing it as a "new form of occupational segregation" that's ensnaring a disproportionate number of Black workers.

Other factors prevent Black Americans from saving and taking full advantage of perks in the tax code, too. White parents send checks to their children for college tuition or the down payment for their first home. Money in Black families tends to move in the other direction, meaning successful Black professionals are far more likely to support parents or other family members.

Problems such as these are so pervasive and stubborn that they're invulnerable to "magic bullets" proposed by both the Left and the Right, Brown says. Policies geared toward boosting Black homeownership, for example, could channel even more Black savings into investments that ultimately prove unprofitable. Education, so often floated as the key to economic advancement, can indeed boost earnings, but it also often saddles graduates with debt. (According to Federal Reserve data from 2019, 30% of Black, non-Hispanic households had student loans, compared with 20% for White, non-Hispanic households.) Here, too, tax policy adds insult to injury. While homeowners can usually deduct all their mortgage interest, student-loan holders can only deduct $2,500—or zero if their income exceeds $85,000 a year.

Brown is often asked: Does all this mean the writers of these tax laws were racist? "The question of intent is really irrelevant," she says. "It's hurting Black Americans whether Congress meant to or not."

"I'm always 'the woman from the South Bronx.' I am very direct. I don't put up with a lot. I don't really care if you don't like the tone"

← Brown before her high school graduation in 1976

→ Brown's mother, Dottie, in the Bronx in 1971

For all that Brown knows of racism, the lived and the learned, she can still find herself shocked by the damage it inflicts.

One summer afternoon in 2018, she was in her three-bedroom "dream house" on Martha's Vineyard, the island getaway for many Black professionals and celebrities. She was working toward her other dream, the book about the tax code she'd been contemplating for a decade, when she came across a startling statistic. Sixty percent of Black Americans who start college never finish it. After seeing the number, she shut her laptop, went to the beach, and stared at the ocean for a couple hours. Something about all those dreams denied and the contrast with her own experience hit her hard. "This is more messed up than even I knew—and I can't take it," she thought. She almost gave up the project.

When Brown was growing up, racism was a constant. Given how banks treated Black buyers, purchasing a home would have been impossible for her family if her father hadn't gotten help from his White boss. And the children's educational advancement might have been thwarted had James and Dottie, repeatedly blocked on their own career paths, not been determined to give their two daughters a better future. For a while, Dorothy and her sister attended a racially diverse elementary school, where they excelled. But after Dottie learned from another parent that Dorothy's sister wasn't being graded fairly, she lied about their address and had them transferred to another school, where they found more supportive teachers.

"Something my mother taught us was, 'You're no better than anyone else, and no one else is better than you,'" Brown says. "I didn't feel that racism would limit me. I knew I'd have to deal with it, but I didn't think it was hopeless." Still, she abandoned her original plan to be a civil-rights attorney like her hero, Thurgood Marshall. She didn't want racism to be the focus of her professional life, too. "It's too personal, it's too hurtful, it's too painful to hear these stories. I have enough stories."

A stroke of luck helped her avoid the student debt that burdens many other Black professionals. Her father, who was eventually hired as a union plumber by the New York City Housing Authority, briefly lost that job during the city's mid-'70s fiscal crisis. The layoff helped Brown, who graduated from high school at 16, qualify for a full scholarship to Fordham University, which she could attend while living at home. A law degree from Georgetown University, and a degree in tax law from NYU followed.

A federal clerkship led to a job at a boutique law firm that handled municipal bonds. Then in 1987 she was hired away by a client, the investment bank Drexel Burnham Lambert. The famously cutthroat and aggressive firm made huge profits on the junk bond boom, and it would later collapse in scandal after the conviction of executive Michael Milken. Brown recalls that a managing partner had this piece of advice: "Dorothy, if you want loyalty, buy a dog."

Brown moved to Washington, D.C., in 1989 to work at the U.S. Department of Housing and Urban Development as a political appointee in the first Bush administration. From the 1988 presidential race, she'd concluded that neither party was good on race. She says she gravitated to the Republican Party because it called for shrinking the role of government, and she believed the government was "one of the more racist actors out there." Her dalliance with the GOP carried on for years, before she switched parties to support Barack Obama's election in 2008.

Brown's first academic job was at George Mason University's right-leaning law school, now named for the late Supreme Court justice Antonin Scalia. Working on predominantly White campuses, Brown says she has dealt with disparaging comments from faculty, disrespectful students, and other instances where she felt treated differently because of her race. In 2001, when she was up for a job at Washington and Lee University, a Virginia institution named for a Confederate general, she presented her work and was interrupted so many times that faculty members later apologized for their colleagues' rudeness. "Dorothy, you were mugged, but you managed to hang onto your purse," said one friend who was there.

In past jobs, Brown says, the profit motive—the fact that she could help close a deal or untangle a tax quandary—had seemed to moderate her co-workers' racial biases. Academia felt different, but she couldn't always be sure when the friction had something to do with her race—and, if it did, when to say something and when to bite her tongue. Brown calls this "racism triage"—where "you reserve your energies only for the worst" incidents. To cope, she relied on a small network of Black women law professors at other schools, whom she'd call, asking, "Is this me? Or is this messed up?"

When incidents occurred, Brown pushed back using the political and strategic savvy she'd learned in earlier jobs. It would take two rounds of voting by the Washington and Lee faculty, but she eventually got the job there, and she thrived. Those opposed to her "outed themselves early on," she says. "I didn't ever have to worry about them again."

In 2007, Brown jumped to Emory University in Atlanta, a more prestigious school that also had a complicated history on race. Tenure protection allowed her to push forcefully for more diversity in the law school. "I'm always 'the woman from the South Bronx,' " she says. "I am very direct. I don't put up with a lot. I don't really care if you don't like the tone."

In 2013, Brown was recruited for a powerful job in Emory's administration, and, though reluctant to give up her research and teaching, she served for three stressful years. In the wake of protests from students demanding, among other things, more faculty of color, she ran a fund to hire diverse faculty and set up initiatives to mentor them. Colleagues say they recognize that Brown's outspokenness can be balanced by a measured approach to important and difficult work. "She may seem impatient, but she also believes in taking it one step at a time," says Claire Sterk, who recently stepped down as Emory's president. By the end, "she can make an argument that becomes very hard for people to not accept."

"I literally want to change how America talks about tax policy"

Biden's election could allow Brown to take her research to a new level. Just hours after being sworn in on Jan. 20, the president signed an executive order creating a cross-agency group with a mandate to address systemic racism in the U.S. government. Their duties will include gathering data to track the effects of policies on disadvantaged groups. "There's no reason this should remain in the Dark Ages," says Brown. Strict rules should be put in place to make sure the data isn't misused, she adds. She's also clear, to that end, that she isn't advocating for the IRS to add a race check box to the 1040 form. There are workarounds, such as using surveys and matching anonymized data sets.

With the right data and the right priorities, says Brown, the U.S. could do a better job of using its tax code to help close the racial wealth gap. Other policymakers are thinking along the same lines. "You've got this tool that is potentially powerful for reducing inequality, including racial disparities," says NYU's Huang. "One of the questions she's asking is: Why isn't it doing more?"

Brown's own reform plan would strip the tax code of exemptions and deductions that steer advantages to White Americans. All income should be taxable, she says. No more exclusions for gifts, inheritances, or property sales. Proceeds from investments should be taxed at the same rate as wage income, and marital status shouldn't affect taxes. There's only one deduction that she would add to the code: a "living allowance deduction" that would prevent or cut taxes on low earners. By requiring everyone else to pay progressive tax rates on all their sources of income, the U.S. could afford to lower rates and get the same revenue.

The Supreme Court would probably strike down any race-based tax credit introduced as a form of reparation to descendants of slaves, Brown says. So her next-best choice is an annual tax credit for taxpayers whose wealth is below the U.S. median. The credit would help all poorer Americans trying to build wealth in a country where it's gotten more difficult to move up the economic ladder on earnings from work alone. But because the typical Black family has a net worth of $24,000, compared to a median wealth of $122,000 for all Americans, it would disproportionately aid Black Americans.

None of Brown's favored remedies look likely to become law in a Congress where Democrats barely have a majority. But after watching attitudes toward racial justice shift last year, she's optimistic. "We are well positioned to start making the kinds of demands that the wealthiest White Americans have made for decades," she says.

In the meantime, Brown's new book has plenty of practical pointers for Black Americans: Take advantage of a 401(k) if you have one. If you'd rather buy a home in a diverse neighborhood–which is understandable–try not to sink your entire nest egg into that purchase. Investing in stocks is likely to provide a better return, despite a "racist financial system that hasn't seen Black Americans as potential customers."

Finally, don't despair or blame yourself for failing to get further along financially. "The reality of how ordinary White Americans build wealth is hidden," leaving "Black families bewildered about their inability to achieve the financial security of their White peers," she writes. White wealth snowballs over a lifetime: A tuition payment by Dad, a job at the family business, a small inheritance from Grandma, and soon even apparently middle-class young adults have amassed enough that they're able to return the favor to their children as they age. This system has been humming along for centuries. As Brown puts it, "Whiteness itself, and the legacy of advantages that comes with it, is the magnet that attracts wealth." B

GAME CHANGER: CORPORATE LEADERSHIP

Rachel Robasciotti

Founder, Robasciotti & Philipson

After growing up Black and poor, Robasciotti graduated from the University of California at Berkeley and worked at large financial-services companies. In 2004 she started her own firm, which focused on investing that incorporates social justice. This month her firm, Robasciotti & Philipson, agreed to merge with impact asset manager Abacus Wealth Partners.

Did having your own company change the way you were treated?

The name of the firm started with my last name. But early on when a client would come to our office and be greeted by both me and Maya [Philipson], a tall, lovely White woman who was then an associate, they would always extend their hand to Maya first and assume she was Rachel Robasciotti. Because she was a White woman, there was the expectation that she looked closer to what a financial professional would look like.

After George Floyd's killing, many investors have talked about diversity. Is that happening a year later?

Gatekeepers [of assets] are really reaching out and looking for meetings for the first time. What hasn't happened since our racial justice uprising is that significant assets haven't moved [to minority managers]. I do believe that if I had a more traditional background, more assets may have moved at this point. I think that's the big disconnect. Other Black, indigenous, or women asset managers tell me very similar stories.

What are some of the barriers holding back change?

Gatekeepers to most of the assets have a pretty clear set of due diligence requirements. They're somewhat set in stone, and they say things like, "You have to have a three-year track record or already have $200 million under management." But if we're actually looking for new perspectives from diverse managers, what we really need is a shift in standards to accurately assess whether or not an asset manager is a good fit for an asset owner. Not coming from a traditional background doesn't mean [they] don't have the brilliance necessary to effectively manage that portfolio. —*Saijel Kishan*

PHOTO: COURTESY ROBASCIOTTI

E3

The $500 Billion Bias Problem

It's the last weekend of the month, so Di Leshea Scott's Saturday begins with a long wait at the post office to get a money order for her rent. From there, she drives north to hand-deliver it at a drab office building just outside Detroit's city limits. As always, this ritual leaves her angry and frustrated; her landlord refuses to give her a lease, she says, or to make basic repairs. When it rains, she needs three buckets upstairs to catch leaks. The back porch is collapsing before her eyes.

She stands outside the landlord's empty office and sighs, then moves a welcome mat aside and flings an envelope with her money order under the door. Another $825 destined for someone else's bank account.

Despite its flaws, Scott clings to her little two-story Tudor on Lawrence Street with a devotion that's hard to fathom, until you know the house's ownership history. She's renting a home she used to own. Wayne County took it away from her in 2013, after she fell three years behind on her property tax payments. Her house, which she'd bought in 2005 for $63,800, was auctioned off by the county and snapped up by an investment company for less than $5,000. Scott lost every cent she'd put into it.

She shouldn't have. For years the city of Detroit used inflated valuations of Scott's house to calculate her property tax bills, charging her thousands of dollars more, cumulatively, than she should have paid, according to a *Bloomberg Businessweek* analysis of her tax records. Hers was among tens of thousands of homes in Detroit's lower-income Black neighborhoods that the city's assessors routinely overvalued. Meanwhile they systematically undervalued homes in affluent areas, reducing the taxes those homeowners paid.

It's not just Detroit. Local officials have overvalued the lowest-priced homes relative to the highest across the U.S., nationwide data show. From 2006 through 2016, inaccurate valuations gave the least expensive homes in St. Louis an effective tax rate almost four times higher than the most expensive. In Baltimore it was more than two times higher. In New York City it was three times higher.

These inequities are tucked deep inside America's system for funding its local governments, tilting property taxes in favor of wealthy homeowners even before any exemptions or abatements. And they carry a jarring implication: The residential property tax, which raises more than $500 billion annually to pay for public schools, fire departments, and other local services, is in effect racist.

That conclusion carries far-reaching implications of its own—not only for municipalities' day-to-day operations but also for roughly $331 billion in general-obligation bonds that cities, counties, and school districts have guaranteed with property tax revenue, according to data compiled by *Bloomberg Businessweek*. The evidence of systematic unfairness is mounting. Since at least the 1970s, piecemeal studies from Chicago, Detroit, New Orleans, and New York have concluded that property tax systems favor those who are better off. A 2020 study from the University of Chicago brings unprecedented scope to the question, covering 2,600 U.S. counties. It found that more than 9 out of every 10 reflected the same pattern of unfairness. "It's a textbook example of institutional racism," says Christopher Berry, a professor at the university's Harris School of Public Policy who led the research effort.

The problem is rooted in American history. One legacy of racial discrimination, including the practice of redlining (the refusal of banks to make loans in Black communities), is that Black people own a disproportionate share of lower-valued real estate. Census data show that the median home value in predominantly Black tracts is roughly half the value in majority White and Hispanic tracts. That historical disparity has been aggravated by a flawed tax system built on incomplete data and outdated methods for estimating the value of residential properties. "There isn't anybody making explicitly racial decisions to produce these outcomes," Berry says. "Nevertheless, they are racially disproportionate."

Wide variations in policies and rates among the many thousands of U.S. jurisdictions that levy property taxes make it difficult to quantify the aggregate size of the imbalances. But Berry found in 2018 that in Chicago alone, unfair assessments shifted $2.2 billion in property tax payments from those who owned the highest-valued homes to those who owned the lowest-valued homes—over only five years.

Unfairness doesn't end there. While tax assessments tend to overvalue many Black homeowners' property, private appraisals done for the purpose of securing mortgage approvals consistently undervalue them. The president of the Appraisal Institute, a professional organization, this year called it "an absolute priority" to work on addressing such issues, which experts say

How an unfair property-tax system blocks the building of Black wealth

By Jason Grotto
Photographs by Sylvia Jarrus and Amandla Baraka

Scott in front of the Detroit home she once owned and now rents

PHOTOGRAPH BY SYLVIA JARRUS FOR BLOOMBERG BUSINESSWEEK

TAXES

help widen the wealth gap between Black and White households.

In extreme cases, such as Scott's, unfair tax burdens lead to unpaid bills and property seizures, destroying the best chance for families to build generational wealth. Meanwhile real estate and bond investors reap windfalls from a money machine that floods local markets with foreclosed homes and securitizes the tax debts into bonds with generous yields.

Scott says she began saving for a house while working in a corporate cafeteria for $6 an hour. Her income doubled when she got a job at a domestic-violence shelter, and during the mid-2000s housing bubble she qualified for a mortgage. Owning a home gave her three children the kind of stability she'd never known herself, and the house became home base for her family and friends. Her best friend helped scrub soot off the foyer's marble tile. Her sister hung curtains in the living room. "For me, it's not just a piece of property," Scott says. "It's where life has existed."

Then, in 2011, she lost her job during the Great Recession and missed her annual tax payment, for $3,120.

Property tax bills are generally calculated based on two factors: the tax rate and the assessed value. The tax rate is straightforward; the same percentage will apply to every piece of residential property within the local taxing district. The assessed value is where things get funky. And even if you think your assessment is fair, you really can't know that until you see how yours compares with everybody else's.

A few years ago, Carmen Daniels, a retired public school assistant principal in New York, thought she was getting a decent deal. The city valued her home in East New York, Brooklyn, purchased for $93,000 in 1998, at $380,000 for the 2014-15 tax year—close to the market price, she figured, considering the brisk appreciation of New York real estate. Then, last year, she learned that a doctor in Clinton Hill, less than three miles away, had been taxed for the same period as if his home were worth only $1.2 million, less than half the $3 million he'd recently paid for it. That low valuation combined with additional quirks in the doctor's case to set his tax bill only one-third higher than hers, though his place was worth eight times as much.

"It's such a crock of nonsense," says Daniels, who's among a group of homeowners working with the community organization East Brooklyn Congregations to pressure New York politicians to fix the system. "It's just the same set of racial injustices continuing."

"It's such a crock of nonsense. It's just the same set of racial injustices continuing"

It's no easy task to assign values to every home in a given city or county. Most assessments are based on recent sales, and because the vast majority of homes won't have sold recently, assessors have to use data from those that did sell to estimate values for all. That process, known as mass appraisal, relies on computer models that calculate the average value of individual attributes—such as square footage of living space, number of bathrooms, and location—for the homes that have sold. Assessors then apply the resulting averages to the attributes found at each residence.

By definition the use of average values means that higher-priced homes will be undervalued and low-priced homes will be overvalued. More important, assessors are barred from entering houses without permission, so they have no real data on their relative quality, including individual improvements or maintenance issues that might affect value. Even if they could survey every home, most assessment offices lack the resources to do so. Such information gaps will prevent even the best assessors from fully eliminating inequities, Berry says.

It's generally accepted that affluent homeowners are less likely to put off repairs, making high-priced housing stock more uniform and therefore easier to value. Experts say assessed values at the low end of the scale tend to vary more, adding difficulty that contributes to inflated assessments.

Alan Dornfest, an assessment expert in Idaho, doesn't dispute the pervasive imbalances that Berry found, but he blames policies set by local governments, not the technical limitations of mass appraisals. For example, some jurisdictions impose caps that limit how much any home's taxable value can increase in a year, distorting valuations. Studies have shown that the complex cap system in New York has benefited owners of high-priced homes disproportionately. "Assessors, however well-intentioned and professional, often are shackled by those policies," Dornfest says.

Regardless of the causes, the effects can be devastating. Consider Scott's history in Detroit: Six months after she bought her house in 2005 for $63,800, the city valued it at $72,292. By 2008 the housing market had begun to collapse, and Detroit's housing prices were down more than 25%, according to the S&P CoreLogic Case-Shiller Index, which tracks home prices in major U.S. cities. Yet, because assessments often lag large market swings, the city's market valuation of Scott's home rose over that time, to $76,268. From 2005 to 2011, the city charged her at least $5,800 more than she would have paid if the assessment had been pegged to the market. That's 80% more than the missed payment that triggered her foreclosure.

By 2013, Scott owed back taxes of almost $10,000, and her misfortune was fueling a money machine that benefited real estate firms, bond investors, and even, in the end, her local government. After foreclosing on her home that year, Wayne County officials used Scott's delinquent property taxes, and those of thousands of other people, to back $267 million in municipal bonds. Even though Wayne County's credit rating was among the worst in the U.S., investors bought up these delinquent tax anticipation notes, or DTANs, secure in the knowledge that their repayment was all but assured: The bond covenants spelled out that the county could seize the parcels on which the taxes were owed and sell them off. In the end, even the county itself got the benefit of a little arbitrage: Between fines, late fees, and proceeds from auctions, it pocketed $73 million more than it had to pay out in debt service that year. Since 2005 the county has issued more than $3.3 billion in DTANs.

The year after the county foreclosed on Scott's home, a Utah company that buys low-priced rental housing picked it up at auction for $4,607. It sold the place roughly five years later for $32,500.

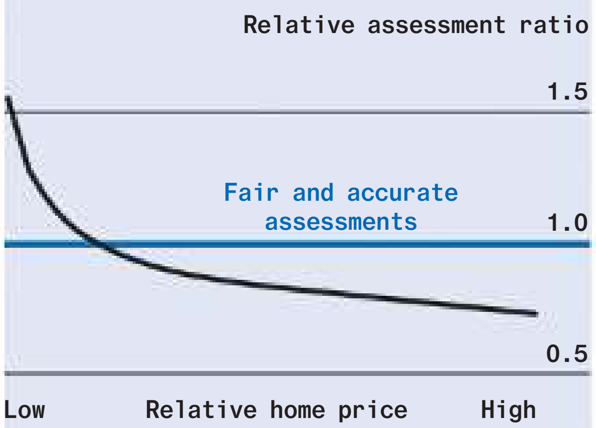
The house's market value kept rising, partly because the landlords kept increasing Scott's rent. But in a perverse twist, the city's tax assessments on the house began falling. In February 2020, when a Michigan company bought the house for $84,000, its taxable value was listed at only $24,600. Scott says she now pays more to rent her home than she paid on her old mortgage, about $650.

Detroit officials have acknowledged overtaxing about 130,000 city residents from 2010 to 2013. That happens to be the period before Mike Duggan became mayor, in 2014, and ordered a reassessment of every residential property in the city.

A National Problem

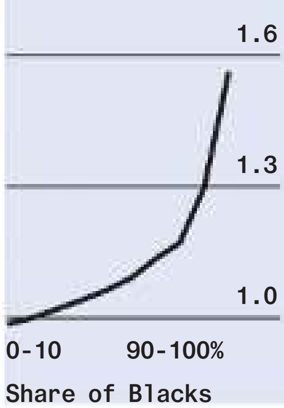
Tax regressivity is most easily identified, and most extreme, in urban areas, but it's pervasive in the U.S.

Nationwide, lower-priced homes are assessed at a higher percentage of their market value than higher-priced homes



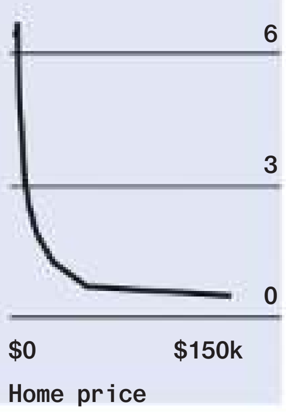
As Census tracts show a higher concentration of Black residents, the ratio becomes increasingly skewed

Relative assessment ratio per Census tract

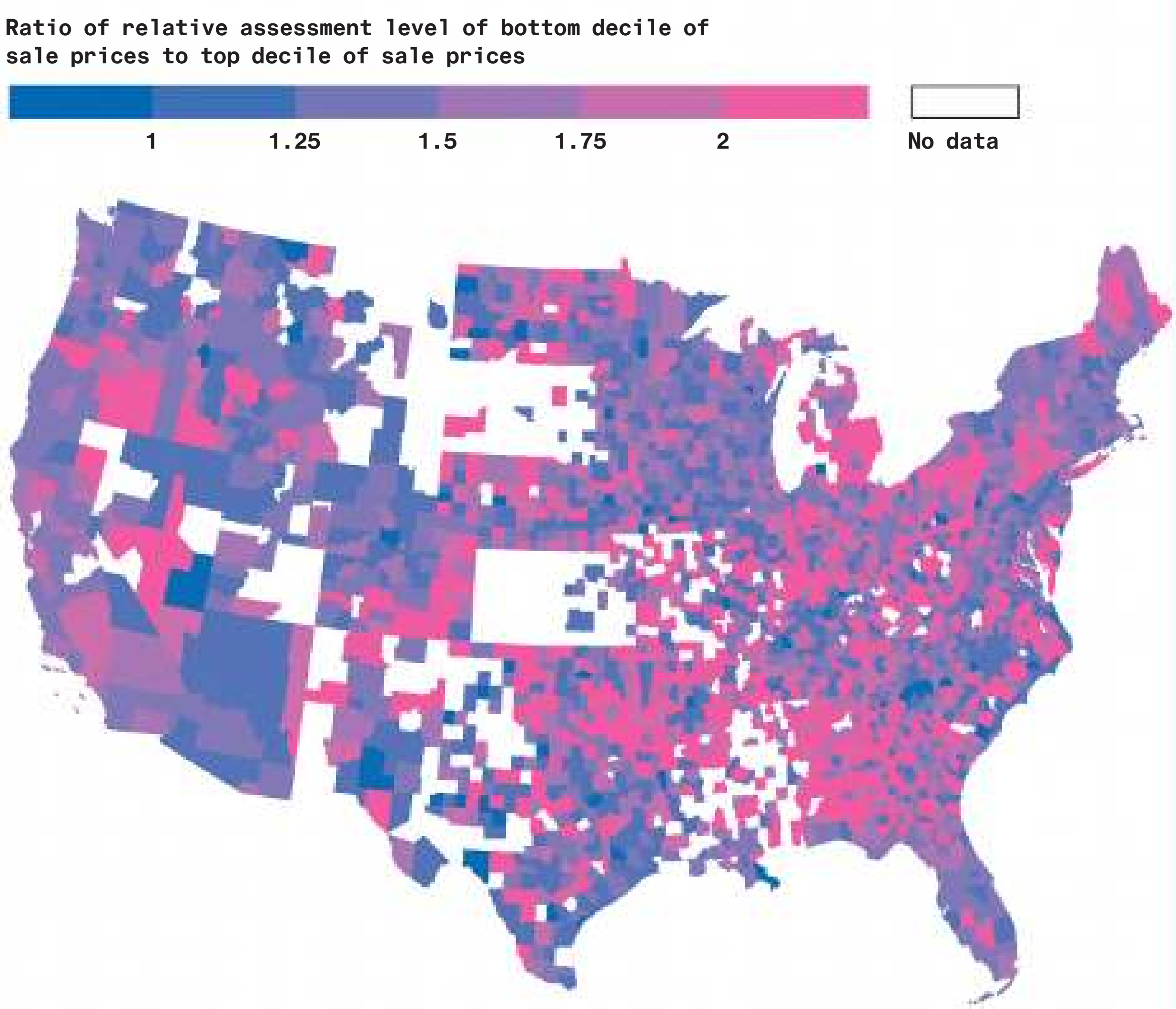


In Detroit, on average, the least expensive homes are taxed at more than six times the effective rate of the most expensive

Ratio of assessment to value, Detroit



Data from 2,600 U.S. counties show that, on average, more than 9 of 10 assessed the least expensive homes higher, relative to the market price, than the most expensive. In 24% of counties, the lowest-valued homes were assessed—and hence taxed—more than twice as high in relative terms as the most expensive homes.



DATA: UNIVERSITY OF CHICAGO, HARRIS SCHOOL OF PUBLIC POLICY. ALASKA AND HAWAII WEREN'T INCLUDED IN THE STUDY.

PHOTOGRAPH BY AMANDLA BARAKA FOR BLOOMBERG BUSINESSWEEK

Last November, Duggan proposed a resolution that would have admitted to the historical unfair taxes while setting aside $6 million to offer affected homeowners first dibs on affordable housing or half-price deals on vacant city land. His measure was expected to pass. Instead the city council voted it down after a contentious virtual meeting. Housing advocates and angry homeowners testified that the proposed remedy was inadequate, and they cited research that showed the city's property taxes remained deeply unfair—even worse than before the reassessment. That research was part of the nationwide effort by Berry and his team of graduate students at the University of Chicago.

Experts evaluate property tax fairness with a straightforward process that's based on actual sales. For each home that sold in a year, they calculate a ratio that puts the assessor's estimated market value over the actual sale price. If the ratio equals 1, the assessor nailed the valuation. A ratio greater than 1 signals an overvalued property; less than 1, undervalued.

A full-on sales ratio study looks for patterns across all recent sales. Berry's study found the same pattern repeatedly: overvaluations linked to lower sales prices, and undervaluations linked to higher sales prices. This is classic regressivity, an overburdening of those least able to pay.

It's true that various factors can influence sale prices—some sellers are more motivated, some buyers more choosy. The International Association of Assessing Officers, which writes assessment standards, has suggested that any perceived regressivity in ratio studies such as Berry's could result from that sort of "random noise" in prices. While the group didn't answer detailed questions about Berry's study, it cautioned that "ratio studies, like all statistics, are only tests. They can never confirm the presence of regressivity, only suggest it." Still, the University of Chicago study found so much regressivity, in a dataset that was so large, the problem has to be systemic, Berry says. Seven economists and law professors who reviewed Berry's findings told *Bloomberg Businessweek* they warrant major policy discussions and further research.

In Detroit, whose property tax system Berry identified as one of the most inaccurate in the U.S., city officials haven't exactly embraced the findings. They've accused him of being a right-wing provocateur who's shilling for low taxes. They've disputed his ability to judge the city's work from Chicago. They've argued that his analysis was too broad; it compared fairness across all of Detroit's neighborhoods, whereas Michigan law carves cities into smaller geographical areas for gauging assessors' work. (Even within those smaller units, Berry's analysis found the same inequities.) They implied he lacked an appreciation of creative approaches to valuation. "Valuation is an art, not a science," says Alvin Horhn, Detroit's assessor. "You have to know the neighborhoods. You have to know why people are making their decisions. You have to know the quality of the properties in those neighborhoods. It's not just looking at numbers on a spreadsheet."

$2.2b

Amount of property taxes in Chicago shifted from the highest-valued homes to the lowest in just five years, according to a University of Chicago study

←
Daniels is part of a group pressing for reform to the property tax system in New York City

This isn't the first time Berry has been sucked into local politics. In 2017 I wrote a series of articles for the *Chicago Tribune* that showed Cook County's residential property tax system was deeply unfair. During the reporting I took my findings to Berry, because years earlier he'd helped the county develop a model intended to reduce regressivity. My findings suggested that the county had never implemented his model.

Berry was incredulous at first. After all, Cook County officials had issued a press release claiming to have used his model to achieve more fairness. But he soon realized that his model had been ignored, and he spoke out about it. In response, Cook County officials attacked him personally. They claimed he was seeking to make money off the new model, even though the county owned the rights to it. They denied that the system, which they'd hired him to improve, had ever been unfair. It was only after an independent review corroborated the inequities that the county acknowledged them.

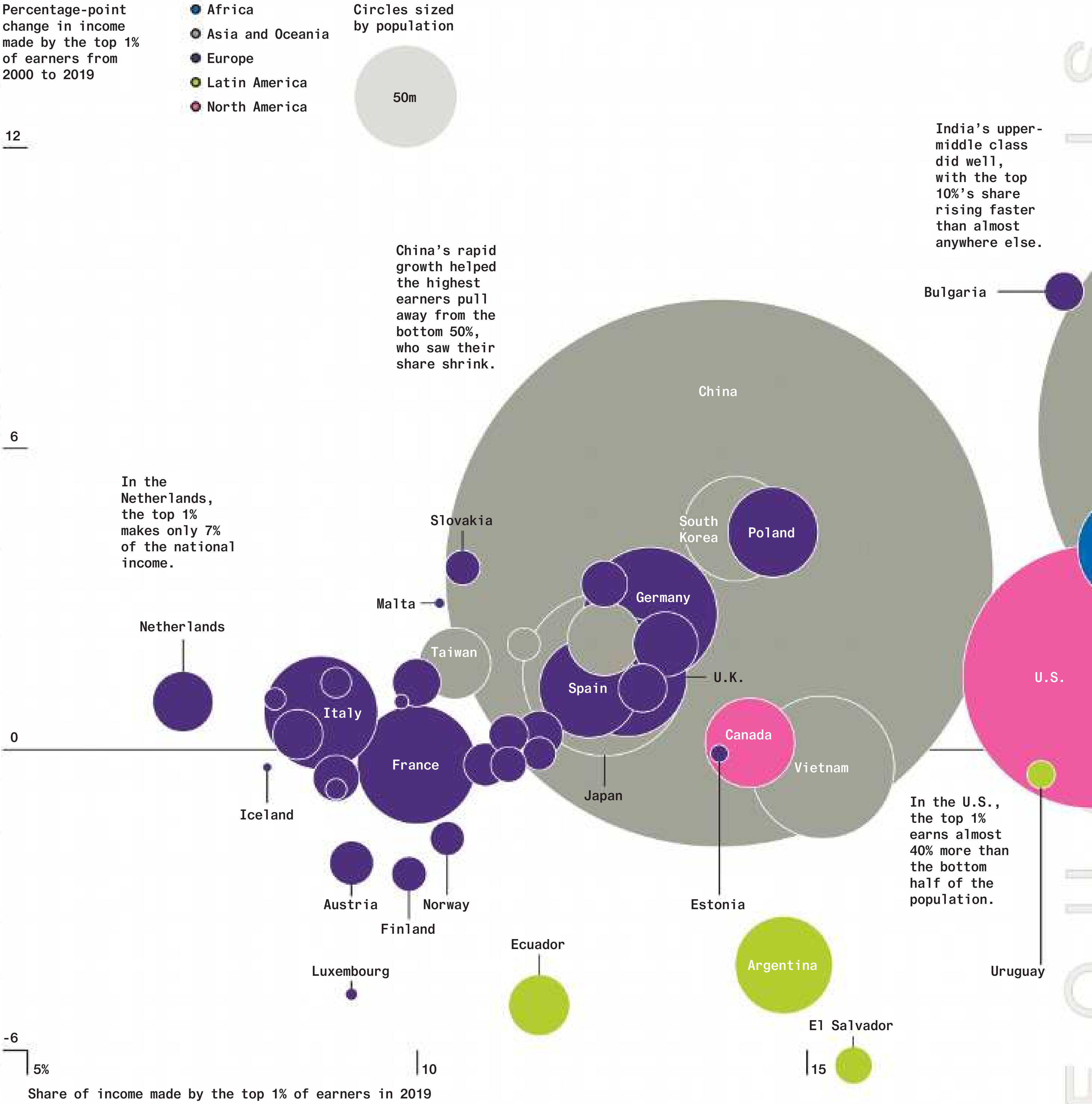
The Cook County experience motivated Berry to begin his national study. "I had been thinking of this as an only-in-Chicago sort of phenomenon," he says. "But as that Chicago work began to get attention, I started to hear from people elsewhere. And every place I look, I'm finding something similar. The names change, and some of the details are different. But the overall pattern of inequity is repeated, place after place."

Di Leshea Scott still hopes to buy back her house, more than six years after losing it. She's saving as much as she can. In addition to her full-time job at the domestic violence shelter, she's delivering food on nights and weekends, often to the suburbs and more affluent areas of Detroit—"to these fancy homes, and they are all lit up and beautiful."

She longs to have something to leave her children. "I have to have a plan for them," Scott says. "I can't just say, 'OK, this is it. See you guys later.'" But she says she hasn't had the heart to tell them that she no longer owns the home they grew up in. B

E4

The Rich Get Richer—But Not Everywhere



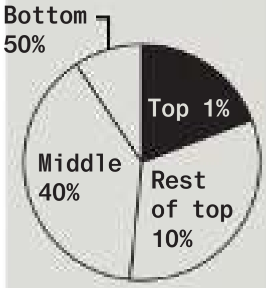
INCOME

The World Inequality Database, built by an international network of more than 100 academics, including Thomas Piketty and Nobel Prize winner Abhijit Banerjee, makes it possible to compare income inequality in 173 countries. The estimates are based on a mix of sources, including tax data, surveys, and national and other statistics. Introduced in 2011, the database was recently expanded to add dozens of nations, bringing total coverage to 97% of the world's population. The new data give a richer picture of how inequality varies among countries. Globalization and other trends have inflated the top 1%'s share of the pie in most places, including Mexico and India, but in Austria, Vietnam, and elsewhere, government policies and trends such as a growing middle class have kept inequality in check.

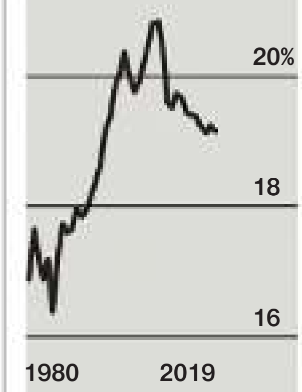
The chart below shows 53 countries that the database rates as having higher-quality estimates. Because the latest numbers are from 2019, we can't yet see how recent events such as the pandemic, soaring stock markets, and unprecedented fiscal and monetary stimulus have affected income gaps.

By Mark Glassman and Ben Steverman

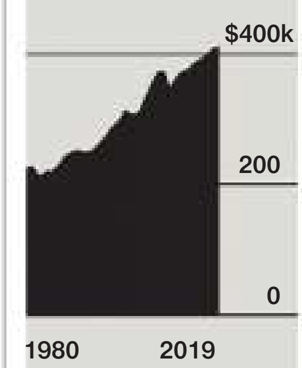
Global income distribution in 2019

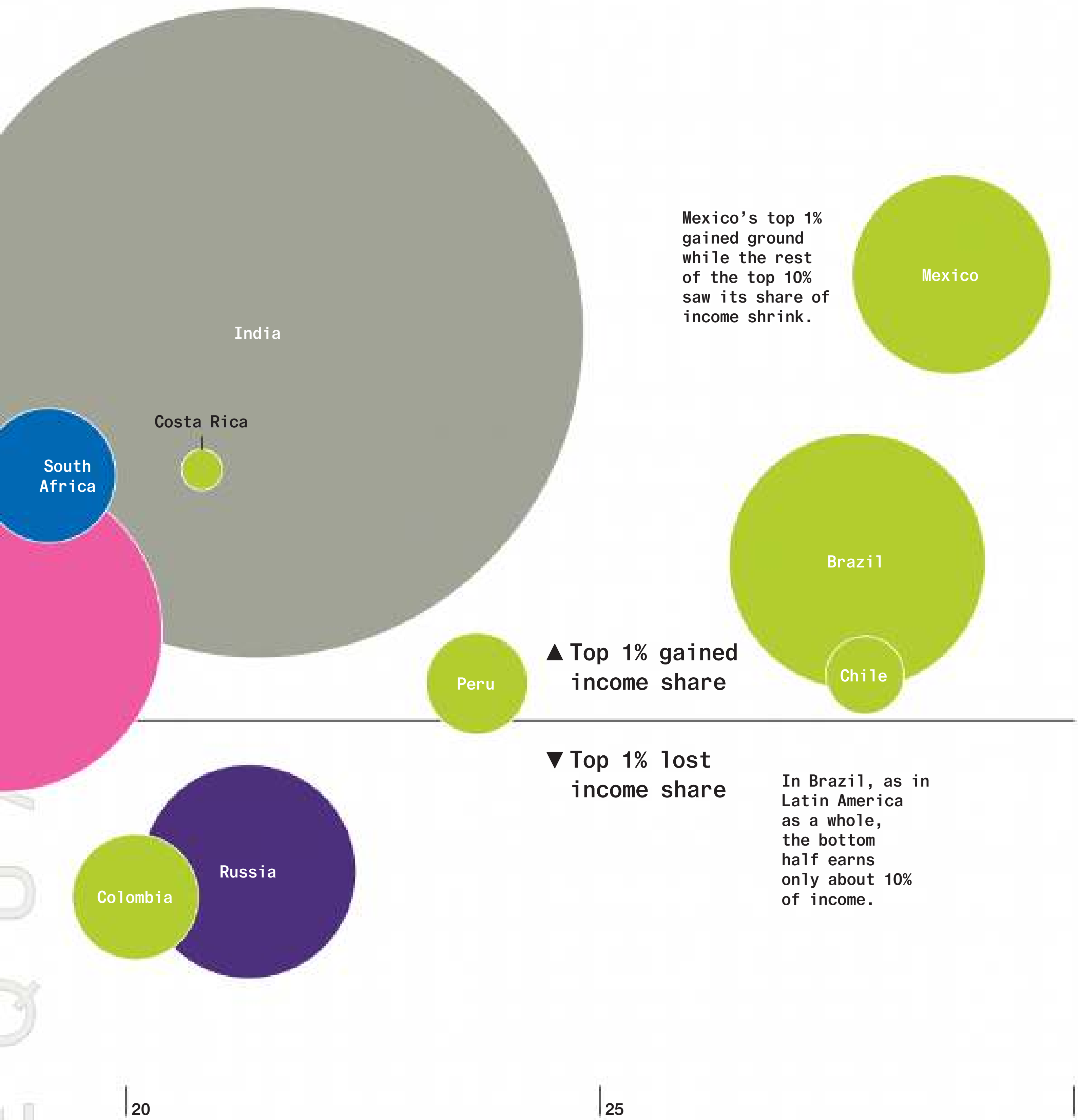


Share of global income that went to the top 1% of earners



Global threshold of annual income to be in the top 1% of adult earners*





*IN 2019 DOLLARS, ADJUSTED FOR PURCHASING POWER PARITY. NATIONS INCLUDED ARE THOSE TRACKED BY THE WORLD INEQUALITY DATABASE WITH A TRANSPARENCY SCORE HIGHER THAN 4. DATA: WORLD INEQUALITY DATABASE

E5

The LGBTQ Struggle Continues

A community that's fought hard for protections is staring down backlash and seeking out its next frontiers

Acceptance of LGBTQ people is growing around the world, and their rights are increasing, too. In the two decades since Pew began polling global attitudes toward homosexuality, almost a dozen countries, from Canada to Kenya, have seen double-digit increases in the share of respondents who say LGBTQ people should be "accepted by society." Wealthier nations with more developed economies and a higher per capita gross domestic product have tended to lead the way. In Sweden and the Netherlands, for example, more than 90% of those surveyed for Pew's 2020 report favored more acceptance. However, a closer look at what's happening in predominantly Catholic or Muslim countries, among others, shows a more precarious situation, in which hard-won rights aren't guaranteed and in some respects are being rolled back. Towns across Poland have recently passed anti-LGBTQ resolutions. In Brazil, while the Supreme Court has ruled in support of LGBTQ rights, including by criminalizing homophobia and overturning a ban on gay men giving blood, the community has also seen a surge of violence bolstered by President Jair Bolsonaro's rhetoric against "gender ideology."

Conversely, some unlikely pockets of the world are offering new glimmers of hope. Costa Rica, a bastion of Catholicism, legalized same-sex marriage last year, and Thailand is the rare Asian country debating doing the same. The U.S. under President Trump saw increased hostility toward trans people, starting with his ban on their serving in the military. But the Supreme Court last year expanded workplace protections for LGBTQ people, and President Biden has since rescinded the military ban.

We talked to seven people from countries around the world about their struggle for acceptance.

—Rebecca Greenfield, with Maria Eloisa Capurro

Sexual Orientation Legislation

Countries with federal or local laws that protect the rights of, or criminalize, their LGBTQ populations

Yes · Doesn't cover majority population · No · New legislation since 2015

	Countrywide decriminalization	Broad protections	Employment protection	Hate-crime legislation	Conversion therapy ban	Recognition of marriage	Recognition of civil unions	Recognition of joint adoption
Indonesia	n/a*	No	No	No	No	No	No	No
Vietnam	n/a*	No	No	No	No	No	No	No
Congo	n/a*	No	No	No	No	No	No	No
France	1791	Yes	Yes	Yes	No	Yes	Yes	Yes
Brazil	1831	Yes (new since 2015)	Yes	Yes (new since 2015)	Yes	Yes	Yes	Yes
Turkey	1858	No	No	No	No	No	No	No
Philippines	1870	Doesn't cover majority population (new since 2015)	Doesn't cover majority population (new since 2015)	No	No	No	No	No
Mexico	1872	Yes	Yes	Doesn't cover majority population (new since 2015)	Doesn't cover majority population (new since 2015)	Yes (new since 2015)	Doesn't cover majority population (new since 2015)	Doesn't cover majority population (new since 2015)
Japan	1882	Doesn't cover majority population (new since 2015)	Doesn't cover majority population (new since 2015)	No	No	No	Doesn't cover majority population (new since 2015)	No
Thailand	1957	No	Yes	No	No	No	No	No
Germany	1969	Yes	Yes	No	Yes (new since 2015)	Yes (new since 2015)	No	Yes (new since 2015)
U.K.	1982	Yes	Yes	Yes	No	Yes (new since 2015)	Yes	Yes
Russia	1993	No	No	No	No	No	No	No
China	1997	No	No	No	No	No	No	No
U.S.	2003	Doesn't cover majority population (new since 2015)	Yes (new since 2015)	Yes	Doesn't cover majority population (new since 2015)	Yes (new since 2015)	Doesn't cover majority population	Yes (new since 2015)
India	2018	No	No	No	No	No	No	No
Pakistan		No	No	No	No	No	No	No
Bangladesh		No	No	No	No	No	No	No
Egypt		No	No	No	No	No	No	No
Ethiopia		No	No	No	No	No	No	No
Nigeria		No	No	No	No	No	No	No
Iran		No	No	No	No	No	No	No

*NEVER CRIMINALIZED HOMOSEXUALITY. DATA: INTERNATIONAL LESBIAN, GAY, BISEXUAL, TRANS AND INTERSEX ASSOCIATION

←

Kerdchoke Kasamwongjit THAILAND

When Kerdchoke, a 56-year-old justice ministry official, first drafted a same-sex partnership bill in 2012, it was a long-shot attempt to achieve legal recognition of gay relationships. Nearly a decade later, his bill, which would allow same-sex couples to jointly manage assets and adopt children, received formal backing from Thailand's cabinet. "I didn't start working on the bill thinking I would be able to use it one day," says Kerdchoke, one of the few openly gay bureaucrats in the civil service.

Thailand has cultivated an image as an Asian oasis for LGBTQ people, but they have few legal protections and routinely face discrimination. Two decades ago, Thailand had no laws even mentioning LGBTQ individuals, let alone enshrining their rights. Now the country has three potential pathways to formally recognizing same-sex unions, including Kerdchoke's bill, which could head to Parliament for debate as early as this year.

Kerdchoke says when he got his first job, with a law enforcement agency in 1988, his boss told him he "wasn't fit to work there." Fifteen years later, Kerdchoke's co-workers at the agency voted him best employee, only for his superiors to ask them to withdraw the award—his sexuality made him "not suitable."

Still, attitudes are shifting. In a 2019 poll by the National Institute of Development Administration, 90% of people said they accept their LGBTQ colleagues. *—Randy Thanthong-Knight*

PHOTOGRAPH BY WATSAMON TRI-YASAKDA FOR BLOOMBERG BUSINESSWEEK

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Bart Staszewski
POLAND

Across Poland, towns and provinces have declared themselves “free of LGBTQ ideology,” and President Andrzej Duda has inflamed bigotry by referring to homosexuality as a “foreign ideology” that is “worse than communism.” To document the alienation many are feeling, Staszewski in 2019 printed a sign that read “LGBTQ Free Zone” in several languages. He started driving around to areas hostile to gay rights, taking photos of LGBTQ people holding the sign and posting the pictures on social media. He’s published about 40 such portraits so far. The campaign has raised awareness both inside and outside Poland, helping lead the European Union and Norway to suspend some aid to the country.

Staszewski characterizes the situation in Poland as a “battlefield.” Trucks funded by an anti-abortion group have carried billboards around various cities linking homosexuality to pedophilia, their loudspeakers roaring out homophobic messages. Police violently cracked down on an LGBTQ protest last August.

“We needed our own Stonewall,” Staszewski says about that demonstration. “We had to go out into the streets and scream about our rights, about what was boiling inside us for years.” —*Wojciech Moskwa*

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Tanya Asapansa-Johnson Walker
U.S.

Just days before the Supreme Court delivered its landmark ruling expanding workplace protections for LGBTQ people last June, the Trump administration removed similar protections for transgender people when it comes to health care and health insurance. Walker, a trans woman and U.S. Army veteran, quickly filed a lawsuit against the Department of Health and Human Services to challenge the legality of the health-care provision. Two months later, a federal court issued an injunction against the administration’s rule.

Even with these recent wins and a friendlier administration in the White House, four years of hostility from President Trump have left LGBTQ rights in a fragile state, Walker says. In 2020, 44 trans and other gender-nonconforming persons were killed in the U.S., the highest number reported by the Human Rights Campaign since the group began releasing data in 2015.

“An attack on one of the letters in the LGBTQ is an attack on the whole community,” Walker says. “We shouldn’t have to fight for our rights, our rights should already exist with everyone else’s.” —*Akayla Gardner*

POLAND: PHOTOGRAPH BY MATEUSZ GRZELAK FOR BLOOMBERG BUSINESSWEEK; U.S.: PHOTOGRAPH BY YAEL MALKA FOR BLOOMBERG BUSINESSWEEK

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Marco Castillo and Rodrigo Campos Hernandez
COSTA RICA

Castillo, a lawyer in San José, spent decades advocating for same-sex marriage, helping draft legislation and file cases in Costa Rica's top court. Initially the idea faced opposition from judges, lawmakers, and the Catholic Church. He even faced criminal charges—ultimately dropped—for abetting the violation of a prohibition on same-sex marriage in the country's family code when he officiated a wedding of two women.

His years of legal battles for same-sex marriage culminated in a 2018 ruling by the Supreme Court, which found that banning gay marriage was unconstitutional. The court gave Congress 18 months to update its legislation.

On May 26, 2020, the day same-sex marriage became legal in the country, Castillo, 77, wed his partner of seven years, sociologist Rodrigo Campos Hernandez, in a family court in San José. "I cried," Castillo says. "I was touched to see how things finally came together after so many years." Since then, more than 500 same-sex couples have wed.

While Costa Rica is still conservative on many fronts, its stable democracy has helped pave the way for a strong human-rights record, Castillo says. He's now turning his attention to broader acceptance of LGBTQ people and to transgender rights. "Trans women are especially discriminated against," he says. "That has to end. It's the fight we have ahead of us." —*Michael McDonald*

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Dalia Al Faghal
EGYPT/SWEDEN

A year ago, Egypt rejected United Nations recommendations that it halt arrests and other forms of discrimination on the basis of sexual orientation or gender identity. Instead, the country responded by putting out a statement denying the existence of LGBTQ people altogether. A fall report from Human Rights Watch found the Egyptian government targets the community in a "systematic fashion," including with torture and forced "virginity tests" that include rectal exams.

The hostile environment has caused people like Al Faghal to leave the country. The Egyptian LGBTQ activist went viral in 2017 after posting on Facebook, in English and Arabic, that she was in a relationship with another woman. Tabloids picked up her story; she and her family received hateful messages and death threats.

Al Faghal has lived and worked in the U.S. and Sweden. She knows many others who've left Egypt because of discrimination. "They are scared," she says. "They want to live their short lives somewhere else, where they can feel safe and be themselves." —*Anastasia Bergeron*

COSTA RICA: PHOTOGRAPH BY OZZIE HOPPE FOR BLOOMBERG BUSINESSWEEK; EGYPT/SWEDEN: PHOTOGRAPH BY REBECKA ULHIN FOR BLOOMBERG BUSINESSWEEK

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Matthew Nwozaku Chukwudi Blaise
NIGERIA

Blaise recalls that two years ago, after they posted about being gay on Facebook, a priest called them into his church office and punched and choked them. Others in the building didn't intervene, a not-uncommon response to anti-LGBTQ violence in Nigeria, Blaise says. Only 7% of Nigerians surveyed by Pew for its 2020 report said homosexuality should be accepted by society, the lowest rate among polled countries. In 2014, President Goodluck Jonathan signed a law criminalizing public displays of same-sex affection and threatening LGBTQ couples who marry or have "amorous relationships" with up to 14 years in prison. In some states, same-sex relations are punishable by death.

The assault fueled Blaise, who's nonbinary and gay, to become more outspoken on social media. After the killing of a Nigerian gay man last March, they created the #EndHomophobiaInNigeria hashtag, which trended for two days. Blaise also organized a group of queer people to march during last year's protests against the Special Anti-Robbery Squad, a branch of the national police that has a reputation for targeting the LGBTQ community.

Last year, LGBTQ Nigerians won a minor victory when a judge threw out a case against 47 men charged with public display of affection, a crime that can carry a 10-year sentence. "It's a very beautiful thing to know that despite these laws that condemn our existence, we are still resilient," Blaise says. —*Akayla Gardner*

NIGERIA: PHOTOGRAPH BY STEPHEN TAYO FOR BLOOMBERG BUSINESSWEEK; BRAZIL: PHOTOGRAPH BY TUANE FERNANDES FOR BLOOMBERG BUSINESSWEEK

EQUALITY

↓
Monica Benicio
BRAZIL

In 2018, 38-year-old Rio de Janeiro city councilwoman Marielle Franco was shot in the head and killed, leaving Benicio, her partner of 14 years, behind. It appeared to have been an assassination, as Franco had been challenging police corruption.

Since Franco's murder, Benicio has traveled the world calling attention to the danger activists face in Brazil. Her partner's mere presence as a Black, gay, and feminist politician had inflamed her critics, who included future President Jair Bolsonaro. The 2018 election of Bolsonaro, who's made a habit of ridiculing LGBTQ people, has only exacerbated the sense of danger among these communities. At least one gay or trans person is killed in Brazil each day, reports the activist organization Grupo Gay de Bahia.

In November, Benicio was elected to Rio's city council herself. She said she's planning a "feminist and anti-fascist term"—language directed at the president. "We are a country that sells the idea of being supposedly friendly," she says. "In reality the country is very conservative and violent." —*Shannon Sims*

GAME CHANGER: SOLUTIONS

Dr. Jeremy Farrar

Director, Wellcome Trust

Farrar trained as a physician and epidemiologist; he and Wellcome, the charitable foundation he directs, are vocal proponents of countries equitably sharing Covid medicines.

Even though we have vaccines now, the crisis isn't over. What's your biggest concern now?

Science has given us the exit strategy. But science only really works if you then bring the benefits of that science to the maximum number of people, in the most equitable way possible and as quickly as possible. The acute worry now is, do we have the science that can get us out of this pandemic but we are keeping the science to a small group of people.

What would be the consequences if vaccines aren't shared with the rest of the world?

That would be a public-health disaster, a scientific disaster, and a moral and ethical disaster. But also it's an economic and financial disaster, because if we allow the pandemic to continue to reverberate around the world, it will allow new variants to appear and escape the vaccines. Then we're in a vicious cycle of constant pandemics from Covid-19 that drags on for many months and years.

Why is the global Covax initiative to help poor and moderate-income nations fight Covid so important?

Every country needs access to the drugs and the vaccines, and there is a limited supply. So we need to make sure that vaccines are being produced globally—that they're made available to the vulnerable populations and health-care workers in not just rich countries, but all countries. And that's what Covax is there to do.

But what of nations that want to look out for their own citizens first?

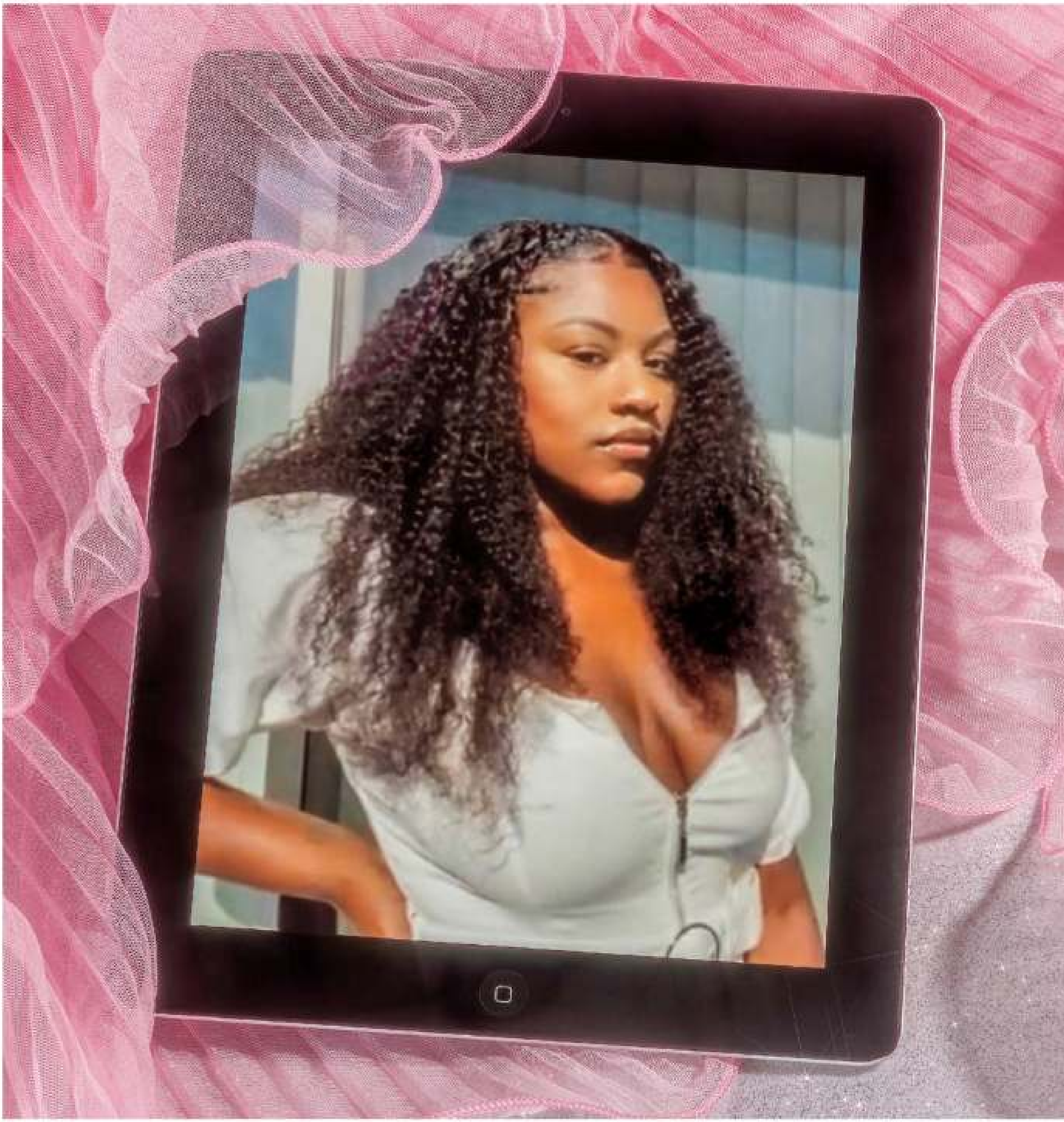
The world is a very small place, and borders don't make any difference to epidemics. As we've seen in the U.K. and the U.S., even places we thought were strong are hugely challenged when something like Covid-19 comes along. So appreciate that we are all vulnerable and that our best defense is to work together.

—*James Paton*

FARRER: COURTESY FRANCIS CRICK FOUNDATION

IDENTITY

E6 Try Making a Living on TikTok If You’re Not White



SYDNEE McRAE 1.1 MILLION TIKTOK FOLLOWERS

“I was telling one of the big managers that I was doing $500 as a minimum. She was like, no, you should be at like $5,000 per video.”

CREDIT FOR IMAGES GOES HERE

INFLUENCERS

Marketers are underpaying Black social media influencers even as they push Black Lives Matter

By Sarah Frier
Photographs by Kelsey McClellan

Since high school, Sydnee McRae had liked the idea of getting paid to make videos online. After graduating, she started making beauty tutorials on YouTube, but she managed to attract only 500 followers—not nearly enough to get brands to pay her for promoting their products or even to get the occasional freebie. Then, a year ago, McRae, now 22, had a breakthrough on TikTok, the short video platform.

It was just as Covid-19 lockdowns were beginning. McRae created and performed a dance to *Captain Hook*, Megan Thee Stallion's sex-positive club banger. She encouraged others to try out the dance themselves with a hashtag, #captainhookchallenge, and a tutorial video that explained her dance step-by-step. The videos were popular, attracting more than 400,000 likes. Within weeks, many of the platform's top stars—influencers with millions of followers—performed their versions of her choreography, helping the song soar in popularity, too. In April, Megan Thee Stallion herself joined in, posting a 15-second video from her kitchen.

McRae was in heaven. "I realized, wow, I created something that people love," she says. She started gaining followers by the thousands. Soon musicians and record labels were getting in touch, asking her to promote their songs and offering to pay her around $500 per dance. McRae found a talent manager and quit her job as a sales manager at Massage Envy in Miami.

In May, McRae received $700 from Universal Music Group to promote a new song, *Out of Love* by the rapper Lil Tecca, with a new dance challenge. It was a hit, too, and McRae was excited a few weeks later when she saw Addison Rae Easterling repeating her dance. Easterling isn't quite as famous as Megan Thee Stallion, though in the world of TikTok influencers she's the queen: She has 70 million followers (to McRae's 1.1 million) and has made, according to *Forbes*, millions of dollars off her dances and lip-sync videos, thanks to deals with brands that include American Eagle, Fashion Nova, and Reebok.

McRae is Black and Easterling is White, which seemed germane when she learned from her manager that Easterling had also been hired to perform McRae's dance and was paid substantially more. Instead of the hundreds of dollars Universal gave McRae to create the dance, Easterling had been paid thousands by Lil Tecca for just her performance. The news burned. "I'm creating the art, I'm giving you the art, without me there would be no art," McRae says. "But I don't get the same respect, the same amount that these White creators get."

The phenomenon of White artists appropriating the work of Black creators—and getting paid more to do it—is as old as the entertainment industry itself. But McRae's experience cuts against the meritocratic promises of the likes of TikTok, Instagram, and YouTube, which allow creators to achieve celebrity without going through agents or casting directors. Now that there's real money to be made on these platforms—brand endorsements on social media account for $10 billion a year globally, according to SignalFire, a venture capital firm that tracks industry data—a new class of gatekeepers has emerged. They're corporate marketers and digital ad agency executives trying to capitalize on the new Hollywood, and most of them are White. The result, according to interviews with dozens of influencers, is that White social media stars consistently make far more than their Black counterparts, even in cases where Black influencers have more followers or are doing more of the creative work. White choreographers with followings similar to McRae's routinely make $5,000 to create and perform a dance. McRae generally gets one-tenth that, and she has noticed the same pay disparity across the industry. Although Easterling at least credited McRae, other white influencers often fail to do so.

In other cases, Black influencers aren't paid at all. Stacy Thiru, who gives beauty tips to her 1.5 million TikTok followers, says that before she knew what her true market value was she'd regularly accept products—wigs, for instance—in lieu of cash when she created promotional tutorials for beauty companies. "They got free promo," she says. "All I got was hair." Another well-known social media personality, Jordan Craig—also known as the meme-maker Ka5sh—says he became aware there was a racial gap in pay when he attended an event with a few White memers, all of whom had similar followings. They showed up in new luxury cars; Craig, who is Black, couldn't afford a car at the time and came in an Uber. "It's crazy to be famous on the internet and then have it not mean anything," he says. "Literally, I was not sure where I was going to sleep last March."

For years, marketers viewed racial messages, and especially the Black Lives Matter movement, as divisive. They inserted provisions into contracts that specifically prohibited influencers from talking about police or using the #BLM hashtag. "The country is morally divided, and actively taking a stance felt outside of their area of expertise and risky to their bottom line," says Karyn Spencer, chief marketing officer for Whalar Ltd., an influencer management and social media advertising agency.

But last summer, just as McRae was starting to get discouraged about her new industry, that calculus changed. Americans of all races took to the streets to protest the killing of George Floyd by police. Corporate brand managers, motivated by genuine enthusiasm—and the awareness that being tied to a popular civil rights movement would be great marketing—joined a chorus of calls for racial equality. They ghost-wrote open letters about race for their executives to sign and scrambled to feature people of color in advertisements.

Alongside rising death counts from Covid-19, lockdowns, and reports of police violence, marketers began to worry that the usual aspirational advertising was missing the mark. In the BLM movement they saw an opportunity to talk about something that felt meaningful, especially to younger consumers who seemed to be interested in little else. In the past, Black creators had to aggressively pitch themselves, says Jack Young, an influencer manager who specializes in working with people of color. Now brands were calling him nonstop.

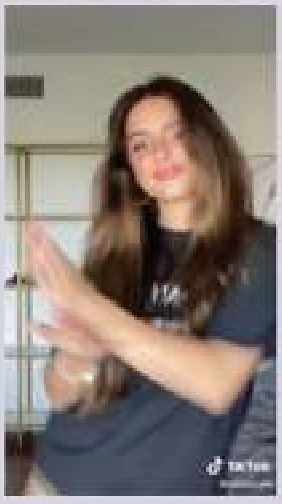
One of Young's clients, Kenny Knox, a 22-year-old sketch comic—he helped pioneer a style of online comedy in which a single actor plays all the characters in a skit—struck sponsorship deals with Trident gum, Axe deodorant, and Gillette razors, among other brands. "I don't know if it's them wanting to work with me because it's me, or if they feel bad and they see me and want their brand to look better," says Knox. "But I'm thankful." By the end of 2020 he was making enough money to rent an apartment without roommates for the first time.

Knox had gotten his start making six-second videos on Vine, the old video app. He was one of the service's most popular users, but he didn't even realize that companies paid influencers for posts until he began trading notes with his White peers, many of whom make as much as $100,000 per video these days. "I should be a millionaire right now," he says. "My friends, my family, they all look at me like I'm about to be Will Smith."

In 2017, Knox had secured a modest deal to record a video for Target Corp. On his way to the studio, a Target rep called to cancel, because the rep had noticed that he'd used the N-word in a recent comedy video. Black comedians and musicians, of course, use the word all the time, but Knox nonetheless offered to delete the offending post. The rep said it didn't matter; Target was no longer interested. "It's a cop-out, because no brand has hesitated to hire a rapper," says Young, his manager. Knox now warns other Black creators to keep their content clean.

This makes him different from White influencers like Jake and Logan Paul, who also became famous on Vine and who make millions of dollars a year, despite antics that have included throwing (and filming) raucous, unmasked parties during Covid-19 lockdowns. Jake repeatedly used the N-word in one of his videos, and Logan once filmed a dead body. The men have since been forgiven by the brands that temporarily shunned them. On a podcast last summer, Logan acknowledged that "half of the reason I'm able to get away with my hooligan shit I do in my vlogs is because I'm a White kid."

Another famous influencer, Felix Kjellberg, a White man from Sweden better known as PewDiePie, has at times courted controversy by making anti-Semitic jokes, by using the N-word, and, most recently, for behavior that violated YouTube's rules against bullying. In 2017, when Kjellberg was cut off from big contracts with YouTube and Disney Maker Studios, he still made $12 million in advertising, according to *Forbes*. Last year he signed an exclusive streaming deal with YouTube. "If I was doing some of the things they are doing," says Black influencer Landon Moss, referring to White influencers such as Kjellberg and the Pauls, "I wouldn't be doing the brand deals I'm doing."



↑ A dance for Lil Tecca's *Out of Love*, as performed by creator McRae (top) and mega-influencer Easterling (bottom)

In Hollywood, racial biases have tended to flow from the top. Executives hire White directors and producers, who in turn work with White casting agents, who cast White actors. When Black talent is considered, it's often for roles or projects that specifically require it. Social media companies have often promoted diversity initiatives, but in practice they're not much different.

In the summer of 2018, Facebook Inc. was preparing the launch of a mobile video service for Instagram, IGTV, that was intended to compete with YouTube. Instagram employees were tasked with briefing and training the photo-sharing app's biggest stars to use the new platform ahead of the official launch so that it would be full of videos by the time regular people logged on. Mark Luckie, who then worked for Instagram's influencer partnerships team, was charged with curating a list of creators of color. Luckie, who is Black, produced a proposal for superiors that included some of Instagram's most popular Black users. "Most of them are Instagram heavyweights," he wrote, adding that they would bring "a welcome level of talent and diversity to the product launch."

His proposal, which was obtained by *Bloomberg Businessweek*, was rejected on the grounds that Facebook couldn't trust the creators Luckie identified to keep IGTV secret. "Due to leak risk we can't be comfortable briefing any creators we don't already have a relationship with unfortunately," a manager replied. The manager encouraged Luckie to contact the names on his list after the launch.

Luckie thought his bosses were missing

THE CRIB AROUND THE CORNER 175,000 TIKTOK FOLLOWERS
"It's kind of hard if brands are reaching out to us as individuals," says house member Stacy Thiru. "They don't know what we're bringing to the table. We're stronger together."

KENNY KNOX 844,000 INSTAGRAM FOLLOWERS
"I want to be the best I can be, the best at my craft, one of the biggest entertainers in the world."

DEMETRIUS HARMON 1.3 MILLION INSTAGRAM FOLLOWERS
"This is the new Hollywood, and so a lot of old toxic traits from Hollywood are carrying over."

out on a huge business opportunity. Around the same time, an internal Facebook research report showed that Black and Hispanic users outperformed others on almost all the metrics the company cared most about, including engagement, overall time spent on the platform, and time spent on video. The report said Facebook's metrics matched the overall media market: Black and Hispanic users spent an average of 55 hours a month on mobile devices, 27% more than their peers of other races, and consumed 137% more streaming video. Black users in particular commented and posted more than those from other demographics—yet Facebook had made scant effort to cultivate Black creators.

Luckie left the company later that year, describing a "disenfranchisement of Black people on the platform" in an open letter to Facebook staff. "You can see this reflected in everything from the guest lists of Facebook's external programs, the industry events the company has historically sponsored, the creators and influencers who appear in Explore tabs on Instagram, the power users who are verified on the platforms, and more," he wrote. Facebook, notorious for making decisions based on data, was instead pursuing relationships with creators based on employees' personal tastes. A company spokesman, Charlton Gholson, disputes Luckie's interpretation of events and says the choice to brief creators was not based on racial considerations. He adds that the company has since "augmented our partnerships approach to be more equitable."

Today, Luckie recalls that members of the partnerships team would take turns telling the group what they were watching or listening to in weekly meetings. "I'd sort of latched on to a pattern that everyone was recommending shows with primarily White characters, music from White artists, thinking, 'this is kind of terrible,'" he says. If employees had taken the time to browse the top-performing beauty artists or music artists or comedians on their own platforms, they'd have had no trouble finding talent of color.

$10b

Size of the global market for brand endorsements on social media, according to SignalFire

Last June, as brands started to become comfortable talking about race, so did Facebook. Instagram product chief Adam Mosseri said in a blog post that the company would "take a harder look" at whether its algorithms held any bias against Black people. "We're also hearing concern about whether we suppress Black voices and whether our products and policies treat everyone equally," he wrote.

Instagram started a campaign to increase the visibility of Black talent on its app with the hashtag #shareblackstories, and Facebook started a $25 million fund to support Black creators. Google followed suit with an announcement in June that YouTube would set aside $100 million to back original programming over multiple years that would "present fresh narratives that emphasize the intellectual power, authenticity, dignity and joy of Black voices." In January, TikTok Inc. announced a three-month incubator program for Black creators that would include "motivational town halls" and "educational events with TikTok executives."

Black creators are hopeful but skeptical that the newfound enthusiasm will change the industry. Layla Qasim, a situational humorist and makeup artist who goes by @neko_channn on TikTok, where she has 2.4 million followers, calls these new initiatives "extremely performative." She's been to Black creator meetups and Black History Month events hosted by platforms, but she wonders why her peers aren't elevated by the companies simply for their talent, outside of a diversity initiative. "They try to shove a Black creator up front and say, 'Look! A Black creator!'" she says. Meanwhile, Black creators like Qasim say they have a harder time getting verified on the apps or getting recommended to users through TikTok's "For You" page. They're also more likely, they say, to get banned or punished by algorithms designed by overwhelmingly White and Asian coders.

LANDON MOSS 615,000 TIKTOK FOLLOWERS

"I was afraid to make people uncomfortable, to make White people uncomfortable, because those are the people at the head of these agencies—they're White."

In February, five well-known influencers, including Qasim and Thiru, the beauty specialist, started living together in a six-bedroom house in the Hollywood Hills, which they named The Crib Around the Corner. "Content houses," often sponsored by brands and managed by talent agencies, have exploded in popularity as creators look to pool resources and pitch themselves as a group.

The Crib is overseen by Whalar, the influencer management agency, which envisioned it as a way for influencers of color to band together, exercising more leverage over brands during negotiations. Whalar sources deals for the Crib's residents, all of whom are Black and who have agreed to be paid the same for any projects they take on. AT&T TV is already signed up as the house's sponsor. Backing the Crib is "an opportunity to address the compensation gap for Black creators, giving them a platform to share content that inspires and entertains while receiving equal pay," says Vince Torres, an AT&T Inc. senior vice president. The company declines to say how much it is spending on the initiative.

For the influencers, living and working together is also a way to trade notes. Black creators have "a lack of knowledge, because we don't really have those opportunities, we don't really see how we're getting cheated," says Dare Ajibare, a house member with a million TikTok followers. All five of the residents have done deals with brands, which, they later learned, had paid White influencers more for similar work. Several say they were able to negotiate for higher pay, but only by agreeing to do more posts in exchange for the extra money. The three women in the house—Qasim, Thiru, and Challan Trishann—say that they've shown up for shoots where none of the hair or makeup artists were prepared for their complexion.

So far, audiences have responded favorably. The Crib's TikTok account has attracted 175,000 followers, and its first video drew almost 1 million views. Ajibare says that to know he has brand executives and managers on his side is "a newfound feeling."

Unfortunately, it's not clear that this will mean more money for other Black influencers. Most brands, even as they speak the language of empowerment, haven't changed their ways, creators say. And there's a possibility that brands will go back to their old ways if BLM fades.

McRae, the TikTok choreographer, still charges around $500 a post. She's planning on moving from Miami to Nashville, where she thinks the lower rents will allow her to save money and begin preparing financially for the moment when her fame ends. "I'm constantly second-guessing myself," she says. "Is it going to randomly stop? Am I going to still be able to do what I'm doing? Even if I am, it's still not going to be equal. How long will this last before I have to go back and work a 9-to-5?" Ⓑ

GAME CHANGER: CAPITAL

Cristina Junqueira

Co-founder, Nubank

São Paulo-based Nubank, the largest fintech company in Latin America, is bringing credit cards and online banking to nations where fees are notoriously high and service is lacking. A rare tech unicorn with a female founder, it's committed to boosting racial and gender diversity.

How big was the need to democratize financial services in your region?

Sixty million people in Brazil alone are unbanked. If you didn't grow up in Brazil, it's hard to imagine how hard it is for a lower-income, working-class citizen to actually get any financial services. People often have to commute an hour or two using public transportation to get to a branch. Working hours are very restricted, so you often have to wait for them to open. When a branch does open, you go through bulletproof revolving doors with armed guards pointing guns at you, because the assumption is everyone is a criminal. You've got to leave all your stuff in a locker outside, as if you're going to prison. You're not allowed to use your phone and have to wait in very long lines. A lot of people go through that multiple times a month to get their paychecks and to withdraw the money.

How has Nubank changed that?

We give people back their financial dignity. Twenty percent [of Nubank customers] never had a credit card or a bank account before; they were completely excluded from the system. And because we eliminate processes using our digital platform, we can pass on those savings in the form of no fees or lower fees or lower interest rates. We estimate our customers have saved over $3 billion in fees alone since we started Nubank.

How have customers responded to your being in the market?

We're proud to be serving 35 million customers in Brazil. Mexico is a much smaller country, but we've grown tremendously and already have more customers there than we had in Brazil around the same time. In Colombia, even before we actually launched, we had 200,000 people on our waiting list.

—Felipe Marques

PHOTO: RODRIGO CAPOTE/BLOOMBERG

E7

The Shape of Corporate Inequality

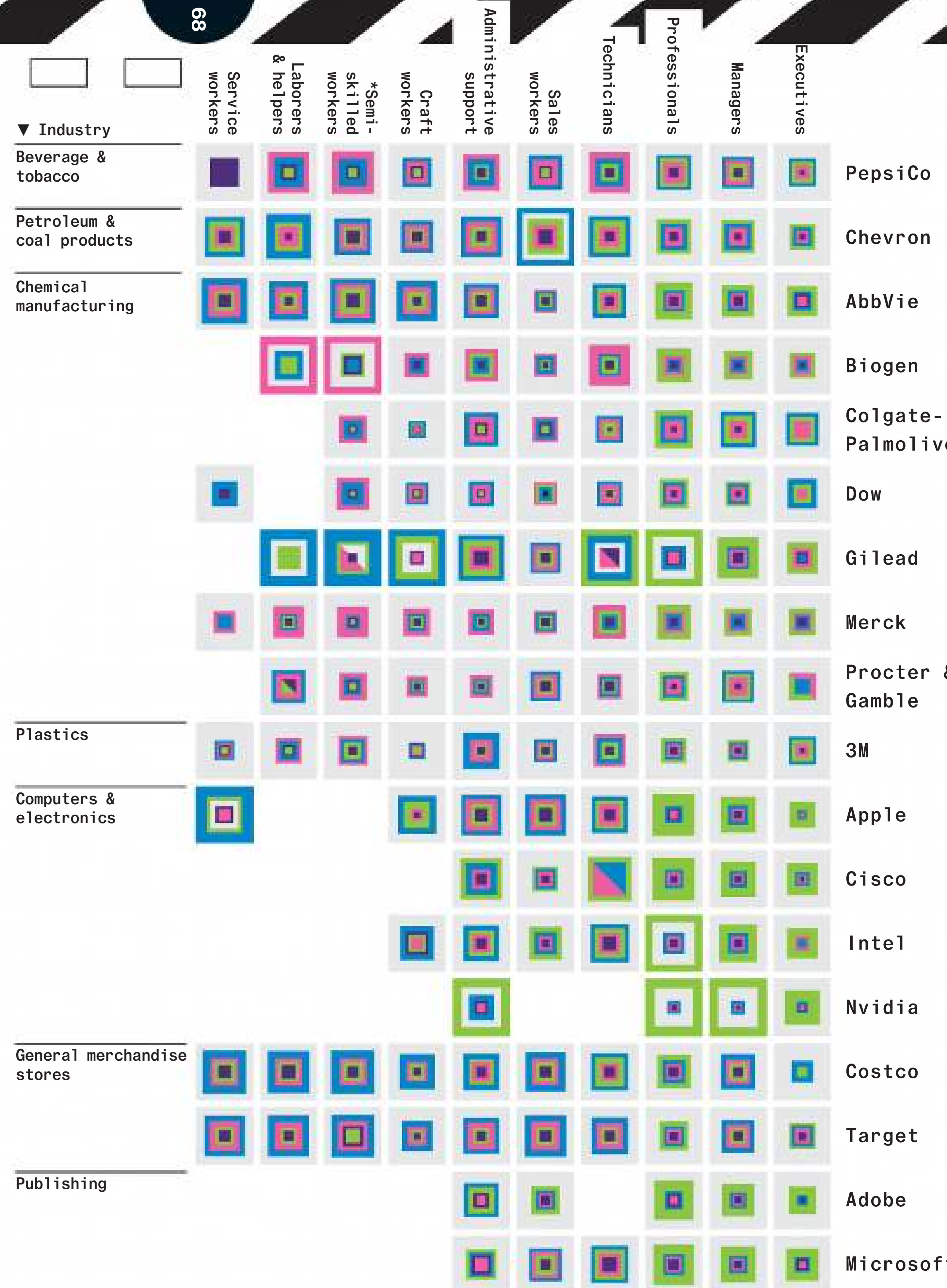
By Dorothy Gambrell

16.7% of Dow's executives were Hispanic

3M had the Whitest overall workforce, at 79.5%

Nvidia's workforce was 53.6% Asian

86.8% of Costco's executives were White



Most prevalent race or ethnicity

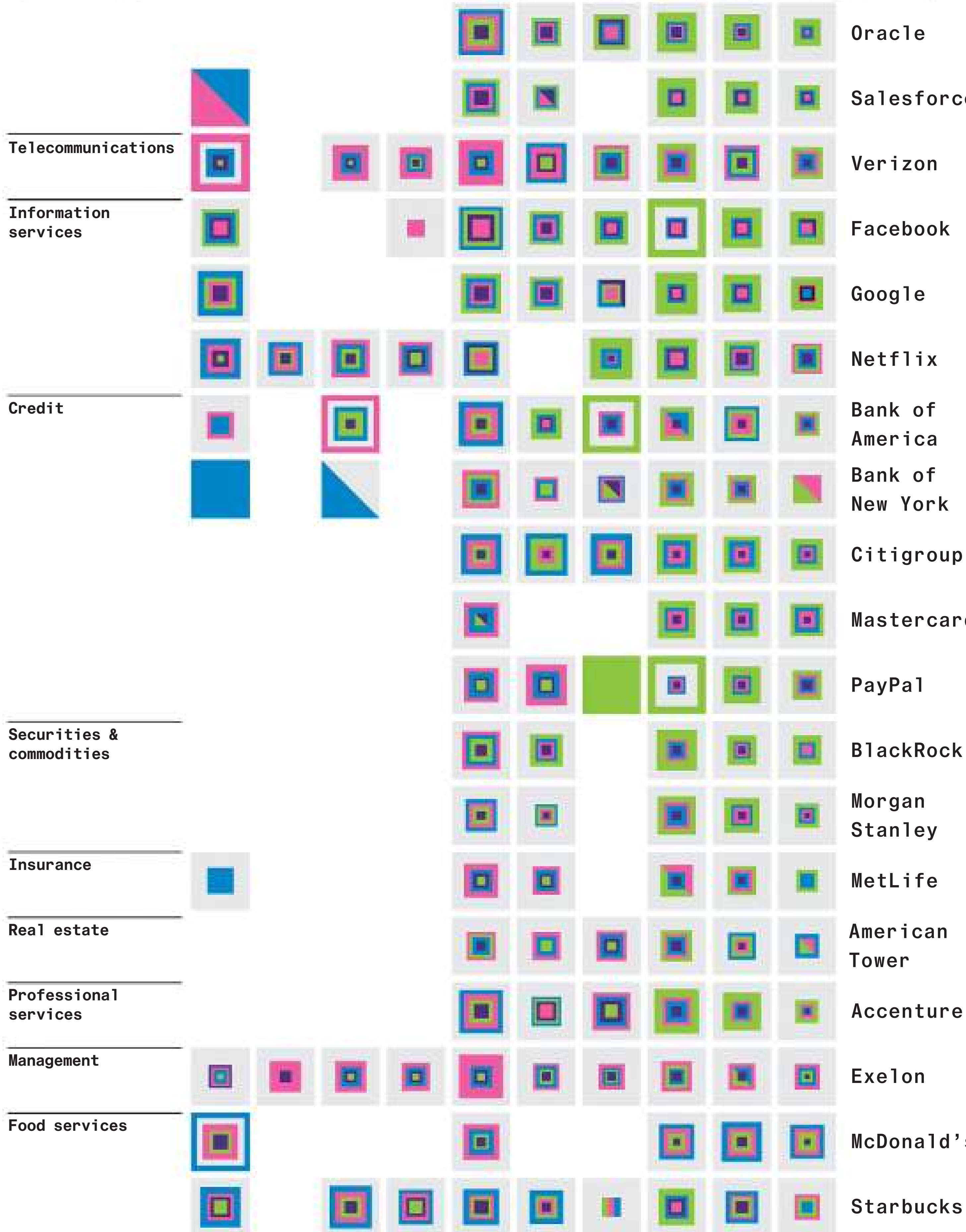
- White
- Asian
- Hispanic
- Black
- Other

In the wake of last summer's Black Lives Matter protests, many U.S. corporations promised to improve their record on diversity. To track the progress they've been making, Bloomberg obtained EEO-1 (Equal Employment Opportunity) forms from 37 of the nation's 100 biggest companies, which show how many employees of different races and genders they have working in different job categories.

The 37 forms that Bloomberg acquired show companies still struggling to add Black and Hispanic workers, especially in management. Only four of the corporations—Exelon, McDonald's, PepsiCo, and Verizon—had Black people in 10% or more of their executive and management roles, even though Black people make up 13% of the U.S. population. Hispanic representation also tended to trail national population figures. Detailed breakdowns of the filings are available at bloomberg.com/representation. *—Adapted from reporting by Jeff Green and Gerald Porter and from data analysis by Cedric Sam*

11.8% of Bank of New York's executives were Black but only 5.6% of mid-level managers

McDonald's had the largest share of Black and Hispanic workers



*THE EEO CATEGORY IS "OPERATIVE"

WORKFORCE

E8

Caste and the Indian Tech Ivies

IIT grads are highly sought after in Silicon Valley. Are they bringing deep-rooted prejudices with them?

By Saritha Rai

IIT hopefuls leave a test center after taking an entrance exam in suburban New Delhi

SUNIL GHOSH/HINDUSTAN TIMES/SHUTTERSTOCK

CASTE

On a sunny day in early 2017, Sundar Pichai, Alphabet Inc.'s chief executive officer, returned to his alma mater, the Indian Institute of Technology Kharagpur, in West Bengal, to speak before 3,500 students. Welcomed as the "rock star" leader of the "world's most innovative company," he reminisced about skipping classes and meeting his college girlfriend—now his wife. He also pitched Google to the soon-to-be-graduates in attendance. How many wanted to work there, the interviewer asked. Hundreds of hands went up. "Wow, maybe we should open a campus in Kharagpur," Pichai joked.

As far as feeder schools go, it doesn't get much better for Google than the network of 23 ultracompetitive, government-funded IITs. Every year hundreds of their graduates join the world's biggest tech companies. In 2003, when the school system celebrated its 50th anniversary, Bill Gates delivered a keynote speech praising grads who'd come to work at Microsoft Corp. over the years, noting that the company had, in turn, invested more money in the IITs than in any other institution outside the U.S. and the U.K.

For all the IITs' proficiency at training and placing students, though, the coders, programmers, product developers, and engineers fanning out to global tech bring with them the troubled legacy of India's caste system. On campus, students are surrounded by—and in some cases participate in—a culture of discrimination, bullying, and segregation that targets fellow pupils from India's Scheduled Castes, also known as Dalits. The IITs officially discourage such harassment, but the prejudice against these students remains quite open.

Caste in India speaks, as race does in America, to centuries of social, cultural, and economic divisions. Unlike in the U.S., though, India has since 1950 had a national system of affirmative action designed to undo the legacy of bias. Among its provisions are ones that help Dalits and other oppressed groups get into and pay for college. For nearly half a century, IIT admissions have been subject to a reservation system that's still hotly debated on the campuses. In recent years, the schools have opposed attempts to extend affirmative action to faculty hires, arguing it would dilute the quality of the applicant pool and undermine their meritocratic image.

The IITs are notoriously cutthroat, starting with the admissions process. Some 2.2 million people have registered to take the 2021 entrance exam, to vie for roughly 16,000 slots. About 15% of those are allotted to students from the Scheduled Castes (SCs) and another 7.5% to applicants from the Scheduled Tribes (STs), indigenous people who've faced marginalization and whose status has also been formalized by the constitution. To fill those slots, universities sometimes offer seats to students with test scores below the cutoff point—though not as far below as is commonly assumed.

Caste-based resentment at the IITs can run high. In one video posted on YouTube in 2018, a student poring over a pile of books is labeled "GEN," for general pool, while the two students sleeping nearby are identified as "SC" and "ST." In another post circulated widely among IIT groups last year, a student suggested Covid-19 should also give preferential treatment to the marginalized groups. "My dear Corona," it said in Hindi. "In every sphere SC/STs get first preference. So if you can, please look into the same."

Dalit IIT graduates who've managed to land jobs in the U.S. say that such attitudes can be found there, too. Last year a Dalit graduate of IIT Bombay filed suit in the U.S. against Cisco Systems Inc. and two of his fellow alums, saying he'd experienced caste-based discrimination at their hands while the three of them were employed at the company. The accompanying publicity prompted a wave of complaints about caste discrimination in American tech—allegations that seemed to blindside the industry.

Amit Jatav, a Dalit from Karauli, in the northwestern state of Rajasthan, remembers catching "the IIT bug" in high school, where he excelled in chemistry, physics, and math. His father, an elementary school teacher, and his mother, a fieldworker, scraped together money from relatives and local lenders to send him for a year of test prep. He took the entrance exam in 2017 and got into IIT Delhi on his first try.

Jatav's classmates quickly identified him as Dalit. He'd been educated in Hindi-language schools, and his English was poor. His clothes were worn and shabby. He didn't have a smartphone. In an environment where entrance exam scores are status symbols, Jatav had placed relatively low, marking him as a "quota" student. He heard loud comments saying he was at IIT only because of his "category" instead of "earning it rightfully." He wasn't invited to study groups, dinners, or social events.

"I struggled with my studies, but nobody helped," says Jatav, now 21 and in his final year. "The attitude was: He's a Dalit, let him struggle."

The caste system traces as far back as ancient India. It comprises four core strata, with the Dalits lying outside and below. (The word "Dalit," in classical Sanskrit, means "broken.") These divisions still permeate life for many Indians, dictating how they work and worship, eat and marry, own land and vote. More than 200 million of the country's 1.3 billion people are classified as Dalits.

In the 1920s, Mahatma Gandhi fought to eradicate practices separating Dalits from others, such as preventing them from entering Hindu temples. After independence in 1947, India's first minister of law and justice, Dalit campaigner B.R. Ambedkar, wrote recompense into the constitution he helped draft. The move banned discrimination based on caste and guaranteed the government's ability to secure representation and unlock opportunity for people who'd lacked both for centuries. India introduced an affirmative action program in 1950; within a few years it was reserving seats in colleges for oppressed Scheduled Castes and Scheduled Tribes, a practice it extended to the IITs in 1973. (An exception is made for "the creamy layer," the official term for lower-caste people who've managed to achieve high status and economic security, who aren't eligible for the quota system.)

Despite this, coded and overt forms of discrimination against Dalits persist, with the education system serving as a primary vector. At secondary school in Rajasthan, Mahesh Kumar recalls, he and his father swept the classrooms as a condition of Kumar's scholarship; they were expected not to make contact with the teachers' belongings so as not to taint them. When Kumar gained admission to IIT (BHU) Varanasi in 2013, he tried to obscure his caste status by dropping his last name, but it didn't help. At the beginning of an IIT school year, senior students often orchestrate a hazing ritual known as *kholna*, calling on first-year students to give their name, their hometown, and the rank they achieved on the entrance exam. If a surname isn't a giveaway, an unusual rank on the entrance exam will be.

Another Dalit, Akshit Sangomla, says that in his first year at IIT Kanpur he refused to reveal his rank. It got out anyway, and soon seniors began stopping him to grill him on his engineering knowledge. Sangomla, who was living away from home for the first time, remembers being terrified by the badgering. He also found himself, like Jatav at IIT Delhi, left out of study groups, dinners, and celebrations. His confidence shot, he struggled academically, falling into a vicious cycle that led to his expulsion after five semesters. "As a Dalit you'll always be an outsider," says Sangomla, who now works as a journalist at a magazine based in New Delhi.

Only one IIT out of the dozen *Bloomberg Businessweek* contacted for this story—including Delhi, Bombay, Kharagpur, (BHU) Varanasi, Madras, and Kanpur—responded to repeated requests for comment made by email and phone over several months. Many of the schools have appointed liaison officers to look into caste discrimination on campus; they didn't respond to requests for comment either. A representative of one school said on background that the IITs didn't want to get drawn into a "controversial" topic. The only formal response came from IIT Roorkee, which said it hadn't received any caste-based discrimination complaints in the past five years. "The reservation policy has helped, without exacerbating caste based discrimination," a spokesperson wrote.

In a 2016 survey of students at IIT (BHU) Varanasi, World Bank economist Priyanka Pandey and her brother, activist Sandeep Pandey, found that Dalits not only experience more discrimination and negativity than others, but their academic performance is also lower, even after controlling for different socioeconomic backgrounds. Asked about the gap, a majority of respondents attributed it to the "lower ability" of lower-caste students. "Caste and class run parallel at the IITs, which are a microcosm of Indian society," says Sandeep, who holds a Ph.D. in mechanical engineering from the University of California at Berkeley and has taught social justice classes at IITs. "For Dalits, life on the campus is a daily reminder of who they are."

> "Caste and class run parallel at the IITs, which are a microcosm of Indian society. For Dalits, life on the campus is a daily reminder of who they are"

A 2020 graduate of IIT Guwahati's design program, Agrata Patel, got into the school through a separate but parallel quota system for students from "other backwards classes," or OBCs—historically oppressed groups that are covered by the reservation system but aren't Scheduled Castes or Tribes. Patel says that, though she faced special pressure as someone from a reserved category, it was easier for her than for her Dalit friends and classmates. "It's a huge load on them. People are always judging them," she says. "I felt for them, I still feel for them. My grades were good—nobody got a chance to point a finger at me." That track led her to her current job, at an Australian tech company.

Dalits in the IIT system often have a rougher path to employment. After his first few semesters in Varanasi, Kumar fell into a deep depression and took time off from school. Overwhelmed by debt, he considered bidding for a sewer-cleaning contract that paid 4,000 rupees ($55) a month. The social hierarchy that considers Dalits "impure" consigns them to poorly paid, "unclean" jobs such as scavenging, cleaning sewers, and disposing of dead animals. Kumar even considered selling a kidney.

Then came a stroke of good fortune. A local paper reported that an IIT student was considering sewer cleaning and organ donation, prompting an outpouring of donations. Kumar returned to Varanasi and graduated in 2019. He now works as an assistant manager with a government-owned mining company in the eastern city of Durgapur.

There's no reliable data on IIT student placement rates or professional salaries, but anecdotal evidence suggests the grind is worth it for many. In December, when students traditionally begin receiving job offers, news outlets relay how quickly they're coming in, and schools boast of how many graduates will make 10 million rupees or more.

In a 2017 paper, French researchers Odile Henry and Mathieu Ferry found that not all IIT graduates are greeted by such an enthusiastic job market. Lower-caste students were barely half as likely to get jobs as general-pool students with similar majors and academic performance; they were also paid less. The researchers attributed the difference primarily to a divide between Dalit and

PHOTOGRAPH BY ANSHIKA VARMA FOR BLOOMBERG BUSINESSWEEK

↑ Jatav in a classroom at the school he attended in his hometown of Karauli, Rajasthan

non-Dalit students in soft skills and social capital. In the lucrative private sector, recruiters look beyond grades for candidates who demonstrate curiosity, leadership, poise, or a competitive spirit—qualities that might show up in, say, extracurricular activities, a glowing recommendation from a teacher, or simply a student's confidence in an interview.

"If one of the criticisms of the quota policy is its lack of meritocracy, since it encourages students whose educational outcomes are lower," the authors wrote, "we note here that it is reserved groups that suffer unequal treatment for equal academic success."

Last year, allegations of caste bias got a public airing some 8,300 miles away from the IIT campuses. On behalf of the Indian Cisco Systems employee who alleged he'd been discriminated against based on his caste, California's Department of Fair Employment and Housing brought a suit in San Jose against the company and two other Indian employees. All three were graduates of IIT Bombay.

American law protects workers from disparate treatment based on a handful of characteristics, including race, sex, religion, and disability status. This was the first time, though, that anyone had argued those protections should extend to Dalits. The complaint said that the unnamed employee had faced discrimination by two upper-caste managers since 2015 and that he'd reported one to human resources for outing him as a Dalit and informing colleagues he'd enrolled in the IIT through affirmative action. The employee said the discrimination had continued under the second manager.

Cisco denied the charges. "We have zero tolerance for discrimination and take all complaints of unfair treatment very seriously," a spokesperson says. "In this case, we thoroughly and fully investigated the employee's concerns and found that he was treated fairly, highly compensated, and afforded opportunities to work on coveted projects." In its response to the suit, Cisco made an additional argument: Because caste isn't a protected category under U.S. civil rights laws, the allegations are immaterial and should be stricken. The court recently denied Cisco's petition to move the case to arbitration, and the company has filed an appeal.

Advocacy groups in the U.S. have weighed in on both sides. The Hindu American Foundation filed a declaration in support of Cisco, saying that though it vehemently opposes "all forms of prejudice and discrimination," the state's case "blatantly violates the rights of Hindu Americans." Meanwhile, the Ambedkar International Center, a Dalit advocacy group, filed a brief in support of the state, encouraging the court to acknowledge caste discrimination and set a precedent prohibiting it. "American civil rights law has little experience with the Indian caste system, but it is very familiar with the idea of caste: the notion that some people are born to low stations in life in which they are forced to remain," the motion reads.

The case inspired a flood of tech workers to tell their own stories. A U.S.-based Dalit advocacy group, Equality Labs, told the *Washington Post* in October that more than 250 tech workers had come forward in the wake of the Cisco suit to report incidents of caste-based harassment. Thirty Dalit engineers, all women, also shared a joint statement with the *Post* that said they'd experienced caste bias in the U.S. tech sector.

For years the industry has been criticized for doing too little to rectify a culture seen as hostile to women, Black people, and Latinos. In response, companies have held town halls, instituted antiharassment training, and made very public promises to do better. On caste, though, executives have largely pleaded ignorance. Microsoft is a rare exception: The company, whose CEO, Satya Nadella, is Indian-American, says that it's received a few complaints of caste bias and that it has more work to do. Google, for its part, says it will investigate any discrimination claims based on caste; it wouldn't say whether it had received any, and Pichai didn't respond to *Businessweek*'s requests for comment.

Another Indian-American executive, Shantanu Narayen, has been CEO at Adobe Inc. since 2007. The company employs hundreds of Indian expats, including more than 100 who graduated from an IIT. In an interview with Bloomberg TV last year, Narayen, a graduate of an engineering school (though not an IIT) in his native Hyderabad, rejected the idea that any of Adobe's Indian workers might show bias based on caste. What the company "has always stood for and our founders instituted as the way of creating this company is equality for all," he said. "We have not had any of those issues."

It would be naive for U.S. companies to assume that Indian hires leave their prejudices on the subcontinent, says Sarit K. Das, a professor of mechanical engineering at IIT Madras who until February was director of IIT Ropar. "Graduates carry this to Amazon or Google or wherever, and the feeling toward the other person is that you didn't make it like me, you are inferior," he says.

Ram Kumar, a Dalit alum of IIT Delhi, has worked in the tech industry for more than two decades, with stints at Cisco, Dell, and other companies. When he arrived in Silicon Valley in the early 2000s, he found "another mini-India arranged by clusters of Indian hierarchy," he says. Whereas dominant-caste Indians might see expat communities as sources of professional networking and support, Kumar avoids them. "People will try to segregate you once they find out your caste," he says. As a matter of self-preservation, "I've avoided good opportunities when I see that the CEO or CTO is Indian."

↓ Patel at her parents' home in Raipur, Chhattisgarh

PHOTOGRAPH BY ZISHAAN A. LATIF FOR BLOOMBERG BUSINESSWEEK

Back in India, Dalit students, faculty, and allies have been pushing back against discrimination. When IIT Bombay tried in 2018 to establish a separate dining hall for meat eaters—a proxy for lower-caste students, since many in the upper castes are vegetarian—student groups protested and got the move quashed, along with a rule at another dining hall that required meat eaters to use separate plates and cutlery. Opposition ended a similar effort at IIT Madras to force nonvegetarian students to use separate entrances, exits, and hand-washing stations.

Professors are also speaking out. Although the IITs are government institutions, reservation requirements don't apply to faculty positions. More than 90% of the 6,000 faculty the system employs are from the dominant castes, a lopsidedness that reflects the populations of the schools' Ph.D. programs, which aren't subject to quotas either. Earlier this year, government data showed that 15 of the 31 departments at IIT Delhi and 16 of 26 at IIT Bombay admitted zero students from the Scheduled Castes to their doctoral programs last year. “I have chaired hundreds of faculty selection committees, and the discrimination against Dalits is never overt. It’s always about the attitude toward the candidates, the questions asked, and the judgment,” says Das. “We follow the rules in the letter but not in spirit.”

In 2018, Subrahmanyam Saderla, a Ph.D. graduate of IIT Kanpur, was selected as an assistant professor in the school’s aerospace engineering department, becoming one of about 150 Dalit faculty in the IIT system. He’d applied for the position through a special drive to recruit Scheduled Caste & Tribe faculty. In a later hearing before the National Commission for Scheduled Castes, Saderla said that, once he was on staff, senior faculty members called him “unsuitable and mentally unfit,” undermined him with junior colleagues and students, and suggested his appointment was a curse on the institute. The Commission directed the school to bring the matter to the police; the police complaint named four professors, all of whom denied the accusations against them.

Within months, Saderla was anonymously accused of plagiarizing his work on unmanned aircraft systems, a charge that could have led to his dismissal and the revocation of his doctorate. “They are OK if you are a clerk in the office or a junior technician,” he says. “But even if you are good enough, you can’t be a faculty member.” He thought he’d escaped the caste system, only to find that he couldn’t.

Hundreds of global scholars, academics, and activists came out in solidarity with Saderla, signing a statement condemning the alleged discrimination and institutional harassment. Saderla was absolved of the plagiarism charge, and after a year-and-a-half-long court battle, his colleagues were exonerated of the caste-discrimination charges. He’s appealing the latter decision to India’s Supreme Court. “If you are born with this tag,” he says, “it stays with you until you die.”

With cases such as this and the Cisco suit, civil-rights advocates see evidence of progress toward addressing the legacy of caste bias. “The critical mass of students who have come in through reservations has made it more difficult to marginalize them,” says Ajantha Subramanian, chair of Harvard’s anthropology department and the author of a book on caste discrimination at the IITs. “They are a force to contend with.” Ⓑ *—With Kartikay Mehrotra, Ian King, Nico Grant, and Dina Bass*

GAME CHANGER: SOCIETY

R.S. Praveen Kumar

Secretary, Telangana Social Welfare Residential Educational Institutions Society

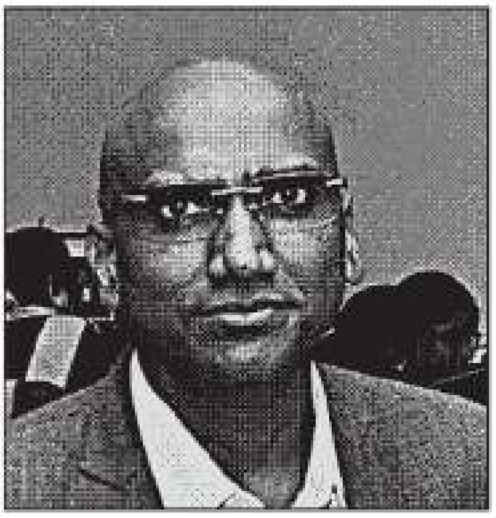


PHOTO: COURTSEY KUMAR

Following a successful career as a regional police chief and a stint at Harvard’s Kennedy School, Kumar began a second act as head of India’s Telangana state residential schools for students from the lowest castes. His mission: to teach 200,000 marginalized kids that they can excel.

You changed careers after you left Harvard. What happened?

I came back to help liberate a community which was historically oppressed with no resources. I deeply believe education is the only weapon that can save the poorest of the poor from a life of victimhood. So I came to education.

You manage about 400 schools where promising, poor village children go to live on residential campuses and complete their studies in English. That’s a big societal change.

Historically, the marginalized people called untouchables or Dalit have been kept away from centers of knowledge. In the 19th century they weren’t allowed to go to regular schools, and even as things slowly changed in the 20th century there was still discrimination. As a result, their dreams got buried, and many dropped out of the education system. So the boarding schools were started for the underprivileged but talented.

Why are the schools residential?

These children require more focused attention. And for many, their home setup is not very encouraging for a child learning. That’s why the government thought that it is in the best interest of the child to create a very positive ecosystem within the school where the teachers play [some of] the role of the parents.

How successful has your new approach at the schools been?

We used to produce about six doctors a year [from graduates]. This year we have produced 189.

You’ve trained and sent some of your students to scale Mount Everest.

It was our out-of-the-box approach to capture the imagination of poor people, to tell them it’s not just Tenzing Norgay or Edmund Hillary who have done that. Our children also can do it.

—Robin Fall

E9

Chief Diversity Officers Are in High Demand

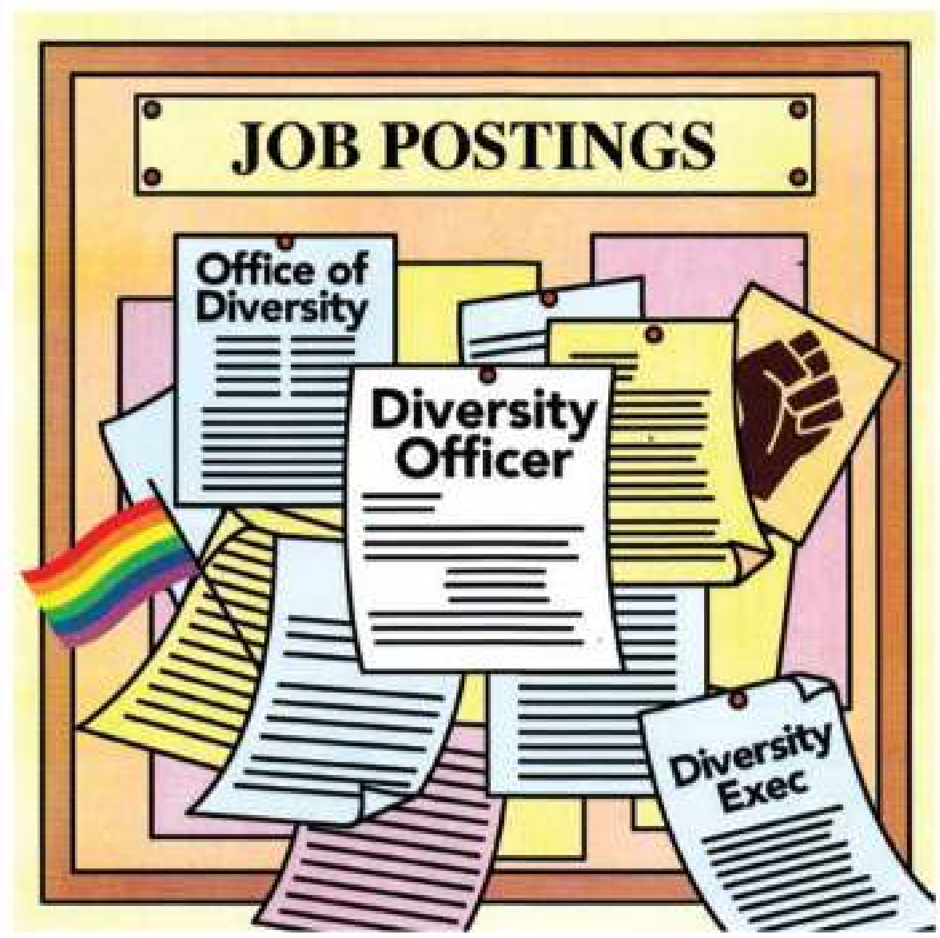
By Jeff Green

In the three months after the police killing of George Floyd touched off mass protests, new hires for chief diversity officers in S&P 500 companies jumped to as many as a dozen a month—almost triple the normal rate, according to research from executive recruiter Russell Reynolds Associates Inc. For many, it was their first diversity executive. “What’s different this time is that the whole world is focused on it,” says Tina Shah Paikeday, who leads the diversity and inclusion advisory practice at Russell Reynolds.

Companies such as McDonald’s, Microsoft, and Boeing have set specific hiring goals. International Business Machines Corp. has dropped degree requirements that had proved to be barriers to recruiting minorities. Other corporations have pledged support to groups promoting the hiring of more Black directors, executives, and employees.

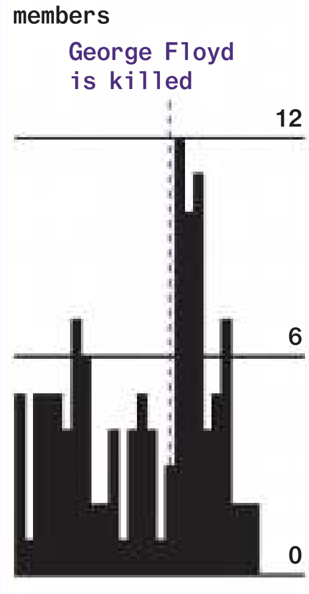
The percentage of S&P 500 companies with a diversity chief is still only 53%, up from 47% in 2018, Russell Reynolds found. An oft-cited 2019 study from Boston Consulting Group Inc. found that 97% of workers say their company has a diversity program, but only 25% say they are benefiting from it.

If employees see that more diversity means a broader variety of ideas and increased likelihood of success, people will begin to get more comfortable with the changes, says Maxine Williams, chief diversity officer at Facebook Inc. “What you market this as within your company matters,” says Williams, whose job was elevated last year to place her directly on the teams with Chief Executive Officer Mark Zuckerberg and Chief Operating Officer Sheryl Sandberg. “This is not just a zero-sum game where you give up something and now you’re left without.” —*With Lauren Pizzimenti*



REMOVING OBSTACLES
IBM started dropping its bachelor’s degree requirement for about half of its jobs in 2018, because it was restricting minority hiring. Now about 15% of hires follow the route of so-called new-collar jobs, according to IBM diversity executive Obed Louissaint.

Diversity executives hired by S&P 500 members



Selected companies that changed diversity executives in the last year

New role created

Company	Date
Nike	7/27/20
Bloomin’ Brands	7/30/20
Sony	10/14/20
Mondelēz	10/22/20
McDonald’s	11/9/20
Levi Strauss	11/17/20
AMC Networks	11/30/20
UPS	1/1/21
Raytheon	1/4/21
Rockwell Automation	2/22/21

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Bloomberg Businessweek (USPS 080 900) March 15, 2021 (ISSN 0007-7135) H Issue no. 4692 Published weekly, except one week in February, April, May, June, July, August, September, October and November by Bloomberg L.P. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Executive, Editorial, Circulation, and Advertising Offices: Bloomberg Businessweek, 731 Lexington Avenue, New York, NY 10022. POSTMASTER: Send address changes to Bloomberg Businessweek, P.O. Box 37528, Boone, IA 50037-0528. Canada Post Publication Mail Agreement Number 41989020. Return undeliverable Canadian addresses to DHL Global Mail, 355 Admiral Blvd., Unit 4, Mississauga, ON L5T 2N1. Email: contactus@bloombergsupport.com. QST#1008327064. Registered for GST as Bloomberg L.P. GST #12829 9898 RT0001. Title registered in the U.S. Patent Office. Single Copy Sales: Call 800 298-9867 or email: busweek@nrmsinc.com. Educational Permissions: Copyright Clearance Center at info@copyright.com. Printed in the U.S.A. CPPAP NUMBER 0414N68830