Bloomberg Businessweek

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◀ In Phoenix, homes that went for \$285,000 at the start of the pandemic are \$435,000 two years later

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CORRECTION		The sidebar accompanying "Stealthy Healthy" (Pursuits, Jan. 31) stated that coconut sugar contains insulin. It contains inulin.

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■ COVER TRAIL

How the cover gets made



"So this week we have a story about mifepristone, the abortion pill."

"There's an abortion pill? I had no idea."

"Exactly. It's been FDA-approved for more than two decades, but it's so heavily regulated that many people have never heard of it."

"Is it not safe?"

"It's safer than Viagra.
You can even have it
delivered to your home
and take it there. In
countries like France
and Kenya, it's widely
available over the
counter."

"Seriously???"

"Yeah. It's like, once it was approved, it was taken to the center of a maze and wrapped in barbed wire."

"Well, that's a cover image."



Cover: Illustration by Sophi Gullbrants



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> CAMINO FINANCIAL Sean Salas, Co-Founder and CEO



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 Global coronavirus cases have passed 417 million, deaths have topped

and more than 10.5 billion vaccine doses have been given. Disney is dropping a mask mandate for fully vaccinated guests at its U.S. theme parks, part of a global move by companies and governments to return to normal life.

Ericsson may have made payments to the Islamic State terror organization to gain access to certain transport routes in Iraq.

The admission from the Stockholmbased company comes after accusations by the U.S. Department of Justice in October of breaching a \$1 billion agreement it made with prosecutors in 2019 to end a longrunning corruption probe.

"These nine families have shared a single goal from the very beginning: to do whatever they could to help prevent the next Sandy Hook."

Josh Koskoff, lead counsel for the families of children and adults killed and wounded in the 2012 mass shooting at Sandy Hook Elementary School in Newtown, Conn., announced a \$73 million settlement with Remington, the maker of the Bushmaster AR-15-style rifle used in the massacre.

Media mogul



ALLEN; PATRICK T. FALLON/GETTY IMAGES. AVOCADO; GETTY IMAGES. SPAIN; CARMELO ALEN/GETTY IMAGES. MUSK; AL DRAGO/BLOOMBERG

Byron Allen says he'll bid

for the Denver Broncos.

As part of CEO Pat Gelsinger's push into the outsourced chip manufacturing business, Intel announced an agreement on Feb. 15 to buy Israel's Tower Semiconductor for about

\$5.4b

The U.S. has banned avocado imports from Michoacán, a coastal state just west of Mexico City that produces a large share of the fruit destined for export. The ban follows accusations that a U.S. inspector received threats. President Andrés Manuel López Obrador said political and economic interests were at play to keep the popular product out of the U.S.

Lockheed Martin ended its \$4.4 billion bid to buy Aerojet.

The U.S. Federal Trade Commission had sued to block the deal on the grounds it would hurt competition among defense contractors.

If he's successful in the auction—which could reach \$4 billion or more—Allen would become the first Black owner in the 102-year-old NFL, where 7 out of 10 players are Black.



• Severe drought has depleted water reservoirs in Spain's Galicia region in recent weeks. As a result, the village of Aceredo, on the border with Portugal, has resurfaced after being submerged beneath the Alto Lindoso reservoir for decades.

Belgians have won the right to perform a full workweek in four days without loss of salary.

The change is part of an agreement to make the country's notoriously rigid labor market more flexible.

Elon Musk gave almost



in Tesla stock to an undisclosed charity in late 2021. The gift of more than



Biden's Immigration Policy Needs Urgent Fixes

U.S. immigration policies should be guided by two basic principles. The first is that immigrants are indispensable to American innovation and long-term economic growth. The second is that laws to secure the country's borders must be rigorously enforced. A system built on these common-sense ideas would promote economic dynamism, boost tax revenue, prevent population decline, and protect national security. It would also command support among a majority of Americans. Unfortunately, the current administration's approach to immigration—both legal and otherwise—has so far been hopelessly muddled. Fixing it should be a top priority.

Start with the legal immigration system, which is heavily weighted toward immigrants with family ties, who make up almost 70% of those who receive permanent residence. An additional 4% come in through the "diversity lottery," which awards visas to residents of countries with historically low rates of immigration to the U.S. Of the 1 million green cards awarded in the last year before the pandemic, fewer than 15% were for work-based reasons.

To correct this imbalance, the U.S. should adopt a points-based system, similar to those in Australia and Canada, and give preferences to high-skilled immigrants. Those with specialized knowledge, outstanding language skills, and entrepreneurial promise, as well as foreign students who earn advanced degrees in the U.S., should receive the highest priority.

Few government policies would do more to bolster American leadership in science and technology. And there's reason to think that such an overhaul could attract bipartisan support. Yet President Joe Biden has shown no urgency. Legislation introduced by Democrats and backed by the White House gives a small boost to the number of employment-based green cards the U.S. issues, but it doesn't go far enough in establishing a workable skills-based system.

Of course, any expansion of legal immigration will be impossible without improvements in border security. Here, too, the administration's approach has been haphazard at best.

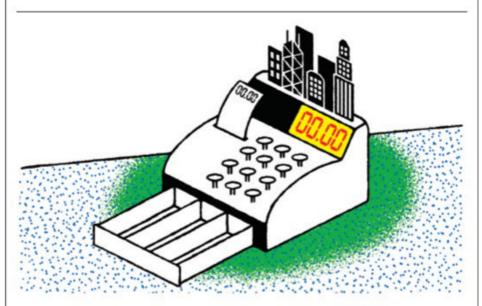
Attempted border crossings have reached record highs under Biden's watch. To deal with the crisis, the administration has relied on a World War II-era provision called Title 42, which allows the government to curb immigration during a public-health emergency. Since the spring of 2020, when the Trump administration introduced the practice, the U.S. has expelled more than 1 million migrants from the border without allowing them to claim asylum.

This approach might have made sense earlier in the pandemic, when overcrowded border facilities seemed like a significant public-health threat. Now it's unnecessary and inhumane, given that many of those deported could be in danger in their home countries. And many will simply try again.

The administration has a more effective tool for managing this problem. The Trump-era Migrant Protection Protocols require those apprehended at the border to remain in Mexico as they go through the asylum process. The program is flawed, with some applicants having to endure unsafe conditions while waiting for hearings. But it grants migrants legal representation and an opportunity to make their case in front of a U.S. immigration official. Bizarrely, rather than fixing this system, the administration is trying to rescind it in court while continuing to enforce Title 42. It should do the opposite.

Ending such incoherence from the administration is a necessary step toward a more orderly system—one that upholds American values and brings in the immigrants the U.S. needs. **⑤** For more commentary, go to bloomberg.com/opinion

AGENDA



► Lockdown Budget

Financial Secretary Paul Chan Mo-po presents Hong Kong's annual budget on Feb. 23 via videoconference. A wave of infections and record caseloads are testing the city's Covid-zero resolve. ▷ 38

- ▶ On Feb. 21, Prime Minister Boris Johnson plans to scrap the last of the U.K.'s pandemic restrictions, including self-isolation, that have dominated daily life for the past two years.
- ► HSBC's ongoing restructuring is likely to dominate its earnings report on Feb. 22. Europe's largest lender continues to pivot toward Asia and wealth management.
- ► Media tycoon Jimmy Lai and six former executives of the shuttered *Apple Daily* tabloid appear in court on Feb. 24 on charges of violating Hong Kong's national security law.

- ▶ Bank of England Governor Andrew Bailey visits Parliament's Treasury Committee on Feb. 23 to discuss future rate increases to contain the worst inflation in decades.
- ► The EU Foreign Affairs Council, made up of the foreign ministers of member states, meets in Brussels on Feb. 21, with tensions on the Russia-Ukraine border the top subject.
- ▶ Alibaba shares its earnings on Feb. 24. After a devastating year marked by political and economic turmoil, investors will want to hear about plans to return to growth.

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Taking His Talents to Mar-a-Lago



 Peter Thiel, tech's favorite villain, is quitting Facebook to support Donald Trump and his allies. Good luck with that

By Max Chafkin

It was remarkably civil, as conscious uncouplings go: Peter Thiel, in announcing his departure from the board of the company formerly known as Facebook, praised his longtime friend and mentee Mark Zuckerberg as "one of the great entrepreneurs of our time." Zuckerberg in turn called Thiel, the first outside investor in Meta Platforms Inc. and a board member since 2005, "truly an original thinker."

That last bit is indisputable. Although Thiel and Zuckerberg are close, Thiel had hardly made a secret of his disdain for Zuckerberg's social network. The company's

first outside investor sold the majority of his holdings almost as soon as he was able to. As I reported in my book, The Contrarian, Thiel also amplified some of the company's loudest critics. "My generation was promised colonies on the moon," Thiel told a gathering of Facebook employees shortly after the company went public. "Instead we got Facebook." He funded political candidates who attacked Zuckerberg, and he invested in Clearview AI Inc., which scraped Facebook data to create its facial recognition database, in violation of its terms of service. Only days before his departure from the board, the New York Times reported that a Thiel-backed cybersecurity company, Boldend, had claimed in a client presentation that, for a time, it had possessed the ability to hack WhatsApp, the Meta-owned secure messaging platform.

That Zuckerberg, who controls Meta through a class of super-voting shares, mostly ignored this disloyalty, and that Thiel looked past his own concerns about Zuckerberg's company, is a testament to an uneasy alliance. Thiel, as one of the most prominent early backers of President Donald Trump, helped smooth relations between Zuckerberg and an administration that was sometimes hostile to the tech industry. Meanwhile, Thiel's board seat and his status as one of Zuckerberg's closest advisers became

his most important credential and source of power.

It's possible that Zuckerberg simply got fed up with Thiel and suggested he resign. He'd done so before, after an email exchange between Thiel and another board member was leaked to the *New York Times* in 2017. (Thiel refused; Zuckerberg backed down.) It's also possible that Meta's recent struggles—the company's stock price fell by 26% in a single

day in early February and has since fallen further—changed Thiel's calculus. The scrupulously Machiavellian investor may have concluded, finally, that a Meta board seat just isn't what it used to be.

In any case, Thiel's departure from Facebook marks the end of an era, both for the company and for the hellscape of privacy violations and misinformation it helped create. Thiel, who came to tech from activist right-wing politics, fashioned an Ayn Randian business philosophy that was reflected in his entrepreneurial endeavors (online payments company PayPal and defense contractor Palantir) and in his investment in Facebook. Thiel's ideas—in particular, his focus on hypergrowth and creative destruction, or as the early Facebook motto put it, "Move fast and break things"—helped make Zuckerberg one of the wealthiest people in the world and cemented Thiel's influence.

After 2016, when Thiel played a crucial role in the election of Trump, he steered Facebook toward a hands-off misinformation policy that benefited the president and the nationalistic movement that sprung up around him. Even as it became clear that Facebook's approach was feeding QAnon adherents, vaccine skeptics, and other extremists, and even as Facebook did little to stop social media that fueled ethnic violence in Ethiopia and Myanmar, Thiel defended the company as a check on government overreach. "I will take all the QAnon and Pizzagate conspiracy theories every day over the Ministry of Truth," he said at a conference. As is often the case with Thiel's barbs, the comment was well-delivered nonsense. Facebook doesn't need an Orwellian ministry of truth—and no one is arguing that it does. It needs to do more to stop amplifying and profiting from extremism.

But Thiel's comments never went past backhanded praise for the ideologies that led to the failed Jan. 6 insurrection at the U.S. Capitol. Now he's supporting the far right more directly. Since announcing his departure from Meta, Thiel has indicated he'll be focusing his attention on electing Trump-aligned candidates in November's midterms. These include two close associates running for Senate seats: J.D. Vance in Ohio and Blake Masters in Arizona. Both are promising a Trumpist restoration and have claimed that the 2020 election results were fraudulent. They also promise hard-line immigration policies, an end to what they see as left-wing cultural hegemony, and opposition to Covid-19 mitigation mandates. (Masters has referred to masking in schools as "child abuse"; Vance has warned of the "tyranny of Dr. Fauci.")

Thiel, who's spent \$10 million on each race so far, has indicated a willingness to spend money on other contests as well, including that of Harriet Hageman, the Wyoming Republican challenging Liz Cheney over her decision to condemn Trump for his actions on Jan. 6. Someone such as Thiel, who styles himself as a free-thinking nationalist, might look at Cheney's decision to break with her party and vote to impeach the former president over a failed insurrection and see a glimmer of heroism. Instead, at a Hageman fundraiser

held at Thiel's Miami home that featured a guest appearance by Donald Trump Jr., Thiel called Cheney treasonous.

If nothing else, Thiel is a master provocateur. Several years ago he attracted attention by using the same slur, without evidence, to characterize Google. Liberals have responded with predictable concern and some outrage. A billionaire tech investor is now investing in candidates who are attacking the legitimacy of the world's oldest democracy. That's potentially disturbing, though it also could mean that Thiel is undermining his own relevance. Josh Marshall, editor of the left-leaning *Talking Points Memo*, joked on Twitter that Thiel had left Meta "to spend more time with fascism."

No one should write off Thiel, who's proven, again and again, to be capable of bending the worlds of business and politics to make himself rich. On the other hand, it's worth pointing out that Thiel's candidates, unlike his tech investments, remain marginal. In early February his Ohio super PAC released an internal poll of likely primary voters showing Vance in the high single digits. In Arizona a recent poll put Masters even lower, at only 6% among primary voters, compared with 25% for Mark Brnovich, the state's attorney general.

Thiel and his candidates are now courting the former president, who has yet to make an endorsement in either race and could potentially vault Masters and Vance to near the top of their primary fields. But this means that Thiel's political ambitions depend, once again, on the whims of Trump. In this light, his activism looks less like an attempt to impose some galaxy-brained ideology on the U.S. and more like a craven play to take advantage of the current populist moment. Among Thiel's early post-Facebook ventures is an online dating site for the MAGA-set, the Right Stuff, founded by a senior Trump aide.

Beyond his activities in the partisan romance sector, Thiel's political jockeying could help ensure that billionaire-friendly policies continue for the foreseeable future. Vance and Masters have both promised to crack down on Big Tech—no big deal for Thiel now that he's off Meta's board—and they've also argued that the government should back off on regulating crypto, a field where Thiel has been active.

As for Meta: For all the company's struggles of late (page 19), the de-Thielification process may offer it something akin to a fresh start, a chance to move on from "move fast and break things." Facebook and its sister apps Instagram and WhatsApp together claim more than 3 billion users worldwide and still hold sway over global culture and politics. If he wanted to, Zuckerberg could acknowledge that dealing with misinformation doesn't mean choosing between QAnon and Orwell—and he could take extremist social-media-powered movements more seriously, even in countries where no one has a big advertising budget. He could also take privacy more seriously.

Of course, there's also the Thiel path, which involves the single-minded pursuit of market dominance. That's worked for Zuckerberg before. But Thiel's pivot to Florida signals that the strategy may have finally found its limit. **3**

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On the outskirts of Columbus, Ohio, where the remains of a 200-year-old canal built to connect Cleveland with Cincinnati snake around new warehouse parks, a modern tributary of the global economy widens a little more with each planeload of goods that roars down its runways. Rickenbacker International Airport was a bustling hub for air freight well before the pandemic-a day's truck drive

to half of the U.S. population, so the slogan goes. In the past two years, another role emerged: economic relief valve for auto parts, consumer products, and pharmaceuticals to flow around the more prominent but clogged arteries of U.S. trade.

The former wartime airbase handled a record 1,655 international cargo arrivals in 2021, a 73% jump from 2019, and overall tonnage rose 18%.

Edited by James E. Ellis ◄ Freighters and reconfigured passenger jets fly in from Asia and the Middle East, operated by the cargo units of Cathay Pacific Airways, Emirates, Korean Air, Qatar Airways, Turkish Airlines, and several other carriers. Nearby are distribution centers for companies ranging from Macy's Inc. to Goodyear Tire & Rubber Co. And 25 miles north, Intel Corp. is building a \$20 billion plant to make semiconductors in the heart of the Rust Belt to alleviate domestic chip shortages.

As Covid-19 writes another chapter in the airport's history—the Tuskegee Airmen unit of Black aviators once called it home, as did the Women Airforce Service Pilots—Rickenbacker illustrates how the old architecture of globalization is absorbing shocks and changing shape. "We had a good cargo business before the pandemic. It's been booming since," says Joseph Nardone, president and chief executive officer of the Columbus Regional Airport Authority, which operates Rickenbacker.

Although it's not what economists would call structural change just yet, Nardone is optimistic that the additional business during the pandemic won't disappear as the virus fades. The big question, he says, is what happens when passenger travel returns to normal, allowing international air cargo to use commercial capacity again through traditional channels such as coastal air hubs plus the bellies of passenger jets. He's expecting this year will be "very similar to 2021," and "we're pretty confident that we'll continue to grow."

The U.S.'s industrial heartland is dotted with examples of how some links in the supply chain have been adapted to keep the wheels of commerce turning while others seized up.

"Supply chain planners appear to be becoming more accepting of the need to price in flexibility and not just lowest cost," says Chris Rogers, an economist in London with Flexport Inc., a digital freight forwarder. Part of that idea includes embracing "rerouting behaviors" that can include nontraditional hubs such as Rickenbacker, he says.

Although air cargo is usually the priciest mode of transport, it became the only way to ensure timely delivery given the dismal state of ocean reliability during the pandemic. The shipping industry, which accounts for 80% of world merchandise trade, had a record year in 2021, with volume totaling 179.1 million units of 20-foot containers, up 6.6% from 2020 and a 5.4% increase over 2019, according to figures released in early February by Container Trades Statistics Ltd. in the U.K.

The upswing was largely driven by trade between Asia and North America, where the volume of containers jumped 33% from the average level for the five years preceding the pandemic. The boom was great for shipping lines' profits, but port congestion sent on-time reliability to all-time lows. U.S. imports from Asia are still overwhelming some of the nation's biggest ports, especially in Los Angeles, Long Beach, and Oakland.

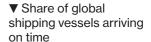
U.S. exports have slumped as the shipping lines prioritize moving imports, causing an imbalance that until recently might have crippled gateways such as the Port of New Orleans, which handles more outbound containers than inbound cargo. But something happened during the crunch of 2021 that the Big Easy hadn't seen since the 1990s: Importers started using carriers known as bulk and break-bulk ships to ferry goods that used to move in containers—and New Orleans is equipped to handle both modes. The result: Bulk and breakbulk volumes for New Orleans jumped 46% in 2021 from the previous year, a boost that helped cushion a 15% drop in container volume. "We're moving massive amounts of plywood and coffee through break-bulk because they can't get containers," says Brandy Christian, CEO of the New Orleans port. "The more flexibility we can build in, the better."

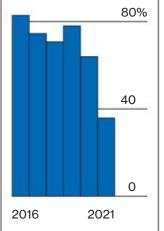
So New Orleans is erecting the Louisiana International Terminal, an estimated \$1.5 billion infrastructure project expected to open in 2027, and the Mississippi River is being dredged to a depth of 50 feet to accommodate the world's biggest ships. Among the goals is to leverage the terminal's access to nearby railroad lines and help New Orleans better compete with rival ports on the East, West, and Gulf coasts vying for shipments to and from customers in the center of the U.S. "That battleground for the future of trade—the growth in population where a lot of manufacturing and distribution is occurring—is a real opportunity," Christian says, referring to the Midwest.

Efforts are also under way to increase trade along the Mississippi, though its almost 100-year-old system of locks and dams limits the potential. And a 2021 report by the American Society of Civil Engineers estimated that the almost \$20 billion in infrastructure spending needed over the next decade to ensure navigation on inland waterways faces a \$12.6 billion shortfall.

That hasn't stopped a group of businesspeople from planning to offer a new waterborne trade option along the Mississippi starting in April 2024. Importers and exporters in Chicago, Kansas City, and other Midwestern cities have traditionally relied on railroads connected to ports on the West Coast to haul their containers. But the pandemic backlogs have highlighted the inefficiencies along those routes and the need for alternatives.

"We had a good cargo business before the pandemic. It's been booming since"





LLUSTRATION BY VINCENT KILBRIDE. DATA: SEA-INTELLIGENC

In late 2021, American Patriot Container Transport LLC asked seven shipyards for bids on four river-going vessels each designed to haul about 1,800 containers between Plaquemines Port near New Orleans to terminals in Memphis and St. Louis. Containers currently travel along the river on barges that can carry only about 300. "The opportunity here is to create a new north-south trade lane," says Sal Litrico, American Patriot's CEO. "When you start looking at the forecasts for the next 10 years, there's significant growth."

Unlike Europe's inland waterways, those in the

U.S. aren't well-traveled routes for containerized cargo. The desire to avoid a repeat of pandemicera supply chain snarls could change that. "Not only are new gateways warranted," says Brian Harold, managing director in Mobile, Ala., for APM Terminals, a unit of container shipping giant A.P. Moller-Maersk A/S that's part of American Patriot's project, "but usage of the river is something that people are willing to do now." —*Brendan Murray*

THE BOTTOM LINE The shipping industry had a record year in 2021, with volume totaling 179.1 million units of 20-foot containers, up 6.6% from 2020. That's caused a need for new trade hubs.

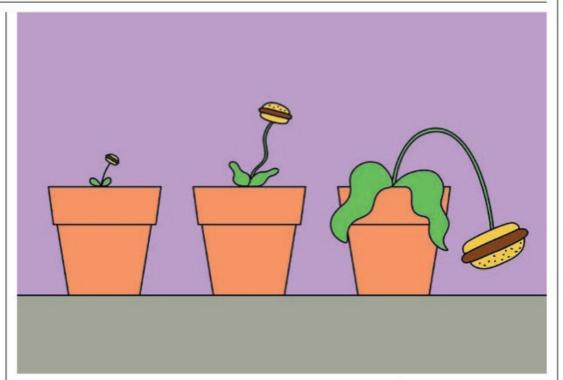
Fake Meat Loses Its Starring Role at Supermarkets

• Grocery sales of plant-based substitutes stalled last year. Now they're being pushed as ingredients in other products

For several years, faux meat has come to U.S. grocery stores mainly in the form of burgers and sausage links, often in the coveted refrigerated case right next to the real thing. The arrival of patties from Beyond Meat Inc., Impossible Foods Inc., and a long list of competitors large and small at first translated into unceasing media attention and massive growth. But the continued hunger for fresh faux meat is proving to be unsustainable.

After surging 53% to \$473 million in 2020, sales of plant-based meats in the meat departments of grocery stores increased only 1% in 2021, according to consumer products analytics firm IRI Worldwide. Whether that was a result of people returning to eating at restaurants or the fading novelty of meat substitutes, the result is that makers of faux meats may have to accept a future where their plant-based products may not be the main attraction on as many consumers' plates.

So manufacturers are looking beyond the meat case. Impossible's beef substitute is now in Buitoni ravioli, while you'll find Beyond Meat's sausage on Banza pizza. There's a frozen, microwaveable breakfast sandwich made with Field Roast's faux sausage underneath plant-based eggs from Eat Just Inc. and Chao Creamery vegan cheese. Nestlé SA's fake-meat line, Sweet Earth, tops pizzas not only under its own brand but also as an ingredient for the company's DiGiorno and California Pizza Kitchen lines.



"We see lots of opportunities for that kind of collaboration," says Dennis Woodside, president of Impossible Foods, about the arrangement with Buitoni. His targets include sauces, prepared meals, and the "entire frozen aisle," he says.

Impossible is still working to create innovative products through technological developments, like its continuing efforts to mimic a whole chicken breast, Woodside says. In the meantime, adding faux ground beef into pasta is easier. "We've been pursuing growth by expanding ground products into every part of the supermarket," he says. That's in part

◆ because, as he says, "lots of people still haven't heard of Impossible."

The industry has discovered that even as Americans spend more time at home in the post-pandemic era, making a meal can still be a pain. For others, especially younger consumers gravitating toward the category, the idea of cooking from scratch with a new ingredient such as pea-based protein may be intimidating. Instead, supplying ingredients for other brands' ready-to-eat meals lets plant-based companies benefit from the trust of labels already familiar to shoppers.

Faux meat's boom in 2020 was the result of a confluence of trends, says Jonna Parker, an IRI fresh food specialist. Increased grocery store distribution had already been planned before the pandemic, so makers were well-positioned for the hoarding that ensued at the start of Covid. The shortages of traditional ground-meat products, she says, even led unlikely consumers to try plant-based products.

Last year's minuscule growth wasn't unexpected after 2020's torrid pace, Parker says. But she adds that the slump was also attributable, in part, to lots of shoppers who'd made their first purchases but not a second or third: Only half of consumers who bought a plant-based meat came back for more. That was partly because there were simply too many products, she says, and not all were good.

It's time for plant-based meat makers to "diversify away from the kids' menu," says JP Frossard, a consumer-foods analyst at Rabobank. "There is a limit for the amount of burgers we eat." The frozen section, offering broad food variety and convenience, is one of the "pandemic winners," he says, making it a prime target for plant-based companies.

Sales are exceeding expectations for the sandwich made with Field Roast "sausage," Eat Just "egg," and Chao "cheese," says Dan Curtin, former president of Greenleaf Foods SPC, which owns the Field Roast and Chao brands. And David Yeung, chief executive officer of Hong Kong-based social venture Green Monday, says selling ready-to-eat foods, especially those made with recognizable partners, has paid off in Asia. His vegan OmniPork label formed a partnership with well-known frozen food brand Amoy to sell a faux-pork dumpling in China and Hong Kong. "It can trigger another demographic that may not be directly, consciously thinking about plant-based products to try," he says. "It definitely expands the appeal and reach of plant-based products. Both brands can enlarge their audience base."

For Thrive Market Inc., an online seller of natural and organic products, its branded frozen meals made with Beyond Meat ingredients are "at the top of our category," says Jeremiah McElwee, Thrive's

chief merchandising officer. "They're opening up a new audience of more and more flexitarians and omnivores who want to eat more plant-based."

This shift toward ingredient status doesn't necessarily mean a bright future for all the startups that have crowded into faux meats, says Michele Simon, an industry consultant and founder of the Plant Based Foods Association. "To me, it's an indicator of the coming commodification of these products," she says. Large traditional meat companies now have plant-based divisions, and they're likely to undercut the plant-based upstarts on price. "At some point," she says, "Tyson's going to come along and say, 'We can sell you a very similar sausage crumble for half the price.'" —Deena Shanker

THE BOTTOM LINE While faux-meat sales in supermarkets soared 53% in 2020, they grew just 1% in 2021. That's led manufacturers to try to get their goods included in other food brands' products.

One Night in Bangkok Isn't So Wild Anymore

● Thailand's attempt to revive its tourism industry may be hurt by widespread closings of the businesses that lure visitors

In downtown Bangkok's Patpong area, most evenings are quiet. Before the pandemic, it was one of the world's most notorious red-light districts, attracting foreign tourists to its many bars, night-clubs, and massage parlors. With the tourism industry decimated by two years of Covid-19, most of the street's businesses are locked, with "Closed" signs in the windows. At the area's night bazaar—for decades the place to buy Red Bull T-shirts, Thai boxing pants, and fake Rolex watches—the vendors are gone.

Thailand wants to get them back. Tourism accounted for one-fifth of the country's gross domestic product before the pandemic, with almost 40 million foreign tourists generating more than \$60 billion in 2019. In early February, Prime Minister Prayuth Chan-Ocha's government began allowing vaccinated travelers to enter quarantine-free.

Like many countries that are now treating Covid as endemic, Thailand is eager to jump-start its tourism industry. But visitors expecting bustling restaurants, bars, and markets may be in for a shock, because many of the small businesses that played major roles in Thailand's tourism ecosystem closed during the lockdowns and haven't reopened. And large, higher-end businesses are offering steep



SEEPORE PHOTO: ALAMY. AFTER PHOTO: ALAMY. DATA: WORLD TRAVEL AND TOURISM COUNCIL (GDP); THAILAND MINISTRY OF TOURISM AND SPORTS (ARRIVALS)

discounts and special packages to capture the few visitors who are still traveling, squeezing out the smaller operators that have survived.

Thailand's strict travel regulations, such as requirements to take multiple Covid tests and provide proof of medical insurance with at least \$50,000 coverage, will also limit the type of people who come, according to Bill Heinecke, chairman of Bangkok-based Minor International Pcl, one of Southeast Asia's largest hospitality, restaurant, and lifestyle companies. "Now when you travel generally, first and business classes are full, while economy is empty," Heinecke says. "So the kind of travelers that we're seeing now are the higher-end travelers who tend to stay longer because of all the hassle you have to go through."

It's likely to take at least until 2024 for the industry to return to pre-pandemic levels. This year the Thai government expects to see fewer than 10 million foreign travelers. And that's an optimistic forecast that assumes omicron and other new variants don't impair a recovery in the second half of 2022.

Earlier efforts to revive tourism included a subsidy program to help pay for domestic travelers' accommodations, flight tickets, and meals. The government also has what it calls a travel sand-box plan, which allows foreign visitors to bypass a mandatory isolation, provided they spend at least a week in Phuket or one of three other approved beach destinations.

Thai hotels and airline associations say these measures don't do enough to alleviate costs, especially for smaller hotel operators hit by the lack of large tour groups from overseas. Staffing is a special challenge for small operators, according to Marisa Sukosol Nunbhakdi, president of the Thai Hotels Association. "To reopen, hotels need personnel and manpower, but at the same time, there's not enough demand and money to do all this," she says. "Many of the workers in the industry have gone back home or changed careers during the pandemic, and they are unwilling to return, because they would be faced with a lot of costs."

That complicates efforts to revive the industry. "The tourism sector that Thailand depends on a lot will take a long time to recover," Bank of Thailand Assistant Governor Piti Disyatat said on Feb. 9. "If the industry has labor shortages, they won't be able to receive a lot of tourists, and the economy won't be able to expand as much as it should."

Moreover, not many foreign travelers are going to risk a trip to Thailand if they have to quarantine upon their return home, as is now the case in many countries. That's why Prayuth's government on Feb. 7 said it wants to start talks soon with





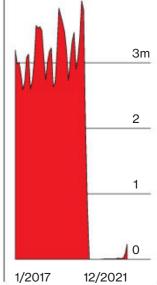
China—the nation's largest source of foreign tourists—and Malaysia to create bilateral travel bubbles that would eliminate quarantine risks on both ends. "We think a travel bubble will be more positive for Thailand's tourism sector than the currently implemented 'Test & Go' quarantine-free scheme, as the latter alone is not enough to attract tourists who will have to quarantine on their return," Tim Leelahaphan, a Bangkok-based economist at Standard Chartered Plc, said in a note.

Thailand has plenty of competition vying for foreign visitors returning to Asia. The Philippines in early February began allowing inoculated tourists to enter without quarantine if they have a negative test result and health insurance, while Indonesia reopened Bali to all foreign tourists, with those fully vaccinated subject to a quarantine of five days and the unvaccinated for seven days. And Sri Lanka on Feb. 12 resumed issuing tourist visas upon arrival for most travelers for the first time since the start of the pandemic. Now that countries are opening up their borders, the real test will be whether travelers—and Covid—do their part. —*Prim Chuwiruch*

THE BOTTOM LINE Thailand, which had 40 million foreign tourists in 2019, saw less than 1 million in 2021 because of Covid travel curbs. The nation is reopening to aid its battered tourism sector.

▲ A street in Bangkok's Soi Cowboy red-light district, bustling in 2012 and somber in 2021







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Facebook's Fading Feed

 The company's model of social networking is no longer where the action is

Austin Johnsen knew his Facebook use had dwindled over the past couple of years, but it wasn't until recently that he and his wife realized just how little they used the world's largest social network. "We got married three years ago, and we hadn't even updated our status that we were dating," says Johnsen, a tech employee living in the San Francisco Bay Area, who joined Facebook in 2004. "Back in the heyday that would have been something you add right away."

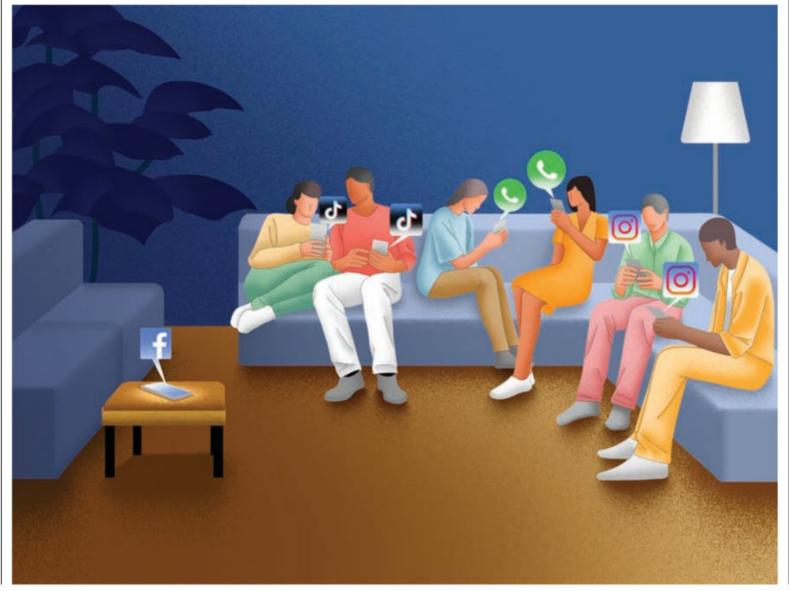
Johnsen, 38, hasn't stopped sharing important life updates online. He just doesn't do it on Facebook. He posts some pictures of his kids to a private group of friends and family on Instagram, and most of his conversations happen on Apple Inc.'s iMessage, which

he says feels more intimate and personal. "Even if the features are there, it just feels like a ghost town," says Johnsen. "The network effects work in the down direction as much as they do in the up direction. You don't want to be the one weirdo forcing your friends and family to go back to Facebook."

Meta Platforms Inc. remains far and away the world's biggest social networking company, with 1.93 billion daily users on Facebook alone, in addition to vast numbers of users on Instagram and WhatsApp. But for the first time in its almost 20-year existence, the network's daily user base shrank over the holiday quarter, helping send its market value down more than \$300 billion in the ensuing weeks and reinforcing the perception that its best days may be behind it. Facebook has intense competition from long-running rivals such as YouTube and Snapchat and buzzy newcomers like TikTok, as well as iMessage, FaceTime—also owned by Apple—and Discord, plus other chat services that may not initially seem like direct competitors.

Although Meta's public, feed-based service has long been the dominant form of social networking, it's always competed with other ways to socialize and share on the internet. The company has leaned heavily into many of them—private messaging, video, virtual reality—as a way to stay ahead of shifting tastes.

Its challenges have come not only from product ▶



Edited by Joshua Brustein



◀ development shortcomings but also often from the damage it's done to its own brand. A string of privacy issues has been eroding trust in Facebook for years, pushing some users toward other services on which messages and photos are more private. In the U.S., the company's most valuable advertising market, its user base has been stagnant for two years. In 2021, 66% of U.S. adults used Facebook weekly, according to a survey from Forrester Research Inc., down from 69% a year earlier. Among young people, a group for which Facebook faces more competition, the declines are steeper. Just 49% of 18- to 24-year-olds used Facebook weekly in 2021, down from 55% the previous year, Forrester found. That meant the video app TikTok, which was used by 50% of people in that age group, was more popular than Facebook for the first time.

The problem for Meta is that it needs more than one fix, says Mike Proulx, a research director at Forrester. Rivals such as TikTok have come up with new ways for people to share, such as letting users post a music video, or a clip of them reacting to someone else's post, sending Meta scrambling to copy the new features. In addition to privacy concerns, Meta's reputation has been damaged by the idea that it's a place full of "old" people, making it less cool for teens. "Facebook is losing relevancy," Proulx says.

Chief Executive Officer Mark Zuckerberg has been preparing for this transition for years. Meta spent an astounding \$19 billion to buy WhatsApp in 2014 to jump-start its private messaging business. Barely a month later it bought the virtual-reality company Oculus, again illustrating his belief that feed-based communication was just one of a number of growing ways for people to share.

In 2019, Zuckerberg argued that private messaging would supplant feed-based interactions as the main way people interact on his company's services. "I expect future versions of Messenger and WhatsApp

to become the main ways people communicate on the Facebook network," he wrote.

Sure enough, private messaging has exploded in popularity worldwide in recent years. Messaging apps were used by almost 3.1 billion people in 2021, according to EMarketer, over 500 million more than in 2019. That figure is expected to grow by an additional 400 million by 2025. Meta's messaging platforms appear as strong hedges against erosion of its traditional social networking product.

Some of this popularity is driven simply by rising smartphone use around the globe, but an increasing interest in privacy, inspired in part by Meta's own practices, has pushed people toward services that are often ad-free and encrypted. Last fall, Forrester found that just 41% of U.S. adults trust Meta; in the U.K. the share was only 26%.

Byron Perry, a 38-year-old living in the Bay Area who runs a series of news and entertainment websites in Asia called Coconuts, joined Facebook almost immediately after it started. He's now all but abandoned the social network for private messaging, citing privacy concerns, though he still uses WhatsApp, which is encrypted. "I've just really been turned off by the scandals Facebook has been involved in," he says. "I'm so aware of how much everything that I do is quantified, turned into data, and then monetized."

Competition is intense in private messaging. Meta's WhatsApp has more than 2 billion users globally and is the top private network in countries such as Brazil and India. But Meta faces stiff competition from leading services in Asia, including Line in Japan, Kakao in South Korea, and WeChat in China. Messenger, Meta's other messaging service, saw more than a 20% decline in users in both Japan and South Korea in 2021, according to EMarketer. Meta doesn't operate in China.

In the U.S., Meta's messaging ambitions have run up against an increasingly familiar foe: Apple. Zuckerberg has called iMessage Meta's "biggest competitor by far" in messaging as long ago as 2018. He suggested in January 2021 that Apple's success results from unfair advantages, such as iMessage coming already installed on iPhones.

Zuckerberg has also started describing TikTok as a significant competitor, noting that short-form videos are becoming increasingly popular with younger users. "People have a lot of choices for how they want to spend their time, and apps like TikTok are growing very quickly," he said during Meta's last earnings call. He has reason to talk up the competition: It's a way to counter accusations that Meta, which is facing a federal antitrust lawsuit, is an anticompetitive monopolist.

Still, Zuckerberg's concerns about being outflanked

◀ Like many others. Jenna Vassallo has used Facebook less and less in the past few years

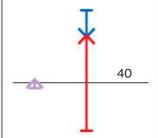
- ▼ Share of U.S. adults using social media weekly, 2020-21 → Facebook
- 허 Instagram
- TikTok

ΑII Gen Z

80%









0

seem genuine. Meta has copied some of TikTok's product for its own apps, and in 2019 it began testing Reels, a rival service for short videos. The feature exists inside both Facebook and Instagram. Zuckerberg said Reels, which launched globally in 2020, is the company's "fastest-growing content format by far."

An issue for Facebook's main app is that its trouble keeping pace could accelerate if it's no longer seen as the inevitable destination for social networking. When Jenna Vassallo, a 36-year-old Boston resident who works in online marketing and does freelance photography, first joined Facebook around 2005, part of her motivation was that everyone else in

her circle seemed to be using it. Facebook "felt like a necessary evil," she says. Her "friends and family used it for everything."

In the past few years, Vassallo's Facebook use has dwindled to almost nothing. It's been replaced by other services—some Meta-owned, such as Instagram, and some competitors, including group message threads and Apple's FaceTime. Other people seemed to be making their own migrations, she says. "Being absent from Facebook stopped feeling like an issue." —*Kurt Wagner*

THE BOTTOM LINE Facebook has been saying for years that other forms of social networking could pose a threat to its core service. It was right.



 It's getting easier to sneak spyware onto phones without tricking victims into clicking links

As a journalist working for the Arab news network Alaraby, Rania Dridi is careful to watch out for suspicious emails or texts. She also avoids clicking on links or opening attachments from people she doesn't know, aware that doing so could allow hackers to gain access to her phone.

But it turns out there were people targeting Dridi who didn't need her help. More than once, hackers have broken into her phone using a "zero-click" attack, a technique that exploits flaws in mobile operating systems such as Apple Inc.'s iOS or Google's Android to breach devices without requiring any action from targeted users. Attackers who gain access this way can steal data, listen in on calls, and track people's locations. There's practically nothing potential victims can do to prevent such attacks, experts say, aside from not using their devices at all.

Dridi, a Tunisian journalist based in London, suspects she was targeted because of either her reporting on women's rights in the Arab world or her connection to other journalists who are high-profile critics of Middle Eastern governments. She says it was devastating to find out about the attacks, which made her feel like hostile intruders had sneaked into her private life. "They ruined my life," she says. "I tried to just go back to normal. But after that I suffered from depression, and I didn't find any support."

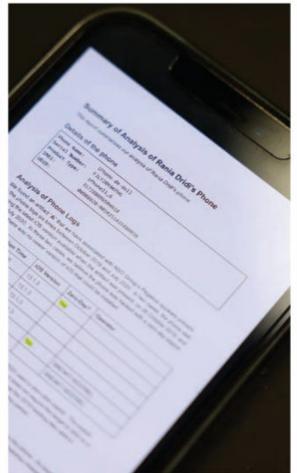
It can be hard to even know when a zero-click attack has occurred. In Dridi's case, administrators at Alaraby noticed suspicious activity on their computer networks that eventually led them to her phone, she says. Citizen Lab, a research group at the University

of Toronto that focuses on abuses of surveillance technology, analyzed Dridi's iPhone XS Max and found evidence it had been infected with a piece of spyware known as Pegasus at least six times, with zero-click attacks used at least twice. The group blamed the United Arab Emirates government. A representative for the UAE Embassy in Washington didn't respond to messages seeking comment.

Government agencies are using zero-click attacks with increasing regularity, according to more than a dozen surveillance company employees, security researchers, and hackers interviewed by Bloomberg News. Interest in the tactic has spiked because encryption has made it harder to snoop on people's communications, and because potential targets have gotten savvier about clicking suspicious links in emails and text messages. "Zero-clicks are very attractive because you can break into phones belonging to people who have good security awareness," says Bill Marczak, a research fellow at Citizen Lab. "The target is out of the loop. You don't have to convince them to do anything."

Several companies are believed to offer zero-click hacks. The Israeli firm NSO Group, which makes Pegasus and has been involved in zero-click hacks since 2017, is the dominant provider of the capability to governments, says Marczak. In a 2019 lawsuit, Meta Platforms Inc. accused NSO Group of using the technique to implant spyware on the devices of 1,400 people who used its WhatsApp service. NSO was also blacklisted by the U.S. in November for supplying spyware to governments that misused it.





■ NSO disputes Meta's allegations. It has consistently said it sells its technology exclusively to governments and law enforcement agencies as a tool to track down terrorists and criminals. "The cyber intelligence field continues to grow and is much bigger than the NSO Group," a company representative said in a statement. "Yet an increasing number of 'experts' who claim to be 'familiar' with NSO are making allegations that are contractually and technologically impossible, straining their credibility."

Several other vendors, including at least three Israeli companies, have offered zero-click spyware, according to news reports and former employees. Alex Prokopenko, an executive at Arity, a company based in Latvia and Estonia that sells zero-click spyware and other kinds of exploits, said in an email that its customers have included governments and companies that work with intelligence and law enforcement agencies in India, Ireland, Israel, Italy, Poland, Singapore, Spain, Turkey, the UAE, Ukraine, and other countries. Most of Arity's sales, he said, were in the range of \$200,000 to \$600,000.

Other companies, such as Zerodium, a somewhat mysterious organization incorporated in Delaware, pay for information about vulnerabilities that would allow for zero-click attacks, then sell this information to customers who may use it to implant spyware. Zerodium offers as much as \$2.5 million for zero-click exploits for Android phones and slightly less for those used on Apple and Microsoft Corp. devices, which it then sells mostly to governments in Europe and North America, according to its website.

A company representative didn't respond to requests for comment.

Carine Kanimba's experience shows how difficult it can be to prevent a zero-click hack. For the past two years she's been campaigning for the release of her father, Paul Rusesabagina, a critic of the Rwandan government who was the subject of the 2004 film *Hotel Rwanda*. He was "forcibly disappeared" in August 2020, according to Human Rights Watch, and a Rwandan court convicted him of terrorism charges in September, a verdict his supporters say was politically motivated.

Kanimba, a dual U.S.-Belgian citizen, says she knew there was a possibility she might be under surveillance. In October 2020 her security advisers were so concerned that they destroyed her mobile phone. Last spring, researchers at Amnesty International informed her that her new phone had been breached in a zero-click hack and infected with NSO Group's Pegasus.

A forensic analysis of the device, conducted by Amnesty International and reviewed by Bloomberg News, found that an attacker had used the iMessage app to send malicious push notifications. A representative for the Rwandan government didn't respond to a message seeking comment.

"I never saw any message," Kanimba says. "The message arrives and disappears straightaway, or it arrives and you cannot see it. So there are no clicks, no action from you. It just infects." — Ryan Gallagher

THE BOTTOM LINE Governments are fueling demand for sophisticated hacking services as they pursue dissidents who've gotten better at protecting themselves.

⋖ Dridi

▲ A Citizen Lab report on Dridi's phone

Elon Tunnels Under Texas

 Documents detail plans for a testing center outside Austin

Six years after launching with grandiose plans to fight "soul-destroying traffic" in many of the biggest and most congested U.S. cities, Elon Musk's Boring Co. has shifted its focus largely to Nevada and Texas, two states that promise far less of the regulatory barriers it's run into in other locations.

Boring had proposed multiple infrastructure projects of a scale that's become rare in the U.S. It announced plans to build tunnels for passenger traffic between Washington, D.C., and New York, underneath Los Angeles's clogged Interstate 405 freeway, and between downtown Chicago and the city's O'Hare International Airport. Executives at Boring have decided to pull back on ambitious projects in states including California, according to a person familiar with the matter who asked to remain anonymous because he's not authorized to discuss Boring's plans. A company representative declined to comment.

Instead, Boring is working out of Pflugerville, Texas, a town near Austin that's close to the site of Giga Texas, Tesla Inc.'s 8 million-square-foot factory. Last year it filed for permits to develop land it purchased in nearby Bastrop County, according to documents obtained by *Bloomberg Businessweek* via a public records request. The company is working



on a compound, with approved permits for on-site housing, designed to help it hone its techniques for building low-cost tunnels.

In May, Boring applied for a permit for a research and development test site, which was granted the following month. The documents show its plans consist of "as many tunnels as necessary" for its purposes. Each tunnel will be 300 feet to 600 feet long, dug using a boring machine called Prufrock, an upgrade from the one Boring used to dig tunnels under the convention center in Las Vegas that have been operating for almost a year. Texas' soil is more porous than the sandy Vegas soil, giving the company an opportunity to practice tunneling in a different set of conditions. The documents also specify three 40-foot grout silos, a 35-foot vertical storage system for the belts used to pull muck out of tunnels, trailers for use as office space, a large tented working area, port-a-potties, and chain-link perimeter fencing.

The plan for employee housing consists of 10 prefabricated one-bedroom dwellings. The structures are small—550 square feet—but sleek, each with an angled roof and plenty of windows. There's also an outline for a "future café and retail" structure, but the plan notes it isn't part of the current application.

The development in Texas comes as Boring has been scaling back its ambitions elsewhere. In Chicago the mayor who'd championed the airport project didn't run for reelection, and it lost momentum. In January an official in San Bernardino County, Calif., said Boring had neglected to submit revised language for a pending contract for a tunnel from Rancho Cucamonga to Ontario International Airport. The company isn't expected to bid on the next stage of the multiyear job, though it could get involved later on.

Fort Lauderdale Mayor Dean Trantalis last year enthusiastically championed a tunnel to the city's beach built by Boring. He's also advocating a tunnel as part of a separate commuter rail project and has mentioned the company in connection with it, though a spokeswoman said in an email in January that Boring is "not part of the conversations at this time."

Texas is a logical location for Musk, who's been spending time in the state and moving more of his ventures there. Local officials and business groups have been aggressively pitching it as a place where businesspeople can operate without restrictions they may face elsewhere. "The regulatory environment in Texas is much lighter than California's," says Katie Greer of the Texas Association of Business. "And that is definitely a major reason companies are coming." —Sarah McBride

THE BOTTOM LINE Boring Co. has pulled back on big tunneling projects that drew significant attention in California and elsewhere to focus on locations with more permissive regulatory regimes.

The Bond Market "What's THAT, GIRL? YOU SAY TWO-YEAR BONDS ARE YIELDING 1.5%?!" The Bond Market Expect higher inflation—and rate hikes from the Ference of the Policy o

The Bond Market Is Trying to Tell Us Something

 Investors are worried that the Fed has waited too long to tackle inflation

With precipitous drops in some leading technology stocks and wild swings in the S&P 500, equities have provided plenty of drama this year. But for clues to the direction of the U.S. economy, listen to the \$23 trillion U.S. Treasury market. Right now, that market is saying inflation and the potential for a slowdown in growth are both threats.

People who buy Treasury securities don't worry about getting their money back—the U.S. government always pays its bills. But they do worry about inflation, which erodes the value of future bond payments. They also worry about whether the U.S. Federal Reserve intends to raise the very short-term interest rates it controls. When investors

expect higher inflation—and rate hikes from the Fed to fight it—they demand higher yields as compensation, so they'll push bond prices down (yields rise when prices fall). And these days that's just what they're doing.

The biggest market action has been a surge in two-year U.S. Treasury yields, which have more than doubled this year, from 0.7% to just over 1.5%. Longer-term rates are going up, too, but much less dramatically, with the 10-year Treasury yield climbing above 2% this month for the first time since well before the Covid-19 lockdowns.

The pandemic prompted the Fed and Congress to pump enormous amounts of money into the economy to support families and businesses, turning what could've been a devastating crisis into the shortest U.S. recession on record. But with the U.S. and other rich countries fitfully transitioning out of emergency mode, supply chains have been straining to meet consumer demand, labor markets have been tightening, and low interest rates have triggered a real estate boom that has raised home prices and rents.

The central bank watches financial markets carefully, and the rise in yields suggests that market participants see inflation as a serious problem. (Or they see the Fed seeing it as a problem—the two sides are constantly trying to anticipate the other's

moves.) Inflation has also become a political liability for President Joe Biden. That's sparked him to say it's a critical job of the Fed to tame inflation. Now the Fed has as much as said that it's poised to reverse course by raising rates. It's already reducing its bond purchases, another of its policy tools.

Bond prices and related derivatives trades show that the market foresees the Fed raising the overnight federal funds rate at least 1.5 percentage points this year. Many of the Fed's global counterparts are pointing in the same direction.

The return of higher interest rates would resonate throughout the financial system—affecting all kinds of borrowers, businesses, and their workers. And here the bond market also has a subtler message for investors. In its response to inflation, the Fed is treading a fine line—its goal is to rein in rising prices without putting a damper on economic growth.

The bond market isn't sure the Fed can do it. The pattern we're seeing now of short-term yields up sharply while longer-term yields remain fairly low—a flattening yield curve, in bond parlance—suggests a cooling economy in the years ahead. If the trend continued and short-term rates rose above the longer-term ones, creating what's known as an inverted yield curve, that would be a strong signal of an impending recession.

We aren't there yet. But suddenly professional bond investors are talking about a different world, with new kinds of risks. Anne Walsh, chief investment officer of fixed income at Guggenheim Partners, saw low bond yields creating hazards for investors in mid-2019 as they piled into riskier assets in search of decent returns. Now she sees inflation and the Fed's response to it as Problem No. 1. "To see this type of sudden inflation with disruptive demographics and supply chain disruptions-you have to go back to post-World War II," she says. "We have a lot of those same elements now. This is a very tricky and challenging time to be an asset manager, particularly on the fixed income side, but also for equity managers." The risk for stocks is that higher rates reduce the value of companies' future earning streams, while a dip in economic activity could crimp corporate revenue.

For bond investors, the change is already costing money. Treasuries are in the red so far in 2022, creating a risk for the first back-to-back annual losses since at least the early 1970s, according to Bloomberg's U.S. Treasury index. And there could be more losses ahead. In the last tightening cycle, the Fed lifted its key rate to 2.5% before calling it quits. Some bond managers think that might not be high enough this time around.

"There is a view that central banks can control inflation without taking rates too high," says Dan Ivascyn, global chief investment officer at Pacific Investment Management Co. "Arguably, there is complacency in the market around officials being able to achieve a positive outcome."

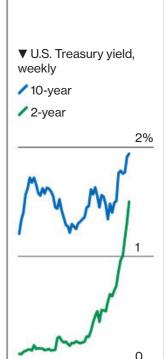
Some Wall Street strategists think inflation is so embedded in the economy that the Fed will have trouble hitting its goal without causing serious pain. The Fed "might not have the option of being measured in their tightening," says Bob Miller, head of Americas fundamental fixed income at BlackRock Inc. "The question we are asking is: Can they execute a soft landing and extend the cycle? The concern is that they are sufficiently late in tightening and should have begun six months ago."

Of course, there have been many false alarms over higher yields in the past several years, with leading bond investors betting on bear markets that didn't materialize. Hedge fund veteran Paul Tudor Jones, former bond fund manager Bill Gross, and Ray Dalio of Bridgewater Associates Inc. are just a few of the big names who in early 2018 predicted that much higher rates were in the offing. Investors in Treasuries ended up just about breaking even during 2018 and went on to gain almost 7% in 2019 and 8% in 2020, according to Bloomberg's index. Inflation is partly an expectations game, and Fed Chair Jay Powell's messaging that he's ready to act may itself help to temper price hikes.

The narrowing yield gap between conventional Treasuries and those that offer inflation protection–known as TIPS–suggests that investors see inflation coming down over the next 5 to 10 years. These bond market measures of inflation expectations show consumer price increases averaging about 3%–well below the current pace, but above the sub-2% level seen during the prior decade. While that suggests some confidence that the Fed will prevent a runaway inflation spiral, another interpretation is that it signals modest long-term growth prospects for the U.S. economy.

Investors could have a bumpy ride while market valuations adjust to a world where inflation is a nagging problem and the Fed keeps tapping the brakes on growth. Pimco's Ivascyn says, "it would not be surprising to see an off year in fixed income and equities," and "investors probably need to get used to a few years of lower returns, given the high starting point of asset prices." —*Liz Capo McCormick and Michael MacKenzie*

THE BOTTOM LINE Shorter-term Treasury yields are climbing and narrowing the gap with 10-year bonds. That suggests rate hikes from the Fed now—and headwinds for economic growth.



2/11/22

2/12/21

 As China uses the Olympics to show off its electronic yuan, the U.S. starts out slow

China is competing for more than just medals at the Winter Olympics in Beijing this month. It's also quietly trying to define the future of money. Although attendees can pay vendors for food and souvenirs with a Visa or cash, they also have the option of holding up a phone, scanning a barcode, and paying with the "e-CNY," or electronic yuan, one of the only so-called central bank digital currencies offered by a major economy.

Inside the Main Media Centre before the start of the games, Cai Qianyi, a 42-year-old media professional, used his Android phone to purchase roast chicken and broccoli. "This is very convenient," Cai says. "Compared to carrying cash, this way I avoid touching currency notes."

To many consumers, paying with a phone may seem a bit mundane. Who hasn't made a purchase that way? Yet to lawmakers around the world and some central bankers, China's trial run looks like an early victory in what some call a digital space race among countries to create an electronic form of bank notes.

Experts say digital currency could give Beijing a wealth of transaction data and tools to both enact policy and expand surveillance. And though the e-CNY is still in its early stages—transactions as of the end of 2021 totaled the equivalent \$14 billion—setting standards for digital cash could eventually be a way for China to flex its geopolitical muscle. "The People's Bank of China is trying to facilitate a new order for global payments," says Yaya Fanusie, a former CIA analyst who is now a fellow at the Center for a New American Security, a think tank focused on foreign affairs and national defense.

In the U.S., a combination of anxiety about China and excitement about digital currencies' possibilities has stoked interest from lawmakers in both parties. While the difference between using electronic currency and, say, Apple Pay or Zelle, is subtle, a full-fledged central bank digital currency (CBDC) would still be something quite new.

Most of the money you deal with never lives in the form of paper bills. Instead, it's part of the banking system's complex web of credit—the money in your checking account is literally a loan you've made to your bank. A CBDC is more like its paper counterpart. Depending on the technology, it might be an electronic token or an account backed by the government's central bank, so there'd be no reason to worry about a bank failure or to need deposit insurance. In theory, you could receive, save, and transfer a CBDC without having a bank account, cutting out costly layers of intermediaries.

The new form of money could be cheaper than minting physical coins or printing bank notes and should be harder to counterfeit. Ohio Democratic Senator Sherrod Brown, who chairs the Senate Banking Committee, has said a CBDC could provide access to digital payments to Americans underserved by traditional banks.



Or consider how CBDCs might have worked during the pandemic. Instead of stimulus payments in some cases taking weeks to hit a bank account via direct deposit, a virtual dollar could appear in a consumer's digital wallet within hours, says Josh Lipsky, who heads the GeoEconomics Center at the Atlantic Council, a Washington-based think tank. "It's a faster, cheaper, and safer way of transmitting money between people and between the government and citizens," Lipsky says.

Among policymakers, there's also some fear of missing out: If the U.S. doesn't offer a digital currency of its own, perhaps people will get more comfortable with alternatives to the dollar. A proliferation of other countries' CBDCs might one



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■ day make it easier to send money across borders
without touching the U.S. banking system and
potentially being caught by U.S. sanctions. And
then there are the private cryptocurrencies people
are already using, which could make it harder for
central banks to manage policy and ensure finan-

But some central bankers have been deeply skeptical of CBDCs. In May 2019, the Financial Stability Board, which helps coordinate financial policy for the world's biggest economies, published a report saying that central banks had identified the risks of creating CBDCs but hadn't identified significant benefits.

cial stability if they were more widely adopted.

The report also said that digital currencies in general weren't a threat to financial stability. "The upshot of that review was that they just weren't important," says Randal Quarles, who chaired the FSB at the time and until December was on the Fed's Board of Governors. "They were novelty items—the financial equivalent of Chia pets."

Less than two months later, a consortium of companies including Facebook Inc. announced it was developing a digital coin, called Libra. Soon after, the Chinese government said it would accelerate its efforts to develop its digital currency. "Suddenly the central banks of the world and especially the finance ministries of the world just lost their minds and said, 'We have to get ahead of this. We have to be the ones issuing central bank digital currencies," says Quarles, who's now chairman of private equity firm Cynosure Group.

The Libra project, since renamed Diem, ran into a regulatory backlash, and its leaders in January said the project would shut down. But its impact lasted. According to the Atlantic Council, 87 countries were exploring a CBDC as of December, with 14, including China, in the pilot stage and nine, including Nigeria, having fully launched.

In January the Fed released a 35-page discussion paper on a potential CBDC, asking for feedback by May. On the plus side, the central bank said a digital dollar could speed cross-border payments and make it easier to use the dollar in new technologies. On the other hand, the Fed said the option of holding a safe digital currency could drain money from banks and raise the cost of credit. "A widely available CBDC would serve as a close—or, in the case of an interest-bearing CBDC, near-perfect—substitute for commercial bank money," the Fed wrote.

Some lawmakers have expressed concern that a digital dollar could give the government too much of a window into Americans' everyday transactions. In a Senate hearing in January, Lael Brainard, a Fed board member and nominee for vice chair, said the central bank was looking for direction from Congress and that "privacy protections are very important in any kind of approach that might be taken."

Opponents of a digital dollar are trying to slow it down or even kill it. The Bank Policy Institute, a trade association for lenders, described a CBDC as a "larger policy change for our society than practically any legislation in living memory."

The banks may find an ally in the cryptocurrency industry. Private companies such as Circle Internet Financial Ltd. have created their own versions of digital dollars, called stablecoins, that have more than \$179 billion in circulation and are supposed to be backed by dollar-denominated assets held in reserve. Top U.S. financial watchdogs have said they are concerned about stablecoins' potential vulnerability to virtual bank runs and have urged Congress to pass laws regulating them.

To stablecoin companies, a safe U.S. CBDC would be a tough competitor. They're out making the case that they've already achieved many of the things a digital dollar would accomplish. "People often talk about, 'Should we build something? What should we do?' There's a lot there already," said Circle Chief Executive Officer Jeremy Allaire on a podcast in late January. His company in February ran prominent ads in the *Wall Street Journal*, the *Washington Post*, and elsewhere pointing to the risks of the Fed or others moving forward on digital money. —*Joe Light*

THE BOTTOM LINE Central bank digital currencies may seem much the same as using a payment app on your phone. But there's a critical difference that worries commercial banks.

The Bitcoiniest of Bitcoin Scandals

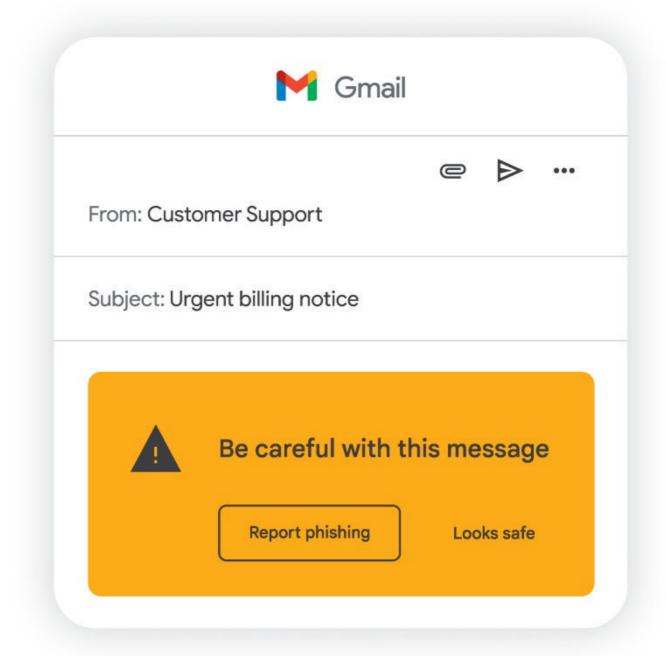
 A couple is accused of laundering stolen crypto worth billions. Or millions. Depends

Here is the worst possible way to become a social media star. In her 2019 rap video, Heather "Razzlekhan" Morgan dances on the steps of Federal Hall in New York's Financial District, wearing a shiny gold jacket and a wide-brim cap and proclaiming herself the "Crocodile of Wall Street." You probably missed it when it came out. This February, however, Morgan and her husband,

"The People's Bank of China is trying to facilitate a new order for global payments"



Every day Google blocks 100 million phishing attempts,



keeping scammers out of your inbox.

We keep more people safe online than anyone else with products that are secure by default, private by design, and put you in control.



◀ Lichtenstein and Morgan, from her

◀ Ilya Lichtenstein, co-founder of a Y Combinatorbacked tech startup, have been charged by federal prosecutors with conspiring to launder 119,754 Bitcoins that were stolen in a 2016 crypto exchange hack. Pretty soon, Razzlekhan was all over Twitter.

The charges Morgan and Lichtenstein face are serious—if convicted, they could go to prison for 20 years. The money is serious, too: The hoard of stolen Bitcoins was estimated by the U.S. Department of Justice to be worth \$4.5 billion at recent market prices. The couple wasn't accused of the theft. In a memo on bail conditions, their lawyers said the government's complaint "depends on circumstantial inferences drawn from so-called 'tracing' analysis of a confusing series of blockchain transactions" that don't prove criminal intent.

Stakes aside, it's hard to get your mind around the sheer weirdness of the case. Of course, there's the couple's social media trail, with flashy photos of a fun-if-eccentric pair that now contrasts with their somber courtroom sketches. Lichtenstein proposed to Morgan kneeling in the middle of Times Square as surrounding billboards lit up with her face. Morgan, an entrepreneur and artist who also contributed to *Forbes*, gave a talk in 2019 called "How to Social Engineer Your Way Into Anything."

It's not just the outsize personalities that are so striking. The numbers involved underscore how crypto can be a fun-house mirror of ordinary finance. Take all those billions of dollars' worth of Bitcoin. Prosecutors said in their press release that they've so far managed to recover more than 94,000 of them, worth \$3.6 billion—making it the department's largest financial seizure ever. The huge dollar values reflect the speculative boom in crypto over the six years since the coins were originally stolen by still-unknown hackers from an exchange called Bitfinex. At the time, the haul was worth only about \$71 million.

What do you do with recovered assets that have racked up a 6,200% increase in value since they were stolen? That's where the story gets even more complicated. It's unclear what Bitfinex users who lost assets in the hack will get back. Bitfinex said in a statement that it will "follow appropriate legal processes to establish our rights to a return of the stolen Bitcoin."

In the exchange's eyes, it compensated users affected by the lost crypto in 2016—not with a direct replacement of Bitcoin, but through BFX, IOU tokens that were later redeemed at a ratio of one for every dollar lost. Some traded those assets on the market for a time, while others converted them into capital stock of Bitfinex parent firm iFinex, which gave some the option of receiving yet another token that



Instagram

would benefit from a potential recovery of funds. It's head-spinning, in the way that crypto tends to be.

Some customers want their original coins back, arguing that if they had those instead of replacement tokens, they'd be a lot better off. (Having your coins temporarily pilfered would be a novel way to HODL.) In any case, there's likely a long legal process ahead. "The world has changed dramatically since 2016, and everyone is going to lay claim to this newfound bag of Bitcoins," says David Silver, a lawyer who specializes in financial and crypto-related fraud.

Whatever their value, it seems these Bitcoins were hard to spend. In some cases, Morgan and Lichtenstein allegedly turned to gift card providers who would turn crypto into money spendable at such businesses as Uber and Hotels.com. The prosecutor's statement also mentions a \$500 Walmart gift card. Some alleged attempts by Morgan and Lichtenstein to move their Bitcoins on exchanges and cash them in resulted in probing questions about the tokens' origins.

Crypto isn't as anonymous as many think. On Twitter, some in cryptoland mocked Lichtenstein's alleged use of a cloud server to store the private keys for a crypto wallet. While U.S. law enforcement noted that the public nature of blockchain helped them follow the money, the desire for privacy is only growing stronger in parts of the crypto community. For example, traders have normalized the use of "privacy mixer" protocols, which obfuscate the trail of crypto transactions. Crypto's libertarian faith in the freedom to be hidden reinforces the perception that digital currencies are a haven for money launderers. Even if some of them allegedly aren't very good at it. —*Emily Nicolle*, with Olga Kharif

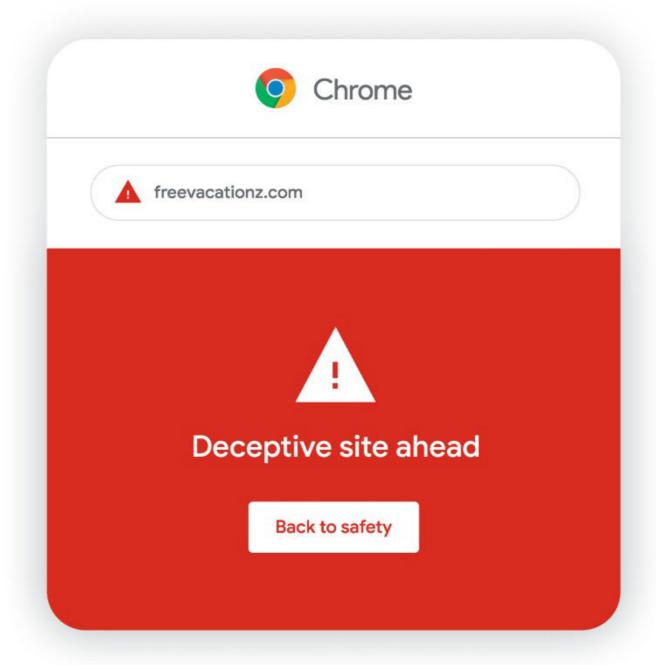
THE BOTTOM LINE The hack of Bitfinex was a major theft of crypto assets worth about \$71 million. Now authorities say they found many of the coins, and they're valued at \$3.6 billion.

 Justice Department estimate of the value of Bitcoins it's recovered





Every day Google protects 4 billion devices from risky sites,



shielding you from malware.

We keep more people safe online than anyone else with products that are secure by default, private by design, and put you in control.



<u>Ehamblo</u> U.K. finance chief Rishi Sunak embraces the moonshots model

There is no subject that divides economists quite like the role of government. The left wants it big. The right would limit it to correcting market failures. Now, though, they're finding common ground in a new concept: the venture capitalist state.

Vaccine rollouts in the U.K. and the U.S. demonstrated that governments can be both big and deeply capitalistic. Operation Warp Speed in the U.S. saw an initial \$10 billion in federal funds committed to seven pharmaceutical companies for speculative drug development. Similarly, Britain's Vaccine Taskforce provided £900 million (\$1.2 billion) of upfront cash commitments for a portfolio of untested jabs.

The sums involved were large, but more striking was the way they were deployed. Taxpayer money was put at risk in the hope that one or two bets would pay off big. It was no coincidence that the head of the U.K. task force was Kate Bingham, then managing partner at SV Health Investors, a life-sciences venture capital firm.

The country has a champion for this model in

Rishi Sunak, the Conservative Party chancellor of the exchequer. He was an avowed believer in the small state when he became a member of Parliament seven years ago, but-like all finance ministers during the pandemic-he learned to embrace big spending.

Among the many emergency Covid-19 programs Sunak has rolled out in his two years on the job, one stands out. In early 2020 he launched a rescue fund for startups called the Future Fund. Initially capped at £250 million of co-investment with the private sector, it ended up injecting £1.1 billion into 1,190 companies via convertible loans that turn into equity if not repaid within 36 months. With that sum—the equivalent of £1 in every £15 of VC investment in a pre-pandemic year, according to an analysis by Legal & General Group PLC-the government ranked as one of the biggest sources of venture capital in 2020.

Sunak insisted on designing the scheme himself, writing the term sheets and choosing convertible loans as the mode of investment rather than straight equity, to avoid any holdups of state aid. He was on familiar ground. The finance chief worked at Goldman Sachs Group Inc. before joining hedge fund Thélème Partners, which in 2010 posted him to California to invest in promising tech and pharmaceutical companies.

The Silicon Valley stint helped forge Sunak's

conviction that recharging the U.K.'s sputtering productivity engine is ultimately a financing project. If ensuring industries of the future get the backing they need required incentivizing private capital by using state funds, so be it.

"Putting money at risk works," says Randy Kroszner, economics professor at the University of Chicago Booth School of Business. The Chicago school famously promotes small government, but Kroszner is a convert to the VC model embodied in Operation Warp Speed: "You need effective public-private partnerships. You need a public sector that will take risks."

Sunak has since taken the emergency program and made it permanent. Under the rebranded Future Fund: Breakthrough, he's committed an initial £375 million for "high-growth, innovative firms," taking a step other governments balk at despite the pandemic's lesson to put taxpayer capital directly at risk.

His plans for a venture capital state are more far reaching than the Future Fund. Sunak is catering to each stage of the startup life cycle: with grants, equity, funding for asset managers to bulk up the domestic VC ecosystem, and regulatory reform to remove investment obstacles.

Inspired by America's government-backed Defense Advanced Research Projects Agency, whose work paved the way for the personal computer, the internet, and other groundbreaking innovations, Sunak has committed £800 million to a British version, the Advanced Research and Invention Agency. Other state interventions are designed to address the private sector's shortcomings. British Patient Capital (BPC), set up in 2018 as an arm of the government's British Business Bank, has been equipped with £2.5 billion in financing that can be tapped by VC fund managers. The goal is to deepen the domestic pool of venture capital to bridge startups across the "valley of death," the phase when early investors want to cash out but the company still needs backing for an unproven business plan.

Sunak is also about to change the rules governing pension fund investments to allow trustees to direct more money into companies that have yet to go public. Just 0.3% of the £500 billion of assets in U.K. defined-contribution pension plans are in unlisted equities, compared with 4% in Australia.

Some of Sunak's ideas might have been picked straight from the books of Mariana Mazzucato, professor of economics at University College London, who was an adviser to Jeremy Corbyn, the socialist former leader of the Labour Party. Except that Mazzucato—whose most recent work, *Mission*

Economy: A Moonshot Guide to Changing Capitalism, references the success of the vaccine programs—says the state should not just de-risk projects to attract private capital, but also demand a fair return for doing so, like any investor.

"Silicon Valley was massively co-financed," she says, in reference to state-funded inventions such as GPS and touchscreen technology. "Why the hell were the risks socialized and the profits privatized?" she asks.

One obstacle to state-run VC is the risk of failure. In the U.K. the government has come under attack for some Future Fund investments made during the pandemic. The British taxpayer now owns 8% of Bolton Wanderers, a third-tier football team; it also has stakes in a coffee chain and a betting business—companies that formally qualified for the emergency program but can hardly be described as businesses of the future. The Taxpayers Alliance, an advocacy group, says the government needs to show the investments are "value for money."

Unfortunately, politicians and the media tend to focus on the bad bets and ignore the good ones, Krozner says. "You should look at the overall portfolio, though. If venture capital didn't take risks, it would never get a hundred-fold return." His message is that for every Bolton Wanderers in the Future Fund there is a Tevva Motors. The maker of electric trucks has raised \$90 million so far, and its founder, Asher Bennett, has been described as Essex's answer to Elon Musk.

The U.K. is taking tentative steps toward Mazzucato's profit-sharing VC vision. The government wants financial returns from both the Future Fund and the British Business Bank. Beneficiaries of the National Health Service's £140 million Artificial Intelligence in Health and Care Award, which combines funding with access to valuable public-health data, must sign a contract stating that they may have to share "royalties and/or other appropriate remuneration." Flimsy as the clause may be, it establishes the principle that the state has a claim on the rewards.

BPC is delivering. It reported an internal rate of return of 25% in 2021, according to Catherine Lewis La Torre, the British Business Bank's chief executive officer.

Turning to a VC model for vaccine programs in the pandemic was an easy choice. The government "did so because they recognized that the costs paled into insignificance compared with the economic cost of lockdown," said Bingham, the head of the task force, in a speech last November. Tomas Philipson, President Donald Trump's chairman of economic advisers, who helped design the

"You need a public sector that will take risks"

◄ regulatory processes that were as critical to the success of Operation Warp Speed as prefinancing, has estimated that bringing vaccines to market six months early was worth \$1.8 trillion.

The challenge will be whether governments can stick with a venture capitalist model when the returns are not so clear. —*Philip Aldrick*

THE BOTTOM LINE U.K. finance chief Rishi Sunak is designing programs to support innovative startups at every stage of their development and spur private investment.

Argentina's Hidden Brain Drain

Tech-savvy workers are trading salaried jobs in pesos for off-the-books gigs paid in dollars

Juan Navarro faces a laundry list of challenges running a software company in crisis-prone Argentina: Inflation that's running at 50% a year, high corporate taxes, and rigid labor laws. But the founder of Hexacta says his biggest headache is an exodus of high-skilled employees ditching jobs with peso salaries for freelance work that's paid in dollars.

Argentina has suffered periodic brain drains during turbulent times. Yet unlike episodes in the 1980s or 2000s, many tech-savvy college grads today are quitting their jobs but not their homeland. Navarro estimates he had to replace 80 of his 600 workers in Buenos Aires last year. They had accepted offers from foreign tech companies that don't have a formal presence in Argentina yet allow contractors to stay right where they are. "I'd say anecdotally that 75% of the bilingual young adults around 25 years old who studied IT careers are working off the books," he says.

The remote-work revolution has a host of U.S. technology companies scouting for hires in Latin America—where they can find qualified people who'll work for much lower pay than in the U.S. The resulting war for talent is a cloud hanging over Argentina's tech industry, which has been one of the few bright spots in an anemic economy, adding 50,000 jobs since 2017, according to government data. As many as 200,000 Argentines with experience in areas such as coding, data science, and biotech are doing work for foreign companies that have no formal presence in the country,

estimates Luis Galeazzi, executive director of Argencon, a trade group that counts domestic and international technology firms among its members.

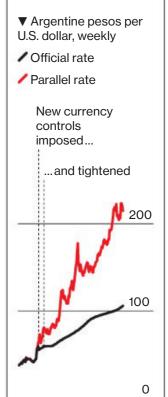
Daniel Filmus, minister of science, technology, and innovation, bemoans the loss of valuable human capital. "We don't want those excellent professionals, who study here and have great skills in the programming field, to leave the country, nor do we want them working for firms abroad," he said in a statement.

Among them is Cecilia, a 29-year-old Buenos Aires resident with a college degree and professional experience in analytics. In her most recent job, her salary equaled about \$2,500 a month, but inflation and the depreciation of the peso cut deeply into her purchasing power. So in December she accepted an offer from a U.S. startup that pays her in dollars. Working out of her apartment, she now makes more than \$6,000 a month.

Her paycheck is deposited in a U.S. bank account, so Argentina's tax authorities are none the wiser. That also allows Cecilia to convert her greenbacks into pesos at the parallel exchange rate, currently 214 pesos per dollar, rather than at the official one, which is set at about 106 pesos per dollar.

The arrangement has its downsides. As a free-lancer, she isn't eligible for employer-provided health care or paid vacations. But overall, the benefits outweigh the costs. "I don't like this situation where I'm working informally," says Cecilia, who spoke on the condition her full name not be published for fear of government reprisal. "I tried to avoid it, but at the same time—for the past two months—I've finally been able to save a big portion of my income."

Soledad, a graphic designer living in the capital, traded a position at a multinational that paid the equivalent of \$1,200 a month for a contract job



2/11/22

2/8/19



LUSTRATION BY VIRGINIA GABRIELLI. ICONS BY 731. DATA: COMPILED BY BLOOMBERG (ARGENTINA); BUREAU OF LABOR STATISTICS UREAU OF ECONOMIC ANALYSIS, AAA, BLOOMBERG INTELLIGENCE (INFLATION) with a U.S. company that pays \$4,000 per month. Her income used to limit her to one vacation a year; last year, she and her boyfriend took four trips. They bought a car, too. "You get to a point where you start to realize how much money you're losing just because you're working for an Argentine company," says Soledad, who asked to remain anonymous because she did not want to alert tax authorities to her situation.

The number of freelancers in Argentina climbed almost 20% between 2017 and 2020, boosted by white-collar workers switching to gig work, according to an analysis by EcoGo, a consultant in Buenos Aires. "What you have is a very aggressive paradigm shift," says Marina Dal Poggetto, EcoGo's executive director.

Foreign-exchange controls imposed in 2019 and gradually tightened since are at the root of the problem, according to workers, business executives, and labor lawyers interviewed for this article. The web of regulations keeps businesses in Argentina from paying salaries that are competitive with those offered by rivals abroad.

They also encourage tax avoidance, a problem the administration of President Alberto Fernández needs to clamp down on if it's to meet deficit reduction goals spelled out in a \$45 billion agreement it's negotiating with the International Monetary Fund.

By law, when a company in Argentina gets paid in dollars for exports of goods or services, it must exchange them for pesos at the official rate. The wide differential between the official and parallel rates encourages domestic businesses with foreign subsidiaries to park earnings in bank accounts abroad instead of repatriating them.

The practice is so widespread that Argencon's Galeazzi estimates that undeclared revenue from technology exports topped \$1 billion last year. To discourage it, the government took the step of eliminating a 5% tax on technology exports, effective January.

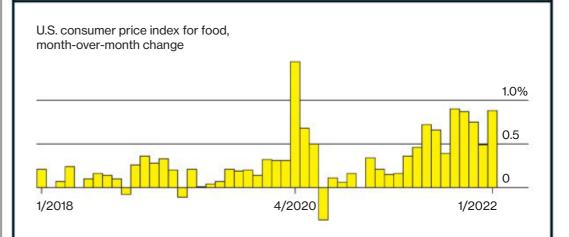
Komuny, a startup focused on education, has its headquarters in Mendoza, a city in Argentina's wine country, but it's incorporated in Delaware, where it books most of its revenue. This enables it to pay the majority of its 17-person staff in dollars or cryptocurrency deposited in foreign accounts. Germán Gimenez, its founder and chief executive officer, says the perk affords some protection against poaching from competitors. "The brain drain keeps getting bigger," he says. "Today, you only need a laptop and internet to escape." —*Patrick Gillespie*

THE BOTTOM LINE To shield themselves from inflation and stringent currency controls, as many as 200,000 Argentines with tech skills are working as contractors for foreign companies.

Inflation

Eating It

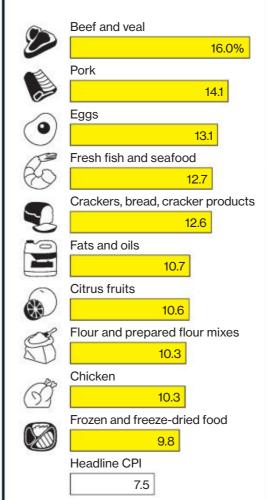
U.S. food inflation rose at the fastest pace in four decades in the 12 months through January. With commodity prices and transport costs still rising, households may not get any relief soon. —*Matthew Boesler*



What's Going Up

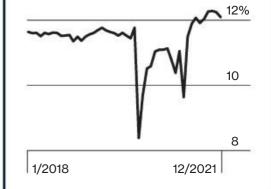
Double-digit increases for everyday staples such as oils and eggs make food inflation hard to escape.

Selected CPI indexes, change from 1/2021 to 1/2022



Rising prices helped push the share of U.S. household disposable income spent on food in 2021 to the highest level in over two decades.

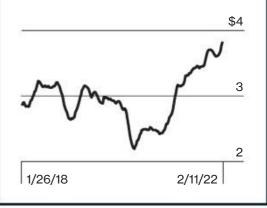
U.S. personal consumption expenditures on food as a share of disposable income



Room to Run

Even if bottlenecks ease, transportation costs may keep food prices from falling.

U.S. average gas price per gallon, weekly



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AWAXHOME

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Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

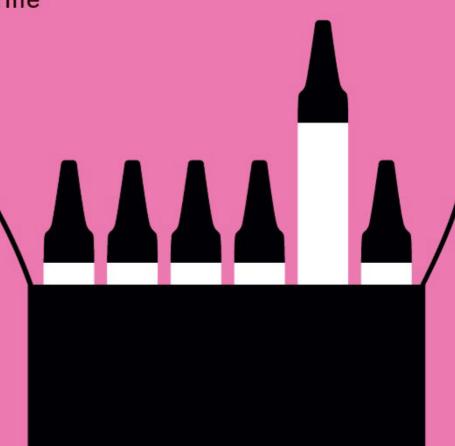
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A New Voice for Progressives

Pramila Jayapal is imposing renewed discipline on the left wing of the Democratic Party

For the better part of four years, Pramila Jayapal was like most of the 435 members of the U.S. House of Representatives, able to come and go from the chamber and walk the Capitol halls with minimal fuss. These days, every time she leaves the House floor and passes through the metal detectors installed after the Jan. 6 insurrection, Jayapal is swarmed by reporters lobbing questions about climate change, health care, immigration reform, and whatever else is trending that day. "I hadn't really been through that before," Jayapal says, "but I just stayed focused on what I was trying to do."

The change came after Jayapal—now in her third term, representing most of Seattle—took over as chair of the Congressional Progressive Caucus. Under her leadership, the caucus has gone from an ineffective assemblage to a focused voice for the left flank of the Democratic Party. Jayapal has strictly

enforced a new rule requiring the 98 members to vote with the group at least two-thirds of the time on bills where the caucus has taken a position, and typical attendance at its weekly meetings has swelled from about 10 to more than half the membership. "My goal was about the outcome," Jayapal says. "How do we make the progressive caucus stronger?"

Although keeping the Democratic Party's diverse members in line remains a struggle, Jayapal's support was crucial to passage of the \$1.9 trillion pandemic relief bill signed into law in March 2021. She capitalized on the Democrats' narrow majority—they can't lose more than a handful of votes on the House floor—in confrontations with moderates on progressive priorities such as direct stimulus payments to individuals, an expanded child tax credit, and housing and food assistance. "She's an outspoken advocate for progressive values," says Oregon

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LLUSTRATION BY MINET KIM. DATA: CENTERS FOR MEDICARE AND MEDICAID SERVICES COMPILED BY THE KAISER PAMILY FOUNDATION

◆ Democrat Peter DeFazio, one of the half-dozen founders of the caucus in 1991, who credits Jayapal with boosting the group's influence. "She's been visible beyond the confines of Congress," he says.

Jayapal has had her share of setbacks, including a failure to wedge a national \$15-an-hour minimum wage—a top policy goal for liberal Democrats—into the relief package. The caucus had advocated pairing the infrastructure bill signed in November with a broader social spending measure, but those efforts faltered when the White House split the legislation into two separate packages to win the support of Republicans on the infrastructure portion.

Jayapal served as the lead contact with the Biden administration and House leadership for the caucus as talks dragged on for months. In the end, Speaker Nancy Pelosi, who originally shared the same stance as progressives, decreed it was time to pass the infrastructure portion before the social spending measure—and Jayapal managed to get most of the caucus to sign on, though sometimes grudgingly. "I don't believe that Build Back Better would have passed the House absent the leadership of the progressive caucus," says Representative Mondaire Jones, a freshman member of the group from New York.

Jayapal, 56, was born in Madras, the coastal city in India now known as Chennai, and moved to Indonesia at age 5 when her father, a petroleum worker, got a job there. At 16 she entered Georgetown University in Washington, D.C., where she worked in the library and at a cafe to pay her bills. After getting a bachelor's degree in English, she attended Northwestern University for an MBA. While there she returned to Asia to work with refugees at a camp along the border of Thailand and Cambodia. She recalls being struck by both the hardship the people faced and their strength in meeting the challenges. "The thing that always amazes me about refugees and immigrants is their resilience in these incredibly difficult circumstances," she says.

After a short stint as a financial analyst in the Midwest, Jayapal settled in Seattle and returned to activism, getting a job with a global nonprofit focused on health care. She spent years traveling through developing countries, eventually landing back in India. In 1997 she came back to Seattle, where she met her husband, labor organizer Steve Williamson.

In 2001, Jayapal founded a group called Hate Free Zone that aims to combat discrimination and hate crimes against immigrants and people of color. She helped lead an effort in Seattle to raise the minimum wage to \$15 an hour, and in 2014 she won a seat in the Washington State Senate, where she advocated measures such as increased access to health care, higher wages, and job training programs for disadvantaged

communities. Two years later she was elected to Congress. "Being able to come here, and go from 16 and nothing in my pocket to a congresswoman—it has to be, for me, about paying it forward," she says.

In her first term, Jayapal joined the progressive caucus and then was asked to be a vice chair of the group. She became a co-chair in 2019, and this session she was elected the sole leader, the first time in 16 years that the caucus has had a single chief. Her goal now is to resuscitate the social spending package, even if it's scaled back. Provisions in the House version such as paid family leave and immigration reform are at risk of being altered or cut if negotiations resume in the Senate.

Some members of the caucus have signaled they're willing to shrink the package even more to appease Senator Joe Manchin, a conservative West Virginia Democrat who has balked at the cost of the measure. Manchin in December effectively killed the bill, saying that it risked further fueling inflation and that he opposed some components including the expanded child tax credit. Jayapal says she wants the package to stick closely to what has already been negotiated, though she's also determined to see a version passed that will ensure universal child care, affordable housing, lower carbon emissions, expanded Medicare, and reduced prescription drug costs. "We don't want to restart a negotiation," she says.

Jayapal has proved she's capable of working across the aisle, co-sponsoring a bill to end forced arbitration for sexual assault and sexual harassment claims in the workplace that passed with bipartisan support. Ken Buck, a conservative Republican from Colorado who co-sponsored the measure, says he sees more opportunities to work with Jayapal. "I respect her and her desire to get things done," says Buck, who serves with Jayapal on the House Judiciary Committee and has collaborated with her on immigration and antitrust measures. "She is absolutely a person of her word."

Jayapal, who won in 2020 with 83% of the vote, has one of the safest seats in the House, and now she's considering a bid to join the Democratic leadership. Pelosi has said this session will be her last as speaker, and if she doesn't change her mind there will be a reshuffling at the top of the party. "Is there an opening where I can take the skills I have and that I've continued to develop and bring them to a broader group, so we can get more important priorities done?" Jayapal asks. "I'm going to look at any opportunity." — Jarrell Dillard

THE BOTTOM LINE The Washington Democrat says that by sticking together and pushing back against conservatives, progressives can pass much of Biden's social agenda.

paying it forward"

"It has to be,

for me, about

 Renewed eligibility reviews threaten to leave millions without health-care coverage

At the start of the pandemic, Congress sent extra money to states to bolster their Medicaid programs on the condition that they suspend eligibility reviews for the safety net insurance program. Low-income Americans, the thinking went, risked losing coverage because of bureaucratic snafus just when they needed it most. That agreement—which was extended eight times—is set to expire in April, threatening to leave millions of Americans uninsured. "There's a high risk of people losing coverage, notwithstanding the fact that they're likely to be eligible," says Cindy Mann, a former Medicaid official who's now a partner at Manatt, Phelps & Phillips in Washington.

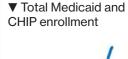
Enrollment in Medicaid and the related Children's Health Insurance Program (CHIP) increased more than 15% from 2019 to mid-2021, to almost 84 million, federal data show. Anyone with coverage will face a renewal assessment to make sure they still meet the program's income requirements and other rules, which vary by state. Verifying eligibility can be a slog in the best of times, when small discrepancies in a name or

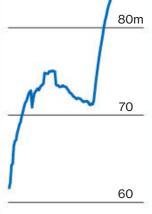
address can lead to a loss of coverage. Doing it en masse after a two-year suspension of reviews promises to be even more chaotic.

States can try to determine whether residents receiving Medicaid remain eligible using existing data from, say, tax filings or unemployment claims. But if that fails, they'll need to contact people directly to request further information. That's where things often get messy. "So many enrollees have moved during the pandemic or have maybe changed phone numbers," says Amber Kirchhoff, a director at the Illinois Primary Health Care Association, which represents clinics serving low-income patients. "Particularly those who are economically vulnerable."

The Biden administration has given states as long as 12 months after the Covid-19 emergency declaration ends to do the checks, and they'll have discretion over how quickly people must be disenrolled if they fail. That means the chances of losing coverage hinge on how eager a state is to purge the rolls of Medicaid recipients and how well equipped its bureaucracy is to manage the process: Does the state advertise the changes? Do different data systems communicate smoothly? Do call centers have enough staff? For instance, Texans trying to access an online system to update their address must sometimes call to reset their password, which can mean hours on hold, says Jana Eubank, executive director of the Texas Association of Community Health Centers. "It's incredibly burdensome," she says.

Before the pandemic, several Republicancontrolled states tried to restrict Medicaid ▶





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■ eligibility by imposing work requirements. The policies were blocked in court, but conservatives who argue the program discourages people from getting jobs continue to pursue the idea. In January, Georgia sued the Biden administration to advance a plan tying expanded Medicaid benefits to work, education, or volunteering. In Missouri some Medicaid recipients were terminated after officials—

relying on faulty data-judged that they'd moved out

of state, the Kansas City Star reported in February.

New York, on the other hand, is running a \$4 million ad campaign in three languages urging residents to "stay connected" and log in to their state health-care account. Those who do are prompted to verify their address and other information and asked to opt in to text-message reminders for alerts on eligibility reviews. "Our goal is that nobody loses coverage," says Danielle Holahan, who leads the state's health-care marketplace.

As many as 15 million people risk losing Medicaid once the verification process resumes, researchers at the Urban Institute estimate, though most would qualify for other plans available from employers or on the Affordable Care Act markets. The Centers for Medicare and Medicaid Services says it aims to ensure those who lose access to Medicaid get other insurance if they're eligible. "We are very focused at CMS in making sure that as people transition, they don't lose coverage but move to their next proper coverage home," Chiquita Brooks-LaSure, a CMS administrator, said on a call with reporters last year.

Most states hire health insurers to manage their Medicaid benefits, and those companies want to hold on to members exiting the program. Anthem Inc., the No. 2 Medicaid insurer, expects eligibility reviews to resume midyear and says the shift will likely boost its commercial insurance offerings. Centene Corp., the top Medicaid insurer, has gained 2.4 million program members since the pandemic's start. The company says it might lose half of them as states review eligibility, but it hopes to transfer some to its ACA business. "Obviously states want to make sure their citizens have health insurance coverage," Chief Operating Officer Brent Layton said on a Feb. 8 call with analysts. "We've been working with them, and we're preparing for it."

President Joe Biden has sought to avert some of the disruption via the Build Back Better Act. The bill, passed by the House of Representatives in November but stalled in the Senate, would offer subsidized ACA coverage to many low-income people who nonetheless earn too much for Medicaid, particularly in Republican-led states that didn't widen eligibility for the coverage. It would also prolong ACA subsidies that have helped increase enrollment by more than 3 million people since 2020.

Key congressional Democrats say extending the ACA support and preventing any major drop in coverage remains a top priority, but Senator Joe Manchin of West Virginia and Republicans remain opposed to much of what's in the Build Back Better bill, and its fate is unclear. "The ACA kept people alive during the pandemic," says Senator Chris Murphy, a Democrat from Connecticut. "We don't want to see them lose that coverage now." — John Tozzi and Alex Ruoff

THE BOTTOM LINE Carrying out millions of reviews after a two-year pause risks sowing chaos, as even small discrepancies in a name or address can lead to revocation of Medicaid eligibility.



Brooks-LaSure

No EXIII in Hong Kong

The omicron variant isn't changing the city's zero-tolerance virus policy—yet

Faced with a surge of infections, Australia, Singapore, and other places pivoted from no-compromise Covid-zero strategies to learning to live with the coronavirus. But in Hong Kong, which had essentially no cases of omicron until an outbreak that's now overwhelming public health officials, authorities are taking a different approach: doubling down.

With aggressive quarantines and contact tracing failing to stop the spread, Chief Executive Carrie

Lam unveiled harsh social distancing measures on Feb. 8, including a ban on gatherings of more than two people and closing everything from barbershops to churches. Restaurants must stop service at 6 p.m. Violators can expect fines of HK\$5,000 (\$641). Those rules add to what may be the world's tightest border restrictions, with all visitors required to quarantine for 14 days and flights from "high-risk" destinations such as the U.S. and U.K. banned outright.



BEN MARANS/SOPA IMAGES/LIGHTROCKET/GETTY IMAGES. DATA: HONG KONG'S CENTRE FOR HEALTH PROTECTION

2k

■ The curbs, imposed as countries from Germany to Vietnam wind down pandemic restrictions, are battering Hong Kong's economy, threatening its already fragile status as an international financial hub. But the city's leaders, who are more deferential than ever to China's central government in Beijing, appear to have no choice but to try to stamp out transmission—and keep Hong Kong in line with the mainland's zero-tolerance policy.

"I believe most government officials know it's impossible to maintain Covid zero, but they can't help because they have to follow China," says Danny Lau, the honorary chairman of the Hong Kong Small & Medium Enterprises Association. "Hong Kong is becoming more and more like a ghost city."

The local omicron outbreak is thought to have begun earlier this year, seeded by crew members from Cathay Pacific Airways Ltd.—some of the only people in Hong Kong who are currently traveling—as well as a resident who was infected during a hotel quarantine. Local officials quickly resorted to the same playbook that's kept the city of 7.5 million almost Covid-free since early 2020: mass testing and targeted quarantines, which included sending even contacts of positive cases to a government isolation facility. But those efforts failed to stop the highly transmissible variant. Daily cases topped 4,000 on Feb. 16, and researchers from the University of Hong Kong estimate that the figure could reach 28,000 per day in March.

The virus will encounter plenty of vulnerable people. Because of widespread hesitancy, inconsistent government messaging, and a sense that with so few cases they faced no real threat, only a third of residents over 80 have received even one vaccine dose. Of those, a majority had the Sinovac vaccine, whose effectiveness against omicron is uncertain. Uptake among younger age groups has been much better, but unprotected elderly residents could flood hospitals as infections rise.

The economic damage from two years of near-total isolation was mounting in Hong Kong even before the current restrictions. Earlier this month, analysts at Fitch Ratings cut their 2022 forecast for its \$344 billion economy, saying that a delayed pandemic recovery puts it among the weakest of the 120 jurisdictions they track. The number of international visitors last year was almost zero, according to the tourism board, compared with more than 65 million in 2018. Meanwhile, a record 89,200 residents departed in the 12 months ending in June, prompted by both the Covid rules and the new National Security Law, which has brought Hong Kong under far tighter mainland control. Executives in the financial industry, traditionally



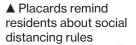
the city's economic engine, have warned of severe labor shortages.

Lam and other officials have said repeatedly that their economic priority is reopening the border with the mainland, which has been closed to most traffic since early in the pandemic. That means Hong Kong probably can't alter its Covid-zero strategy or allow freer international travel until the rest of China does, because even low-level transmission in the territory would keep the boundary sealed. "Hong Kong is in the worst possible situation, where it is closed both to the rest of China and to the rest of the world," says Douglas Arner, a law professor at the University of Hong Kong and an expert on the city's financial system.

There are still signs, however tentative, that the local government is beginning to think differently about the virus—if only because the sheer number of cases is making its previous approach untenable. In January more than 200 diners from a single restaurant were sent to Penny's Bay, a spartan quarantine camp near the airport, because they'd eaten there around the same time as infected people. Now, some who test positive are being told to remain at home—something that's never been allowed before—to preserve hospital beds for the most vulnerable. And Lam has suggested that curbs could be relaxed once the overall vaccination rate, currently 84% of people over 12, exceeds 90%.

All of that could lead to Hong Kong becoming a testing ground for looser Covid policies in the rest of China, much as its open financial markets were once expected to serve as a model for liberalization on the mainland. "There is an opportunity for the central government to take Hong Kong as an experiment to see how living with the virus goes," Arner says. "Eventually the country is going to have to open up, at least in little pieces." —*Richard Frost, Enda Curran, and Shirley Zhao*

THE BOTTOM LINE Hong Kong officials are fighting a virus surge with 2020-style quarantines and social distancing rules. But skyrocketing infections may force them to change tack.

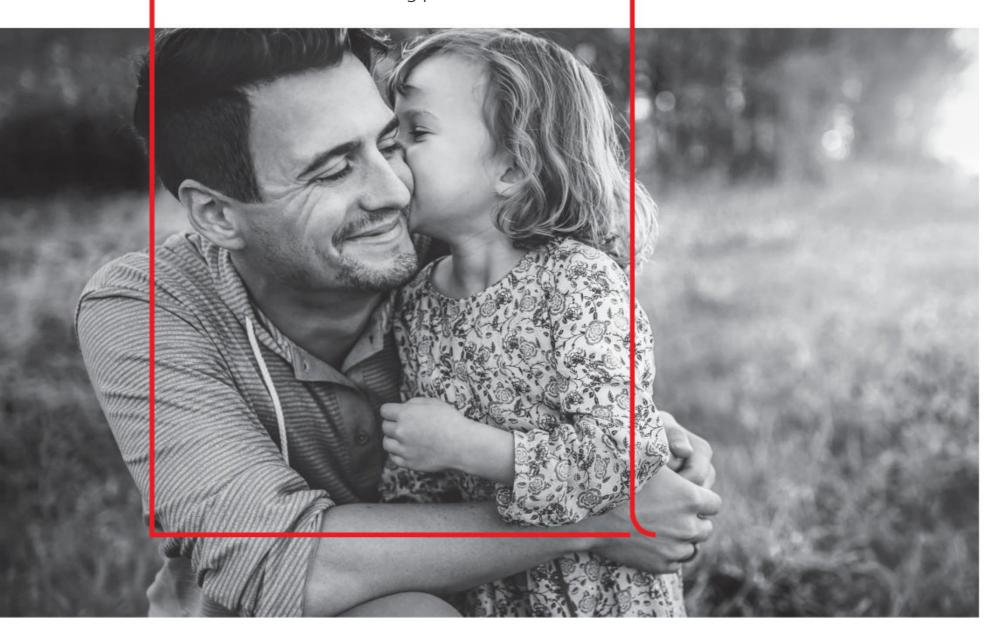




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Small Business

Trash Into Treats



A circular-economy company upcycles surplus produce into drinks and snacks

Loop Mission takes an unconventional approach to the way it makes snacks—and money. The startup pays for produce that would otherwise be discarded and gives it a second life in juices, sodas, beers, soaps, and cookies, which are priced as low as possible to hasten sales and move inventory. The formula is designed to help the planet and turn a profit.

The Canadian company is tackling food waste, a major contributor to climate change, by creating a market for surplus fruit and vegetables while tapping into a growing consumer ethos of sustainability. Its products are sold across the nation at major supermarkets and alcohol vendors, and Loop—the name reflects its focus on the circular economy—is preparing to enter the U.S.

"You can't just be a hippie trying to save the world," co-founder David Côté, 39, says at Loop's airy loft-style headquarters in Montreal. "You need to be in the corporate world to change those big companies out there."

Despite rampant food insecurity, 14% of food harvested worldwide never gets eaten, according to a 2021 report by the United Nations Food and Agriculture Organization. Much of it ends up in the trash, generating enormous quantities of methane. From 8% to 10% of annual greenhouse gases come from food in landfills, according to the UN Environment Programme.

Most of this food isn't rotten. Grocery stores won't let shelves go bare, and consumers shun produce with blemishes, so retailers order too much. Meanwhile, there's little slack in the distribution chain: If a shipment arrives at a warehouse even a few days later than expected, it might as well be rotten. "We get phone calls every day about truckloads of stuff being wasted," Côté says. Five years in, Loop says the amount of excess food it's transformed includes more than 8,000 metric tons of produce.

The company, legally registered as Loop Juices Inc., is part of a small but growing number of companies focused on upcycling food waste. Some transform spent grain from beer-brewing SMOOTHE

A chef and self-professed "health freak," Côté is a native French speaker who talks a mile a minute in English as he recounts Loop's origin story, pausing only to down one of his Deep Green smoothies. In 2015 he was at loose ends. The entrepreneur had a chain of raw vegan restaurants and a kombucha company, together employing 120 people, and felt like he'd accomplished his life's work by bringing plant-based meals and fermented teas to the masses.

Then he met Julie Poitras-Saulnier—now his wife and Loop co-founder—on a Ferris wheel at a networking event. Trained in environmental sustainability, she was also looking for a new challenge. As they went round and round, Côté told her about a call he'd received from a produce distributor in Quebec who was discarding 16 to 25 metric tons of fruit and vegetables—every day. He recounted going to the warehouse and encountering a wall of produce—35 skids' worth—destined for the trash. The trays of perfectly ripe mangoes gave him the chills.

Poitras-Saulnier was captivated by the story and agreed to work with Côté to do something about it. She sold her house, he sold his businesses, and they moved in together, soon creating four cold-pressed juice recipes in their kitchen using the distributor's produce. Stuffed with pineapple, turmeric, cantaloupe, beets, kale, and other premium ingredients, the juice was on store shelves less than a year later, selling for C\$4.99 (\$3.94) a bottle, about half the price of the juices they drank each day. Initially, their recipes were based on produce they knew they could regularly acquire. Later, they added new and one-off products based on what became available.

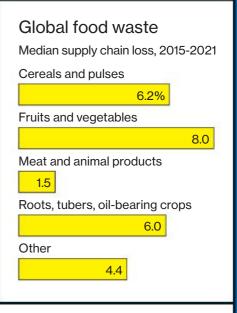
Large food manufacturers, farmers, and grocery stores reached out for help managing surplus produce. The couple started making probiotic sodas, sour beer from old bread, gin from potato peelings, and soap from fast-food joints' leftover deep-fryer oil. "We put juice in everything. We put juice in our beer, we put juice in our gin, we put juice in our soaps, we put juice in our sodas," Côté says.

Marketing was tricky: The key was stressing that the produce, while unloved (and sometimes a little ugly) was still high-quality. They paid suppliers 30% to 40% of the food's original value—even though it typically costs retailers to get rid of waste—reasoning that putting a price on something thought to be a worthless liability was key to building a sustainable market.

To date, Côté and Poitras-Saulnier have created 33 marketable products together—and a baby daughter. Côté, whose tongue-in-cheek business card says "superhero," is mulling a line of baby food, and the company is about to launch fruit-pulp cookies. He typically has 15 recipes in the works at one time, of which only

two or three will end up in production.

Poitras-Saulnier, 34, the chief executive officer of the venture, is focused on a new business-to-business division, Loop Synergies, which the duo recently created to consult with grocery stores and manufacturers looking for ways to upcycle their own excess ingredients. She and Côté also



look for ways to extend the life of produce they don't have the capacity to immediately transform into juice or soda by creating purées and dehydrated powders they can supply to other food manufacturers as a sustainable ingredient.

To prevent manufacturers from exploiting Loop ingredients for greenwashing—for example by adding an insig-

nificant amount of their products to something and calling it sustainable—Poitras-Saulnier is working on a labeling strategy so companies using their ingredients must reach a certain threshold of upcycled content before being associated with the brand. She's also planning a detailed environmental audit of the emissions tied to every aspect of the business. Right now, Loop's factory is on the same site as its main supplier—Courchesne Larose Ltd., the distributor that first approached Côté. For any-

thing the company trucks in, it ensures the carbon footprint of the travel is offset by upcycling the items it's saving from the trash.

Loop plans to open a second factory in a couple of months outside Montreal, funded in large part by Courchesne Larose. And it's just signed an agreement to sell its products in the U.S. with Phoenix-based chain Sprouts Farmers Market Inc. An expansion into Europe may follow. The new factory will help Loop move toward profitability. So far, it's funneled its proceeds into expansion, Poitras-Saulnier says. Last year the company broke even; an initial public offering could one day be in the cards, she says.

In the meantime, Loop is still turning away 200 metric tons of food a week, Côté says. And so the couple will keep adding products to soak up that supply of excess food, while they try to educate businesses that sustainability can create value rather than just add to costs. "Our vision," he says, "is to be in every single aisle of the grocery store, worldwide." — Danielle Bochove

THE BOTTOM LINE Food waste is an enormous problem for the climate. Transforming excess fruits and vegetables into edible products, Loop Mission is helping cut greenhouse gas emissions.

A French company has found a humane way to include animals in its shows

L'Écocirque features all the awe-inspiring acts that audiences have come to expect under the big top—aerialists walking a tightrope, a juggler deftly keeping multiple pins in motion, and a burly man displaying incredible feats of strength. What makes it distinct is the innovative way it includes wild animals, despite widespread bans on their use in the circus. The trick? Instead of live animals, l'Écocirque employs holograms.

The French company's "100% Humain" show, now on tour exclusively in France, showcases projected images of a lion, elephant, and even some beluga whales alongside its human performers, who are illuminated by a massive LED light display and accompanied by a live orchestra playing rock music. In one act, an aerial hoop performer is set against a backdrop of holographic planets that disappear to make way for a moon. "We didn't want to simply make an animal-free show, we wanted a show with an extra something," says co-founder André-Joseph Bouglione.

L'Écocirque—or the Ecocircus, in English—is the creation of a husband-wife team of animal trainers who hail from circus families. André-Joseph is the youngest grandson of Joseph Bouglione, a lion tamer who, together with his wife and seven children, took the 19th century Cirque d'Hiver in Paris from bankruptcy to national crown jewel after World War II. André-Joseph worked for 25 years as an animal trainer. His wife, Sandrine Bouglione, had a pet elephant as a child and spent a decade honing her animal-taming skills in the U.S. with her father in the Ringling Bros. and Barnum & Bailey Circus.

But touring with animals has become taboo, after decades of activists' campaigns that shed light on the suffering endured by creatures that would spend most of

A human performer with a hologram lion

their lives in cages. France last year announced a ban on wild animals in circus shows, to take effect in 2023. It will join about two dozen other European countries that prohibit their use. In the U.S., Hawaii and New Jersey have banned the use of most wild animals, while California, Illinois, New York, and Rhode Island have some restrictions. Many U.S. cities have also imposed limitations.

André-Joseph and Sandrine Bouglione over time became disturbed with the quality of life of their animal performers. The breaking point came one night when one of their big cats was injured. "We were haunted by the way it looked at us before returning to the cage," André-Joseph says. They decided to perform without animals and tested the concept with a small show in 2016, featuring only magicians and acrobats. The move prompted harassment from others in the circus industry and led to a rift with the rest of the Bouglione clan.

The backlash only served to spur the couple on. They spent the next three years on their 100% human concept, getting some outside funding to help cover the €2.5 million (\$2.9 million) development expense. The holograms, created by France's Adrenaline Studio, cost €400,000. The show's debut was thwarted by the country's first Covid-19 lockdown in early 2020. But after limited select performances throughout the pandemic, the 2022 calendar is filling up, with multiple French cities on the list. Still, capacity restrictions mean l'Écocirque is allowed to sell only about 30% of its target of 1,500 tickets for each show. The group would like to do at least triple its current four shows a week.

L'Écocirque is part of a wave of technology-heavy shows that are following in the footsteps of Canada's Cirque du Soleil, which in the 1980s pioneered productions built around human physical talent, storytelling, and flamboyant visuals. Circus Roncalli, in Germany, also uses hologram animals. Brooklyn-based Hideaway Circus employs virtual-reality technology and 360-degree cameras to stream its performance for anyone with a VR headset. And Two Bit Circus, in Los Angeles, offers live carnival shows paired with VR experiences at its miniature amusement park in a game arcade.

L'Écocirque incorporates other environmentally conscious measures. The lighting for its shows is powered by renewable energy, and it serves locally sourced refreshments in plastic-free containers. The small group of performers avoids air travel, instead getting around by boat, train, or public transport. Security guards, cleaners, waiters, and cashiers are hired on location.

The holograms—and sustainability focus—have real potential to resonate with audiences once capacity rules loosen, which could put l'Écocirque on a path to becoming "the next Cirque du Soleil," says Oh Young Koo, executive institute fellow at French business school Insead. "The pandemic accelerated the digital transformation but also made people miss interactions in a physical venue," she says. L'Écocirque offers both. "It's putting people together, but at the same time it's giving them a virtual-like experience," she says.

The industry is littered with examples of prominent circus companies that have failed to adapt to the times, leading to their demise. The Ringling Bros. and Barnum & Bailey Circus removed elephants from its acts in 2016, bowing to pressure from animal-rights activists. It then shut down in 2017—after 146 years in operation—citing plummeting ticket sales, high operating costs, changing public tastes, and drawn-out battles with animal-rights groups. France's Cirque Pinder folded after 164 years in 2018, blaming falling audience figures.

Sandrine Bouglione says that removing animals from circuses not only makes business sense—it's also the right thing to do. "Whatever we do, they are born and die inside a cage, just to entertain people," she says. "We can't just keep doing circus like our grandparents used to do." —Irina Anghel

THE BOTTOM LINE A growing discomfort with animals under the big top has spurred circus companies to innovate. Holograms, virtual reality, and streaming are among the technology helping productions stay relevant.

Awareness Apparel

Waterlust sells activewear to watersports enthusiasts and professionals, with a side of environmental advocacy

How is the sex of a sea turtle determined? By the temperature of the sand surrounding the egg during incubation—generally, warmer for a female, cooler for a male. Each person who buys a pair of Waterlust leggings or board shorts emblazoned with the brand's sea turtle motif receives a series of emails sharing this and other encyclopedia-worthy facts.

The Miami-based brand aims to raise awareness about threatened marine and freshwater environments through the apparel it sells to watersports enthusiasts and pro-

fessionals, which features loud, funky patterns inspired by ocean creatures and ecosystems. About 5% of sales are donated to research and protection efforts, such as expanding conservation areas or coral reef restoration programs. (Outdoor activewear brand Patagonia Inc., a longtime supporter of environmental sustainability, pledges 1% of its sales to preservation.)

Patrick Rynne, Waterlust LLC's 38-year-old founder and chief executive officer, calls his business model

"advocate apparel." The former U.S. Olympic team sailor, who has a master's degree in ocean engineering and a Ph.D. in marine physics, had long wanted to protect the ocean environments where he's spent much of his life.

Rynne launched his apparel line in 2014 with help from his now-wife Fiona, who has a master's in marine affairs and policy, and her sister Laura Graham, a seamstress and designer. They believed that creative apparel would be an effective way to point people repeatedly to the causes the company supports. "We see clothing as a canvas on which we can tell a story and communicate science," Rynne says.

The company's four full-time employees have over-

seen fast growth: Sales have doubled, on average, in each of the past six years, reaching \$2 million in 2021. Waterlust considered becoming a nonprofit, but Rynne says that would have narrowed the scope of projects the team would have been legally allowed to do and made it difficult to fund the work.

Rynne accepts that operating an apparel company comes with an environmental cost. "People need to understand that there is no free lunch and

that we have to be thoughtful about our consumer habits," he says. It took two years for the company to find a manufacturer willing to

make baseball hats with 100% post-consumer recycled plastic for the snap and the bill, Rynne says. "Instead of trying to pretend that our business doesn't do harm in some way," he says, "we're very passionate about reducing it as much as we can." — Jeannette Neumann



Trailblazer board shorts

THE BOTTOM LINE At Waterlust, a startup making apparel with sea-inspired designs, a portion of sales goes to ocean ecosystem protection efforts. The company also attempts to limit environmental impact in its manufacturing.



Twenty-one years after its approval by the FDA, mifepristone could—but probably won't—revolutionize a post-Roe world

BY CYNTHIA KOONS ILLUSTRATION BY SOPHI GULLBRANTS

Mifepristone may be the least marketed pharmaceutical product in the U.S. There aren't any ads for it on TV. Most doctors can't prescribe it. Pharmacists don't know much about it, since it doesn't sit on the shelves at CVS or Walgreens. It would be reasonable to assume this is all because mifepristone is exceptionally dangerous. But it sends fewer people to the ER than Tylenol or Viagra. It's also highly effective when used as intended: to induce an abortion.

When the U.S. Food and Drug Administration approved mifepristone 21 years ago, it was known as RU-486 and hailed as the most important advance in reproductive health since the birth control pill. *Time* magazine had called it "The Pill That Changes Everything." It was supposed to provide an attractive alternative

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to surgical procedures, which can involve sedation, a visit to a health-care facility, and obviously a great deal of medical expertise. At the time, the abortion battleground was, by and large, women's health clinics. The pill, in theory, could allow women to bypass clinics, and throngs of protesters, almost entirely.

Yet in the two decades since FDA approval, mifepristone has failed to reach liftoff. If anything, it's receded from view. A labyrinth of regulatory restrictions has kept it intentionally out of reach. Most abortions in the U.S. are still done by surgical procedure, even though the majority of people ending their pregnancy do so early enough to take the pill instead. Almost 80% of adults, including two-thirds of women, don't even know medication abortion exists, according to the Kaiser Family Foundation.

Jessica Nouhavandi, a pharmacist and the co-founder of online drug-delivery service Honeybee Health, was surprised to learn her friends were among them. At the beginning of the pandemic, she decided she wanted to sell the pill through her site. When she mentioned it in a group text with friends, not one of the 10 college-educated, thirtysomething women had ever heard of an abortion pill. Even among her colleagues, she sees how this could happen. "In pharmacy school you don't really learn about medication abortion," she says. Her training didn't entirely ignore the drug involved; there was just very little emphasis on what it was used for. "Basically, we learn about the meds but don't talk too much about medication abortion."

Nouhavandi felt driven to do something about it, though it

wasn't clear much could be done. For as long as the abortion pill has been on the market, the FDA has required it to be given at a doctor's office. That's not the only quirk specific to mifepristone, either. Prescribers have to get certified to dispense the pill and then counsel patients on the risks of taking it. They then have to get them to sign a form reiterating the facts that were just told to their faces.

These rules may sound largely procedural, but they're logistical headaches that don't apply even to some highly addictive drugs. Without them, a general practitioner could prescribe the pill via telemedicine and have it sent to a patient by mail. This would be particularly useful for the almost 9 out of 10 American women who live in counties without an abortion clinic.

For years, activists, health-care professionals, and medical researchers have been building a case that the abortion pill should be treated like other medications that come with similarly few medical concerns. With the U.S. on the precipice of a new era of restricted abortion access—the Supreme Court is hearing a lawsuit that could overturn *Roe v. Wade* this year—their cause is more urgent than ever.

The FDA last year reviewed its restrictions on mifepristone, but ultimately decided to keep all but one in place. Women no longer have to pick up the pill at a doctor's office. That was a "huge win," says Nouhavandi, but that the FDA left all of the other idiosyncratic hoops in place is "hugely disappointing." Plus the agency added another: Pharmacies such as hers have to get certified to distribute the drug—a rule that only applies to 40 FDA-approved drugs, out of more than 19,000. There's no certification process in place yet; creating one could take months. So far, Walgreens Boots Alliance Inc. isn't seeking certification; CVS Health Corp. wouldn't comment on whether it plans to do so. "I don't think the fight is anywhere near over," Nouhavandi says.

The story of the abortion pill is a revolution in fits and starts. RU-486 was first developed four decades ago by the French pharmaceutical company Roussel Uclaf. It works by blocking progesterone, a hormone that helps grow the uterine lining, where an embryo would typically implant. Early research found the drug, also known as mifepristone, was 80% effective at inducing an abortion. When combined with misoprostol, a drug that causes a uterus to contract, which helps expel a fetus, it works more than 95% of the time in early pregnancies.

In 1988, France became the first Western country to approve the pill for abortions. Within a month, anti-abortion protesters successfully pressured Roussel Uclaf to halt its distribution. The French health minister, Claude Évin, intervened and put it back on the market. "I could not permit the abortion debate to deprive women of a product that represents medical progress," he said at the time. "From the moment government approval for the drug was granted, RU-486 became the moral property of women, not just the property of a drug company."

But it was very much the property of a drug company—one that anti-abortion activists continued to relentlessly target. The National Right to Life organization, a U.S. anti-abortion

■ nonprofit, wrote to the French ambassador threatening a global boycott of Roussel Uclaf and its parent company's products. Roussel Uclaf, in turn, never marketed the pill to Americans. As the drug had made its way to China, Sweden, and Great Britain, neither the drugmaker nor the Republican administrations in charge in Washington had any will to bring it to the U.S.

Then an eight-year political window opened. Bill Clinton, who'd campaigned on making the abortion pill a reality for Americans, came into office. In one of his first moves, he asked for a review on an import ban on the pill. Over his two terms, the Population Council, a reproductive-health nonprofit that had secured the rights to market the drug from Roussel Uclaf, undertook clinical trials needed to get FDA approval and enlisted a drugmaker, Danco Laboratories, to produce the pills.

Danco's origin story, and almost everything else about it, is intentionally vague. According to a *Washington Post* article from 2000, the "secretive and obscure" company was formed in the Cayman Islands in 1995. Danco makes no other medicine besides the abortion pill and keeps a low profile to this day. It lists no street address or phone number. It just uses a P.O. box.

When the FDA gave its regulatory blessing to the pill in

September 2000, at the tail end of Clinton's second term, the agency's commissioner at the time said the decision was purely scientific, not political. And yet the FDA put substantial and extraordinary restrictions on the pill. Later on, they became part of what's known as a risk evaluation and mitigation strategy, or REMS, a program meant to "ensure the benefits of the medication outweigh its risks."

Among the rules: Doctors had to date the pregnancy, which in many cases meant having the patient undergo an ultrasound. Patients had to acknowledge that a surgical abortion might still be required to fully end the pregnancy if the drugs didn't work, and the prescriber had to confirm that option was available. The physician had to sign a statement saying the parties had read the instructions for how to take the medicine and knew how to follow them. Women had to take the pill at their provider's office and then come back for a final checkup. For those not keeping track: That could be three separate trips to the doctor just to take the pill.

A spokesperson for Danco said at the time that the FDA directives were more onerous than what the company had expected given the safety profile of the drug. "It was a mix of medical cau-

tion and political naiveté that manifested itself in hypervigilance," says Beverly Winikoff, president of Gynuity Health Projects, who worked for the Population Council on the pill's approval. Winikoff says that fear of a political backlash had a heavy hand in guiding the FDA's decision-making process. There was such palpable worry about violence from anti-abortion activists during the approval process that the agency didn't disclose where it was holding its data-review meeting. Winikoff was told to go to a hotel, where

she was picked up by a bus that took her to a secret location. "I think there was just a heightened fear about the credibility of the agency, about their own jobs as professionals, about being pilloried in the press," she said of how the FDA handled the review process. "It was astounding to me that the regulatory mechanisms were so divorced from women's lives."

Over the past two decades, researchers and medical bodies have built a growing and compelling case that many, if not all, of the regulations are medically unnecessary. A 2013 paper reviewing abortion data for 45,000 women showed just 0.3% of patients who took the pill ended up hospitalized. The study's authors concluded that abortion by pill is "highly effective and safe." Even Jane Henney, who was leading the FDA at the time of mifepristone's approval, came out in 2019 to argue against the REMS in a New England Journal of Medicine opinion piece that she co-wrote. Nearly two decades of use and additional research "clearly demonstrate that mifepristone is extremely safe and effective," the authors wrote. "We believe that the distribution restrictions may no longer be appropriate." Yet even in the face of this data, regulatory oversight hasn't meaningfully changed. The FDA told Bloomberg Businessweek that after conducting a comprehensive review of published literature and data provided to the agency, it concluded that

"They reinforced the misconception dangerous and need this layer of

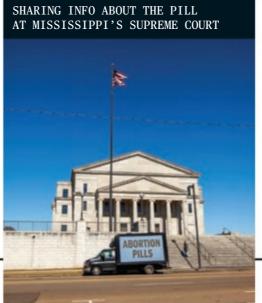
it was safe to remove the in-person dispensing requirement, "provided all the other requirements of the REMS are met, and pharmacy certification is added."

"They reinforced the misconception that the pills are somehow dangerous and need this layer of protection, which they don't," says Elisa Wells, who co-founded Plan C, a site that helps women get abortion pills. "It's just a real disappointment that after 20 years' worth of data that we have about the safety of the pills that the FDA didn't remove all the restrictions and allow the pills to be available the way that so many other drugs are: through pharmacies without any special requirements."

Wells has seen firsthand how much easier things could be. While consulting on a research project in Ethiopia in 2014, she watched a colleague walk into a pharmacy with no prescription

and leave 10 minutes later holding a packet with the abortion pill and instructions on how to use it. The box, bearing the name "Safe-T Kit," was no bigger than a deck of cards and cost the equivalent of \$7. "We're standing there on the streets of this little town," Wells says. "We looked at each other and said, 'How is it available in Ethiopia, which is one of the most resource-poor countries in the world in respect to health care, but in the U.S. it's restricted beyond reach?"

In the U.S., getting the pill can require

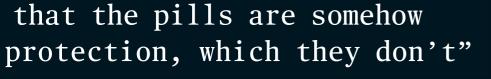


maneuvering comically complex situations. Graham Chelius, a family medicine doctor on the Hawaiian island of Kauai, which has no abortion clinic, had to send his patients to Oahu—a 40-minute flight each way,

costing \$150 round trip, at least—just to pick up mifepristone from a certified provider. "There's no other medicine that I provide that I have to have in the clinic that you just can't write a prescription for and have it shipped," Chelius says.

In 2017 he and the American Civil Liberties Union filed a lawsuit against the FDA to get the agency to remove the

laundry list of obligations that come with prescribing or receiving mifepristone. The case argues that the government's rules place an undue burden on a patient's right to an abortion and violate the right to privacy under the Fifth Amendment. "There is no reason why these restrictions should or have improved the safety of abortions," he says. "For certain, women have been harmed by these restrictions."



It was in the back-and-forth over Chelius's suit that the FDA finally decided the pill could be distributed by mail. But he and the ACLU want the other constraints removed, too, and have yet to drop their case. "We urge the FDA to further eliminate unjustified and unscientific barriers to care," says Julia Kaye, the lead ACLU attorney on the case.

The FDA "clearly could've gone farther," says Daniel Grossman, director of Advancing New Standards in Reproductive Health at the University of California at San Francisco. Grossman has spent years churning out research on the safety of the abortion pill and sees things like the patient agreement form and the requirement that providers get a special certification to prescribe the pill as redundant to the very practice of medicine. Doctors already take responsibility for evaluating patients' eligibility for medications; the extra paperwork doesn't confer any added safety benefit, he says. "The pieces that are left of the REMS seem almost silly."

Last fall, the conservative majority on the Supreme Court signaled in oral arguments that they're open to eroding abortion protections. The court could entirely overturn *Roe v. Wade*, which would leave it up to states to set their own abortion laws. Many have bans ready to go if that happens. Or it could allow for earlier limits to abortion; right now states can't prohibit abortions up until the "point of viability," which the Supreme Court has said is around 23 to 24 weeks of pregnancy. The court





could also keep the status quo.

Even in that case, treating mifepristone like any other drug would make abortions much easier to get, particularly for people who live far from clinics. Since 2015 more than 100 independent clinics have closed across the

country, according to the Abortion Care Network, largely because of laws that make it excessively expensive or legally impossible for them to operate. The farther a woman lives from a clinic, the more likely she is to seek out mifepristone—even with the FDA's hurdles. A 2021 study looking at about 57,000 abortions in almost 80% of the country's counties showed that a 47-mile increase in distance to the nearest clinic was associated with a 41% increase

in the use of telemedicine and medication abortion.

Conservative lawmakers know the power of this pill: Nineteen states have banned using telemedicine to get a prescription for it by requiring a clinician to be physically present when the drug is being given, according to the Guttmacher Institute, a reproductive rights research group. And more mifepristone-specific laws keep coming. A new Texas law threatens anyone who prescribes the abortion pill through telehealth and mails it with jail time and a fine of up to \$10,000. Georgia is attempting to ban sending it by mail, too. South Dakota Governor Kristi Noem issued an executive order that required three trips to the doctor for a medication abortion. "The Biden administration is working right now to make it easier to end the life of an unborn child via telemedicine abortion," she tweeted in September. "That is not going to happen in South Dakota." (A judge put an injunction on the rule, for now.)

If the U.S. enters a post-*Roe* world, legal abortion would likely disappear in almost half of the states, unless there's a way to get mifepristone into those places. That raises a question University of Pittsburgh School of Law assistant professor Greer Donley is exploring right now: Can states ban the shipment of mifepristone if the FDA explicitly says it's allowed?

A Massachusetts case may provide some answers. When the FDA approved the powerful, long-acting opioid Zohydro in 2013, the governor tried to ban the sale of the drug in his state. The drug's maker sued, and a U.S. district judge ruled that the state did not have the authority to overstep the FDA. Donley thinks this could provide the framework for a legal argument against state bans on mail-order abortion pills. If it works, it could also mean the pill remains available in places that ban abortion altogether. "This idea that the states can't do something that frustrates the purpose of federal law, that's the strongest way to go at mifepristone," Donley says. There's no guarantee it'll work, but she thinks it's worth a shot.

"The anti-abortion movement has been trying these pretty outlandish strategies on so many different fronts for decades, and a lot of times they fail, but sometimes they don't. And now we are where we are," she says. "It's time to get creative."

























Landlords backed by private equity have been crowding into neighborhoods that were once full of starter homes and promoting a new vision of the American dream: Paying rent

























By Patrick Clark Photographs by Jesse Rieser

avier Vidana started out as a real estate agent in 2013, when Arizona's Salt River Valley seemed wide open. It was the aftermath of a housing market crash that had seen the typical home value in the Phoenix metro area fall more than 50%, and a single parent with good credit could tap loan programs geared toward first-time homeowners and find a pretty decent place to live. For Vidana, the challenge was convincing potential clients that a house was something they wanted to own. "We were on the phone begging people to buy," he says. "There was no buyer confidence whatsoever."

The economy crawled forward, and the housing market with it. Vidana made a specialty of tutoring young buyers on real estate basics. Soon he was supplementing his commission income by selling how-to PDFs on his website and collecting ad revenue on his YouTube channel. Then the pandemic sparked a boom that gave him something new to explain.

Americans responded to the work-from-home era by house shopping, and no big city was hotter than Phoenix. The median home was worth about \$285,000 at the beginning of the pandemic; it was valued at \$435,000 two years later. It wasn't unheard of for a seller to receive 50 offers or more, or for a prospective buyer to make offers on a dozen different homes before finally closing a deal.

Across Phoenix, frustrated buyers started pointing fingers. Some complained that Californians were distorting the market by carrying remote-work salaries across the state line. Others focused on technology companies, including Zillow Group Inc., that were buying homes and flipping them on a massive scale. But nothing raised locals' ire as much as the growing crop of landlords taking huge sums of capital from Wall Street and building gigantic portfolios of rental homes.

This last category bugged Vidana, too. Property investors had seemed all right when they were using cash to score discounts on homes that needed a lot of work. But these new landlords were taking homes off the market and renting them back to people who would have otherwise been in a position to buy. He saw families getting outgunned by investment firms that could afford to pay \$450,000 for a \$400,000 house. Rents on single-family homes were also rising fast—up 19% in the Phoenix metro area during the pandemic, according to Rick Palacios, research director of John Burns Real Estate Consulting LLC. The result was that buyers could lose out on a home and see it resurface at a rent that was hundreds of dollars a month more than what they would have paid to own it with a mortgage. "The way I see it, they're stealing from first-time homebuyers," Vidana says. "They're trying to push this idea that your first step is not to buy a house anymore, your first step is to rent."

Amid anxiety over inflation and rising home prices, he isn't the only one who feels that way. Tenant rights advocates have described Wall Street landlords as mass evictors, and conservative pundits such as Fox News' Tucker Carlson have blasted them for crowding regular homebuyers out of the market, warning that the very fate of the republic is at stake. Democrats have been in agreement with this sentiment. The Biden administration has argued that big investors are

making it hard for families to participate in a crucial part of the American dream.

These aren't merely symbolic concerns. Home equity represents a huge portion of wealth in the U.S., especially for moderate-income families that have few other opportunities to use borrowed money to invest in assets that can rise in value over time. Price appreciation lets owners accrue wealth and then tap their equity when they have a large or unexpected expense. Other rich countries, including Germany and Denmark, have lower rates of homeownership, but they make up for it with robust social safety nets and pension systems. Those resources aren't nearly as comprehensive in the U.S., so many use housing wealth to pay for college, health-care expenses, and retirement. At an even more basic level, owning lets a family control its own means of production, says Skylar Olsen, principal economist at online mortgage company Tomo. That can mean working out of a home office, renting out a room on Airbnb, or growing vegetables in the backyard. "We're all our own kings when we own land," she says.

At first, Vidana wasn't too worried about the new buyers, because homes were still affordable. In 2019 he'd helped a client sell a house in Surprise, a suburb 30 miles northwest of downtown Phoenix, to a Japanese company. The buyer, a family-owned conglomerate called Yamasa, redid the kitchen and listed the house for rent at a price that seemed unrealistic. But it rented, and Yamasa's agent started blasting him with emails, offering cash for other homes. Yamasa, which did not respond to requests for comment, has since become a prolific buyer of rental real estate, acquiring hundreds of homes in the Phoenix suburbs and thousands of other properties across the U.S.

According to the company's website, Yamasa was founded more than a century ago as a timber business, and later expanded into gas stations, bowling alleys, pachinko parlors, and solar farms. Vidana says he didn't sweat the details of the company's provenance. "I was just hoping more corporations wouldn't follow their lead," he says. But it was, on the face of it, a little bit odd. Why would a Japanese pachinko operation want to own starter homes in the Phoenix suburbs? The answer began with the company Yamasa had teamed up with to operate its rental home business—and would go a long way toward understanding Wall Street's new bet on housing.

esidential landlords were as worried as anyone else in March 2020, when it seemed as though mass layoffs would cascade into missed rent payments, evictions, and societal unrest. Instead, cooped-up Americans took their stimulus checks and the money they saved during lockdowns and started looking for bigger spaces. Pretty soon, capital followed. By the middle of 2021, speculation accounted for roughly half of all home purchases in Phoenix, says Palacios, the real estate researcher. Most of the activity was driven by small landlords and home flippers, who targeted affordable homes near good schools—the same places Vidana's clients coveted.

The suburban gold rush also proved irresistible to private



equity giants, sovereign wealth funds, life insurers, and everything in between. Pagaya Technologies Ltd., which uses artificial intelligence software to evaluate consumer credit, started helping clients buy homes. Boston Omaha Corp., a holding company that, among other businesses, provides broadband internet to subscribers in Arizona and Utah, hatched a plan to develop rental projects. So did a water company in Denver, Pure Cycle Corp. "Adding single-family rental or something tied to housing in your company name these days is akin to adding 'dot-com' back in 1999," Palacios says.

But managing rental houses is difficult, even in a tight market where landlords can raise rents with impunity. To jump-start their efforts, many of the newcomers invested through established companies. One of the big players—the one Yamasa chose—was Progress Residential. Progress is a rental company run by Pretium Partners LLC, a company in New York run by Don Mullen, known for overseeing the fabulously profitable "big short" bet against the housing market that cemented the reputation of Goldman Sachs Group Inc. as the financial jungle's apex predator.

Mullen left Goldman, then founded Pretium in 2012, raising money from investors and plowing it into rental houses as well as bets on corporate credit and mortgages. In its early days, the company bought real estate at depressed prices, but as the market recovered, it learned to win deals by moving fast. These days it employs software that scans real estate listings

every 15 minutes. When its acquisitions team sees a home it likes, it estimates rent and a repair budget and aims to get a cash offer out within hours of the home going on the market. Pretium also works with homebuilders to develop communities of new rental homes.

Before the pandemic, it was little known outside of Wall Street, and even there it was overshadowed by single-family landlords such as Invitation Homes Inc., which Blackstone Inc. took public in 2017. Then in 2019, Pretium raised \$2.5 billion for its single-family rental business, including a chunk of capital from a Connecticut firm called Landmark Partners, priming Mullen's company for a buying spree in which it dominated the hottest corner of the hottest housing market in U.S. history. It won high-profile deals to buy homes from Zillow and Front Yard Residential, adding 35,000 homes last year. That brought its total to a little less than 75,000. It's the second-largest single-family landlord after Invitation.

These developments earned it the envy of competitors and the ire of real estate agents such as Vidana, along with that of tenant advocates and elected officials. The notion of financial-services firms that had gorged on mortgages in the runup to the foreclosure crisis using that calamity as a jumping-off point for a new business had long struck critics as unconscionable. In 2019, Senator Elizabeth Warren, the Massachusetts Democrat, accused the Wall Street landlords of shamelessly "profiting off the destruction they"

◄ caused." Housing activists contended the companies were following the private equity playbook of heaping on fees and cutting maintenance costs to boost their bottom line. "I look at Pretium and its peers as industrialized housing," says Sofia Lopez, deputy campaign director at the Action Center on Race & the Economy, an advocacy group. "It seems inconvenient to them that people have to live in their houses."

But there was also another way to look at it. Forty years ago, when baby boomers were starting families, Wall Street invented a new field of financial engineering to turn giant pools of capital into loans for consumers. This time around, it was the boomers' kids who were settling down, but a shortage of housing combined with stagnant wages and more stringent lending standards was pushing ownership out of reach for young families. So Wall Street built a new machine, one that collected rental income and packaged it into a different kind of revenue stream for institutional investors.

In this version of the story, there aren't enough rentals for families who want to live in a good neighborhood but can't afford a down payment. Moreover, not everyone wants to be a homeowner, which means unclogging drains and, from time to time, dealing with vermin, all while exposing yourself to the risks of the real estate market. "For those of us who live in big coastal metros where prices go up all the time, that's fine," says Jenny Schuetz, a fellow at the Brookings Institution. "But in many parts of the country, people would be better off renting and putting money in an index fund." Schuetz, the author of the forthcoming book Fixer-Upper: How to Repair America's Broken Housing Systems, notes that gains in wealth from homeownership also haven't accrued equally across racial and ethnic groups. Redlining rules the federal government implemented in the 1930s shut Black families out of housing wealth generated in the post-World War II boom. Even today, Black buyers tend to buy later in the housing market cycle, in part because they're less likely to be able to tap family wealth for a down payment.

Dana Hamilton, Pretium's head of real estate, says the rise of large single-family landlords isn't crowding out buyers. She adds that Pretium, which owns a tiny percentage of the country's rental homes, is offering a valuable alternative to buying. "It used to be that if you wanted to live in a certain neighborhood you had to be able to buy," she says. "Today, if you want to live in a certain neighborhood, you can buy or you can rent. That access is one of the things people don't appreciate about what we do."

uying and renovating 100 houses a day, as Pretium did last year, is a complicated business, requiring a brawny logistics operation to procure supplies and manage labor. The job was even harder during a pandemic that famously made all kinds of things more difficult to find, including lumber, refrigerators, wall paint, and landscaping materials. In some markets, builders even reported having a hard time finding dirt.

Pretium typically spends \$30,000 fixing up a house when it buys it, focusing on items such as laminate floors that help the house wear well and others, like new appliances, that help

"It's a capitalist society. What's really wrong?"

it rent fast. Pretium typically spends 20 to 25 days renovating a property, an executive said in a podcast interview last year.

Progress, Pretium's property management arm, is especially good at making homes easy to rent. On a recent tour of available listings in Gilbert, Ariz., where leases ranged from \$2,100 to \$3,100 a month, stickers on the walls encouraged renters to ask Siri about the landlord. (When asked, Apple's voice assistant pulled up links to the company's website that highlighted Progress's dog-friendly policies and its emphasis on offering homes near good schools.) Another decal had a QR code that allowed prospective tenants to call up a leasing application on their smartphones. When the Progress executive leading the tour couldn't find a lockbox to get into a house, he called into the office and had a colleague open the door remotely.

There are other upsides to renting from a corporate landlord beyond such technical wizardry. Pretium keeps a fleet of 850 service vehicles for the most common repairs. In a perfect world, a tenant might call about a leaky faucet in the morning and have it fixed by a maintenance worker who already has a replacement drain pipe in the back of his van and gets buzzed into the house remotely while the tenant is at work.

Pretium says 80% of issues get fixed on the first maintenance visit. That still leaves plenty of unhappy customers. There are more than 4,000 members of a Facebook group called Victims of Progress Residential, where tenants complain about rent hikes and unexpected fees and trade tips on navigating the inevitable corporate bureaucracy that comes with being one of 75,000 customers. Mackenzie Cruz, 29, rented a three-bedroom house in a gated community in Mesa from Pretium because it was the first landlord who didn't turn her away on account of Oakley, the family German shepherd. The experience that followed sounds like what you might get if you rented a house from a cable company (which, if Boston Omaha is successful, you might actually do one day). Cruz says there were erroneous late fees, computer glitches, and countless hours in customer-service hell. Then came the big upcharge: Cruz and her husband asked the landlord to extend their lease by a couple of months so they could wait for the builder to complete the new home they were buying. Pretium said yes but raised the rent from \$1,900 a month to \$3,100, including fees and other charges.

"The whole time we were there I was working nonstop to avoid giving them more money than I was supposed to," Cruz says. "It was almost like a third job, after being a full-time worker and a full-time mom."

Cable company vibes are annoying enough when they affect your ability to stream *Selling Sunset*, but they're a lot more stressful when you're worried about losing your home. Dean Zoller, who rents a home from a corporate landlord that Pretium acquired in January 2021, says he started withholding rent payments after the landlord ignored his request for help

fixing a leaky ceiling. He'd had issues with his home before and complained in November 2020, after the Pretium deal was announced but before it closed, and heard nothing for months.

"The thing I worried about is that any minute they're going to come in and say, 'Now you have to move out,' he says. "There's a lot of stress that comes from the lack of communication. It sucks." A representative for Pretium says the company worked with Cruz to resolve the erroneous charge. The spokesman says that Pretium has no record of Zoller's complaint and notes that the tenant recently entered into a rent assistance program that provides him with protection from eviction under state law.

of the pandemic, an advocacy group called the Private Equity Stakeholder Project (PESP) began publishing research on eviction filings in two dozen counties where court data was easily available online. Mullen's company, according to the group, filed more eviction cases in those counties during a period when a federal eviction ban was in place. In February, Minnesota Attorney General Keith Ellison filed a suit alleging that Pretium and Zoller's landlord, HavenBrook Homes, had carried out a plan "to extract ever greater profits from their tenants by severely under-maintaining their homes."

A representative for Pretium says the company was still reviewing the lawsuit, adding that it's quadrupled its maintenance team in Minnesota since acquiring HavenBrook at the beginning of 2021. He calls the Private Equity Stakeholder Project "overtly biased" and says it isn't a "credible source on our nation's housing." In July, the firm complained in a letter to Representative James Clyburn, a South Carolina Democrat, that the advocacy group was conflating eviction filings, which didn't violate the federal ban, with actual evictions, which in many cases would. Pretium, it said, was complying with the law. Jim Baker, the executive director of PESP, sent Clyburn his own letter arguing that Pretium had misinterpreted him and that the threat of eviction can often be enough to make a tenant feel they have to leave.

The Pretium spokesman also says the company provided tenants with more than \$30 million of rent assistance and



other financial aid and helped its tenants access an additional \$50 million through government programs. In February, Pretium announced the hiring of a new corporate affairs executive—Jocelyn Moore, who served as the NFL's chief communications officer during a period when the pro football league was grappling with racial justice protests and questions about player safety. In her first interview after joining the company, she told Bloomberg Television that by investing in rental homes Pretium was "bringing private capital to bear on one of society's greatest challenges."

By then, the company had a new reason to think about its public perception: Tenants were complaining to the pension funds whose capital fuels its single-family rental machine. In Minnesota, organizers for United Renters for Justice, a tenants group, showed up at an August meeting of a state pension fund's board, demanding that it cancel a planned \$100 million investment in Landmark Partners, the company that invested in Pretium. (Landmark declined to comment.) In December the board convened again. Minnesota Governor Tim Walz, a Democrat who presided over the meeting, grimaced on a Zoom call as tenants told their stories. Then the state fund's chief investment officer advised the board that if it delayed the investment again, it might miss out on the opportunity. Walz said he was convinced Landmark was acting in good faith to address concerns, and the board voted the deal through.

The day before the vote, Javier Vidana contemplated Pretium's rise over lunch at a Mexican restaurant in Litchfield Park, a west Phoenix suburb. Thirty miles away in Scottsdale, executives from the single-family rental industry gathered at a conference, where some sipped \$70 cocktails on a terrace, trying to figure out what to do with what one lender described as an "abundant or even excessive" amount of capital flooding into their space.

Yamasa had slowed its purchases in Phoenix. But Mullen's company is still a force to be reckoned with locally. In 17 ZIP codes in the Phoenix area, Pretium-connected entities accounted for at least 5% of all home purchases last year, according to an analysis by Redfin Corp. Whether that was too much is hard to say. "Is it wrong? It's a capitalist society," Vidana says. "What's really wrong?"

Vidana grew up in nearby Maryvale, which was developed by a group that included Victor Gruen, the architect who pioneered the enclosed shopping mall. Eight years ago, when he was 21, he and his wife bought their first home using a lowdown-payment loan. Their mortgage of \$600 a month got them an old house with no central air conditioning. It was a start.

Home values rose, allowing the young couple to trade up to a nicer one two years later. They bought and sold again in 2018, moving to a part of town with a better school district, where the streets are lined with citrus trees. His path might not work for every family, he acknowledged, but it had worked for him. On the other hand, it helped that Vidana, like Pretium, started buying when the market was at its low point. **B**

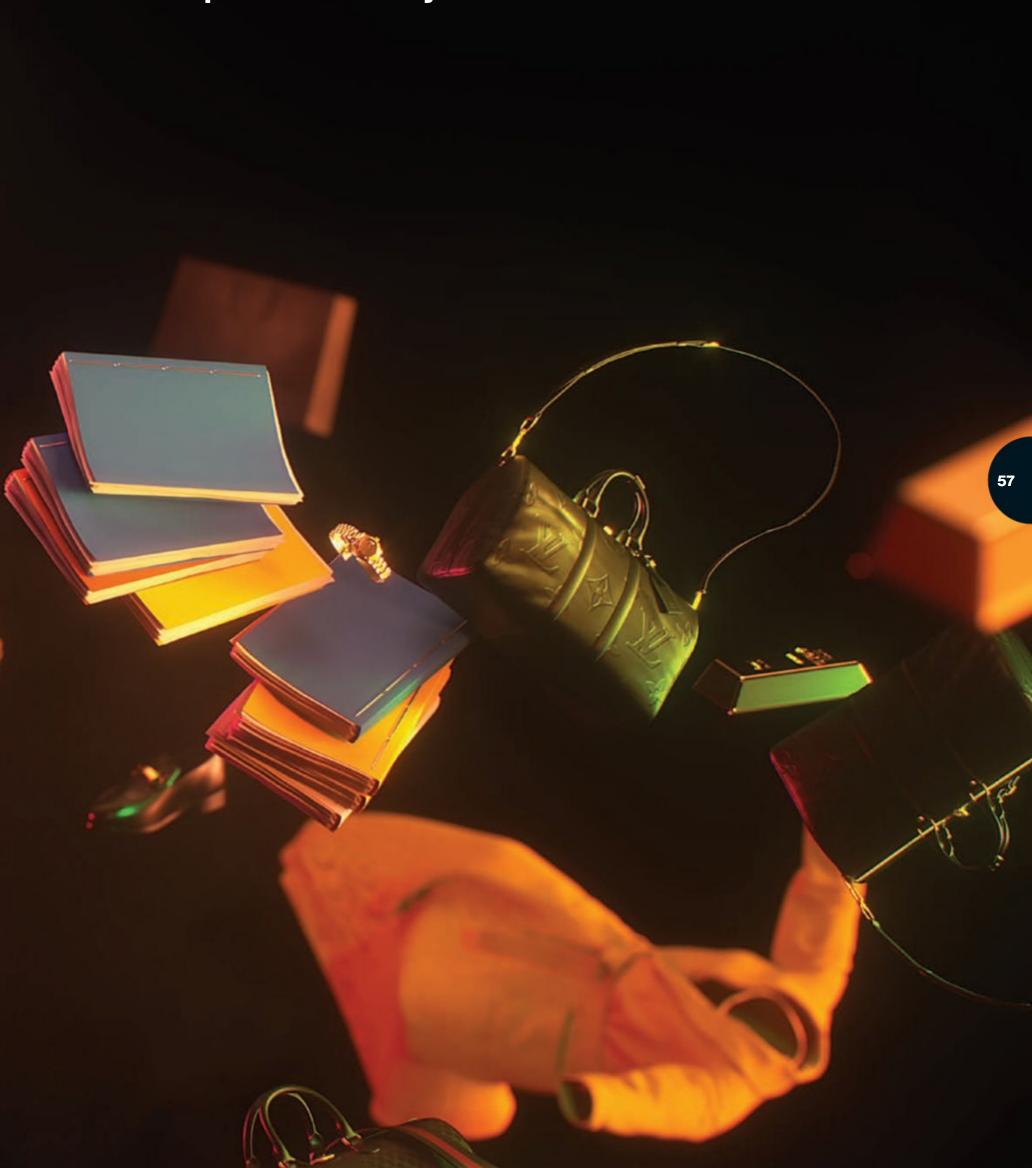
—With Tsuyoshi Inajima

How the Billionaire Gucci Master

56

Sank the Super Cop

A money laundering case against a Nigerian influencer implicates the country's most famous law enforcement official



nstagramisn't exactly known for its fidelity to reality. It's a place people go to curate an image of their best self, or their aspirational one. But rarely do those images obscure

a darker truth to the extent they did

back in 2019, in a pair of posts by two public figures from Nigeria.

On Dec. 8, Ramon Abbas, better known as @hushpuppi, Ray Hushpuppi, or the Billionaire Gucci Master, posted a photo of himself lounging on the hood of his purple Rolls-Royce. His outfit, designed by the legendary Virgil Abloh, was a sky blue shirt-and-pants set with a white cloud that appeared to float across his forearms and midriff. He'd parked the Rolls in the driveway of the Palazzo Versace Dubai, a resort-style hotel where he lived in a penthouse apartment. For Abbas, then a 37-year-old influencer who'd gone from a childhood in a poor part of Lagos to an adulthood full of private jets and celebrity friends, this sort of extremely conspicuous consumption was his brand. "I don't believe in competition," read the post's caption. "You're not me and THATS IT #LouisVuitton #OffWhite #VirgilAbloh #RollsRoyce."

That same week, 3,000 miles away, Nigeria Police Force Deputy Commissioner Abba Kyari, also known as @abbakyari75, struck a different pose. Kyari's style was all business: seated at a desk stacked with files, wearing a blue dashiki and his everpresent AirPods. Flanked by two plainclothes deputies, he looked purposefully into the camera. His caption was equally dry: "With my Senior Colleagues today." Lining the walls behind him were shelves laden with dozens of his awards. In a decade-long string of busts, Kyari, then 44, had captured



kidnappers, freed schoolchildren, and hunted assassins. "He was the star," says Rommy Mom, who sits on Nigeria's Police Service Commission, an independent body responsible for police oversight. During a yearslong wave of violent crime and terrorism, the Nigerian press had nicknamed Kyari, the chief of the

country's Intelligence Response Team (IRT), the Super Cop.

Kyari's glowing press ran counter to law enforcement's checkered reputation in Nigeria. In particular, the Special Anti-Robbery Squad, or SARS-which Kyari had previously headed for six years in Lagos-was known for a mix of savage brutality and day-to-day corruption. A year later, in 2020, SARS's tactics would be the subject of large street protests that culminated in the government agreeing to disband it. Even then, Kyari somehow seemed to float above it all.

"Here was someone who was viewed as really uncharacteristically competent at their job in an organization not known for competence," says Matthew Page, who researches Nigerian corruption as an associate fellow at Chatham House, a London think tank. "That was the narrative around him-that he was actually getting the job done rather than being abusive or on the take."

The Billionaire Gucci Master and the Super Cop could

The scam had already

hardly have seemed more different. Hushpuppi had more than 2 million Instagram followers to Kyari's 80,000, and he'd have looked about as at home in an office surrounded by paperwork as Super Cop would have on the hood of a purple Rolls. Yet behind each man's carefully sculpted public image, their fates appear to have been deeply intertwined.

Off camera, Abbas fueled his lifestyle with a different kind of hustle, as an online scammer and money launderer. He was a partner in what are called business email compromise scams, in which hackers penetrate corporate accounts and collect on phony invoices. He moved money for scams that targeted a law firm in New York, a bank in Malta, and a Premier League soccer club. He teamed up with a loose network of hackers and fraudsters-including, at least once, a state-sponsored group from North Korea-in schemes chasing as much as \$100 million. Eventually he landed in the crosshairs of the FBI. In June 2020, local police raided his Dubai penthouse and shipped him to the U.S., where last summer he pleaded guilty to money laundering related to scams that brought in close to \$24 million. This July, he'll face a sentence of up to 20 years in federal prison.

The announcement of Abbas's plea contained a more explosive revelation, however. The U.S. government alleged that one of the influencer's fellow conspirators was a man sworn to uphold the law: Abba Kyari.

yari was born in Gombe, a town in northeastern Nigeria. His dad, a teacher, raised 30 children in a polygamous family, and Kyari was the eldest. "I handled so many cases whenever my siblings had any problems with one another," he later said in one Instagram post. "I started my detective work in my house." After earning a university degree, he graduated from the police academy in 2002 and in eight years rose from street officer to commander of a SARS unit in Lagos. He earned a reputation for risky and aggressive operations against some of the country's most notorious criminals. By 2016 he'd been plucked to head the Intelligence Response Team, an elite unit created to combat a nationwide kidnapping crisis. He was Nigeria's youngest high-ranking police official.

As a commander, his exploits were legion. He'd arrested the masterminds of the deadliest robbery in Nigeria's history and captured the country's deadliest kidnapper, nicknamed the Vampire. He'd nabbed bombers and arms dealers and taken on the terrorist organization Boko Haram. "It's very important to send a message to the criminals," he said in a BBC documentary on his efforts to stem kidnapping. "Kyari and his people will follow you wherever you are, and they will never forget."

Perhaps most famously, in March 2016, Kyari and his men took over the case of three girls snatched by a gang of kidnappers from a school in Lagos and held for six days. His team reportedly used intelligence from the kidnappers' families to track them down and recover the girls unharmed. The operation earned him a presidential medal of courage. "He has become known as the saving grace of the Nigeria Police," declared the online news outlet the Eagle. By 2019, Kyari was widely rumored to be in line-and angling-for the job of inspector general, the top cop.

HUSHPUPPI/INSTAGRAM (1); ABBAKYARI75/INSTAGRAM (3)

succeeded at this point, but why not try for more?

Beneath the accolades, however, was a disquieting undercurrent. "We had been concerned about the rogue activities of both SARS and the Intelligence Response Team under him," says Okechukwu Nwanguma, executive director of the Rule of Law & Accountability Advocacy Centre, a police watchdog group. Kyari's teams, Nwanguma says, "were involved in all manner of criminal activities: obstruction, abduction, intimidation, torture, killings." Another humanights advocate, who spoke on condition of anonymity for fear of retribution, detailed years of interviews with arrestees who accused Kyari's officers of abuses.

Under Kyari's direction, both men allege, his teams routinely targeted businesspeople for arrest, extorted money from sus-

pects and their families, and in some cases committed extrajudicial killings. In a decade of tracking Kyari, Nwanguma says, he was rarely able to collect enough evidence from intimidated victims to challenge the police. But he estimates that there were hundreds of other cases of abuse: "They would just abduct somebody



and say, 'We are investigating somebody—we saw your name in his phone.' And they take the person."

In one incident in 2015, SARS officers under Kyari were accused of torturing and killing an innocent car dealer in Edo state, in Southern Nigeria, and using the dead man's ATM card to clean out his bank accounts. Five officers were later convicted for the murder. In 2017 a lawyer for a kidnapper whom Kyari had arrested publicly suggested the officers had extorted money and jewelry from the defendant. A year later the widow of a kidnapper who'd been killed in a gun battle with police accused Kyari's crew of appropriating her late husband's assets. In mid-2019 a judge ordered Kyari and his team to produce a suspect whose lawyer couldn't find him and believed he'd died in custody.

All these accusations rolled off Kyari, who didn't respond to calls and messages seeking comment for this story. He continued to rack up arrests. His Instagram post on Dec. 14, 2019, showed him accepting an award from a Nigerian bank security group in Lagos. In a post from Dec. 17, he stood in front of a group of prisoners seated on the ground, identified in the caption as "72 Notorious Kidnappers/Armed Robbers/Car Snatchers."

U.S., that Hushpuppi joined a scam already in progress. This con was more old-school than the business email compromise schemes he was a part of. It was a high-level version of a basic advance fee scam: Pay us a little up front, the scammer says, and we'll guarantee you a huge windfall later. The upfront asks keep coming, and the windfall never arrives.

In this case, the day before his purple Rolls post, Abbas received a message from a Kenyan entrepreneur named Abdulrahman Juma. According to prosecutors, Juma offered to include Abbas in an advance fee scam with an eager mark:

a businessperson hoping to build an international school in Qatar. The businessperson, whose name and nationality remain sealed in federal court, needed a \$15 million loan for the project and hired a financial adviser to help secure it. Unfortunately, the adviser's assistance amounted to Googling sources of multimillion-dollar loans. That search led to Juma and his Nairobi company, Westload Financial Solutions Ltd.

Westload's website promised "financial solutions specialize in financing projects from inception right through operations." That the site was riddled with errors, including occasionally referring to the company as "West Financial," failed to raise any red flags. In November 2019 the businessperson traveled to meet Juma and a colleague at Westload's offices, on the sixth floor of a modern glass office tower in Nairobi's business district. There, according to the U.S. government's allegations, Juma signed a contract to arrange the \$15 million loan in exchange for a \$164,000 upfront "consultancy" payment (the advance fee). The next day the businessperson sent the upfront fee to a law firm of Juma's choice. Neither Juma, Westload, nor the law firm responded to emails and calls seeking comment.

The scam had already succeeded at this point, but why not try for more? When the businessperson complained that the money hadn't arrived in his account in Qatar, Juma said it was stuck and it would take an additional \$150,000 to release—essentially, a second advance fee. Once again, the businessperson paid up, no doubt hoping it was the final key to the supposed loan.

At this point, according to the court documents, Juma engaged Abbas to help with yet another round of the con. Abbas would pose as a bank manager in the U.S. who could unstick the loan. Via WhatsApp, Abbas messaged the businessperson from a New York City phone number, introducing himself as "Malik," the "director of the bank responsible for crediting you the funds." He said that because the Qatari government was under U.S. sanctions, the money would have to go through an American account (which was true enough), and he'd be happy to create one.

And so he did. First, Abbas arranged for a contact in Los Angeles to register a company with the same name as the businessperson's Qatari company. Then he had a Wells Fargo account opened for the business. There was just one last obstacle, "Malik" now told the businessperson: They'd also need an account in the U.K. to receive the money. He said he'd open an "investor's account with our private banking service over there" for an advance fee of \$330,000.

After a week of hesitation, the businessperson wired \$230,000 of the total to a bank "Malik" provided. As it happened, the account belonged to a watch dealer in Florida, and the amount exactly covered a rose-gold and titanium Richard Mille RM 11-03 that Abbas had coveted. "Malik" had the businessperson send the other \$100,000 to a Capital One account held by another Abbas associate. Abbas



"I want him to go through

■ used half of it to purchase bogus citizenship from St. Kitts and Nevis—a transaction that involved bribing a government official and faking a marriage certificate.

A week later the watch made its first appearance on Hushpuppi's Instagram feed. In the image he was standing on the royal purple carpet of the Palazzo Versace Dubai, sporting a Gucci Mickey Mouse T-shirt, his Richard-Mille-clad arm held lightly across it. "One of the best things I learnt that keeps me going," he wrote, "is to 'Never take criticism from people I'd never go to for an advice'" #Gucci #RichardMille #Versace #Rm1103."

By January 2020, according to prosecutors, Abbas and Juma were ready for another go. Abbas called on a compatriot in Nigeria, Vincent Kelly Chibuzo, to create a bogus Wells Fargo website and automated support line, which "Malik" passed on to the businessperson. When he called the phone number, the system said the \$15 million had come through. "OMG, I can't believe it, its true," the businessperson wrote to "Malik."

The group's next story was that the businessperson owed a "withholding tax" of \$575,000 to get the money from the U.S. "Are u proud of me or no?" Abbas asked Juma, by text, when

they'd enacted the next phase.

"It's a perfect job bro," Juma replied.

Perfect, but for one flaw: Chibuzo, according to the allegations, began complaining that he deserved a bigger share of the spoils. When Abbas ignored him, Chibuzo decided to strike out on his own. On Jan. 13 he called the businessperson directly and told him both Juma and "Malik"

were "fake." The businessperson should stop paying them, he said. They should pay Chibuzo, instead: It was he who could actually free up the loan.

The now-baffled businessperson relayed all this to Juma, who forwarded it to Abbas.

Abbas replied that he would "deal with" Chibuzo. A few minutes later, according to the complaint, he called Kyari.

went back to at least the previous September, when Kyari paid a visit to Dubai for unknown reasons. The origins of their relationship are murky, but according to court documents, Abbas loaned Kyari a car and driver for his stay. A few weeks later, Kyari sent Abbas a slideshow of photos from the trip and an article about his recent arrest of a kidnapper. "Am really happy to be ur boy," Abbas responded. "I promise to be a good boy to u sir." Unusually for the two prolific Instagram users, both fond of being seen with other famous people, neither ever posted about the other. Whatever the nature of their connection, it wasn't something they wanted to publicize.

Now, in January 2020, it seemed Abbas was looking for help in neutralizing his scam partner gone rogue. Moments after reaching out to Kyari about Chibuzo, Abbas updated Juma. "Setting him up already," he messaged. In a message to Chibuzo, he was more explicit. "U have committed a crime that won't be forgiven," he said. "In due time I swear with my life you will regret messing with me, you will even wish you died before my hands will touch you."

By Jan. 20 it appeared his threat had been fulfilled. Kyari sent Abbas a headshot of Chibuzo looking despondent. "We have arrested the guy,"



he wrote. "He is in my Cell now. This is his picture after we arrested him today."

"I want him to go through serious beating of his life," Abbas responded. He explained how Chibuzo had double-crossed him in the scam, attempting to "divert the money" to himself.

"Ok I understand," Kyari replied.

"Please sir I want to spend money to send this boy to jail, let him go for a very long time," Abbas continued. "Let me know how I can send money to the team sir, let them deal with him like armed robber.... I want him to suffer for many years."

Kyari texted a Nigerian bank account number to Abbas. According to prosecutors, this step completed the crime, making Kyari and his team cops for hire, paid to commit a false arrest.

The same day, a photo on Kyari's Instagram showed him at a press conference, standing by the podium for the announcement of the arrest of 60 kidnappers. "Nigeria Police will Never relent," the caption read, "in the fight against these deadly Criminals."

advance fee scam continued. The businessperson, perhaps so confounded by the dizzying back-and-forth that he was able to internalize only half of what Chibuzo had said, confessed to "Malik" that Juma had taken him for more than a million dollars. "I know that you think I am stupid, but I trusted him and now I'm going bankrupt," he said.

"Wow," came the reply. "Over one million?"

"Malik," naturally, offered to help, telling the businessperson he could get him out of the mess for a fee of \$180,000. He would also report Juma to the FBI, he said. He didn't, naturally, but now the partnership was falling apart. It was every man for himself. Juma complained to Abbas that the businessperson was calling his office and accusing him of being a scammer. Abbas replied that Juma had only himself to blame. Juma hadn't found a way to keep the story going, but Abbas had. "That's what happens when u leave a client hanging, u take the money and no follow up," Abbas said. "Gives the client time to think and involve people."

After Chibuzo had been in custody a month—including time in the hospital for a painful rash he'd acquired in jail—Kyari allegedly messaged Abbas to say that Chibuzo's girlfriend had offered a bribe for his release. "They were thinking it's normal arrest that is why they think money can remove him," Kyari wrote. "No money can remove him here. Hahahaha." Nonetheless, a few days later, Abbas messaged Kyari that he was free to let him go. Chibuzo was finally freed, presumably frightened into silence. Neither he nor his girlfriend, whose name wasn't disclosed

HUSHPUPPI/INSTAGRAM (1); ABBAKYARI75/INSTAGRAM (2)

serious beating of his life"

in the court documents, could be reached for comment.

The scam reached its final turn in March 2020, after Abbas had extracted an additional \$180,000 in transfers, for a grand total of \$1.1 million in advance fees. "Sorry Mr Malik," the businessperson wrote in a final message, "but I'm not gonna pay more and I'm out of this game." He had finally put it together that "Malik" and Juma were "all one team."

Abbas's time in the game, too, was coming to an end. Three months later, after midnight on June 8, armed officers from a Dubai SWAT team stormed his penthouse and arrested everyone inside. Within a few days, Abbas was on a plane to the U.S., in FBI custody for his role in other, more complex email scams.

If Kyari was concerned, he didn't note it publicly. His own rise appeared to continue unabated. Three days after Abbas's arrest, the National Assembly presented Kyari with a special commendation for outstanding service. "In spite of the image of the police in Nigeria," the speaker of the House of Representatives noted, "the House recognizes that some police officers are exceptional."

In his own personal image-making, Kyari's Instagram showed him drifting a bit further toward Hushpuppi's scene. In October 2020 he was pictured in his office with the Nigerian pop star Davido, once a friend of Hushpuppi. The following July, Kyari was spotted at the funeral of the mother of Obinna Iyiegbu, a nightclub owner popularly known as Obi Cubana, who'd been questioned as part of both drug and fraud investigations. (Cubana has not been charged in those investigations.) Cubana, Kyari noted on Facebook, was "a brother and a good friend."

Then, on July 28, 2021, the U.S. Department of Justice announced that Abbas had pleaded guilty to money laundering. The same day, the Justice Department revealed that it had indicted Juma, Chibuzo, Kyari, and three U.S.-based defendants on charges of conspiring to commit fraud and money laundering. Juma, Abbas, and Chibuzo were accused of directly fleecing the businessperson, while Nigeria's Super Cop was alleged to have aided the conspiracy by jailing Chibuzo in exchange for a bribe.

National ligeria's largest news outlets splashed the Kyari allegations across their front pages and broke down Abbas's scam in minute detail. "How Hushpuppi bought Richard Mille wristwatch worn on Instagram," read the headline in the newspaper *The Punch*. "The indictment from the U.S. court came as a shock to everyone," says Rommy Mom, the member of the Police Service Commission. "This is someone who

had been decorated from the top."

Not everyone was shocked, of course. Nwanguma, of the Rule of Law & Accountability Advocacy Centre, says he and his peers felt vindicated. In the police force, he says, "there are quite a number of good people, but the system is so corrupt that it breeds and encourages



people. It provides them the environment to commit crime and get away with it."

As befits a celebrity cop, Kyari turned first to social media to defend himself. He posted a long Facebook message, since deleted, claiming that he'd only assisted Abbas in investigating threats against his life. The bank account numbers he'd supplied Abbas, he explained, were for payments to a seller of "native clothes and caps." Kyari had facilitated the transaction, he claimed, after Abbas had admired them on his Instagram page.

The Police Service Commission suspended Kyari from the force, pending an investigation by the inspector general of police. After the commission received an initial investigative report in December, it determined the report had "gaps" and demanded further digging. "We should wrap this up before April," Mom, the commission member, said in an interview in early February. He said the commission has faced no pressure from police higher-ups and that its decision will be made independently.

Juma is in custody in Kenya, awaiting a judge's decision on extradition, and Chibuzo's whereabouts are unknown. For months, whether Kyari will be extradited to the U.S. has remained an open question. "To the best of my knowledge," Mom says, "I don't think there has been any extradition request filed." The U.S. Department of Justice Office of International Affairs, which handles extraditions, declined to comment on the state of Kyari's case. But one Justice Department official insisted that Kyari's was more than simply a "name and shame" indictment. In a TV interview in early February, the Nigerian attorney general allowed that there was "prima facie reasonable grounds of suspicion" for prosecution, and that Nigeria was in contact with the U.S.

Even facing potential disgrace and extradition, Kyari seemed unable to avoid the spotlight. At the end of January he posted photos to Instagram and Facebook from the wedding of the son of the inspector general of police—the person in charge of investigating him. Cubana, the nightclub owner, was there, too. After a media uproar, Kyari deleted the posts.

Then, on Valentine's Day, the National Drug Law Enforcement Agency in Nigeria announced that Kyari was suspected in another major crime. The agency alleged that in late January, while supposedly suspended, Kyari had contacted an NDLEA officer saying he and his IRT team had confiscated a 25-kilogram shipment of cocaine. Over several conversations, Kyari allegedly suggested that they join forces to keep and sell most of the seizure, leave some for the prosecution, and split the proceeds. "The boys are very, very sharp, they are very loyal," he allegedly said of his team. "I do take good care of them."

The NDLEA officer reported the approach and, outfitted with a wire, collected the money from Kyari. When Kyari then failed to show up for questioning, he was declared a wanted man. "With the intelligence at our disposal," the NDLEA said in its statement, "the Agency believes strongly that DCP Kyari is a member of a drug cartel that operates the Brazil-Ethiopia-Nigeria illicit drug pipeline."

Late on Feb. 14, the Super Cop was taken into custody. **3**



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aston Rossato sold his first car, a 1981 Toyota Corolla he'd purchased from one of his South Florida neighbors, when he was just 9 years old. "He was asking \$200 for the car. I offered him \$100," Rossato says. "He laughed at me."

But Gaston returned to the neighbor's house with his father, Lucas, who ran a local used-car dealership. Lucas lent his son the money for the transaction and later let him

use his lot to resell it. "We made 100% profit. And I bought the bike I always wanted, a GT Performer," Rossato says. He was hooked.

Rossato started his collector car dealership, the Barn Miami, in 2013, buying and selling underappreciated specialty vehicles out of a rented one-car garage. Although his father still works with him as an adviser, Rossato, now 37, has seriously upgraded. His shop occupies a 10,000-square-foot standalone warehouse building in Doral, with acid-stained, polished concrete floors. In a lofted, clubby lounge perched above the showroom, a picture window overlooks more than \$6 million in inventory, including Ferraris, Alfa Romeos, Porsches, Mercedes-Benzes, and Volkswagens.

The dealership's name came as a surprise Valentine's Day domain registry from Rossato's wife, Nicole, to evoke the idea of "barn finds" in vintage car collecting. The business has developed a dedicated customer base, many of whom return to buy or sell multiple vehicles. These automotive aficionados—including Gen Xers and millennials, people of color, and women—flock to on-site events celebrating car culture, such as lectures and discussions, and regional unveilings of new models from exotic automakers.

In general, people despise going to a car dealership. In fact, a 2016 survey from since-shuttered online car sales startup Beepi reported that a majority of Americans felt anxious, uncomfortable, or taken advantage of at a dealer—and that feeling was more acute for younger car buyers. One-quarter of millennials said they'd prefer to wait in line at the DMV or do their taxes. A similar proportion of Gen Xers said they'd rather get a root canal than visit a car dealership.

Consumer surveys from automotive sales consultant Kelley Blue Book found that satisfaction with the car buying experience hit its highest levels during the pandemic, as lockdowns and shifts in technology and behavior moved more of the process away from dealers.

"The worst thing is to go to a car dealership," says Emmanuel Laroche, a 42-year-old spice importer in Bayview, Fla., who's a repeat customer of Rossato's. "When I was looking for my 1974 Alfa Romeo GTV, I met with other dealerships. But they were pushy. Gaston was very easygoing. I went to see him, and we talked for an hour, just conversation. I felt like I could trust him."

These qualities are key for car buyers, especially those



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interested in the vintage automobile category, where prices have soared in recent years and competition can be fierce. Many new collectors go to online car auction sites Bring a Trailer, Hemmings, and Cars & Bids. All of them have a knowledgeable commentariat offering advice and criticism, and there's no direct pressure from a seller. These sites are also able to offer huge arrays of cars, because they aren't constrained by the need to hold a physical inventory.

The Barn is in a rare category of trusted in-person dealers, such as Hyman Ltd. in St. Louis and Autosport Designs Inc. on New York's Long Island. The latter two have decades of experience and a client base of connoisseurs who allow them access to some of the most exclusive cars.

"It isn't just about the car. If you have a great dealership experience, you will come back," says Ivan Drury, senior manager of insights for automotive research firm Edmunds.com Inc. "I know people who are repeat buyers, who are even loyal to salespeople—especially if they're kind and truthful and answer questions quickly. If you've earned someone's trust, that's a major accomplishment."

Rossato has built his business on these principles. If he doesn't have the exact car a client wants, he'll help them find it and broker a deal. "We have a strong network of current and former clients and other dealers. And we know where certain cars are—cars that aren't even officially on the market," he says. "If we don't know, we know what doors to start knocking on first."

He'll even travel with clients to check out a car he isn't officially selling to help them complete their due diligence. (For top clients, this is a free service. For strangers, Rossato says, "I'd need to charge for my time.")

When clients come to his shop to view a car they're interested in, he gives them the royal treatment. "We pull out the manuals for the car, the historical documentation, whatever we have for them to review, comfortably," he says. "And we put the car they're interested in right under a triple-spotlight setup that we built out in the showroom, and put them upstairs at the glass wall, looking down on it. It makes people feel special."

It helps that the Barn features compelling inventory. Aware

of the trends in the collectible car hobby—wherein each succeeding generation purchases the cars that were imprinted on them in their youth—Rossato specializes in "young-timers," cars from the final decades of the 20th century. "The market defines the kind of cars we offer, and a lot of that today is up-and-coming, '70s, '80s, '90s cars," he says. "But we try to have a nice variety. Not all blue-chip, not all entry-level."

His inventory thus ranges from the mid-five-figures, like a \$30,000 1979 VW Beetle Convertible or a

\$55,000 1980 Land Rover Range Rover Classic, to those in the low-seven-figures, like a 2005 Ferrari 575 Superamerica or a 1958 Mercedes-Benz 300SL Roadster, both \$2 million.

Knowing his target demographic craves community and experiences, he's made his dealership a place for clients and potential clients to gather and ogle the merchandise. Rossato has hosted events on-site for Ferrari, for classic car insurance company Hagerty, and for Italian automotive design house and exotic carmaker Pininfarina. For the past five years he's organized a weekly Sunday morning "Cars and Coffee" meetup at a cafe in the Wynwood Arts District. And he launched AutoKultur 305 Social Club, a lecture series held at local breweries featuring discussions with automotive experts.

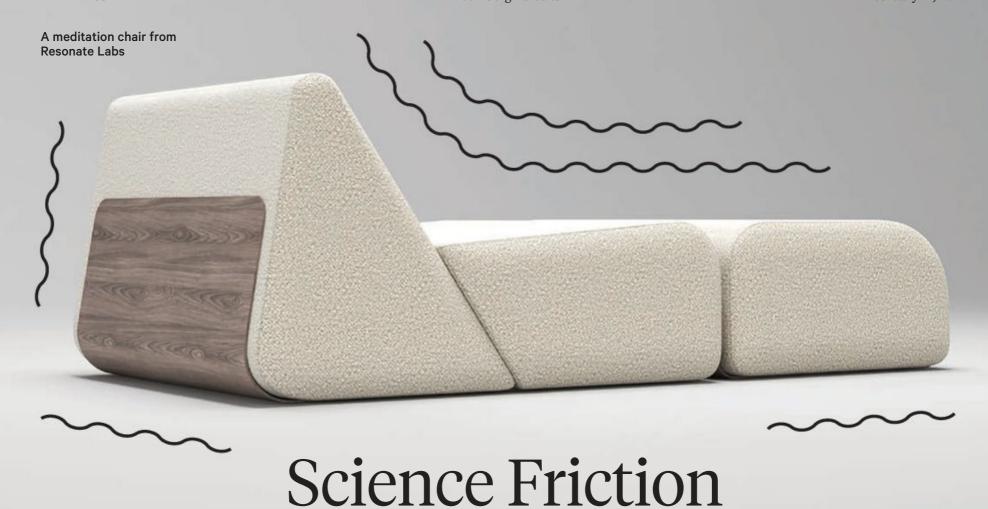
He's also expanding his online presence. The Barn Miami has more than 100,000 followers across its social media platforms, including YouTube, where he and his brother Renzo—who works in client relations for the business—discuss and drive the latest acquisitions. ("We always get the Property Brothers thing," Rossato says. "They call us the Car Brothers.")

His website lets customers browse inventory—with over 100 high-quality photos of each car—contact him, and even complete their purchases. "About 60% to 70% of our business is transacted virtually," he says. "Many times we don't even speak to the person. Though we might FaceTime, or send videos—walkarounds, or startup and driving videos."

Again, this meets his target cohort's needs. "Millennial buyers are looking for the idea that you can get things done almost entirely online," Drury says. "And they want a dealership's website to truly align, to be just like what you'd see if you walk into the showroom."

Rossato's expansion plans include moving further upmarket. "There's nothing like a mid-'60s V-12 Ferrari. I've never sold a 250 GT Short Wheelbase," he says, referring to a highly collectible model that currently sells for \$7 million to \$9 million. "That would be really satisfying."

This wouldn't surprise his long-term customers. "I've seen him grow exponentially in his reputation, in the size of his space, in the type of cars he's dealing with," Laroche says. "He's just doing everything right."



The latest massage-chair technology can make you feel like you're in the captain's seat of the *Starship Enterprise By Brin-Jonathan Butler*

I was waiting to catch a return flight to New York in the Madrid-Barajas airport last September when my fiancée and I spotted arguably the greatest available nonalcoholic and non-duty-free use of our last €30: the robotic massage chair. It wasn't conspicuously high-end. The machine functioned primarily as an added amenity at a low-rent, overpriced "wellness" smoothie stand.

But a funny thing happened. It was the greatest massage of either of our lives. The massage was such a revelation, it even replaced my regular anxiety about flying with befuddlement: Why do Americans get offered options like this only as an afterthought or a sneaky treat at a shopping mall Brookstone?

The first commercial robotic massage chair was produced in 1954 by the Family Fujiiryoki Co. in Japan. Almost 70 years later, according to several surveys conducted there, more than 1 in 5 Japanese households currently own one.

It's a different story in the U.S. As we enter Year 3 of the pandemic, almost every massage parlor I encounter is packed with New Yorkers risking Covid-19 exposure to enjoy the benefits of a masseuse's hands. The U.S. massage therapy market has grown to be worth \$18 billion, according to the American Massage Therapy Association, a trade group. More than 90% of American consumers think massage is an effective way to reduce pain, and an unprecedented 83% agree that it should be considered a form of health care.

Despite these figures, I've not only never met a person

who owns a massage chair—I've also never met anyone who's *heard* of anyone owning a massage chair.

So I reached out to Dr. Scott Weiss, a physical therapist, registered exercise physiologist, and board-certified athletic trainer in Manhattan, to help me test two of the hottest options: the Pharaoh SII (retailing for \$10,000, it's decked with genuine leather and offers a "patented and clinically proven brain massage") and the Phantom II (at \$9,000 it has synthetic leather but includes a "zero gravity" feature that distributes "gravitational pressure by weightless positioning of the body").

They're both from Bodyfriend, a global health-care technology group established in South Korea in 2007. The brand claims a 70% market share, making it the largest luxury massage-chair provider on the planet. Celebrity endorsements are key: In early 2020 the members of K-pop's BTS were named Bodyfriend's promotional models; apparently, Paris Hilton and her mother, Kathy, are also enthusiastic owners. Changjoo Kim, chief executive officer of Bodyfriend North America, says Cedars-Sinai Medical Center in Los Angeles recently ordered 20 chairs to help patients treat and recover from chronic pain.

True to its inspiration, the Pharaoh SII does immediately offer the benign feeling of being entombed in a massage sarcophagus. Both it and the Phantom II have 24 programs to choose from, but my favorite was the three-step leg unit. It offers a calf roller, designed to reduce swelling; an air massage that kneads both sides of the calf; and a sole roller that

"aggressively targets acupoints" on your feet. I'm not much of a foot massage person, or a runner, but this gave a lot of intelligently distributed pressure. My least favorite? That "brain massage," which piped a frenzy of music into my ears that sounded like a cross between a 1998 cellphone ringtone and an on-hold, Soviet-era elevator Muzak track.

Overall, though, the massage was completely satisfactory. One of the major advantages of a robotic chair over a human massage, I realized, is consistency. Once you find the setting you're looking for, the chair produces what amounts to four or five people's worth of hands, all working at exactly the intensity and pace you require with no variation.

"There are a host of populations who could substantially benefit from the device," Weiss told me afterward. "Patients with ambulatory limitations, peripheral vascular disease, chronic pain, certain autoimmune disorders." The problem, he continued, is that the interface is not very intuitive, which makes it challenging to control the massage. Maintenance and upkeep, likewise, could be costly on top of an already steep price. "And in your average New York apartment," he said, "its footprint would take up a solid chunk of space."

Since I was after the revelatory feeling from the airport, not mere satisfaction, I trekked down to a SoHo office the following week to test another option, the \$3,000 vibration-, sound-, and light-guided meditation chair from Resonate Labs Inc. The unassuming, pleasant-looking gray lounge chair seemed more

like a place to peacefully drift off with a book against your chest than anything that might technologically blow you away.

But it did. I was given a pair of padded goggles, headphones, and a weighted blanket, and I simply lay back. The chair began to gently rumble, and suddenly I felt as if I was in a womblike sensory deprivation chamber, transported to a benevolent alien world devoted to bathing me in tranquility and serenity. The darkness of my goggles gave way to a ribbon of flickering rainbow lights, a journey that vaguely reminded me of Stanley Kubrick's stargate sequence at the end of 2001: A Space Odyssey.

The Resonate device was invented by biomedical engineer Emmy Bush and Daniel Lennon, a former Navy pilot. Resonate closed a \$5 million seed financing round with early strategic investment led by Point72 Ventures' Steve Cohen, who's also helped fund psychedelic and mental health research elsewhere. But I didn't have to chew on any nasty fungi to achieve an otherworldly sense of calm and relaxation. The 20 minutes I spent in the chair brought immediate relief from my stress and soreness. Every ache was attended to by sophisticated patterns of vibrations channeled across my body.

In 12 years living in New York, I haven't met many people who are not waging a bitter war against all the predictable sources of anxiety and annoyance that a fast-paced big city dishes out. As I let myself back out onto the street, I thought, "If this chair can make it here, it can make it anywhere."





PHARAOH SII

Sturdy as a pyramid and futuristic in a Captain-Kirk-on-steroids way, the \$10,000 chair has 24 programs, including a 4D massage in which four rollers cover an area from various angles to provide, in theory, a "dynamic massage experience." A Zero Wall feature saves about 2 feet of clearance when reclining. Weiss responded to its warming mode, which helps the muscles be more pliable during treatment. Just skip the brain massage.





Inspired by first-class airplane seats, this is Bodyfriend's topselling luxury chair. The SL-Track feature delivers a roller-based massage from your neck to the back of your thighs. A 20-minute "stretch" program involves a lot of intense boa-constrictor-like squeezing of forearms and calves. The \$9,000 chair offers an unmistakably soothing effect, but the results didn't really improve meaningfully beyond a base line of general comfort.

RESONATE

A combination of light therapy, soothing sounds, and vibrations unlocks a level of restfulness I thought you could only get from a hot spring in the dead of winter. Its technology is built on the science of neural entrainment, in which rhythmic auditory stimuli enhance your brain activity. Best of all? You won't want to hide this unobtrusive, modern-ish piece of furniture in the garage—perhaps helping to justify the \$3,000 price tag.

The Right to Bare Arms

Spruce up your look this spring with an updated take on the sturdy vest By Matthew Kronsberg Photographs by Naila Ruechel

The fleece vest has become such a standard accessory for office-bound tech and finance workers that it verges on parody. Since 2017 the savagely hilarious Instagram account Midtown Uniform has been vest-shaming its Patagonian ubiquity as well as the choice of colors that range from navy blue to, well, royal blue.

But guys still love them, says Patrick Kenger, whose Pivot Image Consulting styles male clients who are often in tech and entrepreneurial fields. "It's the perfect middle-ground piece," he says. "You could have a button-up shirt and some dress trousers and throw that on, and it would look appropriate. They absolutely have a place in 2022 menswear." Even puffer vests, such as the faded orange Pinewood version worn by billionaire investor Josh Aaronson on *Succession*, are still in style. "Those never really went anywhere," Kenger says. Quilted gilet-style versions from preppy brands Barbour and Todd Snyder, he says, remain popular as well.

In an office context, vests can function as more than just an accent piece, according to Joseph Rosenfeld, the bicoastal "chief style geek" who counts finance and tech executives among his clientele. "What's important from a personal-style perspective—especially for people who are on the make, looking to raise their profile—is that the vest helps to bring attention back to the wearer's face" as opposed to, say, a tie, he notes, which draws the eyes downward. "There aren't a whole lot of choices that guys can make," he continues, other than to decide whether to wear a blazer.

The styling and fabric of a vest can project power in different ways, however: Lapels, like the ones on the Tom Beckbe version at right, "project authority, full stop," Rosenfeld says. Smoother garments—think suiting material—exude formality. Softer materials such as merino wool, mohair, and cashmere have what he calls "receding" authority. "It's about being more ooshy gooshy."

And let's not overlook vests' purely practical value: They're warm, especially in chilly workplaces, and serve as ideal transitional pieces from winter to spring, and from remote-work to in-person meetings. Here are six styles to consider.



BARBOUR

"A lot of guys use color as a crutch," Kenger says, but you can still make a statement in navy. Look to subtle patterns, like the diamond one on this Winterdale gilet, to add a bit of pop. A corduroy-lined collar that buttons all the way up and front pockets that open on the top and side provide multiple options for warming up. \$230



TOM BECKBE

A classic quilted design can appeal to someone younger, Rosenfeld says, "as a way of being able to make themselves appear more mature." This option is windproof and water-resistant, and the 2½-inch stand-up collar is lined with soft corduroy. The almost invisible side pockets have a subtle elegance as well. \$180



FTON

Luxurious technical fabric defines this vest. The cotton-nylon blend, available in seven colors (brown, here), is water-repellent and offers the silky feel of a Members Only windbreaker. The band collar has a retro style, too, offset by a two-way zipper design that provides more room at the hem for long days behind the desk. \$255



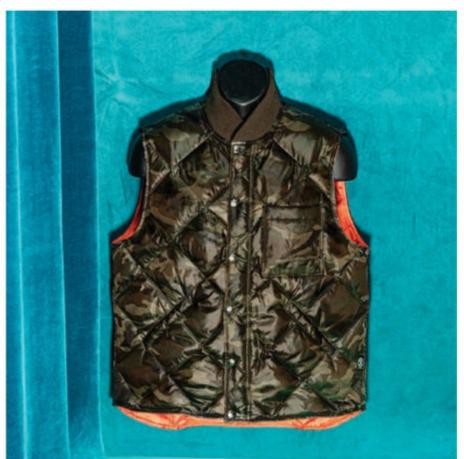
MONCLER

The French brand has formed a partnership once again with London designer Craig Green for its new collection, available in stores beginning in March. The designer has said the clothes are made for being in nature, encouraging wearers to be outdoors. The light down-filled vest has vertical quilting in recycled nylon. \$1,250



SPIER & MACKAY

Made of water-resistant flannel, this check-print vest is elevated with style details including faux horn buttons and a curved breast pocket. "It doesn't feel like you're going hiking with this," Kenger says. "You're not going to do something incredibly outdoorsy. It looks like it belongs with a collared shirt." \$248



TODD SNYDER

This vest in camouflage isn't so much designed for huddling in a duck blind as for hunting new revenue streams. "A little bit of a pattern is always a nice idea," Kenger says. And it will keep you comfortable: The diamond-quilted nylon is down-filled, and the hand pockets are lined in flannel. The chest pocket is also a cool touch. \$298

Colazione of Champions

Ferran Adrià's latest doorstopper traces the evolution of the first meal of the day By Howard Chua-Eoan

I was never a fan of breakfast. To me it's always been a sign of weakness, that your body can't stand to wait until lunch or later for nourishment. Instead, I follow the fashion for intermittent fasting-I go 16 hours without ingesting calories, and make up for it with huge dinners at restaurants I love.

It was, therefore, with equal parts disdain and fear that I looked through Italian Breakfast from Ferran Adrià's Bullipedia project. Disdain for the reason above; fear because it would be foolish to spar with his laser-sharp culinary intelligence. Would he change my mind?

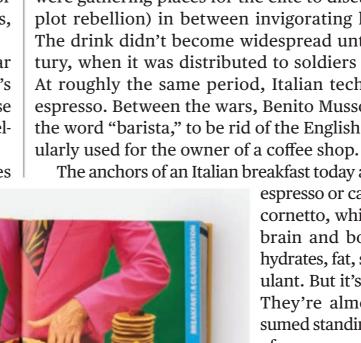
The book is seductive. There are lots of witty images

among its 416 pages, including a portrait of Adrià as a mad scientist that appeared in a 2014 calendar for Italian coffee empire Lavazza. (The chef has collaborated with the brand for years and describes this guide as "joint study and research work.") The picture is a reference to his culture-changing restaurant El Bulli, the gourmet Shangri-La on the Catalan coast, which he ran for close to a quarter-century.

Initially, the book's history of breakfast reinforced my predilections. Human beings,

it turns out, do not come naturally to the meal. Prehistoric and pre-urban people ate when they could, mostly in the latter half of the day. The great civilizations of Greece and Rome had little that fit the description of the meal we consume regularly today. The morning meal was reserved for the old and ill or the newborn and growing-or for people heading out to work in the fields. Basically, you ate breakfast if you had to.

That all changed in the sixth century, when St. Benedict of Nursia (no, not the originator of the egg dish) set out his rules for monastic life. These included the morning reading of the life of desert hermits, mostly from a book by John Cassian



A spread from Italian Breakfast (Phaidon, \$125)

called Conlationes. Meaning "conference" in Latin, the word eventually became the Italian name for breakfast, *colazione*. This perspective is distinct from, say, the French and Spanish, where the words *dejeuner* and *desayuno*, respectively, derive, like the English word for it, from the concept of an end to hunger. Colazione percolates with community and conversation.

In the ensuing centuries, European prosperity transformed breakfast. Wealthy families who once looked down on eating in the morning began to use the occasion to display their riches. Sweet treats became status symbols, because sugar was a luxury, as was chocolate. The buttery croissant, according to legend, was invented in Vienna (some say Budapest) after the Habsburgs faced down the invading Ottoman army in 1683. Its Italian doppelganger, the cornetto, emerged soon after. Cappuccino was introduced that year, too-along with the opening of the first coffeehouse, in Venice—and thus began an unending affair with a beverage introduced by the Turks.

These novel elements required money. Coffeehouses were gathering places for the elite to discuss politics (and plot rebellion) in between invigorating hits of caffeine. The drink didn't become widespread until the 20th century, when it was distributed to soldiers in World War I. At roughly the same period, Italian technology gave us espresso. Between the wars, Benito Mussolini introduced the word "barista," to be rid of the English "barman," pop-

The anchors of an Italian breakfast today are coffee-either

espresso or cappuccino-and a cornetto, which kick-start the brain and body with carbohydrates, fat, sugar, and a stimulant. But it's more than that. They're almost always consumed standing at a bar as part of a communal yet commercial experience, one that is on the go but rooted in sociability.

That's the sly proposition of Italian Breakfast, which is both a meditation on and an examination of the business, management, and human dynamics involved in the variety of breakfasts in Italy. It's distinct from

homebound versions in the U.S., with their out-of-the-fridge and -cabinet meals, or the protein-rich repasts of the U.K.

While I was reading the book, I realized that I do eat in the morning. Here in London, the workday prevents me from doing it first thing, but around 10:30 or 11 a.m., I head up to Catalyst Roasters & Cafe on Gray's Inn Road, where I sit with a croissant and plain black coffee, making conversation with the baristas Luke, Millie, and Kofi; the owner, Alex; and Alex's brother Haris, the roaster. After soaking in the atmosphere and company, I head back to work. It isn't breakfast. It's colazione.

And then I skip lunch. **B**

Full Circle

A connected watch from TAG Heuer comes with updated technology and a smaller size. *By Chris Rovzar Photograph by Sarah Anne Ward*

TAG Heuer released its first smartwatch in 2015 with the goal of serving the same elevated aesthetics found in its mechanical timepieces. Since then the sports watch behemoth has offered updated versions and apps catering to active types, particularly a golf tool that provides course maps, distance measurements, and scorekeeping. On Feb. 10, Chief Executive Officer Frédéric Arnault (son of Bernard Arnault, the CEO of parent company LVMH) announced the Connected Calibre E4 in two sizes: a 45-millimeter starting at \$2,050 and a 42mm for \$1,800 (pictured). The smaller size is for those looking to make a more modest statement—though it doesn't offer the battery life of the 45mm, which can go a full day (including five hours of golf tracking) before needing a charge.

THE COMPETITION

- The ruler in this space is the Apple Watch, which runs on the brand's intuitive iOS, has excellent screen resolution, and is available in 41mm or 45mm sizes. It comes in a number of case metals and an almost endless choice of straps. Hermès models (as much as \$1,759) allow you to be as luxurious as you like.
- TAG sister brand Louis Vuitton released the \$3,450 Tambour Horizon Light Up Watch this year, at 44mm with a colorful glowing bezel and proprietary operating system.
- Montblanc's Summit series (starting at \$725), like the TAG, operates on Wear OS by Google. The smartwatches come in an array of handsome metal cases, and some versions include clever travel-related features, such as the Timeshifter app, which helps fight jet lag.

THE CASE

Compared with the rectangular Apple Watch, the round, wider screen of TAG Heuer's latest release makes it easier to digest information. There's more space to read notifications, and improved screen contrast means data leaps off the face even in bright daylight. Extra buttons on the side allow you to stop and start tracking in the middle of sweaty exercise, as opposed to tapping at a tiny target on the Apple Watch screen or pressing its crown and side button at once. The new faces, such as the undulating Riverside, look flashy, but sporty types may prefer the Timekeeping one (pictured). After you set your step and calorie goals, the Wellness design will measure progress by tracing the perimeter of the face elegantly, and aptly, clockwise. \$1,800; tagheuer.com



Pandemic Aside, Sick Days Are on the Wane

By Justin Fox

The omicron wave of Covid-19 put less of a dent in U.S. employment growth than most forecasters expected, but it did keep a lot of workers home. The 2.3% of employed Americans not at work because they were ill for the entire mid-January jobs survey reference week was the highest such percentage since the Bureau of Labor Statistics started keeping track in 1976, and by far the highest in recent years.

Still, it wasn't that much higher than the 2% recorded in January 1978, during an outbreak of a highly contagious but not very dangerous influenza strain that came to be known as "Russian flu." From the looks of the accompanying chart, missing work because of illness was probably even more common before the mid-1970s.

It's possible that, until the pandemic hit, American workers were simply getting sick less often. On-the-job injury and illness have become far less common, thanks to regulation (the Occupational Safety and Health Act was enacted in 1970) and the changing nature of work. Influenza vaccines are more widely available and effective than they used to be.

Another factor might be rising "presenteeism," in which people show up at work when ill. The percentage of U.S. workers with paid sick leave has risen over time, in part because of state and local legislation requiring it (something that was done temporarily on a national level in 2020), but many may not feel secure enough in their jobs to take advantage of it. It seems telling, for example, that the decline in sick days stalled in the very-low-unemployment environment of the late 1990s and late 2010s.

—Fox is a columnist for Bloomberg Opinion



SAFER JOBS
In 1994 there
were 8.4 cases of
occupational injury
or illness per 100
full-time privatesector workers in the
U.S., according to
the BLS. In 2019-20
there were 2.8.

PRESENTEEISM
 Close to

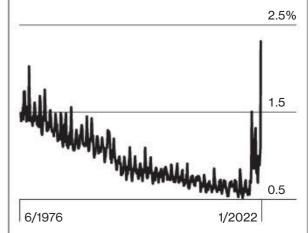
3m

U.S. workers went to work every week in 2011 despite being sick or having a sick child, according to a study based on BLS data.

NATIONAL
HEALTH
Lithuanian workers
missed an average
of 26.2 days of work
because of illness
in 2019, tops in the
OECD's less-thancomprehensive tally.
In the U.S., the figure
was 7.2 days; in the

U.K., 4.2.

 Percentage of U.S. employed people not at work because of own illness



MORE LEAVE

The share of U.S. private-sector workers with access to paid sick leave rose from 44% in a BLS survey conducted in 1996-97 to 77% in 2021.









Dell Technologies recommends Windows 11 Pro for business.



Credible Businesses GloBeam Emails to Prevent Email Scams, Phishing, and Ransomware.



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Awarded with 17 patents, GloBeam protects you from email scams, phishing, email compromises, and ransomware. You can download the GloBeam mobile app FREE now by scanning the QR Code.



