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Bloomberg Businesswe

April 1, 2019 • SPECIAL DOUBLE ISSUE

A special breed of company won't be special much longer 12



The same technology that knows your dog from your cat



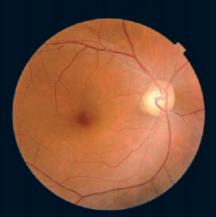


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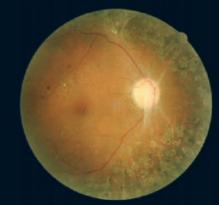
helps doctors know a healthy eye from an at-risk one.

Google Photos uses AI to organize your images and help you quickly find what you are looking for. And for doctors who are working to prevent blindness in 415 million diabetics worldwide, AI is also being used to quickly identify damaged blood vessels in retina scans.

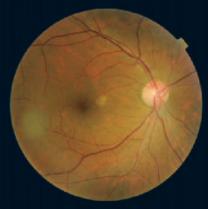








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552 Lives Saved and Counting

For a family of seven, an ambitious Red Cross campaign hits close to home



The Avenarius family was saved by smoke alarms provided by the American Red Cross.

One day last spring, Brett Avenarius struck up a conversation with a total stranger that would save seven lives—including his own. It was one of those "what if" moments that sends chills down his spine.

What if he'd taken that job that would have sent him hundreds of miles away for weeks at a time? What if he'd stepped out his front door that day just three minutes later? What if he'd brushed aside the stranger's offer? What if ...?

As fate would have it, Brett was home that day when Red Cross volunteers were in his Dubuque, Iowa, neighborhood to promote *Sound the Alarm*, a nationwide campaign to install free smoke alarms and help families create home fire escape plans. Brett stepped out just as a volunteer was walking by. When this friendly volunteer approached him, Brett listened.

"An hour later, they put a smoke alarm in every bedroom," Brett says. "Nineteen days after that, the fire happened."

On an average day in the United States, seven people die from home fires. It's a relentless toll, and an insidious one; while catastrophic events like hurricanes and earthquakes attract major media coverage, home fires kill more Americans in a typical year than all natural disasters combined. They

airbnb

also displace thousands of people and cause more than \$7 billion in property damage annually.

"Every eight minutes, the Red Cross responds to a disaster, and most of them are home fires," says American Red Cross President and CEO Gail McGovern. That's why the organization started its Home Fire Campaign in 2014, and each spring it launches *Sound the Alarm*—a two-week blitz that enlists 30,000 volunteers to install 100,000 free smoke alarms in 100 high-risk communities. (This year, *Sound the Alarm* takes place April 27 to May 12.)

To date, Red Cross volunteers have installed more than 1.6 million free smoke alarms and reached more than 1.7 million people. "Thanks to community partners, generous donors and volunteers who support our mission, the Red Cross has already saved more than 500 lives across the country," says McGovern.

That figure now includes Brett; his brother, Steve; Brett's fiancée, Stephanie Elliott; and four young children—all because Brett crossed paths with that volunteer. A year later, he reflects on how lucky he is. And how quickly it all happened.

"In less than 10 minutes, they installed the smoke alarms and gave us a magnetic board for the fridge, for an escape plan," Brett recalls. "I went through it with the kids: 'If there's a fire, where would you go?'"

"Every eight minutes, the Red Cross responds to a disaster, and most of them are home fires."



Gail McGovern,
 President and CEO,
 American Red Cross

Less than three weeks later, Brett and his family put that plan into action when their new alarms woke them at around 2 a.m. The blaze started in a clogged dryer vent. Later, a firefighter told Brett that without those smoke alarms, they all would have died in their sleep.

Before the fire, Brett associated the Red Cross mainly with blood drives. Today, he has a new level of gratitude for the organization. "Without the Red Cross, we wouldn't be having this conversation," he says. "They're angels, every one of them."

The Red Cross thanks our Sound the Alarm partners





Learn how you can get involved by visiting SoundTheAlarm.org



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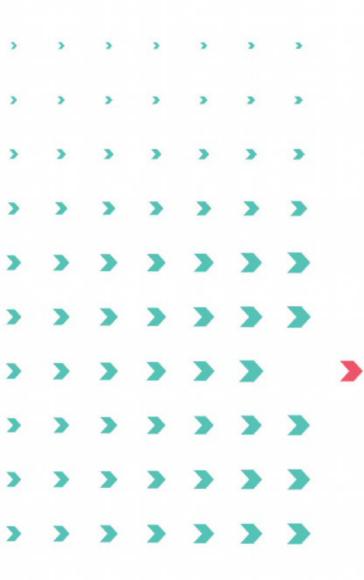
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FEATURES

Delivery Nation

46

As Meituan dukes it out with Alibaba, food bargains abound in China

The Face of Big, Bad Energy Kelcy Warren has had a lot to answer for since the Dakota Access Pipeline 50

Modicare Under the Microscope 56 An experiment in India could turn into a global model for low-cost health care 6

IN BRIEF	9	Lloyd's of London rights a wrong; ill-fitting spacesuits	How to Contact Bloomberg
AGENDA	10 Israeli elections; a jobs slowdown?		Businessweek
OPINION	10	Europe's best defense against Putin's election tampering	Editorial
REMARKS	12	All those big unicorns may mean no more bull	 212 617-8120 Ad Sales 212 617-2900
BUSINESS	16	The downside of too much self-regulation	731 Lexington Ave., New York, NY 1002
Doomteoo	18	A (costly) FDA-approved postpartum depression drug	Email
	19	To conquer Adidas in Europe, Nike goes local	bwreader @bloomberg.net
	10		Fax 212 617-9065
TECHNOLOGY	21	First responders have much to learn about how EVs burn	Subscription Custom
2	23	Adobe's other gig: The creepier side of online targeting	Service URL businessweekmag
	24	Microsoft has the advantage in a tight cloud gaming race	.com/service Reprints/Permissions
FINANCE	26	"Heartbeat" trades widen the loophole on ETF taxes	800 290-5460 x10 or email
B	29	The real news about the Apple Card is who's backing it	businessweekrepri @theygsgroup.com
ECONOMICS	31	Why economists are so awful at predicting recessions	Letters to the Editor
	32	Canadians borrowed and borrowed; now, the reckoning	fax, or regular mail.
	34	Brexit's gift to Amsterdam: Housing woes	They should include the sender's addres
	35	The U.S. will soon be the world's No. 2 oil exporter	phone number(s), and email address if
POLITICS	36	The clash over just how much Mueller report to release	available. Connection with the subject of
5	39	Turkey's agrarian and urban sectors are both anxious	the letter should be
9.4			disclosed. We reser the right to edit for
STRATEGIES	40	How willing are you as a manager to take risks?	sense, style, and spa
	42	Women, men, and work: It's complicated	Follow us on social media
	43	Four books on totally reinventing your business	
	44	New hires at the top must prove themselves from Day 1	Facebook facebook.com/
	45	Six ways to avoid being swallowed by the internet	bloomberg businessweek/
PURSUITS	63	igvee For an old-world city, Kyoto has fresh ideas	Twitter @BW
			Instagram @businessweek
	66 68	Tagging along as Kris Singh spends \$4 million on cars Crossbody bags are practical, gender-neutral, and smart	Bioomberg Businesswert UNICORN XING

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IN BRIEF

Apple rolled After special counsel **Robert Mueller** out its services closed his two-year strategy, which probe by finding no evidence of collusion includes a videobetween Russia and Donald streaming service Trump in the 2016 election, and a credit card. the U.S. president called $\triangleright 29$ for an investigation of the investigators. ▷ 36 Separately, a U.S. judge said Apple NASA aborted its first all-female spacewalk outside the International Space had infringed on a Qualcomm patent, Station, blaming a lack of properly configured spacesuits for astronauts Anne risking a partial iPhone import ban. McClain and Christina Koch. • U.K. satellite company Bang & Olufsen lost Venezuela • "This a quarter of its value in Inmarsat received a suffered major a single day after the is not the power outages Danish maker of high-end televisions and stereos cut that plunged Lloyd's that its earnings outlook again. takeover bid from a large parts of group of private equity I want to be Share price, Danish kroner the country companies betting on surging demand for in-flight into darkness, part of. It's broadband services. including Caracas, 149 9/27/18 the capital. simply not acceptable 59 3/27/19 that any • Uber bought • The Sackler family and • Airbus secured its biggest their company, Purdue commitment in several Middle East ridewoman years from China, which Pharma, agreed to pay hailing competitor ordered aircraft valued at \$270 million to settle claims should not **Careem Networks** by Oklahoma that illegal marketing of prescription for \$3.1 billion. feel safe." painkillers created an opioid epidemic that devastated The deal was signed during local communities. a state visit of Chinese President Xi Jinping to Paris. Lloyd's of London Chief Executive Officer John Neal responding to a Bloomberg Businessweek story on the deep-seated culture of sexual It is the first time the company has acquired a regional competitor. Uber is misconduct and atmosphere of nearpersistent harassment in the London preparing for an initial public offering insurance market. as soon as April. • McDonald's spent more than \$300 million on Dynamic Yield, a tech company that will help it personalize online menus.

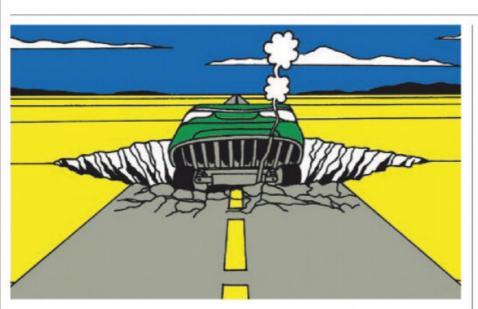
MUELLER: TASOS KATOPODIS/GETTY IMAGES, ASTRONAUTS: NASA, XI AND MACRON: MARLENE AWAAD/BLOOMBERG; DATA: COMPILED BY BLOOMBERG

• U.S. health insurer Centene agreed to buy managed-care provider WellCare for an enterprise value of \$17.3 billion.

Southwest Airlines cut its first-quarter capacity forecast, citing weather, maintenance work, and less leisure travel.

U.K. Prime Minister Theresa May offered to step down if her party helped pass her Brexit deal.

AGENDA



► U.S. car sales are on a bumpy road

GM and Ford report quarterly U.S. sales on April 2, and Fiat Chrysler and other automakers post monthly sales. It's been a tough start to the year for carmakers—even the once-hot market for sport utility vehicles is slowing as consumers hesitate to commit to a new car. Israel holds general elections on April 9.
 Prime Minister Benjamin Netanyahu is fighting for another term amid allegations of corruption.

▶ India's Reserve Bank announces its rate policy on April 4. New Governor Shaktikanta Das cut the rate for the first time in 18 months in February.

► European Central Bank President Mario Draghi will discuss the monetary policy of the countries sharing the euro in Frankfurt on April 10. ► The U.S. employment report for March is due on April 5, with economists looking for signs that a long-forecast slowdown in job gains has arrived.

► Sports radio talk show host Craig Carton will be sentenced on April 5 for ripping off investors in his ticket business. He faces up to 20 years in prison.

► Head to the Goodwood Motor Circuit two hours south of London on April 6-7 for the annual members' meeting and a weekend of vintage cars on display.

BLOOMBERG OPINION

Putin at the Gates

• Europe needs to make its citizens aware of Russia's plans to disrupt elections. Sanctions may be the best defense

Europe is bracing for a Russian propaganda onslaught in the runup to this May's parliamentary elections. The European Commission predicts the Kremlin's disinformation operations will be "systematic, well-resourced, and on a different scale to other countries." Russian President Vladimir Putin's goal is to expand the euroskeptic bloc in the next European Parliament to weaken EU cohesion.

To minimize the threat, the commission has more than doubled its spending on counter-disinformation, to €5 million (\$5.7 million) this year, and is enlarging its staff of analysts dedicated to tracking disinformation. This won't be enough. To stop Russian mischief, Europe will also need to prepare its own citizens and deploy legal and diplomatic countermeasures.

Consider what Europe is up against. Russia's Internet Research Agency alone has a budget more than double that of all European Union counter-disinformation agencies combined. That doesn't include the €1.4 billion Moscow spends annually on mass media outlets that amplify its propaganda.

Given the disagreements among European governments about how aggressively to confront Russia, the commission may find it difficult to appreciably boost funding for counter-disinformation efforts. But it should at least give more resources to the East StratCom Task Force and the EU Hybrid Fusion Cell, which monitor fake news and coordinate governments' responses to it. The commission should also push member states to sign on to its proposal to create a pan-European Rapid Alert System that would expose suspicious social media activity close to elections. And it should maintain pressure on social media companies to take down bot accounts and disclose the funders of political ads on their platforms.

European governments should also do more to help their citizens distinguish fact from fiction. They can, for example, support fact-checking sites such as Lithuania's Debunk.eu, a collaboration among journalists, civil society groups, and the military. And they can bolster digital-media literacy instruction in public schools, as Sweden has. Estonia, a country with a substantial minority of Russian speakers, has gone so far as to create its own Russian-language public broadcasting channel as an alternative to Kremlin-backed media.

At the same time, European leaders should warn Russia that attacks have consequences—including the kind of sanctions and indictments the U.S. has imposed on both Russian election meddlers and Chinese corporate hackers. A first step would be to make clear the current set of EU sanctions against Russia, imposed after the 2014 annexation of Crimea, will be extended if evidence of interference surfaces. In that event, Germany should also cancel the misguided Nord Stream 2 pipeline, which serves Putin's interests more than Europe's.

It's essential to remind Putin that interference is a form of hostile aggression that cannot be ignored. ^(B)



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April 1, 2019



Unicorn Season

• Do the impending IPOs of Uber, Pinterest, Airbnb, and others mean the bull market is ending?

By Michael P. Regan

Psst! Someone knows something about the markets that you don't.

That's the vibe on Wall Street these days, at least among those prone to occasional bouts of what could generously be called caution—or not-so-generously called paranoia.

Federal Reserve policymakers see something the rest of us don't, the thinking goes, and that's why they have all but canceled interest-rate hikes once planned for 2019. Bond traders obviously know something stock investors are missing, so they've inverted the yield curve by pushing yields on 10-year Treasuries below rates on three-month bills in a classic harbinger of a recession.

And will you get a load of this herd of unicorns prancing their way toward initial public offerings? Clearly their bankers have whispered in their ears, alerting them that the grass is high in public markets and now is the time to graze because a drought is coming.

The "Fed knows something" concern is easy enough to dismiss for anyone who has even a cursory familiarity with the central bank's track record as a fortune-teller. The yieldcurve inversion is harder to ignore, given its habit of arriving on the scene before recessions, though a "this time is different" case can be made because of the lingering effects of the central banks' massive intervention in bond markets following the global financial crisis.

What, then, of this unicorn invasion? It's a tricky subject. The nickname refers to startups, mostly venturecapital-backed Silicon Valley creatures, that achieve private valuations in excess of \$1 billion, whether or not they've turned a profit. They were originally called unicorns because their existence once seemed impossible, but these days they're as common as white-tailed deer on a New Jersey golf course.

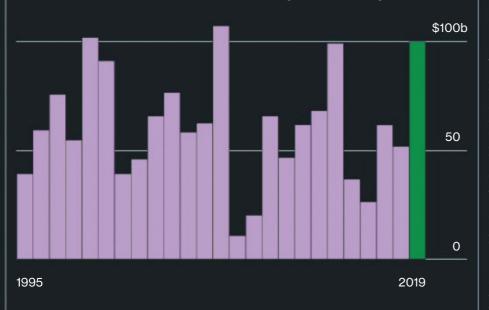
The alpha unicorn of this pack is obviously Uber Technologies Inc., the unprofitable taxi app that is expected to come to market next month in an offering that could value the company at as much as \$120 ► ▲ billion. Its unprofitable rival, Lyft Inc., is getting there first. But the list of expected IPOs goes on and on and on: digital corkboard Pinterest, home-rental site Airbnb, takeout and grocery delivery service Postmates, chat-room operator Slack Technologies, electronic trading platform Tradeweb Markets, virtual-conference company Zoom Video Communications. (Even a San Francisco-based innovator of yesteryear, Levi Strauss & Co., made its triumphant return to public markets this month.)

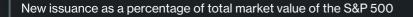
Should these and others make it to the stock exchange, 2019 could prove to be one of the biggest years on record for the amount of money raised in U.S.-listed IPOs. The total will reach \$80 billion this year, double the yearly average since 1999, Goldman Sachs Group Inc. predicted in November– an estimate that may prove low. And there's no arguing that peaks in IPOs have occurred near major tops in the stock market and close to the onset of recessions. Both 1999 and 2007 were unusually strong years for IPOs that were swiftly followed by nasty bear markets in stocks and downturns in the economy.

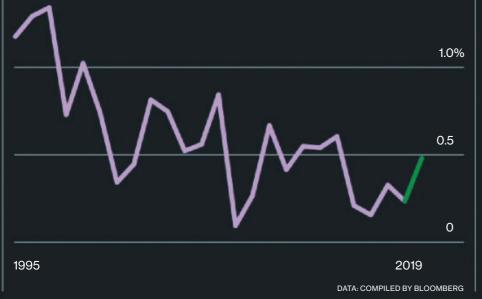
Putting \$100 Billion of New Shares in Perspective

2019 projection by Renaissance Capital

Total dollar value of IPO issuance for stocks listing on U.S. exchanges







"If you look at what it took to have a robust \$100 billion-plus IPO market, we don't have a lot of those dynamics now"

"I get the point: At market tops, confidence is high and everyone is buying with little concern for price," says Jim Paulsen, chief investment strategist at the Leuthold Group in Minneapolis. "From a private-company standpoint, that sounds like a great time to bring an IPO." But contrarians beware: Paulsen points out that irrational exuberance doesn't exactly describe the mood of investors these days. While the S&P 500 is up about 12 percent in 2019, poised for its best quarter in seven years, it has yet to fully recover from a fourth-quarter swoon. "I would argue that, although the market is up this year, it sure seems like cautiousness and pessimism about recession and a bear market is also up this year," he says.

Regardless of the signal about sentiment that this unicorn stampede is sending, there's a more practical issue to consider: supply and demand. Can the investor class absorb this much new stock without dumping shares of established companies to raise funds?

Kathleen Smith, a principal at Renaissance Capital LLC, which provides institutional research and exchange-traded funds focused on IPOs, says that this year's IPO issuance could be more than the market can digest smoothly. "If you look at what it took to have a robust \$100 billion-plus IPO market, we don't have a lot of those dynamics now," Smith said. "You have the extra issue of, 'Oh my gosh, look at all this supply.'" The overabundance of IPOs, she suggests, could lead to market volatility or simply weigh on the performance of the newly public stocks.

No indicator has a perfect track record. The yield curve's brief inversion in 1998 sent a false signal, as did a longer episode in the 1960s. If the signal it's flashing this time is correct, exactly how many months it takes for the recession to arrive is not easily determined by historical precedent. There would likely be a lot of nickels to pick up in front of the steamroller, because the S&P 500 tends to rise in the period between inversion and bull-market top. And when it comes to all those unicorns, even a record year of issuance in pure dollar terms is unlikely to be a record amount in relation to the market's total size. Nor will it do much to halt the shrinkage of supply in total shares outstanding being caused by corporate buybacks. The last major scare of an IPO overdose was when Alibaba Group Holding Ltd.'s \$25 billion stock market debut in 2014 triggered talk of a market top. (Narrator: There was no market top.)

Perhaps the true unicorn is a foolproof signal of when a bull market is over. It doesn't exist.
B — With Sarah Ponczek

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The Problem With Self-Regulation

• Letting industries police themselves can make sense, but mishaps do serious damage

Just the barest facts are unsettling. A federal regulator in the U.S. routinely permits a major American manufacturer to certify that its products are safe. Then, in recent months, 346 people perish. The company, of course, is Boeing Co.; the regulator is the Federal Aviation Administration. And while both say they did nothing wrong, the finer points of how the agency relied on the jetmaker's assurances about the safety of flight-control software suspected in the crashes of two of its 737 Max jetliners are now the subject of federal investigations.

The self-regulatory freedom enjoyed by Boeing is common in the U.S. And it raises questions about

the efficacy of the nation's consumer-protection system, long the envy of the world and part of the reason American products are trusted more than those of many other countries.

Virginia Haufler, an associate professor of government and politics at University of Maryland and author of *A Public Role for the Private Sector: Industry Self-Regulation in a Global Economy*, attributes the spread of self-regulation to a broader global embrace of deregulation. Also, she says, "there has been a rise of very complicated technologies and industries, and in many cases government regulators or policymakers say, 'You guys know what you're talking about, so you come up with the details, and you handle it.'"

Sam Berger, a former Obama White House adviser, says self-regulation is also the result of private-sector efforts, helped by parsimonious Congress members, to cripple federal agencies. "A lot of what we're seeing is a realization by big business that if they couldn't kill a regulation, they would work with allies in Congress to starve agencies of funding," says Berger, now vice president for Democracy and Government Reform at the Center for American Progress.

Apr

Close cooperation between industries and their regulators can be eyebrow-raising. The federal government, for instance, leans heavily on standards developed by the American Petroleum Institute, the top oil industry trade group in Washington, D.C., when it comes to overseeing the design of offshore oil wells. The API says there's no conflict, because it keeps its standards shop separate from its lobbying arm. Indeed, if ever there was a federal agency that could have used some outside assistance, it was the Department of the Interior's perennially underfunded and understaffed Minerals Management Service, which, until 2010, oversaw offshore drilling.

The agency's inspectors couldn't keep pace with rapid technological advances that enabled drillers to venture into deeper waters. Then came the 2010 Deepwater Horizon disaster, which killed 11 workers and triggered the worst oil spill in U.S. history. After the spill, former President Barack Obama abolished the MMS and divided its duties among three separate agencies. The Trump administration is considering recombining two of them as part of its effort to lighten regulation of the oil and gas industry.

The auto industry's chief regulator is similarly challenged when it comes to keeping up with technological advances. The National Highway Traffic Safety Administration requires automakers to certify that new vehicles comply with dozens of vehicle safety standards, but it has allowed manufacturers to freely introduce technologies. The year after Tesla broadly deployed a driver assistance feature known as Autopilot in 2015, a former Navy SEAL using it died when his Model S drove under a semitrailer crossing a Florida highway. After the crash, Tesla said: "Autopilot is by far the most advanced driver-assistance system on the road, but it does not turn a Tesla into an autonomous vehicle and does not allow the driver to abdicate responsibility."

A probe by the NHTSA cleared Tesla's system of any design or performance defects. Yet a separate inquiry by the National Transportation Safety Board in 2017 found that the driver's overreliance on Autopilot and its lack of built-in safeguards contributed to the crash. Consumer-safety advocates concluded that the National Transportation Safety Board's findings were more persuasive. "The devastating conclusions of the board reveal what happens when the government takes a hands-off approach to hands-free driving," said Cathy Chase, president of Advocates for Highway and Auto Safety, in a statement. "This should serve as an urgent alarm to the U.S. Department of Transportation and Congress to take immediate action to regulate autonomous vehicle technology." The NHTSA disagreed, saying it was too early. "I don't think it's appropriate today to

regulate this technology," said Heidi King, the agency's deputy administrator, last year.

The Food and Drug Administration has been trying to stem teen vaping, which health advocates worry is hooking a new generation on nicotine. But the FDA didn't push for the ability to regulate e-cigarettes alongside other tobacco products until 2016. And the agency has postponed implementation of new regulations by several years. Meanwhile e-cigarette manufacturers can continue to advertise their products on television, where traditional cigarette advertising has been banned since 1971.

The FDA has tried to get tobacco companies to voluntarily take steps to reduce teen vaping. At first, it seemed to work. In October tobacco giant Altria announced it was discontinuing sales of its pod-style e-cigarettes and several e-cigarette flavors popular with the vaping crowd. Two months later, though, Altria invested \$12.8 billion in Juul Labs, the maker of the most popular e-cigarette. The decision frustrated outgoing FDA Commissioner Scott Gottlieb. "I'm concerned," he told CNBC in February. "Because they just made a very large commitment to support the expansion of pod-based products, which they said contributes to the youth epidemic." Both Altria and Juul say they are still committed to lowering teen vaping numbers.

After the second crash of a Boeing 737 Max in March, former FAA employees told reporters how they'd been frustrated over the years by the FAA's acquiescence to Boeing on safety checks. In 2012 a Transportation Department investigation found that the discontent created a "negative work environment" among FAA employees responsible for approving aircraft designs. Some said they'd faced retaliation if they raised their voices about it.

The tight relationship between Boeing and the agency continued during the 737 Max's safety assessment. Unnamed FAA engineers told the *Seattle Times* they'd been pressured by their managers to sign off on the jet, relying on Boeing's submissions understating the potential impact of the flight-control software designed to keep the plane from stalling by pushing down its nose. The software is now suspected as the cause of the crashes.

One reason people around the world buy American products is that they trust that these goods have been rigorously inspected by government regulators and are safe. If people no longer believe that, why would they buy American? —Devin Leonard, with Ryan Beene, Jennifer A. Dlouhy, Anna Edney, Ellen Huet, and Peter Robison "You guys know what you're talking about, so you come up with the details, and you handle it"

THE BOTTOM LINE When federal regulators defer to voluntary standards, they're ceding power to the very industries they oversee, sometimes with tragic consequences.

A New Drug's Delivery Problem

Zulresso, the first treatment for postpartum depression, is expensive and hard to administer

The world's first drug for postpartum depression, Zulresso, cleared a major hurdle on March 19, when it won approval from the U.S. Food and Drug Administration. But even bigger challenges lie ahead for Sage Therapeutics Inc., the drug's developer.

Zulresso, the brand name for brexanolone, works much faster to treat the condition than anything now available. Experts have hailed it as "groundbreaking," a "game changer." And postpartum depression affects as many as one in nine new mothers. These facts alone would suggest Zulresso is destined to be a blockbuster. Yet there's a difference between a drug that works and a drug that sells.

"The quality of life, with a rapid and high rate of response, is tremendous. That is the positive side," says Kimberly Yonkers, professor of psychiatry at the Center of Wellbeing of Women and Mothers at Yale School of Medicine. But she sees "obvious impediments" for Zulresso. In the current treatment regimen, a patient is given a prescription for antidepressants that could take weeks to work. Zulresso is administered by a two-and-ahalf-day infusion, and the company plans to charge \$34,000 for it. Considering the price and logistical challenges, Yonkers says, it's not clear how many women will ever get the drug.

Sage Chief Executive Officer Jeff Jonas, a Harvard-trained psychiatrist, says that Zulresso's medical benefits will overcome any concerns about cost and delivery. "Every physician and every institution will make a choice," he says. "Is it better to help someone get better in two and a half days or send them home?"

Sounds like an easy choice, but not every new mother can spend additional time in a hospital away from her baby. "The only moms who can really afford to take it are the ones that can basically arrange for 60-plus hours of child care," says Ritu Baral, a biotech analyst at Cowen Inc. "It's not easy for probably two-thirds of people."

For those who can afford a longer hospital stay, finding a bed could be challenging: Psychiatric wards are disappearing in the U.S. There were a half-million psychiatric beds in state hospitals in 1955 but fewer than 40,000 in 2016, according to the Treatment Advocacy Center. Much of the drop is the result of deinstitutionalization efforts that aimed to get mental health patients into community settings.

Catherine Birndorf, founder of the Payne Whitney Women's Program at the New York-Presbyterian Hospital Weill Cornell Medical Center, has spent decades trying to improve on treatments for postpartum depression. After raising money from friends and family, she opened the 8,000-square-foot Motherhood Center in Manhattan in March 2017; it offers intensive therapy for postpartum mood disorders and allows patients to bring their babies while they seek treatment. "We're doing something unusual, and we want to be on the cutting edge," she says. But the center's landlord doesn't allow patients to stay overnight. Birndorf sees Zulresso as an option for the most severe patientsthose she would refer to a hospital anyway. "It's hard to come by an inpatient bed," she says.

The University of North Carolina Center for Women's Mood Disorders is one of the few places set up to administer a drug such as Zulresso. Professor Samantha Meltzer-Brody ran several clinical trials for it there. Now that the drug has been approved, she says, the medical world will start to adapt to it. "I believe that anytime you have a novel treatment, the system has to catch up with where the treatment moves it," Meltzer-Brody says.

Centers that may work include skilled nursing facilities designed to offer rehabilitation services for patients who have knee surgery, for example, if psychiatrists are able to consult with patients as they receive the drug. Meltzer-Brody works under David Rubinow, a member of Sage's clinical advisory board whose work helped inspire the drugmaker to test brexanolone for use in treating postpartum depression. Because suicide kills more women than any other complication in the first year after childbirth, Rubinow expects medical centers to move quickly to find a way to administer Zulresso. "If we really have at our disposal a tool that can very rapidly eliminate the symptoms and the morbidity and impairment of a severe and potentially life-threatening condition," he says, patients will be given the drug.

Sage is running trials of another fast-acting antidepressant pill, and in January it showed that the drug succeeded in reducing symptoms in a late-stage study. Because it's a pill, this drug would be more



straightforward to distribute—should it succeed in the high-stakes world of late-stage clinical trials, where many promising psychiatry drugs flame out. In CEO Jonas's ideal world, both Zulresso and the follow-up pill will succeed, and then his job will be to figure out how to sell both. "I'm fine if patients have more than one option," he says. Some women may want to be hospitalized, others may want to take the pills home with them. "For us," he says, "that's the best of both worlds." —*Cynthia Koons*

THE BOTTOM LINE Zulresso can treat postpartum depression more quickly than standard antidepressants, but many women who need it may find it hard to get.

Nike Storms Onto Adidas's Home Turf

• The company's Jordan brand is winning over European soccer fans

Using retired basketball star Michael Jordan to sell clothes to soccer fans may seem like a long shot, but it's working for Nike Inc. The "Jordan X PSG" collection, which features hats, jerseys, and other Paris Saint-Germain soccer club paraphernalia, sold out swiftly after its September debut. In the quarter that ended on Nov. 30, Nike reported growing sales in Europe, and on March 21, it reported sales growth of 6 percent in Europe, the Middle East, and Africa for the quarter through the end of February, even as North American results fell short of expectations. "Nike is expressing a vision of the future and executing on it better than anybody I see in retail," says John Kernan, a New York-based analyst with Cowen Inc. "They're staying close to the consumer."

Nike's success comes at the expense of archrival Adidas. The boom this decade in casual clothing and sporty attire known as "athleisure" helped Adidas narrow the coolness gap with Nike. It was aided in



part by savvy marketing, such as Gisele Bündchen posing nude, save for her Stan Smiths, in *Vogue Paris*, Pharrell Williams overseeing the resurgent Superstars, and Kanye West developing his highpriced Yeezy line of sneakers for the company. By 2017, Adidas shocked industry analysts by eclipsing Jordan as the second hottest-selling brand in U.S. sneakers. But in its two most recent quarters, the German company recorded falling sales in Europe.

Nike's push into Europe took root in 2017, when the company—reeling from a two-year slump started rolling out a bevy of best-sellers, including the Air VaporMax, the latest overhaul of the air-cushioned sneakers that date to the 1980s, and the soft and springy Epic React shoe.

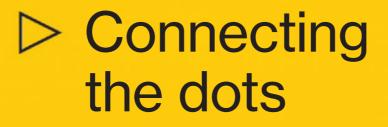
Nike has taken the battle to Berlin. In September it scored a coup at the Berlin Marathon (where Adidas is the anchor sponsor), when Kenya's Eliud Kipchoge smashed the world record by 78 seconds. He crossed the finish line pumping his fists in jubilation and showcasing the Nike Swoosh on his singlet, half-tights, and Zoom Vaporfly shoes.

Three months later, Nike sponsored a documentary, screened online, that celebrated Berlin's vibrant nightlife by featuring three dance-club veterans reveling in the city's techno, art, and street culture—and sporting Nike shirts and shoes. In late March the company will release a Berlin-themed Air Max 180 sneaker, with neon colors reminiscent of the lights in techno clubs and a gray upper the company says is a nod to Berlin's concrete postwar buildings. "Just think how painful it is for the Adidas executives to see that," says Chen Grazutis, a Bloomberg Intelligence analyst. "It'd be like Adidas starting to put videos out saying how Portland is cool. It's a little odd. But when Nike does it, it doesn't look that weird."

Discussing company earnings on March 13, Adidas Chief Executive Officer Kasper Rorsted said the company had become too reliant on fashion-focused products, losing touch with its historical roots in sports gear. The company is promoting a new line of shoes and apparel partly made with recycled plastic pulled from beaches and oceans to raise awareness of global pollution. The material is also threaded into German soccer powerhouse FC Bayern's jerseys for Champions League games. Asked which athlete in the world he'd most like to see wearing Adidas, Rorsted had a quick response: "Mbappe. He's a great player. He has speed. He has personality." PSG's Kylian Mbappe is sponsored by Nike. —*Tim Loh*

THE BOTTOM LINE In its seesaw battle for share with Adidas, Nike is making strides in Europe with shoes designed specifically for regional markets.





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Packed with batteries, electric vehicles can turn into infernos when they catch fire—and that's a big problem for firefighters

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Edited by Jeff Muskus

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Stores .

After witnessing an out-of-control Tesla Model S plow into a stand of palm trees in February on a highway median in Davie, Fla., outside Fort Lauderdale, police rushed to put out the ensuing blaze using a department-issued fire extinguisher. It was a wasted effort: The lithium-ion batteries that powered the electric vehicle had begun a self-destructive chain reaction called thermal runaway and couldn't be put out with the extinguisher's chemicals. The car kept burning after the crash, which had killed the driver. Even after firefighters finally managed to douse the flames with water, the wreck reignited twice more while being towed away.

Electric vehicles are no more prone to accidents or fires than gasoline-powered cars and might be less so, according to the National Highway Traffic Safety Administration. Still, their high-voltage cables and silent-running motors, and especially their batteries, pose unusual challenges for first responders. "It's such a difficult fire because it takes so much water to put out," says Robert Taylor, Davie's fire marshal. Safety experts say the only way to extinguish a lithium-ion battery inside a car is with thousands of gallons of water, much more than is needed to put out a typical gas engine fire.

In an e-mailed statement, Tesla Inc. called the Davie accident tragic and said it had reached out to first responders to offer cooperation. The company also noted that vehicle fires aren't unique to EVs. "We understand that speed is being investigated as a factor in this crash, and know that high-speed collisions can result in a fire in any type of car, not just electric vehicles," it said. One witness said the car "flew" past him, but police said it was traveling at the posted speed limit of 50 mph. The U.S. National Transportation Safety Board is already investigating multiple incidents like the one in Davie, and the agency says it will issue recommendations based on four reference cases by late summer or early fall. "That will be the first major report addressing the issue," says NTSB spokesman Chris O'Neil.

Electric vehicles accounted for just 1.2 percent of total new vehicles delivered in the U.S. last year, according to data from Edmunds.com Inc., but that share is likely to rise sharply over the next five years. This has added urgency to the establishment of safety and training standards for firefighters, police, and tow truck operators as more have to deal with the 760,000 electric and plug-in vehicles on U.S. roads. So far, fewer than onequarter of America's 1.1 million firefighting personnel have undergone some form of EV training, the National Fire Protection Association estimates. "First responders have 100 years of experience dealing with internal-combustion engines, but it's a very different situation when it comes to EVs or hybrids," says Andrew Klock, the NFPA's program manager for emergency technology. "Every time an EV catches fire, we get a lot of calls."

For roughly a decade, the NFPA has worked closely with General Motors Co. and other automakers to educate first responders about which wires to avoid, where critical components are located under the hood, and how to control battery fires. The NFPA provides check sheets for most makes and models. A task force from the Society of Automotive Engineering, which includes representatives from 11 automakers as well as auto suppliers and government officials, is expected to update EV safety guidelines by yearend.

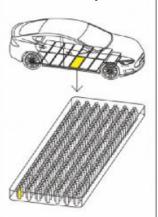
Tesla also meets regularly with first responders and donates its cars for training purposes. But there's only so much that can be done once battery cells begin to explode. The company's online emergency response guide notes: "Battery fires can take up to 24 hours to extinguish. Consider allowing the battery to burn while protecting exposures."

Battery voltage is a big part of the problem. Most gas-powered vehicles run on a standard 12-volt battery, while a typical EV operates at closer to a potentially deadly 400 volts. The all-new Porsche Taycan will boast 800 volts when it goes on sale later this year.

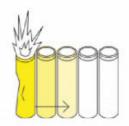
Countries outside the U.S. are also grappling with emergency response to EV problems. On March 16, organizers of the MotoE World Cup, a new racing series for electric motorcycles, announced that a short circuit that ignited one of the machines' battery packs appeared to be responsible for an overnight fire that destroyed all of the event's bikes. In 2016, firefighters in a small town in Norway allowed a Tesla to burn to the ground at a charging station, leaving only the charred remains of the frame and wheels, because they mistakenly feared using water could lead to an electric shock. Later that year, firefighters in the Netherlands delayed extracting the body of a deceased Tesla driver involved in a crash because they feared electrocution if they cut a wire in the car's frame.

In the aftermath of that incident, Dutch authorities turned to one of the leading authorities on Tesla vehicles involved in accidents: the fire department in Fremont, Calif., where the automaker's factory is located. The department has ample experience responding to EV-related incidents, including a fire at Tesla's plant earlier this year that required the full submersion of battery packs in water tanks, says Cory Wilson, a captain at the fire department. • The Tesla Model S has 16 battery modules with 444 batteries each.

• In an accident, penetration or crushing of a battery can trigger a self-accelerating chain reaction known as thermal runaway.



As its temperature keeps rising, the battery can explode, releasing energy that further increases temperatures to as high as 900F and that is likely to ignite other batteries.



This continues down the chain until the reaction is contained or stopped by a reduction of heat.



That hands-on experience goes beyond field exercises. Tesla has donated hundreds of vehicles to the department for use in deconstructive demonstrations of rescue tools. "We've cut up 400 to 500 Teslas over the past five years," says Wilson.

The Fremont Fire Department now has about 50 Teslas ready for the next of its regular two-day classes attended by emergency personnel from around the country. Visiting crews are taught how to safely cut through wires and demobilize the electric vehicles. Wilson says he accepted an invitation on behalf of the department to teach a special session at the Hague for Dutch and German first responders in 2017. "Not knowing how to secure an electric vehicle can be lethal," he says. "We're fortunate enough to have Tesla in our community." —*Chester Dawson*

THE BOTTOM LINE First responders need new equipment and training to handle EV fires, which are far harder to douse than typical car fires.

Forget Photoshop. Adobe Is a Marketing Company Now

• The business's recent Wall Street success hastened a transition to the creepier side of online targeting

In a dreary meeting room in a San Jose office tower, a couple dozen wonks from Adobe Inc. convened in September to plot the company's future. The researchers and data scientists presented pitches that weren't about helping smartphone users airbrush photos or developing a new way to make digital art. Instead, their ideas centered on ways Adobe could use artificial intelligence, based on huge collections of consumer data, to make ads more persuasive.

Adobe's enduring reputation as the Photoshop company hasn't caught up to what it's become: an important conduit in the network of businesses trading and stitching together data about ordinary people to drive more consumption. The biggest problem with that, the Adobe team agreed at their fall research and development meeting, was they weren't moving fast enough. Chris Challis, a manager of data science at Adobe Experience Cloud, told his colleagues about a plan to speed up things by handing off prototype software to corporate customers for testing. "We have the supersmart people that are creating the next thing," Challis says. "It's just a matter of getting it in front of people and proving it in a market setting to see what's really going to take off."

Adobe's urgency comes from the newfound competition it faces in marketing and e-commerce software. For 37 years the company has shrewdly reinvented itself to match the moment, but it isn't used to fighting on unsettled ground against the



likes of IBM, Oracle, SAP, and Salesforce.com. It became a big name because of products that practically monopolized their categories: image editor Photoshop, document reader Acrobat, and, for a time, graphics software Flash. Things aren't so simple in the marketing business. "It's not a clear-cut win for them," says Anurag Rana, a software analyst at Bloomberg Intelligence. "They're going to have to fight for every dollar against Salesforce and SAP."

As it did with Photoshop and Flash, Adobe has been trying to buy its way into a dominant position in marketing and analytics, where Salesforce.com Inc. is a principal repository for customer lists ◄ and SAP SE benefits from customers' accounting records. Adobe bought e-commerce company Magento for \$1.7 billion in May and a few months later paid \$4.8 billion for Marketo, a−yes−marketing firm that mostly targets other businesses. The Marketo acquisition was Adobe's largest ever and more than double what Marketo sold for just two years earlier. Adobe said on March 26 that it plans to build a central hub for all of a given customer's consumer data and that it will partner with other software makers to make sure the system is compatible with their data stores.

Factor it all in, and Chief Executive Officer Shantanu Narayen has upended Adobe's business model and quietly transformed it into that of a marketing company. Adobe has been working full crank to track every interaction a consumer has with a brand: tallying her visits to a brick-and-mortar store and what she buys; using cookies to monitor her web activity and figure out how many devices she has; analyzing her interest in emails about sales or promotions; and incorporating social media monitoring to see what she says about a brand. Adobe can combine all of this with other companies' data about a person's income and demographics to predict the triggers that would make her buy a new phone or pair of shoes. In essence, Adobe is trying to know a consumer's decision-making process better than she may know it herself.

This can't help but sound tone-deaf at a time when the technology industry generates privacy scandals on a near-daily basis. Adobe says it's helping create better customer experiences, so customers see ads and receive offers that are more interesting to them. It also says customers have ways to opt out of its targeting programs. But that's making quite a leap, says Jen King, the director of consumer privacy at Stanford's Center for Internet and Society. "I would be shocked if the general public knew about this in any meaningful way," she says. "This is the Oz behind the curtain."

Chief Technology Officer Abhay Parasnis says the company's marketing efforts are a natural evolution in its history of "pushing the limits of creative expression and storytelling," dating to the advent of the PDF, which Adobe invented. "If you treat the world as if it is going to be full of competitors who are going to do a better job than you, it pushes you to out-invent them," he says. The company says it's mindful of privacy concerns and that it only processes data for its customers, never taking control of or monetizing it. "Last year has been a wakeup call for the tech industry," an Adobe spokesman said in a statement. "While companies need to do much more to build (or even regain) trust, a key part is understanding that many consumers do not understand their rights and how their data is being used."

Adobe doesn't seem likely to change its strategy. Over the seven years it's spent reorienting its business model around subscriptions and augmenting its marketing capabilities, its stock has been the ninth-best performer in the S&P 500, ranking it in the same zone as Amazon.com Inc. and Netflix Inc. Byron Deeter, a partner at Bessemer Venture Partners who invests in cloud companies, says, "People don't appreciate how innovative that company has grown to be in a sleepy San Jose wrapper." Given the increasing attention being paid to privacy concerns online, Adobe may want to keep looking sleepy. —*Nico Grant*

THE BOTTOM LINE Adobe has become a key aid in companies' efforts to track their consumers everywhere. So far, its big concern is the speed of its updates.

Game On (In the Cloud)

 Google and Apple were the first to unveil a "Netflix for video games," but Microsoft has the biggest names

Tech giants are piling into the \$180 billion video game industry. On March 25, Apple Inc. announced a subscription service called Arcade that will let people play high-quality games through the internet instead of having to spend hundreds of dollars on a standalone console or more on a high-end gaming PC. For a monthly fee, users will get as many as 100 exclusive games. Arcade was unveiled just days after Google announced a similar service, Stadia. If so-called cloud gaming takes off, it could be the biggest change in the industry since Nintendo Co. made Mario and Luigi living room fixtures in the 1980s.

Google and Apple aren't alone. Microsoft Corp. is also developing a service, which will be available to the public by yearend. Amazon.com Inc. has a similar product in the works, according to tech news site the *Information*. As with TV and music, the companies that run the internet see video gaming as a natural adjacency for their influence. Streaming



games requires expensive data centers to process all the action and high-speed internet cables to move it around the world in real time. Those are things only the tech giants have. "Cloud gaming creates this moment in the industry where the multibilliondollar companies like Google and Amazon have a chance to buy their way in," says Joost van Dreunen, co-founder of industry analyst SuperData Research. "This is a high-stakes poker game, and not everyone gets a seat at the table."

Shares of veteran console makers Nintendo and Sony Corp. both fell after Google's announcement. Along with Microsoft, Nintendo and Sony have stayed competitive by creating or buying rights to exclusive games, then charging people hundreds of dollars for the devices needed to play them. A cloud model as cheap as Netflix Inc.'s could doom consoles to the same fate as the DVD player and threaten game publishers that spend hundreds of millions of dollars and years developing a single game, betting players will drop as much as \$80 for it.

Google, Amazon, and Apple are still missing a major ingredient: the games themselves. Google's Stadia announcement didn't include any hit franchises, and none of Apple's launch exclusives are from the biggest publishers, such as Electronic Arts Inc. and Activision Blizzard Inc. Right now, those studios have a lot of power in the industry. Take-Two Interactive Software Inc.'s *Red Dead Redemption 2*, an immersive shoot'em-up set in America's Wild West, made \$725 million in its first weekend on sale.

Apple has yet to announce the monthly subscription price for Arcade. Google didn't say how much Stadia will cost, but most observers are expecting some kind of subscription plan, or even a free service supported by ads or in-game purchases. The latter model has become a central part of game developers' business strategies over the past decade. Even megahit shooting game *Fortnite*, which made Epic Games Inc. \$2.4 billion in revenue last year, is free to play. The money comes from extras such as special character outfits, called skins.

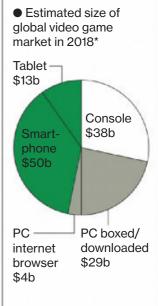
▲ Google and Apple are promising video game services that would likely be cheaper than buying the games

At least some of the tech giants are likely to bid up streaming rights to blockbuster games over the next few months. For now, though, Microsoft appears to have the strongest hand. It has the deepest history in gaming among the big tech players thanks to its 20-year-old Xbox console business, which fought its way into that market in the early 2000s. The company has been testing its own cloud gaming product, and in an internal memo, gaming chief Phil Spencer promised to "go big" at the industry's biggest annual conference in June, according to a person familiar with the memo who spoke on condition of anonymity because the discussions weren't public.

Microsoft has the data centers and internet infrastructure to compete with Amazon and Google. It also has something those companies don't: games. Microsoft has steadily been buying game developers over the years, along with the rights to fan favorites including the *Halo* and *Gears of War* franchises. It also owns one of the most popular games of all time, *Minecraft*, which it acquired when it bought Swedish developer Mojang AB for \$2.5 billion in 2014.

Still, other tech giants have the cash to catch up. Google has made clear that it's serious about investing in Stadia, says David Bos, chief operating officer of game investor Maple Media and a former employee at Google's mobile games division. "They brought together YouTube and cloud and hardware and the assistant," Bos says. "Everything I've seen suggests to me that they're ready to lose a lot of money on this for a long time." —*Gerrit De Vynck*

THE BOTTOM LINE Apple, Google, Microsoft, and Amazon are all trying to make the home video game console obsolete. So far, they haven't announced any must-have titles.



Hop In, Hop Out, Make Taxes Disappear

Banks are using short-term "heartbeat" trades to help ETFs avoid capital-gains bills

One day last September an unidentified trader pumped more than \$3 billion into a tech fund run by State Street Corp. Two days later that trader pulled out a similar amount.

Why would someone make such a large bet– five times bigger than any previous transaction in the fund–and then reverse it so quickly? It turns out that transfusions like these are tax dodges, carried out by the world's largest asset managers with help from investment banks. The beneficiaries are the long-term investors in exchange-traded funds. Such trades, nicknamed "heartbeats," are rampant across the \$4 trillion U.S. ETF market, with more than 500 made in the past year. One ETF manager calls them the industry's "dirty little secret."

Typically, when you sell a stock for more than you paid, you owe tax on the gain. But thanks to a quirk in a Nixon-era tax law, funds can avoid that tax if they use the stock to pay off a withdrawing fund investor. Heartbeats come into play when there isn't an exiting investor handy. A fund manager asks a friendly bank to create extra withdrawals by rapidly pumping assets in and out. "If the IRS were looking at it, they would say that's a sham transaction," says Peter Kraus, a former chief executive officer of mutual fund manager AllianceBernstein Holding LP and a critic of ETFs.

Imagine that a grocer got a tax deduction every time someone returned a box of cornflakes to his store. Heartbeats are when the grocer asks a friend to buy all the boxes and return them, just to pocket more deductions.

Fund managers and bankers say the trades are perfectly legal, and that most of the taxes that they help regular ETF investors avoid will be paid in later years. The biggest ETF managers, including BlackRock, State Street, and Vanguard Group, all use heartbeats, with help from banks such as Bank of America, Credit Suisse Group, and Goldman Sachs Group, according to market participants who spoke on condition of anonymity. Spokesmen for those companies either declined to comment on the trades or defended their use. The Internal Revenue Service says it's aware of heartbeats and wouldn't say whether it considers them an abuse.

To people in the industry, heartbeats are just smart tax strategy. "It's removing a negative from the investment process," says Bruce Bond, a pioneering ETF executive who was among the first regular users of heartbeat trades. "There really isn't a need to have to pay the tax every year. The goal is the best investor experience you can have."

To understand heartbeats, it helps to know that they're just a supersize version of something ETFs do every day. ETFs are funds whose shares trade all day on stock exchanges. Unlike mutual funds, ETFs aren't sold directly to regular investors. Instead, they use banks and brokerage firms as middlemen. These large traders don't transact in cash. They make an ETF bigger or smaller by adding portfolio stocks to it, or by taking them out. They call this activity "creating" and "redeeming" ETF shares. (All this is invisible to small investors, who just buy ETFs from brokers.)

Enter the Nixon-era tax law. In 1969, Congress decreed that mutual funds can hand over appreciated stocks to withdrawing investors without triggering a tax bill. Lawmakers never explained why they blessed the industry with this unique break, but back then, it didn't seem like much of a giveaway. Mutual funds rarely took advantage of it, because their investors preferred cash payouts.

Fast forward to 1993, when American Stock Exchange executives devising the first U.S. exchange-traded fund realized they could put that

26

April 1, 2019

old tax rule to a new use. Say an ETF needs to get rid of a stock that went up. Selling it would trigger a taxable gain that would ultimately be paid by fund investors. But handing the stock off to a broker who's making a withdrawal achieves the same goal, tax-free. Every time a broker redeems a stake in a fund, it's another chance to avoid taxes. That loophole gives ETFs a tax advantage over mutual funds. It went from a footnote in the tax code to the cornerstone of a new industry.

For some of the earliest ETFs, which followed broad indexes such as the S&P 500 and rarely changed holdings, the daily process of brokers creating and redeeming was enough to wash away almost all capital gains. The first and largest ETF, State Street's SPDR S&P 500 ETF, hasn't reported a taxable gain in 22 years. In contrast, a traditional mutual fund run by Fidelity Investments that tracks the same index had a taxable gain in 10 of those years.

ETFs proliferated, and some new entrants shuffled their holdings more frequently, so routine redemptions weren't always enough to wipe out the taxes. The PowerShares funds, co-founded by Bond, started trading in 2003 and changed their portfolios every three months. He says his funds wouldn't have kept capital-gains taxes away without heartbeats. "This tool was there," says Bond, who sold PowerShares to Invesco Ltd. and now runs Innovator Capital Management LLC in Wheaton, Ill. "We were the ones to first really utilize it to its full potential."

U.S. stock ETFs avoided tax on more than \$211 billion in gains last year, according to a *Bloomberg Businessweek* tally based on annual reports of more than 400 funds. The disclosures don't show how much of that is from the funds' routine use of the ETF loophole and how much is from special heartbeat trades that maximize the benefit. But heartbeats certainly contribute billions to the total.

Funds pass taxable gains along to their investors, so by avoiding those gains, they're allowing investors to defer the tax until they sell the ETF itself. The \$211 billion in avoided fund gains probably translates to about \$23 billion in deferred taxes last year. It's the equivalent of a \$23 billion, no-interest loan from the U.S. Treasury to ETF investors, with most of the benefit going to the wealthiest Americans.

Heartbeats have had a few nicknames over the years, including "friendlies," but they haven't attracted much attention outside the industry. Elisabeth Kashner, an ETF specialist at FactSet Research Systems Inc., was the first to write about the practice in a December 2017 report. She called ►

Friends With Tax Benefits

Banks help exchange-traded funds avoid capital-gains levies by rapidly pumping stocks in and out



and needs to drop one of them.

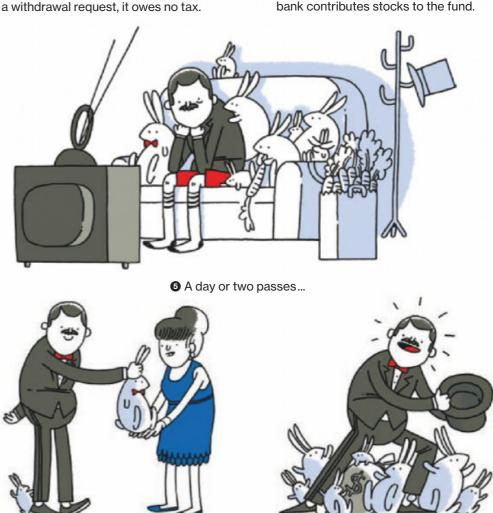


• This stock has gone up in value, so selling it would trigger capital-gains taxes.





• So the ETF asks a bank to invest. The bank contributes stocks to the fund.



• The bank withdraws its investment. Instead of getting the stocks it put in, it gets the stock the ETF wants to drop.

Presto! Since the appreciated stock was handed to a withdrawing investor, no tax is due. them heartbeats because the telltale blips in fundflow data on her computer screen reminded her of a cardiac monitor. Bloomberg Businessweek identified 2,261 such blips in equity ETFs since 2000. Last year there were 548, worth a record \$98 billion.

Most heartbeats take place when an ETF has to get rid of stock because of a change in the index it tracks. That was the case in September with State Street's \$23 billion Technology Sector Select SPDR. Some of the fund's largest holdings, including Facebook Inc. and Google parent Alphabet Inc., were being dropped from the portfolio because they were leaving the index the fund is designed to mimic. Both stocks had more than doubled since the fund first acquired them, so it probably faced a hefty tax bill if it sold them.

On Wednesday, Sept. 19, two days before the index change, \$3.3 billion of new assets poured in, increasing the fund's size by 14 percent. The additions came in the form of stock that matched the fund's holdings at the time. The investor's identity wasn't disclosed, but market participants say that, given the size of the transaction, it was probably a large investment bank.

On Friday of that week, someone pulled more than \$3 billion back out. Trading data suggest it was the same investor that had appeared two days before. Rather than take back the same shares of stock it had contributed 48 hours earlier, the investor appears to have walked away with the fund's oldest shares of Facebook and Alphabet, the ones with the biggest capital gains. Thanks to winnings on stocks like that, the fund reported more than \$4 billion in capital gains for the year. But since it used the ETF tax loophole to shield | be vulnerable to an IRS challenge, says Jeffrey

those gains from taxes, its annual report shows, it ended up reporting a \$309 million capital loss to the IRS.

While State Street declined to comment about specific transactions, Olivia Offner, a spokeswoman for the company, says the "primary motivation" for such trades is not to cut taxes but to avoid pushing stock prices lower by selling large blocks all at once. Trading data show the State Street fund rarely, if ever, did a heartbeat before the September trade. Other funds do them like clockwork. BlackRock's iShares Select Dividend ETF has done one on the third Friday in March in four of the past five years. The Vanguard Small-Cap ETF has completed one at the end of almost every guarter since 2005.

Goldman Sachs took part in some of the first heartbeats in the early 2000s, according to people with knowledge of the bank's activities. Today it's a standard service for any bank with an ETF desk, and ETF market-making firms do them as well. A few days before an index change, fund managers simply call up a banker or market maker and ask them to pour a certain amount into the fund.

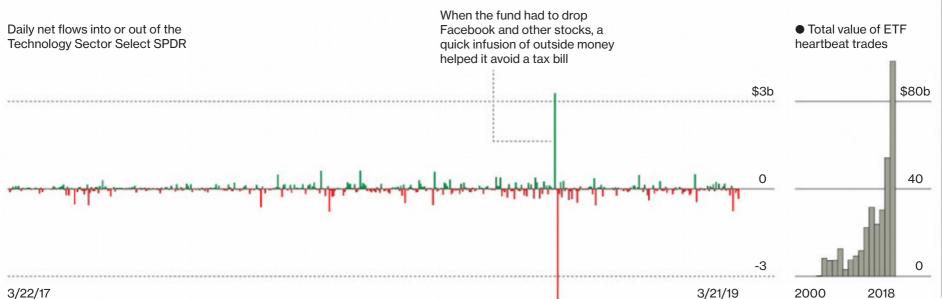
Bankers prefer to tie up their capital for as short a time as possible. But ETF managers worry that too brief a holding period would cause the IRS to deem the transaction a sham. Years ago, some banks were completing heartbeats in less than a day, a turnaround time that alarmed ETF tax lawyers. Most funds now insist bankers keep their money in for at least a single day. "The industry standard is 48 hours," says James Brown, who counsels fund companies on taxes at Ropes & Gray in New York.

Whether one day or two, the transactions may

"There really isn't a need to have to pay the tax every year"

The Big Blip

Heartbeat trades are short, sharp bursts of assets moving into and out of an ETF



DATA: COMPILED BY BLOOMBERG

April 1, 2019

Colon, a tax professor at Fordham University School of Law in New York who's written about ETF taxation. One question the agency might want answered, he says: Does the bank have some independent reason for this investment? If not, Colon says, "the only reason you're doing this is to facilitate the avoidance of tax."

The answer to Colon's question depends on whom you ask. More than a dozen bankers, market makers, and fund managers who spoke on condition of anonymity say heartbeat trades aren't profitable enough for the banks to pursue for their own sake. (Banks can't get paid directly by fund companies for the trades.) Instead, these market participants say, banks do them to build goodwill with clients and win other, more lucrative business. Freddy Martino, a Vanguard spokesman, gives a different account. He says banks "enter into these transactions for their own independent business reasons," and Vanguard doesn't award them any additional business as compensation.

A few ETFs can't fully benefit from heartbeats, because the Securities and Exchange Commission restricts their ability to pick and choose which stocks to hand over to redeeming investors. In June, the SEC proposed a rule that would remove that restriction. Some in the industry took the proposal as an implicit endorsement of heartbeats. The SEC wrote that one reason for the change would be to allow funds to shuffle stocks "in a cost- and tax-efficient manner." The draft rule is still under consideration, and the SEC declined to comment on heartbeats.

What if Congress closed the loophole, ending not just heartbeats but ETFs' entire tax edge? "Without this provision, millions of American investors would face more frequent, sizable, and unanticipated tax bills," says Keith Lawson of the Investment Company Institute. But low taxes are just one of ETFs' selling points, and the funds are flourishing in countries that don't give them special treatment.

Robert Gordon, a tax expert at Twenty-First Securities Corp. in New York, says ETFs are among his favorite investments because the 1969 provision makes them tax-efficient. But he warns that by using heartbeats, ETF managers might draw policymakers' ire and lose the break. "It's a transaction that looks too good to be true," Gordon says. "This has gone too far, and it's going to be the straw that breaks the camel's back." —*Zachary R. Mider, Rachel Evans, and Carolina Wilson, with Tom Lagerman*

The Apple Card Is a Big Step for Goldman Too

• The Silicon Valley-Wall Street partnership could produce dividends for both companies

To reboot its push into electronic payments, Apple Inc. announced on March 25 a credit card that's integrated with the iPhone. It's backed by a company that might seem like an obvious choice, Goldman Sachs Group Inc. But while the bank is among the financial world's biggest names, it's not known for its experience serving consumers. The Apple Card might ultimately be as big a deal for Goldman as for the iPhone maker.

The credit card will be the first issued by the bank's new consumer unit, Marcus. For months, Goldman has been saying it's looking to enter the card business, which it believes can deliver attractive returns. But the conventional wisdom is that bigger players have an advantage because of the high overhead costs of dealing with retail customers.

To keep costs down, customer support for the Apple Card will be provided through iMessage, Apple's chat service. Consumers will apply using the Apple Pay app; if approved, a card icon will instantly appear, and the account will be ready for use. Apple and Goldman say they'll ditch late fees, which have historically generated as much as 7 percent of revenue for card issuers.

To enhance security, the physical card won't have a number on it. Apple won't share user data with partners and advertisers; it also won't know what cardholders have bought, where they made purchases, or how much they spent with the card, which will run on the Mastercard network, according to Jennifer Bailey, Apple's vice president of Apple Pay. Privacy is what may distinguish Apple from its rivals. "I think the market is definitely going in that direction," says John Grund, a managing director in the payments practice at Accenture. "Apple just maybe gave a big push."

The company has struggled to achieve widespread use of its payment app, with consumers lamenting difficulties. Now it will see if teaming up with a bank famous for engineering corporate takeovers will solve the problem. *—Jennifer Surane*



• Consumers can manage their Apple Card account through the Apple Pay app

THE BOTTOM LINE Heartbeat trades—in which assets are quickly moved in and out of funds—stretch ETFs' long-standing tax advantage even further.

THE BOTTOM LINE After its initial attempts to get into the payments business fell short, Apple is emphasizing privacy—and teaming up with Goldman Sachs.

5280 feet to prove yourself

Square Mile Relay returns to New York City on May 2nd.

One team. Ten runners. One mile each. Race corporate rivals in a one-of-a-kind, immersive team-building experience.

Learn more and register your team at **squaremilerelay.com/NYC**

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Why Are Economists So Bad at Predicting Recessions?

Professional forecasters feel safer in a crowd. There's not much incentive to stick one's neck out

In 1966, four years before securing the Nobel Prize for economics, Paul Samuelson quipped that declines in U.S. stock prices had correctly predicted nine of the last five American recessions. His profession would kill for such accuracy.

With recession talk returning to haunt financial markets and the corridors of central banks, a review of the past suggests that those who are paid to call turning points in economic growth have a dismal record. Unlike the stock market, they're more likely to miss recessions than to predict ones that never occur. The lowlight, of course, was the widespread failure to forecast America's Great Recession, which began in December 2007–nine months before Lehman Brothers filed for bankruptcy.

In February, Andrew Bridgen, chief economist at London-based Fathom Consulting, worked out that of 469 downturns since 1988, the International Monetary Fund had predicted only four by the spring of the preceding year (page 32). By the spring of the year in which the downturn occurred, the IMF was projecting 111 slumps, fewer than ►



Edited by Cristina Lindblad and David Rocks ▲ a quarter of those that actually happened. In a post on his firm's website, Bridgen wrote that while IMF economists monitoring Equatorial Guinea, Papua New Guinea, and Nauru can walk tall for their recession calls, the rest pretty much flopped. "Since 1988 the IMF has never forecast a developed economy recession with a lead of anything more than a few months," he says.

IMF economists point out that they're not alone in missing downturns. A recent working paper by Zidong An, Joao Tovar Jalles, and Prakash Loungani discovered that of 153 recessions in 63 countries from 1992 to 2014, only five were predicted by a consensus of private-sector economists in April of the preceding year. And the economists tended to underestimate the magnitude of the slump until the year was almost over.

The shortcomings of economists are in the spotlight again as the world economy traverses a soft patch. Growth in China continues to cool, while Europe is looking fragile. Italy is already in recession, and Germany and France risk stagnating. On March 22 the U.S. bond market flashed a warning sign when the yield on 10-year Treasury notes dipped below the yield on three-month Treasury bills. That reversal in the normal pattern of interest rates-known as an inversion of the yield curve-has generally been followed by a recession, although the length of time before a downturn varies widely. Meanwhile, in a recent survey of its members, the National Association for Business Economics found 42 percent anticipate a U.S. recession beginning next year, along with 10 percent predicting one this year and 25 percent expecting one in 2021.

What's behind economists' poor forecasting performance? The main reason is that it's simply a hard job. Information about the economy is incomplete and arrives with a lag. And turns in the economy tend to be abrupt. Some are caused by financial shocks, such as stock market panics, which are themselves unpredictable.

Loungani, who works at the IMF, says a lack of incentives may also be partly to blame. Unlike portfolio managers, economists don't have money riding on their ability to accurately predict downturns, and misses are rarely career-ending.

Groupthink may also pose an obstacle. Professional forecasters feel safer in a crowd rather than sticking their necks out with a recession call. Then there's a bias toward clinging to predictions even after contrary evidence emerges. The paper co-authored by Loungani shows that failing to forecast a recession is a much more common error than warning about one that doesn't occur. On the other hand, one way to make sure you never miss calling a recession is to constantly predict one—but be vague about when it will arrive. Stretching out the time horizon is a common gambit. Predicting a contraction 18 to 24 months in the future is a reasonable wager: Since 1959 the chance that the U.S. economy will be in a recession in any given month has been about 13 percent, according to Tom Stark, assistant director of the Real-Time Data Research Center of the Federal Reserve Bank of Philadelphia. (Stark says that stat can't be used to calculate the probability of a recession in the next, say, two years.)

Loungani nevertheless sees some room for optimism in economists' current behavior. In previous cycles, a lot of analysis was devoted to how times had changed and why the business cycle had been tamed, with more soft landings and fewer outright recessions. Stung by the failure of predicting the last recession, the profession has spent the past decade examining how expansions come to an end and discussing the policy tools that may be needed to stabilize an economy that's slowing. JPMorgan Chase & Co. economists currently tell clients there's a 40 percent chance of a downturn over the next year. "That's a better narrative than declaring we are in

a new economy and the business cycle is dead," Loungani says. —*Simon Kennedy and Peter Coy*

THE BOTTOM LINE Economists' inability to accurately predict recessions is a source of concern when key indicators in several countries seem to be flashing red.

Canadians Feel The Debt Burn

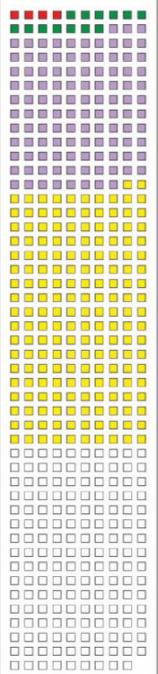
Low rates set off a borrowing boom.
 Now a reckoning may be fast approaching

Kieran Maxwell flinches when she sees an 800 number light up on her phone. It's a natural reaction after a decade of being hounded by debt collectors. "You go to bed thinking about it. You wake up thinking about it," she says. "I wouldn't even want to answer the phone, because I didn't want to know who was asking for what."

The 43-year-old single mother is about C\$100,000 (\$75,000) in debt, mainly from student loans to fund nursing and kinesiology degrees at Toronto's York University. The loans might have been manageable • Recessions in 194 countries since 1988 by when they were predicted in the IMF's *World Economic Outlook**

- Predicted in spring of the preceding year
- Fall of the preceding year
- Spring of the same year

Fall of the same yearNot predicted



if she hadn't had to turn to credit cards to help cover other expenses, including private school and tutoring to help her 14-year-old son overcome a learning disability. The breaking point came in 2017, when she realized she couldn't make even the minimum payments on her credit cards.

Household debt in Canada, a nation generally known for moderation, has reached levels that could be qualified as excessive. Canadians owe C\$2.2 trillion—which, as a share of gross domestic product, is the highest debt load among the Group of Seven economies. With the housing market cooling, a reckoning may be fast approaching. People are "freaking out," even though, with interest rates not far above historical lows, "money still costs nothing," says Scott Terrio, a Toronto-based manager at Hoyes, Michalos & Associates Inc., which specializes in insolvency.

Until recently, Canada had been lauded as a bastion of sound financial management. The country of 37 million emerged relatively unscathed from the global financial crisis, thanks in large part to the strength of its banks. But the extended run of low interest rates that followed sparked a boom in borrowing, with the ratio of debt to disposable income rising to a record 174 percent in the fourth quarter, from 148 percent a decade earlier.

Now everything is downshifting. The Bank of Canada has hiked the benchmark interest rate five times since mid-2017, to 1.75 percent. Federal and provincial governments have enacted a raft of rules in recent years to tame housing speculation. The policy changes are having an effect. Home values fell in 2018 for the first time in three decades, and the slide has extended into this year. Credit growth is running at its slowest annual pace since 1983.

Households are feeling the strain. The debtservice ratio—a measure of how much disposable income goes to principal and interest payments climbed to 14.9 percent in the fourth quarter, almost matching the 2007 record high. A total of 31,900 Canadians filed for insolvency in the three months through December, the most since 2010.

It's hard to tell how bad things could get. Many financial indicators remain benign. The credit card delinquency rate was 0.79 percent in February, well below levels seen during the financial crisis, while the share of mortgages in arrears was 0.24 percent at the end of November, close to the lowest since 1990. Jodi Letkiewicz, an associate professor at York, isn't reassured. "The last thing to go is the mortgage," she says, adding that before then, people stop making car payments or they begin making smaller credit card payments. "By then, they're already in a lot of trouble." That dynamic may already be playing out: Delinquencies on auto loans hit 0.97 percent in the final quarter of 2018, the highest since the aftermath of the 2008-09 recession, according to credit monitoring company Equifax.

Much depends on what happens to housing prices, particularly in Canada's largest city. John Pasalis, president of Realosophy Realty, a Toronto property brokerage company, says one potential trouble spot is the city's condo sector, where many

▼ Maxwell at home in Toronto



buyers who snapped up preconstruction units paid well above current resale prices. If the job market wobbles and prices for condos start to fall, people could start walking away from their contracts, Pasalis says. "Then we have problems."

Another pocket of vulnerability is Helocs, or home equity lines of credit. This type of revolving credit played a supporting role in the U.S. housing bubble as Americans tapped the rising equity in their homes for cash. In Canada, borrowing through Helocs has grown faster than residential mortgages since 2017. On a per capita basis, Heloc balances in Canada averaged \$4,849 in October, more than quadruple the \$1,080 average in the U.S., according to Bloomberg calculations based on data from DBRS Inc. and the U.S. Federal Reserve. DBRS, a Toronto-based credit rating company, warned in February that if real estate prices fall, homeowners may find themselves with debt loads that exceed the value of their homes.

Like Maxwell, many Canadians are getting trapped in the debt cycle even before they enter the property market. After William Weathersby lost his IT job in 2012, he turned to a payday lender and ended up juggling C\$12,000 in high-interest loans, as well as credit card debt and tax arrears. He

 Household debt to GDP Canada 100.2% U.K. 86.5 U.S. 76.4 France 59.5 G-20 58.4 Japan 57.7 Germany 52.7 Italy 40.9

34

filed for insolvency two years ago. "It really just caught up with me," Weathersby says. He eventually found work at a call center. Striking an agreement with creditors to pay only a portion of the debt "basically saved my life," he says.

Many economists are confident Canada will avoid a U.S.-style blowout, not least because of the strength of its labor market: The economy created 122,700 jobs in January and February, the best start to a year since 1981. The Bank of Canada expects GDP growth to pick up in the second half of this year.

Some of the riskiest practices that set the stage for the U.S. housing bust, such as Ninja loans—no income, no job, and no assets—are nonstarters in Canada. Another brake is that unlike in the U.S., mortgages are "full recourse" in most of Canada, meaning lenders can pursue borrowers even after they've walked away from the property. For Maxwell, owning a home is a long-forgotten dream. Refusing to file for bankruptcy, she went to a credit counseling service that helped her budget and negotiated a repayment plan with her creditors. Her investment in getting a degree is starting to pay off: She has a C\$80,000-a-year job at a nurses' union. If all goes well, she'll be able to pay off her existing credit card debts in two years. The almost C\$90,000 of outstanding student loans is a hurdle she'll clear later, she says. Money is tight, though, so much so that when Maxwell wanted to take her son to Cuba as an eighthgrade graduation present, she had to borrow from family. —*Chris Fournier and Erik Hertzberg, with Natalie Wong*

THE BOTTOM LINE At more than 100 percent of GDP, Canada has more household debt than any G-7 country. Personal bankruptcies in the final months of last year reached 2010 levels.

The Unbearable Bounty of Brexit

• In Amsterdam, an influx of jobs from London is an economic blessing but a housing bummer

After more than three frustrating months looking for a place to live, Laura van Overveld saw a listing for a one-bedroom apartment close to central Amsterdam that seemed promising. Although the price was a bit of a stretch at €285,000, she called the agent to schedule a viewing. The response: Forget it, 90 others were in line ahead of her. "You get the feeling that you're just searching for nothing," says Van Overveld, 27, an account manager at an online finance company who's now renting a cramped flat with two other women. "Every time you see something, there are people–couples or investors–who can pay more."

The woes of the likes of Van Overveld and, presumably, the 89 others who didn't get the apartment are weighing on Amsterdam officials as they face an influx of wealthy newcomers because of Brexit. Dozens of companies have added Amsterdam offices as a result of the U.K.'s impending departure from the European Union, and some 2,400 jobs have been created in the Netherlands, with officials predicting many more will come. Real estate agents say they speak English with half the buyers or renters who show up for home viewings, and lender ABN Amro Group NV has stationed a Brexit team of 10 people at Amsterdam's airport to offer mortgages to potential homebuyers flying in from London. "The people and companies coming here are a blessing," says Udo Kock, the Amsterdam official responsible for economic affairs. "But given that the supply of housing is limited, every increase in demand leads to more pressure on the market."

The city of 860,000 is already struggling to provide shelter for its residents. To meet demand, the metropolitan area needs to add more than 40,000 homes–6.6 percent of the total market, consulting firm Capital Value BV estimates. The median home price has jumped 80 percent in the past four years, to €448,000 (\$505,000). With most places subject to bidding wars that end well above asking prices, Van Overveld's real estate agent advised her to consider • Median home price in Amsterdam



only apartments listed at about 20 percent below what she could afford. "Everything in my price range has all sorts of issues, like deferred maintenance or impractical layouts," Van Overveld says. "You need a small bed for some of them, because a normal-sized one literally doesn't fit between the walls."

The city last year said it aims to add 7,500 homes annually through 2025, a third of them designated social housing, with rents topping out at €711 a month. Officials have proposed a ban on rentals of newly built homes to keep landlords from snapping them up and pushing potential middle-class buyers out of the market. And the government is considering what it calls an "emergency button" to cap rents when they're rising too fast. "We don't want to become like New York, with a lot of rich and poor people and few in between," says Laurens Ivens, the city official in charge of housing.

Those proposals have sparked intense opposition from developers and landlords. Institutional investors say rent controls would be counterproductive by making it impossible to earn a reasonable profit from housing. With construction costs and land prices also rising sharply, returns are already low, and pension funds and other typical backers of such projects would likely balk at anything less, says Gertjan van der Baan, chief executive officer of Vesteda, an investment company that owns 28,000 apartments in the Netherlands. "The only remedy to the housing problem is to build more," he says. "An emergency button to cap rents would scare off investment" and limit the supply of new homes.

Even if Britain were to call off its exit from the EU, some of the jobs and the people who fill them would likely continue to flow to Amsterdam. After seven years in London, Hannah Al-Sad, 29, was looking for an adventure, and with Brexit looming she jumped at an offer from an ad agency in Amsterdam. For her first month, she says the company arranged a "really nice" apartment near Vondelpark, a green oasis just outside the central canal zone. The trouble began when she had to find her own place: Agents gave would-be renters 10-minute time slots, mostly during working hours, and by the time Al-Sad got to the better flats, others had already made offers and "the chance was gone." After about a dozen viewings, she finally landed a small apartment at a far higher price than she'd expected. Finding it was, Al-Sad says, "a stupid game." — Ruben Munsterman and Ellen Proper

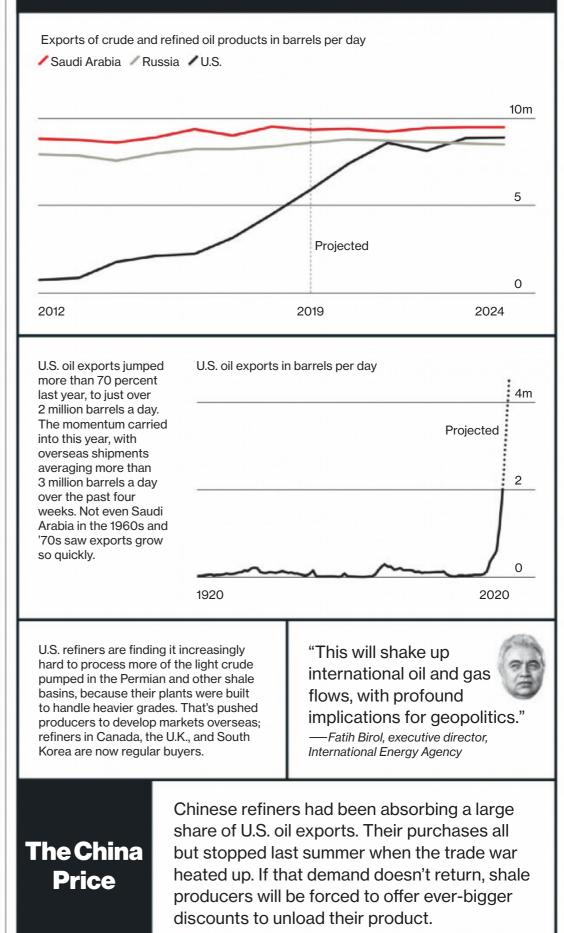
THE BOTTOM LINE With thousands of newcomers expected because of Brexit, Amsterdam faces ever-greater difficulties in providing shelter for its 860,000 residents.

Oil

U.S. Exports

America's shale boom is in its second decade, but it was only three years ago that Congress lifted a 40-year ban on most oil exports. At the current pace, the U.S. will soon surpass Russia's export volume and come close to Saudi Arabia's. — Javier Blas

Birth of a Petrostate



35

36



• The numbers were there at the top of Attorney General William Barr's March 24 letter to the House and Senate Judiciary Committees: 22 months, 19 attorneys, 40 FBI agents and investigators, 2,800 subpoenas, 500 witnesses. After everything that went into special counsel Robert Mueller's probe into possible collusion between Russia and the 2016 Trump campaign, Barr's four-page summary of its conclusions was anticlimactic—to everyone but the president. Although Mueller didn't find sufficient evidence to establish that the campaign "conspired or coordinated" with the Russian government, and Barr determined that the findings didn't warrant an obstruction charge, there may still be plenty in the report that the White House would want to keep secret, and that Democrats would desperately want to see. Even before the special counsel's investigation ended, the squabble over who'd get access to its contents had already begun.

Judicial Secrecy Restrictions

In June 2018, before he was nominated to his current post, Barr wrote an unsolicited memo arguing that the Mueller team shouldn't have standing to question Trump on obstruction of justice unless it had already established collusion with Russia. Mueller gave Barr and Deputy Attorney General Rod Rosenstein advance warning on March 5 that he wouldn't make a determination on obstruction. But still, the Justice Department's quick turnaround on the question—within 48 hours of announcing it had received the report—only adds to congressional Democrats' distrust.

The day after Barr sent his summary to Congress, six leading House Democrats responded with a letter of their own, which formally requested that Justice begin making the full text of the special counsel's report, as well as any underlying evidence used to produce it, available to lawmakers no later than April 2. After a short March 27 meeting with the attorney general, House Judiciary Committee Chairman Jerrold Nadler told reporters that almost certainly wasn't going to happen.

"We're not happy about that, to put it mildly," he said. Nadler and others, including California Senator Kamala Harris, who's competing for the Democrats' 2020 presidential nomination, had called for Barr to testify before the House on his decision-making, which would surely involve questions about what evidence he considered in reaching such a swift conclusion. Nadler said that testimony would happen "reasonably soon," adding, "we may very well want Mueller after Barr."

In his summary, Barr said he intended to release "as much of the special counsel's report as I can," consistent with Justice Department policies and the Federal Rules of Criminal Procedure, which prohibit disclosing certain materials related to grand jury proceedings. CNN reported that in a closeddoor meeting on March 26, House Speaker Nancy Pelosi told Democrats they couldn't trust Barr's words alone. "We cannot make a judgment on the basis of an interpretation by a man who was hired for his job because he believes the president is above the law," she said.

With the total number of ongoing investigations spun off from the special counsel's probe still unknown, Democrats will have plenty of fodder to question Barr's judgment on what can and cannot be disclosed. Barr's testimony before the Judiciary Committee hadn't been scheduled at press time, but depending on when that occurs, Barr may get a preview on April 9, when he'll appear at a previously scheduled House Appropriations subcommittee meeting to discuss the Justice Department's budget requests. This testimony would represent only his second time speaking as Trump's attorney general and his first appearance before Congress since his Senate confirmation hearings in January.

At those hearings, he gave lawmakers a potential justification for withholding even a redacted report. "If you're not going to indict someone, then you don't stand up there and unload negative information about the person," Barr said. "That's not the way the Department of Justice does business."

The comment echoed Rosenstein's memo criticizing former FBI chief James Comey for his treatment of Hillary Clinton during the investigation into her use of a private email server as secretary of state. That memo was cited in part to justify Trump's firing of Comey, which led to Mueller's hiring as special counsel. If Barr sticks to this line, expect House Democrats to respond with subpoenas. —*Chris Strohm and Greg Farrell*

The Executive Privilege Argument

Early on in the investigation, the president's lawyers agreed to cooperate with prosecutors from Mueller's office-but reserved the right to exercise executive privilege at a later date to prevent certain materials from coming to light. Even as the president, who's been publicly celebrating the end of the investigation, told reporters at the White House that "it's up to the attorney general, but it wouldn't bother me at all" to see the full report released, one of his lawyers, Jay Sekulow, was on CNN saying it would be "very inappropriate" to release Trump's written answers to the Mueller team's questions, in part because it could set a bad precedent for other presidents. One duty of the attorney general is to protect the president's right to keep privileged communications secret, which puts both Barr and Trump in an awkward position.

The concept of executive privilege exists so a president can have sensitive conversations with advisers without fearing their contents will later come out and become politically damaging. Privilege is not absolute, however. In the fight "If you're not going to indict someone, then you don't stand up there and unload negative information about the person" • over President Nixon's Oval Office tapes, which capped off the Watergate crisis, the Supreme Court in the end determined that the public's interest in hearing them outweighed the president's assumption of privacy.

Ultimately, the decision to exercise executive privilege doesn't belong to the attorney general or Trump's lawyers—it's the president's alone to make. Should he choose (or be persuaded) to exercise a sweeping claim to privacy, Democrats are likely to challenge him all the way to the Supreme Court, a process that could take months, if not years, to complete. Meanwhile, any sections of the report covered by that claim could remain out of public view, possibly until after the 2020 presidential election. —*Shannon Pettypiece and Chris Strohm*

PoliticalCalculations

"I would hope it would not be necessary to subpoena the attorney general," Nadler said at a news conference in New York hours after receiving Barr's letter. Despite his measured tone, it was clear how much of the report he expected to be disclosed—that is, all of it.

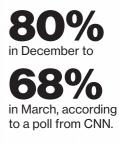
On March 14, the House voted 420-0 to adopt a nonbinding resolution declaring not only that the full report be provided to Congress, but also that all but those portions the Justice Department is legally prohibited from disclosing be made available to the public. Nadler confirmed to reporters that the panel intends to "move forward with our investigations of obstruction of justice, abuses of power, corruption—to defend the rule of law, which is our job," emphasizing that Judiciary has a "broader mandate" than Mueller had as special counsel.

That broader mandate, of course, includes the power to investigate the president for "treason, bribery, or other high crimes and misdemeanors," impeachable offenses under the Constitution. Nadler has consistently sought to downplay the idea that his committee's work is building up to impeachment proceedings—but he hasn't dismissed the possibility, either.

Any move in that direction could be risky for Democrats. At least according to a March 14-17 CNN poll, many in the party's base—68 percent wanted to see Congress act to impeach the president and remove him from office no matter what the special counsel's office found. But that number was down, from 80 percent in December, just before Democrats retook control of the House. Mueller's findings may have taken still more wind out of those sails. Especially as the administration renews its attacks on the Affordable Care Act, neither Nadler nor Pelosi wants to risk distracting voters from health care and the other issues that helped the party take back the House in the midterms just to settle a score with Trump.

The many Democrats vying for the 2020 presidential nomination all sounded a remarkably similar tone when it came to Trump and the Mueller investigation, demanding the report be made public but stopping short of calling for any action on impeachment. "We want to make sure that we carefully guard and jealously hold these institutions of our democracy and employ this mechanism of impeachment as an absolute last resort," Beto O'Rourke said in Charleston, S.C. "Ultimately, I believe this will be decided at the ballot box in 2020."

On March 26, four days after Barr received the Mueller report, a Justice Department official said the attorney general planned to take weeks, not months, to complete his review of the material, which may help Democrats. If they take their eyes off the ball for too long, warned South Bend, Ind., Mayor and presidential contender Pete Buttigieg in a March 22 MSNBC appearance, "then not only is it possible for [Trump] to succeed in 2020, but we could also find ourselves with another figure like him—or even worse—in the future." *—Sahil Kapur and Billy House* • Among Democrats, support for impeaching Trump dropped from



Among Republicans surveyed, support for impeachment declined from



16 Questions Barr Didn't Answer That the Full Mueller Report Could

1 Why didn't Mueller reach a finding on whether Trump tried to obstruct justice?

2 Why did he let Trump submit written answers rather than subpoenaing him for an interview?

• Without interviewing Trump, how is it possible to make a decision about obstruction?

Are there any instances of potential obstruction that weren't made public?

• Whom did the special counsel's office interview?

6 How wide-ranging is the report?

What was the standard of proof?

8 What unreported lines of investigation did the special counsel's office spin off?

 What conclusions did Mueller draw from apparent discussions in Trump's campaign about Ukraine and sanctions relief for Russia at a time when Trump was negotiating to build a tower in Moscow?

• What evidence did he gather about Jared Kushner's alleged efforts to establish a back channel with Russia?

(1) What about Don Jr.'s June 2016 Trump Tower meeting with Russians?

What did Mueller conclude about Paul Manafort's interactions with a Russian suspected of having ties to the country's intelligence service?

(B) What about Roger Stone's alleged interactions with WikiLeaks?

What happened to the draft charges against Jerome Corsi, Stone's alleged WikiLeaks intermediary?

(B) Will we ever know if Russia's sabotage attempts swayed the 2016 election?

Did Mueller recommend ways to prevent foreign interference in future elections? — Andrew Martin, David Voreacos, and David Kocieniewski, with David Glovin

April 1, 2019

Erdogan's Lost Economic Edge

• He boosted Turkey's growth by focusing on cities, but now both urbanites and farmers are unhappy

The quiet is nagging at Hasan Gormez as he sips a Turkish black tea outside a cafe in Yeniceabat, a hamlet about a two-hour drive south of Istanbul. "Back in the day, the village coffee shop was filled with happy farmers joking around," says Gormez, 48, who works 30 acres he inherited from his family. "Now everyone here is upset about the economy, and our kids are gone."

The "New Turkey" that President Recep Tayyip Erdogan has been touting ahead of local elections on March 31 is a nation emboldened by its economic clout, even though a recession has cut short the expansion that had gone on almost uninterrupted since late 2009. Yet by hitching development to consumer spending and urban infrastructure projects, Erdogan has also accelerated one of the biggest population shifts in modern Turkish history, dislodging 2 million people from agriculture jobs to look for work in the big cities.

The share of the workforce employed in farming has almost halved, to 15 percent, during Erdogan's 16 years in power, and an area the size of Holland has been taken out of cultivation. As villages have emptied, Turkey's self-sufficiency has withered. The Economist Intelligence Unit's latest Global Food Security Index ranked it 48th of 113 nations, below Saudi Arabia, Qatar, and other desert states.

Erdogan got his political start in the 1990s as mayor of Turkey's commercial hub, Istanbul, and built his base among working-class city dwellers by developing infrastructure and extending social support. Yet even Turkey's urban centers have emerged as battlegrounds in the local elections, the president's first test at the ballot box since assuming vastly expanded executive powers last year. The longtime leader has a track record of swinging voters his way as polling day nears, but this time, Turks are casting ballots with the economy shrinking, jobs disappearing, and food prices rising.

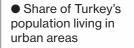
Erdogan still wields immense influence in the countryside, where people embraced his attempts to break with the country's more secular recent history and return to a government steeped in Islam. But the political winds are starting to shift there, too. Once an agricultural powerhouse, Turkey has grown reliant on cheaper food imports over the years, making farming less profitable and adding to the ranks of exiles from the villages. That didn't seem to matter much until last summer, when the lira's meltdown made those imports increasingly expensive, driving up food inflation at the fastest pace since at least 2004. A farmer and onetime loyal AKP voter, Erdinc Sari, 46, says it's time for a change. The price of animal feed has more than doubled in three years. The government provides 1,500 liras (\$280) in annual support, barely enough to cover 10 percent of what he spends on fertilizer alone. "I have two kids: one son, one daughter," he says. "I don't want them to become farmers like their dad."

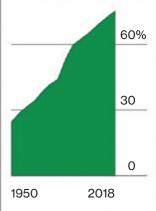
Erdogan's response to rising prices has been to lurch away from the free market toward state-led interventions. Municipal police have raided warehouses and hounded retailers, blaming hoarders for runaway prices, while stalls sell state-subsidized food, competing directly with privately owned retailers. The government has also tried propping up the lira, pressuring banks not to facilitate bets against the currency by foreign fund managers.

The law enforcement crackdown was enough to slow the upward momentum in food prices in February. But food inflation is running at more than double the central bank's yearend forecast. The jobs in services and construction that turned millions of villagers into urban dwellers are also disappearing fast. Unemployment jumped for eight straight months through December, reaching 13.5 percent, its highest level since 2009.

Every week since he lost his job six months ago, Muharrem Cinar, 51, has visited the government-run employment agency in Ankara. Disappointed each time, he's been forced to borrow heavily from friends and family to pay for his children's education. "I've never been unemployed for this long in my life," he says. "I don't even have money to buy bread."

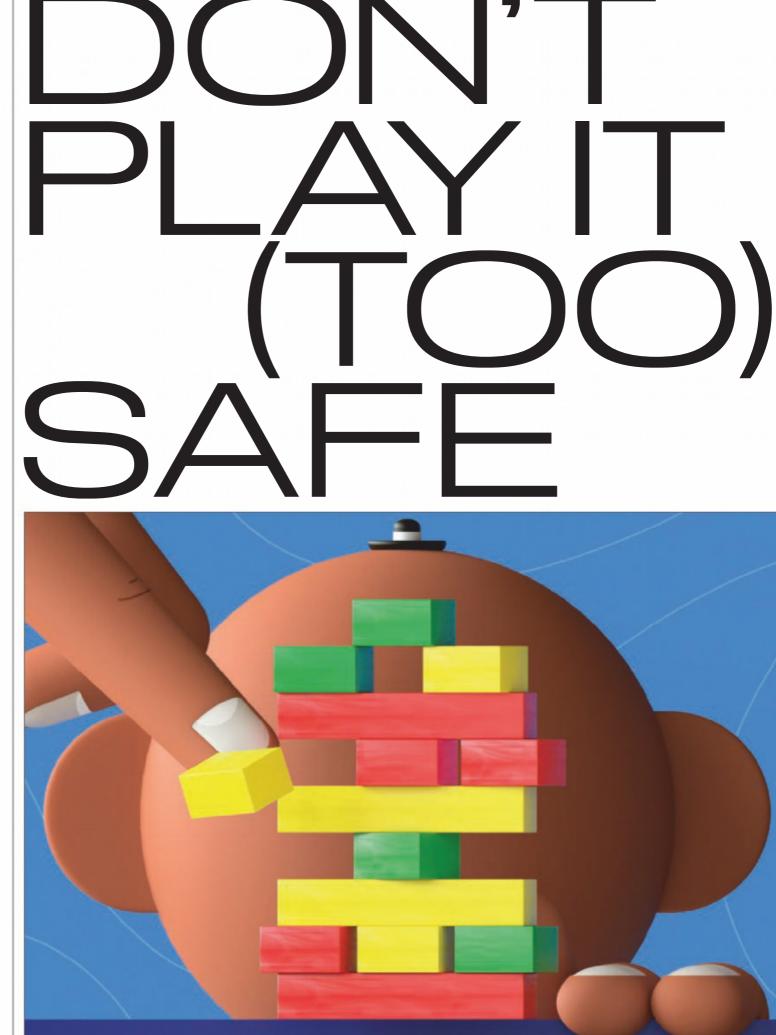
But it's the youngest Turks who've been stung the most. A quarter of people age 15 to 24 need jobs. Rabia Akman, 24, a nurse with four years of experience, has also been unemployed for six months. "I don't want to say I don't have any hopes for the future," she says. "But I'm scared." —*Cagan Koc*





THE BOTTOM LINE While Erdogan himself isn't up for reelection, local votes will show how his support is holding up as the economy sinks and inflation rises.





Edited by Dimitra Kessenides Are you risk-loving or risk-avoiding?
 Knowing your own tolerance will make you a better decision-maker

40

Risky business, as every chief executive officer knows, is a redundant phrase. "To create value for shareholders, you inherently must take risks," says Todd Gormley, an associate professor of finance at Washington University's Olin Business School.

Although some CEOs embrace Alexander Smith's notion that "everything is sweetened by risk," arguably more favor Edmund Burke's belief that "early and provident fear is the mother of safety." Somewhere between lunatic risk-taking and paralyzing risk aversion exists a sweet spot of daring but prudent action. Finding this is as much art as science. Here are some tactics to help:

ACKNOWLEDGE YOUR TEMPERAMENT

Even among CEOs, there's a spectrum of riskseeking to risk-avoiding personalities. "The perception is that CEOs, compared to the average person, are more likely to be risk-loving," says Gormley. "But the data clearly shows that they also play it safe in many business settings." For any leader, it's important to know how your risk tolerance can bias your decisions, consciously or not. But understanding how your own temperament influences decisions can be difficult, says researcher Donald Hambrick, a professor of management at Penn State's Smeal College of Business. "That's one of the reasons for the burgeoning executive coaching industry," he says. Another suggestion: Surround yourself with a leadership team of people with different dispositions who can serve as a sounding board-and are strong enough to disagree with you.

EMOTIONS ARE YOUR FRENEMY

Conventional wisdom has long suggested that succumbing to emotion dooms rational deliberation. But as neuroscientist Antonio Damasio discovered in the early 1990s, emotion is essential to risk analysis. Damasio, a professor of psychology and neurology at the University of Southern California, studied patients with lesions in the emotional centers of their brains. The reduced influence of emotion didn't render them coolly calculating, logical decision-makers like *Star Trek*'s Spock. Quite the opposite: These patients were unable to make even trivial decisions, such as what to eat for lunch.

Emotion is essential to handling risk, but that doesn't mean it helps us make the right decisions. Studies show that anger makes men, though not women, more willing to gamble. It also makes both sexes less generous and more prone to impulse buying. By contrast, disgust increases risk aversion, an effect particularly pronounced in women. Decisions made in the throes of almost any strong emotion, from terror to optimism, most often lead to regret. "For many CEOs, one of the most important aspects of personality is narcissism" As researchers at University College London found, the key appears to be letting emotion flavor rational deliberation but not overwhelm it. Most of us know not to make important decisions in the heat of the moment-take a break, sleep on it, cool down. "Emotion recollected in tranquility" (William Wordsworth) isn't just the key to poetry but also to sound judgment.

NARCISSISM AND CAPABILITY CUES

External factors known as capability cues also exert strong influence on whether we're likely to shoot for the stars or stay the course. CEOs are regularly barraged with feedback on their performance, from objective measures such as stock price to softer signals such as press coverage. These can raise or lower their self-confidence—and in turn affect risk-taking.

"For many CEOs, one of the most important aspects of personality is narcissism: an inflated sense of self coupled with a need to have that sense of self reinforced," says Arijit Chatterjee, associate professor at Ecole Supérieure des Sciences Economiques et Commerciales. Hambrick and Chatterjee analyzed how objective measures and social praise influenced spending by 152 computer industry CEOs. As a proxy for risk-taking, they used measures such as research and development investment, and for risk aversion, how much a CEO was willing to overpay for acquisitions. The results: Objective performance measures had little effect on the confidence and risk-taking of more narcissistic business leaders, but media praise had a huge impact on their egos and belief in their abilities. By contrast, objective data mattered a lot to the less narcissistic, but media praise left them relatively unfazed.

The lessons seem clear enough. For narcissistic CEOs: Don't let a glowing cover story, or hatchet job, turn you too cocksure or gun-shy. For non-narcissists: Don't let recent performance, good or bad, knock you off your game.

ALIGN PERSONAL AND COMPANY RISKS

Incentive packages, outside oversight, and job security factor dramatically into a CEO's willingness to take or avoid risks. Gormley, along with David Matsa, a professor of finance at Northwestern University's Kellogg School of Management, wanted to study why some CEOs, faced with the need to change strategies, stay the course rather than taking, as they put it, "painful-but-profitable choices like redistributing resources, enforcing pay cuts, or closing a plant and laying off dozens of workers."

The most common reason, they discovered, was that it wasn't in CEOs' personal interest to do so, especially when their comp packages were heavy >

In equity. "When your wealth and reputation are all in one basket," says Gormley, "the impulse is to protect yourself, even if it's not in the best interests of the shareholders." The latter can spread their own risk by diversifying; not so a CEO whose net worth is tied overwhelmingly to one company.

SELFISH ACQUISITIONS

For companies facing serious threats, such as litigation or new regulations, a common risk-hedging strategy is to diversify through acquisitions. "It's the same as an investor diversifying his personal portfolio," Gormley says. A famous example is Phillip Morris International's 1988 acquisition of Kraft Foods at a time when the health risks of smoking were becoming impossible to ignore. This might seem a prudent move, ensuring that even in worst-case scenarios, leadership will still have a company to run. But acquisitions are often less beneficial to ordinary shareholders, because their costs in added debt or dilution of equity outweigh any benefits. "If an individual is worried about risk," says Gormley, "he or she can diversify for themselves at much lower cost. They don't need the tobacco company to go buy other companies for them."

Gormley and Matsa suggest several ways management can be more responsive to shareholders, from eliminating poison pill-style protections from potential takeovers to annual elections to ensure the independence of the board.

PAYING FOR PRUDENT RISK-TAKING

Perhaps the most powerful tool is the structure of compensation packages for top leadership. It's long been thought that payment heavy on company stock shares encourages strong performance because it hitches a CEO's success to the company's. In reality, Gormley says, equity can be a perverse incentive to play it safe and avoid risks. Stock options, on the other hand, encourage risk-taking because management is rewarded only when share prices climb. Just don't go overboard loading up a CEO with options.

According to "Swinging for the Fences," a study co-authored by Hambrick, when stock options constitute 30 percent to 40 percent of an executive's pay package, it encourages not only more "swings" but also a favorable distribution of home runs and strikeouts. "Once you get above 50 percent," he says, "the risk-taking becomes really careless and the outcomes become lopsidedly negative." — *James Thornton*

THE BOTTOM LINE Risk-taking can be inappropriate, and so can risk aversion. What's a CEO to do? Strive for somewhere in the middle—cautious, but not afraid.

Women, men, and work: It's complicated. Joanne Lipman, the former editor-inchief of USA Today and chief content



officer of Gannett Co., has spent her career navigating office gender issues. Her how-to guide, *That's What She Said: What Men and Women Need to Know About Working Together*, out in paperback, has advice on dealing with the complexities. She spoke with *Bloomberg Businessweek* about the gender gap. —*Arianne Cohen* • Your book convincingly argues that both men and women discriminate against working women. Why does that happen?

What we're talking about is unconscious bias. Everyone–women, men, black, white–has biases that are buried so deeply inside that they don't realize they exist. These biases come out in subtle but important ways. For example, women are interrupted three times as often as men, and when women do it, they tend to interrupt women.

• What would you say to executives whose solution to #MeToo is to avoid one-on-ones with women?

I have zero patience for it. Absolutely none. Because most of them are men who were not mentoring women in the first place, so it's an excuse. • So, many men still feel they're walking on eggshells?

If men have questions about appropriate behavior, just ask. Women are generally not going to be offended. For example, I met a male business friend who I had not seen in a while. We met for a drink. We walked into a restaurant, and he gave me a hug and then immediately said, "Is that OK?" And I said, "Yes, it's totally fine, I'm a hugger. But I'm really glad you asked, because it might be uncomfortable to the next woman."

• How can women subtly help other women?

Three ways. First, interrupt the interrupters: Say, "Oh, Betsy is speaking. I would love to hear her finish." Some companies now have No Interruptions rules. Second, amplify: When a woman says something, another woman repeats her idea, giving her credit by name. And my favorite is brag buddies: Two women recount their achievements to each other, and then each one goes to the boss and brags about the other.

April 1, 2019

GO SCORCHED EARTH

• Four books suggest you overhaul everything at work, including your allotted business book reading time. So we read them for you. Bottom line: Abandon everything that's not nimble, fast, and friendly. — Arianne Cohen

GREAT

FADERS

Great Leaders Have

No Rules: Contrarian

Leadership Principles

and Business

By Kevin Kruse

Clunky old-school

and sanity, because

modern success

management standbys

will crush your company,

operates in real time, at

high speeds, and face-

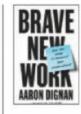
playbooks won't help you,

to-face. How-to-lead

so toss them out now.

to Transform Your Team





Brave New Work: Are You Ready to Reinvent Your Organization? By Aaron Dignan

The practices of many organizations are ancient and based on outdated assumptions that are rarely reconsidered—like an operating system that needs a revamp. Are time-intensive performance reviews the best use of managers' hours? Probably not. Are there better, more efficient ways to help employees achieve? Yes.

PREMISE

ACTION PLAN

Overhaul your existing organization—its purpose, structure, workflows, all of it. Make it more fluid, like the Hollywood ecosystem: Directors, cinematographers, and editors organize and reorganize around projects and hold multiple roles on different productions at the same time. Be accessible and likable. This means showing your weaknesses. Don't be shy about sharing past business failures. Be transparent about pretty much everything, play favorites with the best and brightest, and lead with heart. Instead of an open-door policy, consider weekly catch-ups.



Nine Lies About Work: A Freethinking Leader's Guide to the Real World By Marcus Buckingham and Ashley Goodall

So many workplace norms are accepted without question. The authors present nine that you should start challenging—for example, strategic planning, which they say is more an exercise in abstract guessing. Instead, focus on data collection and sharing the more you share, the better-coordinated actions will be.

Don't feel compelled to provide constant feedback. That can harm performance. Instead, help your workers excel by focusing on what works with each of them individually and reinforce that each time an employee does something well by telling her how you experienced it.



Range: Why Generalists Triumph in a Specialized World By David Epstein

Don't bother specializing early—today's top jobs are in complex and unpredictable fields and need employees with broad, flexible knowledge.

Leap from one career to the next, then trot into a CEO gig around the time your friends retire. Stop planning for the long term—respond to life with changes as needed. It's all right not to use that graduate degree.

PROVE YOURSELF NOW



 New and incoming C-level staff must win over directors and activist shareholders from Day 1

Debra Weiser knew she had to quickly show her leadership strengths when she was hired as vice president and head of excess casualty at Everest Insurance Co. 20 months ago. While getting to know her staff and assessing their talents, she took one-onone meetings with her boss and top executives in finance, law, and other departments, whose counsel she knew she'd need. And she didn't hesitate when she was asked early on to discuss her five-year plan at a meeting, even after learning she had to prepare her own PowerPoint deck, a task she'd relied on support staff to do at her prior job at a larger insurer.

"Business moves so much faster today. You have to throw yourself into the work and learn very quickly who's who, who does what, and how your company operates," Weiser says. "Adaptability to new cultures and ways of doing things are some of the keys to success."

The executive suite revolving door is turning more swiftly as corporate directors and activist investors demand strong results—or seek management changes if they don't happen. That puts more pressure on new chief executive officers and other C-level staff. Instead of a grace period to find their footing and mull strategies, they must immediately tackle challenges and show their capabilities.

Last year, 1,452 CEOs at public and private companies and nonprofit groups left their position, 25 percent more than those who departed in 2017, and just shy of the highest annual CEO departures recorded during the 2008 financial crisis, according

MANAGE EXPECTATIONS

• Listen to the concerns and ideas of employees first and focus early on areas in which they need help.

② Diversity of thought works to your advantage and your company's. Everyone on your team can't and shouldn't be like you.

Streamline meetings, encourage collaboration, and make yourself available to employees who have questions and concerns.

Communicate openly with co-workers and directors about your goals and the reasons for them—and about the priorities management has to propel the company forward.

• Deliberate before committing to goals that others set and don't promise results you aren't certain you can deliver. to executive recruiting company Challenger, Gray & Christmas. Although 27 percent of these departures were retirements, many CEOs resigned amid board questions about performance, and some because of professional or sexual misconduct allegations.

"CEOs and other top executives must start earning their stripes from Day 1 on new jobs, and there's little margin for error," says Ken Freeman, former dean of Boston University's Questrom School of Business and the former founding CEO of Quest Diagnostics Inc. in Secaucus, N.J. Social media and the availability of data about companies' performance compound the pressures, adding "constant, up-to-the-minute scrutiny of CEOs," he says.

An essential first step is becoming knowledgeable about customers' needs and employees' talents. "One big mistake some new executives make is thinking they can help underperformers improve, instead of cutting them loose quickly and getting the best possible team in place," Freeman says.

New leaders also must balance the pressure to show results quickly with the understanding that big changes—including entering new markets, divesting or acquiring businesses, and recruiting talent don't happen overnight. "Executives have to lay out a road map and shorten the time frame as much as possible, but at the same time avoid the tendency to overcommit," Freeman says. "Overcommitting and then underdelivering is a bad place to be."

Executives can avoid this mistake by dividing goals into incremental steps, says Maggie Wilderotter, a director at Costco Wholesale, Hewlett Packard Enterprise, Lyft, and other companies, and the former CEO of Frontier Communications Corp. in Norwalk, Conn. "Progress is what gets measured rather than the outcome itself," she says. "Executives are less likely to overpromise if they lay out what they plan to achieve in the next three months, six months, and so on." Corporate boards are often comfortable with this approach, she adds.

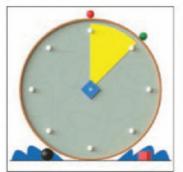
Equally important is frank and honest communication. CEOs must keep all stakeholders—including corporate directors, employees, and customers informed about both problems and achievements and avoid delivering inconsistent messages, says Wilderotter. At Frontier, she told directors and staff it would take at least two years to get to a point where the telecommunications company would start growing. Then, she says, she outlined the steps to get there. "I'd say, 'If we do this and this, we should get this outcome in 90 days,' and then we could review our progress." —*Carol Hymowitz*

THE BOTTOM LINE Under immense pressure from activist investors and social media, new chief executives no longer have a grace period to learn the ropes.

REBBOODT

 The internet is full of distractions that interfere with work. Cal Newport, a Georgetown computer science professor, thinks he can help According to Nielsen, the average American spends three hours a day staring into a phone or tablet. Factor in TVs and computers, and it's up to about nine hours in the glow of a screen. That's a lot of time that could be better used for professional gain. In his latest book, *Digital Minimalism*, technology and productivity expert Cal Newport offers advice on how to free yourself from the tyranny of email, social media, and other digital services. Here are six actions you can take now. —*Clint Carter*

SCHEDULE
 UNINTERRUPTED
 WORK BLOCKS
 Chart your workday
 in two-hour peri ods and quarantine
 tasks that don't
 necessarily boost
 productivity—includ ing meetings and
 phone calls—to



some scheduled breaks between the blocks. "If you take a two-hour block and do literally no quick checks, your mind is operating at full capacity," Newport says. It's like having a cognitive superpower.

HANG OUT WITH YOURSELF By pulling out our phones at the first hint of boredom, most of us suffer from what Newport



calls "solitude deficit," which could be partly responsible for a 5 percent jump in anxiety-related disorders from 2017 to 2018. One way to work in alone time and harness it for creative gain is to practice productive meditation. Do something physical, like jogging, to focus your full attention on a single problem.

Two or three such sessions a week will tame your screencheck impulse, he says, and improve your concentration.

SEND FEWER, MORE THOUGHTFUL EMAILS The typical office worker sends or receives roughly 125 emails per day, according to analytics firm the Radicati Group. That's potentially many hours wasted on low-quality communication. Newport's solution: Ignore every email that doesn't require a response, and for those that do, write one that minimizes the number of subsequent emails—instead



of "Let me know when you want to meet up," try "Let's meet at Rocko's Coffee at noon or 12:30."

PHONE A FRIEND Digital interaction isn't a substitute for real-time conversation. "Our brains don't really understand a 'like' or a 'happy birthday' on Facebook," Newport says, adding that such gestures don't add a sense of connection



or belonging. If your schedule doesn't allow you to meet friends face-to-face, give them a call. You'll feel better.

CLEAN OUT YOUR TOOLBOX Newport recommends taking a 30-day break from any digital tool that isn't essential to your work, including social media and video games. You can also probably do without chat services and



attention-guzzling websites such as Reddit. When the detox is complete, set clear productivity and relationship goals, then reintroduce only those services that help you achieve them. Set some boundaries, too—for instance, check Twitter only on your desktop computer.

GET CRAFTY As you scale back on your digital compulsions, make time for



a hobby, whether it's painting, playing an instrument, or even whittling. Use your hands productively, and you'll create something you're proud of. That'll help you forget about whatever's happening on your phone. Bloomberg Businessweek

利用

Meituan remade life in China's cities with 600,000 people delivering meals and other services. Now it just has to outlast the country's biggest internet giant

By Lulu Chen, David Ramli, and Peter Elstrom Photographs by Gilles Sabrié

April 1, 2019

messengers, some shown here at a morning team meeting in Beijing, drop off about 20 million meals every day

n Beijing, it's often cheaper to have food delivered than to get it yourself. Like, way cheaper. Abey Lin, a 19-year-old Californian studying at Beijing Film Academy, uses his smartphone to order a local restaurant's roast duck dish for 20 yuan (\$2.99), about 80 percent less than it costs at the register, via delivery app Meituan. He can get a 40 percent discount on two pizzas topped with golden potatoes and barbecued seafood. Meituan charges \$1.46 for a bean curd dish from another shop, a little over a third of the price on the restaurant's menu. It would be tough for Lin to beat that price even if he had a kitchenette to make the dish himself. "It blew my mind," he says. Lin, an aspiring director, arrived in Beijing mentally prepared for the hardships of the capital—the blackened air, the bitter winters, the government bans on Instagram and Snapchat. He wasn't as thoroughly briefed on China's new order of city living, but he's quickly adapted. He mostly avoids his dorm cafeteria in favor of a steady supply of burgers, noodles, and cumin meat skewers available at any time, usually within 30 minutes. When he ventures out into the smog to pick up the latest bag at the college gates, there's always a group of deliverymen stomping their feet to stay warm as they wait for other students. "This is way more convenient, and it costs less," Lin says. "China has this efficiency that's ridiculous."

Across the country, millions of people like Lin are ordering in two or three meals a day, as well as groceries, office supplies, haircuts, massages, and whatever else they might want. Behind this \$35 billion delivery market isn't exactly efficiency, though—it's a fight between Meituan and Alibaba Group Holding Ltd., China's most valuable company. Alibaba and its various subsidiaries dominate the country's online retail **>**

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In services. Its namesake app, a sort of mashup of Grubhub, Expedia, MovieTickets.com, Groupon, and Yelp, has 600,000 delivery people serving 400 million customers a year in 2,800 cities. Alibaba is betting it can undercut Meituan to death. Both companies are spending billions in an escalating war of subsidies that might persuade even Jeff Bezos to cut his losses.

The showdown isn't just business. It's personal. Alibaba funded Meituan in its early years, and the relationship ended after Meituan Chief Executive Officer Wang Xing wriggled out of that partnership, infuriating Alibaba co-founders Jack Ma and Joe Tsai. Wang, a slight figure with wire-rim glasses and a buzz cut, says the clash was inevitable. "Alibaba has this weird way of thinking," he says at Meituan's Beijing headquarters in his first interview since the company's initial public offering in September. "If you do anything in commerce, they think you are stealing money from them." Wang cuts the figure of a bashful programmer, but by China's standards, he's a firebrand. He calls Facebook Inc. a copycat for imitating other online services. He says Ma, China's most celebrated founder, has an "integrity problem" that's hurt the country's reputation for years, dating to a surprise spinoff of an Alibaba subsidiary. Alibaba declined to comment for this story. Facebook didn't respond to a request for comment.

For more than a decade, China's internet has been dominated by three companies: Alibaba, Baidu, and Tencent. Now, a younger generation has a chance to take on those giants and their founders. (Ma and Tsai are 54 and 55, respectively; Wang just turned 40.) Wang's effort to control China's services-app market, expected to top \$800 billion in annual transactions within five years, is likely to erode the sales of conventional online retailers, especially Alibaba. Hence the subsidy war.

Many investors are betting on Alibaba, which has a market value of more than 12 times Meituan's \$36 billion. With investors rattled by Wang's aggressive spending, Meituan's share price is down about 30 percent since the IPO, which raised more than \$4 billion and made Wang a billionaire. But his backers say he's no less willful. "He's a very scary person," says Kathy Xu, founder of Capital Today Group, a venture firm that's backed Meituan. "Once he's hooked on something, he can fight with you forever. He just has that patience to go to the very end."

ang's life traces his country's tumultuous transition from poor, agrarian nation to economic powerhouse. Private enterprise was illegal until 1980, the year after he was born. His father's father, a middle school provost and playwright, died during Mao Zedong's Cultural Revolution as intellectuals were purged and sent to the countryside. "Nobody really knows what happened," Wang says. "The official ruling was that he committed suicide." At 16, Wang's father had to figure out how to support his mother and three younger brothers. He tried mining, gardening, and several other ventures before succeeding in the cement industry, where his son got a close look at what it takes to create a business. April 1, 2019

The younger Wang studied at Tsinghua University, China's answer to MIT, then pursued a Ph.D. in computer engineering at the University of Delaware. But in 2003, he dropped out, inspired by Friendster, a Facebook precursor, to create a social network for China. He teamed up with his undergraduate roommate, Wang Huiwen, and a middle school classmate. They rented cheap office space near the northern gate of Tsinghua's campus and built a website.

It didn't go well. Their site, Xiaonei ("Within Campus"), attracted tens of thousands of college students, but Wang Xing and his co-founders soon spent the 800,000 yuan they'd raised from family and friends and had to sell. Their 2007 effort, a popular Twitter look-alike called Fanfou, had to suspend operations in 2009 as it struggled to keep up with government censorship requirements. After that, Wang says, "I wanted to do something less controversial."

In 2010 he created Meituan in the mold of Groupon Inc., then one of the hottest startups in the U.S. (The Chinese characters for the name Meituan mean "beautiful together," a nod to the benefits of group discounts.) That field quickly became crowded; what's come to be known locally as the 1,000 Groupon War soon followed. Hundreds of Grouponesque startups poached one another's employees, spread rumors about rivals' imminent bankruptcies, and wooed customers with unsustainably low prices. Meituan's staff often worked from 7:30 a.m. until after midnight. "It was live or die," says Gan Jiawei, an Alibaba veteran who joined Wang in 2011.

Wang had learned from his mistakes. He expanded quickly, to hundreds of cities in 2011, but spent less recklessly than his competitors did. While two leading, homegrown groupdiscount sites flamed out and Groupon shut down its China business, Wang focused on food and dining to develop steady repeat customers. "They thought the business was group buying," he says of competitors. "We thought the business was e-commerce for services." By 2013, with rivals continuing to fade away, he shifted from volume discounts at restaurants to direct food delivery. He won over merchants with free, reliable technology that helps them keep their books and restock inventory, along with taking orders. "Meituan is definitely No.1,"

says Jack Wang (no relation), whose popular Vietnamese restaurant in Beijing works with several delivery services.

Once Wang (of Meituan) had control of the meal delivery market, he began to spend more aggressively. He discounted the food so he could upsell users on hotel bookings and airfare. He was the first in China to make movie ticket sales easy online. Within a few years he'd shifted that market from 10 percent digital to



more than 60 percent. By mid-2015, soon after Meituan raised \$700 million in venture funding from Alibaba and others, Wang had spent so much money to keep up that he needed another round of venture capital.

Alibaba refused to put more money into Meituan, because the younger company wouldn't fully integrate its app with Alibaba's, according to Meituan co-founder Wang Huiwen. Wang Xing worried he'd lose control of the business if that happened. Instead, Meituan brokered a deal with Alibaba's longtime archrival, Tencent

Holdings Ltd., best known for its WeChat superapp. Tencent agreed to lead Meituan's fundraising by pledging \$1 billion, merge Tencent's own delivery service with Meituan, and let the combined company operate independently. "It was a very easy meeting," Wang says. "What they had,

we needed. What we had, they needed." When Meituan called a board meeting to make things official, Alibaba got 12 hours' notice and no choice in the matter, according to people familiar with the proceedings. Wang had what he wanted. He'd also made some fearsome enemies.

> ven at the company's headquarters in Chaoyang, a sprawling district on the east side of Beijing, Meituan

deliverymen on scooters dart around pedestrians to drop off meals for workers, brakes screeching. There's real urgency to the hustle: A deliveryman who would give only his surname, Yang, says he generally makes \$15 to \$30 a day, and as little as 75¢ for a short trip.

Inside, digital screens fill the walls of the network operations center, showing blue-and-white maps annotated with real-time orders, deliveries, merchants, and customers. One map showing all of China flashes with the company's activity in each province. Another shows live shots of Beijing deliverymen zipping from stop to stop. Artificial intelligence software helps determine drivers' itineraries. An average driver makes 25 deliveries a day, up from 17 three years ago; that's about 20 million daily deliveries across the network. For comparison, Grubhub Inc., the U.S. leader and owner of Seamless, delivers fewer than 500,000 meals a day.

The math, and Meituan's potential, can be dizzying. China's urban areas have 2,426 people per square kilometer (6,283 per square mile), almost eight times the comparable U.S. population density. While the U.S. has 10 cities with 1 million or more people, China has 156. Deliveries in China cost about \$1, compared with \$5 in the U.S., iResearch says. Meituan retained about 63 percent of the country's meal delivery market at the end of 2018, according to Bernstein Research, even as Alibaba spent billions over the previous several years to capture most of the rest.

The growing conflict and its costs have delayed some

ing after setting up money-losing experiments in two cities. He says he's now focused on getting each delivery person to drop off 40 percent more orders. Wang estimates Alibaba, based on its balance sheet, can afford to spend at its cur-

rent level for about 12 more months, but he expects to last years.

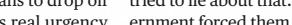
Surrounded by whiteboards and almost dry markers, he mocks rivals, former rivals, U.S. tech leaders, and even himself. Alibaba's

> Ma keeps getting special attention. "I still think he has an integrity problem," says Wang, adding that Ma did lasting damage to the global reputation of China's business leaders by spinning off digital-payments subsidiary Alipay without the approval of Alibaba's board. The incident happened in 2011, which may make it ancient history to most people-but not to Wang. "They

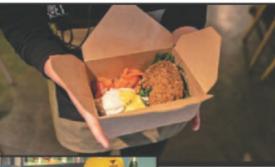
tried to lie about that. They even tried to say the Chinese government forced them to do that. That was wrong," he says. "I think the impact of that incident is still underestimated."

Wang says his role model is Ma's longtime nemesis, Bezos, who consistently defers profits and reinvests in new businesses. Wang plans to do the same. "There's so much to do," he says. "We are not going to finish in one year or two years." Among other things, he plans to introduce an Amazon Primelike subscription service. Chief Financial Officer Chen Shaohui says one option is a membership tier that includes free rides on Meituan's Mobike two-wheelers. Meituan is counting on more patience from shareholders than Alibaba, now entering its third decade, can reasonably expect. Profits look like a distant dream. Meituan has lost money almost every year since its founding, and though it has \$8.6 billion in cash, Wang's hunger for expansion could quickly eat into the pile. Last year, he paid \$3 billion for Mobike, which also loses money.

For the time being, though, Wang's company has helped change life for hundreds of millions of people throughout China's cities, giving them an easy way to avoid braving traffic-snarled streets when they need food. "I don't really go to supermarkets anymore," says Luo Rui, a thirtysomething white-collar worker in Beijing who uses Meituan pretty much every day. "You order something online, and by the time you reach your house or apartment, your delivery is already there." Even at her office, where a crush of restaurants awaits downstairs, she's usually better off staying put. B



An average Meituan driver makes 25 deliveries a day



of Wang's other

initiatives. He put

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Life is good for a pipeline billionaire.



Most of the time

How Kelcy Warren went from cool oilman to face of big, bad energy. By Devin Leonard

"I'm going to be a little boastful here," says Kelcy Warren.

"Nobody has built more pipelines in the last 15 years than Energy Transfer. Many of these pipelines are game changers for the nation, and we're very proud of them." Warren, chairman and chief executive officer of Dallas-based pipeline operator Energy Transfer LP, is on the witness stand in a courtroom in Delaware. Few people would dispute his assertion about the disruptive nature of his business. His company is best known for its Dakota Access Pipeline, a \$3.8 billion project that in 2016 became a subject of global interest and, in some cases, outrage. "It kind of, unfortunately, got a little fame to it," he concedes when questioned about Energy Transfer's signature undertaking.

In court on this day in February 2018, Warren is on the defensive, testifying in a civil suit filed by some unhappy investors. These shareholders allege that they were denied the opportunity in 2016 to take advantage of a private offering of \$1 billion in new shares—shares that, unlike the usual ones, guarantee cash distributions to holders even in a downturn. Warren, who's worth \$4.8 billion according to the Bloomberg Billionaires Index, helped himself to more than half of these special securities.

Tall and ruddy-faced, with a crown of snowy hair, Warren is wearing a charcoal suit, a white shirt, a blue-and-white-striped tie, and stylish black leather sneakers. He speaks in soft tones, creasing his brow and pursing his lips as he mulls questions from attorneys. He slips back and forth between corporatese and folksy witticisms, talking one minute about tax complexities and the next about how he might "jack-slap" his chief financial officer for giving him unsound advice.

Warren's overriding theme is that the private share offering, however exclusive, was the proper thing for Energy Transfer to do. "I'll tell you–everybody talks like this was a bad deal," he says, sounding bruised that anyone would think that. What his detractors don't understand, he says, is that Energy Transfer needed to do the transaction to stave off disaster for all shareholders. Oil prices were tumbling. A \$38 billion merger with a rival, Williams Co., was coming apart. Meanwhile, the billions Energy Transfer had sunk into Dakota Access were put at risk when the Obama administration intervened in September 2016, withholding a permit that the company needed to finish the project. "The federal government shut us down," Warren says. "Had that not been overturned, we would have been screwed. I mean, in a big way."

As relaxed as he seems on the witness stand, Warren looks relieved when he steps down. He exits the courthouse, climbs into a black SUV, and he's gone. The judge in the case will later agree that the privately issued shares were designed to enrich Energy Transfer's insiders, but he'll rule that the offering should not be rescinded.

Warren also escaped disaster in North Dakota. Four days after taking office, President Donald Trump, a former Energy Transfer shareholder, issued an executive order freeing up the disputed permit. Warren had ardently supported Trump, donating more than \$100,000 to his campaign and \$250,000 to

"I'm not afraid at all of these people"

his inaugural celebration. "Having a government that actually backs up what they say, that actually says we're going to support infrastructure, we're going to support job creation, we're going to support growth in America, and then actually does it—my God, this is going to be refreshing," Warren told investors in a conference call two days after his candidate's victory.

Before Dakota Access, few outside the industry had ever heard of Warren or his company. He seemed to prefer it that way. He could fraternize with blues and folk singers and country rockers who might have been frostier if he'd introduced himself as, say, CEO of ExxonMobil Corp. Indigo Girls, Keb' Mo', and Lucinda Williams all recorded songs for Music Road Records, the label Warren founded in 2007, and played at an annual charity shindig at his ranch north of Austin.

Now Warren is the face of a company famous for a pipeline project that, a sympathetic shareholder says, has become a symbol of "the big, bad energy industry." The notoriety hasn't helped as the company tries to build new lines. "People who didn't know who Energy Transfer was before certainly did after that," says Tom Seng, assistant professor of energy business at the University of Tulsa and a pipeline industry veteran himself. "So when you're sitting around at a town hall meeting where representatives of Energy Transfer are coming to talk to you about a proposed project, your hair stands up and you say, 'Oh my God, it's those guys!'"

Warren, who declined to be interviewed for this article, can't let go of what happened with Dakota Access either, though the pipe now carries more than 500,000 barrels of crude oil a day. In August 2017, Energy Transfer filed a federal racketeering suit against Greenpeace International and several other environmental groups, accusing them of being at the center of a vast conspiracy to spread misinformation about the project. It was an effort that required two law firms, one of them Kasowitz Benson Torres, which has often defended President Trump and helped craft his response to the Mueller investigation.

"What happened to us was tragic," Warren told CNBC three days after the suit was filed. "We were greatly harmed."



Dakota Access protests in 2016

"How were you harmed by it?" asked anchor Brian Sullivan, looking puzzled.

"Our project was delayed by, let's say, 90 days, and we lost millions of dollars," Warren said.

"Kelcy, you're a billionaire, your company is very wealthy, and your law firm represents Donald Trump," Sullivan replied. "You understand the optics here, but it doesn't sound like you are afraid."

"I'm not afraid at all of these people," Warren said of the environmentalists his company had targeted. "They are going to pay for this."

Energy Transfer's suit didn't go anywhere—it was dismissed early this year. It's the company, in fact, that's been paying: \$12.6 million to the state of Pennsylvania, where the company has drawn the ire of regulators and citizens as it struggles to complete another major project. And while that might not be a lot of money to a company with \$54.1 billion in revenue in fiscal 2018, it speaks to the lesson Energy Transfer has been slowly learning: What works in friendly states such as Texas and Louisiana, where the oil and gas industry is generally accepted as part of the local culture, might not go down as well elsewhere. Energy Transfer has amassed hundreds of violations with state and federal regulators and faces multiple criminal investigations in Pennsylvania—investigations the company says have no legal basis.

There was a time when the public paid little if any attention to pipeline builders like Warren. Their operations were smaller and less visible—being buried underground—than those of oil and gas extractors. Investors liked pipeline companies mainly because they were boring. They tended to enter into lengthy, fee-based contracts, so they were less exposed to commodity price gyrations. "It's a cash cow industry," says Kenneth Medlock, senior director of the Center for Energy Studies at Rice University in Houston.

Warren, 63, grew up in a small East Texas town. His father was a pipeline worker, and Warren began his career in that industry. He worked his way up to the executive suite of a pipeline company known as Endevco, then in 1996 co-founded Energy Transfer. Warren became known as a dealmaker, buying up pipeline companies on the eve of the shale boom. As his empire grew, he took home vast sums, including \$244 million in a 2004 initial public offering involving one business, an additional \$487 million in a second IPO, and \$1.6 billion in distributions over more than a decade, according to Bloomberg estimates.

Among the many ways Warren has enjoyed the bounties of his labor (a Dallas mansion, an island off the Honduran coast, three ranches, at one of which he keeps giraffes), the most stylish and personal is his record label, Music Road. It's modeled on David Geffen's artist-friendly Asylum Records, home in the 1970s to Southern California troubadour Jackson Browne and his sweet melodies and confessional lyrics. The Energy Transfer CEO can recite the lyrics of any Browne song from memory, or so the *Dallas Morning News* has reported.

"They are going to pay for this"

Warren didn't get Browne to record for Music Road, but he did the next best thing: In 2014 he released *Looking Into You: A Tribute to Jackson Browne*, featuring the singer's tunes covered by such artists as Bruce Springsteen, Indigo Girls, Keb' Mo', Joan Osborne, and Lucinda Williams. Browne didn't take part in the project, but he told a Texas reporter he was fond of the result.

The shale boom was in full throttle around this time, and Warren was eager to build in areas of the country that were energy-rich but pipeline-starved. The most prominent of these efforts was Dakota Access. Most segments of the 30-inch-wide crude oil line would be built on private land and didn't need federal approval. One exception was a 1,000-foot segment beneath Lake Oahe.

The U.S. Army Corps of Engineers ruled in July 2016 that this wouldn't be a problem. The Standing Rock Sioux tribe sued the Army Corps, seeking to overturn the decision. The pipeline didn't traverse the tribe's nearby reservation, but its leaders argued that it would cross land that had been theirs before the federal government appropriated it. Moreover, the tribe said a pipeline mishap might pollute the lake, its historic water source. Energy Transfer says the pipeline is safe and that it tried to engage the Standing Rock Sioux in discussions early on and that the tribe wasn't interested. But Dave Archambault, the tribe's chairman at the time, says he explained his people's concerns to a top Energy Transfer executive, who was unmoved. "I said, 'You know, you are going to meet resistance," Archambault recalls warning him. "He said, 'That's nothing. We meet resistance all the time." But nothing quite like this. The Standing Rock Sioux led protests along the pipeline route, drawing thousands of demonstrators and the support of a variety of celebrities and Democratic presidential candidate Bernie Sanders.

In early September 2016, the Obama administration said the federal government would delay the permit until it could do a broader review of Dakota Access and the objections raised by the tribe. It asked Energy Transfer to voluntarily pause all construction within 20 miles of the lake. The following month, when an appeals court refused to overturn the decision by the Army Corps, Energy Transfer resumed its activities. "The company said, 'Screw you. We're going ahead,'" recalls Jan Hasselman, an attorney for Earthjustice, an environmental law firm representing the Standing Rock tribe. "That's when things really got tense out there." (Energy Transfer responds that it "followed all the appropriate rules and regulations in building the Dakota Access Pipeline.")

Hundreds of demonstrators were arrested as they tried to impede the pipeline's construction. In one dramatic late-night standoff, law enforcement officers sprayed people with water cannons in freezing temperatures. Images of these confrontations circulated widely and provided many people with their first impression of Energy Transfer.

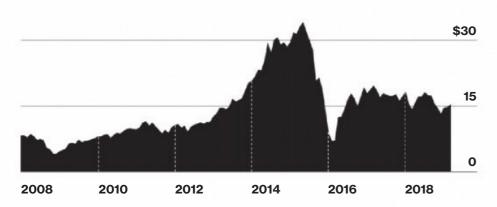
That apparently included some of the musicians Warren had patronized. Some said they had no idea he was involved in anything like the Dakota Access Pipeline. "Many of us, as artists, take offense and are mystified by how someone with such a deep passion for organic and traditional music can own a company that is so blatantly tearing at the heart of the fabric of our American community," Indigo Girls wrote in an open letter posted on their Facebook page. It was signed by Browne, Osborne, and Keb' Mo'. Browne also posted a statement on his website saying he would be donating his songwriting royalties from *Looking Into You* to Warren's indigenous foes.

Warren responded that the project was being unfairly maligned, and didn't these musicians understand that their nylon guitar strings were made using fossil fuel transported in pipes by companies such as his? In an early December blizzard, Warren flew into Bismarck to meet with Archambault. The Standing Rock Sioux leader says he again explained the tribe's position to the Energy Transfer CEO. "Kelcy Warren said, 'If I knew this stuff a year ago, we wouldn't be here, but there are only 20 miles of pipeline left. I can't reroute it,'" Archambault remembers. Energy Transfer confirms that the two men discussed how the problem might have been resolved earlier, but in any case it didn't matter: Trump cleared the way for the pipeline's completion the next month.

This might have been a good time for Warren to take steps to repair Energy Transfer's image, but that didn't seem to be a priority. In February 2017, the Federal Energy Regulatory Commission allowed Energy Transfer to begin work on a portion of Rover, a \$4.2 billion, 713-mile pipeline intended to transport natural gas from the Marcellus and Utica shale fields in West Virginia, Pennsylvania, and Ohio up into Michigan. FERC refused, however, to give Rover what it calls a blanket construction permit, which would have allowed Energy Transfer to conduct routine construction activities without first getting the commission's approval.

FERC said it was displeased that the company had violated historic preservation rules by razing the Stoneman House, a 173-year-old building in Leesville, Ohio. Energy Transfer had said it didn't mean to circumvent federal regulations when it took down the structure, which was across the street from a compressor station it was building, but FERC cited company

Energy Transfer's stock price





Sinkholes filled with concrete in Chester County

emails showing that Energy Transfer was already planning to demolish the building before it purchased it. A contractor warned the company that this would be a "politically risky strategy." And indeed it was. When Democrats in Congress suggested that Energy Transfer had been less than straightforward with FERC, Warren responded in a public letter that he was "baffled as to how it can be alleged that we provided false or misleading information." (Energy Transfer says, "We continue to work with FERC to resolve the matter.")

Once Rover was under way, Energy Transfer was repeatedly sanctioned by the Ohio Environmental Protection Agency for drilling-related spills, including one in April 2017 involving the release of 2 million diesel-fuel-contaminated gallons that coated a 6.5-acre wetland in Stark County. "They basically buried one of the highest-quality wetlands in the state, a forested wetland, under 20 inches of this drilling mud," says Cheryl Johncox, organizer of the Sierra Club's Ohio-based Beyond Dirty Fuels Campaign. In his letter to Democratic leaders, Warren characterized Energy Transfer's spills as "neither uncommon nor unexpected." The company says its cleanup efforts prevented any long-term environmental damage.

In November 2017, Mike DeWine, then Ohio's attorney general and now its Republican governor, cited the Stark County spill and numerous others in a lawsuit, accusing Energy Transfer of being a serial polluter. "Whether its actions (and failures to act) stem from a series of calculated business decisions or complete indifference to Ohio's regulatory efforts, Rover has endangered the environment in more than ten counties," his office said in a complaint. Energy Transfer denied the charges, and a judge dismissed the suit in March. Rover has been fully operational since last November and is now carrying more than 3.25 billion cubic feet of natural gas a day.

The fight in Pennsylvania is at another level. There, Energy Transfer subsidiary Sunoco is building Mariner East, a 350mile project repurposing a crude oil line that dates to the 1930s and adding two beside it so that the three can carry liquid propane and ethane from the Marcellus shale field in the western part of the state to a terminal near Philadelphia, where it would be shipped elsewhere.

The Pennsylvania Department of Environmental Protection chastised Energy Transfer in 2017 for fouling private wells in Chester County, near Philadelphia, and halted construction

ERIC FRIEDMAI

"This is Chester County. This is not the Siberian wasteland"

in January 2018 for numerous other permit violations. The company went back to work the next month after paying the \$12.6 million fine. By then, investigators for the state Public Utility Commission were alarmed about sinkholes that had opened in the backyards of houses where Sunoco was drilling in West Whiteland Township on a cul-de-sac called Lisa Drive.

One of the unfortunate homeowners was T.J. Allen, a contractor with a graying goatee. On a chilly afternoon, Allen led visitors around his house to show them what Energy Transfer had done to his modest backyard. Mariner East is treated under Pennsylvania law as a public utility and has the right to use court-approved eminent domain to take people's property. So Allen had little choice but to let Energy Transfer turn his yard into a construction site. Now there were two craters, about 8 feet and 10 feet wide, covered with boards and filled with a slushy, gray material–slurry concrete.

Allen wasn't happy when the holes appeared on his property, but he was horrified when workers showed up with truckloads of cement and started pouring it into the holes. He feared it would dislodge an older pipe that runs through his property, causing a dangerous natural gas leak and possibly an explosion. "I'm pleading with them," he said. "I'm like, Please, please don't do it."

Tom Casey, another homeowner along the Mariner East route, had come to have a look. He surveyed Allen's pockmarked backyard and shook his head. "Kelcy Warren could probably care less," he said.

"Of course Mr. Warren cares about the people and properties along our routes," a spokeswoman for Energy Transfer says. "To say otherwise is irresponsible."

Even so, the days of profitable invisibility are clearly gone for Warren and Energy Transfer. In March, the PUC issued an emergency order shutting down the existing pipeline because it, too, feared a catastrophe on Lisa Drive. On May 21, Elizabeth Barnes, an administrative law judge at the PUC, ordered Energy Transfer to temporarily halt construction in the area and perform an extensive analysis of Mariner East's risks and how local police and firefighters ought to respond in the case of a leak. The company, she wrote, "has made deliberate managerial decisions to proceed in what appears to be a rushed manner in an apparent prioritization of profit over the best engineering practices." (Energy Transfer says sinkholes are "not an uncommon occurrence," that it was working with homeowners to repair the damage, and that suggestions the project has been rushed are "unequivocally not true.")

In June the PUC partially reversed the decision, allowing Energy Transfer to send fuel through the old pipe along Lisa Drive. Soon after, it permitted some construction on the two new ones to begin again. For the company's growing number of opponents in the area, it looked as if Energy Transfer once again hadn't been held to account. "The PUC is really weak in terms of enforcing regulations," says Pennsylvania State Senator Andy Dinniman, a Democrat who represents Chester County and has been one of the leaders of the opposition to the project. A PUC spokesman says the commission is conducting multiple investigations of reported leaks and other issues with the pipeline.

Then, in September, another Energy Transfer natural gas line in Pennsylvania exploded, incinerating a home in Beaver County in the western part of the state. (No one was hurt.) The company says the incident appears to be the result of a landslide. The DEP and PUC are still investigating the blast. They haven't said much about it, but a cellphone video of a fireball erupting from the ground in the area was widely viewed on the internet and became an issue in the state's general assembly races in November.

The blast piqued the interest of Tom Hogan, the Republican district attorney of Chester County. After visiting with people on Lisa Drive, he announced he'd opened a criminal investigation of the Mariner East project. He told the local media he'd had it with Energy Transfer. "These pipelines go thorough heavily populated areas," Hogan said. "They go right past train tracks. They go right past schools and parks. Quite frankly, this is Chester County. This is not the Siberian wasteland."

Energy Transfer calls Hogan's investigation "baseless" and says some of his public statements about Mariner East are "inaccurate." Yet the company's troubles in Pennsylvania continue to deepen. Recently, Delaware County District Attorney Katayoun Copeland and Pennsylvania Attorney General Josh Shapiro announced that they, too, were jointly conducting a criminal investigation of Energy Transfer and Mariner East. At about the same time, Energy Transfer's federal suit against Greenpeace was dismissed.

In February, Warren sounded an uncharacteristic note of contrition. "We made some mistakes," he said on Energy Transfer's earnings call. "We're going to take our medicine and fix those mistakes and complete good projects from this point forward. Not to insinuate that everything we've done has been bad, it's just we've made some mistakes that we're not proud of."

"We've learned a lot," said Tom Long, Energy Transfer's chief financial officer. "Every place is not Texas."

It was a somber moment in an otherwise upbeat conversation. And why wouldn't Warren be sunny? New pipelines are coming online, and company revenue is expected to climb this year to \$62 billion. Then again, this is a man who vowed on national television to seek retribution from his company's detractors. The very day Warren spoke of the company's recent mistakes, Energy Transfer filed another suit against Greenpeace, this one in state court in North Dakota. Cancer surgery for \$700. A heart bypass for \$2,000. Pretty good, but under India's new health-care system, not good enough

By Ari Altstedter Photographs by Anshika Varma

56

The World's Cheapest Hospita

An operating theater at Bangalore's Narayana Institute of Cardiac Sciences

April 1, 2019 57 0.14 00 Has to Get Even Cheaper

April 1, 2019

was only after a junior surgeon opened the patient's chest, splitting his sternum with a quick buzz from a handsaw and cranking a savage-looking retractor to pin open his rib cage, that the rare and lethal disease became visible.

A normal heart has the rough dimensions of an apple, but the beige and purple mass beating between the man's ribs had inflated to the size of a cantaloupe—the result of clots in his pulmonary artery that were blocking the flow of blood to his lungs. With his own circulatory system effectively strangling him from the inside, his heart had swollen from the effort of keeping him alive. In the West, the condition would almost never be allowed to progress this far. But the patient, an outwardly healthy 31-year-old, lives in a remote city in western India, where doctors had no idea how sick he was. At such a late stage, the only way to save his life was this difficult and dangerous operation at Narayana Health City in Bangalore.

After the body was cooled to protect against brain damage while the patient's heart was stopped, a nurse dimmed the overhead lights and the junior surgeon stood back, clearing space for Dr. Devi Shetty, wearing an LED headlamp and loose dark-blue scrubs, to get to work. Shetty, 65, is tall and lean, with large brown eyes and a high, prominent nose. After collecting himself for a moment, he began digging deep into the pulmonary artery with scissors and forceps to remove the clots one by one, keeping his arms pinned tightly to his sides to reduce unwanted motion. Soft and sticky, the masses kept breaking apart as Shetty tried to secure his hold on them. But slowly the clots emerged, some congealed into floppy circles the size of a quarter, others with tiny arms where they'd branched off into capillaries, like miniature squid. Shetty had almost no margin for error. Miss one, and the whole ordeal would be for nothing; move too aggressively, and a slip could puncture a lung. It took 90 minutes to get them all.

A pulmonary thromboendarterectomy, the surgery Shetty performed, can tie up an operating room for most of a day. In the U.S., the procedure can cost more than \$200,000. Shetty did it for about \$10,000 and turned a profit. A cardiac surgeon by training, Shetty is the founder and chairman of Narayana Health, a chain of 23 hospitals across India that may be the cheapest full-service health-care provider in the world. To American eyes, Narayana's prices look as if they must be missing at least one zero, even as outcomes for patients meet or exceed international benchmarks. Surgery for head and neck cancers starts at \$700. Endoscopy is \$14; a lung transplant, \$7,000. Even a heart transplant will set a patient back only about \$11,000. Narayana is dirt cheap even by Indian standards, with the investment bank Jefferies estimating that it can profitably offer some major surgeries for as little as half what domestic rivals charge.

Narayana has made Shetty one of India's best-known doctors and the proprietor of a lucrative business, with about \$8 million in profit in 2017. But he now faces a problem that might be even more complex than heart surgery: how to make his hospitals cheaper still. The reason is Modicare, the national health insurance program that's one of Prime Minister Narendra Modi's signature initiatives. Under way since September, it's perhaps the most ambitious public-health effort in history, intended to give basic coverage for the first time to 500 million of India's poorest. At first it seemed no one was in a better position to gain from this flood of new patients than Shetty. But his enthusiasm gave way to anxiety last year after the government published its list of reimbursement rates, which are lower even than Narayana's prices. Those rock-bottom payments mean that to thrive under Modicare, Narayana needs to find ways to cut costs further—and then keep cutting.

Shetty thinks he can do it and, in the process, create a model for ultralow-cost health care that can be applied anywhere. "We are trying to produce a pilot for the rest of the world to follow," he said over a lunch of curries and fried fish after scrubbing out from the heart operation. He was still wearing his surgical cap. "In 10 years, India will become the first country in the world to dissociate health from affluence. India will prove that the wealth of the nation has nothing to do with the quality of health care its citizens can enjoy."

It's a noble vision, and Narayana is as well-positioned as any provider to help make it a reality. But it's hard to overstate the scale of the challenge Shetty faces. For a surgery like the one he'd just performed, Modicare would provide only \$1,300.

Shetty comes from a clan of prosperous restaurateurs, operators of a chain of eateries that served the coconut-heavy cuisine of Karnataka, on India's west coast. When he was a child, his parents tried not to leave him alone with anything mechanical, because he would try to take it apart and put it back together again. Apart from art class, where Shetty was allowed to work with his hands, he was an indifferent student; he had to repeat the second grade. But his attitude to school changed drastically in 1967, when a teacher informed the class that a South African doctor had just performed the world's first heart transplant. Shetty says he knew immediately that he wanted to one day do the same. "It is the pinnacle of what somebody can do with their fingers," he recalls thinking.

In his mid-20s, Shetty entered a local medical school, where he saw the toll that poverty can take on health in India. Many of the patients who came to his teaching hospital, he noticed, weren't recovering from surgery properly–sometimes resulting in a fistula, a painful abscess of the abdominal or anal region. When Shetty investigated, he learned that the cause of their complications was simple: The patients couldn't afford the protein their bodies needed to mend. So he began handing out hard-boiled eggs; soon he was known as the Egg Doctor.

Shetty went on to train at Guy's Hospital in London. At the time, he says, the cardiac team at Guy's could perform as many as six surgeries in a day—an unheard-of pace in India. Shetty wondered if it could be replicated at home. He got his chance when an industrial tycoon, G.P. Birla, recruited him to help found a heart hospital in Kolkata. There, Shetty achieved national recognition for performing India's first neonatal heart



Shetty holding a consultation in his office



Narayana Health City in Bangalore

surgery, in 1992. He also met his most famous cardiac patient, Mother Teresa. When she was well enough, she sometimes accompanied Shetty on his rounds. He says he was inspired by the depth of the nun's commitment to India's least fortunate– but he was unwilling to emulate her approach, and not simply because of its material sacrifices. Although Shetty often performed free surgeries for the poorest of the poor, he reasoned that the only way to sustainably serve large numbers of people in need was to make it a business. "What Mother Teresa did was not scalable," he says–perhaps the first time venture capital jargon has been applied to the work of the Angel of Calcutta. In the mid-1990s, Shetty began experimenting with a business school concept alternately called upskilling or task-shifting. The idea is for everyone involved in a complex process to work only at the top of his qualification, leaving simpler tasks to lower-paid workers. In a hospital, this might mean that the costliest staff—experienced surgeons—enter the operating theater only to complete the most difficult part of a procedure, leaving everything else to junior doctors or well-trained nurses. Then they move to the next theater to perform the same task again.

In 2000, Shetty secured a \$20 million investment from his father-in-law, the owner of a successful construction business, to create the first Narayana hospital, which would put assembly line surgery into action. (Narayana was the benefactor's middle name.) Initially focused solely on cardiac procedures, Shetty gradually expanded Narayana's remit to include most major operations and set up regional hospitals that could feed patients with complex conditions into its two largest facilities: the Bangalore flagship and another in Kolkata. Within a decade the company had a national network and, in 2014, even opened in the Cayman Islands, in part to attract medical tourists from the U.S. Two years later, Narayana Health went public in Mumbai; it's been continuously profitable since.

"Everyone does as much as they can," Ashwinikumar Kudari, a senior gastrointestinal surgeon, says toward the end of a busy day at the Bangalore hospital. He's just removed two malignant tumors the size of golf balls from a middle-aged woman's intestines-the seventh surgery he's performed or supervised since morning. A compact man with a trim mustache and a wry smile, Kudari is soon on the move again, checking in briefly on a gallstone removal next door before dashing up a spiral staircase to another operating theater. There, he takes over from a colleague who's struggling to locate a particularly tricky fistula. "Our margins are low on one surgery, but because we do so many in a day, we can make enough," he remarks after the elusive fistula-the longest he's ever seen-is found, running from the man's anus to above his groin. By working at this pace, the average Narayana surgeon performs as many as six times more procedures annually than an American counterpart.

Shetty's philosophy of thrift is everywhere. The surgical gowns are procured from a local company for about a third of the cost of international suppliers. The tubes that carry blood to heart-and-lung machines are sterilized and reused after each surgery; in the West, they're thrown away. The machines themselves, along with devices such as CT and MRI scanners, are used well past their warranties, kept running by a team of in-house mechanics. The operating rooms, pieces of real estate so expensive that many hospitals bill for their use by the minute, are also part of the assembly line. Whereas preparing a U.S. surgical theater for the next patient can take 30 minutes or more, Narayana has gotten the process down to less than 15, in part by keeping turnaround teams with fresh instruments, drapes, and other supplies on immediate standby, ready to roll the moment a room is available. Even patients' families

59

▲ are part of the upskilling model. Narayana trains them to bathe patients and change bandages in the hospital, as they'll do when they get home. This allows paid staff to focus on more challenging work. Through all these methods and more, Narayana has been able to get the retail cost of a heart bypass, its most common operation, down to \$2,000, about 98 percent less than the U.S. average.

It's all a far cry from the high-touch treatment Westerners expect, but Shetty is adamant that none of the practices compromise safety. Sterilizing and reusing clamps and tubing is permitted under the standards of the Joint Commission, a U.S.-based body that vets and accredits hospitals worldwide, including Narayana's cardiac hub. Involving properly instructed family members in the simplest care tasks isn't unheard of in Europe and North America, and some studies suggest it may improve patients' prospects. (Unlike busy nurses, relatives have just one person to focus on.)

The data appear to back Shetty up. In part, because its huge volumes help surgeons quickly develop proficiency, the chain's mortality rates are comparable to or lower than those in the developed world, at least for some procedures. About 1.4 percent of Narayana patients die within 30 days following a heart bypass, according to the Commonwealth Fund, which studies public health, compared with 1.9 percent in the U.S. Narayana also outperforms Western systems in results for valve replacements and heart-attack treatment, the group found.

Yet even for bypasses—Narayana's bread-and-butter procedure, with greater economies of scale than any other—Shetty needs to cut costs further, because Modicare will reimburse only about \$1,300 for each surgery. For other treatments, the difference between current price tags and Modicare payment schedules is much wider. "They are paying less than what it costs," Shetty says. "Unless you have someone paying more than what it costs, you may be able to survive for five years, but what about when the machines get old and need to be replaced?" Even at Narayana, thrift goes only so far.

Per capita, central-government spending on health care

in India is lower than in any other major economy. Until recently only a quarter of the population had any insurance, forcing hundreds of millions to pay out of pocket or go without treatment. The Prime Minister's People's Healthcare Plan, as Modicare's official name translates from Hindi, provides about 500,000 rupees (\$7,000) in annual hospital coverage to 107 million families, their eligibility determined by the primary breadwinner's occupation. That works out to roughly a half-billion individuals—among them ragpickers, rickshaw pullers, street vendors, and the vast rural army of landless casual laborers—now getting insurance for the first time.

Critics have urged Modi to put the money into India's shaky system of free public hospitals, but he argues that the country is better off relying on what's already in many respects a world-class private health-care industry and that

If it succeeds under Modicare, Narayana may become a model not only for competitors in India but also for Western health-care operators, which are desperately trying to contain costs

the government can't afford to build enough facilities itself. Modi is trying to contain one of Asia's widest budget deficits, and he's allocated the equivalent of only \$900 million for Modicare in the coming fiscal year. (Costs are generally split 60-40 between Delhi and the states.) Private hospitals aren't obliged to accept Modicare, and several hospital groups and physicians' associations are boycotting the program, criticizing its low rates. Thousands of providers have nonetheless opted to participate, both to gain access to new patients and to avoid antagonizing the prime minister. And even if Modi loses in the national elections taking place in May, most observers expect the program will continue.

To run the initiative, Modi hired Indu Bhushan, 58, a former bureaucrat who'd taken the unheard-of step, in India's cosseted civil service, of leaving his guaranteed lifelong job for an external gig—in his case, as a portfolio manager for the Asian Development Bank. In a country that often struggles to deliver on ambitious policy, Bhushan's message is simple: Modicare is here, and private operators need to get on board. "We have to have expanded capacity, and much of this capacity has to come through the private sector," he says, sounding at once wishful and mildly threatening. "The private sector also wants to be part of something that is so high-profile politically. … They would like to be seen to be contributing to this, which is something close to the heart of the chief executive of the country."

During his meetings with hospital administrators, Bhushan urges them to look on the bright side. Modicare's rates may be low, but it promises reimbursement within 15 days, faster even than some private plans. In his telling, Modicare patients will be a ready-made customer base for entrepreneurs with ideas for delivering low-margin, highvolume health care, while providing existing hospitals with a sort of financial backstop—minimally profitable but reliable generators of revenue who pay their bills on time. And because those patients will be concentrated in poorer cities and rural areas, Bhushan's hope is that they'll drive the construction of new facilities in underserved regions.

He also tacitly acknowledges that the current price list is

something of an opening bid, subject to adjustment if hospitals are cooperative. "That's how business people work, right? If you offer them some price, they'll say, 'Can we make a deal?'" he says coyly. To create incentives for quality, bonuses may be available, too. With state approval, hospitals accredited by India's version of the Joint Commission can charge the government an extra 15 percent; teaching facilities are eligible for an additional 10 percent.

In contrast to the ultra-itemized billing familiar to Americans, Modicare pays flat fees for every procedure, including the entire hospital stay required to get it done. (Narayana operates the same way.) The longer a patient occupies a bed, the greater the hit to the hospital. So it's in the interest of Narayana, and anyone who wants to make money off Modicare, to get ancillary costs as low as possible without jeopardizing outcomes.

The team Shetty has charged with doing so works a halfhour's drive from the Bangalore hospital, in a neighborhood that illustrates some of the tensions created by the city's emergence as India's answer to Silicon Valley. Across the road there's a gleaming juice bar; about 300 feet away, a garbage fire burns at a deserted construction site. The street is home to two startups, and inside a tiny white office building that Narayana leases is a third, of sorts.

There, about 70 programmers and product specialists set up their laptops every day wherever they can find a spot, WeWork-style. They're building Atma, a platform intended to handle the back end of everything that happens at Narayana hospitals: admissions, payments, scheduling, pharmacy dispensations. Every time a piece of equipment is used– something as trivial as a syringe or as complex as an MRI machine–the system will record it, along with data on outcomes and complications. Narayana will then begin endlessly combing through the numbers, looking for unnecessary costs and devising ways to stamp them out.

The executive leading Atma, which means "soul" in Sanskrit, is Shetty's son Viren, a 34-year-old Stanford MBA who's clearly in charge. As he passes subordinates' offices at Narayana headquarters, they sometimes pop to their doors to say, "Hello, sir." He argues that more sophisticated use of data can dramatically alter Narayana's cost base. Viren gives the example of a Narayana heart surgeon who tended to install more pacemakers than his colleagues-so many, in fact, that he accounted for 80 percent of pacemakers used in his entire unit. When the doctor's superiors inquired about the habit, he said his patients' conditions were more complex than those that others handled. But a look back at the numbers showed this wasn't true, so Narayana fired him. "The whole push for us," Viren says, is "to highlight the flaws in our coverage, [and to] find out where these little spikes of cost are." The Shettys see further savings coming not from any single reform, but from thousands of little tweaks at every stage of treatment.

The other main component of Narayana's plan to overhaul itself for Modicare is more conventional: getting some people to pay more. At the top of a private elevator in the Bangalore hospital is the Platinum Wing, which opened in 2015. Although its customers receive the same treatment from the same doctors as regular patients, they recuperate in style. Rooms have hardwood floors and rainfall showers, and soft flute melodies are piped into the hallways. In addition to South Asian staples, the canteen serves locally exotic

dishes such as tuna salad and chicken stroganoff. Platinum Wing patients pay an extra 8,500 rupees a day in addition to the cost of a basic single room. It's money Shetty is counting on to subsidize the rest of Narayana, and he's planning to expand the concept to more of the company's hospitals. Even in India's poorest cities, he estimates that 10 percent to 20 percent of the population might be willing to pay for such comforts.

Modicare is still in its infancy—as of March just 1.5 million people had used it—and Narayana is only partway through preparing for full implementation. Making the changes required to prosper under its constraints will be the work of years, a constant battle to shave off a few rupees here and there. But if Narayana succeeds, it may become a model not only for competitors in India but also for Western healthcare operators, which are trying desperately to contain costs. Nowhere is this more true than the world's most expensive health-care market, the U.S. "There's going to be a lot of interest in how India is pulling this off," says Ashish Jha, the director of Harvard's Global Health Institute. "You're going to see health-care organizations in America and elsewhere really rethinking their business model and how they do things."

That's a notion the elder Shetty enthusiastically endorses. "I would like in my lifetime for every citizen of this planet to get health care at a price they can afford to pay without having to beg or sell something," he says.

First, though, Modicare will have to reach people such as Jayama, who like many South Indians uses only one name. A 50-year-old woman who earns 6,000 rupees a month hauling bricks, she's one of a few dozen patients hoping to see a doctor at a free clinic Narayana offers in her village in a scrubby region of Karnataka. Her neck is badly swollen, an obvious sign of hyperthyroidism. She rummages through a plastic bag for her medical records, which a nurse scans for review by a doctor in Bangalore. His face soon flashes up on a large computer monitor; after asking Jayama a few questions, he recommends she go to a hospital to see a specialist.

Jayama is befuddled by the advice. The last time she sought treatment she needed a 10,000-rupee loan. Two years later, she still hasn't managed to pay it back. When asked about using Modicare, Jayama says she's never heard of it or, for that matter, of Narendra Modi himself; she's illiterate. After the basics of how a visit to a thyroid specialist could be covered are explained to her, she pauses for a few moments, then responds with an expression in the local language, Kannada: "*Aadare olleyadu.*" Roughly, it translates as "If it happens, it's good."

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EVERYTHING'S NEW IN

OLD KYOTO

66 The swankiest car showroom in the world

P

U

68 The bag no modern pedestrian can do without

> 70 Ruth Reichl's tasty memoir

71 Mirrorless cameras, small and sharp April 1, 2019

> Edited by Chris Rovzar

A profusion of modern art, eating, and accommodations reveals that Japan's former capital has been a simmering cauldron of fresh ideas all along. *By Brandon Presser Photographs by Carol Sachs*

Businessweek.com

ou want to know what Japan is? This is Japan," my friend Misa Matsuda said, plunging her chopsticks through the oil-slick stillness of her soup broth, exhuming long tresses of noodles from deep below. It was 2003, and Misa and I had a nightly ritual as teenage students in Tokyo: fortifying our stomachs with a steaming bowl of "mayonnaise ramen," enhanced with a thick dollop of the condiment for extra richness, before a long night out clubbing around the frenetic streets of Shibuya Crossing.

At the time, I was on the hunt for a way to describe to my friends at home what made the country tick. What they were seeing on TV was the stereotypical (and reductive) Harajuku Girl, a look made popular in the U.S. by Gwen Stefani. As Misa put it, our hearty midnight snack was the actual answer. Originally from China—the dish was called Chinese *soba* until the 1950s—ramen was continually refined by the Japanese, eventually becoming synonymous with its adopted homeland. Like Buddhism and tea ceremonies, it was borrowed from abroad, assimilated, and perfected with time. The idea has stuck with me since.

For much of Japan's modern history, Tokyo has been the hub of cool, creative energy-the place where you could do something as subversive as adding mayonnaise to ramen. Kyoto, its ancient capital, has been a fortress of steadfast cultural preservation. So it might seem unexpected that in spite of all the infrastructure required for Tokyo's 2020 Olympic Games, it's Kyoto that's emerging as a hotbed for innovation, particularly where restaurants, art, and accommodations are concerned. By the end of the year, Kyoto will be home to at least three highly anticipated hotels, including, most notably, Japan's first Ace Hotel. Designed by Kengo Kuma and located in the city center, it promises the chain's trademark breed of carefree cool. Aman, known for its out-of-this-world luxury resorts and \$2,000-a-night price tags, makes its debut in November near the iconic Golden Pavilion temple. And the Park Hyatt brand is soon opening 70 rooms in a four-story building near the Kiyomizu-dera temple complex.

Local artist Shiro Takatani, who co-founded the influential art collective Dumb Type, isn't surprised that his city is heating up. "Tokyo may be Japan's modern capital, but Kyoto retains a youthful energy," he says. "It's a college town at its core." There are at least 30 accredited educational institutions in this city of 1.5 million, making it a breeding ground for ideas—often ones that engage with the country's oldest customs.

Takatani recalls days spent as a student in the 1980s hashing out grand theories with friends in Kyoto's famed cafes. Fast-forward, and he and his cohorts are collaborating on multimedia performance art and video, using their traditional education to create commentary on modern Japanese society. In recent years they've gained global visibility, even showing works at New York's Museum of Modern Art.

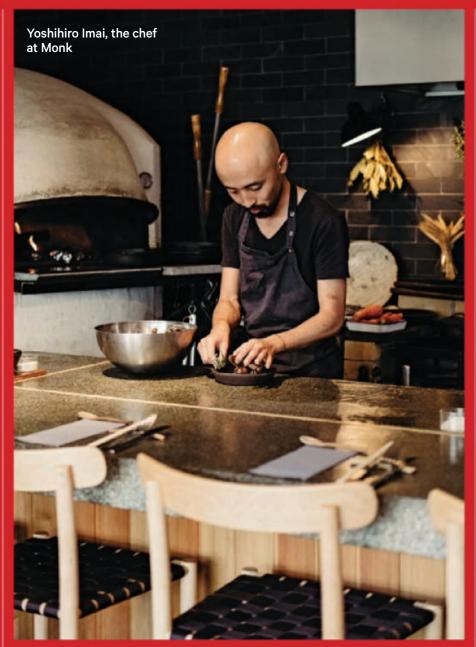
French photographer and Kyoto transplant Lucille Reyboz agrees that the city's long-simmering creative spirit has finally reached a rolling boil. In 2013 she and her husband, Yusuke Nakanishi, founded an international photography festival called Kyotographie, which hosts exhibitions inside centuries-old buildings, many of them abandoned or disused. "We want to both honor the city's history and establish it as a leading light of international culture," she says. Last fall the Kyoto prefectural government and chamber of commerce gave Reyboz and Nakanishi an annual local honor, the Kyoto Creator Grand Prix, for their artistic leadership.

Reyboz's British friend David Croll, an expatriate entrepreneur, is co-founder of the Kyoto Distillery. Two years ago he started bottling Ki No Bi, Japan's first superpremium gin, in a district known for its proud tradition of sake brewing. Its proprietary recipe capitalizes on *kyo-yasai*, the unusual heirloom vegetables and botanicals of the Kyoto region. Ki No Bi has begun to replace whisky as the tipple of choice at cocktail bars around town. Among them is the gin-centric, *Alice in Wonderland*-inspired Nokishita711, as well as Bar Rocking Chair, run by a world-champion bartender.

Chefs are similarly applying refreshing dashes of whimsy to kyo-yasai and kaiseki cuisine, a traditional series of small, intricately prepared dishes that dates back at least 1,000 years. The always-packed Awomb condenses the kaiseki experience onto a single bento platter; it's so photogenic, the restaurant has to enforce a dining time limit on its Instagram-obsessed patrons. At Soujiki Nakahigashi, the hardest reservation to score in Kyoto, the namesake chef Hisao Nakahigashi designs each day's menu around the produce he personally forages on the nearby mountainside. But whereas most kaiseki meals are carefully structured to follow a prescribed progression, Nakahigashi allows room for improvisation. Overhearing that I live in the Big Apple, for instance, he prepares a course of mountain vegetables gently submerged in a clear broth. "New York!" he exclaims with a wink as he presents my dish. In Japanese, the name is a double-entendre–*nyu-yoku* means "taking a bath," like the vegetables in my bowl.

One of Nakahigashi's protégés, Yoshihiro Imai, has a more renegade interpretation of kaiseki cuisine. At his restaurant, Monk, the parade of courses marches out of a kilnlike oven and culminates in...a pizza. Monk is the culinary equivalent of the Kyotographie photography festival: Imai reveres tradition while dabbling with international tastes, techniques, and trends. He makes his perfect Neapolitan-style pies with high-grade Japanese flour and kyo-yasai toppings such as *manganji* pepper (a thicker *shishito*), red *kintoki* carrots, and bulbless *kujo* scallions.

"Usually one pizza is the right amount of food for two people," Imai says, as I dine alone among the couples at his countertop. "But I'll make a whole one just for you." He soon slides a bubbly crust my way, laden with a pulpy eggplant pesto and fresh basil leaves. At the end of the meal (and after a rich mouthful of espresso brewed from beans roasted in his oven), he packs up my leftovers. "It'll make a great snack for later," he says-perhaps one that's even better than mayonnaise ramen.



WHEN THE PENTHOUSE SUITE ISN'T ENOUGH

A residence fit for a king nay, emperor—the rambling temple complex of Ninna-ji was established in the 880s, during the Heian period. For centuries, the temple (which is now protected by Unesco) only welcomed members of the imperial family for overnight visits, but now the general public can stay as well.

For a starting price of 1 million Japanese yen (\$9,000) a night, guests get dinner, breakfast, and butler service within a temperature-controlled samurai residence; in traditional fashion, the beds consist of plush futons on tatami mats. Morning brings a private prayer session on the temple grounds with Ninna-ji's resident monks.

It's all the brainchild of industry veteran Ken Yokoyama. His latest endeavor, Weft Hospitality, champions tourismdriven revenue streams for Kyoto's donation-poor temples and shrines. Book overnights through Weft's tour operator, InsideJapan.

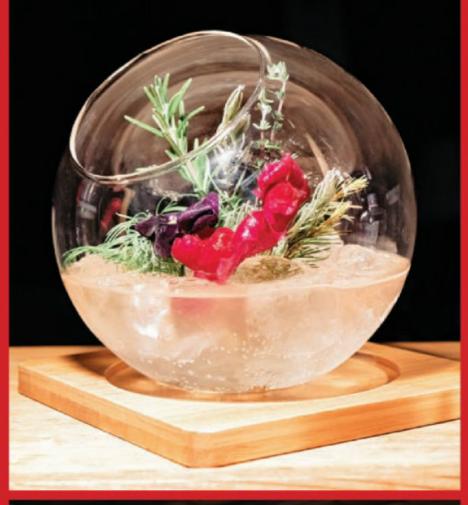
THE 'LITTLE KYOTO' YOU DIDN'T KNOW EXISTED

Situated in the arable land of western Japan, Kanazawa was the country's largest producer of rice during feudal times, making its rulers, the Maeda clan, some of the nation's richest. Today, the vestiges of their wealth well-preserved wooden shrines, samurai quarters, and geisha districts—have earned the city its "Little Kyoto" moniker.

All that is within easy access of Japan's major cities following the 2015 completion of the Hokuriku bullet train, making Kanazawa a magnet for young Japanese weekenders who dress up in traditional *yukatas* and kimonos for the trip. Foreigners are catching on, thanks to a spate of new boutique hotels, including Uan Kanazawa, Kumu, and the two-room Auberge Maki No Oto.

Another local claim to fame? Gold leaf production. (The town supplies 99 percent of the craftsmen's needs in the country.) You'll see it everywhere in the historic Higashi Chaya district—even draped onto cones of vanilla soft serve. Botanical Garden, a gin-and-rosemary cocktail at Nokishita711

Ninna-ji guesthouse





How to Spend \$4 Million in a Day

Shopping for supercars in Geneva with a guy who collects some of the most expensive wheels in the world By Brett Berk

Kris Singh is so excited he's almost vibrating. We're gathered on the Aston Martin stand at the Geneva International Motor Show, where the venerable British carmaker has just unveiled three concept cars: the Lagonda All-Terrain, a battery-powered SUV lined with silk and cashmere; the Vanquish Vision, a sports car intended to compete with \$250,000 Ferraris; and the AM-RB 003, a 500-unit, \$1.3 million hybrid that resembles a demonic specter in an astronaut's helmet.

All three are years from being road-ready, but that doesn't matter to the 39-year-old Miami-based investor. "I love seeing things for the first time in real life instead of on the internet," Singh says. "Being surprised, that's so rare these days. It's like being a part of history."

History hasn't been kind to auto shows in recent years. Luxury car companies such as Bentley, Lamborghini, Mercedes-Benz, and Porsche have fled them in droves because of the expense of constructing stands and the ease of revealing a car online instead. A more au courant way to network and negotiate with customers is at high-touch, low-key equestrian events or the classic car shows at Amelia Island, Fla., and Pebble Beach, Calif.

Geneva is the exception. Each March the European banking and diplomacy hub attracts the biggest names in high-end automobiles, as well as countless obscure brands. Toyota Motor Corp., Fiat SpA, and other mainstream automakers also have a presence here, but it's the Bugattis of the world that spend €1 million to €2 million to introduce their latest creations. Over two VIP days, hundreds of millionaires will kick the tires on hundreds of millions of dollars' worth of exotic cars.

"Geneva is a dangerous sport for me," Singh says. "I find something that I want to buy here every year." He owns a \$1.5 million Pagani Zonda, a \$2.5 million Koenigsegg Agera RS

CARS

he bought in Geneva four years ago, and a \$3.9 million Lamborghini Veneno he'd already ordered by the time he saw it for the first time in real life here in 2013. He shares pictures of his favorite cars with 720,000 followers on Instagram, often with the hashtag #blessed.

Holding a single-page intent-to-buy contract, Peter Freedman, the regional marketing director for Aston Martin Lagonda Ltd., greets us in the shadow of the 003's open butterfly-wing doors. Singh already has on order a \$2.5 million Aston Martin Valkyrie that will feature a chromatic paint job made with crushed moon rocks. But he's expressed interest in buying the 003, too, though it won't be out until late 2021. Now, considering the other potential buyers who are circling and its limited production run, he kneels to sign the contract on the front fender. Freedman compliments him on his excellent taste, and the two shake hands and laugh.

At the McLaren Automotive Ltd. booth, in a VIP area behind a velvet rope, privileged customers are granted access to the brand's top executives and designers, with whom they can discuss future product plans, schedule track weekends, or spec a custom color and trim. "We're all sort of courting for engagement," says Ansar Ali, managing director of special operations for the British manufacturer, as dozens of McLarenistas eat sea bream tartare and sip Deutz Champagne. "It's not about being seen," he says. "It's about being behind the scenes."

In Bugatti GmbH's private upstairs lounge, an international group of well-preserved men and women hug, slap backs, and toast with flutes as if they're at a royal family reunion. "We want to make everyone feel like they are part of the family," says Christian Mastro, a sales, marketing, and customer service executive for the brand. About 100 Bugatti customers will visit over the two VIP days, significant for a brand that's produced fewer than 1,000 cars in the past two decades.

This dance of salespeople with their top clients illustrates how, when dealing with exclusive, desired, and rapidly appreciating objects like these, the relationship goes both ways. Singh must persuade the automakers it's worth selling one of their precious wares to him. Lingering in the Bugatti lounge, he excuses himself when he sees company President Stephan Winkelmann enter. "I want to get him to give me a Divo," he says.

The problem? Only 40 of these \$5.8 million track-focused Divos will be built, and all of them are spoken for. Singh says he was offered the opportunity to purchase one, but it came with the prerequisite that he also buy one of Bugatti's \$2.7 million Chirons. "I didn't want a Chiron," he says. "And when I saw the Divo the first time, it was on video, and I didn't really like it." Now he does.

He returns, undaunted. "I'll get a Divo," he says. We pass the Koenigsegg Automotive AB stand, where the Swedish maker of the world's fastest production car, the Agera RS, has unveiled its successor, the Jesko. It has a tall rear spoiler that cantilevers acrobatically; its 1,600 hp motor is wrapped in carbonfiber bodywork that resembles an advanced air force weapon.

"I must have it," Singh says, vibrating again. "Koenigseggs are legitimately the best. They make everything else feel slow." He signs another contract on the table-size rear spoiler. Asked how much, he shrugs. "I have no idea," he says. "Joking. I think it's \$2.7 million." B



Hands-Free Devices

Crossbody bags add a flash of gender-neutral fashion to functional fanny packs By Jason Sheeler Photographs by Janelle Jones

Texting while walking is hard when your hands are carrying a gym bag and iced latte. But help has arrived for modernday schleppers: the crossbody, which—thanks to longer straps and ergonomic shapes—is slung diagonally from one shoulder and worn anywhere from chest to back to hip. Flexibility is the bag's chief appeal, according to Olie Arnold, the Londonbased style director of online retailer Mr Porter. "They're the functional hybrid of a backpack and a briefcase," he says, "and an alternative to both." What they don't have is room for a lot of stuff—a good excuse to Marie Kondo your daily haul.



One part passport holder, one part detective's holster, the **Dunhill travel bag** (\$725) is made from a water-repellent canvas material. Wear it on your chest or hip.



Yes, fine. The **Dior mini saddle bag** (\$2,700) looks like an old-school fanny pack. A hit among the fashion-forward, it won't hold much more than a cellphone, wallet, ChapStick—and other pedestrians' attention.



STYLE



Slowly wade into the crossbody category with the **Louis Vuitton Avenue sling bag** (\$1,810). It's backpack-lite, with roomy pockets and interior compartments, plus an adjustable strap.



Not for novices, Tom Ford's **TF Buckley messenger bag** (\$2,590) is large enough for your basics—with plenty of oversize zip closures yet small enough to keep that print from going full Palm Beach.



If you have a black belt in style—and are lucky enough to get your hands on this in-demand, fluorescent **Gucci Matelassé belt bag** (\$2,980)—it'll be all the Day-Glo green you'll need for spring.



When this calfskin **Hermès Citywide bag** (\$4,875) came down the runway, it was slung over the shoulder diagonally and tucked under a raincoat, setting the standard for how to wealth-stealth in 2019.

70



The Delicious Decade

Ruth Reichl edited *Gourmet* from 1999 to 2009. Her tastes linger with us still. *By Kate Krader*

Once upon a time, Condé Nast editors ruled the Earth. They had town cars, an annual clothing allowance, and a canteen called the Four Seasons. Now, every season brings news of the shuttering or sale of a title—or the exit of one of those fabled editors. In 2018, the company said Chief Executive Officer Bob Sauerberg Jr. would be stepping down later this year. The year before, it lost \$120 million, according to the *New York Times*.

But from the 1990s to the late 2000s, New York's social world spun around AnnaGraydonDavidPaige (the first names of the editors at *Vogue, Vanity Fair*, the *New Yorker*, and *Architectural Digest*, respectively). Fashion was Condé Nast Inc.'s calling card, but it also boasted the queen of food journalism, Ruth Reichl. The curly-haired Berkeley hippie was the era's Julia Child, with a dash of Chrissy Teigen's communications savvy. In April 1999, Reichl became editor-in-chief of America's original food magazine, *Gourmet*. Her new memoir, *Save Me the Plums* (April 2, Penguin Random House), details her reign, which began when *Gourmet*'s core audience was the secondhouses-with-horses set and lasted through a decade of everexpanding horizons.

Reichl narrates cage-rattling decisions such as putting cupcakes on the cover (old-school readers rebelled; too downmarket) and assigning articles to the likes of David Rakoff and David Foster Wallace. (Wallace's article on the ethics of killing shellfish at the Maine Lobster Festival became the title essay in his book *Consider the Lobster*.) Meantime, Reichl reveals the challenges of being a wife, mother, and successful author with frequent book tour demands that she guiltily fulfills. Inevitably she arrives at September 2009, when Condé Nast's late owner, S.I. Newhouse Jr., gathered *Gourmet*'s team to say he was closing it. Reichl raided the magazine's wine cellar and summoned company cars to take the staff to her house for one last party.

After such books as *Comfort Me With Apples*, about her start in restaurant criticism, Reichl has an enthusiastic fan base– 1.3 million of them devour her haiku-like tweets. These readers will be happy to know she's pretty much always right in *Save Me the Plums*, whether she's putting raw fish on the cover (considered art director suicide at the time) or sending pots of homemade chili to Sept. 11's first responders. Occasionally she admits a mistake: Toward the end, when budgets were being slashed, she neglected to research the person who bought an auctioned dinner with her. It was hedge fund manager Bill Ackman, who wasn't amused at her lack of interest in him.

The book is perhaps too light on what went into putting together *Gourmet*, a magazine that covered so much disparate ground it felt like it had ADD. But what is there are reminders of the things she and the magazine achieved: As the restaurant editor at rival *Food and Wine*, I was extremely jealous of the time she flew the entire staff to Paris so they could re-create the experience of French eating, cooking, and shopping in extraordinary detail and when she devoted an entire issue to Southern food legend Edna Lewis. Reichl was also the first print magazine editor to hire a full-time video producer to capture the work of a test kitchen and share simple tricks for, say, boning a fish. Seems obvious now, but she was way ahead of her time.

In the end, for all her efforts, Reichl and *Gourmet* came up against the industry's conundrum: Magazines can't remain the same and stay afloat, nor can they continually innovate, lest they lose their audience. And *Gourmet*'s test kitchen ran up vast bills: Recipe-testing costs averaged \$100,000 a year, and the staff included 12 cooks and 3 dishwashers. It wasn't unknown to test a recipe 20 times. (Try telling that to an Instagram chef.) And then there was the financial crisis.

A 2009 *Newsweek* article guessed that Condé Nast ad revenue losses might hit \$1 billion that year. Thus, *Gourmet*'s demise was predictable—but still shocking, and not only to foodies. For a decade, Reichl used her talents and platform to push the culinary universe to a more democratic place that championed cooking while spotlighting real-world food issues. And it transformed elevated cooking into the realm of the achievable. Now the idea that everyone can be a home chef is central to our public lives on social media. But momentary videos on YouTube, "quick-fire challenges" on TV, and well-composed photos on Instagram rarely tell the story behind the dish. Reichl endorsed doing it the right way; whether a recipe was simple or ambitious, she urged readers to learn more about what they were doing in the kitchen.

Although her megaphone is smaller, her voice remains one of the most trusted in our disparate food universe. Reichl's book reminds us of the time when you could pick up a magazine and feel simultaneously starved and sustained.

Take Your Best Shot

The Fujifilm X-T3 is the best mix of new and old in a rapidly changing photography environment. *Photograph by Jessica Pettway*

behind mirrorless cameras has improved so dramatically that they can shoot professional-grade images and highquality 4K video at a fraction of the size and weight of a digital singlelens reflex (DSLR) camera, which requires a prism to reflect light back into your eye. In the past year, every major brand—including Nikon, Panasonic, and Canon—has jumped on board. The Fujifilm X-T3 (\$1,399), released in September, combines an innovative autofocus

and top-of-the-line

The technology

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THE COMPETITION

• Nikon Corp. has a dedicated fan base and beloved family of camera lenses. In November it rolled out the Z6 (\$1,999 for the body only), the first of mirrorless cameras. At just 585 grams (1.3 pounds) it's the lightest option on this list. • Sony Corp. has been playing the full-frame mirrorless game for longer than most, and its Alpha7 III (\$1,999 for the body only) offers a solid

two digital

FUJIFILM

24.2-megapixel option, a 693-point autofocus system, and one of the longest-lasting batteries available. • Canon Inc.'s first mirrorless camera. the \$2,299 EOS R (body only), has a high megapixel count, 30.3, and also provides superb video quality for those looking for a full-frame camera that doesn't trade size for strength.

a regular Fuji customer, it's easy to start out overwhelmed by all the buttons. But with just a little oractice, they become second nature, whether adjusting ISO (light sensitivity), shooting mode (single, rapidshooting, video), or shutter speed. Its image stabilization function works great with still pictures, helping reduce blur from shaky hands, and it's phenomenal with video. Tones reproduce well, colors are rich, and the resolution is stunning—proof that mirrorless cameras are the direction to go. A Nikon or Canon is more recognizable, but this is the camera that will make people ask how you got that shot. \$1,399; fujifilm.com

LAST THING

FedEx's European Bet Still Hasn't Delivered

By Brooke Sutherland

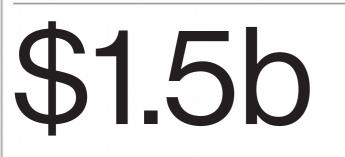
FedEx Corp.'s European road trip has turned into a yearslong headache.

72

The parcel-delivery company, historically a laggard in Europe relative to rival United Parcel Service Inc., bet big on the region in 2016 with the \$4.4 billion acquisition of Netherlands-based TNT Express NV. Three years later, FedEx is still trying to integrate TNT into its operations. Two veteran executives leading that process have been replaced, and sluggish growth abroad is weighing on FedEx's results. On

March 19, the company cut its fiscal 2019 earnings guidance for the second time in only three months and said it may need to take more drastic cost-cutting actions to mitigate the impact of weak international sales.

"We remain confident in the long-term strategic value of the FedEx Express/TNT Express combination," Rajesh Subramaniam, FedEx's president and chief



MONEY PIT

LLUSTRATION BY GEORGE WYLESOL

FedEx's original cost estimate for the deal was \$700 million to \$800 million in integration expenses-about half the current estimate.

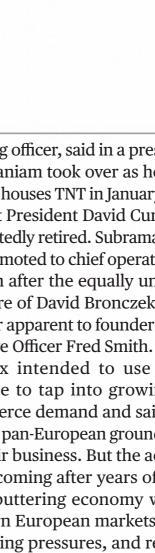
● RAISE THE ROOF On March 19, FedEx increased its estimate of cumulative integration costs by \$100 million, from the \$1.4 billion it had predicted in 2017.

operating officer, said in a press release. Subramaniam took over as head of the unit that houses TNT in January after former unit President David Cunningham unexpectedly retired. Subramaniam was then promoted to chief operating officer in March after the equally unexpected departure of David Bronczek, the onetime heir apparent to founder and Chief Executive Officer Fred Smith.

FedEx intended to use the TNT purchase to tap into growing global e-commerce demand and said it could

cut costs by merging TNT's pan-European ground network with its existing Express air business. But the acquisition was risky from the start, coming after years of earnings challenges at TNT as a sputtering economy weakened demand in its core western European markets, cheaper competition piled on pricing pressures, and restructuring led to eye-watering charges. TNT had woefully underinvested in its network, and now the cost of catching up has fallen on FedEx.

FedEx initially expected a four-year integration process. In December it was forced to acknowledge that downtrodden demand in Europe and aftershocks from a 2017 cyberattack on TNT's network would delay the expected benefits of the deal and cause it to miss profit growth goals for the Express segment. On March 19, FedEx said the work may stretch into its fiscal 2021–which is an awfully long time to wait for a big deal to start paying off. B — Sutherland is a deals columnist for Bloomberg Opinion









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