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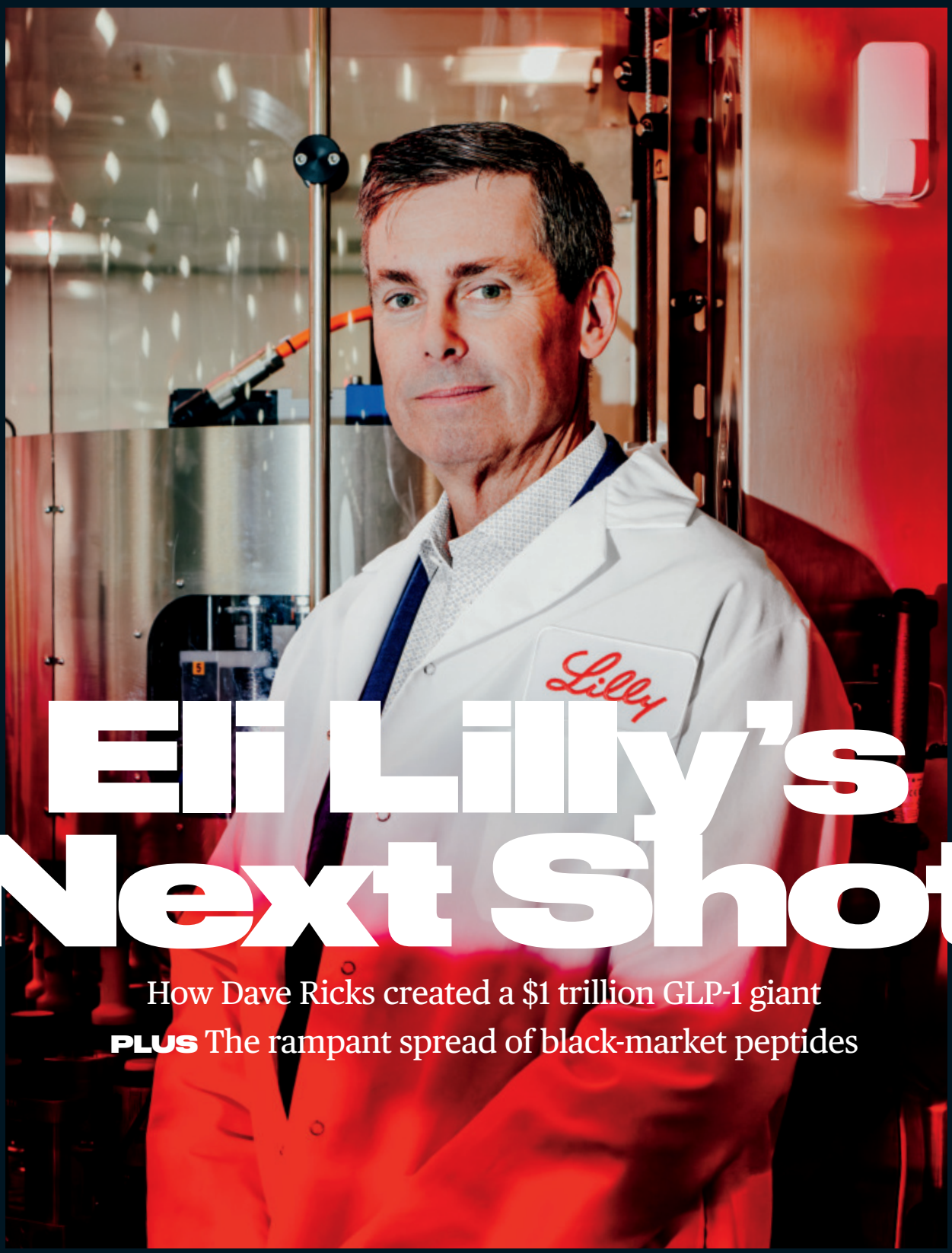

Eli Lilly's Next Shot

How Dave Ricks created a $1 trillion GLP-1 giant

PLUS The rampant spread of black-market peptides

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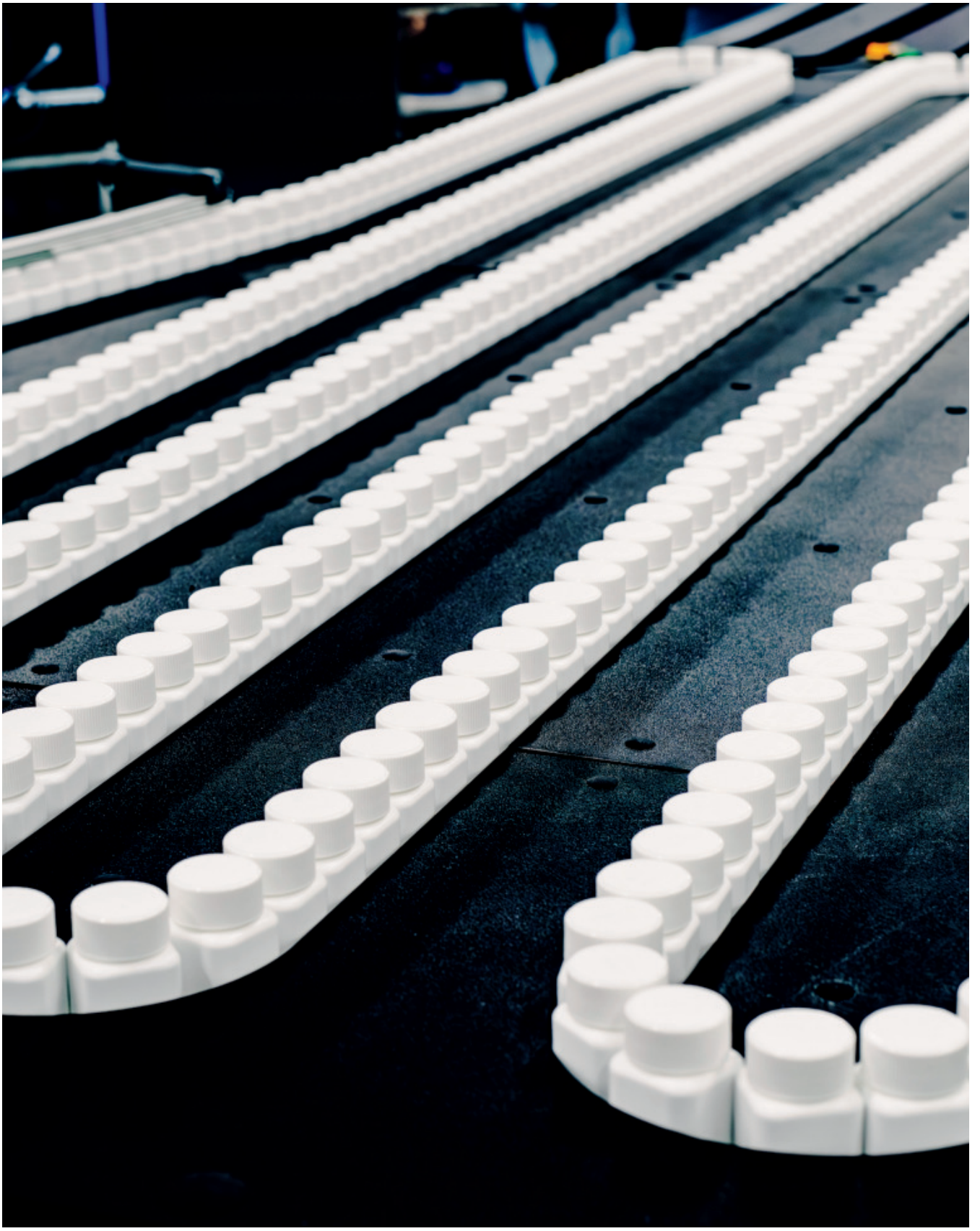

Bottles of Foundayo, the oral GLP-1 that Eli Lilly introduced in April ▷ 34

■ PHOTOGRAPH BY KEVIN SERNA FOR BLOOMBERG BUSINESSWEEK

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"Rousing and alarming, an impassioned call to rebuild America's defense industrial base."
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● **Muller** also worked with **Amanda Mull**, a senior reporter for *Businessweek*, and fellow health reporter **Ashleigh Furlong**, and learned that the Janoshik peptide testing lab in Czechia has a useful neighbor: a waste management company. After the peptides are tested, they don't have far to travel before getting destroyed. ▷ 42

● Bloomberg CityLab reporter **Fola Akinnibi** found out that Tremont is part of Pennsylvania's coal region, with some of the largest anthracite deposits in the world. Hard coal, as it's known, helped fuel the Industrial Revolution. Photographer **Caroline Gutman** flew her drone to get a sense of the scale of the 1.3 million-square-foot ICE warehouse. ▷ 52

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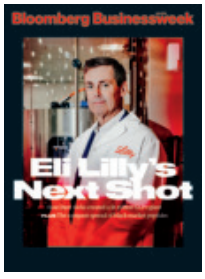

Photograph by Kevin Serna for *Bloomberg Businessweek*. Serna's lens shot through red gel to add vivid hues and nod to Eli Lilly's company color. It set him up for a looser approach to lighting and framing.

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Strap Yourself Into Starship Elon

● By Max Chafkin

Elon Musk is, famously, kind of a lot. He's a thrice-divorced man with at least 14 children who's spent a significant part of the past few years flirting with White nationalism and promoting a sex chatbot. He is also fabulously successful, having helped transform PayPal, Tesla and SpaceX from startups into household names—not to mention his roles in the buyout of Twitter (since rebranded as the anti-woke social network X and swallowed up by SpaceX) and the 2024 election of Donald Trump.

Now he is also a trillionaire. On June 12, SpaceX went public, closing with a market capitalization of $2.1 trillion, which sent Musk, who has a stake of about 40% in the company, to a level of wealth that, as a share of US gross domestic product, puts him roughly on par with the richest Gilded Age monopolists. In the minds of Musk and those who bought into the largest initial public offering in history, SpaceX still has plenty of room to grow. The company's registration statement with US financial regulators outlines three lines of business—rocket launches, satellite internet, and hardware and software for artificial intelligence—and claims that its total addressable market is $28.5 trillion, which is almost as big as America's GDP. That calculation includes $370 billion for rocket launches, $1.6 trillion in satellite-related revenue and a staggering $26.5 trillion coming from the data centers Musk plans to launch into space.

The IPO filing is careful to note that the sum of those numbers doesn't include additional revenue streams such as interplanetary travel, asteroid mining and (why not?) moon factories. It refers to the company's market opportunity as the largest "in human history," a phrase that appears a dozen times in the document. SpaceX immodestly credits itself with having developed "the most transformative and critical technologies in human history"—apparently putting Grok (the aforementioned chatbot) and its Starlink satellites (which provide broadband internet services on airlines and yachts) slightly ahead of breakthroughs like agriculture and the wheel.

To say it plainly, none of this makes sense, at least not according to the normal rules of business and finance. In reality, Space Exploration Technologies Corp. is a modestly sized, money-losing aerospace and telecommunications company that brought in $18.7 billion in revenue last year and lost $4.9 billion. And the losses are accelerating with Musk's pivot toward AI: SpaceX lost $4.3 billion in the first quarter alone.

There are other issues to concern SpaceX investors. According to Musk, the company's future depends on a gigantic experimental rocket, Starship, which will carry aloft a new generation of much larger and more advanced Starlink satellites, along with the planned orbital data centers. Musk has pitched the latter as necessary in a world of skyrocketing demand for AI and increasing concerns about electricity and land use. But Starship, which Musk first announced in 2018, has yet to reach low earth orbit, and data centers in space are, for the moment, science fiction. In the meantime, Starlink's margins are shrinking as it expands to poorer parts of the world and cuts prices to entice new users. A much-heralded expansion into mobile phone service has been met with apathy from consumers. "We're seeing a lot less usage than we were originally thinking," said T-Mobile Chief Executive Officer Srini Gopalan during a recent earnings call, describing his company's use of Starlink satellites to expand its network.

Musk's reality distortion field has always been large, even by

the standards of Silicon Valley. The entrepreneur has a knack for getting the stock market to buy into his wildest visions, no matter how unrealistic they might seem to the rest of us. Musk's car company, Tesla Inc., has a market cap more than five times greater than that of the next largest automotive company, Toyota Motor Corp., even though Toyota sells six times as many cars. "If you value Tesla as a car company, you would never, ever get remotely close to the valuation it trades at—same with SpaceX," says Tim Farrar, a satellite communications consultant and analyst. "If you value SpaceX based on the Starlink business, the launch business and the reality of the AI business, then you get to valuations that are a tiny fraction of $2 trillion." The rest is just what Farrar calls the "unknown Musk factor."

Investors sometimes call this the "Elon premium," and it has proved to be a potent economic force over the past few years. It's also a glaring and mostly unacknowledged risk factor from which flow a host of other risks, many extending beyond SpaceX. Even if you leave aside his penchant for unconventional behavior, Musk will turn 55 at the end of June. That's youthful by CEO standards, but Musk's own account of his diet, exercise, sleep habits and drug use suggests he won't be a young 55. SpaceX's Securities and Exchange Commission filing mentions the risk that Musk might die or become disabled, but it also makes clear that the process of planning for that eventuality hasn't even begun.

Moreover, SpaceX is structured so that shareholders will have no leverage to get the company to disentangle itself from its founder. Musk's supervoting shares give him more than 80% of the voting power at SpaceX and the ability to hire and fire board directors at will. Shareholder derivative suits, in which shareholders sue a board on behalf of the company, will be more or less impossible because of Musk's decision to move its incorporation from Delaware to Texas, a state that allows companies to set stricter limits on who can sue. SpaceX's bylaws also force disgruntled shareholders into mandatory arbitration, which make class-action suits unlikely. Finally, the company successfully campaigned for early inclusion in index funds—Nasdaq, FTSE Russell and MSCI have all relaxed rules that would have forced it to wait set periods before joining their indexes—ensuring that a huge number of people will wind up with SpaceX in their retirement portfolio even if they don't buy the stock directly. "Shareholders have three things they can do to hold management accountable—they can vote, they can sue, or they can sell," says Ann Lipton, a University of Colorado law professor. "Those avenues are all gone."

■ ILLUSTRATION BY RICARDO DISEÑO ■ DATA: BLOOMBERG

SpaceX has long been the least Musk-like part of Musk's empire: a stable, sometimes profitable company, run by a no-drama chief operating officer for much of its 24-year history. Which is what you'd expect of a business whose chief source of revenue is government contracting. The US needs SpaceX to launch its spy satellites, to safely move astronauts to and from the International Space Station and to develop a lunar lander for NASA's Artemis moon program. Even today—despite Starlink's more than 10 million individual subscribers—US government contracts account for one-fifth of the company's revenue. That's before billions of dollars in new contracts related to Trump's planned missile defense system kick in.

Yet Musk has made clear that he now sees the company's government work as a side quest and that SpaceX's future growth depends mostly on demand for AI services. For years, Defense Department officials and members of Congress have worried about the national security implications of becoming overly dependent on Musk, given his volatility and apparent conflicts of interest. Now they might reasonably wonder if SpaceX itself is in danger of becoming distracted by the opportunities Musk sees in the AI boom.

SpaceX has few rivals in the launch business but many in AI, where it competes with Anthropic PBC and OpenAI, which both confidentially filed to go public in recent weeks. Both companies, like SpaceX, are unprofitable, and both are selling investors on a technological vision that isn't close to being fully realized. Both have recently been valued at close to $1 trillion by private markets, and they'd likely seek even richer valuations from public investors under terms similar to those Musk has established, ensuring their founders are free from traditional oversight while pushing volatile stocks into the portfolios of retail investors and retirees. In the best-case scenario, investors will participate in a historic boom; in the worst, they will be holding the bag when the AI bubble bursts.

It's worth saying that no one is forcing investors to bid up the valuations of SpaceX or its peers. Musk's power, and his trillionaire status, comes from a dedicated base of small investors and day-traders who have, in some cases, made huge sums of money by ignoring sober-minded attempts to value his companies. In the days before the public offering, Fidelity Investments, which had generally restricted IPOs to wealthy customers with hundreds of thousands of dollars in their brokerage accounts, announced the threshold for SpaceX would be just $2,000. Meanwhile, JPMorgan Chase & Co. CEO Jamie Dimon pitched the stock directly to the public while he boasted about "democratizing finance." Retail investors—who were set to account for at least 20% of the IPO, according to Bloomberg News—aren't buying despite Musk's baggage but because of it.

But if their instincts prove to be wrong, it won't just be the investors who bought into Musk's vision who'll suffer. The fallout will hit the broader stock market, as well as the beneficiaries of the AI boom—including chipmakers, construction companies, financial firms, the Trump administration and everyone else with a stake in Musk's AI pivot. We're all strapped into Musk's rocket, whether we like it or not. Ⓑ

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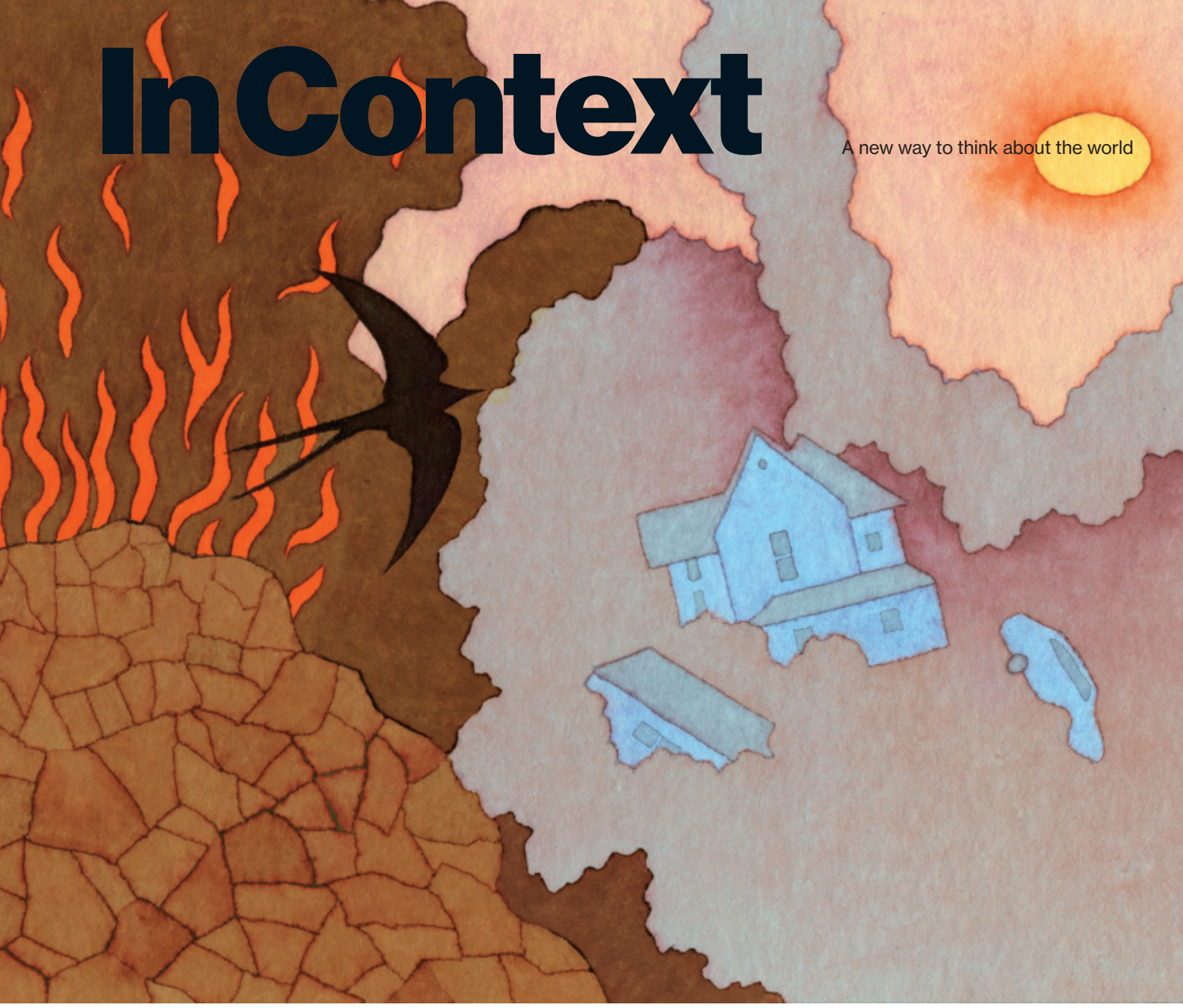
A new way to think about the world



An Economic Storm Is Brewing

● By Lauren Rosenthal

The last time El Niño emerged from the tropics, in 2023, nearly every corner of the economy felt its impact. Candy-bar makers reduced the amount of chocolate in their offerings, after drought in West Africa triggered higher cocoa bean prices. Some transatlantic flights got longer and others got shorter and bumpier, altering fuel consumption. Even soap prices bubbled up, as key ingredients became harder to source.

The effects of the El Niño that just arrived threaten to be far worse. The US Climate Prediction Center says the conditions, which it calculates emerged in May, will continue gathering strength and peak over the winter, raising the risk of punishing heat waves, severe drops in rainfall and devastating deluges in various corners of the world. That doesn't bode well for governments, businesses and households already struggling with higher inflation linked to the US and Israel's war in Iran.

Even before the CPC declared the event's official arrival, the US Department of Agriculture had said it sees domestic food prices increasing by as much as 4.7% in 2026 from a year earlier, the biggest leap in three years. For products made from sugar and cocoa—the two crops most at risk from El Niño droughts, according to Marex Group, a financial-services firm in London—the USDA expects prices to jump as much as 8.4%. The last time the world faced such a strong El Niño, in 2015 and 2016, the result was more than $7.8 trillion in lost productivity, based on a Dartmouth ▶

■ ILLUSTRATION BY ANDRÉ DERAINNE

◀ College study, with the economic effects continuing to ripple through for years afterward.

El Niño—or "the child" in Spanish, named for baby Jesus because Peruvian fishermen in the 1600s first noticed the phenomenon around Christmastime—is a weather pattern that occurs with sustained warming of Pacific Ocean surface temperatures. Trade winds weaken and sometimes even run backward, which in turn further increases the temperature of the ocean. This leads to patterns of high and low pressure that translate into excessive rains in some parts of the world and drought in others. It's a normal, cyclical event that used to come and go with little fanfare, except in the rarest of years.

Climate change—which loads the atmosphere with additional heat and moisture—can amplify its impact. In fact, forecasters have had to change their methods for measuring El Niño to account for the oceans getting significantly hotter.

Flooding in northern Peru during a hyperlocal 2017 El Niño (top); a drought in Zimbabwe in 2024

On the new scale, this episode looks as though it will be, at its peak, nearly or equally as strong as major outbreaks in the early 1980s and late '90s, making it one of the most significant events in modern history. Some forecasters are going so far as to call it a "super" El Niño. "The simple thing I say is: Expect more volatility with an El Niño," says JPMorgan & Chase Co.'s global head of climate advisory, Sarah Kapnick, and not just in areas we think of as traditionally vulnerable.

No two El Niño events are the same, so it's not clear yet what exactly the unfolding phenomenon will bring. "Given the lead time with this, we're still very cautious that things can slow down or speed up over the next few months," says Emma Sanig, a meteorologist and research analyst for Marex. But recent cycles offer some clues.

Past El Niño periods have broken temperature records, sparking deadly heat waves that sent power demand surging. Paired with low rainfall, El Niño often causes staple crops to wither in parts of Southeast Asia, Australia and West Africa. India's monsoon rains came in late this year and are predicted to run roughly 10% below normal, possibly creating water shortages that could pose a challenge to the production of rice, sugar and seeds for cooking oil and cosmetics. The country's farmers can turn to diesel-intensive pumps for irrigation, but that's a costlier option, as the conflict in the Middle East has restricted the flow of crude oil. This puts pressure on central bankers weighing the pain of higher inflation against potential interest-rate hikes.

At the same time, the phenomenon often drives heavy downpours in coffee- and cocoa-producing regions of Latin America just as the harvest gets underway, making it difficult to get crops to market. Global cotton production can also take a hit, pushing up prices for clothing, diapers and medical equipment. Typhoons juiced by El Niño in past cycles have destroyed coastal power infrastructure. They can also obscure solar arrays in Japan, forcing generating plants to switch to dirtier fuels.

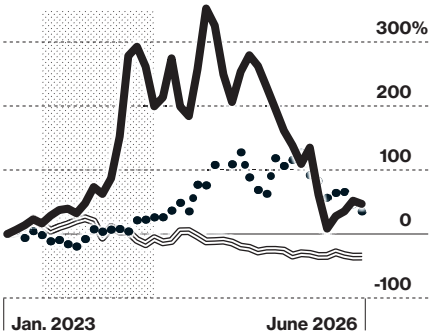
It's not all bad news. El Niño can help certain crops, bust droughts in Southern California and reduce the number of hurricanes in the Atlantic. The problem is that, as the planet gets hotter, El Niño has started to buck some of these expectations. In 2023, for instance, forecasters expected El Niño to help rip apart storms and create a quieter hurricane season; instead, the Atlantic saw one

Where El Niño Often Hits Hardest

Price change since January 2023

Cocoa Coffee Sugar

El Niño



of its busiest storm years on record, an unusual occurrence in an El Niño year. The culprit was an ocean heat wave that helped fuel more tropical systems.

So far, US forecasts are calling for a calmer-than-normal hurricane season in 2026, but that's been little comfort to property insurers. Clients of global reinsurance broker Aon Plc have been reassessing financial reserves in case a tropical storm hits the US, says Liz Henderson, its head of climate risk advisory. Higher prices would have "downstream impacts on the cost of replacement," she says. "If there is an event, it could be more expensive."

One reason this El Niño could be particularly detrimental is that businesses have already been changing practices and turning to backup suppliers for some inputs because of the war in Iran and the closure of the Strait of Hormuz. Farmers in some markets, for instance, have scrimped on fertilizer applications—or switched to cheaper but potentially less effective options like manure, almond shells or urine-based products—in response to dwindling industrial supplies and higher prices. Lower fertilizer use alone could reduce crop yields at the next harvest, so El Niño's hit would only amplify the pain.

In countries where incomes are lower and groceries tend to eat up a greater share of household budgets, the risks are even higher. The Food and Agriculture Organization of the United Nations is warning of widening food insecurity and water shortages ahead in Latin America and the Caribbean. Similar dynamics in southern Africa could follow. "El Niño conditions will pour fuel on the fire of a warming world," UN Secretary-General António Guterres said in a statement in early June. "Impacts will hit even harder, travel even further and cross borders with devastating speed."

The last El Niño, which wound down in 2024, battered countries that were already struggling with supply-chain disruptions and fuel shortages stemming from Russia's war with Ukraine. When the drought conditions it triggered meant water levels in the Panama Canal fell too low for some cargo vessels to safely cross it, shipping restrictions stacked up. That put a kink in the flow of goods around the world, including the crucial movement of liquefied natural gas, the fuel that increasingly keeps the lights on around the globe. This time around, the Panama Canal Authority has been taking steps to preserve water levels since December 2025, months before El Niño was set to emerge. It's now planning for an expanded dry season that starts weeks earlier than normal. "We have made early decisions to operate as if we were in some water-restrictive condition, which we are," says Ricaurte Vásquez Morales, administrator of the authority.

The global, interconnected nature of the modern supply chain adds to the risks. This May, for instance, Peru halted anchovy fishing off its coast due to the warming waters. Even if most people don't think they buy Peruvian anchovies, many ultimately do: The catch is often ground into fish oil or fishmeal, much of which is used to feed farmed fish, poultry and pigs. The halt to fishing in Peru signals higher costs ahead for various animal proteins—and with so many categories of food already at or near record-high prices, that may be one storm more than many global consumers can weather. Ⓑ —*With Pratik Parija, Ruth Liao and Michael McDonald*

■ PHOTOS: EL NIÑO FROM TOP: ARON UPUMEL/AP; ERNESTO BENAVIDES/AFP/GETTY IMAGES; ROBOT: SOURCE: DILIGENT ROBOTICS
■■ DATA: BLOOMBERG, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Do Robots Really Need Legs?

● By Samantha Kelly

At Providence Saint John's Health Center in Santa Monica, California, a humanoid robot in a plastic Dodgers helmet roams the hallways. It pulls up outside an oncology lab, where a technician walks over and retrieves a package from one of three drawers beneath its torso. The technician thanks the robot, named Moxi, which blinks, pivots and heads for the elevator.

Moxi and its twin, Roxi, complete dozens of such tasks at the hospital each day, including delivering lab samples and medications and transporting supplies and spare clothing. The company behind the machines, Diligent Robotics Inc., a startup in Austin, has deployed them in more than 25 health systems across the country. Moxi and Roxi represent the promise that many technologists see in human-shaped robots, which can function in a world designed for humans. But the pair are shaped differently from humans in one notable way: They have wheels instead of legs.

In certain circles, this is a sensitive topic. Roboticists have long focused on the "hand problem"—the challenge of fine motor control—but the industry has also been engaged in a long-running disagreement about what should happen below the waist. Robotics companies, as well as aspiring robotics companies such as Tesla Inc., have drawn billions of dollars in investment to build machines that walk like humans, arguing that doing so will make them uniquely useful not only in manufacturing and healthcare facilities but also in people's living rooms and kitchens. But legs are tricky, and some people in the field say rolling robots are more practical and can begin doing work today that walking robots are ▶

Diligent's Moxi

◀ still years away from accomplishing.

Andrea Thomaz, chief executive officer and co-founder of Diligent, says wheels are more reliable, noting that many hospitals and senior centers are already designed around wheelchair accessibility. "Wheels are safer," she says. "If a robot is going down the hallway on wheels, it can stop without having to actively balance. And if there is a battery or power issue, a humanoid with legs could fall on somebody."

The wheel-leg divide was on full display at CES in Las Vegas this January. Legged humanoids stood prominently across the annual tech conference show floor, attracting much of the attention and many of the headlines. But the robots that actually moved—at least reliably—were almost all on wheels. Legged systems are far more complicated. They require additional motors, create more opportunities for mechanical failure and are often tethered during demonstrations. "Legs are a terrible idea," says Bill Ray, a senior analyst at market-research firm Gartner Inc., arguing that they add significant engineering complexity, particularly around balance and ankle articulation. Legged robots also consume far more energy, because balancing requires constant adjustment.

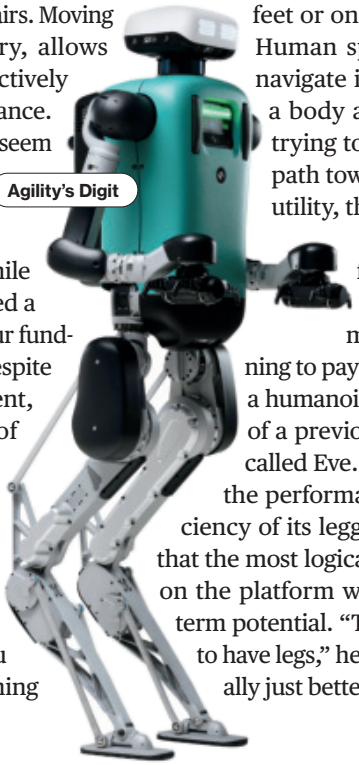
Still, the bipeds offer advantages that wheeled systems struggle to match. Legs can make it easier to get up stairs. Moving one leg at a time, in theory, allows robots to recover more effectively if they begin to lose their balance. Another advantage: Investors seem to like legs. 1X, the maker of Neo, a humanoid robot designed as a home assistant, has raised $123.5 million, while Agility Robotics Inc. has raised a total of $180 million across four funding rounds. Figure AI Inc., despite limited real-world deployment, has reached a valuation of $39 billion. By contrast, Diligent Robotics has raised about $50 million.

Ray attributes this disparity in part to the human tendency to anthropomorphize technology. When you as a human perceive something that looks human, he says, you attribute human values to it. "When you see a robot walking, your brain says, 'Oh, it can climb, jump and run,' even if it can't do those things."

At Agility's facility in Salem, Oregon, Digit—a 5-foot-9-inch robot with blinking LED eyes and ostrichlike legs—lifts 50-pound containers and places them onto a conveyor belt. To reach lower shelves, it bends its legs at the knees and hips. Digit takes short, careful steps to enable consistent stability and predictability while still moving quickly enough to load and unload bins.

Digit is shaped less like a human than some rival products. Jonathan Hurst, Agility's co-founder and chief robot officer, says he's closely studied movement across a diverse range of animals—humans and birds, ghost crabs and horses—focusing less on anatomy or appearance than on the underlying physics of motion. "It's made for work and provides actual value. It's not a companion, so it doesn't really matter what it looks like," he says. "But it is human-centric because it needs to interact with us. Here we just need to move these boxes, and nothing else matters."

Hurst argues that legs are critical to reliability in performing these tasks. "Would you rather be on your own two feet or on a Segway?" he asks. Human spaces are easiest to navigate if you have two legs, a body and arms: "If you're trying to design a robot on a path toward general-purpose utility, this is the best way."



Agility's Digit

Bernt Børnich, the founder and CEO of 1X, says its investment in legs is beginning to pay off. "We used to have a humanoid on wheels," he says of a previous industrial model, called Eve. But 1X has improved the performance and energy efficiency of its legged systems so much that the most logical thing to do is focus on the platform with the biggest long-term potential. "There's no reason not to have legs," he says. "They're generally just better for everything."

The company plans to begin shipping its $20,000 Neo robots to homes later this year. The devices are designed to help with domestic tasks such as folding laundry while offering humanlike companionship. 1X expects to manufacture 100,000 robots annually by the end of 2027.

At its research and development lab in Glendale, California, Walt Disney Co. is developing both wheeled and legged machines for deployment at its theme parks. Based on familiar characters, the new Disney robots go beyond traditional animatronics with free-roaming characters including *Star Wars* BDX droids, *The Fantastic Four*'s H.E.R.B.I.E. and Olaf, the snowman from *Frozen*, navigating crowds in the parks and interacting one-on-one with guests in real time. "For us it always starts with the character and the story," says Kyle Laughlin, senior vice president for technology and engineering of R&D at Walt Disney Imagineering, the cruise line and parks' design unit. "We work in close partnership with the film, television and games teams who created these characters, and the movement system has to feel authentic to who that character is."

Although Olaf was the one that went viral this year for a sudden malfunction, Laughlin says H.E.R.B.I.E. is among the company's most technically challenging robots because it moves on a balancing ball and constantly performs calculations to stay upright. "We know guests may bump into them or pet them on our cruise ships," he says as H.E.R.B.I.E. wheels across the R&D floor, not far from a BDX droid making singing noises and dancing on its two small legs. "We've continued to work on making sure these are safe while also advancing the engineering."

Practical considerations about specific applications drive the decisions at many companies weighing wheels versus legs, but Disney is after something different. "The goal is not to pick the 'best' technology," Laughlin says. "It is to choose the form of movement that best preserves the character's personality, emotion and believability when guests meet them in the real world." If that's where you're headed, it turns out there's more than one way to get there. Ⓑ

■ PHOTO: SOURCE: AGILITY ROBOTICS

The Rise of Japan's Thrifting Economy

● By Kanoko Matsuyama and Aaron Clark

Used clothing and accessories are particularly popular with Japan's Gen Z shoppers

Uniqlo, with its meticulously organized stores selling functional basics, might look like the face of Japan's apparel industry. But by store count, the leader these days is 2nd Street, a secondhand-clothing chain that was little known a decade ago and is now riding a wave of Gen Z demand for affordable fashion.

The retailer, selling everything from broken-in Nikes and vintage Prada wallets to gently worn business suits and streetwear in near-mint condition, overtook Uniqlo in the past few years and continues to widen its lead, with its 931 Japanese locations at the end of March outnumbering the casual-wear giant's 794 as of last August. In Japan, where 2nd Street has set a target of 1,500 stores by 2035, the chain's popularity signals a cultural shift among consumers long known for favoring pristine, brand-name goods. The retailer's rise also reflects the emergence of young, price-sensitive Gen Z shoppers trying to stay on top of fashion during the country's first sustained bout of inflation in decades.

In the past four years, Japanese consumers have been navigating the most significant erosion of their purchasing power in recent memory, as inflation has outpaced wage growth. A weaker yen has also made European fashion brands, once attainable indulgences for the middle class, out of reach for many. Even with wage increases over the past year, rising costs have reshaped consumer behavior, turning the search for preloved clothing from a niche habit to a mainstream hobby.

"Our industry has always been pretty resilient in conditions like this, with inflation running ahead of wage gains," says Masanori Takai, a senior executive at 2nd Street in charge of store operations. Still, the retailer's popularity is about more than just affordability, he maintains. "Each store has different inventory, and each item is special. Customers get to search for something good from what's affordable—kind of like a treasure hunt." Given the rising popularity, he says 2nd Street is also looking to open more specialized stores in Japan in the coming years, including outlets focused on furniture and musical instruments.

Japan isn't alone in seeing a surge in demand for used clothes. In the US the secondhand-apparel market is expected to total almost $79 billion by 2030, according to a report by online reseller ThredUp Inc., driven in part by Gen Z and even Gen Alpha's emerging interest in all things retro. The US-Israel war on Iran, seesawing Trump administration tariffs and the supply-chain disruptions resulting from both have added to inflationary pressure for consumers everywhere. McKinsey & Co. forecasts the global secondhand market will grow up to three times faster than firsthand fashion through 2027.

The resale market in Japan, though, stands out for its huge inventory of Hermès scarves, Louis Vuitton handbags and other high-end items, mostly accumulated during the country's luxury boom of the 1980s and '90s, when rapid financial growth turned it into a global superpower and gave its middle class unprecedented purchasing power. The country is also known for its culture of meticulous care, one reason its vintage stores have become a destination for overseas fashion enthusiasts and tourists eager to capitalize on the weak yen. ▶

■ PHOTOGRAPH BY ANDREW FAULK FOR BLOOMBERG BUSINESSWEEK

◀ Japanese households hold an estimated ¥91 trillion ($570 billion) worth of items unused for at least a year—roughly ¥715,000 per person—according to NLI Research Institute, a Tokyo think tank. The report was commissioned last year by Mercari, the flea-market app that helped break the stigma of buying used items, paving the way for stores like 2nd Street and smaller rivals Treasure Factory and Ragtag to expand. Fashion accounts for the largest share, at 34%, followed by leisure and sports equipment at 22% and entertainment items like books, games and music at 21%, the report found.

Dotted throughout Japan, 2nd Street stores are a far cry from the stereotype of a musty and often chaotic thrift store. The company's sprawling suburban locations and smaller boutiques in city centers feature bright lighting and clean floors, projecting an almost sterile feel. Compared with the clothing at vintage shops in Tokyo's Shimokitazawa and Koenji neighborhoods, which trade on retro-cool aesthetics, or at luxury resale specialists in Aoyama, 2nd Street's offerings are also highly sensible: Lightly worn office staples are displayed alongside premium streetwear and once-ubiquitous pieces by Marc Jacobs and Coach, all of them looking for a second life.

Sales for 2nd Street in the last fiscal year through the end of March came to about ¥155 billion, up 18% from a year earlier. The company is part of the listed Geo Holdings Corp., a massive retail group with a market capitalization of ¥80 billion. Geo began in 1986 as a video-rental business before expanding into used phones and video games; it plans to rename itself 2nd Retailing later this year to reflect the success of its used-clothing chain.

On a recent weekend afternoon several shoppers at one of its stores in western Tokyo sifted the racks of Moncler and Acne Studios jackets, pausing to scrutinize prices and scan for imperfections. The racks were organized by style, with dedicated zones for Ralph Lauren, Supreme and other popular brands. A few people came in carrying bags stuffed with used clothing and waited at the cash register as a staff member examined sweaters and T-shirts one by one. The stores accept only clean, lightly used items, and they pay in cash. The purchase price is determined by as many as 20 criteria, including condition, trend, brand name and seasonality: A puffer jacket might fetch a higher price in November than in June. Lower-grade items are recycled, repurposed or sold overseas.

Some inventory comes from people clearing out their parents' attics, but Takai says many regulars are as likely to sell a vintage piece as they are to buy one, treating the stores like an evolving closet. "It's now much more common to buy, sell, buy, sell, again and again," he says, adding that this allows people to try out more styles. "This is helping lead our market growth. And it's a particularly strong trend among our customers in their teens and 20s."

Yu Yanagida, a 31-year-old real estate office worker in the southern Japanese city of Miyazaki, began documenting her secondhand hauls on TikTok last year and now has 25,000 followers. She says buying used clothing has helped her save money while avoiding the grip of fast fashion. "People in my generation are used to being able to buy clothes cheaply and easily. That also means it's easy to end up with similar clothes as your friends, or to order things online and forget about them by the time they arrive," she says. "Thrifting at places like 2nd Street feels new and exciting for younger people, and even kind of cool."

High-end items are part of the appeal

Even Itochu Corp., one of Japan's largest companies, is moving to capitalize on the secondhand boom. Earlier this year, the conglomerate—whose businesses span everything from energy to convenience stores—bought a stake in secondhand retailer BookOff Group Holdings, known for its used manga and retro video games. Itochu plans to use its roughly 16,000 FamilyMart convenience-store locations as drop-off points for used goods, extending BookOff's reach deeper into everyday Japanese commerce.

The government has also emerged as an unlikely cheerleader for the expanding industry, framing it as a cornerstone of a "circular economy" that helps fulfill the UN Sustainable Development Goals that Japan signed on to a decade ago. Shintaro Murai, a deputy director at the Ministry of Environment, says Japan aims to expand its secondhand market by nearly a third to ¥4.6 trillion by 2030. Officials want 50% of the population buying or selling at least one secondhand item annually by 2030—up about 9 percentage points from 2024.

The impact on the firsthand apparel market is still uncertain. Some see the growing popularity of preloved clothing as a threat to established retailers, while Takai and others say it's encouraging consumers to shop more, since they can flip any purchase to help fund their next outlay. Either way, major retailers are taking the burgeoning market seriously. Japanese retailer Muji, known for its utilitarian, no-logo aesthetic, has begun encouraging customers to bring used items back to stores in exchange for loyalty points; it then resells the items at some of its locations after remaking them by dyeing or mending them.

A major challenge to the uptake of secondhand shopping, Takai says, has been winning over the more skeptical older generations. But he says there's been progress. "You can see them come in with low expectations and are surprised by what they find," he says. "Soon, dropping by the store becomes a habit for them." Ⓑ —*With Yui Hasebe*

■ PHOTOGRAPH BY ANDREW FAULK FOR BLOOMBERG BUSINESSWEEK ■ DATA: NATIONAL STATISTICS INSTITUTE OF SPAIN, INSTITUT NATIONAL DE LA STATISTIQUE ET DES ETUDES ECONOMIQUES, ITALIAN NATIONAL INSTITUTE OF STATISTICS, GERMAN FEDERAL STATISTICAL OFFICE

Spain Is the Real Melting Pot

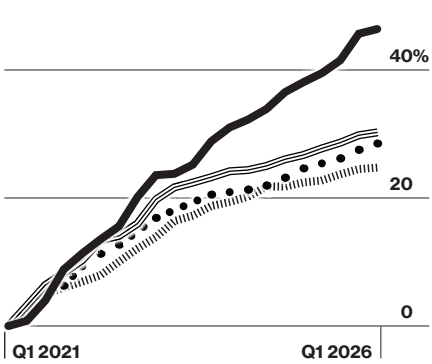
● By Max Rivera

Two hours into Bad Bunny's second of 10 megaconcerts in Madrid, the singer darts offstage for a quick wardrobe change, tasking a Puerto Rican percussion group, Los Pleneros de la Cresta, with keeping the crowd in motion. As the band riffs on "Café con Ron," a hybrid of plena, tropical synth sounds and bass-rattling drums with more than 300 million streams, the musicians encourage audience members to proudly hoist the flags of their home countries. The show might be taking place in Spain, but a sea of Latin American flags emerges from the masses.

The geographic diversity of the 60,000-plus fans filling the stadium every night of Bad Bunny's sold-out Madrid residency in May and June reflects a wider trend playing out across the nation. In the past three years, Spain has welcomed more than 3 million immigrants, the bulk of them from Latin America. Their arrival has reignited growth, allowing companies to fill job openings at breakneck speed, and transformed the country into the fastest-expanding major economy in the euro zone. Today roughly 1 in 5 residents is foreign-born, with recent population growth driven largely by arrivals from Argentina, Colombia, Peru and Venezuela—a kaleidoscope of high-earning Spanish speakers who until recently might have been more likely to land in Miami than Madrid.

Spain's Gains

Change in nominal GDP since Q1 2021



Many of these transplants are middle-class professionals fleeing political and economic instability, drawn by Spain's shared language, accelerated citizenship pathways for Latin Americans and access to the European labor market. At a time when Spain (like much of the developed world) faces a rapidly aging population, immigration has become an economic lifeline. Many open roles, such as those in tourism, elder care and agriculture, don't require specialized skills, though more recently the country has aggressively pursued highly educated Latin Americans to fill lucrative jobs in tech and healthcare.

Migration has long been a prominent part of Spanish culture and history, and many Spaniards have relatives who emigrated to Latin America, just as many Latin Americans now come to Spain in search of a better future. That history helps explain why integration has often been relatively smooth. "The inclusion of these workers is very easy," says Patricia Gabaldón, a professor of economics at IE University. "We are super lucky, because we speak the same language, but also because the cultural roots are very similar."

The embrace of immigration—something Prime Minister Pedro Sánchez has identified as both a social and an economic imperative—stands in sharp contrast to the growing nationalism elsewhere, particularly in the US, where many Latin Americans moved before the anti-immigration Trump era. And while other European countries have tightened entry, Spain has embraced the opposite approach. As part of an application process that ends on June 30, Spain will naturalize roughly 500,000 residents already in the country. Today immigrants fill roughly 90% of the country's newest jobs, according to a paper by Real Instituto Elcano, a think tank in Madrid.

The pro-migrant stance has faced criticism, particularly in parts of the country where housing remains in short supply. Hostile attitudes toward migration have been growing among the far and center-right, where common narratives include claims that migrants steal jobs, receive unfair access to subsidies or commit more crimes. Arab and Muslim migrants, in particular, tend to be perceived more negatively.

Before the Bad Bunny concerts, thousands of locals took to the streets calling for rent protections amid the housing crisis. Across Spain, the cost of living continues to climb, a burden in a country where wages are low and work-life balance is prized. Those sharp price hikes are why 55% of Spaniards report a worse economic outlook compared with before the pandemic, according to a survey by think tank Funcas. Local officials have instituted measures to prevent short-term rentals, but the country still needs about 700,000 additional homes, according to a Banco de España estimate. If the cost of living rises too quickly, it risks curbing the stream of immigrants who've helped prop up growth.

Niki Dodd moved to Spain from Argentina in her 20s to find a job in the arts. That was before the latest wave of immigration, and the now 32-year-old creative director and photographer says she can feel the change. With costs rising, she's having trouble finding the larger apartment she says she'll need to stay in Madrid indefinitely. At the same time, she relishes the growing diversity in the Spanish capital and the buzz of fellow creatives who've helped transform the city.

After attending one of the Bad Bunny shows, Lorena Jusino, a 34-year-old Puerto Rican living in the city, says she regrets that more of her compatriots haven't made their way to Spain's capital. But she says interest in her home island is often a topic of conversation, one that inevitably turns to Bad Bunny, a proud Puerto Rican.

Still, when the artist—who won album of the year at this year's Grammy Awards—takes the stage in Madrid, those demographics briefly shift. During his almost three-hour set, Bad Bunny tells the audience they're all welcome to be Puerto Rican for the night. His offer draws a deafening response from the multinational crowd. Ⓑ —*With Daniel Basteiro*

A Walk With

By Anna Peele

Her father pulled pints for Guinness factory workers during her childhood. Now, **Gráinne Wafer** is in charge of the beloved (and booming) beer brand

Gráinne Wafer is embarking on the surprisingly intricate task of pulling a perfect pint of Guinness. First step: inspecting the cleanliness of the glass. It's Guinness-branded, as it should be at every bar where the Irish stout is served on draft. Wafer, a senior executive at Guinness' parent company, Diageo Plc, holds the barware up to the sunlight coming through a window at a bar in the Guinness Storehouse in Dublin. Last year, 1.8 million visitors flocked there to learn about the storied history of the brand, including the 284 checks the brew goes through before it leaves the factory.

The punctiliousness doesn't stop at the factory gates. Guinness' protocols recommend bars wash their pint glasses separately from other dishware, lest grease transfer and ruin what is called the "schtik," the distinctive lines of foam left behind on the glass as the creamy head drops with each sip. Satisfied that this glass is sufficiently immaculate, Wafer positions it precisely at a 45-degree angle and pulls the tap toward her. When the liquid, which is carbonated with a mix of nitrogen and carbon dioxide, reaches the top of the harp emblem, she places the glass on the counter and waits until it settles—the mesmerizing moment when the bubbles rise from the body of the beer to the head, turning the stout from tan-colored to a deep brown. She then places the glass back under the tap and, this time, pushes the handle away, which slows the flow of gas and allows for greater control when pouring the domed head.

This entire process takes almost two minutes, which is, needless to say, a lot longer than it takes a bartender to pour a regular pint. "Some of the great advertising campaigns are all based around that idea of the anticipation," says Wafer, 56. The resultant slogan: "Good things come to those who wait."

Wafer's evangelical belief in the product has helped Guinness become the toast of Diageo, where she serves as global category director of beer, vodka, liqueurs and convenience. Like many of its peers, the wider company has endured years of falling sales as alcohol consumption dropped following the pandemic. But Guinness has bucked the trend. Since Wafer began leading the brand in 2019, Guinness has gone from frequently lagging Diageo's overall performance to posting a double-digit compound annual growth rate, starting with a 27% spike in the second half of 2021. Ireland and Britain are still its biggest markets, but Guinness is today the most-sold draft beer in New York and Boston. A higher-alcohol variant called Foreign Extra Stout has made Nigeria the world's fourth-largest consumer of Guinness, and Guinness 0.0 is the No.1 nonalcoholic beer in the UK. To keep up with demand, including for 0.0, Diageo recently opened a new brewery in founder Arthur Guinness' hometown of Littleconnell, in Ireland's County Kildare. A second facility, due to begin construction this year, will more than double site capacity. "It's a 269-year-old overnight success," Wafer says.

Wafer has worked at Diageo for 29 years, but her attachment to the Guinness brand goes back much longer. Her father owned a pub called Hannon's right outside the original brewery gates, and Guinness employees frequented it after their shifts. When Guinness recruited Wafer from the public-relations firm where she was working after earning a master's degree in modern American and English literature, her father was elated. "That was, for him, just the proudest moment," Wafer says. "Working for Guinness in Ireland is like…" She pauses as she summons the correct words to describe what it's like promoting an iconic brand that's omnipresent in Dublin. "It's such a big part of the Irish psyche and legacy," Wafer says. "You are very conscious that you are just a moment in that journey," she concludes, which seems like an understatement considering we are on a property where its namesake founder signed a 9,000-year lease in 1759.

That kind of ubiquity has its downsides. By the time Wafer was put in charge of Guinness, the brand had become pigeonholed. "It's drunk by older guys in a traditional bar in winter," she imagined consumers thinking. So she and her team introduced the "A Lovely Day for a Guinness" campaign, which highlighted younger people drinking beer in warmer months. The company also emphasized that despite its dark color and creaminess, Guinness is actually lighter in calories (210 for a 20-ounce pint) and lower in alcohol content (4.2%) than many rival beers. The next reimagining of what a Guinness could be came during Covid-19, when the company introduced more drinkers to the canned product. Because the drink is nitrogenated, the canning process is different from that of regular beer. Every container holds a widget that looks like a small ping-pong ball with a tiny hole in it. It's activated when the tab is popped open and releases the nitrogen in the widget as it careens through the can, creating the same texture as in the draft version. Around the same time, in October 2020, the brewer introduced its 0.0 product. Guinness uses cold filtration to remove the alcohol from the stout, providing an almost imperceptible effect on the flavor.

More recently, people have started posting TikTok videos of themselves "splitting the G"—that's taking a first sip so big that the schtik hits the middle of the G in the Guinness logo on the pint glass. It's a trend that doesn't quite square with what Diageo calls "our commitment to positive drinking." Still, Wafer is fairly sanguine about the immoderate gulp. "People are playing with the brand or with the product."

Now that Wafer has delivered for Guinness, Diageo is hoping she'll work the same magic on the rest of the portfolio that's been part of her remit since 2024, which includes vodkas and canned cocktails. Her plans once again include having uniform, rigorous quality standards and leaning into social media trends.

She's finished pouring her beer, but it's not time to drink yet. To certify that the pint is truly up to standard, Wafer performs the "tilt test," during which drinkers slope their Guinness as far as possible to see how far the cream will tip over the lip without spilling. Any other beer would pour out at the precarious angle at which she's holding the glass, but the head keeps the Guinness in place. Then she asks me to try my hand at the multistep pour. It takes two tries, but I finally manage Guinness-level excellence. "That's perfectly domed," Wafer says approvingly. "Stunning." B

■ PHOTOGRAPH BY MATTHEW THOMPSON FOR BLOOMBERG BUSINESSWEEK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In View

Our contributing writers' guide to a changing landscape

Tokenizing stocks is all about cutting out the middleman—except when it's not. Christopher Beam explains

■ PHOTOGRAPH BY TABEA MATHERN FOR BLOOMBERG BUSINESSWEEK

Crypto has always been a technology in search of a purpose. And over the course of its near-two-decade existence, it has found several. Bitcoin provides a store of value, though that value can fluctuate wildly. Stablecoins let you transfer cash instantly around the world without a go-between. And, on a less savory front, blockchains make it possible to launder money anonymously and scam buyers of memecoins.

But crypto's white whale has always been Wall Street. Blockchain boosters have long imagined that the technology would usher in the next generation of finance by moving the traditional system of banks, exchanges and traders onto decentralized digital rails.

If press releases are to be believed, that moment has arrived. Last summer, brokerage apps Robinhood and Kraken began offering "tokenized equities" to non-US customers, essentially giving investors exposure to US stocks even if they can't buy actual shares. In December, JPMorgan Chase announced it would offer money-market funds on the blockchain, following similar projects by BlackRock and Goldman Sachs. Then, in March, both the New York Stock Exchange and Nasdaq unveiled partnerships with crypto firms to create venues for customers to buy and sell tokenized assets.

While these projects differ in their specifics, the basic pitch is the same: Putting stocks and other assets on the blockchain can make trading faster, smoother, cheaper and available 24/7. It would also provide greater flexibility, allowing traders, including retail investors, to lend out shares and earn interest on them, and to use the assets as collateral to get loans. Plus, so-called smart contracts—essentially self-executing digital agreements stored on a blockchain—could free up money that banks and other institutions hold as buffers in case of emergency.

In some cases, the pilot projects appear to be working: Some firms are already using blockchain platforms like JPMorgan's to execute repo trades—that is, short-term exchanges of Treasuries for cash.

But there's an irony to the Wall Street incumbents hyping their pivot to crypto. The original goal of blockchain technology, going all the way back to Satoshi Nakamoto's 2008 Bitcoin white paper, was decentralization. In a fully on-the-blockchain world, you don't need intermediaries to help you transfer assets; it's just you and the person with whom you're transacting. (One popular crypto podcast is called *Bankless*.) If the purpose of the blockchain is supposedly to eliminate middlemen, why are so many of them embracing the technology?

Buying a stock seems like a simple process, but behind the curtain it's brain-meltingly convoluted. First, you tell your broker—Fidelity, say, or Charles Schwab—that you want to buy it. That entity finds a seller, usually through a market maker like Citadel Securities. The trade then requires the approval of a clearinghouse, which in most stock transactions in the US is the National Securities Clearing Corp., a subsidiary of the Depository Trust & Clearing Corp. The NSCC checks to make sure the two orders match, and another DTCC subsidiary—confusingly called the Depository Trust Co., or DTC—settles the trade by marking who owns what on a centralized ledger. (Usually they don't know that you own the stock, but simply that someone at your brokerage does.) Even then, you don't actually hold the stock in a physical or even digital sense. You simply have a beneficial interest in shares that are registered in the name of a DTC-affiliated firm called Cede & Co., and a transfer agent such as Computershare Ltd. records ownership and manages any dividends on your behalf.

No one argues that this is the best possible system. That's just the way it evolved, sometimes in response to crises. For example, the "paperwork crisis" of the late 1960s, when Wall Street brokerages became overwhelmed with physical stock certificates, led to the creation of the DTC and electronic ownership of shares.

In theory, tokenization threatens this traditional—which is to say, patched-together-over-decades—system. For crypto purists, the whole point of the technology is that it's peer-to-peer. If a company wanted to issue shares as digital tokens, it could mint them on the blockchain and sell them directly to investors. If those investors then wanted to sell, they could look for buyers on a decentralized exchange. No need for intermediaries like brokers, custodians, clearinghouses or transfer agents.

And yet, those very intermediaries are now saying the blockchain is the future and they want to be part of it. In practice, that means adopting versions of tokenization that still preserve their roles. For many incumbents, the threat of crypto technology is "existential," says Christian Catalini, founder of the MIT Cryptoeconomics Lab. "A lot of these intermediaries are an artifact of history. And they're not necessarily adding a ton of value." In other words, if you can't beat the blockchain, join it.

Tokenization of securities comes in three main forms. The first is called synthetic tokenization, which basically means creating a token that mirrors the price of a stock. When you buy it, you don't actually own a share of the company in question, but you're exposed to its price fluctuations. (This is similar to buying shares in an exchange-traded fund.) These kinds of tokens are offered internationally

"I think if you're accessing tokenized Apple stock through the exact system of intermediaries that exist today, you're no better off"

by brokers like Robinhood and Backed Finance but are heavily restricted in the US. For now, their appeal is mostly overseas, where investors may have no other way to get exposure to US stocks.

The second is a so-called wrapper model. Again, you don't own the share directly, but rather you own a token that's attached to a contract that gives you access to the share. (For example, the DTC might hold on to the share for you—think of it as a kind of lockbox—but you get a token that proves you own the share.) This might be attractive if you want the instant transferability, round-the-clock trading and other benefits of crypto alongside the safety of legal ownership.

Last, there's native issuance, which means the company issues a token directly on-chain that is itself the share, a process that is technically simpler and cheaper than going through the traditional securities process. But even then, under current rules, traders still need regulator-approved transfer agents to record their ownership on an official ledger.

Wall Street is exploring all three models, which means the tokenization landscape could soon get very, very complicated. "The situation now is … I think the technical term is a 'hot mess,'" says Omid Malekan, an adjunct assistant professor at Columbia Business School who studies crypto finance.

And yet intermediaries cite that very mess as evidence that they're still necessary. Take transfer agents. In recent months, both Computershare and Equiniti, two of the biggest transfer agent firms in the US, have announced their own blockchain projects. You'd think that tokenization would mean transfer agents, whose job is to record and manage ownership of shares, would no longer be necessary. To the contrary, says Ann Bowering, chief executive officer of issuer services for North America at Computershare: "The need for a central party becomes greater once you have increased fragmentation across the market." Billy Miller, chief operating officer of Securitize, a crypto firm that has partnered with Computershare, says the goal is not revolution. "We're not trying to replace every single intermediary," he says. "We just want to allow this market to exist in a more efficient way."

This incremental approach has drawn criticism from some crypto experts. "I think if you're accessing tokenized Apple stock through the exact system of intermediaries that exist today, you're no better off," Malekan says. "That's innovation theater." Catalini, from the MIT lab, compares the current wave of tokenization efforts to "a car on a road designed for horses." Real efficiency will only happen when Wall Street companies commit to building a fully on-chain model, he argues.

But that would require both regulatory and technical changes. While the Genius Act, passed by Congress last year, paved the way for certain financial institutions to issue stablecoins, legislation that would clarify the rules around decentralized finance is held up in the Senate. If passed, the Digital Asset Market Clarity Act could help define the relationship between a tokenized stock and the underlying security. Plus, blockchain technology needs to improve before it can handle the tens of millions of transactions that pass through NYSE and Nasdaq every day.

Some observers are skeptical that the stock market needs tokenizing at all. "It doesn't provide enough advantage to enough people to just eat the entire equities market," says Patrick McKenzie, who writes the *Bits About Money* newsletter. While there might be demand from institutions that want to make certain large-scale trades 24/7—like the repo market mentioned above—McKenzie doesn't see much upside for retail traders.

Whether customers want tokenization or not, Wall Street seems determined to give it to them. Which means the hot mess will likely persist. And in the long run, the old guard will probably prevail, Catalini says. He compares them to music labels. That industry underwent its own digital shake-up in the 2000s, and the cost of distribution went to almost zero. Their business model had to change, but many of them are thriving. Startups may discover new use cases for crypto on Wall Street, but when it comes to tokenizing existing assets,"my money would be on the incumbents," he says. B

■ ILLUSTRATION BY BEN DENZER

● Reading List

Money Goes Digital

In 2021, Cornell University economist Eswar Prasad published *The Future of Money*, in which he explored the various ways digital innovation was changing finance. Financial technology startups were enabling mobile payments and peer-to-peer lending, cryptocurrencies such as Bitcoin were emerging as a store of value, and central banks were considering issuing their own digital currencies. Five years on, many of the transformations he observed have continued, while others have fizzled. *Bloomberg Businessweek* asked Prasad to recommend five books or other writings to better understand how money is evolving and where it might be headed. Below he describes which works he picked and why.
—*Christopher Beam*

❶ The Bitcoin white paper by Satoshi Nakamoto
This is the nine-page masterpiece that launched the whole cryptocurrency revolution. It's amazing that the writer could convey such an interesting and important set of ideas with such brevity.

❷ *Proof of Stake: The Making of Ethereum and the Philosophy of Blockchains* by Vitalik Buterin
This book by the co-founder of Ethereum is a series of essays about the conceptual and philosophical aspects of blockchain technology. Buterin's writings lay out the broader social purposes of decentralized finance—the benefits as well as the guardrails necessary to ensure it doesn't support illicit activities.

❸ *Going Infinite* by Michael Lewis
This book on the rise and fall of FTX founder Sam Bankman-Fried is a great read about the way people in this industry view themselves and the factors that motivate them. That includes hubris.

❹ *Money Beyond Borders: Global Currencies From Croesus to Crypto* by Barry Eichengreen
Eichengreen looks at the ancient competition between public and private money, as well as global transitions in and out of dominant currencies—like the Spanish dólar and the British pound sterling—to draw lessons about the future of finance. His takeaway: Currency dominance isn't perpetual.

❺ *The Oracle* by Ari Juels
A crypto thriller from one of the foremost experts on blockchain technology. When an archaeology professor upsets some worshippers of the god Apollo, they write a "smart contract" that will pay someone to assassinate him. The developer of the code then faces a dilemma: Either subvert the smart contract, which goes against the technology's founding principle of trust and privacy, or allow it to operate as designed even though it might hurt people—including him.

Is this peak ice cream?

Stacey Vanek Smith and Deena Shanker dig in

It was the sticker shock felt round the world: An 8-year-old girl in Burnley, England, expressed outrage about the price her local ice cream truck was charging. "He's selling just two ice creams," she fumed to her aunt in 2024 in a video that went viral, "for bloody £9!" garnering more than 22 million views. "He's going to get nowhere with that! No, he ain't!" Imagine her indignation if she were to find out that these days £4.50 for a cone—roughly $6—is, for her peers across the Atlantic, practically a steal.

Ice cream, once an everyday, affordable source of joy, has morphed into a luxury good, violating our fundamental summertime right to cold and creamy salvation. In the US, prices at scoop shops have jumped more than 35% since 2019, when the average cost of a cone was about $4.50, according to Technomic, a research firm. "It's not just driven by one factor," says David Ortega, a food economist at Michigan State University, citing the Covid-19 pandemic, social media, the job market, tariffs, war, the K-shaped economy and a slew of other socioeconomic forces. "It's sort of this perfect storm." It's not uncommon for an ice cream shop to charge more than $8 for a couple of scoops; multiply that by four for a family, and parents now paying the price of a small meal are left wondering: Is this inflation, price gouging, or have we simply reached peak cone?

Long before inflation chaos arrived, an enterprising corner of the ice cream industry engineered its first big pricing leap. For years the dessert was served at neighborhood scoop shops for a few bucks or less and sold in half-gallon tubs at the supermarket. Then came the first generation of premium brands including Häagen-Dazs and Ben & Jerry's, with higher butterfat content and fancier flavors. In the early 2000s, not long after chocolate, coffee and beer got the superpremium overhaul, charging more for, say, small-batch production and ingredients with provenance, ice cream entrepreneurs started doing the same. Soon enough, Van Leeuwen, Jeni's, Salt & Straw and other pricier brands emerged, boasting high-end ingredients and creative, sometimes-questionable flavors, including fish sauce caramel and pizza, along with prices that could surpass $10 a pint. "That kind of broke a lot of economic principles," Ortega says.

During the pandemic, demand soared, as did premium pint sales. "A lot of people were looking for that self-care," says Jacob Posada, an analyst for industry research firm IBISWorld. "Like 'Let me get a small little treat to reward myself.'" As consumers embraced ever-pricier pints, costs were climbing too. Supply chain shocks and inflation caused the cost of ingredients to skyrocket: From 2020 to 2025, wholesale prices for dairy rose 20%, cocoa jumped more than 300% and eggs spiked more than 600%. At the same time, wages started increasing, especially in hospitality jobs such as food service.

To protect margins, many less-expensive supermarket brands, including Breyers and Turkey Hill, swapped out ingredients, like replacing cream and milk with oil. In 2025 the combination of low yields and new tariffs meant that cocoa availability became sporadic, says Chad Townsend, co-founder of the Pennsylvania-based chain Millie's Homemade. But he didn't want to downgrade his ingredients. So he did what might be considered sacrilegious in the trade—he temporarily let the chocolate flavor run out of stock. This was not popular with customers. "People want chocolate ice cream," he says. "It was not great for business."

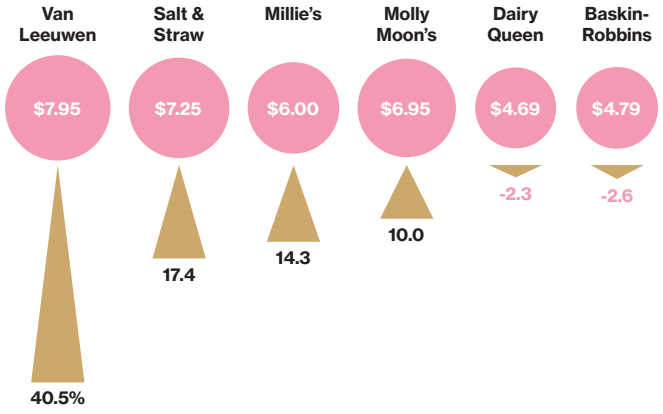
Still, from 2020 through 2024, premium ice cream sales were on a tear. More shops opened, lines got longer, flavors got weirder, prices rose. But the lower end of the market has been struggling, with chains such as Dairy Queen, Friendly's and Baskin-Robbins closing locations. Even Mister Softee hit a rocky road, cutting the number of trucks from thousands to about 600.

Now new problems are creating economic headwinds for

The Cream Rises

● Cost of a single scoop

▲ Change in the number of scoop shops, 2024 to 2025



■ PHOTOGRAPH BY RYAN DUFFIN FOR BLOOMBERG BUSINESSWEEK. STYLIST: SEAN DOOLEY ■ DATA: TECHNOMIC (GROWTH). PRICES ARE THE HIGHEST CHARGED AMONG CENTRAL CITY LOCATIONS IN NEW YORK, LOS ANGELES, SEATTLE AND PITTSBURGH AS LISTED ON COMPANY WEBSITES AND SIGNAGE AT PHYSICAL LOCATIONS

the industry. Ice cream uses a lot of energy: It needs to be shipped in refrigerated trucks, stored in energy-guzzling freezers and sold in air-conditioned shops or out the windows of diesel-powered trucks. Data center demand has pushed electricity costs up more than 6% in just the past year, and the war with Iran has increased diesel prices more than 50%. "It's been very shocking," says Townsend of Millie's.

All this poses a particular problem for shops, which can't afford to wait it out. Scoop season runs only between Memorial Day and Labor Day, and shops have to pad their prices to try to prepare for whatever economic storms may come. "We only make money for about four months out of the year," says Molly Moon, owner of her eponymous Seattle chain. "It's a cash-flow management game. We're squirrels." Whatever Moon can stash away this summer will have to sustain her business through next May, even with continued uncertainty about oil prices, tariffs and overall inflation. During the pandemic, Moon increased her single-scoop price about 20% due to higher costs. Now she's resisting; so far, only her pints and kids' scoops are going up.

On a sweltering afternoon on the Upper East Side of Manhattan, customers line up at Anita La Mamma del Gelato, looking for some sweet relief. The three small cups of ice cream personal trainer Tom Mangan orders for himself and his 4-year-old daughter and 6-year-old son set him back $33. It's a lot, he says, but the upscale atmosphere, blissful air conditioning and, of course, the treat itself made the expense "kind of worth it." It must be—he brings his kids in about once a week. "There's an interesting consumer psychology at play here, given the inflationary environment," says Ortega, the food economist. "You may be cutting that vacation to Florida this summer, but a $7 ice cream cone is something you might treat yourself to."

Those who can afford it continue seeking out this kind of splurge wherever possible. Dominique Ansel Bakery, the home of the Cronut, sells—and regularly sells out of—a vanilla ice cream cone dipped in gourmet French butter and sprinkled with fleur de sel. For the past few years, indie ice cream brands, including Betty Jo's Ice Cream in New York and Henry's Secret Ice Cream in Los Angeles, which don't have storefronts, have been arranging monthly "pint drops" for devoted followers. The pints can cost more than $20 each, and social media is full of fans sampling the coveted flavors. "People want ice cream to be an event," says Posada, the analyst. "Seasonal flavors or limited-edition flavor drops, like Dubai chocolate, drive people to come."

But Ortega says that 2026 may be the summer when scoop shops finally freeze out their customers if prices keep rising. "Ice cream is a discretionary item. It may get cut when budgets get tight," he explains. Just ask PepsiCo Inc., which incrementally raised the price of Doritos nearly 50% in the last four years. When a large bag of the famous chips hit $7, many consumers simply stopped buying them. There are signs this could be happening to ice cream. Over the past two years, the number of "premium" ice cream containers sold has fallen about 6%, according to data from NielsenIQ, while the category overall has ticked up by under 1%.

Ben Van Leeuwen doesn't seem too concerned. The chief executive officer of the eponymous superpremium mini ice cream empire, which has about 100 scoop shops around the country and sells pints at more than 12,000 retailers, says he's not worried about his price hikes. When he was faced with soaring pandemic costs—at the time, selling a small scoop for about $5.50—someone recommended he reduce the fat and eggs in his ice cream, assuming customers wouldn't notice. "And I said, 'They won't notice the first time, and then when we've done it five times, we'll suddenly have a product that's not Van Leeuwen anymore,'" he says. Instead, he doubled down, adding more eggs and more cream. "We increased the formula to actually make it more expensive."

He continued increasing scoop shop prices: three times over five years. Today, a single scoop of Van Leeuwen Earl Grey tea or Sicilian pistachio will set you back about $8. Customers haven't flinched. The pandemic taught him that his fans want the best and will pay for it. "Ten cents here, 20 cents there—I don't think it's going to drive traffic up or down," says Van Leeuwen, who's set to open 10 more shops this year. But Townsend of Millie's says he's worried that customers have a breaking point. For the second year running, he's keeping the price of a single scoop frozen at $6. "It still needs to be a family experience," he says. "Where guests can come in and have a great time, and not feel like they're getting robbed." B

US aid cuts create an opening for China, Wes Kosova says

China's ambassador to South Africa gathered politicians and health officials in Pretoria last November to announce some welcome news: Beijing would provide $3.5 million to help the nation prevent the spread of HIV. South Africa, where about 8 million people live with the virus, has the highest HIV burden of any country in the world.

The money is desperately needed and not even close to enough. Until recently the US supported South Africa's anti-HIV efforts with more than $400 million a year in assistance. The President's Emergency Plan for AIDS Relief, or Pepfar, funded government HIV-awareness campaigns and nongovernmental organizations that oversaw health centers and drug therapies, slowing South Africa's infection rate and reducing AIDS fatalities. But the lifeline was scaled back last year after Donald Trump curtailed tens of billions of dollars in US foreign aid.

The South African aid package, administered through the Joint United Nations Program on HIV/AIDS, is just one of dozens of giveaways China has provided to countries as the US is pulling back from foreign assistance. In March, Beijing announced $3.5 million in food aid for Zambia, which is recovering from a devastating drought. It pledged 5,000 metric tons of rice to reduce hunger in Zimbabwe. Antigua & Barbuda received a $14 million grant to build water systems, solar energy and other infrastructure, and Tanzania was given $41.6 million for a pediatric cardiac-care center. Cambodia got $4.4 million to clear old landmines, an effort the US once helped fund.

In the past, these small Chinese grants might have gone unnoticed. But with governments and aid organizations struggling to make up for the loss of US support, Beijing's modest acts of largesse have generated headlines in Africa and around the world, many of them framed as China stepping up after the US stepped away. If China's leadership hasn't drawn the contrast quite so sharply, it also hasn't discouraged others from doing so. In an article touting the grants, a business publication aligned with the Chinese government tartly noted that the HIV funding was China's "first major entry" into an arena that had "long been dominated" by the US.

"We're seeing more of a humanitarian focus," says Carrie Dolan, a healthcare sciences professor at William & Mary who's done extensive field work in Africa. "China's trying to grow as a superpower. And so they're funding these interventions in a new way."

The US provided more than 40% of the world's humanitarian aid before Trump cut assistance programs and effectively dismantled the US Agency for International Development. The billions sent abroad each year won goodwill and also influence. Washington pressed governments that received aid to protect free markets, fair elections and human rights—or at the very least to align themselves with America instead of its rivals, chief among them China. Now that Washington has largely exited the field, Beijing will see whether it can reap similar influence and soft power benefits at a fraction of the price, says Yanzhong Huang, a senior fellow for global health at the Council on Foreign Relations. This "health diplomacy," as he calls it, is "very smart. It's sort of like China's PR victory."

After the US pullback there was speculation about whether China would rush

■ PHOTOGRAPH BY MAX SLOBODDA FOR BLOOMBERG BUSINESSWEEK

in to fill the vast funding gap and claim the title of world's most generous giver. A year and a half later, we have the answer: Not really. Beijing can't compete with the billions the US poured into foreign aid, and it isn't trying to. It's long offered relief during natural disasters and famine (it's currently sending food to Cuba), but China's foreign assistance is primarily centered around development loans instead of Western-style grants through nongovernmental aid organizations. China allocated about 24.9 billion yuan ($3.6 billion) for "Aid to Foreign Countries" in its 2024 budget, according to the Ministry of Finance. Compare that with the US, which budgeted about $64 billion in nonmilitary foreign aid the same year.

Trump's "America First" foreign aid policy aims to replace many grants with transactional deals. Assistance "must advance US interests, deliver measurable results and increase recipient-country responsibility," a State Department spokesperson said in an email. The agreements "require co-investment where appropriate and make clear what each side is contributing." In practice, that means nations seeking help from Washington often need to offer something of value in return.

The administration's "trade, not aid" slogan has gotten a mixed reception. Since Trump retook office, more than 20 African nations have signed bilateral agreements with the US to fund healthcare projects. But others have balked at some of the details. Zimbabwe and Ghana said Washington wanted broad access to health data, potentially including sensitive personal information, and raised concerns about citizens' privacy and data protection rights. The US offered several reasons for requesting the data, including that it was to ensure the funds were spent wisely. A State Department spokesperson said the proposed agreements called only for the kind of "aggregated, de-identified" data that's long been used to fight disease. Arnold Kavaarpuo, head of Ghana's Data Protection Commission, told the Associated Press that the scope of the desired information "went far beyond what would typically be required."

Zambia and Zimbabwe also said the negotiations included discussions about greater US access to their deposits of copper, cobalt and other critical minerals used in semiconductors and electric-vehicle batteries. The State Department said there was no linkage between aid and access to minerals. Ghana, Zambia and Zimbabwe didn't sign deals collectively worth more than $1 billion in US assistance, while accepting China's far smaller grants.

The consequences of US aid cuts are being felt acutely in the Democratic Republic of Congo, where a rapidly spreading variant of the Ebola virus has already claimed more than 100 lives. The outbreak was harder to detect and contain in part because it's a rare strain that's resistant to vaccines. It didn't help that health organizations in the country were forced to scale back parts of their Ebola containment efforts after the Trump administration reduced its funding for such activities from $1.2 billion in 2024 to less than $70 million in the last months of 2025. The US has since unlocked an additional $300 million through a UN fund to provide humanitarian assistance in Congo and neighboring Uganda.

Developing nations haven't counted on China for this kind of direct aid. Since 2013, much of Beijing's foreign assistance has been through President Xi Jinping's signature Belt and Road Initiative, which has financed ambitious infrastructure projects in countries that can't afford to undertake them on their own. China has backed more than $1 trillion in loans and other financing to construct highways, railroads, dams, bridges and airports in more than 150 nations around the world.

Beijing pitches itself as a partner to other nations and maintains that the goal of the Belt and Road program is to empower countries rather than perpetuate dependence. (If that sounds familiar, maybe it's because the Trump administration uses similar language to describe its own foreign aid policy.) The loans also help to spread China's influence and drive economic growth at home. Many Belt and Road loans must be repaid with interest, and Chinese materials and labor are often part of the arrangement. Chinese contractors are awarded about 89% of the transportation infrastructure projects China funds, according to Marina Rudyak, an assistant professor at Heidelberg University's Institute of Chinese Studies.

This has sometimes led to acrimony. Laos, Pakistan, Sri Lanka and other countries have struggled to meet their debt obligations to China. Some nations have defaulted on their loans or renegotiated the terms to give them longer to pay. In other cases, countries have found it difficult to maintain new infrastructure and machinery once Chinese contractors packed up and went home. "They will send all this equipment over, but they're not always training people on how to use it," Dolan says. After they help build a hospital, "they're not teaching people how to fix the CT scanner."

China has no intention of abandoning the Belt and Road Initiative, and despite the controversies, there appear to be plenty of governments willing to sign up. The number of deals it's struck with other nations has grown after a Covid-19-induced slowdown. Beijing has made some changes, though. Even before Trump was reelected, it had begun shifting its focus away from big-ticket public works and toward what it calls "small and beautiful" projects that are less financially burdensome and can produce faster results. These sometimes include grants through international organizations, such as the HIV-prevention funding China provided to South Africa. "This is a very interesting time," Huang says. The US "seems to be converging with China's old transactional model" just as Beijing is testing softer, multilateral aid.

China might welcome the impression that it's filling the US void, but some of its recent aid announcements may be motivated by different aims. Among the beneficiaries of its recent generosity are countries that have had complicated relationships with Beijing. Zambia, which received food aid this year, owes China more than $4 billion from loans used to build roads, airports and a hydropower station. "Some of the mutual respect didn't work out for China the way that they wanted," Dolan says. "So now they're in this phase of trying to rebuild and regain trust." B

In Depth

Climate change will hurt your wallet

The Pembury Reservoir provides water for residents of Tunbridge Wells in southeastern England

Floods and Droughts Bring Rising Water Bills

In England and Wales, the steep costs of upgrading climate-stressed water systems are being passed along to customers. *By Olivia Rudgard and Jess Shankleman*

One morning last November, Amber Salamon went to deal with the mess of Weetabix her young son had smeared all over the kitchen. "I was just about to clear everything up, turned the tap on, and there was no water," she recalls.

It was the first of many days without running water for Salamon's family and about 60,000 other residents in the town of Tunbridge Wells in Kent, England. When the water returned five days later, it wasn't clean enough to drink. In January the water cut out again, returning only temporarily each day. Local businesses were forced to close. Alex Greig, the owner of Fuggles Beer Cafe, estimates the outage cost him more than £10,000 ($13,400) in profit. "We're in this situation where we can't rely on one of the most essential services," he says.

Tunbridge Wells isn't done paying. Water bills in the town are about to get more expensive, in part because of climate change, which officials blamed for last winter's outages. A heat wave earlier in 2025 depleted the reservoir that feeds the local water treatment plant and degraded the water quality, making the chemicals used to treat it ineffective, according to South East Water, the company serving the town. (Regulators also accused the company of failing to prepare for the water quality issues. In May the chief executive officer of South East Water resigned after admitting to "unacceptable" oversights that led to the loss of service in Tunbridge Wells.) To avoid similar crises, the company says it's spending £1.2 billion on climate resilience ▶

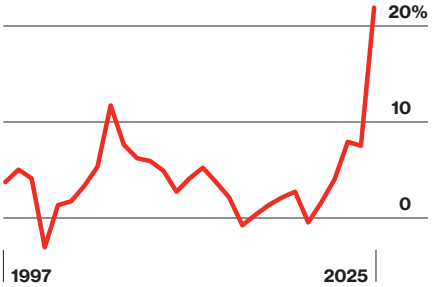
Greig storing emergency water at Fuggles

◀ over the next 50 years. Customers are already paying for other improvements, including a new £39 million water treatment works that came online earlier this year.

Communities across the UK are grappling with related issues. Water bills in England and Wales have been cheap, and now the infrastructure, some of it more than a century old, faces an overdue reckoning. For years sewage has overflowed into the UK's rivers and

A High-Water Mark

Consumer price index for UK water service, year-over-year change in April reading



seas because of too-small pipes and tanks. Now heavier rain caused by climate change is exacerbating the sewage problem by overwhelming those tanks more quickly. Worsening dry spells are also straining the country's drinking water storage capacity, and there's not enough space to process stormwater during more intense bouts of rain.

Many of the 16 regional businesses that run water systems in England and Wales are making deep investments to address these challenges. They're spending at least £1 billion collectively from 2025 to 2030 to shore up water supplies against climate extremes, including fixing leaks and building reservoirs, according to calculations from Water UK, an industry body. Companies are spending even more on other projects to make them more climate-resilient and to address other issues affecting water supplies, such as population growth and greater pressure to preserve natural rivers and streams. In the east of England, a £1.8 billion effort involving hundreds of miles of new pipes to transfer water from northern parts of the region to the south started work in 2020 and has an estimated completion date of 2032. "Climate change leaves no room for delay on this investment," Anglian Water, the company running the project, said in a statement.

Additional projects are underway to harden water networks to flooding and other climate risks and to stem the flow of sewage into waterways. To handle such problems, London completed a 24-foot-wide "super-sewer" under the River Thames last year at a cost of £4.6 billion. Climate projections suggest it will be big enough to last until the 2080s without any increase in sewage spills. After that, more money may be required to add extra water storage and greenery to slow the flow into the sewer.

Big investments by water companies mean steeper rates for customers. On average, annual costs across England and Wales have already risen by 55% in the past four years, to an average of £639 a year (in Scotland and Northern Ireland, water is managed by publicly owned, government-funded suppliers, and costs to customers rise more slowly). In 2024, after a scandal over sewage in rivers and leaks from water pipes, regulators approved plans from water companies in England and Wales to collectively spend more than £100 billion to deal with long-term issues, double the £51 billion it allowed in 2019. Many of those companies are also pursuing expensive resilience projects, such as new reservoirs and desalination plants, at an overall cost of £50 billion.

Water price hikes have been so drastic that they're stoking inflation in the UK, according to the Bank of England, which said in its February monetary policy report that water bills were one of the factors keeping inflation persistently higher than the government's 2% target.

Now, "inescapable facts," including climate change, mean water bills will increase by roughly 30% over the next five years, says Jon Cunliffe, a former deputy governor of the Bank of England who carried out a government-commissioned review of the water sector last year.

The UK's problems are part of a global trend. Water price inflation is higher than overall inflation and economic growth rates. Last year's average increase in water bills across 200 countries was 6.2%, according to data from Global Water Intelligence, a consulting firm. Europe had the highest increases globally, at 8.2%, reflecting its investments in climate resilience, GWI said in a press statement. The UK isn't the only normally temperate, drizzly country that's relying more on desalination: The Netherlands and Belgium are also looking to create drinking water from the sea, a technique used mostly in more arid parts of the world, as they seek to cope with dire climate-driven predictions of a shortfall in drinking water.

England's water supplies have run perilously low at several points in the past two decades, but those crises were solved by rainfall. That run of near misses has prompted the government to tighten requirements for water suppliers to be prepared. Before 2019, companies prepped for a 1-in-100-year dry period, roughly equivalent to the worst drought on record. Now they have to show they're prepared for a much more severe drought, the kind that would under normal circumstances be expected to recur only every 200 years. By 2040 they have to be ready for a 1-in-500-year drought.

"We've often been spared by the return of rain, but that's luck, not resilience," says Emma Howard Boyd, who chaired the Environment Agency, which regulates water quality in England, from 2016 to 2022. "And our level of risk has been higher than we've been willing to admit."

Water bill increases are coming just as the UK's overall cost of living also rises. In a 2024 survey of customers in England by the Consumer Council for Water, a publicly funded consumer advocacy organization, 2 in 5 respondents said they would struggle to afford significantly higher water rates. Salamon says she's fine with paying more for a secure supply, but not if the recent problems in Tunbridge Wells continue. "If we don't see any investment going into that infrastructure and we continue to see outages," she says, "that would be difficult to swallow." B

Umbrellas provide some relief at a Delhi market in June

Harsh Weather Comes For Health Insurance

Insurance companies are selling new products as climate change makes people sicker. *By Ishika Mookerjee*

In the weeks after the last of the Diwali firecrackers explode each fall, a dense blanket of smog settles over New Delhi, one of the world's most polluted cities. The haze worsens through the winter months as cold air traps a poisonous mix of industrial emissions, vehicle exhaust and residue from annual crop-burning. The problem has become so intense that employers in the Indian capital are increasingly fielding staff requests for "pollution leave"—time off to manage symptoms such as difficulty breathing, stinging eyes and fatigue.

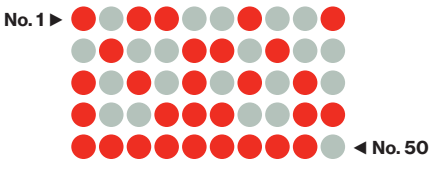
In January, when the air quality was particularly bad, "I received a lot of messages from my team that 'my eyes are burning, I have a headache, I won't be able to come to office,'" says Swapnil Srivastav, co-founder of Kidbea, a children's clothing company near Delhi. Like other Indian employers, he's been shelling out for air purifiers and masks to keep his employees comfortable, spending nearly 100,000 rupees ($903) so far.

It's an example of how employers are responding to chronic climate stresses across India, home to 5 of the 10 most polluted cities on the planet. While the country's poor air quality is primarily the result of emissions, atmospheric stagnation—a phenomenon that holds pollutants close to the ground—intensifies the effects and is projected to worsen as the climate warms.

The World's Most Polluted Cities

Cities with the highest PM2.5 readings in 2025

● Located in India ● In other countries



In urban areas such as Delhi, Bengaluru and Hyderabad, pollution-related health insurance claims have spiked, according to research published by insurance aggregator Policybazaar, which found that more than 8% of post-Diwali hospitalization claims in the past few years can be linked to air contaminants. Little data exists on heat-related claims in India, but summer temperatures regularly rise above 45C (113F) in the country's northwest. Higher temperatures make heart attacks, cancer and degenerative diseases more likely, and insurers in Japan and Hong Kong are already offering policies linked to heat waves and heatstroke.

This is creating an opportunity for insurers in India too, where health insurance typically covers hospital expenses, severe illness and extended periods of leave rather than visits to clinics or lost wages over relatively short periods. To respond to rising pollution- and heat-related claims, some insurers are packaging wellness benefits such as health screenings and gym memberships as part of a "prevention" strategy. Others are offering products covering lost wages that pay out once a predefined threshold—such as a certain temperature or Air Quality Index (AQI) level—is hit, because laborers are unable to work then, in some cases due to government restrictions on construction activities or vehicular traffic. These "parametric policies" are meant to pay out regardless of actual losses suffered and generally do so much faster than traditional policies, usually within a matter of weeks.

In a world first, Indian insurer ICICI Lombard General Insurance Co. paid over 49,000 women a total of more than 32 million rupees following heatwaves in 2024 as part of a program that pays laborers and seasonal workers a portion of their income on days when the temperature exceeds a predetermined level, usually upwards of 40C (104F). The number of workers covered has now grown to about 240,000. The company's parametric products also cover air quality, high rainfall and cyclones. Last year, Go Digit General Insurance Ltd. launched an AQI-linked product for migrant construction workers. Financial-support payments of up ▶

■ PREVIOUS SPREAD: PHOTOGRAPHS BY MURRAY BALLARD FOR BLOOMBERG BUSINESSWEEK. THIS SPREAD: PHOTOGRAPH BY ABHISHEK KHEDEKAR FOR BLOOMBERG BUSINESSWEEK ■ DATA: UK OFFICE FOR NATIONAL STATISTICS (WATER), IQAIR (POLLUTION). READINGS FOR PARTICULATE MATTER 2.5 MILLIONTHS OF A METER OR SMALLER

◀ to 6,000 rupees can be triggered when the AQI repeatedly hits 400, the level at which the Delhi government often closes down construction sites.

Climate change, higher pharmaceutical prices and aging populations are all likely to increase medical costs and prompt health insurance claims in the coming years, says Christopher Au, senior director of climate practice and alternative risk transfer solutions at consulting firm WTW. That will, in turn, drive the development of extreme weather insurance products like these, the cost of which is absorbed by both companies and individuals.

Accurately pricing these products will depend on granular, localized health data that can show the correlation between increased claims and climate-driven effects, something that's in short supply. Privacy restrictions usually limit the collection and sharing of health data, but even if they didn't, disease classifications vary by jurisdiction, and hospitals usually list illnesses, not their triggers, as causes of death. In India, the private health insurance industry is only about 15 years old "in the true sense," says Mayank Bathwal, chief executive officer of Aditya Birla Health Insurance Co. "The dataset is only starting to emerge."

The role of climate change in driving specific weather events is also a thorny question for researchers around the world. Still, climate "has to be embedded in our insights and underwriting and pricing," says Priya Deshmukh, head of health products, operations and services for ICICI Lombard. The company is building a framework to measure how climate stresses exacerbate health risks. "I wouldn't say we have cracked it, but we are at it, making an effort to really quantify it."

Meanwhile, some companies are taking steps to protect employees from extreme conditions, partly to reduce the need for costly insurance coverage in the first place. Manufacturers of goods whose production creates high ambient temperatures like steel, cement and chemicals are starting to impose afternoon curfews so factory workers avoid the hottest hours of the day, says Aniket Jalgaonkar, founder of ClimateWyse Consulting Solutions.

Office workers are also seeing increased flexibility from their employers. Chandrika Bhattacharya moved to Delhi as a consultant for accounting firm EY in 2024 and was taken aback by bouts of coughing, feverishness and persistent discomfort in her throat during the city's polluted winter. "I just felt that heaviness throughout the day," she recalls.

The effects were compounded by the isolation she felt on days she had to stay home due to air-quality restrictions that limit commuting into the office. Alone in a megacity with few friends, Bhattacharya was reminded of Covid-19 lockdowns a few years earlier. "When you're locked indoors like that for a certain period of time, it just feels like, what's the point of it all?" she says. For her, the physical effects of the pollution "spiraled into a mental health situation."

Her managers were supportive of both her work from home and leave requests, she says, even allowing her to work for a few weeks from Hyderabad, where the pollution is less punishing. EY declined to comment. Ultimately, Bhattacharya quit the firm and moved to Kenya, where her parents live.

Srivastav, who runs the children's clothing company near Delhi, says he'd jump at the chance to buy insurance to protect against productivity loss when bad air days keep his employees home, though as far as he knows, such a product doesn't currently exist. "From November to January, we saw a roughly 30% to 35% loss of productivity," he says of last winter. For insurers, "this could be a big win." Ⓑ

—With Siddhi Nayak

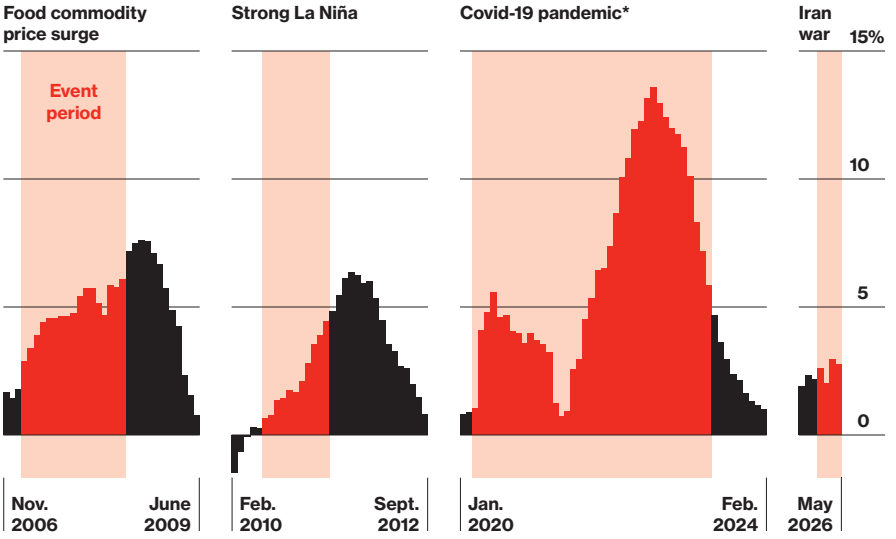
A visitor to Delhi's India Gate shades himself from the summer sun

Hot Planet, Pricey Food

Climate change is turning one-off weather shocks into more regular events that decimate harvests and strain supply chains. As effects compound, extreme heat, droughts and storms threaten to make climate inflation an economic fixture. And as temperatures climb, experts predict, so will household costs such as groceries. —*Emma Court*

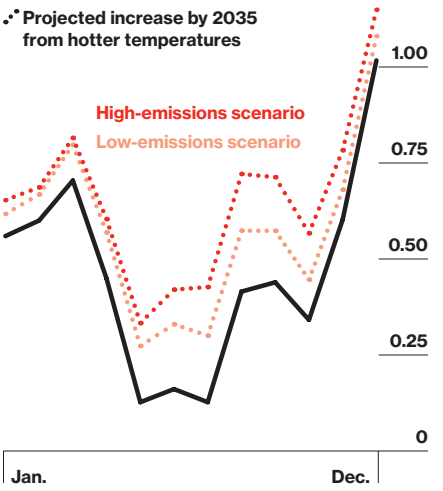
❶ The Iran war has inflated the cost of products globally from crude oil to swimsuits. Food prices aren't immune, with increases filtering down to supermarket shelves. It's part of a pattern. Look at the roller-coaster ride that US shoppers experienced with grocery prices after major shocks like the Covid-19 pandemic.

Year-over-year change in average US city grocery prices



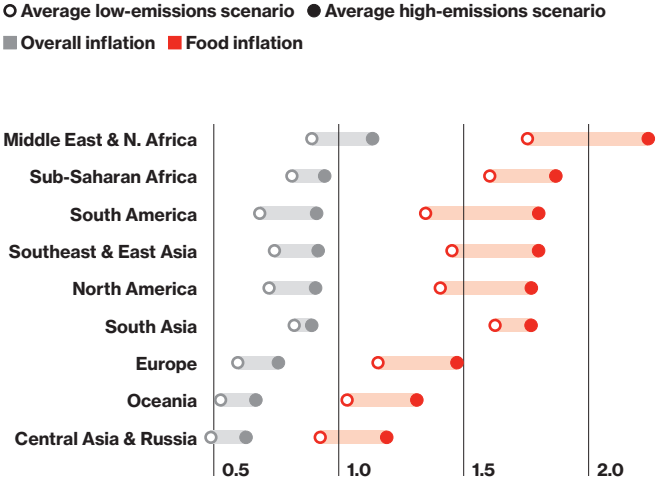
❷ Climate inflation may be more enduring. One study found extreme heat alone could add extra costs on top of historical food price increases.

Increase in average global food inflation, month-over-month, in percentage points



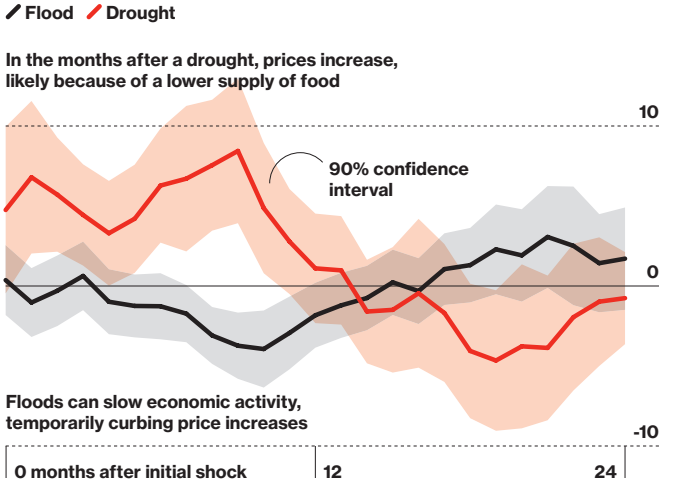
❸ Africa and South America will likely be among the most exposed to prices rising due to extreme heat. Countries in those regions are also typically lower-income, with less infrastructure and fewer resources to adapt.

Temperature-driven increase to annual inflation by 2035, in percentage points



❹ Different events can affect prices differently. Droughts and heat waves tend to raise prices as they destroy harvests. Floods and storms are more likely to depress routine spending and have less predictable effects on prices.

Global average change in inflation for staple foods following a weather event, in percentage points



■ PHOTOGRAPH BY ABHISHEK KHEDEKAR FOR BLOOMBERG BUSINESSWEEK ■ 'EVENT END IS WORLD HEALTH ORGANIZATION DECLARATION OF END OF PUBLIC HEALTH EMERGENCY. DATA: US BUREAU OF LABOR STATISTICS (CPI FOR FOOD AT HOME); M. KOTZ (MONTH-OVER-MONTH FOOD INFLATION); *COMMUNICATIONS EARTH & ENVIRONMENT* (REGIONAL INFLATION); *THE B.E. JOURNAL OF MACROECONOMICS* (STAPLES INFLATION BY WEATHER EVENT). CPI CHANGES BASED ON SEASONALLY ADJUSTED INDEX. FUTURE INFLATION ESTIMATES BASED ON HISTORICAL RELATIONSHIPS BETWEEN TEMPERATURE AND INFLATION ACROSS 121 COUNTRIES AND APPLIED TO SSP585 (HIGH-EMISSIONS) AND SSP126 (LOW-EMISSIONS) SCENARIOS. REGIONAL INCREASES IN INFLATION ALSO USE SSP126 AND SSP585. GLOBAL AND REGIONAL ESTIMATES DON'T TAKE INTO ACCOUNT FUTURE POLICY OR CLIMATE ADAPTATION MEASURES. STAPLES INFLATION CHANGES INCORPORATE HISTORICAL PRICES AND NATURAL DISASTERS FROM 1990 TO 2018


zepbound™
(tirzepatide) injection
5 mg
0.5 mL
NEEDLE END

How Eli Lilly Got Huge By Making Us Thin

Dave Ricks steered the 150-year-old drug giant to a $1 trillion market cap. Can he defeat pharma's boom-and-bust cycle?

By Madison Muller and Brad Stone
Photographs by Kevin Serna

When Dave Ricks became chief executive officer of Eli Lilly & Co. in 2017, he was facing an industry under siege. Americans held drug companies in lower esteem than airlines, law firms and even the federal government. President Donald Trump, then starting his first term, was excoriating them for their high prices. A mounting number of reports showed that soaring costs were even forcing some diabetics to ration insulin.

Ricks, the 11th CEO in Lilly's 150-year history, concedes that one was a public-relations nightmare. Eventually it became personal: One day he received a letter from a young boy detailing the lengths to which his mother was going to afford insulin. Similar messages piled in from others. Ricks says he read almost all of them and about 90% accused Lilly of price-gouging patients. "I couldn't sit there and accept it," he recalls. "It was a major problem."

Almost a decade later, the mood at Lilly has shifted dramatically. The company's hit diabetes shot, Mounjaro, and obesity shot, Zepbound, have transformed its fortunes and, in many ways, its public image. Lilly is the most valuable healthcare corporation in the world, joining only a dozen or so other companies, mostly in tech, that have reached a $1 trillion market capitalization. Ricks, formerly just another embattled pharmaceutical executive in Washington, is a frequent White House ally who helped persuade the Trump administration to expand Medicare coverage for obesity drugs. Even the mail is better these days: Patients send him rapturous testimonials of their weight loss success, complete with before-and-after photos. One 52-year-old correspondent told Ricks that his doctor said he'd almost certainly die before 60. Then he started Mounjaro and shed more than 200 pounds in 18 months. "His only wish was to go to his daughter's wedding," Ricks says. "And he was like, 'Now I can do it.' "

Millions of patients all over the world are taking Mounjaro, Zepbound and other GLP-1 receptor agonists made by Lilly and its longtime rival, Denmark-based Novo Nordisk A/S. These revolutionary drugs—the acronym stands for glucagon-like peptide-1, a gut hormone the medicines are designed to mimic—have surged in popularity thanks to their ability to suppress people's appetites and melt away stubborn pounds. Available first as injections and then also as oral medications, GLP-1s are beginning to turn the tide on the US obesity epidemic, an unfathomable outcome a few years ago. Now their efficacy is being studied for other potentially deadly conditions, including heart disease and drug addiction, with promising results.

Investors can't get enough of Lilly's drugs. Since Mounjaro was approved in May 2022, it has passed Merck & Co.'s cancer blockbuster Keytruda as the world's bestselling medication, helping bump Lilly's stock nearly 300%. Zepbound is the planet's most popular obesity medicine despite being released only two years ago. (Ricks says Lilly is shipping seven Zepbound injections every second.) Foundayo, a daily pill introduced in April that also helps patients lose weight, has already racked up about 89,000 prescriptions, according to analysts, even though the company only recently started advertising it.

People are also clamoring to get their hands on retatrutide, a next-generation compound Lilly has in testing. That drug, which mimics three different hormones versus two for Zepbound and one for Novo's Wegovy, yielded average weight loss of 28% across 18 months in a late-stage trial—a decline previously thought possible only through gastric bypass surgery. And Lilly has more obesity drugs coming. "We basically put a bet on every rational idea and said, 'We should be first or best on every conceivable concept,' " Ricks says.

Behind the blockbusters is a company that's been remade by Ricks' personality, with speed the top priority and mistakes not an option. He's resolved widespread supply shortages, supercharged research and development, poured billions of dollars into manufacturing and artificial intelligence, and pioneered direct-to-consumer strategies, including launching LillyDirect, an online platform where patients can connect with doctors and get obesity drugs.

These moves have helped Lilly capitalize on the obesity boom in ways its peers have struggled to match. Novo, whose diabetes drug Ozempic created the modern weight loss frenzy, has stumbled amid US pricing pressures, lagging insurance coverage, intensifying competition and, especially, by assuming its early lead would hold. "Lilly is just playing at a completely different game level than

Ricks at Lilly's headquarters in Indianapolis

■ DATA: BLOOMBERG

any other pharmaceutical company," says Wei-Li Shao, who spent 18 years at Lilly and is now president of virtual care platform provider Omada Health Inc.

The test for Ricks now is whether Lilly can outlast the industry's familiar boom-and-bust cycle. Although drug patents last about two decades, they're typically granted years in advance of US Food and Drug Administration approval, so companies don't get that much time to reap a profit before cheaper generics begin to erode sales. Roughly half of Lilly's revenue last year came from Mounjaro and Zepbound, a precarious dependency for any drug company. While Lilly has about a decade of patent protection left on those drugs, the competition is already intensifying. Hundreds of thousands of people are taking Novo's new Wegovy pill, and at least 120 companies, a third of them in China, collectively have hundreds of such drugs in development, according to Bloomberg Intelligence. The rapid rise of AI has also introduced a new threat: that the next big drug will come from Silicon Valley. And Lilly has some internal challenges too, with insiders saying its newly hard-driving corporate culture has led to high executive turnover and poor morale.

Ricks is undeterred. Now in his 10th year as CEO, he says he wants to imbue Eli Lilly with the consistency and dominance of technology giants such as Apple Inc. and Amazon.com Inc. In addition to flooding Lilly's pipeline with new treatments, he's got the company on an unprecedented acquisition spree and in a ubiquitous advertising campaign that seeks to inspire Nike-like brand fidelity.

"If you look at healthcare, most people would say it is, perhaps next to government services, the worst consumer experience they have every day," Ricks says. But, he adds, "there are a bunch of people posting on Reddit when their package arrives from Lilly at their door. They unwrap it. They make a video of it. It's like an iPhone. It's an exciting moment."

In 1876 a former Union army colonel named Eli Lilly opened a small laboratory on Pearl Street in Indianapolis. He wanted to improve on the era's patent medicines and counter snake oil salesmen by making quality products patients could trust. It took some time—early medications such as Succus Alteran, marketed as a blood purifier for syphilis and other ailments, were themselves little more than quackery—but Lilly eventually found success selling pills coated in gelatin, a major improvement on the putrid medicinal liquids and powders patients commonly choked down.

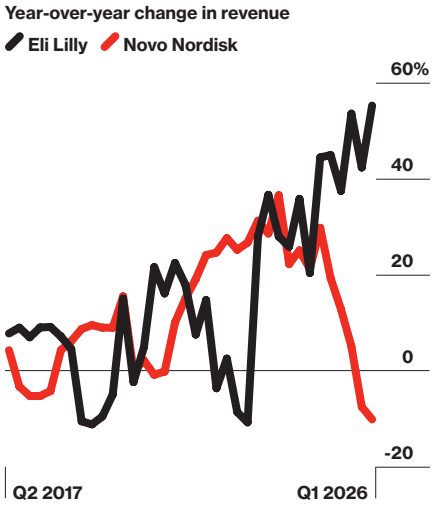
Over the following 150 years, Lilly grew from that tiny, two-story brick building into a powerhouse with roughly 50,000 employees around the world. Today its Indianapolis headquarters, a mile north of the original operation, is so large it has its own ZIP code. In that time it's been at the forefront of addressing America's most pressing ailments and anxieties: diabetes, polio, depression, erectile dysfunction, Covid-19 and, now, obesity.

In the early 2000s, Lilly learned what it was like to have the profits from an enormously popular drug vanish virtually overnight. Prozac, approved as a breakthrough treatment for depression in 1987, by then accounted for about a quarter of the company's sales, prescribed to tens of millions of patients. Executives tried to plan for the loss of crucial patents for the drug in 2001, focusing heavily on mental health, cancer and diabetes. But although Lilly's research led to the development of GLP-1 drugs for diabetes, the company failed to find a replacement hit at the time, and in the process it ignored some early research showing how GLP-1s might help with obesity.

By 2008, Lilly had lost a third of its revenue since the turn of the century and had seen an even bigger drop in profits. It was forced to undertake a massive cost-cutting effort that eliminated 5,500 jobs, roughly 14% of its workforce. From 2005 to 2009 the company got only two new drugs approved, a blood thinner called Effient and a diabetes treatment called Byetta. Novo Nordisk, in contrast, was moving on GLP-1s for weight loss; by 2013, when the American Medical Association declared obesity a chronic disease and not the result of weak willpower or bad lifestyle choices, it was ready. The next year, Novo got approval for Saxenda, the first GLP-1 drug cleared for weight loss in the US.

Rising With the Peptides

Year-over-year change in revenue



Those were formative years for Ricks, who'd joined Lilly as a business development associate in 1996 after growing up in the San Francisco Bay Area and studying industrial management at Purdue University. He ascended the ranks, managing Lilly's businesses in Canada and China before returning to oversee the company's most important market. Along the way he developed a reputation as an uncompromising manager with an aversion to the "Lilly nice" culture of harmonious collaboration. Shortly after Ricks joined the executive committee, he remembers, he asked then-CEO John Lechleiter for some constructive feedback. "You have an overdeveloped sense of urgency," Lechleiter told him. "You mean I'm impatient?" Ricks replied. "He's like, 'Yeah, sometimes it gets you in trouble.' I'm like, 'OK, some trouble's good.' "

In July 2016, Lilly announced Ricks would become CEO. At the time, it took an average of 13 to 14 years for a promising medication to make it through the company's test labs to an FDA approval decision. Dan Skovronsky, Lilly's chief scientific and product officer, says ▶

◀ he remembers the speech Ricks gave when he started as CEO—especially the priority on speed. "It's not just about getting to the patients faster—of course, we care a lot about that—or beating your competitors," Skovronsky says, summing up the message. "It's also such a tough business that you need to learn, and you can learn faster if you move faster."

That year, Novo published impressive results from a weekly GLP-1 shot that went on to become Ozempic. Under Ricks, Lilly needed to come up with something better. He turned to Skovronsky, a physician, neuroscientist and entrepreneur who'd joined the company after it acquired his startup, Avid Radiopharmaceuticals, in 2010. Lilly scientists had been experimenting with combinations of GLP-1s and other gut hormones, which had the potential to be more powerful than GLP-1s alone. That research led to early-stage testing of several different compounds, one of which stood out to Skovronsky: tirzepatide. In just a month, healthy volunteers who took the drug lost from 3% to 5% of their body weight. "We said, 'This is working,' " he recalls. "This is really going to be a special medicine."

At Ricks' direction, Skovronsky was also working on an initiative to cut Lilly's development timeline in half. "We tried to reinvent every step of the drug development process with an eye on speed," Skovronsky says. Tirzepatide was "the first molecule that got the full-speed treatment." He turned the R&D department into a pseudo biotech startup, calling the group GIP Bio (in reference to one of the hormones the drug mimics) and freeing it from bureaucratic requirements such as commercial viability assessments. "We were hungry to prove ourselves," Skovronsky said at an R&D day years later.

Tirzepatide won FDA approval in 2022, roughly five years after Ricks and Skovronsky decided to expedite it. Lilly had been so optimistic about the drug—which would be branded as Mounjaro—that it had started looking at manufacturing sites nearly four years before the approval came through, a step it had never taken before. Ricks was determined to catch up to Novo. "We're not going to lose because someone leapfrogged us," he remembers thinking.

By the time Zepbound was approved, in late 2023, GLP-1 hype was at a fever pitch. Patients were documenting their weight loss journeys on TikTok and swapping tips for managing side effects on Reddit. But Novo was struggling to manufacture enough semaglutide, the active ingredient in Ozempic and Wegovy. Seeking an edge, Lilly priced Zepbound about 20% cheaper than Wegovy. It also introduced LillyDirect, whose launch had been closely managed by Ricks himself. There, patients could connect online with doctors to get a weight loss drug prescription and pay directly if their insurance didn't cover it, as was often the case. (The site was janky at first, but today 55% of new Zepbound patients are buying through LillyDirect.)

Demand quickly spiraled out of control for Lilly, however, as it had for Novo. Within months, patients across the US were clamoring to find Zepbound in stock at local pharmacies. Frantic, some railed against both companies on social media. Many turned to telehealth providers such as Ro and Hims & Hers Health Inc., which were selling cheaper copycat versions of the drugs, something that's allowed when medicines are in short supply. Ricks pushed his staff to get the situation under control, pouring billions into Lilly's manufacturing sites in Indiana, North Carolina, Wisconsin, Ireland and Germany. "Our workers come every hour of every day to every plant in the world to make more, 24/7, 365, overtime, weekends, holidays," Ricks told *Bloomberg Businessweek* in 2024. "We're operating above the theoretical capacity of those sites."

Lilly's bottlenecks, unlike Novo's, stemmed not from an ingredient shortage but from the complexity of its plastic injector pens. The company found a workaround by instead offering the drug in a small, single-use vial. This required customers to fill a syringe and inject the drug themselves, but such was Zepbound's promise that most overcame any squeamishness. Novo, lacking an immediate solution, was forced to limit the sale of introductory Wegovy doses. "You cannot make it hard for your customers to get your product, especially if there's an alternative that may even be a little better," says BMO Capital Markets analyst Evan Seigerman. "When you do, you permanently change behaviors."

Vials were also cheaper to produce than pens, so in August 2024, Ricks cut the price of Zepbound vials in half on LillyDirect, the only place that offered them at the time. Patients could now buy the drug there for as little as $399 a month. Single-use Zepbound vials quickly became the site's bestselling product, allowing Lilly to capitalize on the burgeoning cash-pay market in a way that Novo, which wasn't selling Wegovy in vials and didn't have a direct-to-consumer site, couldn't. It took the Danish company an additional seven months to roll out a similarly low-priced offering and more than a year to start its own consumer website. But by then it was too late: With Ricks at the helm, Lilly had turned the tables, surpassing its chief rival in the most economically and culturally transformative drug category in recent memory.

Lilly Through The Years

1923
Lilly begins selling the first mass-produced insulin, transforming diabetes from a fatal disease into a manageable condition.

1940s
The company helps scale production of penicillin, bringing the breakthrough antibiotic to millions of patients.

1955
Lilly becomes the first company to manufacture and distribute the Salk polio vaccine worldwide.

1982
Lilly introduces Humulin, the first medicine made using recombinant DNA technology, ushering in the biotech era.

1987
Prozac is approved for use in the US, en route to becoming one of the best-known depression treatments and helping reshape mental-health care.

2003
Lilly launches Cialis, challenging Viagra and becoming a major player in men's sexual health.

2022-24
Lilly rolls out Mounjaro and then Zepbound, which make it the leading force of the modern weight-loss-drug boom. The company also launches LillyDirect, a new direct-to-consumer platform.

2026
Lilly introduces Foundayo, a new once-daily obesity pill.

■ DATA: ELI LILLY

The opportunity before Lilly was vast. Obesity affects more than 100 million people in the US and 1 billion around the world. Many more are considered clinically overweight. Countless business empires have been built around the age-old challenge of helping people shed unwanted pounds. And GLP-1s weren't a fad diet or a willpower-testing exercise regimen, but rather a scientifically proven drug with few serious side effects. Lilly's focus shifted from making enough medicine to putting it in the hands of as many patients as possible, including those covered by Medicare, and to cultivating a deeper connection with their customers.

The brand overhaul started with Lina Polimeni, who during a 22-year career at Lilly had gone from peddling medicines to Los Angeles-area doctors to serving as the company's top marketing executive. For the campaign she was planning, Polimeni wanted to hire Portland, Oregon-based advertising firm Wieden+Kennedy, best known for its relationship with Nike Inc. But such was the poor reputation of drug advertising—characterized by euphemistic references to illnesses, blithely smiling patients and long regulatory disclosures encompassing every conceivable side effect—that the agency rejected Lilly. "I had to reverse-pitch them three times," Polimeni says. "They didn't want to work in pharma."

Eventually she persuaded Wieden+Kennedy to give Lilly a chance, and together they produced a short film during the pandemic, when the Covid vaccines were making Pfizer and Moderna household names. The spot established a friendly new identity for Lilly as "a medicine company." Some of Polimeni's colleagues, including Ricks, still needed convincing of the merits of a larger campaign, though. "There were a lot of discussions in terms of whether this was the right thing to do," Polimeni recalls. Ricks wanted to make sure the imagery incorporated doctors and scientists, but he eventually gave the green light.

When a sponsor of the US Olympic team backed out ahead of the pandemic-delayed Tokyo Summer Games in 2021, Polimeni got her chance to go big. Lilly stepped in to promote not one of its drug franchises but the company itself. The move was successful enough that its brand advertising became ubiquitous, appearing most anywhere potential patients might be paying attention: the Oscars, the Super Bowl, the subway. "We want people to know that we're here for you," Ricks says, envisioning a world where customers gravitate toward trusted Lilly drugs over competing options. "That's where we're headed."

Brand awareness doesn't matter much, though, if people can't afford the medicine, and most insurance companies are still reluctant to cover GLP-1s for weight loss. Lilly itself switched plans for the first time in ages last year after its pharmacy benefit manager, CVS Caremark, moved Zepbound off the plan's list of preferred medications. (Caremark put it back on this May.) A not-insignificant share of Lilly's employees are on a GLP-1, Ricks says, a fact underscored by the medical waste containers full of used Zepbound and Mounjaro pens in its campus bathrooms.

Although obesity is a chronic disease, "half of the people don't have access or coverage for getting treatment," says Ilya Yuffa, who oversees Lilly's US business and has, like Ricks, been with the company for 30 years. The access gap traditionally extended to Medicare, which until recently was legally barred from covering drugs used solely for weight loss. As for Medicaid, it's allowed but expensive. The cost is prohibitive enough that only 13 US states currently cover weight loss drugs, and some of the largest, including California, have stopped doing so for that reason.

During his most recent presidential campaign, Trump promised to go after drug companies that charge more for the same medications in America than in other wealthy nations. After Trump won, Ricks, who has personally donated primarily to Republicans, started appearing on Fox News for the first time in years and made frequent trips to Washington. With the president also pushing American companies to invest in domestic manufacturing, Lilly announced it would spend $27 billion to build four new plants in the US. By spring, Trump was almost obsessively touting Ricks by name, referring to him variously in speeches as "a great gentleman," "an incredible executive" and "one of the hottest people in the world." Trump said Lilly wouldn't be subject to the tariffs he was threatening because it was investing in the US.

Ricks' relationships in Washington served him well last summer, when the Trump administration hauled drugmakers into the White House for closed-door meetings about lowering drug prices. The negotiations carried on into the fall, culminating in an infamous November event in the Oval Office, at which Trump, Ricks and Novo Nordisk CEO Mike Doustdar announced that Lilly and Novo would cut the prices of their weight loss medications in exchange for Medicare reimbursement and a three-year reprieve from tariffs.

When Ricks got his moment to speak, a patient Lilly had brought to the event fainted in the background. Centers for Medicare and Medicaid Administrator Mehmet Oz jumped in to help the man, with Doustdar and another executive holding up his legs as Trump and Ricks looked on. Footage of the incident went viral, and *Saturday Night Live* spoofed it days later. Cast member Mikey Day played Ricks, capturing his deliberate speaking style, manicured Midwestern polish and utter astonishment at being caught in the chaotic center of the political storm around drug prices and GLP-1s.

For Ricks, who's 59, the challenge now is less about making history than about escaping it. Every drug company lucky enough to have a wildly successful medicine must reckon with the reality that sooner or later, patents expire and competition arrives. Over a decade ago, to take one example, expiring patents on AstraZeneca Plc's Seroquel and Crestor left the company in a dismal state. It struggled for several years before CEO Pascal Soriot shifted its focus to oncology and turned its fortunes around. "There's a long list of companies that did well, got big ▶

◀ and then failed," Ricks says. "We don't want to be on that list."

As Lilly tries to avoid a slump, the intensity has ratcheted up internally, chipping away at the genial culture that long defined its workplace. Ricks has stringently maintained the company's head count despite Lilly's massive growth in recent years, and four current and former employees who requested anonymity to freely discuss internal matters say some staff feel overworked and burned out. There's widespread fear that making mistakes will lead to serious repercussions, and there's been some loss of civility. Ricks is known to be an "epic micromanager," one of the employees says—prone to getting involved in projects CEOs normally wouldn't bother with. Meetings with him can be intense, several people say, albeit because he knows everyone's job better than they do.

Ricks bristles at the suggestion that he's a micromanager, though he concedes "no problem is too small" for his attention if it's important to the business. "It's not about sticking your nose in stuff and throwing your weight around," he says. "It's about proving to people that we can solve problems." At a leadership off-site sometime in the past few years, according to one of the former employees, he warned executives Lilly isn't an easy place to be and asked them to honestly assess whether they were aligned with where the company was heading.

"I think I'm easy to be with and hard to work for," Ricks says. "That's in my best days. I mean, we all have bad days." He adds: "I kind of hope Lilly's like that—where we're demanding as hell on the what, but really quite sympathetic on the how."

As Lilly works to sharpen its edge, new products, aggressive rebates and mounting political pressure have driven down GLP-1 prices far faster than many investors expected, raising questions about future profitability. Generic versions of Novo's GLP-1 drugs are already available in countries including India and Canada. And industry giants such as AbbVie, Amgen and Pfizer are trying to develop obesity drugs that are more tolerable, easier to take or longer-lasting than the current options.

Still, no one is leapfrogging Lilly—at least not yet. If anything, the company seems set to build on its lead, with plans to launch several new obesity medicines, including drugs that may have fewer side effects. Its next big thing will likely be retatrutide, the three-hormone drug that cut weight by 28% in trials, which is due out next year assuming it's approved. Although Lilly originally positioned it as something for people on the higher end of the body mass index spectrum, Ricks now sees "mass-market" potential at lower doses.

There's already some evidence of that potential, if not the kind Ricks likes to see. People all over the world have begun buying peptides—short chains of amino acids that form the basis of GLP-1s and other medicines—on the black market online. Shady overseas sellers, who've obtained the formula for retatrutide from Lilly's patent applications and scientific papers, are illegally hawking the drug under names including Reta, GLP-3, Triple G and even ratatouille. This is before Lilly has completed clinical testing or safety reviews on the drug, and despite warnings from the FDA that such sales are illegal. "People say 'peptides' like a magic word," Ricks says. But "it's like saying 'chemical.' You wouldn't put a crop protection chemical in your body. You wouldn't put [just] any peptide in your body, but people somehow think it's magic beans. I think these products should go through testing. They should be manufactured in a controlled setting. And none of those things are occurring. That's scary."

The industry is also worrying about potential usurpers from outside the field. Anthropic, Google, OpenAI and other companies are developing artificial intelligence systems that could one day be capable of designing novel molecules, raising the specter that the next generation of breakthrough medicines won't be developed by a pharmaceutical company at all. Ricks has doubts, naturally. "There's no magic where you can turn on a computer and invent a drug today," he says. "Maybe we'll get there someday." He points out the rich irony that Lilly is taking over a South San Francisco building previously occupied by Verily, Alphabet Inc.'s embattled life sciences unit, and adds, "It turns out that language models are not good models for predictions of biology."

If AI is going to reshape the industry, though, Ricks wants Lilly to be a major participant. He's become a student of the technology after toying with ChatGPT over Christmas in 2022 and later taking a coding class alongside his chief information and digital officer, Diogo Rau. "I can probably count on my fingers how many CEOs could actually code or write a code for a large language model, including tech CEOs," Rau says. Ricks, who calls himself a "tech nerd," admits to running two LLMs at once during most meetings, in part to keep up with his brightest scientists. (These days he favors Claude and Grok over ChatGPT.) Signs all over Lilly's Indianapolis headquarters encourage employees to use the technology too. "How will you change the game by harnessing the power of AI?" a cafeteria poster reads.

Already, Ricks says, Lilly scientists have used it in ways that are "as impressive as AlphaFold," referring to Google's landmark tool for predicting protein structures. Lilly's AI drug discovery tools, which have been trained on decades of in-house research data, are stored in TuneLab, a service that smaller biotech companies can also access. All they have to do is prove they're real biotechs and not "some Chinese AI lab that's just, like, interrogating our models," Ricks says.

"I kind of hope Lilly's like that—where we're demanding as hell on the what, but really quite sympathetic on the how"

Zepbound pens on the assembly line in Indianapolis

In 2026, Lilly unveiled a supercomputer, built in partnership with Nvidia Corp., that's designed to help researchers sift through vast amounts of biological data and accelerate the search for new medicines. The two companies are also building a $1 billion lab in San Francisco that will allow Lilly to advance drug development and Nvidia to improve its pharma capabilities. Beyond that, Ricks says, "we have a data advantage, because most of the tech-bio companies that you talk to, even some of the scale players, they're just training on public data, but there's only 4,000 ever approved drugs. Lilly alone has more than 3 million failed drugs." He's convinced that if computers will one day design novel medications, Lilly has an unassailable head start.

Ricks isn't waiting for a technological revolution to rescue the company from its impending patent cliff, though, or from a future in which the obesity market may be saturated. As the company looks beyond obesity, he's furiously reinvesting in its internal pipeline and deploying its balance sheet to fund acquisitions—a record $20 billion so far this year alone. Those transactions have brought Lilly into new fields and reinvigorated old efforts in areas such as sleep disorders and infectious disease. The company recently spent $7.8 billion to buy Centessa Pharmaceuticals Plc, one of its largest acquisitions ever, gaining experimental medicines for narcolepsy and similar sleep and alertness disorders. Lilly sees sleep as an untapped opportunity with the potential to be as big as obesity. "I have a sense it could be that the diseases of sleep, like narcolepsy, are just the tip of the iceberg," says Skovronsky, the chief scientific officer. "As we learn more about the science, maybe someday we can make medicines that can help a broad range of people sleep better and be better awake during the daytime."

Internally the company spent more than $13 billion on research and development last year. It's continuing to invest in obesity and other metabolic health conditions, while also pouring resources into areas including cancer, immunology, neuroscience and gene therapy, which now accounts for a third of its early-stage pipeline. Lilly recently released data from a small initial study of a gene therapy that showed promise in treating high cholesterol with a single infusion. Those results garnered much fanfare, including from Elon Musk, who's used Mounjaro to lose weight. "Impressive new drugs coming from Lilly!" he wrote on X. The company is weighing, too, whether to expand into consumer-facing areas such as aesthetics (which could mean hair loss or skin care) and even psychedelics, according to people familiar with its plans.

It's all part of Lilly's effort to prepare for the inevitable day its GLP-1 dominance ends. "We spent a lot of time as an executive committee looking at other examples of pharma companies that have had extremely large franchises, where eventually either growth slows or they get genericized," says Jacob Van Naarden, head of business development and oncology. "We are trying to do something unbelievably hard that no one's ever done before."

For Ricks, that's the largest and last item on his CEO to-do list, which he started in a letter he wrote to himself on a legal pad a decade ago while taking a class for new CEOs at Harvard Business School. "If I look back at that list, most of those things are solved," he says. Planning for continued growth after Zepbound "is to me the defining challenge we have." He adds: "There is still lots to do to check that one off the list." Ⓑ

Caveat Injector

They’re everywhere: DIY peptides for losing weight, building muscle, slowing aging, getting tan and general looksmaxxing. Inside a legally ambiguous and medically dubious global supply chain

By Amanda Mull, Madison Muller and Ashleigh Furlong
Photograph by Ian Shiver


HEINZ
TOMATO KETCHUP
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In an industrial park a half-hour outside Prague, Peter Magic finds himself at the center of a gold rush. In the 15 years since he started his business as a teenager in his parents' garage in Slovakia, it's developed into a fast-growing company with almost nine figures in annual revenue and an international clientele. He isn't training a new kind of agentic artificial intelligence that replaces your employer's legal department or building the next online prediction market. His company, Janoshik Analytical, does purity and sterility testing for black-market anabolic steroids, an obscure niche Magic found during his own foray into weightlifting. His search for other lifters online took him to 4chan and Reddit, where many talked freely about their pharmaceutical experimentation but fretted about what might be in their drugs. Magic figured testing steroid samples couldn't be that hard. "It took a couple of years, actually, before we got all the processes perfected, because obviously, legally, this is pretty thin ice," he says. Among connoisseurs, his testing has become the gold standard. Outside, in his lab's parking lot, he has the shimmering purple Ferrari to prove it.

As it turns out, Magic's reputation for running a legitimate business evaluating illicit substances has positioned him perfectly for a new black market: the global trade in peptides. Injectable peptides are a loose cohort of amino acid-based drugs that bond to receptors in the body to toggle various physiological processes on and off. Some peptides are legal and widely used, including insulin and GLP-1 drugs (the "P" is for "peptide"). In the early 2020s, as buzz about their weight loss capabilities moved beyond diabetics in doctors' offices, Ozempic and other GLP-1s quickly grew popular among fringy fitness buffs, looksmaxxers and Silicon Valley types. To get weight loss drugs well outside of prescribing guidelines, some turned to lenient telehealth providers and longevity clinics that were happy to welcome off-label patients—the kind of clientele who are, in turn, happy to pay in cash. Exhilarated by the ease with which GLP-1s helped them get shredded, some of these users wanted to experiment further.

With the help of unconventional medical practitioners, these enhancement enthusiasts found more than a dozen other kinds of peptides. Most of these drugs weren't approved by the FDA and absent from the list of drug ingredients allowed to be used in compounding pharmacies—state-regulated facilities that fill many gaps in the country's pharmaceutical supply by mixing customized medications. Some of these substances had been developed by traditional pharma companies but abandoned because of muddled efficacy results or lack of projected profitability. A few had hardly been tested in humans, and the potential long-term side effects and safety of any of these peptides remain unknown.

Their names consist of cryptic jumbles of letters (BPC-157, CJC-1295, TB-500) and promise all kinds of benefits: Want to sleep better? There's a peptide for that. How about heal your tendinitis faster or lock in at work? There are peptides for that too. Need a tan? Sure. Then there are the "stacks," such as Wolverine, KLOW and Phoenix—combinations of peptides meant to max out users' results. Although most compounders stayed out of the peptide business, some were willing to fill prescriptions and risk the FDA warning letters that generally constitute the first phase of enforcement.

As these peptides became mainstays of online chatter among gym bros and biohackers, and as their beliefs about peptides found even greater purchase among influential podcasters like Joe Rogan and Andrew Huberman, their popularity began to spread, alarming regulators. In August 2023, Jennifer Aniston told the *Wall Street Journal* that she swore by weekly peptide injections as part of her anti-aging regimen. Weeks later, the Biden-era Food and Drug Administration changed the regulatory status of 19 peptide drugs, effectively banning compounding pharmacies from producing them, even with a valid prescription, because of safety concerns. Filling these drugs was never really legal, given their absence from the permitted list, but the change sent an explicit message to compounders about regulators' views. Many of the pharmacies that had been willing to test the boundaries took it as a warning shot and decided to drop the drugs entirely.

Undeterred, peptide users simply went underground, where they found groups of fellow travelers on Discord or Telegram, or they formed groups of their own to track down the drugs they wanted. To get them, these groups began to go straight to the source, ordering active ingredients in bulk from Chinese pharmaceutical manufacturers through WeChat, WhatsApp, or other apps, and paying in cryptocurrency. Suppliers then shipped the active pharmaceutical ingredients, or API, to buyers in little glass vials of white powder that can be reconstituted into an injectable liquid with a special type of sterile water. Labs such as Janoshik come in when those vials arrive stateside. Buyers send off a few to make sure they got what they paid for before divvying up the goods among group members.

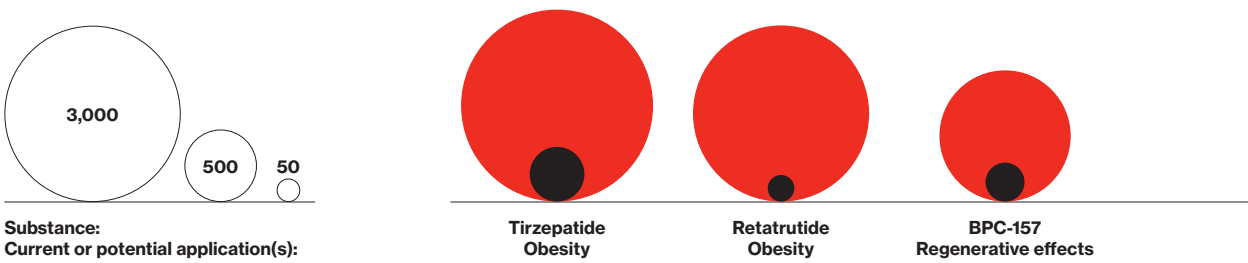
It wasn't long before some of these informal sourcing operations began to join

■ PHOTOGRAPH BY DAN HROMADA FOR BLOOMBERG BUSINESSWEEK ■ DATA: JANOSHIK ANALYTICAL

Shots in Demand

Quality reports Janoshik produced for selected peptides

● 2023 ● 2025



Peptide quality-testing entrepreneur Magic in Prague

a few existing peptide retailers in opening themselves to the public, which was becoming more peptide-curious by the day, in spite of the FDA's safety warnings. Importers expanded their orders and built ordinary-looking e-commerce sites complete with advertising budgets and influencer partnerships. They believed they'd found a regulatory loophole that would allow them to sell to anyone with a credit card and sufficient risk tolerance: Like most prescription drugs, peptides aren't controlled substances that are inherently illegal to possess, but federal regulations govern what constitutes permissible trade, depending who the buyers and sellers are. In particular, the sale of the raw materials used to make them isn't nearly as closely scrutinized as the sale of finished prescription drugs, as long as those raw materials are destined for use in a lab for research instead of in humans or animals.

Sellers slapped "For research use only" on their websites and began filling orders for sometimes dozens of kinds of APIs—not only the controversial ones, but also those found in Ozempic and Zepbound, which appealed to millions of consumers desperate for the pricey drugs. "There's still really no way to know that your product is what even the testing company says it is unless you take it yourself," says a founder of Compound Sciences, a peptide site in Utah that's been around for less than a year, who asked not to be named so they could speak candidly. "And, you know, our families are on all of this product." (He maintains that his business is careful to adhere to federal regulations around allowable marketing and packaging practices for research-use API, which is where most sellers err.)

Interest in these substances has spread to the mainstream, and peptides are now commonly discussed online as treatment options for sagging skin and arthritis, pitched to menopausal suburban moms and offered to clients at a growing number of med spas as a casual add-on to a Botox touch-up. Black markets—that is, sustained trade in goods that violate the law in some way—are by nature difficult to measure, but there's plenty of evidence of increasing demand. There are so many peptide sellers sending Janoshik samples that, from 2023 to 2025, the volume of peptide tests the company processed increased more than 1,200%, according to data it shared with *Bloomberg Businessweek*. During the first nine months of 2025, US Customs and Border Protection logged $328 million in active pharmaceutical ingredient imports for peptides, twice the amount imported during the same period the previous year, according to the *New York Times*. This included both material making its ▶

◀ way to compounding pharmacies for legal use in medications and raw material headed to murkier destinations.

But that number is likely just a fraction of the total. Importers increasingly employ more evasive maneuvers to skirt detection by customs officials. And that logged dollar amount is only the value of the imported raw material, which costs most large importers a few dollars per vial, compared with the $50 to $300 consumers are paying. The Compound Sciences co-founder says his company is a small business, bringing in about $100,000 in revenue per month, with about half of that being profit. That's purely from personal referrals, he says—Compound Sciences doesn't buy ads or work with influencers—noting that he knows of larger operations that he believes bring in as much as $2 million per month in gross sales. Investors within the industry say the black market is anywhere from $1 billion to $3 billion.

Now this already booming economy is preparing to emerge from the shadows. Under instruction from US Secretary of Health and Human Services (and self-professed peptide fan) Robert F. Kennedy Jr., an FDA committee is expected to recommend that seven peptides be added to the list of substances available for legal use in compounding pharmacies, with another five to be considered for inclusion by early 2027. Such a move would help clear the way for compounding pharmacies to fill prescriptions of these medications, which as Kennedy said in an X post in April, would divert demand away from "a dangerous black market that puts Americans at risk." It would also make a number of hyped peptides that lack rigorous scientific backing—and that could have side effects as risky as severe allergic reactions, liver or kidney damage, and sped-up tumor growth—much more palatable to the buying public.

In some ways, this would be a shocking turn of events, upending the system of drug development and regulation in the US as we know it. In other ways, it's just the most recent step in the long march toward a fully consumerized healthcare system, in which customers transact directly with companies marketing medications, with limited interference from pesky doctors and regulators. Along with entrepreneurs and investors getting in position to cash in, many existing healthcare workers stand to profit from swelling consumer demand: telehealth companies, compounding pharmacies, med spas, testing labs, Chinese drug manufacturers.

There's one industry, though, that's been caught flat-footed: Big Pharma. It's responsible both for the peptide consumer craze and the original development of almost all of the drugs now popular on the black market. For traditional pharmaceutical companies, the growing popularity of these peptides threatens to siphon off potential customers and undermine incentives to invest in costly clinical research and drug development. Meanwhile, entrepreneurs like Nathan Graville, the chief executive officer of longevity telehealth platform Geviti Health Inc., are getting ready to pounce. "Our pharmacy partners are already preparing" for these to be legal, the 27-year-old says. "They're preplanning for a lot of volume, a lot of demand."

Reis prescribes peptides at her practice in Boise, Idaho

■ REIS: PHOTOGRAPH BY LOREN ELLIOTT FOR BLOOMBERG BUSINESSWEEK. SLEIMAN: PHOTOGRAPH BY SYLVIA JARRUS FOR BLOOMBERG BUSINESSWEEK

Kristi Turner is not a hobbyist bodybuilder or an aspiring wellness influencer or someone with a deep distrust of mainstream medicine. She's a therapist in suburban Indianapolis with a husband and two grown kids, and she's been trying to lose weight for as long as she can remember. In May 2024, Turner took her first dose of Eli Lilly & Co.'s Zepbound, a GLP-1, and felt her life change within a matter of hours. "We were going with my son and his fiancée to dinner, and that was five hours later, and I realized the food noise was gone." She describes it as a magical experience that's since helped her lose almost 200 pounds.

Turner began taking Zepbound after becoming a patient at Mochi Health, a San Francisco telehealth startup founded in 2022—a boom time for online medical startups, thanks to pandemic-loosened regulations and a spike in demand for Ozempic prescriptions. At Mochi, Turner met Dr. Laura Reis, a functional medicine practitioner and osteopath, who prescribed that first dose. Eventually, Turner canceled her Mochi subscription and continued to see Reis at her independent practice. "I followed her like a little groupie," Turner says. "She's the one who's opened the world of peptides to me."

To help with post-weight-loss skin sagging, Reis recommended Turner take GHK-Cu, a peptide the FDA has excluded from compounding in its injectable form. Turner is also on glutathione, a

legal peptide, for its purported immune-boosting properties, which she first heard about after joining a livestream with Reis, who said it was a favorite among her other patients. "My boys are 22 and 19, and they make fun of me," Turner says. "They're like, you're turning into a gym bro. You're getting your 'stacks.' "

Doctors who are willing to recommend restricted peptides to patients are usually in specialties—functional and integrative medicine, longevity, anti-aging—that offer a broad range of therapies lacking in a rigorous scientific backing. Depending on the doctor, that can include relatively uncontroversial treatments such as acupuncture or massage, as well as more esoteric options like complex protocols of nutritional supplements or energy healing.

"I got out of mainstream medicine because I was very disillusioned," Reis says, though she still commonly prescribes statins and other FDA-approved medications. At her own practice, she has more latitude in how much regulatory and scientific risk she's willing to offer to patients, including through peptides that aren't supposed to be available from compounding pharmacies. She's been able to find willing compounders for the forbidden drugs anyway, including for Turner's GHK-Cu, which Reis is able to get from a pharmacy in Texas. "The potential risk is a little bit scary," Turner admits, but she trusts her doctor to keep her safe. "Dr. Reis does her research."

As Reis sees it, her role is twofold: to help patients in ways she doesn't think mainstream medicine can, and to blunt the safety risks that some of them are already taking after trying treatments they've heard about on Reddit or TikTok. "The hard part is patients are asking for these medicines because they're seeing them online, but as physicians, we're carrying all the risk," Reis says, though she and her practice also actively promote the use of these drugs online. "We're carrying sourcing, sterility, potency, informed consent, state board scrutiny, malpractice. I mean, it's a huge risk, but I've also taken that risk conservatively, and probably only a small percentage of my patients are on some of the more gray-area peptides."

Michigan-based contractor Sleiman is now on a stack of seven peptides

She mentions BPC-157 for musculoskeletal healing, which is incredibly popular online and listed prominently on her practice's website, though it's banned from compounding pharmacies and there's almost no clinical research showing its safety or efficacy in humans. "I've used that for patients," she says. "Is the data there to support it? Absolutely not."

Among Reis' patients taking BPC-157 is Hassan Sleiman, a 45-year-old roofing contractor in Michigan. Sleiman didn't know much about peptides, but he'd begun to worry about his health after spending much of his life ignoring it. He smoked about a pack and a half of cigarettes a day, and before construction, he'd spent years working as a bouncer and in a Ford plant—all of which had taken a toll on his body. Nine previous surgeries and other nagging injuries kept him in pain. He found Reis through his best friend, whose transformation under the doctor, he says, has been incredible.

Sleiman says Reis started him on tirzepatide, the active ingredient in Zepbound, as well as BPC-157, and he felt pretty good, even though he hadn't really changed his habits more broadly. Now, he says, he's on a stack of seven peptides: tirzepatide and BPC-157, plus MOTS-c for collagen production, glutathione for "detoxification," and TB-500, KPV and GHK-Cu for old injuries and skin quality. With the exceptions of tirzepatide and glutathione, all these drugs are currently banned from use in injectable medications by US compounding pharmacies. Sleiman says he feels incredible, and his health has improved enough to ▶

◀ make his work less painful and running after his 9-year-old more fun. He's started carrying around Reis' business cards so that when people ask what he's doing, he can send them her way. He likens it to the way he promotes his faith: Why would he gatekeep something that can help people? "Most people just don't even know where to start," he says.

For many patients, feeling comfortable injecting a dubiously sourced medication at home didn't just materialize overnight. Often, it starts with safe, legal, legitimately prescribed and extremely effective medications. "The GLP-1s, they pulled the entire peptide market up there along with them," says Magic, the Janoshik founder. Some 12% of Americans are taking a GLP-1 drug, according to a recent survey from the health policy organization KFF, helping convince millions of users and the many people who've watched their transformation that the key to health, beauty and longevity might come in a syringe. The widespread use of cosmetic injectables such as Botox and lip filler, now easily jabbed at a strip-mall med spa near you, has bolstered the belief that injectable drugs are an easy, low-risk option providing quick, visible results.

Pursuit of GLP-1s and the insurance denials, high cash prices, shortages and prescribing restrictions that have commonly come with them have also pushed patients toward medical practitioners and drug sources they might have previously eschewed, or maybe hadn't even heard of. Patients turn to the internet for guidance on how to find better prices, just like they do with everything else they buy. Wherever they look for advice—Reddit, Instagram, TikTok, Facebook groups—people are ready to guide them to the black market. For patients who arrive in these corners of the internet where cheap "research chemicals" proliferate, it can feel like Alice going through the looking glass. What if that $1,300 medication you desperately needed was really cheap all along? Why hadn't anyone told you the truth? It's not a coincidence that some of the most vocal research-peptide users—though far from all of them—are vaccine skeptics who think that common immunizations lack sufficient scientific evidence. As these users see it, vaccines and other things are foisted upon them by the government and Big Pharma in pursuit of control and profit. Peptides, meanwhile, are the secret key to free your personal health from institutional control.

London-based Hukmani consults with peptide entrepreneurs

Those buying research-grade chemicals effectively become impromptu pharmacists, a job most are not qualified to do. They have to turn powdered active ingredients into injectable drugs, which requires reconstituting them with bacteriostatic water—itself a sterile prescription product that customers are sourcing bootleg versions of online. Powders are sold by weight, but dosages are measured in volume. That means users who want to experiment need to understand how to combine the powdered and liquid ingredients to make a particular concentration, which some brands of syringes will then measure in milliliters while others simply show units. About a year ago, new patients at the telehealth platform Ivim Health began showing up to their intake appointments, mentioning that they were on retatrutide, Lilly's new, unapproved GLP-1 that, in "research use" form, is now the most popular drug among peptide buyers. When asked how much they were taking, they had no idea. "When we're on those videoconferences with patients, we'll ask them, like, show

■ PHOTOGRAPH BY ALEX BINGHAM FOR BLOOMBERG BUSINESSWEEK

us the vial and show us the injection instructions," says Taylor Kantor, Ivim's co-founder and chief medical officer. Usually, they just have the vial. Shipping research peptides with instructions for dosage and injection, after all, would risk sellers acknowledging that they're selling to individual patients for human use.

The regulatory changes the FDA is considering would be the first step in moving access to at least some of these substances into compounding pharmacies, which would reduce some of the risks that come with consumers acting as kitchen-table chemists. (Because retatrutide is currently in Phase III clinical trials, it wouldn't be included.) Compounders operate licensed, state-regulated and sterile facilities that would ship peptides in ready-to-inject vials of liquid that include dosing and injection instructions. These kinds of pharmacies have been around as long as doctors have been writing prescriptions, but the Covid-19-era boom in telehealth usage and massive shortages of name-brand GLP-1s suddenly put them front and center with consumers.

"You saw one telehealth company run a Super Bowl ad advertising compounded drugs," says Scott Brunner, a pharmacist and the CEO of the Alliance for Pharmacy Compounding, a US trade group. "That would've been unheard of 10 years ago." As a result, many of the country's thousands of licensed compounders have dramatically expanded their capacity to make peptides in the past few years.

Although the vast majority of compounding pharmacies won't touch the currently unpermitted peptides, some of them, including those Reis sources from for her patients, have continued to fill prescriptions for the drugs anyway, even after the Biden-era changes reinforced that they weren't authorized to do so. Now that there's a peptide-friendly administration in the White House, some pharmacies and practitioners alike, especially those in red states, appear even more comfortable gambling that regulatory clearance is more likely than targeted enforcement for those who get into the peptide business a little bit early. Among prescribers, the practice has become so widespread that, in early June, the Alabama Board of Medical Examiners issued an official notice, warning the state's practitioners that prescribing or recommending "research-grade" medications is prohibited by law, even if patients sign a waiver advising them of the risks. That some compounders already demonstrated a willingness to play fast and loose with the rules during the heady days of the GLP-1 boom worries Brunner, the pharmacy trade group head, about what might be ahead. "There are telehealth platforms that are members of our organization and are model citizens, but there are some that, you know, they didn't exist in 2023," he says. "I'm concerned about that kind of opportunism, which I suspect, in a universe where these peptides are authorized, will repeat itself."

Tucked away at the back of a cafe at a five-star hotel in London's ritzy Notting Hill, Mansi Hukmani is fresh from the gym and sipping on carrot juice. The Belize native moved to London about six months ago after a stint in New York, but it's hard to say where she'll be on any given day. She travels back to the US frequently and flits between far-flung locales such as Dubai and Panama at the behest of her clients. About a year and a half ago, after leaving her career developing branding and growth strategies for tech startups, she started a wellness-focused Substack newsletter called *Chief Longevity Officer*. It didn't take long for something she'd written about peptides to make the rounds. "I started getting invited to a lot of these biohacker meetups in New York, literally going to people's high-rise lofts in Tribeca and seeing people inject themselves." The opportunity in peptides, she says, quickly became obvious: A lot of people who start companies and dole out investment dollars had suddenly become interested in experimenting in a sector that most of them didn't know much about. And so, Hukmani has become one of a small but growing cohort of advisers, fixers and consultants who help people with money figure out how to put it into the peptide market.

Hukmani's sprawling network of friends and associates includes Max Marchione, a founder of San Francisco-based Superpower Health Inc., which until recently was just a blood-testing startup for people who want to self-monitor their biomarkers. Marchione first became aware of peptides in 2024, when his co-founder looked at Marchione's stack of nutritional supplements and told him he needed to give peptides a try. Initially, Marchione says, he was spooked to self-inject the drugs. But he got over it, and in the past six months or so, he's remade Superpower, acquiring technology from a biotech company that will allow it to customize its peptide formulations. The goal, he says, is to begin selling immediately when the FDA's regulatory changes hit and for Superpower to become "the biggest peptide company in the world."

Not everyone will be able to move as swiftly if the FDA flips the switch. Brunner, the CEO at the pharmacy-compounding trade group, says he's worried that the group's member companies will be inundated with prescriptions they can't fill and angry customers they'll have to turn away. To comply with quality regulations, compounding pharmacies can't just WhatsApp a Chinese supplier, send over some Bitcoin and start filling prescriptions once the API powder clears customs. "Most estimates I hear are between ▶

"Anyone selling retatrutide right now is just, like, a flat-out criminal, and it's scary that people are injecting themselves with black-market drugs"

◀ three and nine months," he says, for a pharmacy to establish regulatorily sound sourcing for the ingredients necessary to compound many currently banned peptides. If that happens, he fears that some compounders might be tempted to turn to substances that are below pharmaceutical grade to meet the demand. Hukmani, who says she's currently advising a firm that's looking to bring peptide manufacturing to the US, described the issue a little more succinctly. "It's not even America that really controls the peptide and GLP-1 infrastructure, right? It's, like, f---ing China."

To manufacture peptides profitably requires economies of scale. The facilities and equipment are too expensive and technically complex for opportunists to enter the market overnight or for manufacturing capacity to be spun up quickly in the US. Europe has a few big manufacturers that, along with highly reputable Chinese suppliers, mostly deal with high-end drug companies and large, well-funded research laboratories. For pretty much everyone else—smaller pharma companies, compounding pharmacies, less sophisticated research labs—the active ingredient is imported from one of many other Chinese chemical manufacturers.

It's generally these manufacturers that also directly or indirectly supply the black market for "research chemicals," though, in China, it's illegal to export pharmaceutical grade ingredients without a permit. Some take the risk of filling the vials themselves. For other manufacturers, their participation is unwitting, or at least plausibly deniable. Local middlemen set up front companies that claim to be ordering bulk peptide ingredients for legal uses, and the front companies handle the work of processing and packaging those ingredients into dosage-specific vials for consumers overseas.

When a *Businessweek* reporter visited Janoshik's Czech testing facility in April, two employees were hauling a big blue Ikea bag full of testing samples into the company's lab. Janoshik's peptide sampling room is filled with tiny vials that have been cataloged, weighed and sometimes shaken or heated, depending on the substance. An employee feeds samples into one of the liquid chromatography-mass spectrometry machines. The business is growing so fast—Janoshik has ballooned from 10 to almost 40 employees since last year—the machines are labeled with mythological characters and superheroes to help its many new staffers discern one from another. "This is Sif, a Nordic goddess, and this one is Thor," Magic says, pointing to two of the machines. Janoshik and its clients (typically peptide sellers in the US or private sourcing groups) can then look up the batch numbers printed on their vials to see if what's inside is what it claims to be. Only about 5% of samples don't pass, a percentage that's consistent across other testing labs.

■ PHOTOGRAPH BY IAN SHIVER FOR BLOOMBERG BUSINESSWEEK

Magic is careful to note that Janoshik can detect contaminants such as heavy metals or endotoxins, but can't determine whether the substance is safe to inject on a pharmacological level. But still, as the ranks of black-market consumers have grown, those buyers have begun to demand evidence of third-party testing from other types of suppliers, including licensed compounding pharmacies who'd never received such requests from patients in the past. This, Magic says, is a completely new frontier for his business, and he's negotiating a deal with an American lab that would expand the Janoshik name stateside.

In other areas of the market, entrepreneurs are looking for more ways to rush in. At the inaugural meeting of the California Peptide Club in April, held at a hilltop San Francisco mansion, conversation among the 150 attendees centered on what business opportunities might be available to founders and investors. In New York, wellness influencer Delphine Le Grand recently introduced the Protocole, an online subscription service that lets members, primarily women, buy "premium-grade" peptides with physician oversight. She says investors were initially reluctant to fund her company, but given the expected change in regulation, "in the last few months we've seen a huge, huge shift, where every institutional investor is trying to form their thesis on this space."

Rare Capital, a private investment firm in Nashville that was bullish on peptide startups even before the prospect of legalization, led Protocole's $6 million seed round in April. To Rachel Schow, the fund's co-founder, it was obvious just how mainstream the demand already was. Wherever she went—a country music concert in Florida, her Minnesota hometown, the luxurious haunts of Los Angeles' wealthy residents, hangouts with her

teacher friends—people were buzzing about peptides. "The middle of the US is all talking about it," she says. Other investors, including Daisy Wolf, a partner at Andreessen Horowitz, are intrigued but skeptical. Demand is clearly huge and many of the GLP-1 drugs are exciting, Wolf says, but she says she's worried about a lack of oversight and safety data around a lot of what's out there. "Anyone selling retatrutide right now is just, like, a flat-out criminal, and it's scary that people are injecting themselves with black-market drugs," she says.

Pharma companies seem stunned that, over the course of just a few years, American consumers have found a way to get their hands on substances that are too experimental for them to legally market or that they gave up on developing years ago. But in the age of social media and DIY wellness, these drugs have found a second life with consumers willing to experiment on themselves. This new dynamic presents a problem for the future of drug development: Drug companies are generally willing to pay for the expensive trial and error, because patent laws then allow them to reap huge profits on drugs that succeed. If the FDA is prepared to accept overwhelming consumer demand as a justification for curtailing those patent rights, then the financial calculus for drugmakers changes in ways that could fundamentally alter the future of pharmaceuticals.

Obesity drug upstarts such as Structure Therapeutics Inc. are already bracing for potential copycats to flood the market years before they even have an approved drug. "It's obviously a risk to innovation," Andreessen's Wolf says. "Why should biotechs and scientists invest billions of dollars in inventing new drugs that can change humanity, save lives, if they're just going to be ripped off immediately, and there's going to be no protection." Not surprisingly, Dave Ricks, CEO of Lilly and one of the most powerful people in the pharmaceutical industry, agrees. "People don't have a biochemistry lab in their basement, and those medicines haven't been tested in clinical trials like a Lilly medicine," Ricks says. "When you buy a Lilly medicine, you know what's in it and you know it was tested."

The question of how to regulate such a market will be central when the FDA convenes at its campus in White Oak, Maryland, in July. Over two days, the agency's Pharmacy Compounding Advisory Committee, or PCAC, will consider whether compounding pharmacies should be allowed to legally make a handful of popular peptides. The agenda includes BPC-157 for ulcerative colitis, a disease that causes painful ulcers in the large intestine, TB-500 for wound healing and MOTS-c for obesity, among others.

The problem is that there aren't large-scale clinical trials in humans proving the safety or effectiveness of most of these compounds, evidence that PCAC—a group that currently has only three voting members, as opposed to its statutorily required 10—historically requires before making an affirmative recommendation. Beyond that, little information has been released about the meeting, and the FDA has been roiled by recent staff changes. "The prevalence of these substances on the black market and growing consumer awareness do not change FDA's scientific or regulatory standards," HHS Press Secretary Emily Hilliard said in an emailed statement. At the upcoming PCAC meeting, "independent experts will evaluate the available scientific evidence for each substance, including clinical, pharmacological, safety, and other relevant data."

Despite the chaos, and despite the further FDA rulemaking that would be necessary to permit compounding more peptides, preparations for Peptide Liberation Day continue. Businesses that already offer certain legal peptides are getting ready to add even more, while some compounding pharmacies have gotten a jump on the monthslong process of securing their supply chains. Ivim's Kantor, whose telehealth company already offers GLP-1s and the peptide sermorelin (which can be compounded legally), says its pharmacy partners are "going through the testing phase" to ensure quality and safety thresholds are met. It's also trying to figure out which peptides it will be able to offer and is conducting peptide-focused training sessions with its practitioners.

Other telehealths are trying to strike a more cautious tone with the public. Hims & Hers Health Inc., which owns a peptide manufacturing facility in California, says it isn't planning to rush into the market. The $6.4 billion company, which recently roused the ire of federal regulators over its aggressive GLP-1 marketing, says it won't expand its peptide lineup for consumers until it's confident in its ability to meet the "very high standards that we believe everyone should be meeting," a spokesperson says. "If the FDA does expand access to certain peptides, the patient experience must include a rigorous intake process, consistent provider involvement and a commitment to advancing reliable learnings about safety and efficacy."

If regulators decide to open the door to more kinds of peptides, there will also be a market shakeout. Businesses that sell research-grade chemicals stand to lose some customers, and even a peptide-friendly FDA might crack down on those suppliers once a more regulated option exists. At Utah's Compound Sciences, the founders say they'd be sorry to see the revenue stream go if the FDA tightened its screws on research-use retailers, but they wouldn't lose sleep.

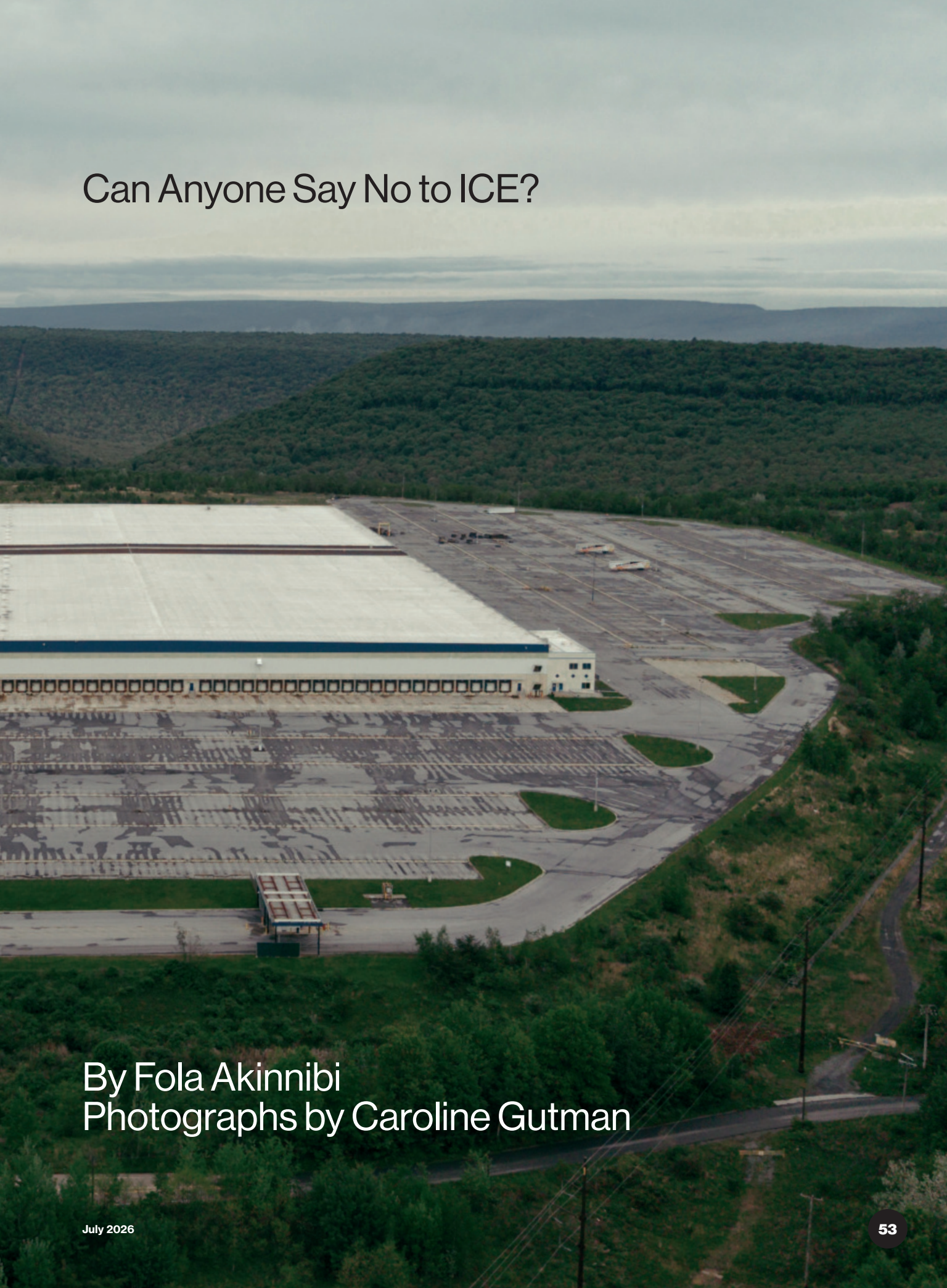
Their long game, the co-founder says, is elsewhere: He and his partner also own licensed compounding pharmacies. "Our real goal in this is to move peptides into the compounding pharmacy," he says, which already fills tirzepatide prescriptions for telehealth companies. Not only would the proposed regulatory changes likely help more patients feel comfortable trying the drugs, but the company also wouldn't have to deal with some of the headaches of operating on the black market, such as breaking up import shipments into smaller packages to avoid confiscation and dealing with overpriced payment processors who are willing to handle credit and debit transactions for high-risk businesses.

At the moment, though, the headaches are worth it. "It's not a nice way of explaining it, but the research-only side is our side chick," the co-founder says. "Right now, the side chick is tremendously successful. She's the one we're putting on our arm." B —*With Amber Tong and Brody Ford*

Tremont Borough, Pennsylvania, has 1,700 people.

ICE wants to detain 8,500 immigrants in a converted warehouse just outside town

Can Anyone Say No to ICE?



By Fola Akinnibi
Photographs by Caroline Gutman

The rumors started in January. Leaked plans suggested that Immigration and Customs Enforcement was looking to turn warehouses across the US into massive immigration detention centers. One of the largest was planned for Tremont, Pennsylvania, a tiny rural township in Schuylkill County (pronounced "SKOO-kil"), about 100 miles northwest of Philadelphia. Residents peppered officials with questions during Schuylkill County Commissioners meetings. What information did they have? How did they plan to respond?

Larry Padora, a Republican in the deep-red county and leader of the three-person commission, wanted to kill the rumors at a late January meeting. He paused the lively public comment period to give a firm statement. There was no evidence that ICE was coming to town, he said. "No deeds recorded, no anything that this facility is even being purchased." He was referring to a former distribution center for the discounter Big Lots. It had been identified in the press as a potential site. The commissioners had checked the tax assessor's office and asked the local economic development organization. They spoke to the offices of Governor Josh Shapiro, US Representative Dan Meuser and US Senators Dave McCormick and John Fetterman. None had heard anything from ICE.

As Padora was unequivocally denying the reports, however, the Department of Homeland Security, which oversees ICE, had been quietly and quickly working toward buying the facility in Tremont—a township of 284 that's right next to a borough of roughly 1,700, also named Tremont. A deed had been notarized for almost two weeks; it would take effect the day after the hearing. The rumors were true. "Nobody had confirmation of this beforehand in any way, shape or form," Padora said at the first county commission hearing after the deed had been filed.

The agency's actions seemed to catch Pennsylvania officials at every level on the back foot. They say DHS bought the massive, empty warehouse without informing them, without inviting public comment and pretty much without any advance notice. The officials appeared shocked by the lack of communication from the federal government on such a large project and the speed at which it was moving.

Flush with hundreds of billions of dollars in funding and a 2029 deadline to spend it, DHS has been moving at breakneck speed to remake America's immigration detention infrastructure. Key to this effort is a $38.3 billion plan for ICE to shrink its detention footprint to 34 government-owned sites from more than 200 private prisons and state, county and local jails, all of which are essentially leased. The agency's rationale is that this will make for more efficient operations and faster deportations. It will also increase the number of beds available. Since the beginning of the year, DHS has spent at least $1.1 billion on 11 warehouses across the country. It wants to open them by fall.

Much more spending is inevitable. DHS plans to buy an additional 13 warehouses (though the agency has paused further purchases for now) and 10 existing jails. Any and all warehouses will require extensive conversion: The empty shells will have to be outfitted with toilets, showers, beds, and dining and recreation areas. Then there's the matter of cells. A preliminary plan released earlier this year showed the living space so tightly packed that immigrant advocates and local jurisdictions raised alarms. DHS hasn't commented on that early plan or produced a current one for public consumption.

Local activist Lara Wiscount addresses a meeting of the Schuylkill County Commissioners

Despite a growing list of concerns from officials and community members who recently learned they're about to play host to detention facilities, DHS has released few public details of the plans. The only concrete outline of the agency's vision, beyond the purchases, is a four-page document (three if you don't count a page that's just a picture) that was released by the state of New Hampshire, which received it from DHS after word got out that ICE was eyeing a facility in the state.

Facets of the agency's multibillion dollar plan have come under scrutiny. According to research from commercial real estate firm CoStar, the government is paying 11% to 13% more than other buyers of similar facilities. DHS avoided assessing the environmental impacts of converting these sites until pressured to do so. Some of the facilities sit near sensitive locations such as schools, homes or even chemical storage facilities. Many of the locales don't appear to have the infrastructure, emergency services or labor force to support what's being proposed. That

includes Schuylkill County. In a place where roughly 70% of voters picked Donald Trump in the 2024 election, a bipartisan, grassroots backlash has emerged.

DHS appears to be spending money without thinking its plans through, says Michelle Brané, who was the agency's immigration detention ombudsman under President Joe Biden. If the goal was cost effectiveness, she says, "they wouldn't be doing this." There are also significant risks that come with locking up this many people in converted warehouses: ruinous environmental consequences, human suffering and death. "They should know this," Brané says.

DHS didn't directly respond to a detailed request for comment from *Bloomberg Businessweek*. Instead, an agency spokesperson recycled the statement it has given numerous outlets about the warehouse effort, saying it's "reviewing agency policies and proposals" as part of its transition efforts. The spokesperson pointed to DHS Secretary Markwayne Mullin's testimony during his confirmation hearing. "We want to work with community leaders," Mullin, who replaced Kristi Noem, said at the March inquiry. "We want to be good partners."

In Tremont Township, where DHS purchased the old Big Lots distribution center for $119.5 million, the experience has been a case study in the agency's decision-making and communication. DHS wants to detain as many as 8,500 people in the facility. That would make it the second-largest community in the county, dwarfing the borough and township population, and a threat to the local water and sewer system, according to local authorities. The building is steps from the town's sole daycare. Yet the only communication about how this will be addressed has been through sporadic conference calls with Padora and other local officials, who have tried to provide updates at county commission meetings. Those updates have recently trickled to a stop.

Padora, head of the county commissioners and the region's conduit to ICE

The former Big Lots distribution center sits at the top of a mountain. It's a massive white building set back from a parking lot and lined with 112 truck loading docks and two drive-in doors. There are no windows. It's a single-story rectangular box with 1.2 million square feet of floor space, the equivalent of roughly eight Costco stores or 22 football fields. The interior configuration—again, think Costco—was well suited for Big Lots to get its mishmash of products out to its stores quickly. In 2002, a year after it opened, a distribution-industry trade publication touted the facility as state-of-the-art, noting that it was able to ship out 250,000 cases of goods a week.

Big Lots began to struggle, and in 2020 the company raised cash by selling the warehouse to a real estate investment firm. (Big Lots then leased back the facility.) That firm was acquired a year later by Blue Owl Capital Inc. In late 2024, Big Lots filed for bankruptcy. Months later it closed the warehouse and laid off all 505 employees.

Aesthetics and livability were not chief among the concerns for Big Lots when it built the facility. Still, it wasn't an easy project. The company had to clear 26 feet of mountaintop where the warehouse sits, carefully coordinating the explosive blasts to avoid disturbing a series of disused mines hundreds of feet below and an aircraft fuel line that divides the property. It timed construction to avoid the brutal winter conditions that affect the mountain. Years of planning and preparation, conversations with local and state officials, and engagement with the local community all went into getting the facility open.

The federal government originally said it would need four months to convert the building into a detention center. Pallets and racks once lined the space up to its 40-foot ceilings. ICE wants to install rigid walls and doors, according to internal agency plans seen by *Businessweek*. Immigration detention facilities need laundry and medical services areas, space for food prep and dining and housing. Big Lots didn't need hundreds of toilets for discounted furniture. Home goods, and the employees tasked with sorting and storing them, didn't need to shower daily on-site, exercise outdoors or be fed three square meals.

In its statement to *Businessweek*, the agency said that it evaluated the facilities to "help minimize environmental impacts, including potential impacts to protected species, sensitive natural resources and valued cultural resources." ICE expects people to be in its mega-facilities for as long as 60 days, though recent data shows people are routinely detained at current ICE detention centers for longer.

Big Lots didn't need hundreds of toilets for discounted furniture. Home goods didn't need to shower daily on-site, exercise outdoors or be fed three square meals

Within hours of Trump's inauguration in January 2025, DHS announced a goal of deporting 1 million people a year. Immediately it became clear that reaching that goal would require mass arrests. Despite saying it was focused on criminals, often referred to as the "worst of the worst," the government would need to sweep up law-abiding residents, children and people attending their immigration hearings. DHS still fell short the ▶

◀ first year. But the arrests it made did lead to record levels of detention, in part because of the time and resources it can take to deport a single person.

There are roughly 66,000 people in ICE custody, down from a record 73,000 in January. (During the Biden administration, the highest number of people detained by ICE at any given time was about 39,000.) To address the newly created need for detention space, the Trump administration quickly built a large tent camp at the Fort Bliss Army base in El Paso, Texas. For now, the immigration detention center there is the largest in the US, with room for 5,000 beds. It cost $1.26 billion and has so far been a disaster. In less than a year of operations, the camp has never come close to its 5,000-person capacity. It's dealt with a measles outbreak and accusations from detainees of inhumane conditions. At least three incarcerated people have died there. Recently, the federal government replaced the contractor originally tasked with overseeing the site, a Virginia company called Acquisition Logistics.

If filled to capacity, the four biggest proposed warehouse jails (including Tremont) would each be among the largest

The sign is still standing

detention facilities of any kind in the US. Yet the agency has historically struggled to operate jails with more than 2,000 people. "The smaller facilities run better," says Claire Trickler-McNulty, who worked for ICE during the first Trump administration and under Biden. Big facilities are hard to staff adequately, especially in rural areas. The logistics for food and medical care are harder to manage above a certain size as well.

A few officials have had success persuading DHS to drop plans in their jurisdictions. New Hampshire Governor Kelly Ayotte got then-DHS Secretary Noem to scrap plans for a warehouse in the state after a February meeting. Mississippi Senator Roger Wicker had similar luck. Sellers have also pulled out over community opposition. Facility owners in Missouri, Oklahoma, Utah and Virginia got cold feet, though the federal government was able to purchase a different warehouse in Salt Lake City. In seven other jurisdictions the plans to purchase sites appear to have stalled.

Still, DHS owns 11 empty warehouses. It's awarded contracts for converting and running only two of them, in Maryland and Arizona. Those contracts, which together could be worth as much as $1.4 billion, have been bogged down by local concerns about lack of infrastructure or emergency services and proximity to schools and homes, in addition to humanitarian opposition. There are also accusations of failures to communicate with local officials and to conduct environmental reviews (in some cases because DHS has declared a review isn't necessary). On big projects, the federal government typically attempts to mitigate those concerns beforehand. Not this time. "They got this insane amount of money, and Congress didn't make them put out a public plan," Trickler-McNulty says. "They haven't said why this is a good idea."

Tremont Borough's Main Street, a half-mile-long commercial and residential corridor, has a pizza place, bar, post office and bank. There's a single, three-way stoplight near the main retail attraction: a Family Dollar store. As far as amenities go, there's a small plot of grass that serves as a veterans park and memorial. The borough's pool is in dire need of repairs and has been closed since the end of the 2022 season. Residents have formed a committee to try to get it reopened, though local officials say it would cost $200 per resident to keep it operating. In response to a notice on Facebook that the pool would again not be opening in 2024, one person said "not much left for Tremont to offer that attracts taxpayers."

Tremont Township, the larger and less populous surrounding area, is more rural. It's a smattering of homes, a local government building, a gas station with a Burger King, off-roading areas and auto repair shops. The Big Lots warehouse was one of the county's biggest employers when it was open. Otherwise, not many people work in the township or the borough; the average commute time to work for residents is almost 30 minutes, according to Census Bureau data.

There's a range of feelings about the proposed detention facility. Joe and Lara Wiscount, retired teachers in their 50s who are liberal members of a local Democratic club, are opposed to the facility on pretty much every level. They've pushed Padora and other local officials and made themselves available to the media. Tremont Borough's mayor, Justin Moeller, a Republican, says he's powerless to stop the facility and his only concerns are about water and sewage. If there's no impact to those systems, he says, "then it is out of the borough's hands." Anyway, he "100%" supports the administration's immigration agenda. By his estimation, a lot of residents are excited about the prospect of the facility. Joe Wiscount disagrees. He attended a spring protest where he estimates there were 60 to 80 people marching against the facility and five or six counterprotesters.

The township and the borough have a combined population of fewer than 2,000, roughly a quarter of whom are over 65. The facility will need a staff of 2,000 to 2,500. At the very least, the federal government could produce an independent economic impact study, says Brianna DelValle, who lives in Schuylkill County and has helped lead some of the local opposition through an organization called No Skook Detention. "If we can actually confront the real impacts, the financial impacts of this, it will help us plan."

Many residents say they fear it will be another idea with terrible consequences for them. Already, the area participates in a waste-recycling process that can begin with a toilet flush in eastern Brooklyn. The waste is treated by New York City's sewer system and turned into a sludge made of feces, food and paper fibers. The biosludge—equivalent in weight, over the course of a year, to the Washington Monument—is sent by trucks to a facility in an adjacent township. It's turned into fertilizer on-site. This transformation produces a smell in town that hangs in the air, even on cold days. In the summer, residents say, it can be unbearable. People get headaches, children cannot play outside and windows remain shut. Laine Mack Jr., a 62-year-old lifelong borough resident, calls the facility the "s--- plant up the road."

Main Street in Tremont Borough

Tremont was coal-mining country

Residents have been living with the smell for years. On the other side of town there's a second facility that deals in sludge. Sometimes material sloshes out of transport trucks onto the street, Joe Wiscount says. The smell forces him and his wife to make calculations about their outdoor time. There's actually a third fertilizer facility a bit farther away from town.

Those projects were sold as economic development opportunities, but the two nearby biosolids facilities employ roughly 20 people, combined. One of the facilities pays a $2 municipal fee per ton of wet sludge it receives, according to documents filed with the Pennsylvania Department of Environmental Protection. One facility sits outside the township, and the other reports activities in three local townships, including Tremont. The smell doesn't recognize those political boundaries.

Residents haven't heard directly from the federal government about the warehouse jail. What's clear is the facility won't pay taxes. The feds' purchase of the site will cost the school district and the local and county government almost $1 million in revenue annually compared with what Big Lots and subsequent owners paid. Neither the township nor the borough has a full-time police officer. The fire department is volunteer. The emergency medical services system is already stretched thin. The closest emergency room is a 30-minute drive. In its existing facilities, ICE relies on local sources for all these services regularly. In the first five months of operations at Fort Bliss, staff called 911 almost once a day.

Padora, the Schuylkill County Commissioners leader, is the main conduit between the local community and DHS. And that line of communication has not been robust. On the first conference call he had with federal officials, he says, there were two dozen people in a Zoom meeting, many from the federal government without their cameras on. These faceless federal officials didn't have answers to many of the county's basic logistical questions. On subsequent calls the federal government suggested that it would hire locally to the extent possible and that it would consider making an annual payment in lieu of taxes to help offset the lost tax revenue. Padora has sought to get these assurances in writing.

Those informal concessions don't address the biggest hurdle to the proposal—the water. There simply isn't enough of it in the area to support what ICE is proposing. Even if Tremont stopped using water ▶

◀ altogether, there wouldn't be enough. In 2024 and 2025 the area experienced its worst drought conditions in decades, and the water problems were exacerbated in 2024 when the borough used roughly 60% of its reserves to fight a massive fire. Recently, to supplement the water supply, the regional water authority has hauled water in with trucks and obtained permission to tap into a reservoir that the region stopped using in the 1990s because of water quality concerns. That new source can safely give Tremont an additional 70,000 gallons a day.

At capacity, the ICE facility would need almost 1 million gallons of water a day, according to the state Department of Environmental Protection. That's 130 times what Big Lots used. If ICE were forced to rely on the Big Lots amount, it could safely detain 63 people—as long as staff didn't use the bathroom, wash their hands or drink any water. The Tremont system's maximum capacity is 400,000 gallons per day, but it's capped at a figure below that by a multistate water regulator. On an average day in 2025 the region used 208,000 gallons of water. There is no other water in Tremont.

DHS told Padora, in limited conversations with him, that it was considering trucking water into the facility. Delivering a million gallons of water a day to a facility at the top of a mountain strains credulity, says David Hess, who headed the Pennsylvania DEP in the early 2000s. Such a plan would require roughly 166 trucks per day, every day. "They'd be trucking water in around the clock," Hess says. Even the largest water storage tanks on the market would have to be refilled every few days—a "logistical nightmare," he says.

And as water comes in, it will need to be taken out. The proposed detention center could produce 450,000 to 1 million gallons of sewage daily. The regional water authority is authorized to handle 500,000 gallons and is already at 80% capacity. Anything above that is at risk of being discharged, untreated, into the nearby Swatara Creek, a tributary of the Susquehanna River. The people in surrounding counties drink the water.

At the immigration tent camp in the Florida Everglades, dubbed "Alligator Alcatraz," it cost $92 million to haul out less than a year's worth of wastewater. That was for roughly 500 detainees. (Florida is expected to close the facility, in part because of the huge costs to run it.) Implementing a strategy like that at Tremont would double the number of trucks coming in and out of the facility. "Water and sewer isn't rocket science. It's basic stuff," Hess says. "The fact that they failed to look at this basic stuff, what else are they missing?"

What DHS is or isn't missing is now the subject of federal suits in at least five of the jurisdictions in which it has bought facilities. Maryland sued the agency in late February over a proposed 1,500-bed warehouse jail in the state's panhandle. The lawsuit accused DHS of violating federal law by failing to consider the environmental impacts of the project. Instead of conducting a traditional environmental review, the agency acknowledged in the lawsuit, it did a limited review and found that the project "is not expected to result in any significant adverse environmental impacts." That determination, the agency argued, eliminated the need for a monthslong impact study. It conducted the review in one day, the same day it completed the purchase of the property. The federal judge overseeing the case didn't find the government's argument convincing. He halted construction pending a full environmental review. In June the agency released a public comment form to kick off its environmental assessment. The suit is ongoing.

Borough Mayor Moeller

New Jersey followed Maryland's lead in March, suing over a similar facility. It led with the lack of environmental review and also accused DHS of violating federal immigration law and a law that requires the federal government to account for "all national, regional, state and local viewpoints" for development programs and projects. Days later, Michigan made a similar claim. DHS filed its limited review of the Michigan site, with findings similar to those for Maryland, more than a month after purchasing the site and hours after Michigan filed suit. In response, DHS has said Michigan doesn't have standing to bring the lawsuit and that the agency needs detention space in the Detroit area. The New Jersey proceedings were paused after DHS agreed to begin assessing the environmental impact. Arizona raised a challenge as soon as work started on a warehouse site there; the state alleges that DHS didn't conduct any review at all. Social Circle, Georgia, a small town 50 miles east of Atlanta, filed the most recent suit, in mid-May. The agency has yet to respond.

Officials in other jurisdictions where DHS has bought warehouses have attempted to slow the government by using local powers. Salt Lake City officials have taken steps to limit water usage by nonresidential facilities because of drought conditions in the region and the potential for the proposed warehouse jail

to sap water resources. San Antonio changed its zoning rules in an attempt to derail the warehouse conversion there at a site that faces an elementary school and apartment complex. El Paso's water authorities have also raised questions about the potential strains on infrastructure from a proposed facility.

Pennsylvania is mounting an aggressive defense of its own. The Department of Environmental Protection simply shut off the water to the site (as well as to another, smaller proposed facility in the state). A series of orders in March cut off access to water and sewage until DHS seeks permits and regulatory approvals for the project. It also asked the federal government to produce its plans for water and sewage management at the site within 20 days.

On March 17, six weeks after DHS became the owner of the Tremont facility, Pennsylvania state officials received their first communication from the federal government about the project. ICE Assistant Director Keith Ingalsbe acknowledged the state's environmental orders in a letter that requested an extension for submitting the water and sewage plans. "ICE will not be able to meet the 20-day deadline for delivering these plans to DEP because it has not finalized them yet," the letter read. The agency sought a meeting with state officials to discuss a path forward and asked the regulator to at least let it use water at the levels Big Lots was using before it vacated. DEP refused both requests.

At DHS there's been internal scrutiny of the almost $40 billion effort. DHS's Office of Inspector General has announced it's doing an audit of ICE's push for more detention space that seeks to figure out whether the purchases meet ICE's "operational need in a cost-effective manner." This came after a separate internal review of the program soon after Mullin took over.

ICE has repeatedly pointed to "numerous solutions" that would keep it from "creating an adverse impact to the water authority infrastructure" in the places it plans to turn warehouses into detention facilities. It hasn't made any of those solutions public. In Pennsylvania it hasn't produced any water and sewage plans. It hasn't produced an environmental impact report. Yet it's pressing forward. It's appealing the Pennsylvania environmental orders, arguing in part that they suggest "an antipathy towards ICE," according to the documents. The appeal process could take months.

DHS also brushed aside the environmental concerns in its statement to *Businessweek*, saying those opposed to the project are "feigning concern" to "obstruct" the president's immigration agenda.

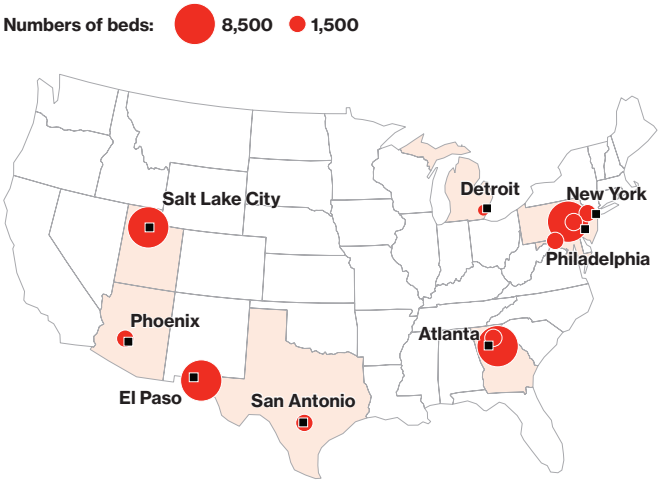
None of the 11 warehouses that DHS bought are close to ready for occupancy. People with knowledge of the process say the next two to move forward are likely to be those in San Antonio and El Paso, where no legal action has been taken. Mullin has not said when DHS will resume buying warehouses. On June 9, Congress passed an additional $70 billion in funding for immigration enforcement through 2029. On top of that, Congress is debating an annual budget appropriation that could give ICE even more money.

Meanwhile, government officials and residents of Tremont are waiting. Padora used many of the commission meetings in March to provide residents with updates from his conversations with state officials and with DHS. More recently, he's conceded that things are in a "holding pattern." Locally, there's a resignation that if the federal government wants to jam this through, it will. "This is just another injustice forced upon this part of the county for no good reason," says DelValle of No Skook Detention. Before that, residents are hoping they'll at least get a timeline, a written plan and some say in the process. Or simply some notice. B

DelValle of the local group No Skook Detention

ICE's Property Portfolio

Locations and proposed capacities of the 11 warehouses bought for conversion to detention centers



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Being a CEO Really Stinks*

By Beth Kowitt
Illustrations by Stephan Dybus

A few months after Dustin Moskovitz stepped down as head of work management platform Asana Inc. last summer, he said out loud what a lot of other chief executive officers seem to be thinking these days: The role had been exhausting. He'd expected the job to eventually get easier as the company matured, but instead, the world had only grown more chaotic. He didn't feel as if he was building something anymore but only reacting to one crisis after another, each beyond his control.

And no wonder. Consider just a sampling of what CEOs have had to navigate in the last year and a half: the steepest tariffs since the Great Depression, which have remade ▶

MORE FROM THE OFFICE TRENCHES

*Except for the mind-blowing salary

◀ supply chains and driven up already surging inflation. A war with Iran, followed by oil shocks and a further reshuffling of the world order. The looming promise and peril of artificial intelligence, which threatens to reshape not only the workforce but the very nature of work.

At the same time, activist investors have started a record number of campaigns to lobby for changes inside companies, boards are faster to fire a CEO when things go sideways, and there's a president in the White House who can send a stock tumbling with a single Truth Social post. As the Big Boss, a modern CEO is expected to weigh in on social issues (at least the right ones, in the right way) and then contend with the backlash and the backlash to the backlash. Pleasing everyone—let alone anyone—is an impossible task now that five generations, from Gen Z to the last workers of the Silent Generation, are in the workforce together. Each cohort brings its own unique relationship to work, but they're all in agreement that they don't like their jobs much right now.

"It feels like extraordinary events happen ordinarily. It's unrelenting"

Top pressures on CEOs, by average stress score of 0-100

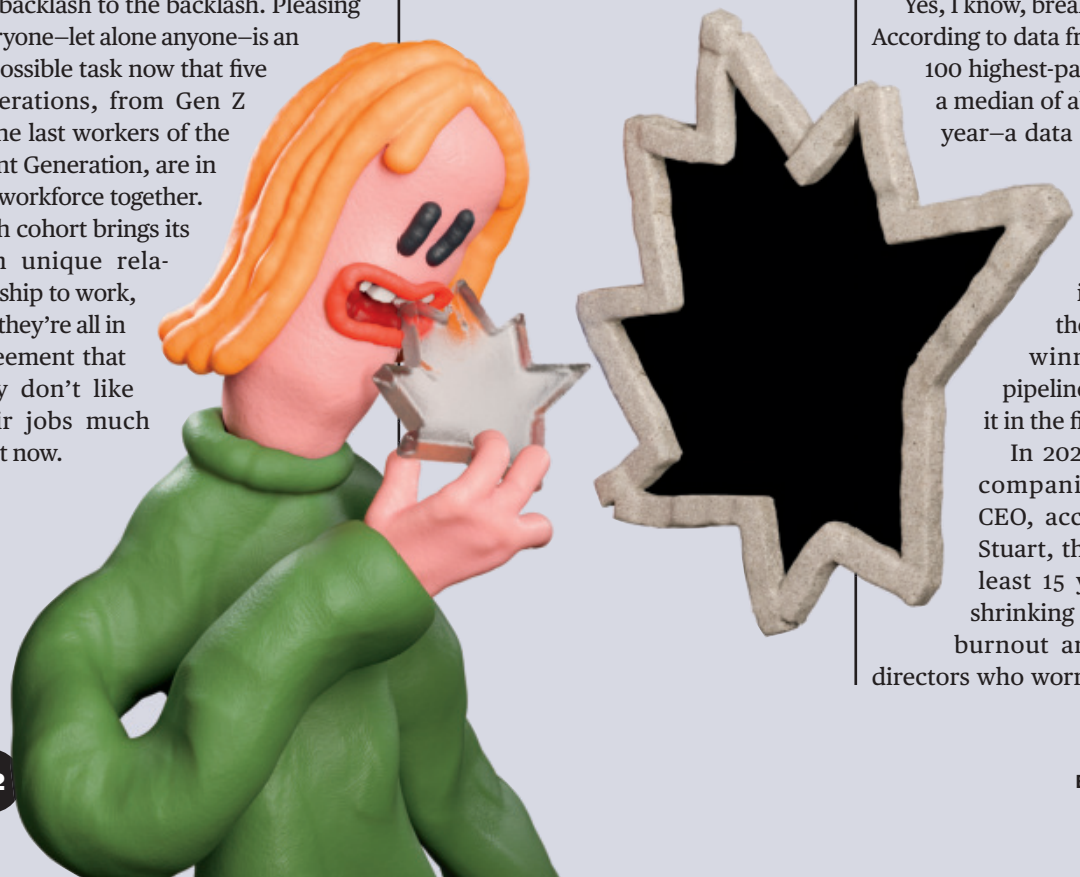
"It feels like extraordinary events happen ordinarily," says onetime Home Depot Inc. top boss Frank Blake, who's regarded as something of a CEO whisperer. "It's unrelenting." How do you develop a 10- or even a 5-year plan amid so much change and uncertainty? You don't. Contemplating what will happen next year has become a luxury, Blake says.

Running a big company has always been a challenging, sometimes 24/7, endeavor. But today's chief executive officers are more than just business leaders; they've evolved into public figures, exposing themselves to unwanted scrutiny and even threats of violence. In the background, trust in business and capitalism has collapsed, especially among young people. It's no surprise that Boston Consulting Group's first CEO Insomnia Index reported clinically high levels of stress among more than 70% of respondents.

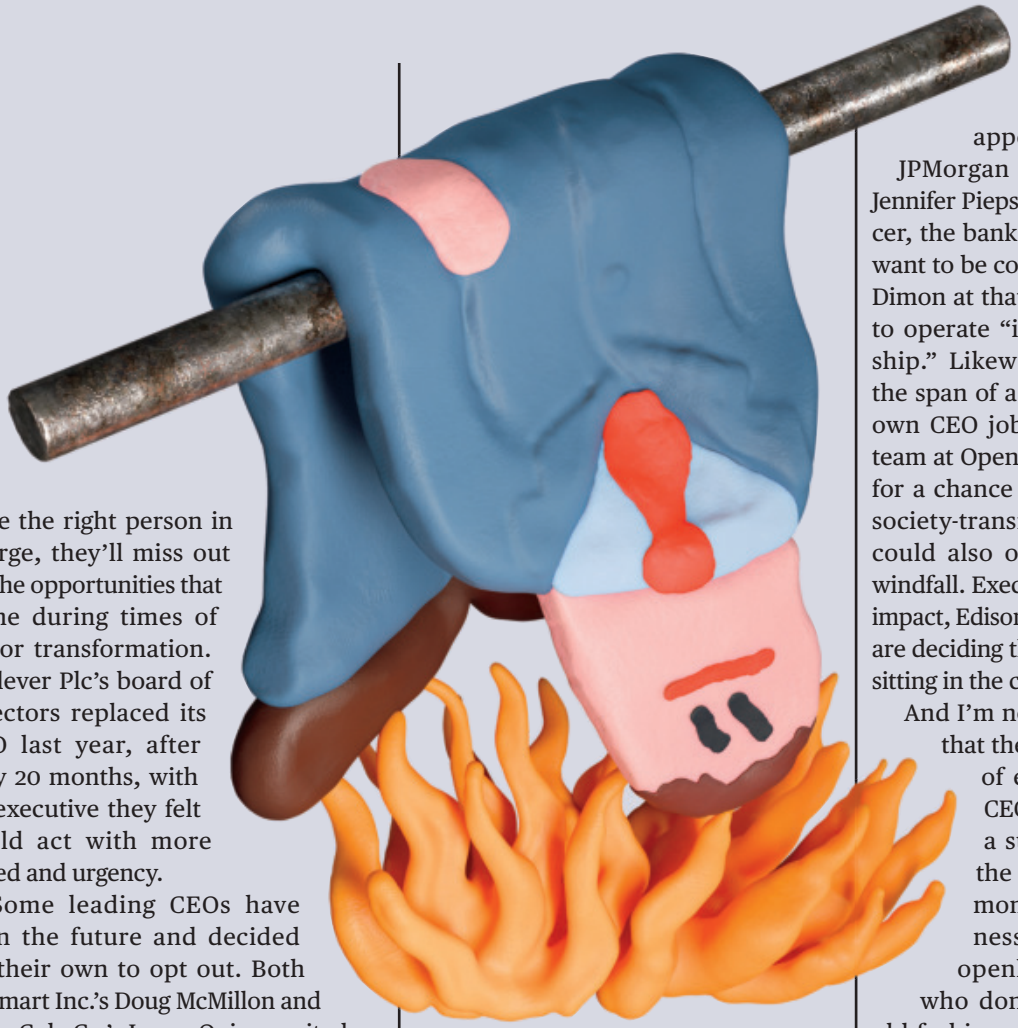
In case the top job still sounds like one you might be interested in, let me offer a few more testimonials. The former leader of the startup Stability AI told the *New York Times* in 2024 that he agreed with Elon Musk's assessment that being a CEO is "like looking into the abyss and chewing glass." The co-head of software company Monday.com said on a podcast that some days he feels "like I was run over by a truck, hit by a plane and barbecued—and it's just 11 a.m." Even when things are going well, the job is stressful: The CEO of successful video game publisher Take-Two Interactive Software Inc. said at a recent industry conference that expectations for his business are so high right now that it's "terrifying."

Yes, I know, break out the tiny violins. According to data from Equilar Inc., the 100 highest-paid US CEOs raked in a median of about $39 million last year—a data point that certainly hasn't helped their image problem. But the grueling nature of the job isn't only affecting the work itself but also winnowing down the pipeline of who wants to do it in the first place.

In 2025, 11% of S&P 1500 companies named a new CEO, according to Spencer Stuart, the highest rate in at least 15 years. Tenures are shrinking too, driven by both burnout and FOMO boards—directors who worry that, if they don't



■ DATA: BCG CEO INSOMNIA INDEX SURVEY OF 500 CEOS, JANUARY 2026; SPENCER STUART



have the right person in charge, they'll miss out on the opportunities that come during times of major transformation. Unilever Plc's board of directors replaced its CEO last year, after only 20 months, with an executive they felt could act with more speed and urgency.

Some leading CEOs have seen the future and decided on their own to opt out. Both Walmart Inc.'s Doug McMillon and Coca-Cola Co.'s James Quincey cited AI as an element in their departures, saying their companies needed faster or more energized leaders during this period of rapid change. Others, including Adobe Inc.'s Shantanu Narayen, are leaving after facing investor skepticism that their companies can thrive amid the latest tech revolution. Then there are the CEOs, such as those previously employed by Kohl's Corp. and Nestlé SA, whose personal relationships blurred into their work life and got them fired. Boards today show much less tolerance for such misdeeds, viewing them as a reputational risk. Case in point: Few people might consider tech firm Astronomer a household name, but everyone knows what happened to its (then) CEO last summer at a Coldplay concert.

Increasingly, executives watching from the sidelines aren't so sure they want in. Jane Edison Stevenson, global vice chair of board and CEO services for organizational consulting firm Korn Ferry, tells me she was aware of situations where CEO successors in the pipeline had decided it was just not the promotion they wanted. "We're seeing people be more selective about the trade-offs they're willing to make," she says. James Citrin, lead of the CEO practice at Spencer Stuart, says that, while boards today want a leader with previous experience, they're finding that people who've worked as a CEO before are more reluctant than ever to do it again. The dwindling candidate pool may be a reason why it's taking longer to fill top jobs that on paper should represent the pinnacle of a person's corporate career.

Instead, the job of the No. 2 is looking more appealing. Last year, when JPMorgan Chase & Co. promoted Jennifer Piepszak to chief operating officer, the bank explicitly said she didn't want to be considered to replace Jamie Dimon at that time, instead preferring to operate "in support of top leadership." Likewise, three executives in the span of a year and a half left their own CEO jobs to join the leadership team at OpenAI, swapping the top title for a chance to work on a potentially society-transforming technology that could also offer a massive financial windfall. Executives want influence and impact, Edison Stevenson says, and some are deciding that doesn't always require sitting in the corner-office meat grinder.

And I'm not sure it's a coincidence that these high-profile examples of executives opting out of CEO roles are all women. For a subset of the population, the challenges of the current moment also include a business climate that's become openly hostile to executives who don't look and act like the old-fashioned boss archetype (read: White male). Sheryl Sandberg has said the environment for women is one of the worst she's ever seen in her career. Overall, female CEO appointments in the S&P 1500 dropped to 9% last year, from the midteens in 2024 and 2023.

Whether that's by choice or by force, it's a warning sign that the pool of CEO candidates is shrinking. And that, right there, is the real risk. There will always be someone clamoring to sit at the top of the org chart. But as the number of interested candidates falls, so do the odds that the best possible applicant—the one you want as your boss—will be the one getting the call. B

Shrinking Mi

Middle managers shouldn't exist anymore.

That's what Jack Dorsey thinks, anyway. The co-founder of Twitter and fintech company Block Inc. recently penned a management manifesto calling for "a different kind of company," one where an AI-powered "intelligence layer" coordinates work in place of middle managers, while individual experts make decisions and solve problems "without waiting to be told what to do."

A big company without middle management might sound far-fetched, but it's the sort of enterprise a growing number of chief executive officers seem to favor. Coinbase Global Inc. chief Brian Armstrong said in a layoff memo that there will be no more "pure managers" at the cryptocurrency exchange, while Airbnb Inc.'s Brian Chesky said he doubted that "people managers will have any value in the future." Amazon.com Inc. CEO Andy Jassy has said he wants to eliminate scores of managers to "drive decision-making closer to the front lines."

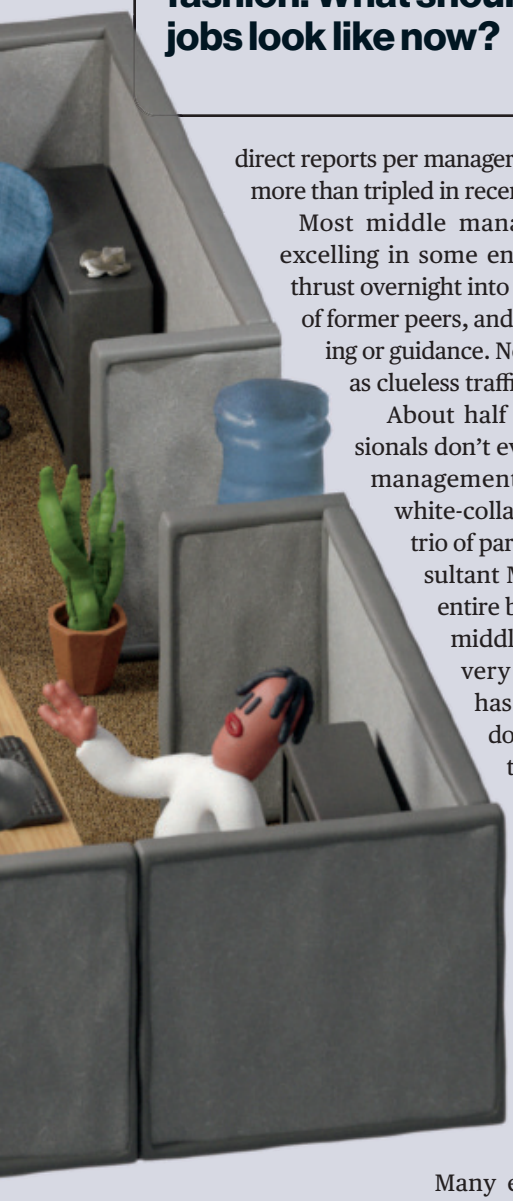
Bank of America Corp. chief Brian Moynihan seeks to "strike the right balance of managers and teammates." At Citigroup Inc., 13 management layers were reduced to eight. This isn't just an American trend—the CEOs of European pharmaceutical giants Bayer, Novartis and Novo Nordisk have all argued that strata of bosses limit people's ability to do their job well.

Cutting middle managers is nothing new, but the project managers and team leaders standing between individual contributors and company executives have never had such a big target on their back. Almost a quarter of job cuts in 2025 took aim at mid-level workers, up from 11% in 2020, according to Live Data Technologies. Those who remain tend to be miserable, with manager engagement levels tracked by researcher Gallup at record lows. The heavier workloads left behind by the job cuts are part of the reason: Consulting firm Gartner Inc. found the number of

By Matthew Boyle

ddle Management

Bosses are falling out of fashion. What should these jobs look like now?



direct reports per manager at large organizations has more than tripled in recent years.

Most middle managers get their jobs by excelling in some entry-level role only to be thrust overnight into running teams composed of former peers, and often without much training or guidance. No wonder they're depicted as clueless traffic cops.

About half of Generation Z professionals don't ever want to rise to middle management, a 2026 UK survey of white-collar workers found, while a trio of partners at management consultant McKinsey & Co. wrote an entire book reminding CEOs that middle managers matter. "The very management layer that has been so severely beaten down is now absolutely vital to achieving organizational success," they argue in *Power to the Middle*, "and most senior leaders still don't realize that." They're the ones who carry out the C-suite's strategy, they know how to get stuff done, and research shows they're the primary reason employees either thrive or burn out.

Many employees "are craving some sense of stability and guidance, a person they can lean on," says Melanie Naranjo, chief people officer at workplace compliance training platform Ethena. "When you have one manager who's managing 17 people, there's no way you can convince me that they have a good relationship with every single person."

Lately middle managers are also tasked with making sure employees adopt artificial intelligence, by encouraging experimentation, rejiggering workflows and fixing errors generated by "AI slop." Without such support, Gallup found, AI will remain a tool people play with rather than become the efficiency-booster CEOs demand. But this directive can get reduced to blunt enforcement. Some former managers recently dismissed at Amazon chafed at the company's demands to track how often employees were using AI tools. "It was management by spreadsheet," says a senior manager with more than a decade's tenure, who was laid off in January and asked not to be identified for fear of jeopardizing his severance agreement.

Middle managers need not go extinct, but they'll likely have to evolve. To that end, AI may actually help. Middle managers historically have cascaded orders down to the rank and file, while filtering crucial information up the chain of command. Increasingly that flow can be automated, with AI tools easily analyzing corporate data. "That component of their work is going away—I'm sold on that," says Erica Seldin, an organizational consultant who's worked with Bayer, Autodesk and PepsiCo.

What's left is the "human side of what managers do," which is "where people get stuck" not knowing what's expected of them, Seldin says. McKinsey found that middle managers spend almost three-quarters of their time on administrative tasks or other work not directly related to talent management.

Kimberly Hartstein, 36, a sales and marketing director at a biotech company, views the role she was recently promoted to "mostly as clearing roadblocks" so her staff can focus on their work. (She's also still doing her old nonmanagerial job, which hasn't been backfilled yet.) Rather than perpetuate bureaucracy, she's trying to shield her team from it. Hartstein is an example of the "player-coach" model of manager, which Dorsey believes will come to replace the old-school boss. Ideally player-coaches are freed from shuttling information up and down the chain and can focus on coding, building models or whatever specialized tasks they were hired to do, while providing direct instruction so others can develop. Chris Layden, CEO of staffing firm Kelly Services Inc., describes this model as "an investment in people."

As the role of middle manager changes, it's more important to figure out who is truly capable of leading others. "The caliber of people manager needs to be higher than ever before," says Helen Russell, chief people officer at software maker HubSpot Inc., "because the human element of what you're doing is more important than it ever has been." These are also the people who in turn become executives, workplace consultant Melissa Swift says: "It's the training ground for the challenges of senior leadership." B

The Coach Teaching AI Execs How to Feel

By Kevin Lincoln
Photograph by Cayce Clifford

"Every person in every AI lab that I've met so far is a sweetheart," Joe Hudson says while walking along a sidewalk in San Francisco. He's in town to coach at OpenAI, which sends a car to drive him 55 miles south from his home in Sebastopol, California, every other week. "They care. They think about it a lot, what they're doing in the world, and they really want it to be a good thing. Are they human? Yes. Does everybody have their foibles? Absolutely."

As one of the most sought-after executive coaches in Silicon Valley, Hudson is viewing the artificial intelligence race from a much different vantage point than the rest of us. He's in the trenches, aiming to make the architects of AI more emotionally intelligent. Last year, OpenAI Chief Executive Officer Sam Altman posted on X: "joe coaches the research and compute teams at openai; i super enjoy working with him. one superpower is that he deeply understands emotional clarity and how to get there; this will be one of the most critical skills in a post-AGI world." AGI, or artificial general intelligence, represents a version of the technology that eclipses humans in essentially all cognitive tasks and which some tech titans believe is imminent. OpenAI retains Hudson as a coach, but he says all the other major AI labs have put their executives through his company's courses, and he's coached leaders from Apple, Google and Twitter as well.

Altman referred to Hudson's superpower as "emotional clarity"; Hudson usually calls it "emotional fluidity," explaining "it means that you can feel all the emotions, but you're not controlled by them." The theory goes that by avoiding certain emotional states, such as anger or grief, we negatively affect the quality of our decision-making. If we're capable of going there, though, we'll be able to better endure the discomfort that's an inevitable part of being a CEO, founder or human of any stripe. "When you have conflict, it isn't as scary, so you can have that conflict quicker and come out the other end productive," he says. "You can have the hard conversation. You can tell people that you really care about them, instead of being scared that they might leave if they have leverage over you."

To those outside Silicon Valley, the 54-year-old Hudson is best known for his "rapid coaching" sessions, where he spends 10 minutes or so talking people through their biggest obstacles. These often start professional but end up becoming personal. Videos of the sessions are available on his YouTube channel, which currently has about 140,000 subscribers, and they usually go something like this: A person says they're struggling with procrastination or money problems or anxiety, and Hudson asks them increasingly specific "how" and "what" questions—How are you getting in your own way? What makes you not want to take care of yourself?—until they've found themselves in a deep exploration of their emotional patterns.

In addition to his one-on-one coaching practice, his company, Art of Accomplishment, encompasses his YouTube channel and a number of programs, mainly online but with some in-person components, that have spun out from the work of Hudson and ▶

Joe Hudson is sure the winners of the impending tech revolution will be human

◀ his wife, Tara Howley. These offerings are run mostly by a team of facilitators the pair have trained for years, with occasional appearances from Hudson himself. They include the three-week Connection Course, which costs $900, and the $8,000 eight-week Master Class. Like most other entrepreneurs in the changing-lives business, Hudson has his own podcast and regularly appears on popular shows such as *Modern Wisdom* and biohacker Dave Asprey's *The Human Upgrade*.

One of the fundamental aspects of Hudson's approach is a mindset he calls VIEW: vulnerability, impartiality, empathy and wonder. "Practically it's a way to have conversations," he said on the first episode of his podcast. "It's a communication methodology that allows your conversations to be far more effective. By effective, I mean more connected, more intimate and more productive, from anything from sales to product development to conversations with your husband or wife or co-worker."

Hudson says this mindset will only become more relevant in the age of AI as knowledge grows increasingly commoditized, leaving wisdom as the crucial human skill. "Wisdom is how to live," Hudson wrote in a 2025 blog post. "It is the residue of mistakes, metabolized by time and reflection. It can't be rushed, and it can't be copy-pasted. It is an embodied—as in felt in the body—experience, guidance from the inside." Hudson's teachings are designed to lead people to wisdom through welcoming the full range of emotions, even during the high-intensity experiences of, for example, being a Silicon Valley CEO. Compare this with knowledge, which Hudson defines as facts, frameworks and technical skills.

"Joe is exceptional," Altman wrote in an email to *Bloomberg Businessweek*. "He has a super high EQ and knows how to build supportive, high-trust teams that are focused on winning." Hudson says his public affiliation with Altman and OpenAI has been both a blessing and a curse. People have told him they can't work with him or his company because of what they've read in the news. Although he acknowledges the anxiety around AI, he also says it risks becoming a self-fulfilling prophecy.

"The thing I would say to the world is they're giving birth to something," Hudson says. "If a mom's giving birth, you want to create a good environment for them to do it. Have some faith, give them support, because that's what's going to get the best result. You don't want them scared s---less and feeling attacked."

"Most people aren't walking around thinking, 'You know what I need more of? Connection.'

Even though what they need more of is connection"

Every year, Art of Accomplishment has a company off-site, bringing together far-flung employees from the US, Europe and Central America. This year's is on a flower farm where you can see horses grazing among the picturesque pastoral sprawl of Sonoma County. The team is meeting in a barn, a dozen or so people curled up on a ring of couches and recliners. Hudson, alongside Howley, is there in jeans, a green polo under a green half-zip and a trucker hat.

The day begins with a presentation on the growth of the business, including debates over whether the courses should be marketed as "aspirational" or for "anybody" and whether they should explicitly offer training to coaches—a pertinent question for a market that includes life, health and executive coaches and is now worth

$16 billion in the US alone, according to research firm Marketdata Enterprises. Art of Accomplishment says its revenue has grown about 75% year over year starting in 2023; it expects more growth in 2026 as more and more potential clients want in on Hudson's feelings-centric technique, even if they might not realize that's what they're looking for.

"Most people aren't walking around thinking, 'You know what I need more of? Connection,' " Hudson says. "Even though what they need more of is connection." This seems even truer as we come to grips with a loneliness crisis that isn't going away. Joe Biden's surgeon general declared loneliness an epidemic in 2023, publishing data that showed a marked increase in time spent alone from 2003 through 2020, a development that Covid-19 accelerated only further. Last year more than half of Americans reported feeling isolated, according to the American Psychological Association.

A mounting body of evidence suggests connectedness in the workplace is beneficial for both employee well-being and productivity, and applies just as much to the kinds of high-level executives coached by Hudson as to the average midcareer professional. Former Taskrabbit CEO Stacy Brown-Philpot started working with Hudson in 2019, after the company sold to Ikea and she found her career at an inflection point. "He taught me how to love myself," she says. "I wasn't afraid to be vulnerable, and I wasn't afraid to let people in. It created a sense of loyalty and commitment to whatever we were doing." When she started her own investment fund, Cherryrock Capital, Brown-Philpot used what she learned from Hudson to assemble and motivate her team: "It was a hard time to raise money, but I was like, 'We're going to do it, and I'm going to love you all the way through it.' Having that confidence from a place of love and care is what Joe really, really taught me."

Johannes Landgraf, CEO and co-founder of Ona, which offers cloud services to support AI agents, told Hudson his team "did six months of work in two days" at one of the summits they attended as part of Art of Accomplishment's Council program. On the strength of testimonials like Landgraf's, Art of Accomplishment is considering a new model where those participating in the Council compensate Hudson's company in stock rather than cash, just as many do in his personal practice; the previous version of the Council was listed at $10,000 per person. The idea is that the compensation should be in proportion to the value Art of Accomplishment provides.

It's a similar model to venture capital, with coaching services taking the place of cash investments. That's no coincidence: Hudson's entry into Silicon Valley was as a venture capitalist, though his journey was a winding one. His father worked as an executive for General Electric, United Technologies and Westinghouse Electric, and his career took the family all over the world. Despite the glamour, Hudson saw how corporate life could destroy someone from the inside. The closer his dad got to achieving his dreams, the more he seemed to spiral, leading to drinking, mood swings and nightly yelling at the dinner table.

Hudson rebelled by growing a mohawk and dyeing it green, taking up skateboarding and drugs and getting kicked out of a number of schools. When he eventually graduated from St. Mary's College of Maryland with a degree in human development, he threw himself into a lifestyle very different from his father's, playing in a rock band in San Francisco. But he kept one toe in the business world, the only way he'd been able to connect with his father, and for a time worked in international stock lending at Barclays Global Investors.

Then he met Howley, an artist and actress who did theater and low-budget indie movies, and within a few months they were engaged. Both came from dysfunctional backgrounds and fought constantly, and so Howley issued ultimatums before getting married—ultimatums that would eventually lead to Hudson and Howley's work today. They'd have to do therapy, both as a couple and individually. They'd have to travel together somewhere off the grid, which would take them out of their comfort zone and force them to work together when things got difficult. And they'd need to do a 10-day silent meditation retreat.

The result from the last one was different from what Howley had expected. "I was surprised to find that he loved meditation," she says. "He had a life-altering experience and became a lifelong meditator." Hudson describes that experience as "eight seconds of oneness," something he spent almost a decade trying to replicate. "I would find enough work so I could afford to sit and meditate," Hudson says. "Tara was definitely upset with it."

Then they had their first child, in 2006. At the time, one of Hudson's projects was making large-scale video art. He gave one of his wealthy collectors good advice about gold and oil, which he picked up from a consistent *Financial Times* habit, and the collector asked Hudson what he would do if he could choose anything in the world. He said he wanted to help humanity heal through consciousness and also help the environment. The collector gave him money to invest in companies for these purposes, and Hudson became a venture capitalist working for the collector and his foundation.

"What I didn't understand is, what you're looking for is an entrepreneur who doesn't need you," Hudson said, on his podcast, of being a VC. "That's what you're actually looking for, and my background was to be needed. That's what gave me some sense of validation." But, he continued, that's "a really bad way to invest venture money. What you really want to pick is people who don't f---ing need you, who find you to be a nuisance. And because of that, a lot of the investments we were making weren't working."

He started coaching his founders to improve their performance, drawing on his own spiritual journey, the philosophy of question-based selling—a sales framework based on asking strategic questions instead of prioritizing a pitch—and the work of Cees de Bruin, a good friend who advised companies on "human dynamics." Hudson's reputation spread across Silicon Valley, with executives he'd coached recommending him to others, and soon he was getting more coaching requests than he had time for. He started hosting small-group sessions and courses in addition to the one-on-one work. Eventually he decided he was spending too much time away from his family, and in 2019 cut back, coaching a handful of executives who ▶

◀ could pay him enough to make it his whole business. Once Covid hit, a former client suggested he start up his courses again, this time online.

Hudson had already begun collaborating with his wife, who'd co-facilitated classes with him. "I had no interest in doing it," Howley says with a laugh. "But while I was a mom, I was taking a zillion courses on conscious parenting and emotions and the psychology, somatics, body realm." They found they loved working together and decided to build Art of Accomplishment.

"To me, business is an art form," Hudson says of his seemingly disparate professional interests. "There's this great quote—I don't know who said it—but at the pinnacle of a poet's career, he's a businessman, and at the pinnacle of a businessman's career, he's a poet. Painting is pigment. Music is notes. Business is revenue."

After the company-oriented conversations of the morning, the Art of Accomplishment off-site continues with a series of exercises that provide a glimpse of how the VIEW mindset functions among a team. First the employees spend five minutes or so of sustained eye contact with a partner. During another exercise members of the group listen to what others appreciate about them, then repeat that appreciation back. Just about everyone cries. The event bears far less resemblance to any standard corporate experience than to something you might participate in at Burning Man, which Hudson attended in the late '90s through 2001. In 2022 he went to coach at the festival, but says he won't do that again—it turns out Burning Man is not, in Hudson's experience, a good place to do the real work needed for transformation. (Part of this might have to do with the fact that Hudson does not coach people under the influence of psychedelics.)

Versions of these exercises are found in all parts of Hudson's practice. He lists what he sees as the benefits: "Less burnout, more productivity with less effort, happier teams, better retention of key people. Excavation of toxic or problematic people. The whole organization can pivot a lot quicker." He cites other advantages as well, including an improved ability to deal with stress and a reduction in passive-aggression.

Landgraf, the Ona CEO, has seen these results firsthand. Now 32, he became a founder in his late 20s. As his company grew, he sensed that he'd benefit from having an executive coach. Rather than someone who would pump him up before an all-hands meeting, Landgraf was looking for a coach who'd really listen and help him grow, which led him to Hudson. "Within 10 minutes, he ripped me open," Landgraf says. "I was like, 'What just happened?' I felt very seen in a way where it was like, 'He knows.' I got this weird feeling in my stomach."

Landgraf listened to every episode of Hudson's podcast, and he and his executive team took the Connection Course together. He then did the weeklong Groundbreakers program, another of Hudson's offerings that one former attendee described as designed to "change your relationship with the voice in your head to one of self-love" and which has a multiyear waitlist. Eventually, Landgraf brought his team into the Council. During one of the sessions, he realized he needed to pivot the company and credits Hudson with helping his team make tough decisions that put Ona on the path to success, culminating in an announcement in June that OpenAI would acquire it. "The core thing for Joe is that he does not want to change you," Landgraf says. "The only thing he can give you is the tools that allow you to see reality a bit differently and help you move through those emotions."

Landgraf's biggest indication of how well Hudson's approach has worked for Ona is the company's employee retention rate. It's notoriously difficult to hold on to talent in the AI field, but Landgraf says Ona's culture, which Hudson helped him shape, has engendered loyalty: "The goal is that people do their life's work and they are excellent at what they do—and they become a better person. They become a better version of themselves, a better friend, better partner."

He echoes his coach's belief that, in the age of AI, your biggest asset is the wisdom and strength of connection that comes from emotional fluidity. As Landgraf sees it, "we're moving from a world that is very IQ-driven to a world that is very EQ-driven, and actually more human. In an AI world, the most capable teams will have the most trust, the most clarity and the least avoidance." Although Hudson says many of the tech leaders he encounters still find his approach counterintuitive, he believes that's going to change, and soon.

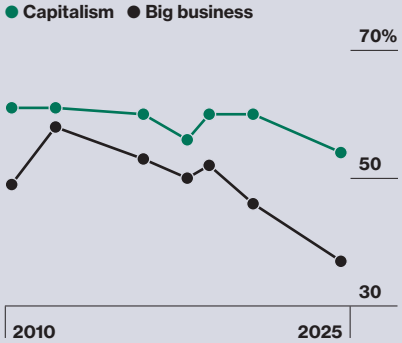
"I feel like I'm in the 1970s and I'm an environmentalist who thinks he can make money from it," Hudson says. "Back then you couldn't be an environmentalist and a businessman. You had to be one or the other. By the 2000s there was a whole fleet of venture capitalists who were like, 'We can save the planet and make money.' I feel like I'm on the cutting edge of a revolution." Ⓑ

Corner Office? No Thanks

Americans don't much trust today's crop of executives—or want to be one themselves

The proportion of US adults with a positive image of big business has plummeted since 2010, and their waning trust in chief executive officers is surely playing a role. Only 37% of US adults view CEOs favorably (Gen X respondents have a particularly negative view), with media and tech execs among the most disliked, according to a survey conducted by Morning Consult for *Bloomberg Businessweek*. "It paints a striking picture," says Kyle Dropp, president of Morning Consult. If CEOs want to rebuild trust with the public, they'll need to "make it clear that the many things that their companies control and the cumulative employee impact can have a positive effect on everyday Americans' lives." Ⓑ —*Miles J. Herszenhorn and Dorothy Gambrell*

Share of US adults with a positive image of

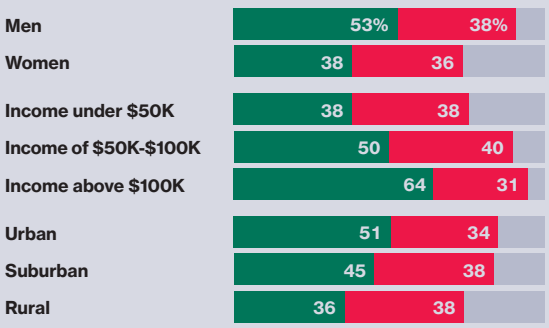


CEOS ARE LEAST TRUSTED DATA SOURCE

When trying to gauge the health of a company, whose perspective do you trust the most?

WHO TRUSTS CEOS (AND WHICH ONES) THE MOST

How much do you trust a CEO to do what is right?

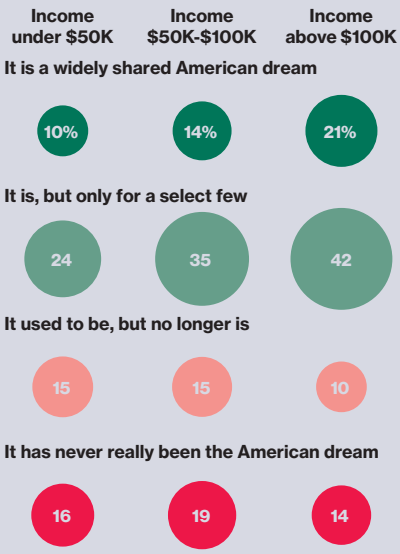


Respondents with a favorable impression of CEOs from selected industries

43%	Food and beverage
39%	Automakers
39%	Retail
38%	Banks
37%	Healthcare
37%	Airlines
36%	Technology
33%	Media and entertainment

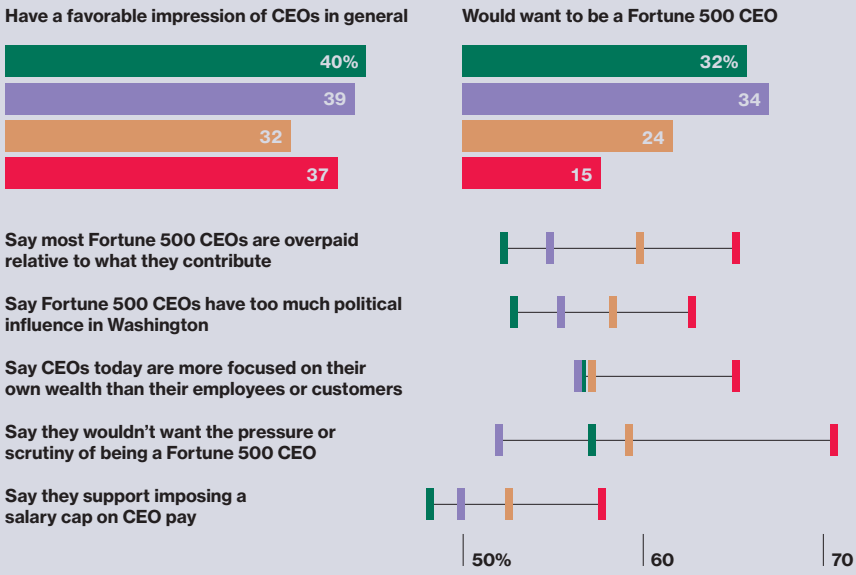
CAREER GOALS OUTSIDE THE C-SUITE

Do you think becoming a Fortune 500 company's CEO is the American dream?



FEW PEOPLE OF ANY GENERATION WANT THE TOP JOB

Gen Zers: 1997-2012 ■ Millennials: 1981-96 ■ Gen Xers: 1965-80 ■ Baby boomers: 1946-64



■ DATA: GALLUP, MORNING CONSULT

AI Knows If Your Boss Is a Bad One

By Jo Constantz

For many browbeaten office workers, liberation—or, at least, a better-mannered boss—may be nigh. A growing category of software is using AI to detect workplace bullying, raising the prospect that toxic managers could soon have fewer places to hide.

One such platform, Smarsh Inc., which serves Morgan Stanley and other financial companies, promises to "uncover hidden intent," its website says, so employers can spot bullying and harassment "even when it's subtle." Global Relay Communications Inc., another software provider, says its systems ensure "bad conduct is spotted and escalated instantly," allowing companies to locate "patient zero" before a "contagion" of toxic culture takes hold.

The software can, in theory, flag bad behavior by anyone. But it's especially significant when the offender is a manager: someone with the power to block promotions and make daily life unbearable.

While forms of employee-surveillance software have been around for decades, the advent of large language models marks an inflection point. Earlier generations of surveillance software relied on keywords (for example, four-letter words) and rudimentary natural-language-processing techniques to detect abusive language and behavior. With more sophisticated artificial intelligence systems, employers can take context, tone and recurring patterns into account across thousands of conversations to help identify problematic managers far earlier.

"We never had a keyword list for belittlement. How would you even suggest that? It's almost like you have to read between the lines to catch that somebody's doing that, and we can do that now," says Donald McElligott, vice president for compliance supervision at Global Relay. "The AI can read between the lines." Several dozen clients are piloting this capability, which Global Relay introduced a little over a year ago.

Some companies have become enthusiastic adopters. One on the West Coast is analyzing every indicator it can—including small workplace infractions like not completing training on time or failing to regularly change passwords—to create something like an employee social credit score, says Susan Frank Divers, a consultant and the former chief ethics and compliance officer at Aecom, a provider of global infrastructure services. The business, which Divers declined to identify because the work isn't public, can run employee-sentiment surveys if a pattern emerges to see if there's a problem and intervene if necessary. "The holy grail in ethics and compliance for a long time has been to try to figure out what are those predictors for unethical behavior," Divers says. "There's a lot written on the culture of 'the organization' and whether it tolerates a--holes as managers."

The implications are just beginning to percolate through the ranks of chief executive officers, human resources specialists and lawyers. When Roxanne Bras Petraeus, co-founder of compliance startup Ethena Inc., asks companies' lawyers whether they're using AI to monitor work calls for signs of bullying or harassment, many are taken aback: They hadn't even considered it. "I'm just starting to see it click," she says of executives grasping what's now possible.

The first corporate surveillance software boom started in the late 1990s, when Wall Street regulators ordered companies to preserve their accumulating mountains of email in case of misconduct. The sector later expanded to help businesses investigate discrimination, sexual harassment and bullying claims; demand grew when the pandemic pushed more white-collar

Is sacrificing your own privacy worth it to stem your manager's worst tendencies?

work online. While companies offering employee surveillance software hope to bring in new clients, the technology remains most popular in finance and other industries in which businesses are legally obligated to keep an eye on internal communications.

But even there, companies are exploring newer options. One major private equity outfit surprised McElligott when it seemed much more keen on HR surveillance software—which scans for bullying, discrimination and harassment—than on financial compliance products. Global Relay tested the HR tools for the PE firm, McElligott says, which flagged two incidents the client had to investigate. Because there's a strict firewall in place between the company and its customers, McElligott never learned exactly what happened. "But I'm dying to know." Global Relay plans to release an update later this year that will allow companies to adjust the sensitivity of their settings.

Employers are more able than ever to use AI to fight bad behavior, but adoption hasn't exactly been swift. Most companies have yet to overhaul the way they turn up toxic bosses, says Tracy Billows, a veteran employment lawyer. But she says she expects AI will become more central to the workplace misconduct-prevention playbook in the next few years by "helping organizations investigate and respond to that misconduct in a more timely and, hopefully, effective manner."

Cost is a major concern: Smarsh's largest customers process 30 million to 40 million messages a day on their platform, and running each through a system that relies heavily on LLMs can be expensive. Prices vary widely based on the volume of communications being surveilled and the number of risks being monitored, says Emily Wright, a compliance consultant who works with financial-services companies. But in general, the more issues the system flags, the more companies may have to spend on staff to review them.

There's also the issue of privacy. An alarm goes off "when you use the word 'surveillance,'" says Robert Cruz, vice president for regulatory and information governance at Smarsh. This puts companies in a paradoxical position: The tools that could expose a bad boss depend on a level of oversight that many workers see as excessive. Cruz says every organization has to do its own "mud wrestling" to decide where to draw the line between business priorities and privacy concerns.

Finally, businesses "don't necessarily want to go fishing for a problem," Billows says. "As I like to say to clients, 'Don't open a door you're not prepared to walk through.' You're going to have to be ready to take the steps necessary to respond. That's where I think you might see a little bit of reluctance." B

THE RELUCTANT BOSS

Are Co-CEOs The Solution?

A growing cohort of companies from Netflix to Spotify are giving it a go

By Heather Landy

When Mellody Hobson was named co-chief executive officer of Ariel Investments LLC in 2019, her husband, George Lucas, warned her that having two leaders at the top has never worked out, at least not in his universe. Call it the Sith Rule of Two. According to *Star Wars* lore—and he'd know; he invented it—devotees of the dark side are typically led by a pair of lords of unequal status, a teacher and an apprentice. It's always a tense relationship, with the more senior leader inclined to switch sidekicks if a more promising pupil appears and the more junior facing scant chance of promotion so long as the boss is alive.

"Obviously, John is not a Sith Lord," Hobson says, laughing, when describing her co-CEO and the firm's founder, John Rogers Jr. But she knew going into a shared leadership role with her mentor and boss of 28 years wasn't without risk.

Co-CEO arrangements are historically rare and famously fraught, undone as easily by clashes of egos as by disagreements over company strategy. This management model has been alternately critiqued as a backdoor attempt at talent retention, a halfway measure for handing power to women and a recipe for confusion over who's in charge of what.

So is it ever logical to have more than one executive in the top role? It's a question being asked in an increasing number of boardrooms, spurred by the ever-widening responsibilities of CEOs managing through major shifts in technology and geopolitics and evolving societal expectations of corporate bosses. A growing group of companies, including Comcast, Netflix and Swiss running-shoe maker On, are giving the model a chance.

For Oracle Corp. the move was seen as a way to balance its bet on Clay Magouyrk, who was 39 when he was appointed and known for his maverick style; he was paired with a more experienced executive 15 years his senior. Spotify Technology SA split the top job when its founding CEO stepped aside in January. (Filling the big shoes of a founder is a common reason companies turn to co-CEOs.) At other businesses, co-leadership is the manifestation of a culture built on collaboration, or simply a way of covering more territory.

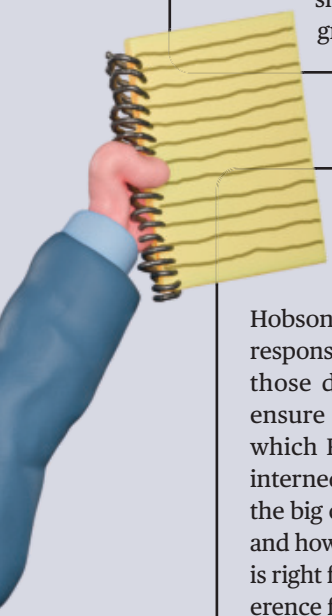
Pairs who've done it share their best tips for making it work.

1. PLAY TO YOUR STRENGTHS...

The co-CEOs leading global architecture and design firm Gensler spent decades on parallel professional tracks before they were promoted together to the top role in 2024. Elizabeth Brink came up through Gensler's planning and strategy track, as Jordan Goldstein stuck close to architectural work while developing an interest in digital technology. Given their different routes to the top, Goldstein leads on tech, plus practices including sports and aviation, while Brink runs point on talent development, research and practice areas including healthcare. "We started to identify the areas where we each have a lot of passion so that we can cover a little bit more ground," Brink says.

2. ...BUT STAND UNITED

Despite their division of labor, Brink and Goldstein co-lead Gensler's global operations, and every Monday they co-host a firmwide call often lasting two to three hours. When they make a decision, "we always co-own it," Goldstein says. "If there's disagreement, we keep it within the room and then go out with one voice." Disputes are rare, Brink says, but when they do arise they require each person to explicitly state what's making them wary. By addressing those concerns, the pair can reach a consensus. They don't both need to love the decision. But "in the end, we both have to feel comfortable with it because we're co-owning it," she says.



3. WRITE IT DOWN

Having a system for settling debates is a common trait. At Ariel, "we sat with a board member, and we literally wrote out rules of engagement," Hobson says, so "we would be extremely clear about our responsibilities and where we had decision rights." Making those determinations ahead of time helped ensure the duo didn't default to dynamics in which Rogers, who hired Hobson after she'd interned at Ariel and finished college, made all the big calls. "I'm confident in my point of view and how I think about the world and what I think is right for the firm," she says, "but I do have reverence for what he envisioned."

4. BE EQUALS, REALLY

Hobson wanted the co-CEO role only if she, Rogers and the board all thought of her as an equal. "People just assumed I was making all these decisions—and in effect, Mellody was making a lot of decisions and leading many aspects of our business," Rogers says. "We agreed that we wanted to make sure this was clear to the rest of the world." Their ownership split offered another signal. When her promotion went into effect, Hobson held a 39.6% stake in Ariel, to Rogers' 34.2%.

5. SPLIT DIRECT REPORTS

At Nordstrom Inc., co-CEOs Pete and Erik Nordstrom, who are great-grandsons of the founder, have a mostly fluid approach to managing the business. Although the former came up through merchandising and the latter mainly in store operations, they're comfortable wading into each other's territory when necessary. But they draw the line when it comes to managing people. Each has his own set of direct reports, with the executive team roughly split between the two. "We think that's important," Erik says. "People need to hear from one clear voice how they're performing and what their standing in the company is."

6. FIGHT FOR WHAT WORKS

In 2015, Pete and Erik became co-heads of Nordstrom alongside their brother, Blake. Still, the board would question the arrangement every few years and look into whether it was creating confusion internally. In 2020, a year after Blake died of lymphoma at age 58, the two younger brothers finally capitulated to the board: Erik became sole CEO, and Pete was named president and chief brand officer. When the company returned to private ownership last year, one of the first things the Nordstroms did was name themselves co-CEOs.

PURSUITS

Summer Sports Special

Top of the world

On the pitch

Inside the new tiers of fandom at a World Cup stadium

By Amanda Mull

Watching elite athletes from the sidelines instead of the stands is an experience not unlike gazing down from the edge of the Grand Canyon or getting a little too close to a container ship as it sails by. There's no comforting abstraction of distance or television. You're pressed up against the limitations of what's possible in the physical world, your sense of wonder shot through with the uneasy thrill of proximity to the extreme.

But watching from behind home plate when Shohei Ohtani smashes a pitch out of the park, or from courtside when Steph Curry sinks a three, is also unlike those experiences. For one, it probably involves securing entry to some kind of limited-access holding pen for big spenders that requires you to occasionally brandish a large laminated pass clipped to a branded lanyard.

Nevertheless, if you make it all the way down to field level at Gillette Stadium in Foxborough, Massachusetts, you can stand on a faux grass rug outside the Bud Light Celebration Beer Hall and feel, briefly, as if you might be able to reach out and touch the face of God. Or, on one overcast Thursday afternoon in late March, the face of Kylian Mbappé.

The French forward was in exurban Boston with the rest of the men's national soccer team for an exhibition match against Brazil as part of the buildup to the World Cup. When I'd set out for Massachusetts, I hadn't expected to see him; star players often skip friendlies before major tournaments, and soccer doesn't get more starry than Mbappé, arguably the world's top player. But there he was, scoring the game's opening goal just over 30 minutes in, so close to where I stood that, watching *SportsCenter* that evening, I spotted the hightop table I'd been leaning against all afternoon.

Unfortunately, you can't see me in the clip. Mere seconds before Mbappé separated from Brazilian defenders to streak down the field, I'd traded one great thrill of human existence for another: I'd gone inside to admire the wall of self-serve beer taps and see if lunch was still available at the free buffet.

In my defense, inspecting these amenities was more central to my assignment than witnessing the transcendence of a generational superstar punking a goalie. My marching orders were simple: With the World Cup looming, I was to take in half of the game from the best seat in one of the host venues, and half from the worst.

At both ends of this continuum, ticket prices are a sore subject. FIFA, soccer's global governing body, implemented a dynamic-pricing scheme that spiked the minimum get-in price for particularly popular matches into the four figures, with the best seats easily topping $10,000. This year's tickets are by far the most expensive in tournament history, prompting widespread fan outrage. FIFA President Gianni Infantino blames the US market. "You cannot go to watch in the US a college game, not even speaking about a top professional game of a certain level, for less than $300," Infantino said in May. "And this is the World Cup."

That is, of course, so laughably false that it can't be treated as a serious claim.

The VIP view

It's easy to watch a major college football game for less than $50 and most NFL games for $150. But when you look at how prices have changed over time, you can see why Infantino might have thought FIFA could get away with this. Earlier this year the Bureau of Labor Statistics reported that the price of attending a sporting event in the US had indeed surged 123% since 2000, far outpacing overall inflation.

Watching a game of any kind has become the province of the affluent, and stadiums and arenas are remaking themselves in their image. Witness amenities such as Allegiant Stadium's Wynn Field Club in Las Vegas, where an end zone booth for 12 can cost into the mid-five figures for a single event and attendees can order bottle service. Or the newly announced Arc at Kaseya Center in Miami, where memberships starting at more than $21,000 per season let fans watch Heat players walk back and forth from the locker room from the luxury of a private club.

So what, exactly, are fans getting for their money?

Venues are in the business of selling space, and for much of their history, they maximized revenue by putting as many butts in seats as physics and social norms would allow. Ticket revenue itself mattered, but so did selling lots of beers and hot dogs and souvenir hats at extortionate prices. The atmosphere and sense of community at games also deepens the emotional bonds of fandom, the fraught psychological infrastructure on which every sports business depends.

For a long time, many people would have said the best seat in an average sports venue was in a luxury suite. You (or, more likely, your company) rented a suite for a full season, and for tens of thousands of dollars, which you could plausibly categorize as a business expense for tax purposes, you got a place to impress clients.

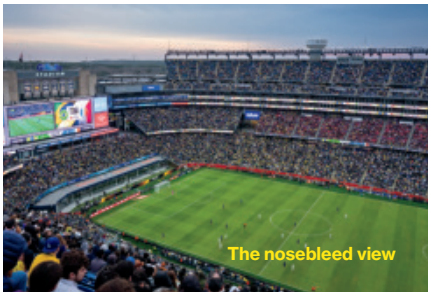
But stadiums have changed along with their spectators. Fans in luxury suites had long been hidden away from other attendees between tiers of normal seating. Now many of the shiniest amenities are intentionally visible on game broadcasts. At SoFi Stadium just outside of Los Angeles, open-air cabanas behind the team benches let fans mill around on the sidelines during Rams and Chargers football games, and several NHL franchises have converted the glassed-in photographers' pit between the team benches into premium seating.

NFL teams have taken a cue from the NBA and its highly desirable courtside seats. To do that on crowded football sidelines, stadiums have tucked ultra-cushy luxury seating areas and open-air lounges into corners and behind end zones, in what used to be dead space or regular seats with bad sight lines. Here, the sights and sounds of football give prospective ticket holders a number of additional thrills, most notably that a receiver might fly into the section and stick around to celebrate a touchdown with you.

Gillette Stadium is the home of the New England Patriots, and its indoor-outdoor beer hall, which opened in 2023, is exactly the kind of VIP area that's become so popular. From my perch at the railing, only a bank of photographers and a slim passageway used to shuttle around even more important guests separated me from the field. During Patriots games, the photographers move elsewhere and fans get even closer to the players.

Before France and Brazil took the field, former Brazilian star (and current politician) Bebeto stopped by to sign autographs and pose for selfies with a gaggle of fans too young to have seen him dominate in the 1994 World Cup. Boston Celtics star Jayson Tatum brushed past after administering the pregame coin toss, with much of the rest of the Celtics roster trailing behind. (Robert Kraft, owner of the Patriots and the stadium, was also hurried in front of us to his seat by a swarm of security, if that's more your type of celebrity sighting–this is, after all, a business publication.)

That football and soccer are harder to watch at field level doesn't seem to matter. Stadiums compensate by installing mammoth video screens so patrons can still see what's happening. Many of the spaces aren't meant for full-game viewership anyway. The beer hall is the more expensive of a pair of luxury spaces built


The nosebleed view

inside Gillette as part of a $250 million renovation that began in 2022. During a Patriots game, only season ticket holders who spend $5,000 per person per season for access, in addition to their tickets, may enter.

When the stadium opened in 2002, "the typical fan experience centered around sitting in one's seat, watching the game and interacting primarily with the season-ticket members seated nearby," Jim Nolan, chief operating officer of Kraft Sports + Entertainment, said in an emailed statement.

But he said the data the company collects on fan preferences shifted. People wanted to get a beer and a snack and mingle, and some of them wanted a swanky environment to do it in. Gillette has adjusted accordingly.

On the secondhand market, single-game access to these spaces has become a hot commodity. In 2023, club spaces at ticket-resale platform SuiteHop represented only 9% of the business, which was then dominated by people buying and selling seats in traditional suites. Now, they're 38%, and demand for both types of luxury seating has soared, says Lois Mueller, its senior vice president for business development.

Clubs or lounges are especially popular among younger fans and people looking to plan a birthday or bachelor party, Mueller says. These groups may not want the cloistered, corporate vibe of a traditional wood-paneled suite or have enough guests to justify a 20-person space. A lounge is more social and casual, but it has the same open bar, climate control and private bathrooms that make spending hours in a stadium much more comfortable.

What young fans want out of a sporting event is a question of existential ▶

■ PREVIOUS PAGE: MADDIE MEYER/GETTY IMAGES. THIS SPREAD: MOLLY PETERS FOR BLOOMBERG BUSINESSWEEK

◀ importance for teams and venues alike. Although attendance numbers for pro sports remain high in the US, Americans under 30 are significantly less likely to identify as sports fans than older folks were at the same age. Plus, huge TVs, 4K game feeds and customizable multiview features have made even die-hards question the utility of spending all that money to sit thigh-to-thigh with a sweaty stranger.

Fewer fans wanting to show up to games is not ideal for sports franchises and venues, but it's certainly survivable. The fans who do come just need to generate more revenue, and venues are moving as quickly as fresh drywall can be hung to see what patrons will pay for. "You'll have pop-a-shot and air hockey tables and things like that, and there also happens to be a basketball game happening on the court behind you," Mueller says. "In some venues, you have basketball courts where you can play a pickup game at halftime if you want."

You can play air hockey anywhere, of course, and for far cheaper. The best pitch for going to see live sports remains the spectacle of the game itself. As much fun as it was to brag that I was briefly two feet away from Jayson Tatum, why someone might pay thousands of dollars a year to stand in that spot remained purely theoretical to me until Brazil's players emerged from the tunnel next to the beer hall to start the game.

Massachusetts is home to the second-largest Brazilian population in the US, and even on a weekday afternoon, this exhibition was almost sold out, the crowd skewed toward the country's jubilant green-and-yellow-clad fans. Some experiences in life remain truly rare—say, knowing what it feels like to run out of the tunnel in an NFL stadium in front of 65,000 screaming fans. Even if you're just adjacent to it, huffing the fumes of other people's excellence, even if you're just a reporter standing around in a pair of Hokas so your 40-year-old feet won't be too sore at the end of the day, it rips.

By the time I headed upstairs to sneak into a putatively bad seat—the kind that will cost about $89 for Patriots games this season—France led 2-0 and the stadium's mood was slightly more subdued. These seats were way up in the air and set at a vertiginous angle that made my vestibular system think I was going to plummet to my death at any moment. And in an outdoor stadium such as Gillette, you're far more aware of the weather up there. The denim jacket that had served me fine at field level couldn't compete with the wind whipping the stands at altitude.

The irony is that this is a pretty good way to watch football and soccer, games that happen across planes so vast they can be understood only in real time from elevation. At that angle, the careful choreography of the game grew clearer, the players reacting in unison to every movement of the ball, the Brazilian side pressing the French defense—at first successfully, to bring the game to 2-1, and then with increasing desperation as the remaining minutes ticked away.

When you watch from down on the field, it's easy to feel like part of the show. Up high, your role as part of the crowd is unmistakable

When you watch from down on the field, it's easy to feel like part of the show. Up high, your role as part of the crowd is unmistakable. This was the first time that day I'd seen anyone visibly, palpably, ineffectually stressed out about the outcome. Although the stadium's fans overwhelmingly cheered for Brazil, when the game clock turned over to stoppage time, a sleeper cell of a dozen or so France supporters in my new section revealed themselves, the young men standing arm in arm to sing "La Marseillaise."

At this point I should probably render some kind of verdict on which form of spectatorship offers the superior experience, but I'm not sure how. I often joke to friends who somehow escaped the psychological affliction of fandom that American football, my drug of choice, is really just about feelings. In the US, kids often become aware of their family's religion and favorite teams at around the same age—an introduction to the inseparability of devotion and suffering. I grew up watching University of Georgia games on metal bleachers in a stadium that holds more than 90,000 people. When I graduated to the student section, we'd stand atop them like gymnasts on a balance beam.

Spectatorship as a mode of collective struggle is so deeply embedded in my being that I'm not sure a more comfortable version will ever feel quite right to me, even if air conditioning and clean bathrooms and my own personal candy buffet feel wonderful on their own terms. And I can hardly fault anyone who wants a transcendent collective experience and somewhere to set their drink.

What most of us can agree on is that the worst part of attending any event is what happens when it ends.

This has, as far as I can tell, always been true. Edith Wharton opens *The Age of Innocence* by setting the 1870s New York society scene, describing where different members of the upper crust sit at the opera and the strategies they employ to leave as efficiently as possible. The aristocrats took hired carriages so they could dive into the first one available upon exit instead of waiting for their own. "Americans want to get away from amusement even more quickly than they want to get to it," Wharton writes.

As I trudged down flight after flight of stairs, I thought of the escalators and elevators straight to the parking lot, advertised as amenities in the stadium's various fan spaces alongside the open bars and bountiful buffets. A not-insignificant number of Patriots season ticket holders might be persuaded to spend an extra $5,000 a year just to beat the traffic. Ⓑ

The Oldest Sandbox

Golfers go to extremes to find the ideal course
By Michael Croley

When most people think of golf, their mind goes immediately to grass. If they picture sand at all, they think of the place they don't want their shot to land.

But to a small subset of wealthy golfers and course designers, sand is everything. Courses built on sandy soil tend to require less landscaping, which makes them feel more natural, less engineered. This soil allows for faster drainage on rainy days and firm, bouncy turf year-round. Combining this turf with gentle slopes in the fairways can lead to fortuitous bounces of the ball—or penalizing breaks—creating an extra layer of tension.

"That's what makes a great course play like a great course," says Bert Guy, a golf course consultant from Tuscaloosa, Alabama. "You cannot replicate it. You can truck in sand and cap a clay site, and it'll play OK, but it'll never play like land that's sand all the way down." This geology also allows for a sport closer to what the first golfers played centuries ago.

Surges in wealth and the game's popularity have created more players than there are slots to play at upscale US courses, developers say. In response, some are building their own elite, exclusive clubs with tight membership caps and six-figure initiation fees, with sand and solitude as central selling points. For them, profit is often a bonus, not an outright goal.

It's become a topographical treasure hunt. To get exactly the courses they want, hopeful developers are poring over maps from the US Geological Survey's website and choosing unglamorous spots miles from any financial hubs—or oceans. They're scanning rural areas in Texas, Florida and Georgia, aiming to find bands of ancient beaches to serve as the foundation for the next great round of golf.

The Fall Line in Mauk, Georgia

■ JON CAVALIER

Ben Cowan-Dewar, who operates Cabot, a suite of high-end golf resorts stretching from Norway to Nova Scotia to Florida, says the appeal of these sandy sites is simple: "I've been to some courses that are forgettable, that have amazing food or have the coolest bar, and I've never gone back to them. But when I've been to a place that stirred my soul, I found my way back."

Sand is the trademark of golf's most famous venue. Set on ancient Scottish dunes, the Old Course at St. Andrews has tempted and teased players since the 15th century. Its design features, including rumpled fairways and deep bunkers formed where animals burrowed, have always functioned as the platonic ideal of golf design. The game hewed close to that ideal until the early 20th century, when heavy machinery began to allow developers to move silt or clay wherever they wanted. Instead of designing courses built into their surroundings—say, rolling hills near a beach—builders could alter the terrain more drastically. This led to the construction of more courses in more locations, creating heavily landscaped spaces and requiring maintenance similar to that at English gardens. But these more manicured environments created more of a distance between players and the natural surroundings.

"Sand just gives you a better chance to let the land speak," says Guy, the consultant. He would know. He's played a central role in three of the most high-profile destination-golf openings in recent years: The Fall Line, Childress Hall in Texas and High Grove in Florida. All three have sandy soil.

Today's new, high-end courses in remote locales have reverted to older aesthetic choices. They feature sand-scraped exposures where strips and dots of green mark fairways and putting surfaces. This sandy soil is rarer than clay or silt. But if you can find a workable parcel, it's far simpler, faster and cheaper to move land around to deliver a course whose curves and depressions recall St. Andrews, says golf course architect Bill Coore.

The work that Coore and Ben Crenshaw did at Sand Hills Golf Club in 1994 was ▶

High Grove in Florida

"There's a fear of loss that 'if I don't do this, I'm not going to be there.' And then greed takes over, and when greed takes over, people will pay whatever"

◀ proof of concept. Given 8,000 acres on which to create the course, they needed to move only 4,000 cubic yards of dirt on the naturally sandy site. A typical clay-soil course might require moving 30 times that amount during construction, course designers say. Regularly ranked among the top 10 US golf venues, Sand Hills demonstrated that big spenders would travel for exceptional golf no matter how far off the beaten path. It sits in Mullen, Nebraska (population 500). To reach it you need to drive almost five hours from Denver or Omaha. The most efficient way is to do what other guests do: fly private.

In 1999, Bandon Dunes opened on the southern coast of Oregon and supercharged the quest for perfect sand in destination golf. The resort has become so popular that anyone wanting to stay on-site and play one of its five 18-hole courses and two short courses will find it's booked into 2027. And to get a spot, you must win a lottery. At the end of a long journey to reach the club, visitors are rewarded with the kinds of gorgeous, rolling courses that at one time only the Scots and Irish played on.

Golf has exploded in popularity this decade. The National Golf Foundation reports that 12 million Americans travel annually to play the sport, up 49% in 2025 from pre-Covid-19 levels. This surge has paralleled the massive wealth generation for the top 10% of earners since the Great Recession. Guy attributes destination golf's rise to three factors: "wealth creation, the rediscovery of outdoor recreation and the shift from possessions to experiences."

All of this comes at a steep price. In and around Palm Beach, Florida, several clubs in the past four years have opened with initiation fees starting at $500,000 and climbing because of demand. More are coming. Mike Collins, chief executive officer of IMI Worldwide Properties, oversees residential sales at new private luxury golf communities in places including Texas and the Bahamas. He says initiation fees that exceed half a million dollars are no hurdle for ultrahigh-net-worth individuals populating and building these clubs.

Golfers also feel an urgency to commit to a membership because of how strictly such clubs limit their rosters. "There's a fear of loss that 'if I don't do this, I'm not going to be there,'" Collins says. "And then greed takes over, and when greed takes over, people will pay whatever."

High Pointe Golf Club, in Williamsburg, Michigan, had its first full season in 2025. Founder Rod Trump (no relation to the US president) says he'd planned for a $24 million capital outlay, but when all vertical construction is done, he'll have spent "well over $30 million." The low cost of building in sand—about half of what a clay-based course might cost—let him expand his budget and create more on-site lodging than originally planned. The invitation-only club exceeded its target head count ahead of schedule and now has 195 members.

In April, I traveled to Mauk, Georgia, to visit the Fall Line to see how it compares with the other great sand venues in the US that require a true trek.

The golf is marvelous. The West Course recalls Australia's famous Royal Melbourne, featuring large swaths of sand at its edges and bunkers that spread out like sand-filled amoebas. Its wide fairways don't require precision off the tee. But its fast, springy turf often leads balls into bunkers. I watched good drives end up there, leaving me with uphill shots to greens whose edges led right into more bunkers.

The heathland East Course offers panoramic views of the property, with more swaying land movement left and right and up and down. It's like a hilly meadow ready to be cut for hay, with holes carved into it and turf peeled back to reveal sand underneath. It plays a bit easier than the West, but its green complexes—the putting surface and surrounds—feature wildly thrilling swales and slopes like some of Sol LeWitt's wall drawings. Each course is a testament to the power of building in sandy terrain.

The Fall Line's amenities go well beyond country-club nice. A spacious clubhouse, still under construction, will sit on the driving range and include two bars and two stories of seating and outside dining. The dinner menu the day I visited offered lobster risotto, followed by a main of wagyu rib cap. Among the three amuse-bouches: caviar on puff pastry. You can fish or hunt or sport shoot here. You can also traverse the property on all-terrain vehicles, and the lodging feels more *White Lotus* than rustic cabin—think high-thread-count sheets, gas fireplaces and heated bathroom floors.

Overnight fees for members and their guests at these ritzy, rural clubs can easily top $2,000 a night, covering all golf, all food and drink (including three meals and alcohol), plus lodging. You swipe your credit card at check-in and use your room number for anything you may want to buy in the pro shop.

You won't find many social media posts about the Fall Line, which eschews publicity. The only visitor willing to speak to me on the record about his experience there was Andy Katz, who runs a venture fund. He loved the differences between the courses, calling the East "more expansive and rugged" and praising how the West "rewards precision."

"The food is excellent, but what really stands out is how immersive the property feels," the 51-year-old Atlanta resident says. "The Polaris vehicles they give you when you get on-site let you explore the entire estate at your own pace, adding an element of adventure to the experience. It makes the Fall Line feel less like a golf club and more like a private luxury playground for golfers."

The operating thesis at the Fall Line—as well as similar clubs such as Childress Hall and High Grove—is exclusivity and scarcity. The courses don't have tee times stacked all day long. Invitation-only memberships are capped in the low triple digits. Players from farther away do a mix of flying privately to nearby Butler or taking a commercial flight to Atlanta and driving two hours, like I did. The Fall Line's East Course won *Golf Digest*'s award for best new private course in 2025. The Upper Course at Childress Hall, four hours from Dallas, premiered at No. 73 on *Golf Magazine*'s top 100 list in 2025, and its Lower is expected to make a splash as well. The more awards these courses win, the higher the stakes get in the chase for sand in unexpected places, and the more pressure falls on high-end courses everywhere to compete.

"The remoteness, in a way, is the product," Guy says. "The whole point of going is that you've left. You're not running into your neighbor at the grill. You're not getting pinged by your office. You're somewhere where the cell signal is unreliable, and that's a feature." All that's left to do is take a breath and swing easy. And empty the sand from your shoes at the end of the round. B

■ BRAD TROY

SOUTH SIDE VIBES

Where Fans Actually Feel Wanted

By Ben Austen
Photographs by Jamie Kelter Davis

Chicago White Sox loyalists find themselves in a sweet spot: The team is showing signs of life on the field but is still working hard to attract people to the ballpark

Two years ago in Chicago, amid the scorched remains of a season in which the White Sox lost more times than any other team in modern Major League Baseball history, I went to a Thursday home game. It was late September, the light near Lake Michigan crystalline. So when I finished work early, I decided to drop by the park. With the White Sox you almost never have to plan ahead. The stadium seats a little more than 40,000, but attendance is usually half that or much less. I found street parking. I bought a cheap seat in the barren upper deck but eventually migrated to a box seat behind home plate, scoring an entire row to myself.

The Sox started the bottom of the fifth inning with a parade of singles and doubles. One improbable outcome after another. Twelve batters came to the plate before the third out. I was standing and screaming along with the few thousand others, all chanting the White Sox staple, "Na Na Na Na, Hey Hey Hey, Goodbye."

"Micro moments" is how White Sox spokesman Colin McGauley explains my excitement, this flash disconnected from any larger meaning tied to the standings. He says that's what the team, at a minimum, aims to give the fanbase as consolation during a sorrowful stretch. The Sox last made the playoffs five years ago. Of the 162 games they've played each of the past three seasons, they've lost, respectively, 101, 121 and 102. No fan I know calls the stadium by its sponsored name, Rate Field, or appreciates the mortgage company's logo of a downward-pointing red arrow, which feels like trolling our decline.

Fans of other teams in other cities will swear they have it worse. It's a competition of futility none of us wants to win. I'm not sure what it's like for those wedded to, say, the Marlins or Rockies, other perennial basement dwellers, but I've discovered some silver linings in loving a terrible team.

Like many White Sox fans, I was born on Chicago's South Side and into my devotion. My dad took my brother and me to games in the 1970s and '80s—Nancy Faust on the organ improvising walk-up-song puns of players' names ("In-a-Gadda-Da-Vida" for Pete Incaviglia), clouds of pot smoke engulfing the upper decks. Now I take my kids, their friends and, seriously, anyone who wants to come with. A perk of being a Sox fan at this moment: It's a buyer's market. You feel wanted.

I have a White Sox account executive who checks on me. I'm in no way a high roller. A couple of seasons ago, I bought 20 redeem-anytime tickets from him, two packs of 10. As thanks he threw in four extra seats beside the White Sox dugout. The price tag for the 24 tickets: $178. When my rep reaches out, we chat amiably, or grumpily, about the team. His all-time favorite Sox player is Paul Konerko, from the 2005 World Series squad. It's the team's only championship since 1917.

At a time when a trip to most pro sports events can easily set you back hundreds of dollars, the ticket deals at Sox games this year seem like misprints. Admission and two beers for $24. Family Sundays starting at $12—your kids get to run the bases after the game. Entrance to 28 home games starting the season for a mere $149. My friend Peter Cassel tells me that when he learned he could go to

two months of games for what he'd been spending on a single Sox matchup against the crosstown rival Cubs, the low cost made him feel like a kid again: "The idea of having the leisure to go to a baseball game three or five times a week struck me as the most beautiful thing ever."

Brooks Boyer, chief revenue and marketing officer for the White Sox, has zero control over pitching and batting. He and his staff can influence what people like me experience in the stands, though. "Look at our record. We're probably not going to win today," he says before an early-season game. We're standing on the field near home plate, as little kids from a South Side elementary school belt out a good-vibes national anthem. "When you have struggling seasons like we have for the last three years," Boyer adds, "we better find ways to provide value for the ticket."

One way the Sox do that is food. That includes classics like Chicago-style hot dogs and Italian beef with sweet peppers and giardiniera. But the team has invested in its offerings, forming partnerships with local chains and chefs, bumping the Sox up to first place last year in MLB's Voice of the Consumer poll for food selection and value. Fried plantain sandwiches. Puerto Rican rice bowls. And since signing Japanese slugger Munetaka Murakami this offseason, a Fuku chicken sandwich and wok stations. A California roll on a pushup stick is scheduled to make its stadium debut later this season.

The White Sox also hand out incredible free stuff. The team's gate giveaways ranked first in last year's poll as well. Around Chicago, people continue to wear the T-shirts and throwback jerseys they get for free at Sox games because the gear is genuinely high-quality. And because it's often funny, such as a sweater-vest that looks like the one Mike Ditka made famous when he coached the NFL's "Super Bowl Shuffle" Bears 40 years ago.

The most anticipated giveaway this season is probably a ceremonial papal miter with the Sox logo layered atop gold-colored cloth. Yes, everyone who attends on Aug. 11 will receive a White Sox Pope Hat. (Promotional freebies usually come in limited supply.) Pope Leo XIV, originally from Chicago's South Side, is a devout Sox fan who still reps the team's black cap. The week this spring when President Donald Trump criticized the pontiff as "weak on crime," ticket sales for the August game "blew up," says Mike Downey, head of promotions and giveaways.

Downey says his proudest achievement with the team was the campaign he put together last season celebrating the 125th anniversary of the franchise's founding. Giveaways included a model of the old Comiskey Park that doubled as a fully functioning AM/FM radio. One game honored former owner Bill Veeck by leaning into his circus sensibility—with a 50-foot hot dog and a wedding officiated between innings by my all-time favorite White Sox player, Ron Kittle.

A photo op with a supersize rendition of Bo Jackson, a former White Sox star

The Sox have long been committed to an eccentric, fan-centered ethos. Each season they host an Elvis Night, a Halfway to St. Patrick's Day game and a bring-your-dog-to-the-park night. Two seasons ago, as the Sox were setting new standards for failure, the team hosted its first Mexican Heritage Night. People of Mexican descent make up more than a fifth of Chicago's population, and the weeknight game was a rare sellout. (The only others of late have been against the Cubs, when throngs of North Siders venture south.) Laura Rodríguez Presa, a local journalist who immigrated here from Guanajuato as a child, attended. "It came across as a genuine show of appreciation for the Mexican community that has supported the team for so long," she tells me. "It really felt like a big family party." Rodríguez Presa says she roots for the Sox, even when they're awful, because her grandfather instilled in her that they're "*el equipo del pueblo*," the team of the working class and the city's Latino people.

The official team slogan for the 2026 White Sox is "Feel the Momentum." It's a declaration of modest expectations, a safe bet that announces the team has already struck bottom. The Sox are actually loaded with promising young players. By early June they owned a winning record, a feat they hadn't accomplished more than a week into a season since 2022.

At this spring's home opener, the depths of recent seasons didn't seem to matter. Everywhere I looked, I saw people relishing the micro moments of the day. Bagpipers skirled and keened. Chance the Rapper threw out the first pitch. Fans packed the concourse behind the outfield bleachers, drinking beers and congregating alongside the bronze statues of Hall of Famers Frank Thomas and Harold Baines. With the wind chill near freezing, people donned Sox ponchos and jackets, freebies from previous outings.

As for the game, the Sox blew a late 3-1 lead against the Blue Jays, sending us into extra innings. But in the 10th a new outfielder named Tristan Peters lined a pitch into right field to knock in the winning run. The team poured onto the field, swarming Peters and tearing off his shirt. Fireworks lit up the afternoon sky. As fans marched down the stadium ramps, they celebrated with chants of "Cubs suck!"

Someday, maybe sooner than anticipated, the White Sox might contend again. The casual fans, the fair-weather and the spurned might return in greater numbers, like in the mid-2000s. Some of the current perks will no doubt go away. It's a trade any of us would make for a winner.

The Sox wrote me after the win, an email blast to all fans offering half off on tickets. For the time being, they were still catering to people like me. B

SINCARAZ FATIGUE

The Tennis Duopoly Dilemma

By Giri Nathan

Alcaraz

Mike Maughan adores Jannik Sinner and Carlos Alcaraz, the twin superstars of men's tennis. Why, then, does the lifelong fan of the sport sort of want them to lose? "I have some fear," he says, "that the next 10, 15 years of tennis will be watching tournament after tournament after tournament where every match is beautiful but ultimately irrelevant until the final." And the final is inevitably a matchup between Sinner and Alcaraz, who we've already seen 17 times in five years across Grand Slam events and regular tour stops. They're only 24 and 23 years old, respectively, so Maughan isn't overstating the time frame.

Rooting against them would've sounded bizarre only one year ago, when most tennis fans were craving an infusion of fresh blood after almost two decades dominated by Roger Federer, Rafael Nadal and Novak Djokovic. The first two retired in 2022 and 2024, respectively. But Djokovic refused to age out, making up for what he'd lost in raw athleticism with technical and psychological perfection. He held back an entire generation of players born in the 1990s, who operated under the assumption that they'd someday inherit the game from the Big Three. Instead, that poor, suffering cohort got skipped over altogether.

That's because they've been outclassed by their juniors, Alcaraz and Sinner, who, after battling gatekeeper Djokovic in 2022 and 2023, smoothly seized the game in 2024. That year the new kids split the four major tournaments and claimed almost every other trophy of note. A sport that had recently said goodbye to its greatest generation saw new household names arrive overnight. And as with many rivalries of the past, the apparent contrast in temperament and play style—stony, baseline-bound Sinner versus blithe, improvisational Alcaraz—attracted fans too. "Sincaraz," as the nickname goes, would be the defining rivalry of the next era.

But is it possible we've already gotten too much Sincaraz? We're hardly three seasons into their reign, but they're dominating to an extent that's left some fans and pundits asking existential questions. There are two main "barbershop conversations" in men's tennis now, says Gill Gross, an analyst on Tennis Channel and on his popular YouTube show: "You can talk about the race between Sinner and Alcaraz. Or you can talk about who's next, who joins them. The fact that this question has been asked so persistently tells you there's some level of desperation for an answer."

Unlike a stereotypical sports rivalry, the Sincaraz relationship is not one of spicy acrimony but benign collegiality. The Italian and Spaniard function almost as business partners, playing lucrative offseason exhibition matches that trade on their popularity as a pair. After clashing in a championship match, they might be seen sharing a private jet to the next tournament (as in Beijing in 2024). The loser might even film the winner diving into the swimming pool in celebration (as in Monte Carlo in 2026).

Because their matches against each other are always an event, the ones that either man plays against anyone else tend to feel gruesome, with opponents dispatched in short and brutal sets. Barring injury, like the right wrist issue Alcaraz is currently nursing, a reasonable fan can assume, at the start of any big tournament, that one of these men will win it. Consider the most important titles in tennis: the four Grand Slams. Since the start of 2024, Sinner and Alcaraz won all nine heading into this year's French Open. Although Sinner was upset in the second round, it had far more to

do with his own body than it did his opponent, 56th-ranked Juan Manuel Cerundolo. When the top seed stood only one game away from routine victory, he began to cramp in the hot conditions, which persisted until the end of the shocking loss. Without having had to defeat Sinner or Alcaraz, the No. 3 player, Alexander Zverev, won his first major title instead.

Is the Sincaraz era any different from past men's tennis duopolies? Yes, if we're measuring the gulf between the second- and third-best players on tour. The best way to measure their supremacy is with Association of Tennis Professional (ATP) ranking points, which players receive based on how far they advance in tournaments, with extra points for the most prestigious events.

Pete Sampras and Andre Agassi owned the late 1990s in the popular imagination, but that was actually a time of comparative parity, with a lot of turnover at the top of the rankings. In the aughts, before Djokovic fully emerged, Federer and Nadal ruled. On March 20, 2006, their most dominant moment, with Federer at No. 1 and Nadal at No. 2, the No. 3 player, David Nalbandian, had only 52% of the ranking points of Nadal.

But that number seems positively humane compared with what we're seeing now. In the 30-year-old ATP statistical archive, the four largest gaps between the No. 2 and No. 3 player can all be found in this season. At its largest gap, on April 20, No. 3 Zverev held only 41% of the ranking points of Alcaraz. The gap at that moment between No. 2 and No. 3 was larger than the gap between No. 3 and No. 1,000.

This big gap poses some narrative dilemmas for the sport. Part of the thrill of following a Slam is watching the 128-player bracket slowly whittle itself down to two finalists. Does that process lose its joy if those last two names can be inked calligraphically weeks in advance? Even if the final between them is almost guaranteed to be a classic? The answers depend on how long and how closely you've been following tennis.

Pundits and journalists—myself very much included—have a habit of prematurely anointing some young player as the contender to challenge Sincaraz. Recent candidates include Jack Draper (24-year-old Brit, big talent but always injured), João Fonseca (19-year-old Brazilian, great at hitting the ball but doesn't move that well) and Arthur Fils (21-year-old Frenchman, great at hitting the ball and moving but utterly unproven against the two superstars). These names have so far disappointed, and the cycle repeats itself with another young fellow who's simply trying his best.

The two stars' brief hiatuses from competition have done little to change this dynamic. Sinner missed three months in 2025 because of a ban related to a performance-enhancing drug—which he explained, and anti-doping authorities accepted, as a case of accidental contamination—but kept on rolling when he returned that April at his home tournament in Rome. The Alcaraz injury theoretically unclogged the draw for these hypothetical contenders to advance and build confidence.

Some fans may not be in any rush to throw new names in the mix because they're enjoying the bounty of the present. Katie Turner, a public-relations professional in San Francisco, says she "used to interact with tennis like a loose churchgoer, only going on Christmas and Easter. I would only watch the Grand Slams." But Sincaraz has gotten her to wake up early before work to watch even the smaller overseas tournaments, so captivated is she by the pair's tennis, their contrasting personalities, their race to complete various career milestones and their interpersonal dynamics.

Longtime fan Maughan feels a more complex stew of emotions. Alongside the "relief" from two great players rising up to replace the Big Three comes the "looming dread" that they might go a decade without any viable threats, he says. Also, the timing is different. The staggered ascents of Federer, Nadal and Djokovic allowed for a smooth "crescendo" and "diminuendo" to the era, but Sincaraz snapped into place and now appears impermeable.

Michael Katz, a tech worker in Montclair, New Jersey, who played tennis at Princeton University, worries that Sinner and Alcaraz "conquered each other's demons too quickly," given that they've become similarly comfortable across all surfaces and court conditions. He also notes that there's far more similarity to their styles than is suggested by the fire-and-ice trope often imposed on their rivalry.

Indifferent to fans, the giants of the sport keep on stomping. Even those who bemoan the monotony of the present know, on a spiritual level, that they should count their blessings. "God forbid one of them gets hurt in an irreparable way," Katz says. "And you're like, 'Wait, I take it all back!' "

Sinner

■ GETTY IMAGES

BOOK REVIEW

THE US SOCCER CEILING

By Gabriel Debenedetti
Illustrations by Igor Bastidas

When Gustav Manning, the man once in charge of American soccer, proclaimed to the *New York Times* that he foresaw the sport becoming "the national pastime of the winter," he couldn't have known he was setting a trend. For a guy speaking in 1913, he sounded awfully modern. More than a century later, fans constantly hear that the world's game is the sport of the American future.

Manning's successors sold the dream with particular confidence starting in the mid-'70s, when Pelé touched down in New York from Brazil to join an experimental team called the Cosmos. That effort collapsed after a few years, but the underlying argument only gained steam. The most democratic of sports would soon bloom in the US as globalization, demographics and eventually media rights conspired. Expectations ballooned after the start of Major League Soccer and the US-hosted World Cup in 1994. They exploded in 2023, when Lionel Messi, the sport's best player, ditched his Paris superteam for a newish one in Miami.

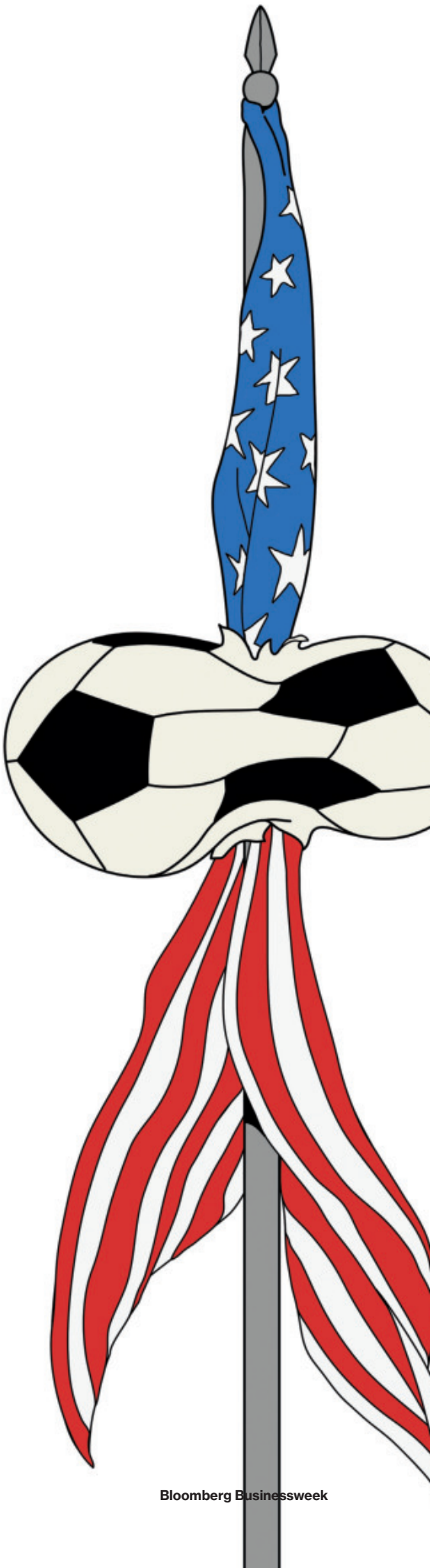
For obsessives like me, it was easy to buy into the romantic promise: Men's soccer would soon Americanize, or America would be soccerized. We could fill NFL stadiums when European teams visited, and it was getting easier to stream live matches from around the world. Soccer-centric shows like *Ted Lasso* and *Welcome to Wrexham*, even if drippingly earnest, were popular for a reason. I delighted in my Argentine family texting me about US games, and I even wrote about how Messi's arrival could turn the domestic attention economy on its head.

The World Cup's return to North America in 2026 has opened my eyes.

The buildup to this tournament—an international bonanza already struggling with exorbitant ticket prices and anemic interest in the home team—laid bare a few truths. Soccer is already a serious phenomenon in the US. One 2024 study pegged it as Americans' third-favorite sport. It's an undeniable economic power, and it will keep growing. But American society just doesn't work as it does in South America or Europe, where the sport is a singular cultural hegemon. It takes decades of incremental growth to make the kind of shift that keeps being predicted. It doesn't help that no one has ever agreed on exactly how we're supposed to identify success.

The subtitle of Leander Schaerlaeckens' meticulous new book, *The Long Game* (Viking), is *US Men's Soccer and Its Savage, Four-Decade Journey to the Top, or Thereabouts*. Schaerlaeckens argues that the national team's current competence is miraculous given its history, but the "thereabouts" is apt. He reconstructs the arc of American performance on the international stage, including the all-time World Cup high of a 1-0 win over England in 1950. But the book's heart lies with the subsequent drudgery: the comical disorganization (like when the squad went a few years in the early 1980s barely playing any games at all), financial disarray and embarrassing experiments.

Although Schaerlaeckens describes a clear improvement since then, the story is not about planned success so much as fits and starts. Those include: the 1994 World Cup that was greeted at first with national ambivalence, then huge attendance; a 2000s program to house the country's top teenage prospects in dorms in Florida; the desolation of missing out on the 2018 World Cup; and the methodical campaign



to claw back to relevance. Schaerlaeckens himself seems to have little patience for the question that has bedeviled American soccer since Manning's prophecy 113 years ago, but the book is bursting with characters offering theories about when, exactly, soccer will arrive.

It's left to the reader to consider what "arrival" would mean in practice (and what about American culture makes us think it's inevitable or even necessary). Mainstream commentary has a maddening tendency to float toward hypotheticals about the country's best athletes—what if LeBron James played goalie?!—rather than remembering the shockingly recent fallow years. Schaerlaeckens recalls that the national team's preparation for the 1990 World Cup in Italy was partially funded by a loan the federation president took out on his construction company.

One plausible gauge of American soccer's success is its exports. When the team lined up against Portugal this March, nine of its 11 starters played club soccer in Europe, some for genuinely elite teams. And seven of the 15 biggest revenue-generating clubs in the world are owned by American billionaires or private equity firms. That includes half of the semifinalists in this year's Champions League in Europe, including Stan Kroenke's Arsenal FC and Apollo's Atlético Madrid.

Yet exports tell only part of the story, as anyone who's seen oceans of pink Inter Miami CF jerseys can attest. In *The Messi Effect: How the Global Legend Changed the Future of American Soccer* (St. Martin's), the *Athletic* writer Paul Tenorio is quick to defend American soccer culture. Even before Messi arrived, he points out, millions of Americans were obsessed with the English and Mexican leagues. MLS teams, he writes, "retained more of a cult feel: passionate followers, but little mainstream resonance." Messi's arrival transformed the American landscape: Stadiums sold out, and both the league and Inter Miami benefited from huge retail and sponsorship boosts.

If soccer is still not the dominant domestic force some predicted, Tenorio sees a culprit in an MLS power structure too timid to turn a moment into something more durable and culturally significant. He's covered MLS since 2007—the year David Beckham arrived in Los Angeles and kick-started the league's bid for global attention—and in beat reporter style he is granular in his indictment. Owners simply moved too slowly to change the league's roster, salary and scheduling rules over the last two years. As a result, they failed to capture as much lasting attention as they could have by improving the product before the World Cup.

Tenorio's well-reported account is dotted with re-creations of private meetings about matters like Messi's contract and MLS's finances. He paints the Miami owners as visionaries and more risk-averse team owners as bafflingly conservative, even if in some cases their caution is for obvious reasons—they remember the league's near-bankruptcy in 2000.

One of Tenorio's most telling revelations is that the league likely knows all this. When Messi arrived, MLS commissioned a study of his appeal. It found that his fans didn't stick with his last two teams, in Barcelona and Paris, when he left: They followed him. So MLS has a finite window to capitalize on Messi before he retires in the next few years and to figure out how to make his surge in attention last. MLS and Apple TV recently rejiggered the terms of their broadcast deal amid skepticism that viewership was still growing much after a leap forward in 2023. My Argentine relatives no longer watch all of Messi's games, but not for lack of interest. Boca Juniors matches are still appointment viewing for them; Inter Miami's can be consumed in Instagram clips just fine.

The task of earning respect for American soccer has not only been on the players', coaches' or administrators' shoulders. It's the fans' burden too. I couldn't help but recall the baffled look I used to get from relatives in Italy—as fanatic as their South American counterparts—when I brought up any of this tortured thinking about the state of the sport in the first place. From the outside, the psychodrama looks self-inflicted. American culture may never revolve around soccer, and the national team would be thrilled with a quarterfinal appearance this summer. We'll still watch in historic numbers, take it far too seriously, mostly move on and have this conversation again in four years. It's the American way. B

Pursuits Picks For July

By Sarah Rappaport

ART

"Echolalia" at the National Gallery of Iceland

Iceland's most famous export—Björk—gets the museum treatment. Through film and a spatial sound installation, three of the musician's otherworldly compositions come to life, including two elegiac tracks from *Fossora* (2022) and a sneak peek of her coming album. *Through Sept. 30*

BOOKS

Country People

Pulitzer Prize finalist and *North Woods* author Daniel Mason's latest delves into questions of belief and parenthood when an academic moves her family from California to rural Vermont. Once there, her husband gets enmeshed with bizarre neighbors and a local legend that may be all too true. *July 7; Random House*

STREAMING

Lucky

Anya Taylor-Joy swaps chessboards for scams in her first major TV role since *The Queen's Gambit*. She plays Lucky, a con artist (based on a bestselling thriller by Marissa Stapley) who's on the run after a heist goes sideways. Annette Bening and Timothy Olyphant co-star. *July 15; Apple TV*

THEATER

Trainspotting: The Musical

First a novel, then the 1996 film that made Ewan McGregor famous, Irvine Welsh's tale about heroin addicts in Edinburgh's underbelly is now…a musical in London's West End? Welsh pens a digital-age update alongside original metal, punk, disco and electronic dance songs—and, yes, those Iggy Pop, Underworld and Lou Reed classics. *Previews July 15; Theatre Royal Haymarket*

FESTIVALS

Salzburg Festival

Summer season, commence! Classical music pilgrims to Mozart's Alpine hometown can enjoy a rare revival of Olivier Messiaen's monumental, metaphysical opera to mark the 800th anniversary of the death of St. Francis. Other highlights: Elfriede Jelinek's world premiere drama, *Unter Tieren*; opera *Ariadne auf Naxos*; and performances from the Vienna Philharmonic. *July 17–Aug. 30*

El Morocco in its heyday

■ HORST P. HORST/CONDE NAST/GETTY IMAGES

CULTURE CAPITAL

THE SEAT OF POWER DINING

By Felix Salmon

It's easier to turn power into money than to turn money into power. And the power restaurant has always been more about power than about restaurant: It's a place where money buys you visibility and clout, and where the quality of the food is of secondary, if not tertiary, importance. The alchemy involved in creating such a venue, however, has always been mysterious. Many try; few succeed.

In culinary history, no place has nailed the semiotics of being a power restaurant as well as the Four Seasons. Architect Philip Johnson's 1959 *Gesamtkunstwerk* inside Mies van der Rohe's Seagram Building on Park Avenue, the exemplar of International Style modernism, exerted an irresistible gravitational pull on Manhattan's corporate elite. Jackie Onassis called it "the cathedral," for good reason.

Now a pretender to the throne, Cote 550, has opened a few blocks away on Madison, in the icon of postmodernism that is Johnson's 1984 AT&T Building. The steakhouse shares with its near neighbor an average check size high enough to leave most T&E guidelines in the dust, but it boasts no soaring ceiling or bronzed fenestration; instead it's squeezed into a basement. For its power, Cote 550 relies, literally, on smoke and mirrors—the vaporized fat from dry-aged wagyu wafting across the room and the angled glass that reflects a brightly illuminated hanging garden encircling the black-walled space.

Owner Simon Kim told *Grub Street* he wants Cote 550 to have a "level of grandiose" unsurpassed in the city. To that end, designer David Rockwell has pulled out all the stops, even including a small central pool that's a direct quotation of Johnson's pool room in the Four Seasons. If it works—and early indications are that it's working very well—the result will be that Holy Grail of restaurateurs, a place where the demand curve slopes upward and raising the price of the food only increases the clamor to get in.

New York has a long history of such places, tracing back at least to El Morocco, which formally opened on East 54th Street in 1933 after the end of Prohibition. Possibly the world's first clubstaurant, it rapidly became what *New York Times* editor Arthur Gelb described as "one of the most caste-conscious, costly and cloistered night clubs in the world."

Although El Morocco featured very expensive Dover sole and foie gras (the $35 menu in 1961 would be equivalent to $400 today), its food was never the point. It was all about the blue-and-white zebra-striped banquettes, and who sat where with whom. Above all, Gelb wrote, it was "a place where celebrities have been coming to keep tabs on each other." As Laura Shaine Cunningham wrote in a *Times* remembrance, "people began to go to El Morocco to be photographed."

That function of being a place to be

seen, is a common denominator of all power restaurants. What's changed over the years, and from place to place, is who the diners want to be seen *by*.

The diurnal counterpart of El Morocco was La Côte Basque. John Fairchild, the publisher of *Women's Wear Daily*, would send a photographer to snap the Duchess of Windsor and C.Z. Guest as they exited, sporting pillbox hats and white kid gloves. (Fairchild later claimed he invented the term "ladies who lunch.") The socialites weren't going with the purpose of being photographed in the way celebrities do today, but it was just as much a place to be seen as El Morocco. The large dining room that made up most of La Côte Basque was the "Outer Hebrides," explained Truman Capote in *Esquire*. "Preferred clients, selected by the proprietor with unerring *snobbisme*, were placed in the banquette-lined entrance area," where everyone else would have to pass by them.

The Four Seasons also had its power tables; Henry Kissinger himself praised the "Machiavellian subtlety" of co-owner Julian Niccolini's table assignments in a *Town & Country* oral history. It almost never had paparazzi, however. When you were seen there, you were seen only—but crucially—by fellow members of the club.

The Four Seasons lives on, now renamed the Grill and run by Major Food Group, of Carbone fame. Lunch guests still ascend the staircase into sunshine exquisitely filtered through its famous beaded chains, designed by weaver Marie Nichols, that shimmer in the convection currents of the 22-foot-high space. "We set a stage, we are in costume, we are theatrical," says Mario Carbone, the co-owner. His props are meticulously chosen: the small cut-glass vessel with sugar water that accompanies every order of iced tea, the astonishingly glossy butter that comes with the bread. Fraise du bois (small French wild strawberries) are sold by the gram and described by the maître d', falsely if charmingly, as being "more expensive than cocaine."

The power dance, however, is missing.

It's not that the Grill isn't busy, but it's surprisingly easy to get into; you're more likely to find yourself next to an interchangeable finance bro than David Zaslav or Ken Griffin. All public restaurants, no matter how expensive, have become less exclusive. The dealmakers are more often found at members' clubs and other places the general public simply isn't allowed, such as Coco's at Colette or Jamie Dimon's private dining room at the top of 270 Park Avenue. Those are places you take someone when you want to impress them—but they have almost zero utility in terms of being seen in the classic sense.

The extravagant theater that defines Cote 550, then, isn't reserved for a select elite. It's a far cry from Le Cirque, another legendary power magnet, which achieved global notoriety in 1993 when *Times* restaurant critic Ruth Reichl contrasted the miserable experience of not being recognized with the top-tier VIP treatment.

At Cote 550 there isn't a bad seat in the house. Diners are ushered down a narrow staircase that opens up after a series of turns to reveal a dark neon-lit bar behind which steaks are dry-aged under deep red light. Farther, past the translucent wall between the women's and men's washrooms, you enter an immersive pastel-hued tunnel, at the end of which you finally encounter the meat-scented vista of banquettes and glowing plant life.

Then comes the meal itself, where you might marvel at the tableside preparation that justifies the price of the $76 Alaskan king crab japchae, and where you'll certainly find multiple servers coming to flip the pieces of salted steak grilling in the center of your table. (A custom-designed light fixture vents the smoke.)

With all that potential social media content, who needs gatekeeping and Page Six? Kim, the owner, insists he's "not snobby about who comes into our restaurant." Rockwell, on the same page, says he wanted to reinforce the whole point of living in a city in the first place, which is "to rub up against different people."

The place is hard to get into, to be sure—good luck gaming Resy—and it can be gasp-inducingly expensive. (That Kobe rib-eye at $82 isn't weirdly almost affordable; it's $82 *per ounce*.) But all the same, it's democratic in a purely capitalist way, accessible to anyone with the kind of liquidity that opens doors. The days of snobbisme are over: A personalized butcher's block, on permanent display and taken out to be used whenever you dine, is something money can buy, if you come frequently enough and spend a lot.

After all, every power restaurant needs to be able to cultivate its deep-pocketed repeat visitors. Barry Wine ran the Quilted Giraffe at the same address, 550 Madison Ave., in the 1980s and made it the most celebrated and expensive restaurant in town. He remembers that actually paying your check in the restaurant marked you out to the regulars as someone to be pitied a little, what with all that grubby money changing hands and the obligatory fighting over who pays what. Much more elegant to send a monthly bill to the office. Wine's property lives on, not only in memory but also in the Quilted Giraffe Room, Cote 550's private event space, adorned with artworks by the restaurateur himself.

Today the locus of power—the set of people diners want to be seen by—is no longer to be found seated at dinner tables or even reading the *Post* or *WWD*. Instead it's online, and the brass ring has become what restaurant historian Andrew Friedman calls "the trophy photograph on Instagram." Being seen is now a do-it-yourself operation, and Cote 550 features strategically placed IYKYK artworks that can telegraph a diner's location to the cognoscenti scrolling through social media. "They all take photos of *Don't Worry*," says Rosa Suehyun Kim of Artline, who commissioned that piece, along with two other neon works by British artist Martin Creed. "It's very photogenic."

Then comes the rub. Once you've posted that selfie—once you've "documented that you were there, you were able to get in," as Friedman puts it—is there even really a reason to go back?

"The relevancy of places starts to decline pretty quickly these days," Friedman says, bemoaning how restaurants are increasingly "disposable." The power restaurants of yore changed locations when their lease expired or a better opportunity presented itself; that almost never happens anymore. The velocity of restaurants has surged: El Morocco buzzed for more than 50 years, but today's hot spots tend to dim after five years or less. Cote 550 is ascendant right now, but you might want to grab it while it's hot. B

HOW BOSSES PSYCH THEMSELVES UP

A key aspect of leadership, whether announcing an IPO or managing a crisis, is the ability to get the room on your side. Eleven executives share how they prepare themselves. *By Kate Krader*

SUSIE WOLFF, *MANAGING DIRECTOR OF F1 ACADEMY*

"Butterflies in your stomach can actually become a superpower. Throughout my racing career, I learned not to fight them, but to channel them into performance. I would bring my attention back to what was right in front of me. What did the steering wheel feel like in my hands? What were the key things I needed to focus on? Keeping myself grounded in the present stopped me from getting caught up in the magnitude of the moment."

ALESSIO ARTUFFO, *CEO OF DOCEBO, AN EDUCATION TECH COMPANY*

"I coach youth soccer, and most of my job is getting kids out of their heads. 'Stop worrying about the other team. Stop thinking about the last play. Be in the game.' I've given that speech for years. At some point you realize the advice you keep giving is the advice you still need. So I took it. Just be in the game."

JIM MAZANY, *CEO OF P.F. CHANG'S*

"For me, it's all about clarity and focus. Before big moments, I like to take a step back, remind myself of the purpose and what's at stake, and then zero in on what I can control."

DANIEL ALEGRE, *CEO OF TELEVISAUNIVISION*

"I focus on what I want to achieve, on the ultimate goal, and repeat it to myself. Everything else is just noise."

RICH ROSS, *FORMER CHAIRMAN OF WALT DISNEY STUDIOS*

"My preparation for fortysomething years is the same. I go back to my beginnings. I don't expect to build off recent or cumulative success. I remember that you need that early energy, nervousness, uncertainty and candor. Most importantly: Clear your mind, so that when you are having to give your all, you are in fact listening to all. Listening is the superpower, not speaking!"

MINOU CLARK, *CEO OF REALSELF, A BEAUTY SERVICES PLATFORM*

"Performance starts with how you feel in your own skin. Before a big panel or board meeting, I'll make sure the details are handled, whether that's a great blowout, strong brows or a trusted treatment, scheduled well in advance. It's less about vanity and more about alignment. When I feel like my best self, I show up sharper, more decisive and fully in command of the room."

KAREN MASSEY, *CEO OF ARGENX*

"I like to make sure that I have time to get to the gym and do either a run or a bike ride—something that's not too crazy—sometimes some yoga. Being able to get that exercise in allows me to zone out a little bit and just calm down and relax."

CARRIE HERSHMAN, *CEO OF OVME, A MED SPA CHAIN*

"I play what I call the grateful game. I mentally scroll through all the places in my life where I'm winning—my family, my team, the hard things we've accomplished together—and it reminds me that I'm capable of doing hard things. By the time I walk into the room, I've shifted from pressure to confidence and have a very strong I've-got-this energy."

MALCOLM WOOD, *CO-FOUNDER OF MAXIMAL CONCEPTS RESTAURANTS*

"The calm I need in a big moment isn't a mindset trick; it's the byproduct of having done the reps. The same way I train for months before a serious high-altitude climb or a paragliding flight, rehearsing every variable until decisions are almost automatic. Adrenaline is what you reach for when you haven't done the work; preparation is what lets you stay quiet when it counts."

ZANA BAYNE, *FOUNDER OF FASHION BRAND ZANA BAYNE LEATHER*

"I try to make big moments smaller, because if I let a specific moment turn into something all-encompassing, if I really build it up, then there's the possibility for letdown in all sorts of ways, right? If I turn big moments into something normal, then I'm able to process them as just part of my life: 'This is what I do every day. This is what I've made a career out of. Do what you do, and do what you do best.'"

JUSTIN MARES, *CEO OF TRUEMED, AN HSA/FSA MARKETPLACE*

"I take a big dose of ashwagandha and reishi [herbs and mushrooms] to chill out and relax, as they are helpful with stress and can calm the nervous system."

■ ILLUSTRATION BY MIA OBERLANDER

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