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and nobody seems to care p6

● A lesson in forward thinking  
from *Black Panther* p74

● The Chinese company that's  
conquered a piece of America p52

# Bloomberg Businessweek

February 19, 2018 ● SPECIAL DOUBLE ISSUE

# UP. WAY UP.

## How Boeing seized the sky

p44



CEO Dennis Muilenburg



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DOLLY FAIBYSHEV FOR BLOOMBERG BUSINESSWEEK

62 ▲ Young fans at WWE's WrestleMania 33 in Orlando last April



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Correction: "Who Profits From Hedge Fund Fees?" (Finance, Feb. 12) should have said Och-Ziff Capital Management Group's expenses for recurring placement and related service fees in 2016 were equal to about 0.1 percent of assets under management, not 1 percent.



# L'ORÉAL

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Chairman and CEO

**No.1**  
cosmetics  
group  
worldwide

**No.1**  
for **gender  
equality**  
/Equileap  
Ranking

Growth  
**ACCELERATION**<sup>(1)</sup>  
**+5.5%** in  
4<sup>th</sup> quarter  
2017

**No.1**  
in **Ethics**  
/Covallence<sup>(4)</sup>  
Index

**RECORD  
OPERATING  
MARGIN**<sup>(2)</sup>  
**18%**

**No.1**  
in **Environment**  
/Newsweek Green  
Ranking

**2017  
NET PROFIT**<sup>(3)</sup>  
**+15.3%**

[loreal-finance.com](http://loreal-finance.com)

(1) Like for like sales growth, based on a comparable structure and identical exchange rates.

(2) 2017 operating profit / consolidated annual sales.

(3) 2017 net profit after non controlling interest.

(4) Personal and household goods category.

## Asia



● The combined Korean women's hockey team celebrated scoring against Korea's colonial ruler, Japan, at the Winter Olympics on Feb. 14. Japan went on to win the matchup 4-1.

● Benjamin Netanyahu remained defiant after police recommended he be charged with bribery and fraud.

The Israeli prime minister denies wrongdoing, and members of his Likud Party called for him to remain in office while the attorney general decides whether to pursue a case.

● Embattled Chinese conglomerate HNA Group announced it will sell **\$6b** in real estate assets around the globe. The sale is the first part of a planned \$16 billion selloff to satisfy hungry creditors.

● China's former internet regulator, Lu Wei, was accused of corruption and expelled from the Communist Party on Feb. 13, just days before the Lunar New Year.



● Famed jeweler Nirav Modi and companies linked to him allegedly used \$1.6 billion of fraudulent guarantees to secure bank loans abroad, according to a complaint filed by India's Central Bureau of Investigation.

## Europe

● U.K. Foreign Secretary Boris Johnson pooh-poohed calls for a second Brexit referendum in a speech on Feb. 14, the first in a planned series by members of Theresa May's cabinet intended to rally conservative support for ongoing negotiations with the European Union.

● Dutch Minister of Foreign Affairs Halbe Zijlstra resigned after admitting to lying about a 2006 meeting with Russian President Vladimir Putin. He confessed that he had not, in fact, been present.



● Facebook's default settings violate German privacy laws.

That was the determination of a regional court in Berlin. The EU will enact similar privacy laws in May, and the January ruling, made public on Feb. 12, may signal trouble for social media companies in Europe.

● Mikheil Saakashvili, the former president of Georgia, was seized in a cafe in Kiev and deported to Poland. Saakashvili, who was briefly a regional governor in Ukraine, has called for the removal of Petro Poroshenko, the country's president.

● “Their swaggering lasts until they see our army, our ships and planes.”

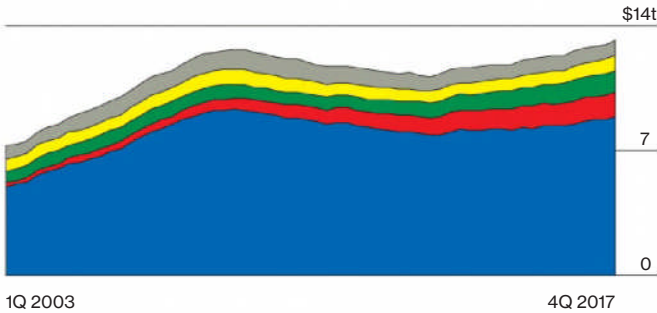
Turkish President Recep Tayyip Erdogan warned Greece against continuing to explore for natural gas off the coast of Cyprus. On Feb. 13, a Turkish coast guard vessel rammed a Greek ship near the disputed Aegean islets of Imia.

# Americas

● U.S. household debt rose to \$13.1 trillion during the last three months of 2017, marking the fourth straight quarter in which borrowing reached a record high.

U.S. household debt

■ Mortgages ■ Student loans ■ Auto loans ■ Credit cards ■ Other\*



● Fannie Mae asked for a **\$3.7b** infusion from the U.S. Department of the Treasury for the first time since 2012. The public mortgage insurer took from the tax legislation passed in December, which reduced the value of some of its assets.

● Alvaro Colom became the fourth president of Guatemala to face corruption charges when he was arrested in Guatemala City on Feb. 14, according to the *New York Times*, along with nine former members of his cabinet. Colom denies any improprieties.



● Peruvian President Pedro Pablo Kuczynski disinvited his Venezuelan counterpart, Nicolás Maduro, from the annual Summit of the Americas, to be held this year in Lima.

● Chipotle Mexican Grill chose Brian Niccol, CEO of rival Taco Bell, to lead it in a turnaround. Chipotle founder Steve Eells resigned as CEO of the struggling fast-casual chain in November.



● Uber Technologies reported sales of **\$7.5b** for the last quarter.

● House Oversight Committee Chairman Trey Gowdy opened an investigation into the White House's handling of security clearance for Rob Porter, the former Trump aide who resigned after allegations surfaced that he had abused his two ex-wives.

In its first full quarter under CEO Dara Khosrowshahi, the company also booked a \$4.5 billion loss.

● Unilever's chief marketing officer, Keith Weed, threatened to pull advertising from Facebook and Google unless the web giants take steps to minimize "toxic content."

# Africa

● South African President Jacob Zuma resigned on Feb. 14, a day before a planned no-confidence vote by the ruling African National Congress party. His term wasn't set to expire until 2019.



● Two members of the powerful Gupta family were arrested, according to South African news sources, after police raided their Johannesburg compound. The Guptas have been accused of corruption and undue influence on Zuma's government.



How Republicans learned to stop worrying and love the deficit

By Peter Coy and Sahil Kapur



Rand Paul, the Kentucky senator, made a nuisance of himself the night of Feb. 8 when he tried to shame fellow Republicans into voting down a \$300 billion spending increase. He asked, “If you were against President Obama’s deficits and now you’re for the Republican deficits, isn’t that the very definition of hypocrisy?” He put up a series of posters of allegedly wasteful federal spending, including a \$356,000 scientific study that he said was designed to determine “whether Japanese quail were more promiscuous on cocaine.” And he refused to allow a vote before the midnight deadline for budget extension, forcing a technical shutdown of the federal government that lasted several hours.

Senate colleagues of the sleepy-eyed physician-politician were unimpressed. John Thune of South Dakota, the Senate’s second-ranking Republican, called Paul’s jeremiad “a colossal waste of everybody’s time.” One mean person on Twitter wrote, “Every member of the GOP in that room is thinking, ‘Now I know why the neighbor beat him up.’”

Paul’s peers could afford to tune him out for one simple reason: Voters don’t care about federal budget deficits. And that, in a nutshell, is why the deficit hawk is an endangered species in the environs of Washington.

Voters used to care about deficits. In 2013, when Obama was trying to get the economy out of its post-recession doldrums, reducing the budget deficit ranked third on the public’s list of priorities, behind only the economy and jobs, according to polling by Pew Research Center. The public’s fear of red ink made it easy for Republicans in Congress to oppose Obama’s infrastructure-spending proposals.

By this January, reducing the budget deficit had tumbled to 14th on the list, between immigration and drug addiction, according to Pew. The decline in concern crossed party lines.

Senate Majority Leader Mitch McConnell of Kentucky and House Speaker Paul Ryan of Wisconsin seem to have absorbed the pollster’s message. They vowed repeatedly last year that any change in tax laws would be revenue-neutral. Nope. On a party-line vote in December, Republicans pushed through a bill increasing deficits by \$1.5 trillion over a decade. They followed it in February with the two-year, \$300 billion spending package that Paul railed against. If that higher spending isn’t allowed to phase out, it could add more than \$2 trillion to the national debt over a decade, including interest expense, the nonprofit Committee for a Responsible Federal Budget estimates.

The December and February votes could help GOP incumbents by accelerating job growth before the midterm elections in November. Federal debt as a share of gross domestic product rose under Republicans Gerald Ford, Ronald Reagan, George H.W. Bush, George W. Bush, and now Trump, while it fell under Democrats Bill Clinton and Jimmy Carter. (Debt to GDP did rise under Obama, but he inherited a meltdown and still cut the deficit 60 percent from his first year.) Yet Republicans continue to be regarded as the party of probity. “It’s really difficult to take somebody’s view about a party and try to shift it,” says Democratic pollster Anna Greenberg.

Budgeting is about making difficult choices. The desire for

lower taxes is incompatible with the desire to strengthen the military while also spending more on an aging population. Trouble is, politicians don’t get reelected by forcing medicine down their constituents’ throats. Huge deficits are the result.

The latest tax cuts and spending hikes threaten to overheat an economy that’s already close to full employment. The January jobless rate was only 4.1 percent, and inflation is (finally) picking up. Tax receipts from individuals and businesses are as strong as they ever get. Despite that, the government is on track to run deficits of 5.4 percent of GDP this year, up from 3.1 percent in Obama’s last year in office, estimates JPMorgan Chase & Co. On Feb. 12, Deutsche Bank AG said the U.S. is the Group of 10 member most in need of fiscal austerity—even as Germany, the Netherlands, and Sweden continue to require stimulus.

The political problem for would-be deficit hawks is that members of the public tend to perceive the danger of deficits exactly backward: Because families have to tighten their belts when times are hard, many voters believe that the government should do the same—even though that’s when the government needs to spend money to mitigate the downturn.

Voters’ instincts are wrong on the upside, too. Because families can afford to spend more when times are good, as now, they tend to forgive government red ink—even though now is precisely when the government should be tightening its belt to keep the economy from overheating and to prepare for the inevitable bad times ahead.

Groups opposed to deficits argue that the public really does care and GOP politicians shouldn’t take for granted the support of antideficit voters. “Eventually those voters are going to just stop showing up. After all, what’s the difference between the two parties?” says Andy Roth, a lobbyist with the Club for Growth. “People are concerned about these issues and want them to be a priority,” says Michael Peterson, chief executive officer of the Peter G. Peterson Foundation. The group goes to college campuses to remind young people that they’ll be saddled with paying their elders’ debts.

If voters don’t put a stop to deficits, bond investors might. Concerns about overstimulus of the economy and increased debt issuance by the U.S. Department of the Treasury have driven the yield on 10-year Treasuries to 2.9 percent, from just over 2 percent, as recently as September.

For now, Washington is blasé. Exhibit A is Mick Mulvaney, who was a fierce enemy of deficit spending as a congressman from South Carolina but has negotiated huge deficit increases as the director of Trump’s Office of Management and Budget. Pressed on that in October on *Fox News Sunday*, Mulvaney said he’d come around to the idea that tax cuts that expand deficits in the short run would stimulate growth and raise tax revenue in the long run, thus eventually shrinking deficits. “We need to have new deficits because of that,” he said. “We need to have the growth.”

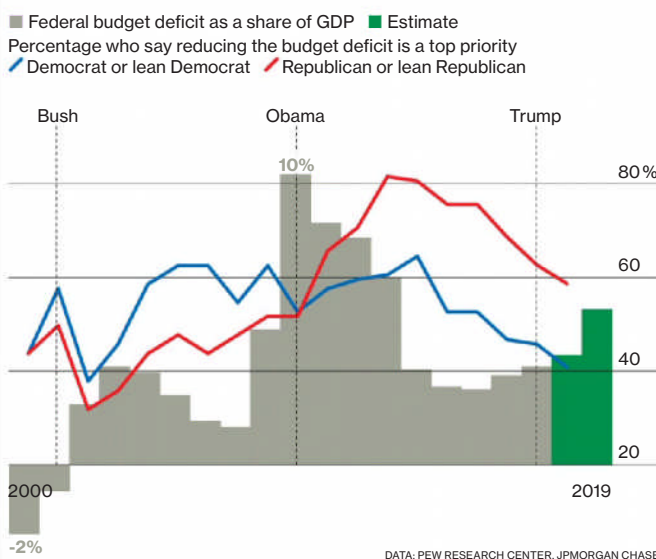
Mulvaney’s contention—in essence, that tax cuts pay for themselves—has been discredited by real-world experience. As recently as May the University of Chicago Booth School of Business’s Initiative on Global Markets asked 42 economists ▶

◀ from across the political spectrum whether Trump’s tax cut proposal “would likely pay for itself through higher growth.” Only one said yes, and it turned out he had meant to say no.

As owner of the world’s principal reserve currency, the U.S. can borrow for years to come before creditors balk. Still, interest expenses are rising. Some Democrats fear that the tax cuts will be paid for by massive cuts in social spending. As if to validate their fears, the Trump budget released on Feb. 12 called for a 42 percent reduction in nondefense discretionary spending over 10 years and \$700 billion in savings from repealing and replacing Obamacare.

Even Republicans won’t vote for those cuts, though. “Deficit concern exists solely as a political weapon for Republicans to use against Democrats,” says Bruce Bartlett, a former domestic policy adviser to Reagan who’s turned into a critic of the GOP. “I personally will not tolerate anyone who supported that absurd tax bill lecturing me about fiscal discipline ever again,” says Senator Brian Schatz, a Hawaii Democrat. Deficit hawks are indeed a dying breed. **B**

Less Worried



VIEW

To read Noah Smith on Pittsburgh’s road map for cities on the rebound and Conor Sen on Asia’s Olympic hosting run, go to [Bloombergview.com](http://Bloombergview.com)

8

# It Never Hurts to Talk—Even With Kim Jong Un

● The U.S. vice president had the right response to a proposed summit between North and South Korea

In the quarter century that the world has been dealing with North Korea’s nuclear program, there have been precious few nuggets of good news. The U.S. response to an olive branch from Kim Jong Un may be one of them.

Kim’s gambit—sending his sister to the Winter Olympics in South Korea with an invitation for President Moon Jae-in to visit Pyongyang—had provoked some consternation. Was he hoping to divide Moon, who favors rapprochement, from the more hard-line views of President Trump? On his way home from the Winter Games, U.S. Vice President Mike Pence said what should have been equally obvious: The allies shouldn’t

allow themselves to be divided. Talks, even between the U.S. and North Korea, can and should proceed alongside the global pressure campaign against the North’s nuclear program.

Two things are worth recalling. First, there’s no military solution to this crisis. Any conflict would result in a U.S. victory—but also an inconceivable number of casualties in South Korea and possibly in Japan and U.S. territories such as Guam. That’s why talk of a “bloody nose” strategy—launching a limited strike to intimidate Kim—is foolish.

Second, sanctions alone won’t solve the problem. Although China has gone along with far harsher restrictions than before, Beijing will resist any measures—such as cutting off fuel supplies—that might provoke a collapse in the North. Sanctions seem to be having an impact on the North Korean economy. But it’ll take time for pressure within the system to build. In the meantime, Kim’s scientists will continue their race to deploy a nuclear-capable intercontinental ballistic missile. With tensions high, the chances of miscalculation rise daily.

At the very least, all sides have reason to lower that risk. The Winter

Olympics have provided a temporary window of calm, with the North refraining from further nuclear or missile tests and the U.S. and South Korea suspending military exercises. The immediate goal should be to extend that period of calm. Moon should make clear that any talks—let alone a summit in Pyongyang—are contingent on a continued lull in testing. If nothing else, that will help slow the North’s progress toward a functioning ICBM.

If the U.S. joins the talks as well, it would be worth exploring a more formal arrangement. Unsurprisingly, Pence reiterated that any serious negotiations must lead to Kim giving up his nukes. While that should remain the official goal, it’s unrealistic at the moment. That means the U.S. needs to focus on improving what it’s been doing for 25 years: containing and deterring North Korea by tightening economic sanctions, improving missile defenses, and coordinating with allies in the region as well as rivals such as China and Russia. That effort, too, can continue alongside talks. Such an approach won’t always produce good news, but it should prevent the worst. **B**

# How much is your broker charging you?

## US Margin Loan Rates Comparison

## Commission Rates Comparison

	\$300K	Equity Trades	Options <sup>1</sup> Base per contract
● Interactive Brokers <sup>2</sup>	2.58% <sup>3</sup>	\$2.59	no base cost \$0.68 per contract <sup>4</sup>
● Fidelity	7.07%	\$4.95	\$4.95 base + \$0.65 per contract
● Schwab	7.07%	\$4.95	\$4.95 base + \$0.65 per contract
● TD Ameritrade	7.75%	\$6.95	\$6.95 base + \$0.75 per contract

Each firm's information reflects the standard online trades pricing obtained from the respective firm's websites as of 2/5/18 Pricing and offers subject to change without notice.

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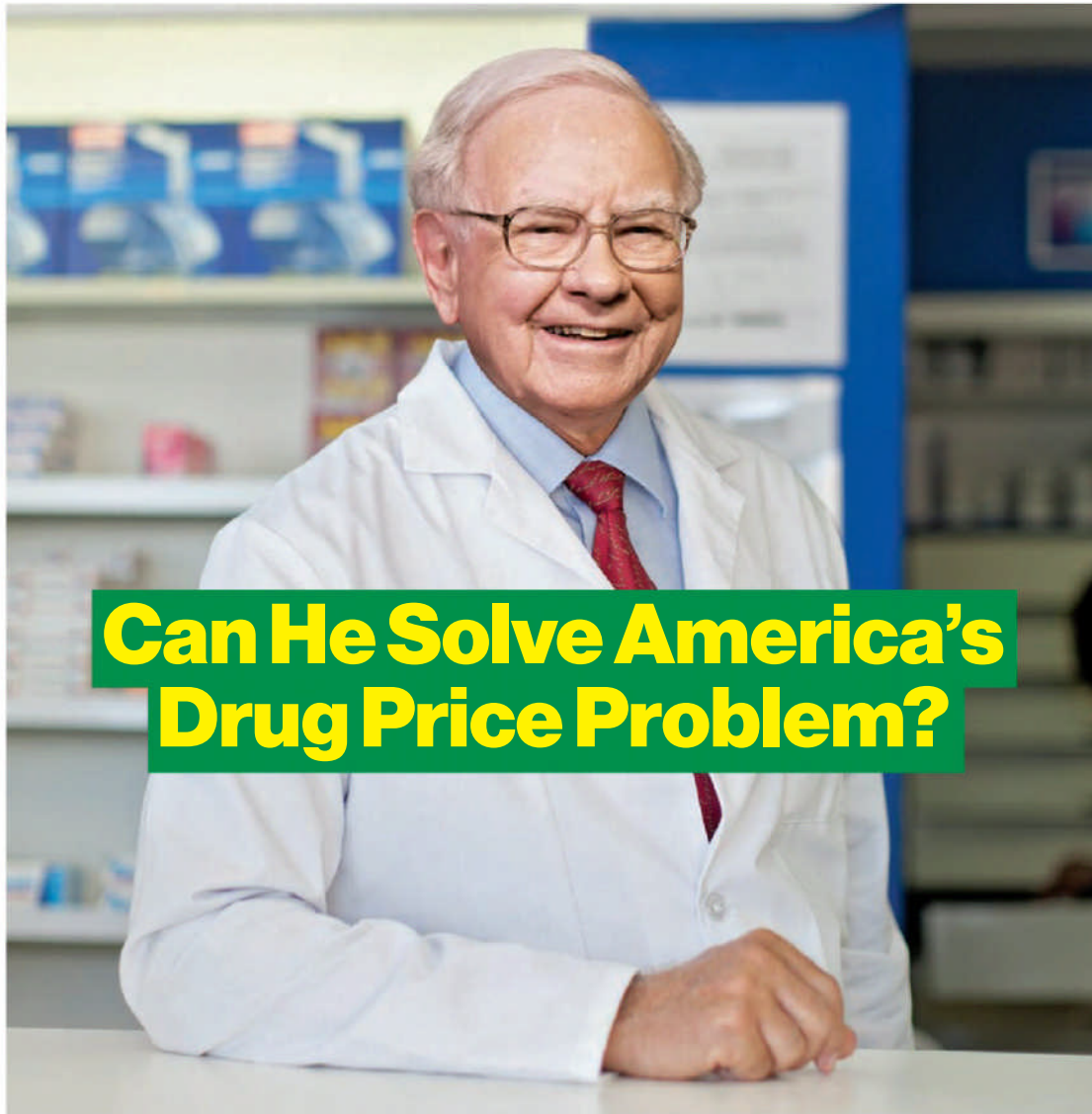
● Major companies will present at Citi's 2018 Global Industrials Conference in Miami from Feb. 20-22

● Deere holds its annual meeting on Feb. 28 in Moline, Ill.

● Retailer J.C. Penney, saddled with excess inventory last year, reports fourth-quarter earnings on March 2

1

BUSINESS



# Can He Solve America's Drug Price Problem?

● The intractability of the crisis makes the Bezos-Buffett-Dimon alliance alluring

With the U.S. health-care system appearing incapable of taming runaway price inflation, Jeff Bezos, Warren Buffett, and Jamie Dimon think they can do better. Perhaps only titans with the resources of Amazon.com, Berkshire Hathaway, and JPMorgan Chase can contemplate such a thing. But changing the convoluted practices that determine drug costs will require them to take on powerful players who are already fighting among themselves.

Pharmaceutical companies have come under fire for the ever-rising five- and six-figure prices

they charge for life-sustaining drugs. They say those numbers don't tell the whole story, because middlemen—the pharmacy benefit managers (PBMs) and the insurance companies they work for—collect discounts that aren't always passed on to patients. The industry is so emphatic about this argument that its lobbying group started a consumer website in January effectively waging war against the PBMs. Big Pharma's battle cry represents a previously unthinkable rift between two big forces in health care that for years quietly settled their differences away from public view.

At stake is how the spoils of pricey drugs are divvied up in complex and shrouded negotiations among drugmakers, PBMs, insurers, wholesalers, and giant retail pharmacy chains. Consider Humalog, an Eli Lilly & Co. insulin drug, which in recent years has more than tripled in price, to \$275 per vial, drawing the ▶

February 19, 2018

Edited by James E. Ellis

Businessweek.com

◀ ire of lawmakers, patients, and consumer activists. But the company doesn't keep even 20 percent of that list price. Most of it flows to middlemen in rebates and other discounts, according to SSR Health LLC, an investment research firm. Rebate deals are being set up for other expensive drugs, such as Humira, AbbVie Inc.'s rheumatoid arthritis blockbuster, which costs more than \$4,800 a month, and Harvoni, Gilead Sciences Inc.'s hepatitis C cure, which lists at \$94,500 for a 12-week treatment.

This is the nut that Bezos and his partners will have to crack. Details about their plans are scant, other than that the venture will focus on better technology. And who knows? Perhaps the trio can pull off something truly remarkable. It would surely be a mistake to underestimate Amazon.com Inc.'s ability to blow up a market after the havoc it's wreaked on everything from books to electronics to household staples. But drug companies and health-care providers are different: They're already gigantic, backed by powerful lobbies, and, most challenging, at each other's throats.

Here's how rebates are supposed to work: A drugmaker sets a list price for a drug, say, \$5,000 a month. That price is roughly what the drug would cost if you walked into a pharmacy and paid without any insurance. But pharmaceutical companies negotiate confidential rebates with insurers and PBMs to ensure a drug is covered; those can sometimes be 50 percent or more of the list price. Big PBMs have the power to kick a company's drug off of an insurance plan in favor of another in return for better rebate terms. In other words, PBMs can make or break a drug's success.

PBMs have been singled out for criticism before, but rarely has the noise been so loud. The rebate system "encourages manufacturers to set artificially high list prices," the White House Council of Economic Advisers said in February. Among big businesses, Caterpillar Inc. has come closest to throwing out its benefits manager. More than a decade ago, it came up with its own list of covered drugs and began negotiating directly with pharmacies, moves that it says have saved it tens of millions of dollars a year. But it still uses a PBM to collect rebates and administer claims.

The new joint venture could do something far more drastic if it bargained directly with drugmakers for top-selling medicines or even created an online bidding system for the manufacturers. The trio could partner with Rx Savings Solutions, for example, a startup with an app that peers into a patient's insurance plan to help find lower-cost drugs. Amazon could eventually open its own

mail-order pharmacy to compete directly with PBMs. Recent speculation about an Amazon-like market for drugs has rattled investors in PBMs, pharmacies, and drug wholesalers.

CVS Health Corp. and Express Scripts Holding Co., two of the largest PBMs, say they welcome the Bezos-Buffett-Dimon initiative. Benefits managers say they're scapegoats for drugmakers desperate to justify high prices. They say they keep a small fraction of rebates for themselves and pass on the rest to their clients. The system keeps prices in check, according to Express Scripts, which says drug costs in its commercial plans rose only 1.5 percent last year when rebates are included. Without PBMs, drugmakers "would charge whatever they want," says Glen Stettin, an Express Scripts senior vice president. "We've taken a lot of their pricing power away."

Big Pharma paints a different picture. In ads, the Pharmaceutical Research and Manufacturers of America points out that many patients can end up paying the full price of a drug, even when their insurer, employer, and PBM benefit from rebates. This is because millions are on high-deductible insurance plans. "We are paying rebates against that same sale where people are paying full price," says David Ricks, chief executive officer of Eli Lilly. "Our view is those rebates should be passed through in the point of sale."

Lilly is trying something different with its own employees: giving them rebates directly rather than keeping them all for itself—a kind of blueprint for how the industry could push back against PBMs. It's not an altogether new idea: General Motors Co. started providing upfront drug discounts for some of its employee plans in 2010. The concept is gaining traction in Washington, where President Donald Trump proposed sharing "a substantial portion of rebates" with patients in the Medicare drug program for the elderly in his fiscal 2019 budget, released on Feb. 12.

Benefits managers contend that the concept is no miracle cure. They already give the majority of rebates, about 90 percent, to employers, unions, and health plans, PBMs say. In essence, giving rebates to employees may mean the company that ultimately foots most of the bill won't get some of the savings it relies on to keep premiums down. Express Scripts offers companies the option of giving rebates to employees, but few have chosen it. CVS says it also offers clients that option and gives its own employees rebates.

When presented with the option, most big companies "decide to keep the rebate for themselves," says David Dross, leader of the managed pharmacy practice at human resources consultant



Mercer. Employers want the checks to keep down premiums and other health costs, he says.

Trump’s proposal to pass Medicare rebates through to patients faces opposition from PBMs. The Pharmaceutical Care Management Association, which represents the companies, recently wrote a 45-page rebuttal explaining why giving rebates to these customers doesn’t make sense. AARP, the advocacy group for Americans older than 50, worries that diverting rebates to Medicare patients on expensive drugs would drive up premiums for everyone else in the program.

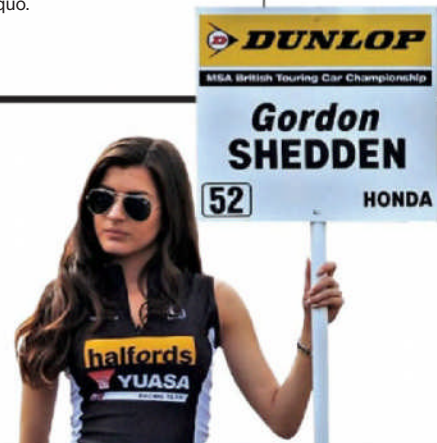
Passing rebates through to the end user may be good for patients who need costly drugs, but

it’s not going to untangle the web of pharmacies, wholesalers, insurers, and PBMs—all of whom may profit in some way from rising drug costs even as they wag fingers at drug companies for causing the problem. In the U.S., on average, \$15 of the \$100 spent upfront on brand-name drugs goes to middlemen, estimates Ravi Mehrotra, a partner at investment bank MTS Health Partners LP. In other developed countries, they get only \$4 of every \$100 spent, he says. Until that changes, prices are likely to keep heading higher. —*Cynthia Koons and Robert Langreth*

**THE BOTTOM LINE** The U.S. drug pricing system is in need of fixing. But almost all of the interested parties stand to profit by retaining the very expensive status quo.

# Taking the Sex Out Of Sports in Europe

● Groups from Formula One racing to pro darts have a #MeToo moment



They’re known as grid girls, walk-on girls, or ring card girls—the attractive, often scantily clad young women hired to work on the sidelines and podiums at male-dominated sporting events. Now many of them are out of a job, as European sports are having a #MeToo moment.

“This custom does not resonate with our brand values and clearly is at odds with modern-day societal norms,” said Sean Bratches, managing director of commercial operations at the auto-racing circuit Formula One, in late January when he announced that grid girls would no longer appear on the track at races worldwide. Formula One Group, based in the U.K., was acquired last year by Liberty Media Corp. of the U.S.

Earlier in January, the U.K.-based Professional Darts Corp. said it would stop using walk-on girls to accompany male competitors to the stage at its tournaments. And Spain’s Vuelta a España bike race last summer ended the practice of having female hostesses appear on the podium with race winners. The event, sponsored by the Amaury Sport Organisation, a Paris-based unit of media company Groupe EPA, substituted what it described as “elegantly” dressed men and women.

Amaury, which also organizes the Tour de France as well as European golf tournaments

and the Dakar Rally road race, didn’t return calls seeking comment on whether those events could be affected. As recently as last year, winners of the Tour de France’s daily stages were congratulated and kissed by young women on the podium.

Some event sponsors say the use of women in such roles projects an outdated image of sports, making it harder to attract new fans and younger television audiences. Professional Darts told British news media that it acted “following feedback from our host broadcasters.” Britain’s ITV Plc television network, which broadcasts many of its competitions, said it had been consulted and approved of the decision.

Unlike in the U.S., most professional teams in Europe don’t have cheerleaders. But boxing, tennis, and other sports employ young women on the sidelines of competitions and related events. There have been no allegations of sexual harassment or abuse of these women, but the actions by Formula One and Professional Darts came a few days after a highly publicized newspaper report that women working as hostesses at a male-only charity dinner in London were groped and propositioned by guests. A Professional Darts spokesman declined to ►

**“This custom does not resonate with our brand values and clearly is at odds with modern-day societal norms”**

◀ elaborate on the group’s earlier statement to British news media. Representatives of Formula One didn’t return calls seeking comment.

The moves by the darts and auto-racing organizations have drawn praise from groups that say the women were being treated as objects. The problem “is the message it gives about how women are valued in society,” the Women’s Sport Trust, a nonprofit advocacy group, said in a statement after Professional Darts made its announcement. “Sporting viewers are expected to admire the successful, talented, strong men taking part in competition, with the role of women purely based on their physical appearance.”

Some fans have reacted angrily, though—as have some of the women previously employed at the events. In an interview on ITV, Kelly Brook, a British actress and model, said her employment

at Formula One was well-paid and “one of the best jobs I ever had.” Said Brook: “You dress glamorously and obviously it’s about being presentable, but I never felt I was taken advantage of.”

Opponents say they’ve collected tens of thousands of signatures opposing the bans. And not all sports are saying #MeToo. Eddie Hearn, who runs British boxing promoter Matchroom Sport, said he planned to continue using ring card girls, the women who carry cards displaying the number of the coming round. The practice has “been a part of boxing history for many, many years,” he wrote in an article for the British edition of *GQ*. The women, he added, “are actually serving a purpose.” —*Carol Matlack*

THE BOTTOM LINE Young women, often scantily clad, were long used on the sidelines of many of Europe’s male-dominated sporting events. Now some organizers are ending the practice.

## For Elevator Makers, The Sky’s the Limit

14

● A new generation of megatowers pushes manufacturers to update lift technologies

Two thousand years ago, the Romans used elevators—powered by pulleys, levers, and slaves—to raise gladiators and wild beasts into the Colosseum for death-match spectacles. Since then, elevator technology has been largely based on the same mechanics, with electricity-propelled cables, rather than teams of rope-hauling humans, providing the lift. These days, however, an engineering revolution is going on. Driven by a boom in megatowers the Romans could not have imagined, the global giants that dominate the industry are engaged in technological one-upmanship.

Real estate developers are on pace to build 187 towers soaring at least 250 meters (820 feet, or almost the length of three football fields) over the next two years. That’s triple the number of such megatowers built in the entire 20th century. It’s forcing companies such as Kone, Thyssenkrupp, and Otis Elevator to reach higher than ever in search of their next breakthrough.

Kone Oyj, which manages a global workforce of 55,000 from Espoo, Finland, says it’s “pushing the limits of elevator physics” at a 350-meter-deep lab it recently reopened inside an active limestone mine west of Helsinki. The expanded

facility holds 11 shafts where Kone conducts experiments involving everything from its patented superlight hoisting material to robotics, vibrational resonance, and free falls.

In Germany, Thyssenkrupp AG’s elevator division has erected a 246-meter testing tower in Rottweil as it tries to perfect a maglev design that will do away with cables and pulleys altogether. Known as Multi, the magnetic system will be able to move people sideways as well as vertically and run inside or outside a building, offering architects a new range of possibilities. Although division chief Andreas Schierenbeck says the rollout is on track for 2020, he still worries about keeping up with his rivals. “We could do better,” he says. “Maybe that’s me being the typical German engineer.”

Global annual revenue from making and maintaining elevators and escalators will rise to \$114 billion in 2021, from \$96.7 billion in 2016, estimates researcher Freedonia Group. One reason: China’s historic urbanization program, which has made it the epicenter of the high-rise frenzy. Otis, a ▶

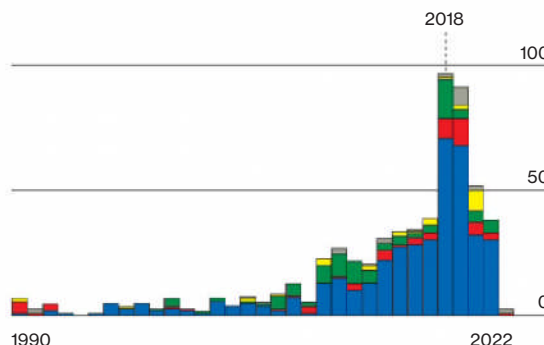
● Estimated global revenue in 2021 from building and maintaining elevators and escalators

**\$114b**

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◀ United Technologies Corp. unit, is planning a 270-meter testing tower in China. Kone opened its own 235-meter facility there in 2015.

Kone, Otis, and Thyssenkrupp, together with Switzerland's Schindler Group and Japanese manufacturer Mitsubishi Electric Corp., constitute the Big Five in the so-called supertall business, says Jim Fortune, an elevator consultant who helped design the vertical-transport network used in Dubai's 828-meter Burj Khalifa skyscraper. He says the heft of the Big Five, which each have a global presence and at least 85 years of experience building and maintaining lift systems, has dissuaded newcomers from entering the business. Still, the basic tenets of the industry—maximizing elevator systems' ability to efficiently handle an unknown mix of passenger trips across a known number of floors—are the same in giant skyscrapers as in buildings of more modest height.

"It's all based on probability theory," says Fortune, who worked on the designs for Saudi Arabia's Jeddah Tower. That will be the first building to reach 1,000 meters—nine times the height of NASA's first moonshot rocket—when it's finished sometime around 2020.

Kone won the 57-elevator Jeddah contract, the details of which are closely guarded, in part because of its invention of UltraRope. The carbon fiber wire is so much lighter than steel, the company says it doubles the maximum height an elevator car can be hoisted in a single run, to 1,000 meters. UltraRope doesn't require lubricant and resonates at a different frequency than steel, limiting the impact of the rough winds that can cause a tall building to sway and make elevators run less smoothly.

Traditional cables require much larger mechanisms and more power to operate, one reason why rides to the top of skyscrapers such as the Burj and London's Shard are broken into stages. Kone has agreements to supply four of the seven buildings higher than 500 meters now under construction, all in Asia, according to the Skyscraper Center. Installation prices for the tallest buildings can range from \$500,000 for single-car elevators to more than \$1 million for double-deckers (which stop on alternate floors, reducing the number of stops per run).

Kone's inventions have helped it become Finland's largest nonfinancial enterprise. As it captured a dominant position in China over the past decade, its shares rose fivefold, boosting its market value to more than \$30 billion. But one area where the company has lagged is speed. Mitsubishi's 121-story NexWay system in the 632-meter Shanghai Tower set three



▲ Kone's high-rise test laboratory in Tytyri, Finland

records in 2016, including one for traveling 73.8 kilometers (45.9 miles) per hour. A month later, Otis's Sky Shuttle in the 555-meter Lotte World Tower in Seoul set speed records in the double-decker category.

More than bragging rights are at play. Faster, direct elevators that don't require multiple transfers mean shorter waiting and trip times—making buildings more desirable to tenants. "If there's an innovative solution that we can be part of at an early stage, we want to do that," says Adam Adielsson, project manager for developer Serneke Group AB's 245-meter Karlatornet tower, expected to be the tallest building in the Nordic countries when it's completed in 2021. It will use Kone lifts.

The Big Five are setting benchmarks so fast that one of the biggest hurdles to innovation now is the human body. No matter how quickly elevators go up, they all have to come down at about the same speed—no more than about 10 meters per second—because the inner ear doesn't adjust to descent as well as to ascent. And then there's another constraint that Fortune says companies don't like to talk about: bladder compression. "Older people can wet their pants if they come down too fast," he says. "I've never seen a real study on that."  
—Niclas Rolander, with Oliver Sachgau

THE BOTTOM LINE Global elevator and escalator companies, whose revenues exceeded \$96 billion in 2016, are benefiting from a supertower construction boom across Asia.

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# IT'S TIME TO STOP THE KIDNEY RIP-OFF.

*"The dialysis companies are putting profits before patients. Lately I've noticed that my clinic has had just one technician for nine vulnerable patients — it's dangerous."*

**Richard Adling**

VETERAN AND KIDNEY DIALYSIS PATIENT



[KidneyPatientsDeserveBetter.com](http://KidneyPatientsDeserveBetter.com)

Paid for by Californians for Kidney Dialysis Patient Protection, Sponsored by Service Employees International Union – United Healthcare Workers West. Committee major funding from Service Employees International Union – United Healthcare Workers West.

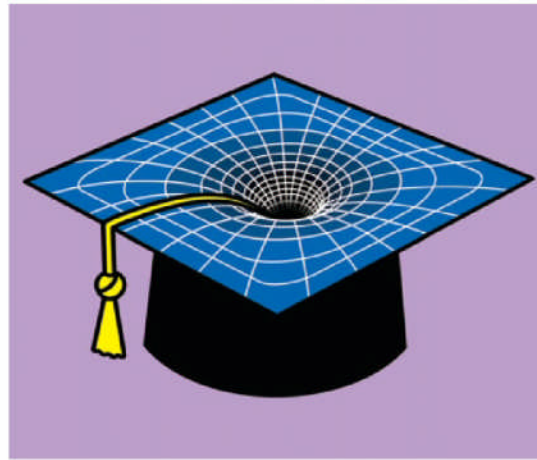
● Analysts expect HP Enterprise (services) to keep shrinking and HP Inc. (PCs, printers) to keep growing.

● Barcelona hosts its annual Mobile World Congress, the year's biggest smartphone-centric trade show.

● Just before MWC kicks off, Samsung will unveil its latest phone. Early ads are pitching a new camera.

# Future U Has A Dark Past

● Silicon Valley's Singularity University has lost Google funding and dealt with assault and fraud allegations



The pitch was simple: Forget accredited graduate schools and think big at Singularity University. Google co-founder Larry Page and futurist Ray Kurzweil could be among your lecturers in the Graduate Studies Program at Singularity, named for the notion that humans will someday merge with machines. You'd work in a kind of combination think tank and startup incubator, trying to address challenges as grand as renewable energy and space travel. Kurzweil announced the program during a TED Talk in 2009, adding that the Singularity team had leased its campus from NASA, just east of the agency's historic Hangar One in Mountain View, Calif. The team received 1,200 applications for its first class of 40 later that year.

Reality hasn't matched the hype. Previously unreported police files, other documents, and interviews with current and former students and staff paint the picture that almost from the beginning, some Singularity staffers weren't able to curb their worst impulses. A teacher allegedly sexually assaulted a former student, an executive stole more than \$15,000, a former staffer alleges gender and disability discrimination, and Singularity dismissed 14 of about 170 staffers and suspended GSP, now called the Global Solutions Program, after Google withdrew funding last year.

Alumni say for-profit Singularity is becoming just another organizer of conferences and executive seminars. It's weighing buying the seminar company Abundance 360, started by Singularity co-founder Peter Diamandis. "It's lost its soul," says Vivek Wadhwa, who ran the faculty until 2013 and is at Carnegie Mellon University. "It's become a moneymaking corporation."

While Singularity says it takes seriously its

community's security and any related allegations, most of those matters are far in the past, says Chief Executive Officer Rob Nail. He says he was already planning to suspend and reevaluate GSP before Google ended its annual grant of \$1.5 million. The grant covered about half the costs of the program, which was free for participants. Google, whose senior manager Jen Phillips left Singularity's advisory board late last year and won't be replaced, says it plans to focus on Singularity's entrepreneurship programs instead.

Nail says although GSP may be reborn largely online, conferences and executive education (tuition: \$14,500 for a weeklong program) will become the bulk of Singularity's work. It held 10 conferences last year and has 18 planned for 2018. On Feb. 15 it announced it raised \$32 million in venture funding led by Boeing Co. and investment firm WestRiver Group. Erik Anderson, WestRiver's CEO, is replacing Diamandis as Singularity's chairman. These changes, Nail says, will help the company turn a profit and thereby aid more people. "If we want to make true impact," he says, "we need to do it in a sustainable fashion."

Singularity had NASA connections beyond its rented buildings. Early GSP students speak highly of a lecture by former astronaut Dan Barry, a physician who got into the space shuttle program after 13 rejections. Several say they saw him as a mentor. ▶

◀ Barry hasn't taught GSP students since 2013, when the company investigated him for allegedly sexually assaulting Yasemin Baydaroglu, a French student who attended GSP in 2011.

Baydaroglu says Barry arranged a 2013 meetup in Paris. They went for a bike ride, during which she complained of back pain, and then went to his hotel to chat. He reminded her he was a doctor, she says, and offered her a massage, speaking in strictly medical terms. Because he was a mentor, she trusted him—until, she says, he touched her breasts and genitals, and she fled. “I really didn't see it coming, and I'm so careful,” she says. “This time my guard was low.” She reported the incident to police several days later, then visited a doctor.

“I completely deny her accusations,” Barry says, adding that the inquiries that followed led to “a distressing time for me and my wife.”

Baydaroglu showed signs of psychological distress that she said were linked to a physical assault, according to a copy of a May 31, 2013, doctor's report reviewed by *Bloomberg Businessweek*. According to a copy of a letter sent from France's Office of the Prosecutor, it declined to pursue the case because authorities hadn't been able to find Barry.

Singularity began its internal investigation after Baydaroglu separately reported the alleged assault to the company. Barry left that summer's program in June; his wife was ill, and the company told students he left for personal reasons. In a June 22, 2013, email to Baydaroglu reviewed by *Bloomberg Businessweek*, a Singularity human resources official told her Nail believed “the facts around the central allegation of unwanted sexual touching are inconclusive” but that he told Barry the circumstances indicated “poor judgment.” The official wrote that Barry wouldn't be present for the remainder of the 2013 GSP and asked Baydaroglu not to discuss the matter with other parties.

The email outlined steps Singularity was taking to reduce the likelihood of staffers being in “potentially intimate situations” on campus, including prohibiting them from being alone with a student at the end of a program day and installing webcams to monitor classrooms. Baydaroglu says Singularity's response left her feeling deeply depressed and betrayed. Particularly galling, she says, was “asking me not to talk about it.” The company declined to discuss the case except to say Barry hasn't been an active faculty member since 2013.

Singularity leaders have a history of shady financial practices. When the organization was in its infancy in 2009, Alicia Isaac, the financial controller, used its credit cards to make \$13,500 in personal purchases; she also kept the cash from

a \$2,000 check to Singularity, according to a subsequent police report. And she helped the president of an artificial intelligence institute try to steal almost \$80,000. Police arrested Isaac in 2009; she pleaded no contest to felony fraud charges. Isaac didn't respond to requests for comment.

Another early Singularity architect, Bruce Klein, was convicted in 2012 of running a credit fraud operation in Alabama. He's no longer associated with the company. Board member Naveen Jain was convicted of insider trading in 2003. He appealed a \$247 million judgment and ultimately settled.

Nail, who previously helped found an automation company, arrived in late 2011 with Chief Strategy Officer Gabriel Balducci, a former Virgin Group executive. They soon changed Singularity from a nonprofit to a for-profit B Corporation, which means a private accreditor certifies it meets certain social and environmental standards.

For years several staffers close to Balducci lived alongside him in a series of rented houses nicknamed the SU Villa, in Atherton and Woodside, Calif. Other employees say the group got favorable treatment and the general atmosphere was unfriendly to women. Eleanor Schuermann, a lawyer at Kastner Kim LLP, is representing a staffer who alleges Singularity discriminated against her because of her gender and disability, paid her less than men in the same position, and retaliated against her for complaining. The attorney's filings with state regulators, the first steps toward a lawsuit, aren't yet public record. Schuermann, who wouldn't name her client, says she's heard from two other Singularity employees about similar claims. The company declined to comment on the case but says it works hard to support women.

Singularity is a long way from 2009, when the first GSP led to the creation of Getaround, a car-sharing company that's raised \$85 million from investors including Toyota Motor Corp. “It is amazing what all has happened here,” Google's Page said during the program's opening ceremony the following year. “It exceeded all my expectations.” These days, Page isn't involved with Singularity. Kurzweil doesn't dispute that while he attends board meetings, he rarely speaks.

Anderson, the new chairman, says the company expects to meet its revenue and social goals. Nail says it's making good on some of its grander ambitions, citing work on United Nations anti-hunger efforts. Still, he says, Singularity can do better: “We're nowhere near impacting the billion people our students talk about.” —*Sarah McBride*

**“If we want to make true impact... we need to do it in a sustainable fashion”**



● Kurzweil

**THE BOTTOM LINE** Singularity is using a \$32 million lifeline to steer its programming hard toward a series of executive training seminars and conferences.

# No, Really, Save That Placenta

● A biotech star is betting stem cells from the tissue can treat Crohn's and MS and perhaps even slow aging

Airplanes used to crash a lot, but last year saw the fewest air accidents since 1923 and the fewest deaths since 1929. One reason is that everyone is a lot smarter about maintenance. Although breakdowns still occur, airlines, equipment suppliers, and regulators have spent decades collecting and analyzing data to predict when various parts will fail. They've adopted more refined inspection schedules based on each craft's use and age. "We should be doing that to our bodies as well," says Robert Hariri.

Hariri is a jet-certified pilot who also happens to be a pioneer of therapies drawn from stem cells, the body's building blocks that can sometimes help patients by replacing other, ailing cells. He's a co-founder, with leading geneticist Craig Venter, of Human Longevity Inc. (HLI). And he's just stepped down as chief scientific officer of biotech giant Celgene Corp.'s cell therapy subsidiary to become chief executive officer of Celularity Inc., a Celgene spinoff that announced \$100 million in backing from its former parent and others on Feb. 15. Within four years, Celularity aims to treat life-threatening immune disorders, such as Crohn's disease and multiple sclerosis, by leveraging stem cells harvested from placentas, the organs pregnant women grow during their first trimester that provide nutrients to a developing fetus. Placental stem cells can "augment the regenerative engine that keeps us healthy and young," Hariri says.

Beyond the startup capital, Celularity says it can count on revenue from Biovance and Interfyl, tissue repair strips and drips Hariri developed years ago, which the company just spent \$29 million to buy back from another biotech company. Celularity says the two products will bring in at least \$25 million this year, and it expects an additional \$15 million or more from its stem cell collection arm, which it describes as "the world's

only repository of private and publicly donated placenta cells and biomaterials." (The money comes from customers who pay Celularity to bank their samples.)

Hariri started trying to use placental stem cells at a time most colleagues focused on the cells found in blood from umbilical cords. As far back as the mid-1990s, obstetricians were telling some expectant parents that their children should expect to treat all kinds of diseases with stem cells grown from samples of their frozen cord blood. So far, cord blood's applications remain limited to certain types of leukemia; Krabbe disease, which affects the nervous system; and a few other rare conditions.

Hariri says he can do better, creating products "that can be deployed to the general population." His theory is that placental stem cells can reprogram the immune system to treat the kinds of life-threatening diseases that affect millions of Americans. As long as parents provide informed consent, the placenta cells themselves are free, because federal law prohibits the sale of body parts.

Celularity has early votes of confidence from board members Bill Maris, the first CEO of Google's venture arm; John Sculley, the former PepsiCo Inc.



and Apple Inc. CEO; and Peter Diamandis, one of Hariri's HLI co-founders and creator of the XPrize Foundation, the nonprofit that organizes competitions to develop spacecraft and other innovations. Diamandis says he's focused on Celularity's longer-term possibilities: "How do you extend your healthy life span 20 to 30 years?" Celularity and investor United Therapeutics Corp. have already teamed up to grow spare organs from donors' cells. And if placental stem cells can treat immune diseases, why not cancer, or even aging ►

▲ Celularity says it expects to collect at least \$15 million this year by banking placental stem cells and other biomaterials

◀ itself? Replace the adult stem cells declining and losing function as you age, and you might be able to slow the effects.

This field already includes a handful of well-financed entrants, most notably HLI; Calico, a subsidiary of Google parent Alphabet Inc.; Unity Biotechnology, backed by Amazon.com CEO Jeff Bezos; and Breakout Labs, owned by venture capitalist Peter Thiel, who's also invested in a startup that collects blood from the young.

None has yet produced anything of value,

and Celularity is likely to face similar challenges in the coming years and decades, according to other placental stem cell researchers. "The field is in its infancy, and much remains to be learned," says Dario Fauza, who specializes in fetal tissue engineering at Harvard. "Claims that placental stem cells are akin to a panacea seem premature to me." —*Paul Tullis*

**THE BOTTOM LINE** Celularity is putting a fresh \$100 million into the longevity sweepstakes, but most scientists say beneficial therapies will take a long time to develop.

# The War for AI Talent, And What Counts

● Just how shallow is the machine learning talent pool?

If you wanted to command a multiyear, seven-figure salary, you used to have only four career options: chief executive officer, banker, celebrity entertainer, or pro athlete. Now there's a fifth—artificial intelligence expert. One reason: No one can quite agree on how many there are.

Google, Facebook, Apple, Amazon.com, Uber Technologies, and others dangle dazzling pay packages to lure top academics to work on teams developing facial recognition, digital assistants, and self-driving cars. Even newly minted Ph.D.s in machine learning and data science can make more than \$300,000. Beyond the tech industry, among those betting on similar expertise tailored to their interests are banks, hedge funds, carmakers, and drug companies.

Don't balk at such pricey hires, Kai-Fu Lee, who previously ran Google's business in China, told an audience of CEOs at this year's World Economic Forum in Davos, Switzerland. "Google is paying a million dollars for these superstars," said Lee, now a venture capitalist. "You may not need someone that high, but you've got to break the scale for at least one person."

Designing AI systems requires a hard-to-come-by blend of high-level mathematics and statistical understanding, a grounding in data science and computer programming, and a dose of intuition. There are widely varied

estimates of exactly how shallow the talent pool is. The answer matters, because it helps companies decide whether to build their systems in-house or rely on outside vendors. It also determines how much leverage experts have in salary negotiations.

On Feb. 7, Element AI, a Montreal startup that helps businesses design and implement machine learning systems, published a report concluding that about 22,000 Ph.D.-level computer scientists around the world are capable of building AI systems. Of those, only about 3,000 are currently looking for a job. In contrast, at least 10,000 related positions are open in the U.S. alone, says Element CEO Jean-Francois Gagné.

These figures are well below another estimate put out in December by Tencent Holdings Ltd., the Chinese internet giant. It wrote that the world has perhaps 200,000 to 300,000 "AI practitioners and researchers." Element says Tencent counted too many coders who merely contribute to projects and lack the expertise to create novel algorithms and applications from scratch. The Montreal company, however, acknowledges that its own methodology had shortcomings.

Element scoured LinkedIn for people whose profiles included doctorates earned since 2015, mentioned key phrases (natural language processing, computer vision), and listed among their skills

**"You've got to break the scale for at least one person"**



the programming languages (Python, TensorFlow) that underlie most AI software. The company says this might exclude a lot of researchers in places where LinkedIn isn't relevant or who have experience but not a fancy degree.

Vishal Chatrath, co-founder and CEO of Prowler.io, an automation startup in Cambridge, England, hasn't had trouble recruiting AI developers. "Talent hires talent," he says. The important thing, he adds, is to have intriguing problems to solve and some outstanding mathematicians and technicians already on staff to stoke expert interest. An added attraction is that Chatrath and his co-founders sold their previous company, voice recognition startup VocalIQ, to Apple Inc. in 2015.

Element has an incentive to highlight scarcity. The more companies despair of hiring their own experts, the more they'll need vendors such as Element to do the work for them. "The talent shortage is real," says Gagné, adding that he's been struggling to hire even with AI pioneer Yoshua Bengio among his co-founders. Bengio, a computer scientist at the University of Montreal, is one of three men credited with helping to lead the AI boom. The other two are Yann LeCun, now at Facebook Inc., and Geoffrey Hinton, now at Google.

Governments and universities need to spend more money on training, Gagné says, especially at the undergraduate and master's levels. At the current education rate, an influx of new experts will start to moderate salaries in three to four years, he says.

Most businesses don't want to wait that long. Intel, Facebook, and Google are creating their own internal AI training programs. Google is also one of the companies experimenting with automatic machine learning, or AutoML, meaning AI that can create its own AI. The search giant recently began offering the service to cloud customers.

Despite the possibility of automatic machine learning, the demand for expertise has attracted swarms of headhunters to once-staid academic confabs with names such as the Neural Information Processing Systems (NIPS) conference. To woo candidates, recruiters organize increasingly swanky private dinners and after-parties. Chris Rice, head of global talent acquisition for Intel's AI product group, says there's little choice but to recruit aggressively at such events. "With talent this scarce," he said at a NIPS conference in December, "it can be hard to find people." —*Jeremy Kahn*

THE BOTTOM LINE Research from Element AI indicates only 22,000 people around the world have the AI skills most tech companies want, but that isn't an especially scientific estimate.

# Climate

# Geoengineering

While most scientists working to avoid catastrophic climate change remain focused on cutting carbon emissions, some researchers say recent experiments show it may be time to try large-scale atmospheric intervention. Tim Kruger, manager of the geoengineering program at the University of Oxford, says that for the world to meet the goals of the 2016 Paris Agreement, we'll need to adopt a kitchen-sink approach. —*Brian K. Sullivan*

## Starting Small

### Plant trees, paint roofs

The most basic strategies include adding millions of trees to remove carbon from the air and making roofs white to reflect more of the sun's infrared rays. Some researchers are testing reflective road sealants, too.



## Thinking Bigger

### Spray the clouds

Later this year, Harvard researchers plan to test whether spraying clouds with salt water or biological agents can cause them to reflect enough solar rays to be worth trying to replicate planetwide.



### Fertilize the oceans

Other researchers suggest dispersing powdered iron sulfate in the oceans to swell the numbers of microscopic ocean plants known as phytoplankton, which would draw more carbon out of the skies.



## Going Extreme

### Simulate a giant volcano

In theory, geoengineers could coat the stratosphere with sulfur aerosols or another substance to mimic the 1991 eruption of Mount Pinatubo. Ash and sulfur dioxide from the Philippine volcano blocked enough sunlight to briefly lower world temperatures.



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LOOK AHEAD

● On Feb. 24, Warren Buffett publishes his widely read letter to Berkshire Hathaway shareholders

● Norway's \$1 trillion sovereign wealth fund, which invests revenue from oil, publishes 2017 results

● U.K.-based theater chain Cineworld expects to complete its acquisition of Regal Entertainment



# This Is Your Exchange-Traded Reality Check

● ETFs are a fast, easy way to invest. Sometimes it's better to slow down and think again

There's no way to talk about the markets anymore without talking about exchange-traded funds. In January, \$79 billion flooded into U.S. ETFs as the S&P 500 hit record highs. And when the bull market finally stumbled, the money poured out quickly, too—about \$31 billion in one week. That's hardly a surprise. More than \$23 billion came out of the giant SPDR S&P 500 ETF, which is known by the ticker SPY and invests in the companies in the S&P 500. For investors from hedge fund managers and algorithmic traders to retirement savers,

buying and selling index ETFs such as SPY is simply the quickest way to buy and sell stocks.

Despite the turbulence, the funds that track major indexes did what any shareholder should have expected: replicated the market. Thanks to the growth of ETFs, investing is easier than ever, at least mechanically. You can buy the whole market with a single trade and, in many cases, pay annual management fees of less than 10¢ per \$100 invested. But ETFs can't do anything about the really hard part of investing, which is that stocks can sometimes lose a lot of money.

Looking beyond the biggest ETFs, however, the latest market correction raised new concerns. There are about 2,100 exchange-traded products (ETPs), which include ETFs and similar investments such as exchange-traded notes. Some of ►

February 19, 2018

Edited by Pat Regnier

Businessweek.com

◀ them bet on weird corners of the market. For example, the exchange-traded note known by the ticker XIV and issued by Credit Suisse Group AG was designed to track the inverse of the Cboe Volatility Index. Essentially, it was a bet on the market staying calm. One week investors poured money into it at a record pace; the next, as markets went crazy, XIV hemorrhaged more than 90 percent of its value. Credit Suisse is shutting XIV down.

Investors are wondering what else might be under the hood of some ETPs. About 20 percent of ETPs by number, managing a total of \$76 billion, use derivatives such as futures or options to build their investment strategies, according to data compiled by Bloomberg. Such investments can be a far cry from the plain-vanilla funds that hold stocks or bonds, yet many aren't much harder to buy. They vary from plays on the retail industry that use leverage to amplify gains (and losses), to bets on the direction of oil or the U.S. dollar, to products that mimic hedge funds.

"They're motorcycles, not minivans," says Sylvia Jablonski, head of capital markets and institutional strategy at Direxion Investments, which specializes in leveraged products. "I'd be the first person to tell a retail investor who's not comfortable with leverage: 'Don't use our products.'" According to ratings by Bloomberg Intelligence, more than 650 ETPs deserve extra caution from investors before they buy.

Take the ProShares UltraPro QQQ ETF, the largest leveraged fund in the U.S., with \$3 billion under management. The fund, with the ticker TQQQ, is designed to deliver three times the daily performance of the Nasdaq 100 Index. To do this, TQQQ enters into swap agreements—where two parties agree to exchange the return

earned or realized on predetermined instruments—and buys futures contracts. One risk here is clear: On a day the Nasdaq 100 loses, say, 2 percent, TQQQ should lose about 6 percent. A more subtle hazard, disclosed in fund materials and on ProShares' website, arises from the fund's one-day investment objective. Because of the way daily returns compound, it's possible over a longer period for holders of TQQQ to lose more than three times the Nasdaq 100's loss.

The United States Oil Fund LP also uses futures, but for a different reason. Far from juicing returns, USO tries to match changes in oil prices by holding near-month futures on the New York Mercantile Exchange. It has a very high correlation to daily moves in crude, helping it become the world's largest and most-traded oil ETF. However, those returns may collapse if the fund is held over a longer time because of the costs of constantly maintaining, or rolling, these futures positions.

Funds that are stuffed with derivatives to replicate hedge fund strategies may seem particularly tempting to some investors. More than 30 such alternative funds, with a combined \$2.6 billion under management, have sprung up over the last nine years. These funds might hold other ETFs directly, as well as buy total-return swaps on ETFs to allow for leverage and shorting—that is, to bet on another fund losing value. One question is how such complex strategies will fare if investors race to sell ETF shares or the underlying investments at the same time. "How liquid are they, and how liquid are the synthetic holdings?" James Pillow, managing director at Moors & Cabot Inc., asks of the hedge fund imitators.

Such concerns are disclosed in prospectuses. But when buying complex products through an online brokerage, all an investor may have to do is

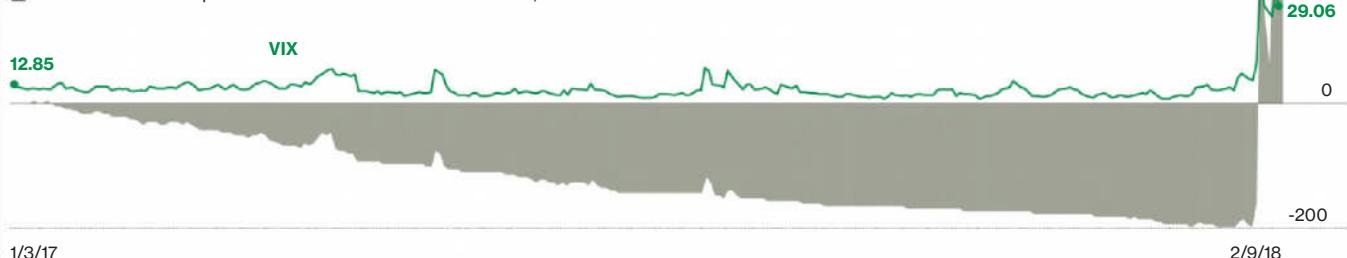
● Assets in exchange-traded products that mimic hedge funds

**\$2.6b**

## The Correction: Not Everyone Was a Loser

The recent market convulsions produced a spike in volatility—and you could bet on it rising by using options linked to the Cboe Volatility Index, or the VIX. According to Macro Risk Advisors, one mysterious trader—dubbed "50 Cent" because the options cost about 50¢ apiece—may have made almost \$200 million on that wager after having blown through \$200 million since the start of 2017 on options that expired worthless. The numbers as of Feb. 9 assume 50 Cent didn't take the newfound winnings off the table. —*Luke Kawa*

■ 50 Cent's cumulative profit or loss on his VIX trade since Jan. 3, 2017\*



tick a pop-up box acknowledging the risks. Fidelity Investments recently announced that it had halted purchases of XIV and two other volatility-focused investments. The U.S. Securities and Exchange Commission is also taking note. But for the most part, it's up to investors to figure out for themselves what they're buying. "Don't click through your disclosure. This isn't like an Apple iPhone update," says Mike Venuto, chief investment officer of Toroso Investments LLC, who says he switched from XIV to another short-volatility product a few months ago. "The amount of trees our industry kills to send out prospectuses—read the damn things." —*Rachel Evans and Carolina Wilson*

**THE BOTTOM LINE** ETFs are widely considered straightforward investments, but some exchange-traded products invest in complex or risky strategies.

## Bob Diamond Tries a New Banking Play

● The former Barclays chief is getting behind small-business lending—in risky Italy

To most people, lending money to small Italian businesses looks perilous. In the past decade, Italy became a byword for financial dysfunction as hundreds of billions of euros in bad loans piled up, its third-biggest bank cratered, and a moribund economy triggered a wave of political populism (page 33). Who wants to provide credit in such a stormy market? Bob Diamond, the former chief executive officer of Barclays Plc, for one.

In February, Diamond's private equity firm, Atlas Merchant Capital, stepped up as the top investor in a €600 million (\$741 million) investment vehicle led by Corrado Passera, the former head of Intesa Sanpaolo SpA, Italy's second-biggest lender by assets. Called Spaxs, the venture plans to buy an Italian bank and originate loans for small and midsize companies.

Never mind that Italy may be on the cusp of yet another bout of turmoil. The anti-establishment Five Star Movement and a center-right coalition backed by scandal-tarred former Prime Minister Silvio Berlusconi are doing well in the polls ahead of the March 4 election. For Diamond, an American investment banker who was ousted from Barclays in 2012 in connection with the London interbank offered rate-rigging scandal,

the vicissitudes of Italian politics are no cause for alarm. "The political situation is very well-known," Diamond says. "What we are finding is that regulators and political leaders believe there isn't enough credit provided to small businesses. We see great opportunities for high-quality lending to strong companies."

Although Italian banks have been stabilizing—with help from the state, which last year salvaged Tuscany's Banca Monte dei Paschi di Siena SpA—small, family-run enterprises still struggle to get enough credit. Such companies account for more than half the nation's exports. "Lending to small businesses is really crippled," says Beat Wittmann, chairman and partner of Porta Advisors Ltd., a Zurich-based investment banking boutique. "The big banks that should do this are incapacitated, especially in Italy, so access to capital for small businesses has been virtually impossible."

That's why Diamond believes this is the moment to get behind that most basic of financial products—the bank loan. This marks a departure for a man who made his name turning Barclays's investment bank into a global force from 2005 to 2011. That track record couldn't save him when regulators on both sides of the Atlantic fined Britain's second-biggest bank \$451 million in June 2012 for manipulating Libor, the benchmark used to set interest rates on loans, mortgages, and other fixed-income instruments. While Diamond wasn't implicated in wrongdoing, market-rigging practices were an open secret on Barclays's trading floor, according to the U.S. Commodity Futures Trading Commission. British tabloids cast Diamond as a symbol of the aggressive banking that led to the crash of 2008. He resigned a week after the settlement, following intense pressure from U.K. lawmakers.

Diamond returned to the fray in 2013 as the co-founder of Atlas Mara Ltd., a company that bought stakes in African banks. After holding an initial public offering, Atlas Mara found it rough going as the slide in commodities slowed African economies and working out souring loans at lenders in Nigeria and Zimbabwe proved daunting. Its shares have skidded more than 70 percent since December 2013. Yet its fortunes may be stabilizing: The company's net profits almost quadrupled in the first nine months of 2017, to \$15.8 million, compared with the same period in 2016.

Despite the turbulence, Diamond is now extending his reach across the Mediterranean. Last year, Atlas Merchant snapped up a consumer finance company in Greece called Credicom. On Feb. 1, Spaxs, a special-purpose acquisition company, or SPAC, conducted an IPO on the alternative investment exchange at the Borsa Italiana ▶



● Diamond

◀ in Milan. Atlas Merchant bought a 7.7 percent stake in the venture.

In Spaxs, Diamond is joining forces with Passera, an influential player in both finance and government. As the CEO of Intesa from 2002 to 2011, Passera executed a series of acquisitions, culminating with the €27 billion purchase of Sanpaolo IMI SpA in 2007. A cerebral financier with a taste for policy, Passera served as the minister for economic development in Prime Minister Mario Monti's government after leaving Intesa Sanpaolo.

Spaxs plans to spend up to 10 percent of its capital to buy a lender and obtain its license and to invest the rest in developing the company's technology, staff, and business operations. The bank will originate loans, help borrowers restructure their organizations to make them creditworthy, and buy bad debt on the cheap to squeeze value from whatever collateral or payments it can recover. Small-business owners hope Spaxs is one of many alternatives to traditional banks that will take root. "Our companies not only need fresh finance but innovative and flexible ideas for supporting their

development," says Alfredo Mariotti, general director of Ucimu, a lobbying group for machine tool outfits and automation providers.

Navigating Italy's business culture won't be easy, says Nicolas Véron, a senior fellow at Bruegel, an economics think tank based in Brussels. The nation has a weak system for enforcing credit agreements, and entrepreneurs often use personal property as collateral for business loans, which makes working out failing debts difficult. "There is this fuzzy boundary between the corporate and the personal," Veron says.

While there's a clear need for a new approach to lending, it's unclear whether Spaxs and other challengers will originate a significant volume of new credit or resort to buying and working out existing debt, says Porta Advisors' Wittmann. "Lending will probably be slow and small," he says. "This is still more about potential than reality." —*Edward Robinson, Sonia Sirlletti, and Elisa Martinuzzi*

**THE BOTTOM LINE** Italy's large banks are recovering, but they're slow to lend to small businesses. Diamond and a former top Italian banker see an opportunity in that.

**"The big banks that should do this are incapacitated"**

# Exxon Hits Back At Climate Suits

● The oil giant tries to turn the tables on the lawyers who say it covered up global warming

As climate change lawsuits against the oil industry mount, Exxon Mobil Corp. is taking a bare-knuckle approach rarely seen in legal disputes: going after the lawyers who are suing it. The company has targeted at least 30 people and organizations, including the attorneys general of New York and Massachusetts, hitting them with suits, threats of suits, or demands for sworn depositions.

Exxon says the lawyers, public officials, and environmental activists are "conspiring" against it in a coordinated legal and public-relations campaign. The company has even given that campaign a vaguely sinister-sounding name: the La Jolla playbook. According to Exxon, about two dozen people hatched a strategy against it at a meeting six years ago in an oceanfront cottage in La Jolla, Calif.

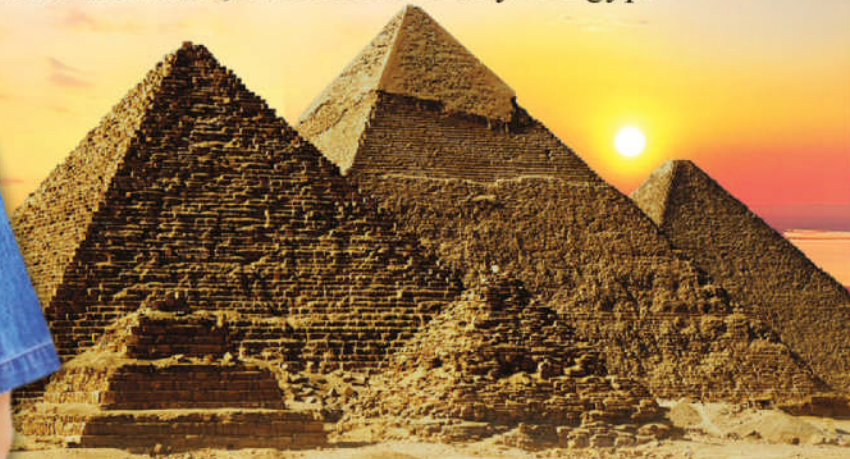
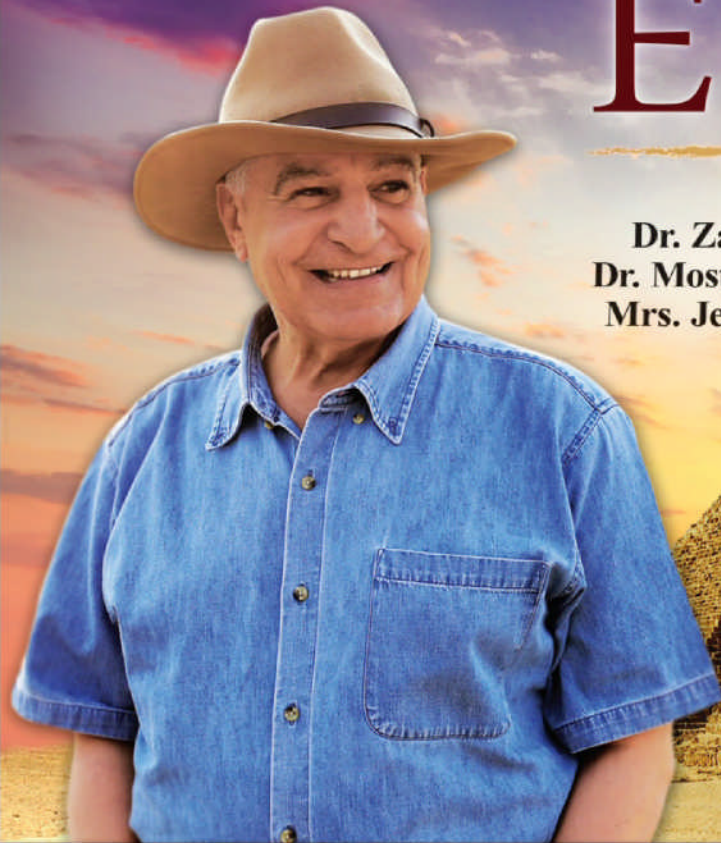
What the company is doing is "an aggressive move," says Howard Erichson, an expert in complex litigation and a professor at Fordham University School of Law in New York. "Does Exxon really need these depositions, or is Exxon seeking the depositions to harass mayors and city attorneys into dropping their lawsuits?"

Experts say Exxon's combative strategy—a gambit to turn the tables—is a clear sign of what's at stake for the fossil fuel industry. So far, New York City and eight California cities and counties, including San Francisco and Oakland, have sued Exxon and other oil and gas companies. They allege that those companies denied findings of climate change scientists despite knowing that the use of fossil fuels posed grave risk to the planet. Attorneys General Eric Schneiderman of New York and ▶

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◀ Maura Healey of Massachusetts are investigating whether Exxon covered up information on climate change, defrauding shareholders and consumers.

Exxon, the world's 10th-biggest company, denies the allegations and says its defense is intended to show that it's being punished for not toeing the line on climate change, even though it agrees with the scientific consensus. "The attorneys general have violated Exxon Mobil's right to participate in the national conversation about how to address the risks presented by climate change," says Dan Toal, a lawyer who represents Exxon. "That is the speech at issue here—not some straw man argument about whether climate change is real."

Plaintiffs' lawyers and legal experts say the oil giant's tactics are meant to intimidate while shifting the spotlight away from claims of environmental damage. And they say there's nothing improper with lawyers discussing legal strategies together. "It's crazy that people are subpoenaed for attending a meeting," says Sharon Eubanks, a lawyer who was at the La Jolla gathering and received a subpoena. "It's sort of like a big scare tactic: Reframe the debate, use it as a diversionary tactic, and scare the heck out of everybody."

Exxon has focused on the La Jolla meeting for its conspiracy claim. Ironically, the Rockefeller Brothers Fund, a nonprofit run by descendants of John D. Rockefeller who are pressing Exxon to address climate change, has funded organizations that led the conference. Exxon grew out of John D.'s Standard Oil. The company has also subpoenaed the fund to testify.



At the gathering, participants met to discuss litigation strategies that could be applied to climate change, according to a 35-page summary of the meeting that was later made public. Eubanks, a former Department of Justice lawyer, talked about how the U.S. government used the racketeering law against cigarette makers, for example. More than four years after the meeting, Eubanks got a subpoena from Exxon to testify about it. The subpoena is pending.

Exxon has also aimed its legal firepower at Matthew Pawa, whose firm represents Oakland, San Francisco, and New York in their suits against Exxon. In January the company asked a state judge in Fort Worth to order Pawa to turn over documents and testify under oath about the La Jolla conference and other conversations with lawyers and activists. Pawa has also been subpoenaed to testify in a federal action Exxon has brought against the state attorneys general. Pawa declined to comment.

The company is also seeking testimony from 15 municipal lawyers and officials in California. Exxon says it's seeking evidence for "an anticipated suit" claiming civil conspiracy and violation of its First Amendment and other constitutional rights.

Experts in litigation say lawyers in big lawsuits, including those targeting tobacco, guns, and pharmaceuticals, routinely meet to share information and coordinate strategy. "I don't think there's anything wrong with plaintiffs' lawyers and attorneys general strategizing together," says Fordham professor Erichson. "Just as I don't think there's anything wrong with lawyers for oil companies strategizing together."

Linda Kelly, general counsel of the National Association of Manufacturers, says the climate litigation is really a play for money and votes. "It's a coming together of plaintiffs' lawyers who have a profit motive and a liability theory, environmental activists who have a political agenda, and politicians who are looking to make a name for themselves with this issue," she says.

San Francisco has promised 23.5 percent of any settlement to its lawyers. New York is working on a contingency-fee deal like San Francisco's, according to a spokesman for the city's law department.

In recent years, the most notable attack on a plaintiffs' lawyer came in 2011 when Chevron Corp., claiming it was the target of an extortion scheme, successfully pursued a civil racketeering suit against Steven Donziger, the attorney behind a \$9.5 billion Ecuadorean judgment against the company over pollution in the Amazon.

Some experts say Exxon's strategy goes beyond mere litigation tactics. "People often try to use litigation to change the cultural conversation," says Alexandra Lahav, a law professor at the University of Connecticut, pointing to lawsuits over guns and gay rights as examples. "Exxon is positioning itself as a victim rather than a perpetrator."

—Bob Van Voris

**THE BOTTOM LINE** Exxon's subpoenas of lawyers may be a "big scare tactic," but they could also be an attempt to influence the public debate over climate change.

**"It's crazy that people are subpoenaed for attending a meeting"**



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LOOK AHEAD

● South Africa, which has the continent's third-largest economy, unveils its national budget on Feb. 21.

● The U.S. Commerce Dept. is due to make a final ruling in a dumping case involving Chinese foil imports.

● Brazil releases GDP data for the final quarter of 2017 on March 1. The betting is that growth picked up.



Vittoria Maschietto has a literature degree from Bologna University, lives in central Rome, and works in sales at a prestigious publishing house. She spends her weekends rock-climbing, visiting museums, or hanging out in cafes with friends. There's just one problem: At 27, she can get only a temporary job that offers no pathway to permanent employment, leaving her with little sense of what's next. "I feel like I'm stalled," Maschietto says as she jumps on her scooter to get to a marketing course she's taking to shore up her prospects.

Her situation mirrors Italy's as campaigning picks up for elections on March 4. After emerging from its longest recession since World War II, the country has logged 14 straight quarters of growth. A labor reform passed by the ruling Democratic Party helped create 1 million jobs, investment is up, and industrial output has been climbing, driven by strong exports and domestic demand for machinery and equipment.

Yet Italians face thorny underlying issues ranging from difficulty in finding fixed employment to trouble getting bank loans. The jobless rate is at a five-year low, but three-fifths of new positions are temporary contracts like Maschietto's. Following a short stint as a freelance language teacher in Germany, she returned to Italy in November in search of greater stability, but couldn't find a permanent job. "I love my work, but I don't know what I'll do later," she says. "There's a difference between not having a permanent contract and not having anything permanent in your life."

While Italy has long been ruled by centrist coalitions, the economic malaise and job difficulties of many people, especially the young, have energized populists and extremists on the right and left. A Feb. 7 poll by Istituto Ixè Srl found that only 22 percent of the electorate would vote for the center-left Democratic Party that has governed since 2013—a sharp drop from the 41 percent the party got in the 2014 EU elections. The anti-establishment Five Star Movement, which the Ixè poll says would take 28 percent, has become the single largest party. Led by 31-year-old Luigi Di Maio, Five Star has made great headway by pairing veiled appeals to anti-immigrant sentiment with proposals such as cutting politicians' pay, reducing taxes, and offering the poor a guaranteed minimum income.

The Forza Italia party of former Premier Silvio Berlusconi has also gained, forming a coalition with the nativist Northern League and the far-right Brothers of Italy. As a group they would get 36 percent of the vote, according to Ixè, making them the biggest single block and the only one with a shot at winning a majority in Parliament. If no party wins the 40 percent needed to form

## The Bitter Taste of Italy's Recovery



The economy is growing, but so is uncertainty. That's lifting populists and nationalists

◀ Maschietto: "I feel like I'm stalled"

◀ Elser: "The day-to-day is so hard you feel like giving up"

February 19, 2018

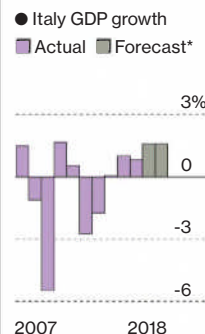
Edited by  
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◀ a government, there will likely be a month or more of haggling over coalitions—potentially culminating in a repeat election. With so much uncertainty, Italians feel the country is “rudderless, with no helmsman,” says Giovanni Orsina, a professor of government at Luiss University in Rome. “You’re in a calm spell and the sky is blue. Then you think, ‘Nobody is driving, what happens if there’s a storm or a rock, or anything?’”

Italy’s financial sector is still recovering after bad loans and bets on derivatives forced the state last year to bail out Banca Monte dei Paschi di Siena SpA and two smaller banks in the northern region of Veneto, at a cost of more than €10 billion (\$12.4 billion). The banking woes have made it harder for businesses to get loans, fueling support for Five Star. In 78 of the country’s 110 provinces, defaults among families and small businesses were higher last year than in the runup to the 2013 elections, a Bloomberg analysis shows. In provinces with the highest rates of default, Five Star’s support is more than 50 percent above the national average.

Although Europe’s No. 2 manufacturing power is on the rebound, many of its companies—big and small—are suffering. Struggling phone carrier Telecom Italia Group plans to cut as many as 7,000 positions via buyouts and early retirements. Alitalia, the national airline, faces its second bankruptcy proceeding in a decade, putting thousands of jobs at risk. “Uncertainty is a problem, which is normal in business, but it’s worse here,” says Peter Elser, a 25-year-old native of Rome who two years ago founded a company that sells handmade linen shirts. Complex tax rules and bureaucratic hurdles to hiring make him lean toward conservative parties, but Elser says no one is offering solutions to address Italy’s deeper economic issues. “The quality of life here is so amazing that you want to stay,” he says. “But then the day-to-day is so hard you feel like giving up.” —*Chiara Albanese and Alessandra Migliaccio*

**THE BOTTOM LINE** Italy boasts steady growth, high investment, and low unemployment—but as elections near, security-starved workers are turning to extremist parties.



# Social Media Smarts Buoy an Italian Politician

● Giorgia Meloni’s Facebook videos may help a right-wing coalition clinch a victory in March 4 elections

Far-right Italian politician Giorgia Meloni couldn’t have picked a better target to raise her profile: the Egyptian Museum in Turin’s two-for-one admission offer for Arabic speakers. Standing behind a “No Islamization” banner, Meloni took to Facebook Live on Feb. 9 to decry the discount as discriminatory to Italians. A subsequent video of the museum’s director debating her outside the building became internet gold, and within days it made heavy rotation on national TV.

Meloni, 41, is the leader of the Brothers of Italy, a political party with fascist roots that is a junior partner in the center-right coalition assembled

by media mogul and former Prime Minister Silvio Berlusconi to contest the March 4 national elections. A Bloomberg compilation of polls has the grouping at 36 percent as of Feb. 9—in the lead, but short of the 40 percent needed to form a government. And while support for Meloni’s party hovers at 5 percent, the congresswoman’s social media savvy could boost the coalition’s chances of winning power.

Meloni may see her influence grow in coming weeks. If his coalition prevails, Berlusconi would only be a kingmaker, as he’s banned from holding public office until next year because of



● Meloni

a tax fraud conviction. Meloni says she wants the top job, but her chances of landing it are remote. “She would hold a cabinet position,” says Roberto D’Alimonte, a political science professor at Rome’s Luiss University.

Growing up in a Roman working-class neighborhood, Meloni got involved in far-right politics as a teenager, was elected to local office at 21, and entered Parliament at 29 as a member of the National Alliance, a descendant of the post-fascist Italian Social Movement. After a merger of parties, she got a taste of cabinet-level power by serving as youth minister under Berlusconi from 2008 to 2011.

The following year, Meloni co-founded Brothers of Italy, adopting the tricolor-flame logo of its far-right predecessors and its name from the first line of the Italian national anthem. Today she’s campaigning on a populist platform that calls for increased social security payments, tax breaks for companies that produce and hire in Italy, and a reevaluation of European Union treaties that underpin the euro. She’s against gay marriage and opposes granting citizenship to children born in Italy to immigrants.

To break through, she’s turned to Facebook. In one recent live video from Milan she pointed to discarded syringes on the ground, denouncing heroin dealers “who for the most part are illegal immigrants.” In another she visited a restaurateur who’d shot and killed a Romanian thief last year. (He faces a relatively minor charge of “excessive self-defense.”) On Feb. 10, when Italians took to the streets in several cities to pronounce themselves against racism and neo-fascists, Meloni posted a video of a small group of protesters hitting a policeman who had fallen to the ground. Within a day, it had more than 700,000 views.

But it was Meloni’s museum moment that hit a political sweet spot in a country simultaneously recovering from recession and facing waves of immigrants. By singling out Islam, she played to her far-right base. At the same time, her appeal for fair access to mummies seemed perfectly reasonable to many of the centrist voters she’s trying to peel away from the anti-establishment Five Star Movement, which is polling at about 28 percent.

The challenge for Meloni is maintaining momentum, D’Alimonte says. “If this Egyptian Museum thing gave her some boost, she has to find something else to keep it up,” the professor says. “Maybe she has to switch to the Vatican museums.” —*Vernon Silver*

**THE BOTTOM LINE** Although her party commands just 5 percent support in polls, Meloni’s Italy-first message is resonating with voters and could land her a cabinet post.

# What Happened To China’s Baby Bump?

● Despite the two-child policy, births are again trending down after a brief jump

When James Chen and Subrina Huang heard in 2015 that top Communist Party of China officials had decided to end the decades-old one-child policy and allow all parents to have a second child, they excitedly considered trying for No. 2. “We thought we might like to have another,” says Chen, 35, sitting at a cafe in Shanghai. “I wanted a boy.”

No more. The couple, whose combined annual income is about 132,000 yuan (\$20,815), already spends 20,000 yuan a year on extracurricular classes, including English and dance, for their 6-year-old daughter. Then there’s housing. “With two children we would have to consider buying a new place,” says Huang, 33, who works at a flooring company. That’s a daunting prospect in a city where a centrally located 1,000-square-foot apartment costs more than 90 times the average after-tax salary, according to Numbeo, a website that compiles cost-of-living data. (In New York, the multiple is 25.) “Having one baby is already not easy at all,” says Chen, an internal auditing investigator for Dell Inc. “Now I can’t imagine having a second one.”

About four-fifths of Chinese couples say financial pressures are stopping them from having a second child, according to Yang Wenzhuang, an official at the National Health and Family Planning Commission. The number of newborns rose 7.9 percent in 2016, the first year the two-child policy was in force, only to fall 3.5 percent last year, according to China’s National Bureau of Statistics. “Of course, when you change the policy, you are likely to have a spike, but that doesn’t mean it’s sustainable,” says Anke Schrader, a senior researcher at the Beijing-based Conference Board China Center for Economics and Business who co-authored a recent report, “Two-Child Policy Won’t Produce a Baby Boom.” Says Schrader: “The financial burden of bringing up children in China is too much.”

That’s particularly true in the cities, where 14.3 percent of total household expenditure goes to children’s education, according to a study ►

**“Having one baby is already not easy at all. Now I can’t imagine having a second one”**

◀ published by Peking University. Factor in soaring apartment prices, and it's not altogether surprising that fertility rates in such places as Beijing and Shanghai have dipped below one birth per woman of childbearing age, probably the lowest in the world, says James Liang, author of *The Demographics of Innovation* (Wiley, February 2018), a book that looks at the economic implications of China's aging population. Although fertility is higher in rural areas, women of childbearing age nationwide had an average of just 1.6 offspring last year, which is slightly below Russia and on a par with Canada. Liang expects the rate in China to start falling again after the initial enthusiasm for the loosened policy dissipates.

"China faces a baby crisis," says Wei Siang Yu, a Singaporean doctor and entrepreneur who created *Fertility UFO*, a video series introduced on Jan. 30, in which doctors dispense tips to real-life couples trying to conceive. The latest government projections have the nation's population peaking at 1.45 billion around 2030, then falling to just 1 billion by the turn of the century.

The government's failure to ignite a baby boom is cause for worry in policy circles. "There is growing concern that the country may experience a demographic time bomb, because in the decades to come the number of young people is likely to fall below the number required to maintain an optimum level of employment," said a Feb. 7 article in the state-owned *China Daily*. China's working-age population, those age 16 to 59, is 902 million, according to the national statistics bureau. But it's been shrinking since 2012 and fell by 5 million last year. In the decade starting in 2025, China will log 7 million new retirees a year. "This will add pressure on China's lowly and acutely underfunded social welfare programs," says the Conference Board report. "Workers will bear significant burdens to support their aging parents and grandparents."

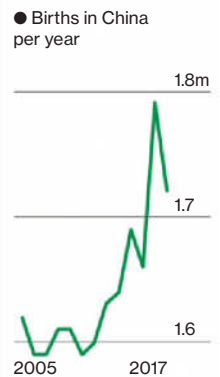
Innovation and entrepreneurialism are also likely to take a hit as China's workforce grays, says Liang, who's chairman of Ctrip, a website that processes travel and hotel reservations, citing Japan as a cautionary example. Not only will there be fewer young people, who tend to have a higher appetite for risk than their elders, but they'll be a minority in the workplace. "In an aging country, [younger employees] usually have a lower position in a company hierarchy," Liang says. "They have less management skills, less financial resources, and less social connections as well. So they are less capable as entrepreneurs."

Policymakers have considered proposals to reduce taxes on larger families and lower the

minimum legal marriage age to 18 (it's 20 for women and 22 for men), but they've failed to take action. This year could be different. Delegates to China's annual National People's Congress, set to open in early March, are likely to consider tax rebates or even direct subsidies for families that have a second child—and following last year's disappointing birth numbers, these may finally pass. In addition, China's health authorities already announced an ambitious plan to add 89,000 maternity beds in hospitals and 140,000 obstetricians and midwives by 2020. Meanwhile, Beijing authorities unveiled plans in late January to add 30,000 preschool spots and build more kindergartens.

All this is unlikely to reverse the declining birth trend. As the Conference Board's Schrader points out, China already has relatively generous policies to support families, including an average of 161 days of paid maternity leave. Since the two-child policy was introduced, several provinces have also lengthened paternity leave. Tibet, for example, now offers new fathers one month of paid leave.

China may be too far along on its development track for these policies to make a difference. As people grow wealthier and more educated, birth-rates typically fall around the world, points out economist Gan Li of the Southwestern University of Finance and Economics in Chengdu. That's because couples tend to focus more on their



careers and are less interested in having the larger families that traditional societies have favored. "China is already a high-income country in its big cities," Gan says. "The trend of a lower and lower fertility rate will happen regardless of policies." —Dexter Roberts

THE BOTTOM LINE Chinese policymakers are likely to consider introducing tax rebates or direct subsidies for households that have more than one offspring.

# Stock Options Fail In India

● Employees go to court, claiming they were swindled out of big payoffs

A few years ago, TechProcess Payment Services Ltd. looked like a promising destination for India's ambitious young tech workers. The Mumbai-based startup pioneered electronic payments in the country and won the financial backing of high-profile investors such as Goldman Sachs Group Inc. Now 17 former employees are suing TechProcess, which accepted a buyout offer from Ingenico Group SA of France last year, alleging they've been wrongfully deprived of gains on their stock options. It's the latest in a string of lawsuits that's shining a spotlight on what many say is systematic abuse of stock options by Indian startups.

India is seeing an historic tech boom: A fifth of its more than 5,000 tech startups were founded just last year, according to Nasscom, a trade association. The past 12 months also have brought an unprecedented number of megafunding rounds, including a record \$2.5 billion stake in e-commerce provider Flipkart Online Services Pvt. But while such companies as Facebook Inc. and Google created thousands of millionaires through stock options, few employees in India beyond founders have profited.

One reason is a dearth of splashy initial public offerings or buyouts that give lucrative paydays to options holders. Another is that some employee stock option programs are poorly designed or that founders refuse to deliver on promises of equity. "People jokingly refer to stock options as ESOP's fables," says Sanjay Swamy, managing partner at Bangalore-based Prime Venture Partners, which has invested in 17 technology startups.

Options came into their own in Silicon Valley, where they've become an essential tool to attract and retain talent. New hires typically get options that are priced at a company's current valuation and vest over several years. If startups go public or get acquired, employees can land instant riches—Google's in-house masseuse became a millionaire when the internet search giant listed its shares in 2004. Some executives and workers who get rich

on options go on to invest in other startups, helping to perpetuate the innovation ecosystem.

In India, it hasn't quite worked out that way. Varsha Iyengar, a partner at Arka Law in Bangalore, says he's seen a marked increase in calls from employees who say they've been scammed. As such stories have spread, families have attempted to dissuade their sons and daughters from going to work at fledgling tech companies.

One early example came in 2013, when a travel startup called RedBus was acquired by a subsidiary of South Africa's Naspers Ltd. for about \$135 million. RedBus's founders and investors were compensated right away for their equity in the company, but most employees got no immediate reward. After consulting with lawyers, workers found out the sale wouldn't trigger accelerated vesting of their options, as expected. Instead, their options would be folded into the acquirer's option program. Heated arguments broke out, and many employees quit, including the chief technology officer and chief operating officer.

In 2016 a spat over stock options briefly shut down the startup QikPod, a delivery locker network for e-commerce. Neeraj Ray, a senior executive, persuaded a court to suspend the company's operations, alleging he didn't get the equity that founder Ravi Gururaj had promised him. Gururaj, a high-profile entrepreneur and co-founder of Harvard Angels India, countered the allegations were "false and frivolous" and succeeded in getting the suspension removed. Ray told Bloomberg News the "matter has been amicably settled."

The TechProcess suit, filed last summer, claims that it and acquirer Ingenico offered workers 13 rupees (20¢) per vested share while investors got an estimated 202 rupees a share. It calls this an attempt "to terminate the employee stock option (ESOP) scheme unilaterally." TechProcess wouldn't comment other than to say the case will have "no impact" on the acquisition, which the group of 17 former workers is asking the court to halt.

While resolving these lawsuits may in time help establish a solid legal framework for determining startups' obligations, there's concern that the bad press may hurt India's fledgling scene in the near term. Entrepreneurs say they're finding it harder to attract talent, because workers have heard the horror stories and, unlike in the U.S., almost no one knows anyone who's made money on stock options. Says Krithika Dutta, legal counsel for an online funding platform for startups: Stock options "are a complete mess in India." —*Saritha Rai*

**THE BOTTOM LINE** Although India is in the midst of a tech boom, problems with options programs have meant the wealth from buyouts isn't trickling down to employees.

**"People jokingly refer to stock options as ESOP's fables"**

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LOOK AHEAD

● Venezuela plans to begin sales of the world's first sovereign cryptocurrency, the petro, on Feb. 20

● Twelve Republicans and two Democrats contend in primaries for Arizona's 8th Congressional District

● The seventh round of Nafta negotiations begins on Feb. 26 in Mexico City



# The Fading of Angela Merkel

38

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Edited by  
Matthew Phillips and  
David Rocks

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The German chancellor has a coalition deal, but it comes at a steep cost



Angela Merkel once claimed she had bested Vladimir Putin during their first meeting in the Kremlin, employing what she said was an old KGB technique: staring at the Russian leader in silence for several long minutes. As the sun rose over a frigid Berlin on Feb. 7, the German chancellor's rivals from the Social Democratic Party (SPD) used the same tactic. This time, Merkel blinked.

Merkel and her team had spent the previous day and night at the headquarters of her Christian Democratic Union (CDU) locked in tense negotiations with the SPD leadership. The SPD had issued an ultimatum that broke with long-standing protocol of German coalition-building: Off the bat, they demanded three key posts, including the finance and foreign ministries, power centers from which the SPD planned to set the government's agenda, especially on Europe.

An earlier attempt at an alliance with the Greens and the Free Democrats had failed. A second collapse in talks, more than four months after the September election, threatened to sweep out the governing elite, including the chancellor who has dominated German politics for 12 years.

As delegates were summoned back to the CDU building, they could barely believe what Merkel and her party's Bavarian sister group, the Christian Social Union (CSU), had negotiated. With so much at stake, she surrendered the portfolios for finance, foreign affairs, and labor to the Social Democrats (though the deal still needs to be approved by the SPD's 464,000 members). CDU lawmaker Olav Gutting captured the mood with gallows humor. "Puuuh! At least we kept the Chancellery!" he tweeted on Wednesday. On Sunday, Merkel took to the airwaves to explain her position. "It was a painful decision," she told the ZDF television network. "But what was the alternative?"

The Merkel who emerged after the talks seems to be a shadow of the woman she was a year ago. With Donald Trump's inauguration in the U.S., she'd been anointed defender of the international liberal order. In the weeks after Merkel decided to run for a fourth term, she cast herself as the counterbalance to events across the Atlantic. With Trump tearing up trade agreements and withdrawing from the Paris accord, Merkel took the lead in spearheading the global trade agenda and doubling down on her commitment to climate issues. Speaking at a rowdy beer tent in May, Merkel turned a Bavarian campaign stop into an international event, declaring—in words clearly directed at the White House—that relationships cultivated since World War II "are to some extent over."

As the campaign got under way, the migration crisis that had come to define most of Merkel's

third term—more than a million refugees had shown up in Germany in 2015 and 2016—subsided. Merkel came to be viewed abroad as the set-in-granite leader of the old order who could face up to the impetuous U.S. leader while focusing attention on the rising ambitions of China and Russia.

What started as a fairly conventional contest between center-right and center-left parties morphed into a referendum on the establishment, not unlike votes elsewhere that had swept populist movements into power. Merkel found herself confronted at campaign events with clutches of hecklers as the far-right Alternative for Germany, almost written off after infighting damaged the party in the spring, started inching up in the polls.

Merkel's message—a Germany in which we live "well and gladly"—came across as too mild for an anxious electorate. The chancellor's trademark step-by-step approach to governing looked to have reached its limit. Merkel's bloc suffered its weakest result since 1949, and the SPD did even worse. The AfD, with its anti-Merkel and anti-Muslim message, got 13 percent of the vote, becoming the first far-right party to enter Parliament since the 1950s.

As coalition talks spilled over into winter, Merkel, 63, largely vacated the global stage, leaving an opening for a new generation of leaders such as France's Emmanuel Macron. For Merkel, the stakes couldn't have been higher. "There was a growing narrative publicly that if we don't have a government, it will mainly be her fault," says Jan Techau, director of the Europe Program at the German Marshall Fund of the United States in Berlin.

Merkel's late-night concession on ministries triggered a rebuke from conservatives who have long accused her of betraying the CDU's roots by dragging it to the center. And many bristled at a preliminary list of cabinet members composed largely of the chancellor's stalwart allies and short on younger and more conservative voices such as Jens Spahn, a deputy finance minister who has frequently criticized the government. The right flank used the moment to exploit Merkel's weakness, calling on her to at least start planning her departure. "Frau Merkel won't remain chancellor for four years because there are so many breaking points in this coalition," says Alexander Mitsch, chairman of a CDU group called the Values Union. "I've never seen such a sour atmosphere in the CDU."

Merkel wasn't the only loser of the Wednesday staredown. Her primary opponent in the talks, SPD Chairman Martin Schulz, had appeared to prevail but soon found himself out of a job. In the negotiations with Merkel, he secured the Foreign Ministry for himself and in exchange ceded the ►

● How the coalition parties divided the ministries

**SPD**

- Foreign
- Finance
- Families
- Justice
- Labor and Social Affairs
- Environment

**CDU**

- Defense
- Economy
- Agriculture
- Science and Education
- Health

**CSU**

- Interior and Construction
- Development
- Transport and Digital

◀ party leadership to Andrea Nahles, the SPD's first female chief in its 154-year history. But the idea of a cabinet post for Schulz—who after the election had pledged never to serve in a Merkel government—encountered ferocious resistance from the SPD rank and file.

The SPD membership vote, which will be carried out by mail over the next few weeks, could sink the whole deal. Four years ago, three-fourths of SPD members approved a similar plan to join Merkel's government, but the mood is more divisive this time. Many Social Democrats blame their electoral decline on the party's role as Merkel's junior partner and say they would do better to rebuild in opposition. If they reject the pact, Merkel would have to choose between a minority government or a return to the ballot

box for an election that polls suggest would leave both main parties even weaker.

The CDU is less inclined than the SPD to brook revolt from within, but after leading her party to an historic defeat—and then giving up so much—Merkel has never appeared more vulnerable. The chancellor sought to quell the unease in the ZDF interview, reaffirming a pledge to serve her entire term, which would match the record 16-year chancellorship of her CDU predecessor, Helmut Kohl. “I promised those four years, and I’m someone who keeps promises,” Merkel said. “I totally stand behind that decision.” —*Patrick Donahue, Arne Delfs, and Rainer Buerger*

**THE BOTTOM LINE** After months of negotiations, Merkel finally sealed a deal on a new government. But she had to give up key ministries, making her appear more vulnerable than ever.

# Bannon to GOP: The Women Are Coming

● The ex-White House adviser sees female empowerment as the next great political backlash

On Jan. 7, a few days after he'd been brutally excommunicated by President Trump for his indiscretions with author Michael Wolff, former White House chief strategist Steve Bannon sat down to watch the Golden Globe Awards in the backroom of the townhouse he lives in near Capitol Hill.

As Oprah Winfrey and a parade of black-clad actresses turned the awards ceremony into a national platform for #MeToo activism, Bannon became more and more agitated. What bothered him was the political threat that the women's movement poses to Trump and Republicans—a concern newly relevant, given the spousal-abuse scandal that's seized the White House for days and is certain to intensify the problem Bannon identified back in January.

Nobody would call Bannon a feminist. And you certainly wouldn't pick him to bring order to a chaotic West Wing beset by scandal. Yet whatever his flaws, Bannon is a shrewd analyst of American politics and of our collective national anxieties. It was Bannon who, earlier than almost

anybody else, spotted, and then harnessed, the anti-establishment groundswell that gave rise to Trump. From his couch that night in January, watching Oprah command the Golden Globes stage with a message of female empowerment, Bannon was sure he was witnessing the next great political backlash—this one aimed at Trump and “patriarchs” like him, whose behavior had galvanized a potent counteraction.

“It's a Cromwell moment!” Bannon declared, invoking 17th century Puritan zealot Oliver Cromwell. “It's even more powerful than populism. It's deeper. It's primal. It's elemental. The long black dresses and all that—this is the Puritans! It's anti-patriarchy.” I recount this scene in the preface of the paperback version of my book, *Devil's Bargain: Steve Bannon, Donald Trump, and the National Uprising*.

Bannon regarded the activism onstage not only as a demonstration of female empowerment but also as an expression of anti-male rage. As someone who prospered by leveraging an angry backlash to get Trump elected, Bannon's true fear was

**“They couldn't juxtapose a better villain than Trump”**

that Trump and Republicans were not sufficiently alert to the electoral threat posed by this rising movement. If Oprah could unite a national audience watching an awards show on television, he pointed out, then she could certainly turn out Democratic voters in force were she to hit the campaign trail this fall. Republicans are already in danger of losing the House; Bannon thought Oprah would cinch it for their opponents.

Six weeks later, Bannon's concern looks prescient. As fallout grows from the revelation that White House staff secretary Rob Porter allegedly abused two ex-wives—and was allowed to remain in the job after administration officials had been made aware of the allegations—Bannon is the rare person in Trump's universe who sees clearly the political damage such episodes are doing to Republicans and takes seriously the backlash coming in the form of the #MeToo and Time's Up movements.

When Porter's troubled marital history first emerged on Feb. 6, the initial response from the White House was to vigorously defend him. Chief of staff John Kelly issued a defiant statement of support: "Rob Porter is a man of true integrity and honor and I can't say enough good things about him." As pictures circulated of Porter's first wife, Colbie Holderness, with a black eye she says he inflicted, Porter resigned and the focus of the White House's defense efforts shifted to Kelly, who had known about Porter's marital problems, because they'd prevented the staff secretary from getting a permanent security clearance.

This belated attempt at damage control was further undermined by the president himself, who tweeted his frustration that Porter was being condemned without "due process" and said nothing about the victims of his alleged abuse, his ex-wives.

Trump and others around him have been reluctant to publicly address the grievances or to acknowledge the potential political consequences that #MeToo could have for the GOP. Women make up the backbone of the liberal resistance to Trump, which poses a dire threat to Republican congressional majorities this fall and, perhaps, even to the future of the Trump administration. A Democratic-controlled Congress would vigorously investigate—and might even impeach—the president.

"The anti-patriarchy movement is going to undo 10,000 years of recorded history," Bannon said. "You watch. The time has come. Women are gonna take charge of society. And they couldn't juxtapose a better villain than Trump. He is the patriarch. This [the Golden Globe Awards] is a definitional moment in the culture. It'll never be the same going forward."



▲ Oprah Winfrey at the Golden Globes in January

Leaving aside Bannon's flair for dramatic pronouncement, the crux of his fear is something Democrats on the ground say has already materialized. "The single biggest action since Trump's election was the Women's March, which very quickly transitioned to an electoral organizing movement, with levels of activism beyond what we've ever seen before in an off-year electoral cycle," says Alfred Johnson, co-founder and chief executive officer of MobilizeAmerica, an online platform that connects activists and Democratic campaigns. "As somebody who works on the ground with this movement every day, it's unquestionably the case that a majority of Democratic political volunteers are women—as are many of the new candidates."

Last fall, Johnson says, more than 70 percent of MobilizeAmerica's volunteer shifts in Virginia's off-year elections were completed by women, and the candidates they helped won every race but one. And the Republican "patriarchy," as Bannon might put it, fared especially badly: On election night, Democrats flipped 15 seats in the Virginia House of Delegates, the party's largest gain since 1899. All 15 seats were represented by men. Today, 11 are represented by women.

With the White House reeling from a scandal that underscores Republicans' worsening problems with women, there's a kind of upside-down poignancy to the fact that Bannon, so publicly cast out of Trump's inner circle, seems to be the only Republican able to see what Democrats like Johnson are seeing every day. Bannon can sound the alarm, but it's unclear whether anyone in the White House will listen. Right now, Trump seems no more willing to heed Bannon's counsel than he is Oprah's. —*Joshua Green*

THE BOTTOM LINE Winfrey's speech at the Golden Globes alerted Bannon to the power of the #MeToo movement and the threat it poses to Republicans and Trump in the 2018 midterms.

# Moscow on The Euphrates

● Hundreds of Russian mercenaries were killed by U.S. forces in Syria—raising the specter of inadvertent but direct conflict

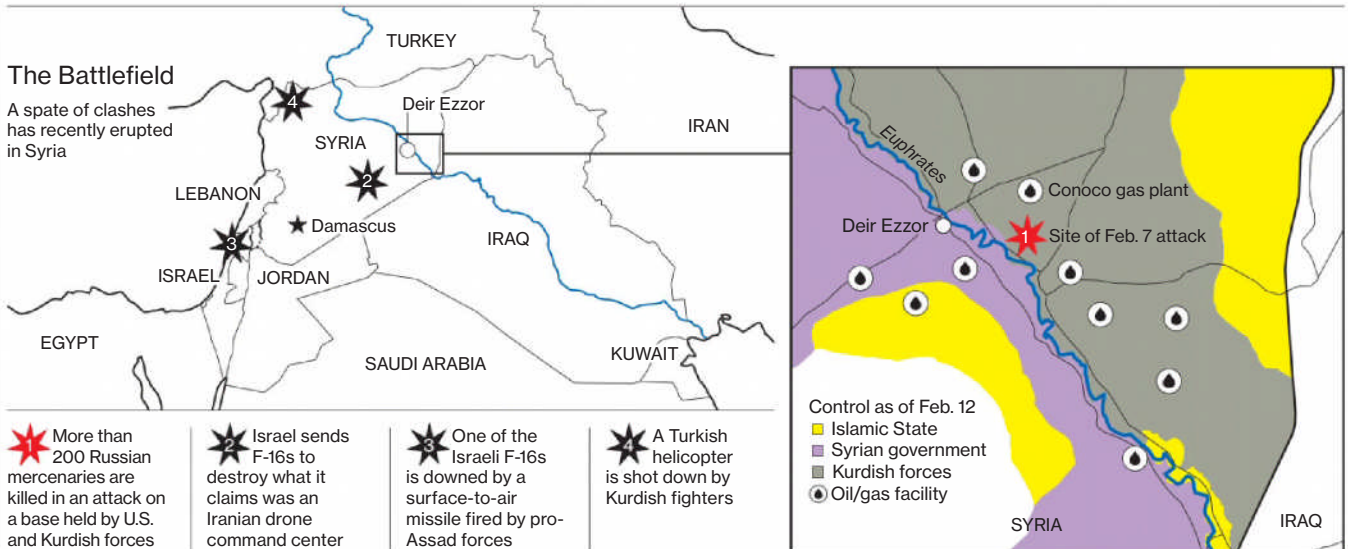
Syria's seven-year war is entering a dangerous phase. A series of recent clashes has escalated tensions among the proxies of world and regional powers squaring off in the country. Russia, Iran, Israel, and Turkey have all had aircraft shot down in or near Syria in recent weeks. The most serious event took place on Feb. 7, when U.S. forces killed scores of Russian mercenaries in what may be the deadliest clash between the former foes since the Cold War, according to one U.S. official and three Russians familiar with the matter.

More than 200 military contractors, mostly Russians fighting on behalf of Syrian leader Bashar al-Assad, died in a failed attack on a base held by U.S. and mainly Kurdish forces in the oil-rich Deir Ezzor region, two of the Russians said. The U.S. official put the death toll at about 100, with 200 to 300 injured. The Russian assault may have been a rogue operation aimed at capturing oil fields controlled by the Kurds, underscoring the complexity of a conflict that's broadened from a civil war into a clash involving Islamic State extremists, stateless Kurds, and regional powers. Russia's military said it had nothing to do with the attack. U.S. Secretary of Defense James Mattis called the whole thing "perplexing" but provided no further details.

"This is a big scandal and a reason for an acute international crisis," says Vladimir Frolov, a former Russian diplomat and lawmaker who's now an independent political analyst. "But Russia will pretend nothing happened." Indeed, President Vladimir Putin's spokesman, Dmitry Peskov, declined to comment on reports of Russian casualties, saying the Kremlin tracks only data on the country's armed forces. Putin talked with President Donald Trump by phone on Feb. 12, but the military action in Syria wasn't discussed, Peskov said. "No one wants to start a world war over a volunteer or a mercenary who wasn't sent by the state and was hit by Americans," says Vitaly Naumkin, a senior adviser to Russia's government on Syria.

The incident comes two and a half years after Putin, with Iran's help, turned the tide of the war in Syria by committing air support and manpower to buoy Assad's forces, quieting U.S. calls for the Syrian leader's immediate removal. Islamic State, which once controlled large swaths of Syria, is now largely defeated; rival powers and militias are fighting in various combinations to fill the vacuum. That includes securing some of Syria's prime oil and gas assets. Last year, with Islamic State in retreat, Kurdish-led forces and those loyal to Assad raced into the Deir Ezzor region, home to the bulk of Syria's oil fields. For the most part, the Kurds got there first and have spent much of the past several months fortifying their control of the region.

The latest offensive began about 5 miles east of the Euphrates River on the night of Feb. 7, when pro-Assad forces fired rounds and advanced in a "battalion-sized formation supported by artillery, tanks, multiple-launch rocket systems and mortars," says Colonel Thomas Veale, a spokesman for the U.S. military. The U.S., which has advisers stationed at the base alongside Syrian



Democratic Forces, responded with aircraft and artillery fire. “Coalition officials were in regular communication with Russian counterparts before, during, and after the thwarted, unprovoked attack,” Veale says. No fatalities were reported on the coalition side.

It’s unclear who was paying the Russian forces, though the Russians familiar with the matter linked them to Wagner, a shadowy organization known as Russia’s answer to U.S. military contractor Blackwater. Russian media reports indicate Wagner was hired by Assad to recapture and guard Syrian energy assets in exchange for oil concessions. According to Russian media, Wagner is made up of military units that may be under the control of Yevgeny Prigozhin, who has a catering company that cooks for the Kremlin. Prigozhin has denied any links to Wagner.

Yury Barmin, a Middle East analyst at the Russian International Affairs Council, a think tank set up by the Kremlin, says Russia supports Assad’s efforts to reclaim the “crucial” eastern region of Deir Ezzor to help fund his national reconstruction and reconciliation plan, which the U.S. opposes. Russia signed a “road map” agreement with Assad’s government in January to assist in rebuilding Syria’s electricity network. On Feb. 13, Energy Minister Alexander Novak told reporters in Moscow that Russian companies are interested in contracts to help refurbish damaged oil pipelines and wells.

The death toll from the skirmish, already about five times more than Russia’s official losses in Syria, is rising, according to one mercenary commander who says that dozens of wounded men are still being treated at military hospitals in St. Petersburg and Moscow. Most of those killed and injured were Russian and Ukrainian, many of them veterans of the separatist conflict in eastern Ukraine, according to Alexander Ionov, who runs a Kremlin-funded group that fosters ties to separatists and who’s fought alongside pro-government forces in Syria.

Grigory Yavlinsky, a longtime Russian opposition politician who helped steer democratic reforms after the collapse of the Soviet Union in 1991, called on the authorities to come clean about what happened. “If there has been mass deaths of Russian citizens in Syria, then the relevant authorities, including the general staff of the Russian armed forces, have a duty to inform the country about this and decide who bears responsibility,” Yavlinsky said on Twitter. —*Stepan Kravchenko, Henry Meyer, and Margaret Talev, with Ilya Arkhipov*

● Who’s backing whom  
 ■ Supports  
 ■ Opposes

	Syrian government	Opposition forces	Kurdish militias	Islamic State
Russia	■	■	■	■
Iraq	■	■	■	■
Hezbollah	■	■	■	■
Iran	■	■	■	■
Israel	■	■	■	■
Turkey	■	■	■	■
France	■	■	■	■
U.K.	■	■	■	■
U.S.	■	■	■	■

THE BOTTOM LINE U.S. and Kurdish forces killed more than 200 Russian mercenaries fighting alongside Syrian government troops on Feb. 7.

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**HOW  
BOEING**

• **EMBRACED  
TRUMPISM**

• **SQUEEZED  
SUPPLIERS**

**AND**

• **MADE  
INVESTORS  
RICH**



# SO

much goes into the development of a commercial aircraft—billions of dollars, millions of work hours, rivers of sweat—that when a new model is finished, the designers like to throw a party. At Boeing Co.’s rollout of the 777 in April 1994, an event orchestrated by Dick Clark Productions, music swelled while the slogan “Working Together” appeared on a 285-foot screen before thousands of employees gathered at the doors of a massive hangar at the doors of a massive hangar in Everett, Wash. The phrase was the organizing principle of Boeing’s engineering team and even the name of the first airplane, painted in cursive under the cockpit window. “Because we

realized,” a narrator intoned, “that only by working together as a team—with our customers, our suppliers, and each other—would we build a truly great airplane.” Boeing extended its embrace of globalism with its next airplane, the 787 Dreamliner, introduced in 2011, relying on a far-flung network of suppliers that not only built but also designed many of the parts.

These days, the spirit of togetherness goes only so far. Under Dennis Muilenburg, who took over as chief executive officer in 2015, Boeing has turned unapologetically hard-nosed. Even amid the greatest sales boom in aviation history, he’s insisting suppliers cut prices—while he angles to take over their most lucrative repair and maintenance work. This cost initiative is called Partnering for Success; some of its targets call it Pilfering from Suppliers.

Muilenburg drew yet more backlash by pressing a dumping claim last year against Bombardier Inc., a much smaller aircraft maker backed by the Canadian government. In January, the U.S. International Trade Commission unexpectedly rejected Boeing’s claim, and that wasn’t the only public rebuke. The case caused frictions with some customers, put \$20 billion of fighter orders from Canada in jeopardy, and pushed Bombardier into a partnership with Airbus SE, whose CEO, Tom Enders, called Boeing a nationalist bully “ruthlessly surfing the ‘America First’ wave.”

Just about every constituency is upset except Boeing’s shareholders. In this new alpha Boeing they see a plodding giant of American industry, already the largest U.S. exporter, reaching to become something more: a model of industrial profitability. The plane maker set company records for earnings, cash flow, and commercial deliveries in 2017, then pledged to do even better. Shares have doubled since the beginning of last year, the best return in the Dow Jones industrial average.

The engine of this new relentlessness is a company lifer who speaks in the measured language of a systems engineer. “While it has some tough edges,” Muilenburg said in October, discussing Partnering for Success in his office in Boeing’s Chicago headquarters, “it is making our supply chain better, and 90 percent of our supply chain



Tailfins at Boeing’s Everett, Wash., factory representing its Dreamliner customers



sees that.” In the wake of the rejection of Boeing’s anti-dumping claim against Bombardier, he told analysts “you can count on” Boeing making similar challenges when it deems competitors are getting unfair state aid.

In Everett, an hour north of Seattle, Boeing’s footprint extends on either side of the four-lane Boeing Freeway and includes a vast complex of buildings with its own credit union, dry cleaner, and fire department. The company spent \$1 billion to erect one of the buildings, known as the 777X Composite Wing Center, in 2016. Here, a giant robotic arm strings rows of carbon fiber tape over what will become a 108-foot-long spar running the length of the wing of a 777 airliner. Each spar contains 400 miles of the half-inch-wide tape, and the workers wear white lab coats to keep clothing fuzz from contaminating it. Engineers monitor the factory floor from glass-walled offices above.

This new wing, which drastically reduces fuel consumption, is the centerpiece of the cost-saving technologies the company first developed for the 787 and is migrating to the newest versions of the 777 and other future airplanes. The 350- to 425-seat 777X, due in 2020 and ordered mainly by Emirates and other Middle Eastern carriers, will have a wingspan so wide that Boeing is adding motors to the wingtips to raise them so it can still squeeze into airport gates. (The tips will fold up while the plane taxis.) For an engineer, this is thrilling work, and the head of the 777X program, Eric Lindblad, flashes a smile when asked if his team is glad to keep it in-house. “Unequivocally yes,” he says.

The first time Boeing developed a composite wing, for the 787, it hired Mitsubishi Heavy Industries Ltd. to do the engineering and manufacturing in Nagoya, Japan, part of an effort to spread the enormous development costs of the plane to multiple partners. Work on the fuselage went to Italy and the passenger doors to France. Boeing had never handed off responsibility to its suppliers on this scale—and it was a disaster. The first plane out of the Everett factory in 2007 was an empty shell, lacking plumbing, wiring, and electronics. Early models were built and rebuilt. An engine exploded, the carbon fiber frame had to be reinforced to support the wings, and an electrical blaze knocked out pilot control panels during one flight test. Battery fires grounded the global fleet soon after the plane was finally delivered, three years late.

The crisis eventually passed, and the Dreamliner became successful with airlines, but the company lost money on the first 500-plus it delivered. The experience was searing for Boeing managers. Partnering for Success was inaugurated in 2012 by then-CEO James

McNerney, who demanded discounts of about 15 percent from suppliers—their margins, he grouched, were often higher than Boeing’s, sometimes double or triple. Companies that balked risked banishment to a “no-fly list” barring them from bidding on new programs. Among these was United Technologies Corp., which makes such components as engines, brakes, and landing gear. When UTC refused to give McNerney his discount, Boeing awarded the contract for the 777X landing gear to a small Canadian manufacturer, Héroux-Devtek Inc.

Suppliers say Muilenburg’s own squeeze, which they call Partnering for Success 2.0, demands additional price cuts of about 10 percent. “Frankly, this feels like walking down the street and being mugged,” Nigel Stein, then CEO of the U.K. aircraft parts maker GKN Plc, told analysts in October, by way of explaining that the company had missed profit forecasts in part because of pricing pressure, low productivity in North America, and unexpected writedowns. (A spokesman for GKN said it “was not the case” that Stein was “criticizing Boeing.”)

Muilenburg cut Boeing’s workforce almost 7 percent in 2016 and an additional 6 percent last year, mostly through voluntary buyouts and attrition. He eliminated a significant source of uncertainty by signing an agreement with the engineers’ union that will ensure labor peace through early 2022 and lower pension costs. And he’s bored in on the question of profitability. One team spent a year studying the life cycle of its products and those of competitors. It discovered that Boeing was collecting only 7 percent of the money spent on the maintenance, repair, and upgrade of commercial aircraft and 9 percent of the spending on military products, says Chief Financial Officer Greg Smith, who led the study. Boeing made a lot of money delivering airplanes, but they last 30 years to 50 years, and most of the higher-margin aftermarket work was being done by suppliers and airlines.

In response, Muilenburg last year set up a unit called Boeing Global Services, which gathers together the company’s various consulting, repair, and spare parts businesses. Although few of them were dominant in their fields, they collectively had annual sales of \$14.6 billion. He instructed managers of the unit to boost revenue to \$50 billion within 5 to 10 years. That will require them to hunt deep in the territory of suppliers and customers, some of whom have their own maintenance businesses. This, along with the ceaseless price squeezing (from Airbus as well as Boeing), has set off a wave of acquisitions as suppliers try to build leverage. Last April, Rockwell Collins Inc., which makes aircraft electronics, paid \$8.6 billion for B/E Aerospace Inc., a supplier of cabin equipment including seats and lavatories. Just after the deal closed, Gregory Hayes, ▶

**BOEING'S  
SHARES  
HAVE  
TOPPED  
THE DOW  
SINCE THE  
BEGINNING  
OF 2017**





◀ CEO of United Technologies, called his counterpart at Rockwell Collins, Kelly Ortberg, with a proposal. “I said, ‘Kelly, we need to do something,’” Hayes recalls. “‘The forces of nature in the aerospace business are such that we need to figure out how we’re going to reduce costs.’”

In September, UTC agreed to pay \$23 billion for Rockwell Collins—weeks after Boeing set up a unit called Boeing Avionics to make its own cockpit equipment. In January, Boeing stepped up the pressure by forming a joint venture with Adient Plc to make aircraft seats. And there’ve been rumbles about a joint venture with Woodward Inc., which makes actuators—motors that move plane components like the 777X wingtips.

**M**uilenburg, 54, has always had some swagger. He joined Boeing straight out of Iowa State University, where his ambition, as he told the *Ames Tribune*, was to become “the world’s best airplane designer.” He has the squared-away look of NASA Mission Control, circa 1970: blond crew cut, steel-blue eyes. Since 2013 he’s been chairman of Biblical Business Training, a St. Louis nonprofit whose mission is to “equip and empower God’s people in the workplace.” Conspicuously fit, he cycles 140 miles a week and likes to lead a peloton of Boeing workers on rides when he does site visits. Boeing was once derisively called “the Lazy B” for its lumbering bureaucracy; now employees joke about keeping up with the boss’s energy. While heading the defense division in St. Louis, Muilenburg would end meetings in a ground-floor conference room by inviting managers to walk or run with him eight flights back upstairs.

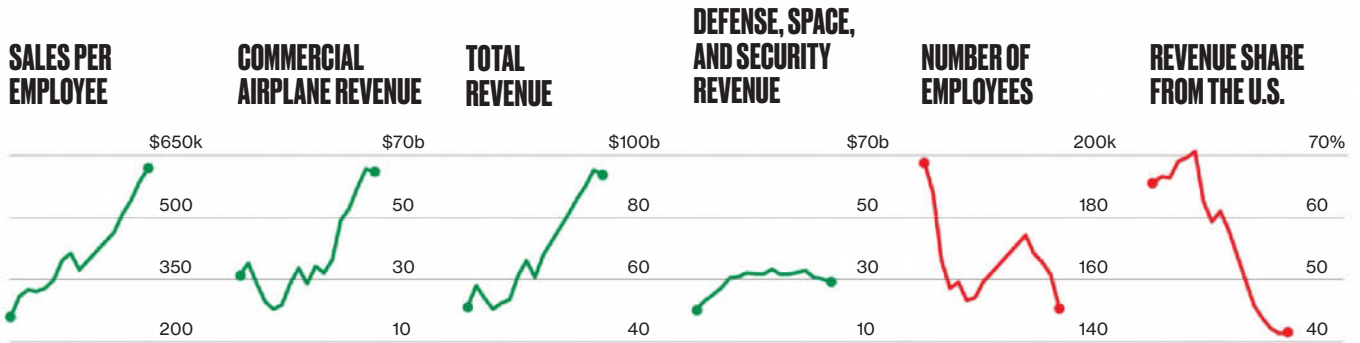
In this industry, the repercussions of mistakes are revealed very, very slowly. Aircraft manufacturers invest billions before a single delivery and might not know they’ve misread the market or designed a plane no one wants until years later—when the mistake might ruin them. Former Boeing CEO Phil Condit says he often thinks of something Ed Wells, an engineer whose designs helped usher in the Jet Age, told him: “Be careful how long or how short you make the landing gear.” Wells had overseen work on the 707 in the 1950s and was haunted by a decision to save weight on the landing gear. In 1965, Douglas Aircraft Co. introduced its “Super Sixties” DC-8s, which were longer than the 707. Boeing wanted to respond by stretching the 707. It couldn’t, because the landing gear was too short—the tail would have hit the ground on take-off. The underlying point, as Condit sees it: “Make sure there is room to incorporate the future.”

When Condit got that advice in the 1980s, Boeing was the leader in a hotly competitive business including McDonnell Douglas Corp. (born of a 1967 merger between Douglas and McDonnell Aircraft), Lockheed Corp., and Airbus. Airbus, a consortium of European manufacturers supported by multiple governments, didn’t make its first U.S. sale until 1978, when Eastern Air Lines acquired 23 twin-aisle A300s. It was, as the ▶

787 Dreamliners being assembled in Everett

# BOEING TAKES OFF

Six ways of looking at a growing business, 2000 to 2016



DATA: COMPILED BY BLOOMBERG

◀ *New York Times* declared, “the biggest foreign penetration ever made in the American market for airliners.”

That first Airbus sale may seem long past, but in the 136-page petition Boeing filed against Bombardier with the U.S. Department of Commerce in April, it’s described as a fresh wound. Boeing, now the sole American manufacturer of big passenger jets, claims illegal government aid for Airbus has cost it more than \$100 billion in profit—damage that remains unaddressed while a complaint the U.S. filed in 2004 at the World Trade Organization remains mired in appeals. (So far, WTO judges have found about \$22 billion in illegal aid for Airbus and \$3.3 billion for Boeing.)

Bombardier isn’t exactly another Airbus. The company, based in Montreal, started in snowmobiles before branching into business jets and small commuter planes seating about 70 people. In 2005 it began developing the C Series, a 108- to 160-seat craft—just below the size of the most popular Boeing and Airbus models. The wings are made in Northern Ireland, fuselage sections in China, the cockpit in Quebec, and the brakes in the U.S. The plane is aimed at the sliver of market not controlled by Boeing and Airbus, which are forecast to take in \$1.3 trillion of the \$1.5 trillion in large commercial aircraft sales over the next decade. Developing the C Series almost bankrupted Bombardier, which stayed afloat with more than \$1 billion in government equity infusions and loans. Sales were slow until April 2016, when Delta Air Lines Inc. ordered 75, worth \$5.6 billion.

The ferocity of Muilenburg’s response to that deal surprised much of the industry. “There are ways of handling this other than telling the world, ‘We’re so afraid of this jet, it’s really that good,’” says Teal Group analyst Richard Aboulafia, who’s followed the industry for 30 years. Carter Copeland, an analyst with Melius Research LLC, says the whole trade fracas might be plain unnecessary. “The 120- to 130-seat category historically is where a lot of other manufacturers go to die,” he says.

Muilenburg has an enthusiastic backer in President Donald Trump, after an awkward start to their relationship. The then president-elect picked Boeing for one of his early calling-on-the-carpet rituals in December 2016, blasting the “out-of-control” costs on a 747 Air Force One contract. Within hours, according to a Boeing official familiar with the events, Muilenburg was on the phone, explaining Air Force One’s specifications. He ultimately gave Trump a discounted deal to pull out of desert storage two Boeing jumbos ordered by a now-defunct airline and reconfigure them as presidential transports.

Since then, Trump has come to treat Boeing as a kind of corporate Bill Rancic—the Season 1 *Apprentice* winner he can’t stop plugging. “Is Boeing here? Boeing?” the president called out at a meeting of business leaders in Tokyo in November, before gushing to the head of Boeing’s Japan operations, “Oh, look at my guy. Stand up. Boy, have I made him. ... Fantastic. Great job you’re doing. And I do love the F-18 also.” Indeed he does: At the White House a few months earlier, Trump surprised the president of Finland during a joint press conference with a declaration that the country had agreed to purchase some number of new F/A-18 Super Hornet fighter planes. President Sauli Niinisto later called the remark a “duck,” Finnish for joke, and said the country hasn’t made up its mind.

Muilenburg won’t discuss his conversations with Trump, other than to note a “big change” from the Obama administration. “It’s an open communication line, and it’s iterative, it’s frequent, it’s consultative, and the president is willing to listen,” he says. He bristles mildly at any suggestion that Trump isn’t sophisticated in how he views a global trading system in which countries are both competitors and partners: “He does understand it, and I think he appreciates it.”

What this Commerce Department especially understands, as it says in each press release announcing new sanctions, is that “enforcement of U.S. trade law is a prime focus of the Trump administration.” In the year since

Trump's inauguration, the department has initiated 84 cases alleging dumping or illegal subsidies, a 58 percent increase from the pace a year earlier under Obama. It's imposed duties on Canadian lumber, Chinese solar panels, and South Korean washing machines, among other goods. One effect has been to raise prices domestically; lumber, for example, was up 21 percent last year. The thinking is that over time the higher tariffs will force investment in the U.S., something Trump supporters say is already happening, pointing to such examples as Samsung Electronics Co.'s announcement in June that it would start making appliances at a plant in South Carolina, creating 954 jobs.

The Commerce Department responded to Boeing's complaint against Bombardier by proposing duties of almost 300 percent on the C Series. Pressing his advantage, Muilenburg also stepped up negotiations to buy the enemy of his enemy, Brazil's Embraer SA, a Bombardier rival. Bombardier, burning cash and fearing it would be shut out of the U.S. market, handed Airbus a majority stake in the C Series line for no cost. It also agreed to contribute \$300 million toward expansion of the Airbus factory in Mobile, Ala., where the planes could be built to potentially sidestep duties.

Muilenburg's aggressive strategy backfired when the U.S. International Trade Commission ruled 4-0 that Boeing, which doesn't make a plane as small as the C Series model that Delta is buying, wasn't harmed by the Bombardier sale. Airbus tweeted a photo of its CEO and his counterpart at Bombardier, Alain Bellemare, raising Champagne glasses to toast the decision. In a research note, Bank of America Merrill Lynch analyst Ronald Epstein called the episode Boeing's "Canadian wild goose chase" and tallied the blowback—which included, by his reckoning, the \$12.7 billion order for 100 Airbus jets that Delta placed in December.

The most surprising answer to the Bombardier affair, however, might have been that of the Canadian government. According to one person familiar with Boeing's thinking, the company anticipated that Prime Minister Justin Trudeau would retaliate for the challenge by canceling a \$5.2 billion order for 18 F/A-18s. Trudeau went further by setting penalties for any bidders that harm Canada's "economic interests" in a contest for an additional 88 fighters worth as much as \$15.2 billion. Over time, relationships might be repaired—but the subsidy wars aren't over. The WTO is due to rule this year on Airbus's final appeals to its findings of illegal aid. If Airbus loses, the Trump administration will have the right to levy retaliatory tariffs on a host of European exports—potentially setting off another protectionist tit-for-tat, with Boeing in the center.

**"YOU'RE IN  
ROW 80C  
OR E,  
GOOD LUCK  
GETTING  
OFF THAT  
AIRPLANE  
ON TIME"**

The next test of Muilenburg's mighty Boeing will come with another consequential decision: whether, and how, to build the plane now on its drawing boards, its first brand-new model since the 787. Boeing calls it the NMA, or New Midmarket Airplane, and Muilenburg is telling analysts it may enter service as early as 2024. That's something like the day after tomorrow for airplanes, and to meet that target he'll have to give a go-ahead within the next year.

Development of the NMA might cost \$10 billion, however, testing the commitment of investors. It will also require suppliers and customers who aren't alienated.

The U.S. market is no longer the only one that matters. The busiest air route in the world isn't London to New York; it's a one-hour hop from Seoul to the South Korean resort island of Jeju. In fact, 7 of the 10

most-traveled air routes in the world are in Asia, where 100 million people now make their first flight every year. Boeing's two versions of the NMA—a 225-seater that could cruise 5,000 nautical miles and a 275-seater with a range of 4,500 nautical miles—would seem to fit this niche nicely. They would also be a way to jam Airbus. Boeing envisions twin-aisle planes to speed boarding; Airbus is considering a lower-cost stretched version of its single-aisle A321neo. "You're in Row 80C or E, good luck getting off that airplane on time," Muilenburg says.

The author John Newhouse famously called the aircraft industry's combination of bare-knuckle tactics and white-knuckle risks "the sporty game," in a 1982 book by that name. It's still widely read among industry executives. One constant of the game is that apparent winners often become losers—choking on contracts they can't afford or chasing markets they don't need. And by that logic, it's too early to call Boeing's hard line on trade a failure. The shotgun wedding of Canada and Europe at the Alabama plant may falter in disputes over jobs and costs. It could distract Airbus while Boeing develops the next leap in jet travel with its NMA, already dubbed the 797 by analysts.

The ultimate state-sponsored behemoth, however, is still coming. Aerospace is a pillar of President Xi Jinping's Made in China 2025 plan, and the state-owned Commercial Aircraft Corp. of China, known as Comac, is developing its own airplane, the 168-seat C919. On its maiden flight, broadcast live last May on state TV, it never exceeded 10,000 feet. By all appearances it wasn't ready. But eventually, Comac will probably ascend. If it does, some can imagine Boeing and Airbus finally calling a truce and focusing on a common threat. You might even call that working together. 🍷 — *With Rick Clough, Benjamin D. Katz, and Frederic Tomesco*

PARA

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BOU

An impossibly lucrative Chinese casino has conquered a piece of America

# D I S E

# G I L T

By Matthew Campbell  
Photographs by Moises Saman

# Dr. Marty Rohringer was ending a graveyard shift at the lone hospital on Saipan, the exceptionally remote U.S. island, when four Chinese men arrived with a body.

The figure they had with them—a middle-aged man, also Chinese, naked but for his underwear—was unresponsive, and had clearly suffered severe trauma. As an orderly lifted him onto a gurney, the four men indicated in broken English that he had fallen from a hotel-room balcony.

Rohringer began to evaluate the man under the ER's harsh fluorescent lights. His skin was pallid and turning blue, and it was obvious that he could not be revived. One of the men who'd arrived with the body started to mime chest compressions: Was there really nothing to be done? Rohringer pronounced the man dead just before 8 a.m. on March 22, 2017. Already, the medical staff suspected that the story of his fall was a lie.

The hospital had been inundated with patients from a construction site a few blocks away on this speck of rock among the Northern Mariana Islands, in the deepest part of the Pacific. To get a sense of Saipan's isolation from the Lower 48, imagine flying from Denver to Honolulu. Then fly that far again. Then go farther still. Saipan (population 48,000) is nevertheless American soil, with U.S. dollars, U.S. mail, and U.S. laws. But the place has seemed less and less like America since 2014, when a Chinese casino operator arrived and—with near-total impunity—turned Saipan into a back door to the U.S. financial system.

At a temporary storefront, the company, Imperial Pacific International Holdings Ltd., was somehow handling more than \$2 billion a month in VIP bets. And at the construction site, it was building a gargantuan casino with a crew of hundreds of Chinese, scores of them working illegally on tourist visas. So many laborers were getting hurt that Rohringer's colleagues began keeping an unofficial spreadsheet, separate from standard hospital records: a grim catalog of broken bones, lacerations, puncture wounds, dislocated limbs, and eyes penetrated by flying metal. The dead man Rohringer saw was not, of course, a tourist who'd stumbled over a railing—he was a builder named Hu Yuanyou, and he'd plummeted from a scaffold. His colleagues hadn't called 911; instead, they'd pulled the work clothes off his broken body in a clumsy attempt to obscure his identity. The less that outsiders learned about the casino, the better.

Hu died building what's become, on paper, the most successful gambling operation in history. In the first half of 2017, table for table, Imperial Pacific turned over nearly six times more cash than the fanciest gaming facilities in Macau, which themselves dwarf the activity in Las Vegas. And that was before Imperial Pacific opened its lavish megacasino in July.

Given Macau's status as a hub for industrial-scale money laundering, the Saipan figures have left gaming veterans astonished that they could be generated on U.S. soil, under Washington's ostensible oversight. Eight casino executives and analysts interviewed for this story, all with extensive experience of the Asian gaming trade, said they saw no

way such volumes could be generated legitimately. Asked if there could be a benign explanation for such instantaneous success at a casino more than three hours' flight from any major city, on a drowsy island where the best hotel is a 1970s-era Hyatt, one of the executives burst out laughing.

Per capita, there's almost certainly more Chinese money moving through Saipan than anywhere else in the world. The unprecedented flow of capital has allowed Imperial Pacific to operate in ways that would be unthinkable within the 50 states. When laws have become inconvenient to the company, they've been flouted; when the requirements of its contract with the government have become onerous, they've been removed; when legislators have tried to interfere, they've been ignored. Imperial Pacific has made millions of dollars in payments to family members of the territory's governor, Ralph Deleon Guerrero Torres. Remarkably, the company has also enjoyed the support of a gold-plated roster of American politicians. Its advisers and board of directors have included former directors of the CIA and FBI and former governors of Mississippi, New York, and Pennsylvania.

In a written response to questions from *Bloomberg Businessweek*, Imperial Pacific said it has “strived and [is] committed to comply with local and federal laws” and that it “categorically denies” impropriety in its dealings with the government. Torres's office said that all changes to laws or policies were undertaken “with the intent of achieving economic growth within the boundaries of the law.”

Imperial Pacific's overnight domination of Saipan has generated deep unease among the island's citizens, many of whom are convinced that their home has been bought. The company, they believe, set out to take over a little piece of America, politicians and all. Given the billions of dollars at stake, it's not surprising someone would try. What's shocking is that, so far, it seems to be working.

I landed in Saipan in September, well after midnight and thoroughly disoriented. Just a few hours earlier, I'd flown out of Hong Kong on a vector southeast over the Pacific; now I was disembarking into tropical warmth and the familiar scene of a U.S. Customs and Border Protection checkpoint. Many of my fellow passengers were Chinese, and as they waited for immigration agents to arrive, I went to swipe my passport at one of the automated entry kiosks. Three of the government machines had been paid for by Imperial Pacific.

In my rental car, I circled the airport parking lot, searching in the darkness for the road into town. On the periphery, I could just make out a series of squat concrete structures—Japanese bunkers from World War II. In 1944, American forces sweeping the Pacific identified Saipan as an essential conquest: From its runways, bombers could reach Tokyo.



The battle for the island was ferocious, and at its conclusion, rather than surrender, thousands of Japanese soldiers and civilians hurled themselves from a promontory that's been known ever since as Suicide Cliff.

In the morning, Saipan revealed itself in some of the most blinding sunlight I've ever experienced. At 46.5 square miles, the island is just smaller than San Francisco, a dot in the semicircle of undersea mountains that stretches from Indonesia to Japan. Inland Saipan is verdant, with thickets of coconut and papaya trees climbing limestone hills. But most locals live along the flat western coast, amid scruffy strip malls and car dealerships. The population is a mix of old-stock Chamorros, as most native islanders are known, and migrants from the mainland U.S., many of them the sort of amiable oddballs who might otherwise move to Key West. For visitors, Saipan's chief charm is the combination of Americana and the exotic, such as Little League games with snack stations of taro and breadfruit. "Exotic" cuts both ways, of course, and several businesses offer Asian tourists access to American eccentricities, like assault rifles. "Experience the thrill of firing a real gun," reads an advertisement for a local shooting range. "In Saipan, it's legal and is guaranteed by the United States Constitutions 3rd Amendment."

After World War II, the U.S. claimed Saipan and its sisters, eventually forming the Commonwealth of the Northern Mariana Islands. But the place had little economic purpose. In the 1970s, to encourage development, Washington exempted the CNMI from minimum wage and immigration laws, and major retailers rushed into Saipan, eager to label as "Made in U.S.A." clothing sewn by workers making \$2.15 an hour. The industry eventually collapsed, taking with it Saipan's tax base. A 2011 cash shortage was so severe that the hospital ran out of bedsheets.

Isolated, out-of-options municipalities have often turned to casinos for economic salvation, but Saipan's heavily Catholic voters had long opposed the idea at the ballot box.



Chinese workers protested at the casino site last July.

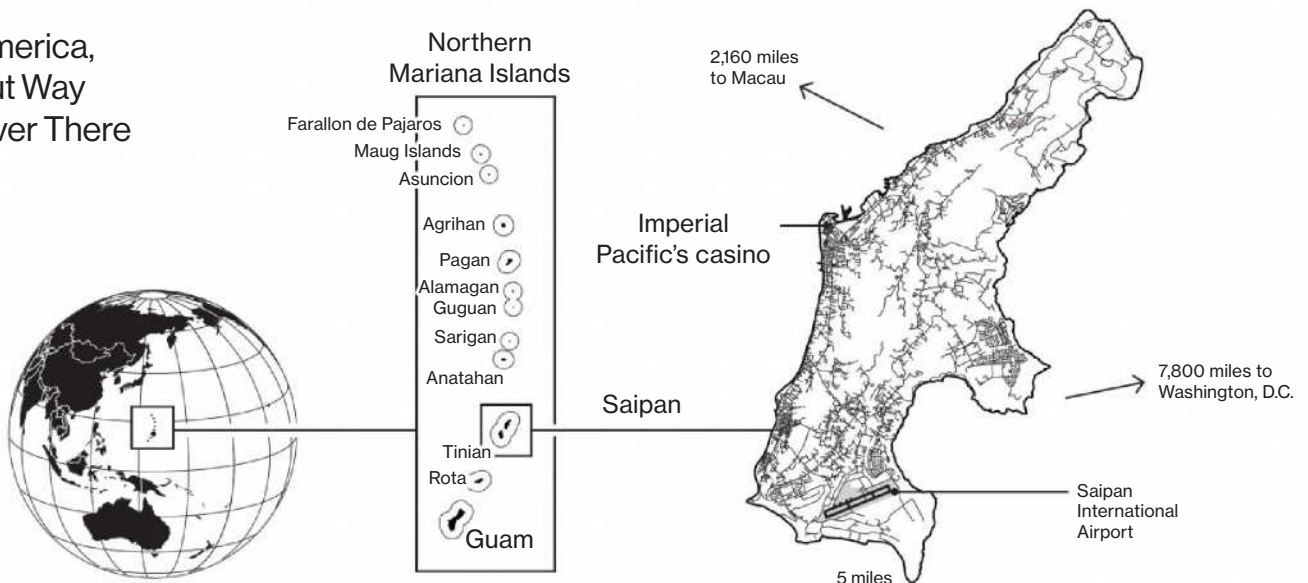
Structurally, the CNMI government resembles an American state: bicameral legislature, supreme court, branches of the Democratic and Republican parties. But in practice, politics is dominated by two prominent families, one of them the Deleon Guerreros. Ralph Deleon Guerrero Torres was among those who voted against a casino proposal in 2013, when he was president of the senate.

Not long after the vote, with money stresses intensifying, Torres and several other politicians flew to Hong Kong and Macau for what they called a fact-finding trip to reconsider the casino option. Whatever facts they found changed their minds. They returned to Saipan, introduced a bill authorizing a casino concession, and passed it with little debate. When a local activist gathered signatures for a repeal, the legislature passed the measure again under a different name, rendering the petition meaningless.

Two companies bid for the project. The first proposal was from a group connected to a facility on a nearby island. The second was from Imperial Pacific, and it seemed too good to be true. Despite having no experience in casino operation or construction, the company offered to spend \$3 billion on a megaresort out of all proportion to Saipan's economy—Macau on the Mariana Trench.

Saipan's elected officials subjected the bids to only glancing due diligence. They hired a group of experts to scrutinize the proposals, but when one of them, a gaming executive ▶

## America, But Way Over There

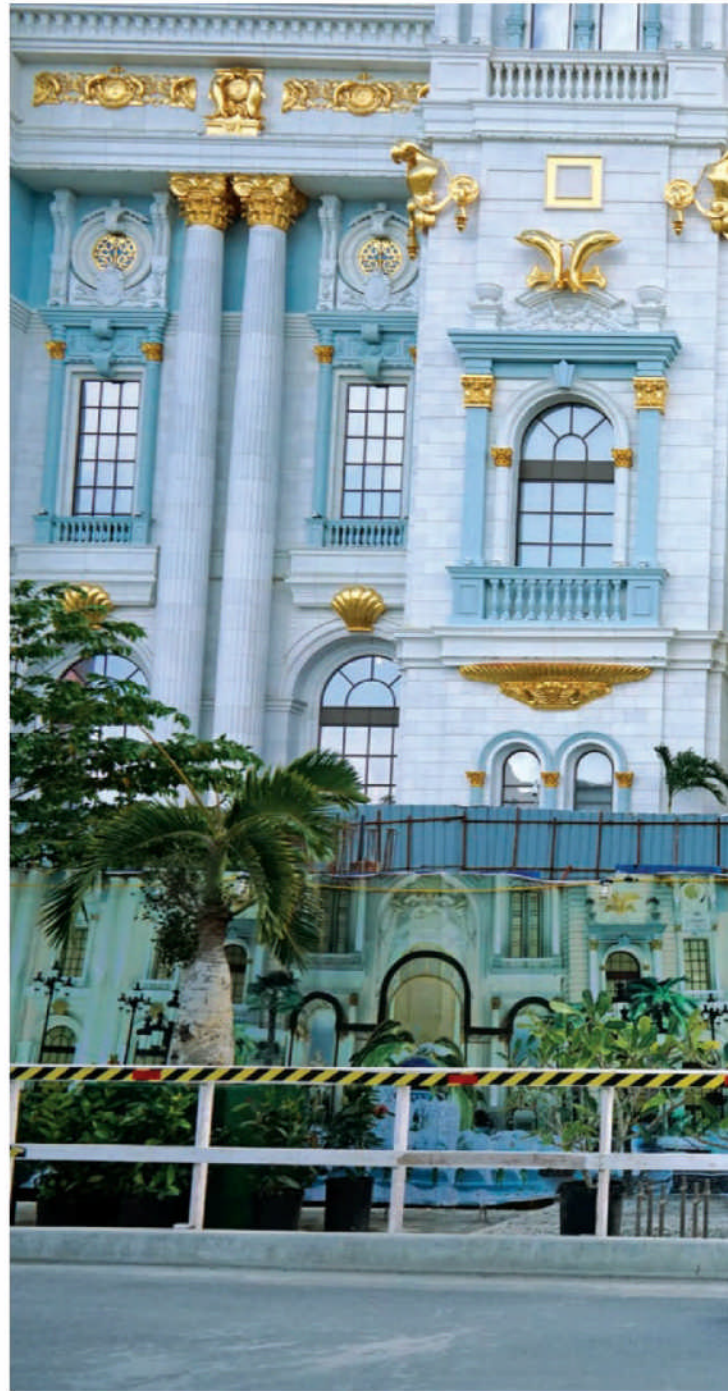


◀ named Shaun McCamley, found a major red flag—that people listed as consultants had not had serious discussions with the company—the government seemed untroubled. (Imperial Pacific disputed this.) In August 2014, the company won the bid in exchange for a \$15 million annual fee and other fixed payments—enough revenue to pull Saipan back from the economic brink. For the lifeline, Imperial Pacific extracted extraordinary terms: a 25-year monopoly on the casino trade and a deal to pay no gambling-specific taxes. Virtually whatever money the Chinese generated at their tables, they could keep.

**T**he strongest desire among China’s wealthy is to get their money—ill-gotten or otherwise—out of the country, safe from the threat of government seizure. One prevalent method for magicking money across the border, in defiance of strict capital controls, begins with companies called junkets. They bring wealthy clients from the mainland, where gambling is illegal, to the VIP rooms of casinos in Macau. There, the junkets extend the clients credit to play baccarat, a game of luck at which they’re likely to win or lose a negligible amount. At the end of play, clients cash out their balance in the currency of their choice. The debt is collected in yuan, in China. Everybody wins: The clients have converted yuan into dollars or euros or sterling, and the middlemen get a cut.

In 2011 a mother and son from Harbin, a hardscrabble city in China’s northeast, became involved with a junket called Hang Seng. Cui Lijie (then about 52) and Ji Xiaobo (about 32) had grown wealthy through investments in real estate, lending, and pawnshops, and despite being newcomers to Macau, they tripled the new venture’s client list in a year—from 200 high rollers to 650, according to filings. Macau gaming experts told me that Hang Seng offered far more generous credit than its competitors, making it a go-to junket for moving large amounts of capital. In 2013 the company’s betting volume reached more than \$4 billion a month—easily among the largest operations in the city. But then, in 2014, China’s government cracked down on the Macau laundromat, and Hang Seng’s volume dropped by two-thirds. Cui had recently taken control of a company called First Natural Foods Holdings Ltd. As the action in Macau tanked, First Natural announced it was changing its name to Imperial Pacific and would seek to build a casino on Saipan.

For an American face to lead the development, the company hired Mark Brown, an Atlantic City native who’d run Donald Trump’s casino empire. Brown was so revered by his Trump colleagues that some executives grew mustaches to mimic his own, and in 2004 he appeared at the future president’s side on *The Apprentice*. But after Trump’s



company declared bankruptcy, his star fell. In 2009 he was fired from an executive role at Las Vegas Sands’ Macau operations, and a subsequent move to Sydney was blocked by Australian regulators. When Imperial Pacific approached Brown in 2014, he was working at a casino in Cambodia.

Imperial Pacific also hired Shen Yan, a Chinese banker who’d held senior positions at Deutsche Bank and Credit Suisse, as president. Yan had suffered an alarming career

**IMPERIAL’S BILLIONS FLOWE  
THAN 20 TABLES. WYNN MA**



Despite welcoming high rollers since July, Imperial Pacific's casino is half-finished—with no functioning sprinkler system.

setback in 2011—he was arrested at Hong Kong International Airport for carrying a gun in his backpack—but he had connections, including to David Paterson, the blind former governor of New York, whom Yan had once helped navigate a menu at a Shanghai luncheon. In 2015, Yan persuaded Paterson to join an Imperial Pacific advisory board and make introductions to other political figures.

Paterson delivered, demonstrating just how easy it is to

get prominent American government figures to work for an opaque, year-old Chinese casino developer. He quickly got in touch with Ed Rendell, the ex-governor of Pennsylvania. “They wanted some Americans involved in case anything came up with the regulation or legalities,” Rendell told Bloomberg in a 2016 interview. “One of my assistants and I did some research on the internet.” He signed on for \$5,000 a month and persuaded Haley Barbour, the former Mississippi governor, to take the same gig. Louis Freeh, the former FBI director, also became an adviser. Eugene Sullivan, a retired military judge, and James Woolsey, the former CIA director, joined Imperial Pacific’s board of directors.

(Barbour resigned on Feb. 8 in response to questions for this article. Paterson and Rendell, who stepped down ▶

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CAU HAD 192**

◀ earlier, told me they had no knowledge of improper activities by the company. Freeh, who is no longer on the advisory board, and Sullivan, who last year reduced his role from director to adviser, didn't respond to requests for comment. Brown, who left in December, declined to comment. Woolsey told me: "I have not been made aware of any issues of safety or improper relationships with politicians. If impropriety is proven, I will not be comfortable staying on the board."

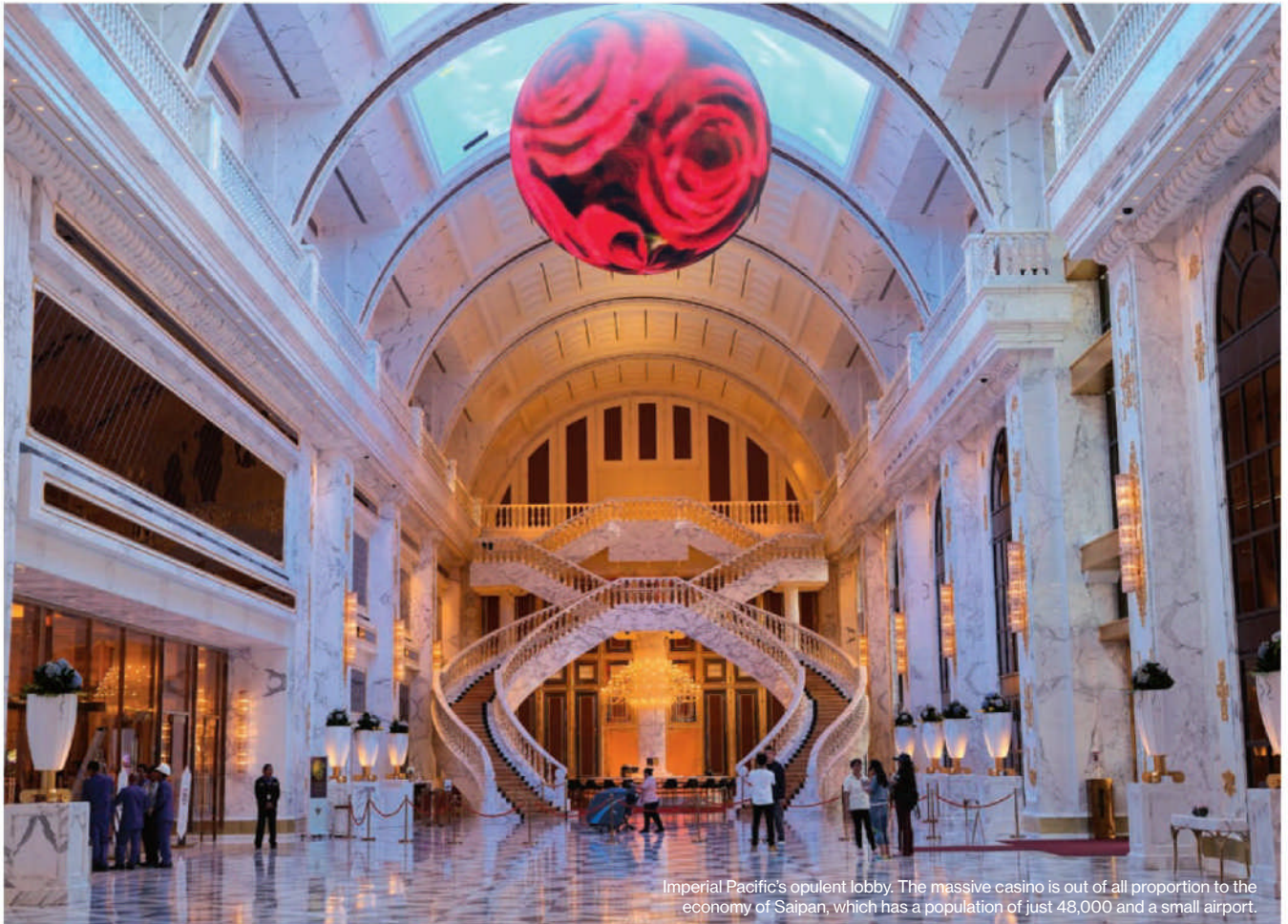
With a celebrity cast on the payroll, Imperial Pacific turned to bringing in money—immediately. Even before ground was broken at the construction site, it got permission to open a temporary casino across the street, in a duty-free mall. It was a ho-hum space, the size of a suburban Olive Garden. Yet in its first three months after opening in November 2015, VIP bets totaled \$5.3 billion, across fewer than 20 tables. That was more than a third of the action at Wynn Macau—a lush resort with 192 tables, Michelin-starred restaurants, excellent airport access, and global name recognition.

The trajectory was unprecedented, verging on impossible, or at least not legally possible. A year later a former casino worker, Danny Ewing, sued Imperial Pacific for wrongful termination. He claimed that one executive, a board member, was "allowing, if not encouraging," her workers "to submit incomplete and misleading"

know-your-customer declarations, which casinos must collect to document the source of bettors' funds. Ewing also alleged that Imperial Pacific helped players structure transactions to avoid reporting requirements and that he'd been fired after he complained. (Imperial Pacific denied the allegations, and the suit was settled; in its statement, the company said it doesn't believe its betting volumes are excessive.) Imperial Pacific kept dealing in stupefying amounts of cash, and extending credit accordingly. At the end of 2016, filings show, one client alone owed it \$96 million.

If the sums were bewildering, one thing became clear: the nature of lawmakers' fact-finding trip to Macau. Torres, who became governor in 2015, claimed at the time that it was paid for by a company with no connection to the bid process, called Esteem Capital. But in early 2017, a judgment in an unrelated Hong Kong case revealed that Ji had presented himself in the past as an agent of Esteem—and that its Hong Kong address was identical to that of Imperial Pacific.

**O**n my third night on Saipan, Yan consented to meet at a cafe in town. I didn't know what to expect of a banker-turned-casino-boss with a concealed-firearm rap, but Yan arrived looking stylishly prosperous, in a fitted T-shirt, jeans, and red slip-ons. On



Imperial Pacific's opulent lobby. The massive casino is out of all proportion to the economy of Saipan, which has a population of just 48,000 and a small airport.

the condition that I not quote him, Yan agreed to lead me on a tour of the permanent casino, which had opened a couple of months before, ending the temporary site's lucrative run.

The new facility was just around the corner, towering at cartoonish scale over the tourist district's shabby low-rises—a palatial mashup of Mediterranean opulence and nautical icons. Its ivory-colored facade was festooned with gilt mermaids, dolphins, and clamshells, accented by blood-red spotlights. (Locals call the building Satan's Palace.) Yan and I passed between two brawny, trident-wielding Poseidon statues to reach the triple-height lobby, beyond which lay the clanging expanse of the main casino floor, where a rowdy Chinese clientele crowded around baccarat tables. The big money, of course, was flowing off to the side, in a series of VIP rooms. Yan took me into an empty one, as if to make a what's-the-big-fuss kind of point: traditional Chinese décor, heavy carpeting, leather chairs. VIPs themselves were off-limits. When a portly one approached, Yan abruptly handed me off to an aide and made the universal gesture for “shoo.”

To leave required navigating a maze of active construction equipment. While the casino has been welcoming high rollers since July, it's unsettlingly half-finished. The sprinkler system isn't functional, and three firefighters have to be posted inside at all times. The attached hotel, which is supposed to open later this year, is still a skeleton, and the casino basement has repeatedly flooded with sewage. In one case, according to a person who experienced it, the result was an ankle-deep sludge of human waste in a locker room.

Last May, after Imperial Pacific requested permission for its “soft opening,” a special body appointed to supervise the development delivered a scathing private report to Governor Torres. According to a person who saw the document, it warned about metal debris scattered on the casino roof, which could turn into deadly projectiles in one of the typhoons that regularly batter the island; structural steel that appeared to be missing bolts; and columns with kinks that could indicate a risk of catastrophic collapse. The report urged Torres to keep the public out until Imperial Pacific could guarantee safety. But the governor rejected the advice, according to the person familiar with the report. The government later removed the supervisory body's oversight. (The governor's office told *Bloomberg Businessweek* it was assured by engineers the site was safe; Imperial Pacific said it complied with all building regulations.)

To understand Torres's willingness to accommodate Imperial Pacific, it helps to consider his family. Torres, 38, has three brothers, all lawyers at a family firm called Torres Brothers LLC. The governor worked there himself until 2008. In the first eight months of 2017, according to regulators' records, Imperial Pacific paid Torres Brothers \$126,000.

The company has also been an active acquirer of long-term land leases on Saipan. (Only native islanders can purchase land.) During my time there, I received a list of transactions that illustrates how some of the leases benefited Torres's relatives. The details are on record at the

island courthouse. Imperial Pacific has operated via a blizzard of limited liability companies with generic titles. And in November 2015, one such entity bought a land lease from Torres's sister-in-law, Rowina, for \$667,000. She almost quadrupled her investment, having purchased the land about five months earlier for \$180,000. The lease documents bear the signature of her husband, Torres's eldest brother, Vincent—widely considered the alpha male of the family—and that of Cai Lingli, a member of Imperial Pacific's board.

Another series of transactions, the largest worth about \$4 million, have been a windfall for a man named Serafin Camacho. The governor is first cousin to Camacho's wife, Lillian, and godfather to his adult son, Joel, who's a member of the Saipan zoning board, which will rule on Imperial Pacific's future development. Serafin's sale documents also show Cai's signature; the deals paid out immediately, even though the lease for one doesn't begin until 2042.

Imperial Pacific said its land deals were in “full compliance” with the law. Vincent Torres and Joel Camacho both said they saw nothing improper in their families' dealings with the company. The governor's office said that any implication the land deals are improper “lacks an understanding of the size” of Saipan and the governor's sprawling family. As for Imperial Pacific's choice of legal representation, Torres said he has “no involvement in [his siblings'] business transactions... and no direct financial stake in their company.”

Life is leaner outside the circle of Imperial Pacific's patronage. At the center of the island, the CNMI legislature meets in a one-story building that could pass for an elementary school. I found Representative Ed Propst's office deep inside, cramped and windowless, with a beat-up plaid couch and a narrow desk piled high with binders. “Minority,” he shrugged by way of apology. An independent, Propst is one of the most outspoken opposition members of a Republican-dominated legislature and a vociferous critic of the casino.

“I believe that Imperial Pacific runs this government,” he said. “Any legislation they've ever wanted goes their way 100 percent of the time. Not 99 percent of the time. One hundred.” Propst has tried repeatedly to impose greater scrutiny on the casino and raise its taxes, to no avail. “Where are the feds in all this?” he asked, his voice rising with exasperation.

So far, only labor conditions have attracted the attention of Washington. Following the fatal fall of Hu, federal prosecutors acting on FBI investigations charged several employees of the contracting companies building the casino with immigration violations; some pleaded guilty. Separately, a U.S. Department of Labor inspector said in a court declaration that the rate of injuries on the site “greatly exceeds the national average.” The inspector described one worker arriving at the ER with a broken back and a doctor advising immediate hospitalization. But someone intervened. “The injured person was not allowed to be admitted, and was promptly transported” to China. ▶

# "I BELIEVE THAT IMPERIAL PACIFIC RUNS THIS GOVERNMENT"

◀ Imperial Pacific has said that it had no knowledge of safety violations or workers being employed illegally and that both were the responsibility of its contractors. But these claims don't withstand much scrutiny. The contractors' office was rented by Imperial Pacific and, according to a former employee who worked there, shared with its staff. Additionally, a safety expert who worked on the construction site told me that Imperial Pacific was deeply involved with selecting and supervising contractors.

The expert described the job as one of the most challenging of his career, with widespread dangers. Generators weren't properly grounded, workers were missing basic equipment such as safety glasses and correct footwear, and welders lacked anything like the necessary training to handle torches. Once, he said, he was forced to compress a three-hour safety briefing into one hour. His job included ensuring compliance with U.S. regulations, and he said Imperial Pacific ignored three written pleas to stop work. (The company disputed this.) Eventually he quit.

Imperial Pacific has said it's now confident that construction workers are legally employed and that its site is complying with safety rules. Yet gruesome injuries continued after the FBI action. In late September a worker received a severe electric shock, almost losing a limb. A video of the aftermath shows him writhing on the ground next to the casino, screaming.

Although most of the undocumented workers were flown home after the FBI arrests, a group of about 35 initially refused to leave, saying they hadn't been paid as promised. I visited some of them in a dilapidated four-story apartment block where Imperial Pacific was providing housing until a deal could be reached. Zhang Chunfeng, a slim 41-year-old who wore a blue golf shirt over gray sweatpants and plastic clogs, showed me where they were sleeping: on filthy mattresses in small, bare rooms whose walls and ceilings were streaked with brown and black stains. "If the casino didn't want illegal workers," Zhang asked, "how can so many of us be here?" As he spoke, another worker jostled toward me, pulling up his T-shirt to reveal a baseball-size welt on his shoulder—the result, he said, of an on-site accident. "Why," Zhang continued, "did so many of us become victims?"

Imperial Pacific's activities in Saipan are overseen by the Commonwealth Casino Commission—a body funded by a \$3 million annual payment from the company. It holds meetings in a backroom at the public library, just past a rack of atlases. At the session I attended, questions that might otherwise be red-alert items were dispensed with briefly. The Marianas are in an active seismic zone—2016 saw a 7.7 magnitude earthquake—and one commissioner asked Imperial Pacific's representatives if they'd

installed seismic bracing on the still-not-functioning sprinkler system. The answer: Only in the basement; the other floors were getting worked on. The discussion moved on after less than two minutes. Outside the door, a red flag with Imperial Pacific's logo was hanging from the ceiling.

Later, I went to the CCC's offices, inside a strip mall, to meet its executive director, Edward Deleon Guerrero—the governor's uncle and the father of his chief of staff. In a bare room kept at a chilly 62F by a wheezing air conditioner, Deleon Guerrero disputed the idea that a regulator with only one company to regulate faces an inherent conflict of interest. "If you shut down this particular operator, it doesn't mean we stop," he said. "We can probably look for another operator. ... I don't think we would lose our jobs."

Virtually none of the CCC's employees have significant experience in casino oversight, and Deleon Guerrero noted that they were making periodic trips to Las Vegas to bone up at seminars. "We're building up our own intelligence," he said. "We're tracking who these VIP players are ... we're on the lookout." His staff also monitors Imperial Pacific's "key employees," he added. Their knowledge is still incomplete. When I made a reference to Yan's arrest, an aide jotted on his legal pad: "gun charge? find out."

The last time I saw Yan, he was eager to emphasize that Imperial Pacific had bona fide amenities to offer beyond a U.S. address. We drove to two high-elevation villas that are maintained for guests. They were luxurious, in a South Beach mode: white leather sofas, contemporary chandelier, lounge chairs overlooking the Pacific. A menu listed Chinese dishes said to have aphrodisiac powers: duck with deer antler and a chicken stew containing cordyceps, a coveted fungus. Down in Saipan harbor, Yan took me aboard one of the yachts the casino makes available to elites—the 144-foot *Grand Mariana*, whose bedrooms wouldn't be out of place in a recently renovated Ritz-Carlton.

Dig deeper, and even the yachts take on an alarming sheen. In June, acting through a company called Pride Keen Ltd., Imperial Pacific hired Michael Netto, a 40-year-old Singaporean maritime consultant, to move another of its yachts from Saipan to Hong Kong. At a cafe in Singapore's financial district, Netto told me how the trip went horribly wrong. As the 121-foot *Grand Mariana III* entered Philippine waters, it experienced mechanical trouble, and Netto slowed down to seek help. According to Philippine coast guard reports, Imperial Pacific reported the vessel stolen. "They must have thought I was trying to take it," he told me. Soon, Philippine authorities arrived and detained him aboard the ship.

After a couple of days' confinement, Netto said, three white men claiming to work for Pride Keen boarded the *Grand Mariana III*. Netto was in a room that allowed him to



After the FBI arrests, laborers stayed at this dingy apartment block. "If the casino didn't want illegal workers, how can so many of us be here?" asked one.

observe their movements via the ship's surveillance cameras. He watched the men fill a brown duffel bag with bricks of U.S. dollars that, unbeknownst to him, had been hidden around the vessel. He reviewed the footage a few times to be sure. I asked Netto in a subsequent conversation if he was absolutely certain the bag was being loaded with cash. "I am very, very certain," he replied. "I know it may be hard for you to believe, but it is what I saw." (Imperial Pacific said the vessel was not being used to store cash and that it had been "hijacked by pirates.")

**S**aipan's citizens share a weary understanding that their home is a soft target for hucksters of all kinds—out-of-town charismatics have peddled cure-all economic schemes for decades. In a case of life imitating *The Simpsons*, someone recently tried to sell the island a monorail. All around, the relics of failed promises are being slowly reclaimed by the land. Dozens of garment factories sit abandoned, with caved-in roofs and vines climbing the walls. By the airport, the gray concrete husk of a grand, aborted hotel perches on a hillside. It's easy to picture Imperial Pacific's casino meeting a similar end.

For now, though, work on the resort continues, albeit at a far slower pace than before the FBI sent its undocumented workforce home. In September the company reached a deal with U.S. Customs and Border Protection

to pay for private inspections of passengers it brings in on corporate jets, bypassing airport queues. Meanwhile, it's becoming more and more difficult to see daylight between Imperial Pacific's agenda and that of Torres's administration. Both company and government in 2017 used the same lobbying firm: Avenue Strategies, the D.C. influence shop co-founded by former Trump adviser Corey Lewandowski. And in October a man named Changwei Xu was detained at Saipan airport because of a Nevada arrest warrant, with bail there set at \$7 million. But Imperial Pacific didn't want him locked up. The Torres Brothers law firm quickly informed the CNMI Department of Corrections that Xu was its client and, remarkably, requested that he be released on medical grounds to house arrest, under Imperial Pacific's supervision. The government agreed.

Toward the end of my time in Saipan, I went to see Juan Babauta, the governor of the CNMI from 2002 to 2006, for a coffee near the casino. He spoke at first with diplomatic reserve, pausing to check who might be in earshot; Saipan is a small place, and Governor Torres is his brother-in-law, married to his wife's sister. But as our discussion went on, he grew animated and angry.

"People need to realize this place is as corrupt as it could have ever been," Babauta said. "It's pathetic. I'm pissed," he continued, almost spitting out his words. "Because we are destroying a beautiful paradise." **B** —*With Daniela Wei*



# Acquire This!

62

WWE's prescient network strategy  
and quest for new audiences  
(women! Emiratis!) are turning  
potential buyers' heads

By Felix Gillette  
and Kim Bhasin

Photograph by  
Dolly Faibyshev



**The building that houses the headquarters of World Wrestling Entertainment Inc.** stands just off Interstate 95 in Stamford, Conn. Its facade is vaguely menacing, a curtain of black glass topped by a Jolly Rogeresque black flag. Inside the lobby, visitors pass by a life-size statue of Andre the Giant, the 7-foot-4-inch, 520-pound superstar of yesteryear. It's a sensation not unlike strolling under the vast basilica of a Roman temple. *Welcome to this divine space, ye slight-statured mortal.*

On a Friday afternoon in December, Stephanie McMahon, WWE's chief brand officer, is seated in her office on the top floor. She's dressed in black, with earrings shaped like daggers. Near her desk is a football signed by New England Patriots tight end Rob Gronkowski, who last year brandished his meaty deltoids in the ring at WrestleMania 33.

McMahon says she's on a cleanse and hasn't had coffee for days. The resulting headaches have abated, however, and she riffs exuberantly on the universal modalities of pro wrestling. "The notion of good vs. evil is translatable and one of the oldest stories since the beginning of time," she says.

Lately, while many entertainment companies are being pummeled, WWE has been on a roll. On Feb. 8, the day it announced fourth-quarter earnings, its share price closed at \$33.84, up 73 percent from a year earlier and near an all-time high. In 2017, WWE generated \$50.6 million of net income on \$801 million of revenue, its largest haul ever. The wrestling promotion is also being floated as a potential acquisition target for big media and tech companies hungry for live programming. Brandon Ross, an analyst at BTIG LLC, has suggested that Walt Disney, 21st Century Fox, Comcast, AT&T, and Verizon are among the most likely suitors. "We've certainly thought about it," McMahon says of a possible sale. "It would be foolish not to."

The market's enthusiasm for WWE stems largely from its lucrative TV contracts, combined with its early success in direct-to-consumer streaming TV apps. In 2014 the company made a risky move, deciding essentially to cannibalize its traditional pay-per-view business. Instead of paying their cable companies one-time fees to see WWE's marquee events—say, \$44.99 for the Royal Rumble—fans would be encouraged to subscribe to a streaming video service, the WWE Network, and pay a monthly fee. After some early turbulence, the move is paying off. Roughly 1.5 million people now hand over \$9.99 a month for the WWE Network, making it the 11th-most-popular streaming video service in the U.S., according to Parks Associates, and the second-most-popular, after Major League Baseball's, in the "sports-related" category.

McMahon, 41, is the scion of a pro wrestling dynasty. Her grandfather and great-grandfather were influential promoters in the industry's early years. During the latter half of the 20th century, her father, Vince McMahon, WWE's chairman and chief executive officer, transformed the family business from a niche regional attraction into a mainstream brand whose stars—Hulk Hogan, Dwayne "The Rock" Johnson, John Cena, Dave Bautista—regularly graduate to Hollywood careers.

"There was a time when it came across as seedy, kind of playing to barroom brawls," McMahon says. Those days are

over, she asserts. "Our lines of business are really more akin to Disney than they are to anything else."

McMahon is both executive and on-screen performer for WWE. She used to play the boss's entitled, imperious daughter; now she's a rancorous commissioner, endlessly bickering with the family's brawny help. In 2003 she married Paul Levesque, a WWE star who wrestles as Triple H. He's since joined his wife in the executive ranks, forming the rare media power couple capable of deploying both beat-downs and Chartbeat.

With a growing cast of female and international wrestlers, WWE is now plotting to expand its fan base beyond American men. It already has loyal followings in certain overseas markets, but executives say the spread of streaming video and social media has created the perfect conditions for an all-out global invasion. Over the past year, the company has teamed up with streaming service PPTV to offer the WWE Network in China, staged an international talent tryout in Dubai that drew aspirants from 18 countries, put on a 10-day European tour, and teamed up with Fox Sports Mexico to create a Spanish-language show that's airing throughout Central America and the Caribbean.

Overseas audiences account for 70 percent of WWE viewing, McMahon says, yet only 30 percent of its revenue. "So there's a big opportunity."

**WWE is a tightly scripted company. Everything that happens in and out of the ring is by design.** The announcers, executives, and wrestlers are constantly imbuing the minutiae of its ever-shifting plotlines with an overarching sense of momentousness, often by playing up the various ways WWE is "making history." If a wrestler wins a particular title for the first time, the occasion is "historic." If a matchup features a new twist on an old wrestling format, it's historic. Special guest referee: historic. Novel promotional poster: historic.

In December, when WWE staged two days of live matches in the United Arab Emirates, the incantations of history-in-the-making were especially sustained. Executives say the company is well-positioned to generate more cash in the Arab world in coming years. WWE broadcasts its two weekly live-event TV shows, *WWE Raw* and *WWE SmackDown Live*, throughout the Middle East and North Africa via a partnership with OSN, a satellite provider headquartered in the UAE. Last year, OSN premiered a weekly show dedicated entirely to WWE highlights. Its analysis is hosted, in Arabic, by Moein Al Bastaki, a celebrity magician from Dubai, and Nathalie Mamo, a retired basketball player from Lebanon.

Roughly once a year, WWE takes its stars on tour in the Middle East and stages live, nontelevised events to stoke interest. December's show featured a new enticement: the first women's championship bout in the region. Inside a sports stadium in Abu Dhabi, Alexa Bliss, a pixieish firebrand whose catchphrase is "five feet of fury," put her title belt on the line against Sasha Banks, aka the Legit Boss, a strapping, loquacious cousin of Snoo Dogg. When they're wrestling, Banks and Bliss typically wear short shorts and cropped tops, but ►

◀ the UAE has strict dress codes. As a result, Banks and Bliss arrived in the ring wearing long-sleeved, ankle-hugging bodysuits designed for the occasion.

The crowd, a mix of men and women, didn't seem to mind the historic lack of exposed midriff. At one point during the face-slapping, stomach-kicking melee, some in the audience broke out in a feel-good chant: "This is hope. This is hope." Banks says the reception assuaged her fears that they'd be mocked and left her choked up at the thought of serving as a powerful role model for the young Arabic women in the crowd. "I was trying everything in my will not to cry during performing," she says.

"It was history-making for us," McMahon says.

In the early 2000s the WWE's female wrestlers were often recruited from the ranks of models, and their matches were designed to uncover skin. A "bra and panties" match could be won only by stripping an opponent down to her underwear. From 2008 to 2016, they were called divas. McMahon herself was routinely mocked by male stars such as the Rock ("Big, phony fun bags") and jeered by crowds ("Slut! Slut! Slut!").

She traces the shift away from this mindset to a 2015 women's tag-team match that lasted only 30 seconds. "Our fans started a hashtag called #GiveDivasAChance," she says. Since then, WWE has hired about 40 more women wrestlers, started calling its female performers "superstars" in concert with the men, and unveiled a championship belt with more gravitas and less decorative pink butterfly. McMahon describes the course correction as long overdue. "I never felt great about the way we portrayed our women," she says. "It was something that I spoke up against for quite some time. But it took me a while to have a stronger voice in the room. Ultimately, the voice that needed to be heard was our fan base."

Not coincidentally, turning women performers into more wholesome, athletic superheroes has made the product more palatable to countries with conservative values—and more appealing to advertisers wary of angry parents. "From a sponsor standpoint, they're more socially acceptable," says Dave Meltzer, editor of the *Wrestling Observer Newsletter*. But, he adds, "there are people who complain to me constantly that they want it like it was back when it was really, really raunchy."

**In the '80s and early '90s, WWE unleashed a handful of sneering, exotic wrestlers to rile U.S. audiences.** The foreigners were inevitably bad guys—menacing, heavily accented personifications of threats to the U.S. from places such as the USSR (Nikolai Volkoff, actually a Croatian) and Iran (the Iron Sheik).

Globalization has complicated these storylines. As WWE's overseas ambitions have grown, so has its need to recruit wrestlers of diverse ethnicities and national origins—and to have some of them perform as heroes. "Forty percent of our talent roster is international," McMahon says. "We're looking to grow that." The jingoism hasn't entirely disappeared, but the us-vs.-them dynamic has become less clear-cut.

"If you did what you did in the '80s now, it wouldn't feel right," says Meltzer. Thanks to YouTube, he points out, foreign wrestlers can gain sizable followings before ever appearing

on WWE. And in general, fans today care more about the quality of moves in the ring than the acting outside of it. Fluent acrobatics, he says, matter more than fluent English.

This dynamic has played out with India, for example, where company executives say WWE is the second-most-consumed sport after cricket. Last May, Jinder Mahal, a glowering knave with a flair for neckbreakers, was crowned WWE champion, the first of Indian descent. (Mahal, who is Canadian-born, held the title for several months before losing it to A.J. Styles.) In December, at a live exhibition inside a stadium in New Delhi, Mahal shed his turban and wrestled Triple H in front of a frenzied crowd that the *Times of India* estimated at 8,000. Ultimately, Triple H prevailed. Afterward, he shook hands with Mahal, said it was an honor to wrestle the "Modern Day Maharajah," and joined him for some in-ring Bhangra moves. The détente was short-lived, though. Before exiting, Triple H pancaked one of Mahal's minions, heightening the drama for a potential rematch. *Your move, cricket.*

Such events have helped the WWE Network lift its international subscriptions from 44,000 after its first year to roughly 410,000—a level of success that was far from certain when it began in February 2014. At the time, it was unclear if anybody anywhere would pay for a stand-alone pro wrestling network. Most subscription video apps were aggregators such as Netflix, not dedicated to single brands like WWE. "There was not a playbook out there for us to say, 'Let's go look at how X, Y, or Z did it,'" says Michelle Wilson, WWE's co-president.

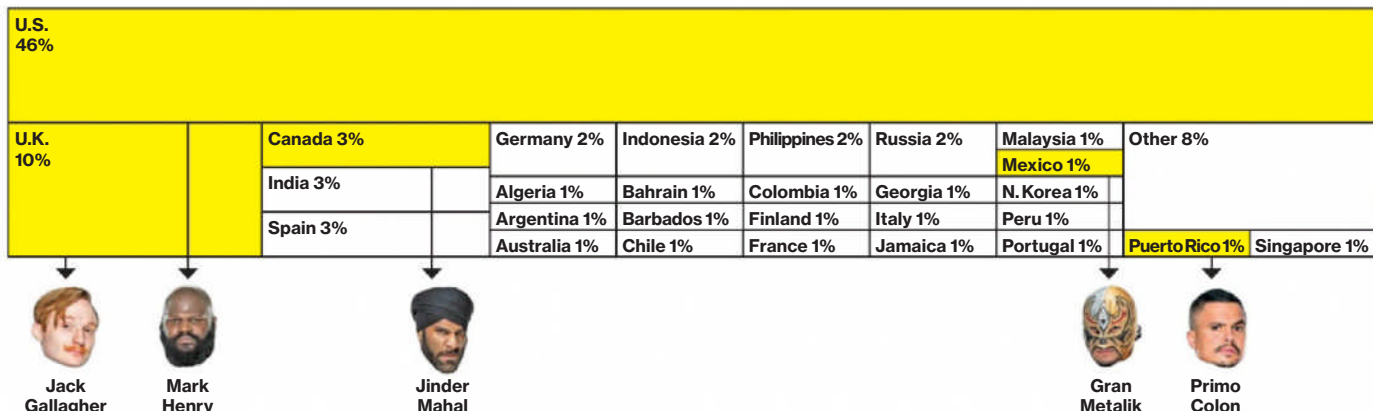
The WWE Network has since evolved to include a vast bank of archival footage, marquee events such as *WrestleMania*, and a hefty slate of exclusive programming. Every Wednesday night, the service streams a show featuring up-and-coming performers from NXT, a developmental league run by Triple H. The WWE Network also hosts an hourlong broadcast of its cruiserweight division, called *WWE 205 Live*, as well as talk shows and documentaries.

The service is available throughout much of the world, and although most programming is English-only, premium events are broadcast in eight languages. The next big phase, executives say, is to tailor the product to local audiences. That means creating local-language highlight shows and continuing to develop and promote local talent. In 2013 the company unveiled the WWE Performance Center, a wrestling school and training facility in Orlando, where WWE takes promising athletes from different disciplines and countries and converts them into all-around stage performers. After impressing WWE brass at the tryouts in Dubai, Shadia Bseiso, a Jordanian jiu-jitsu competitor, signed a contract and headed to Orlando. McMahon says WWE is considering building a second performance center overseas.

Over the years, the company has occasionally had to fend off rival wrestling promotions on TV, most notably World Championship Wrestling (which it later bought) in the 1990s. To date, the WWE Network hasn't had to face an equivalent challenge from a streaming service, though several overseas promotions are introducing rival products. Tokyo-based New Japan Pro-Wrestling Co. offers a subscription product for

## WWE Doth Bstride the Narrow World Like a Colossus

Where the 21.8m followers of WWE's YouTube channel are watching from  
 ← Wrestler's birthplace



999 yen (\$9.20) a month, which is now available in English. New Japan has been building up its appeal to Western viewers, in part by staging a series of buzz-making matches starring WWE legend Chris Jericho.

In most of the world, however, WWE has no direct competitors. Perhaps as a result, the company seems confident it can win over local fans without investing huge amounts of money. At the moment it employs seven international general managers, scattered from Shanghai to Singapore to Australia, who oversee regional development and report to Wilson and her co-president, George Barrios. A conquering army it is not, but that might be all right, according to BTIG's Ross. "You don't need to put offices in every single country around the world," he says. "You just need to make a couple of targeted bets on talent in certain core overseas markets."

When the WWE Network made its debut, there was some concern among analysts that it might decimate WWE's audience on traditional television. So far that hasn't happened. With *Raw* and *SmackDown Live*, WWE continues to air five hours of original wrestling programming each week on USA Network. The ratings have remained strong even as most of cable TV has slumped, with WWE shows consistently ranking among the top 20 most popular of the week.

WWE's current domestic deal with Comcast Corp., which owns the USA Network, is set to expire in 2019. Some analysts say WWE's next deal will be more lucrative. The company has attracted a broader base of advertisers of late thanks to the growing demand among sponsors for live programming, plus its tamer fare. There may be more competition this time. "We would not be surprised to see tech platform bidders emerge, which have begun to experiment with sports and scripted programming," Ross wrote in a research note. WWE already has one of the most popular channels on Google's YouTube, and in December it announced it had sold an original wrestling series that's appearing exclusively on Facebook.

"Facebook could be the most likely destination for WWE content in 2019," Ross wrote.

**Later this year, Vince McMahon turns 73. An aging patriarch often spells trouble for a family-run business, but the McMahon clan seems poised to endure. In 2016, after six years away from WWE, Shane McMahon, Stephanie's**

older brother, returned. These days, he plays the on-screen commissioner of *SmackDown Live* and wrestles with a vengeance. "He is really a strong talent for us right now," says Stephanie—though he isn't, she points out, an actual executive at the company.

For many longtime observers, a WWE without Vince McMahon is hard to imagine. James Clement, an analyst with Macquarie Capital Inc., says that while the family has a "deep bench," investors would be concerned if he suddenly abdicated the throne. "When there is the first wrestling match on Mars, Vince is probably going to be behind it," Clement says.

For now, the McMahons seem content to beef up their arsenal of female and international wrestlers on planet Earth. In January, WWE held one of its biggest annual events, the Royal Rumble, at Philadelphia's Wells Fargo Center. Backstage, before the show, Banks, dressed in sweats, rips open two bags of chunk tuna and dumps them into a bowl. The Legit Boss is nervous. "If I try to eat a real meal, I won't be able to get it down," she says.

The night's biggest surprise is the unveiling of WWE's latest high-profile hire, mixed martial arts fighter Ronda Rousey, who will become a full-time wrestler. But the outcomes of the titular events—men's and women's versions of a prolonged battle in which 30 combatants try to win a title shot by throwing their opponents over the top rope—raise eyebrows, too. The women's Royal Rumble is the first-ever, an achievement whose historic nature the announcers don't shy away from stressing. Stephanie McMahon presides ringside as a guest commentator, while other teams of broadcasters provide live commentary in Spanish, German, Russian, Japanese, Mandarin, Portuguese, and Hindi.

Banks sashays onstage in Wonder Woman-style gear as the first entrant; 55 minutes later she's tossed out of the ring by duplicitous twins. The last wrestler standing is Asuka, a kaleidoscopically styled, fiercely kicking combatant recruited from Japan. Earlier that night her compatriot, Shinsuke Nakamura, won the men's bout. Introduced only a few years earlier, at press conferences in Tokyo, Asuka and Nakamura will now headline *WrestleMania*, WWE's biggest annual show, in front of 75,000 berserk fans in New Orleans this April. *Your move, New Japan.* **E**

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# NOT ALONE IN THE KITCHEN

# PURSUITS

Rosio Sanchez is winning over Danish diners with \$8 tacos and gooseberry salsa

By Richard Vines Photographs by Nana Hagel

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Edited by Chris Rovzar  
Businessweek.com

Growing up as the daughter of Mexican immigrants on the South Side of Chicago, Rosio Sanchez didn't set her career goals too high. She certainly didn't plan on being a leader, much less a chef—even though she discovered a love of cooking at age 13. “I was a pretty quiet kid,” she says, thinking back on the days when she would spend afternoons baking cakes. “I think it was just because I was a fat girl and liked eating desserts.”

Now 33, Sanchez has worked in many of the world's top kitchens and reigns over three of her own in Copenhagen, where she serves some of the most exciting modern Mexican food in Europe. Along the way, she spent five years with chef René Redzepi and rose to head pastry chef at Noma, the four-time No. 1 on the World's 50 Best Restaurants list.

Her newest spot, the eponymous sit-down restaurant Sanchez, offers Mexican dishes to a Danish community largely unfamiliar with the cuisine. Locals have descended hungrily in the city's historic red-light district to try her rich moles and riffs on classics such as a fried cod skin with mussel-gooseberry salsa.

Her prior venues had drawn international attention, too, in part for their kitchens, which were run mostly by women—a choice Sanchez viewed as rather minor. “When I opened [my first] taqueria, I always thought this was a stupid controversy about women in kitchens,” she says. “It really annoys me.” Rather than get into the broader debate about it, she set out to look for women she liked—and hired them. Her original team was almost entirely female, highly unusual for a kitchen in Europe. “It got really crazy in the beginning,” she concedes. “It was like, ‘Oh, we need a little mix.’ You need a little balance so people are not killing each other.”

This wasn't the path her father, who made furniture, and her mother, who juggled jobs, predicted for

Sanchez when she was growing up in the working-class neighborhood of La Villita. “My parents were from Guanajuato and San Luis Potosí,” the chef says over coffee at Sanchez. “They moved from Mexico, like every immigrant story, trying to find a better life.”

In her early teens, Sanchez baked for family and friends. “I loved working with my hands,” she says. “I think a lot of that came from my father, because he was in upholstery, and he loved it.”

In person, she comes across as a no-nonsense boss with a frankness that suits her new Nordic home. The morning we talk, light streams through the large windows into the quiet, cold restaurant, which the night before was warm and dark, with youthful diners jammed into every table and seat at the counter. Sanchez, which opened in November, isn't a particularly inexpensive place: Two of the tacos of the

**“I always thought this was a stupid controversy about women in kitchens,” Sanchez says. Rather than get into the broader debate about it, she looked for women she liked—and hired them.**

day with hand-pressed tortillas cost 100 kroner (\$16.46), and a selection of five plates chosen by the kitchen—such as oysters, *panucho*, tomato soup with grasshoppers, *papas al pastor*, and “dirty” *carnitas*—is 350 kroner. But the small corner restaurant is always booked full several days out.

When I dined there, the oysters came with habanero and sea buckthorn, and the cooks served *chicharrón* (fried pork skin) with *chile de árbol* salsa. From the creamy guacamole to a peppery dessert of chocolate and *chile paletas* (popsicles), the flavors were

absolutely authentic. But the cooking isn't predictable: The food is refined and inventive, reflecting Sanchez's experience in modern kitchens around the world. She uses produce imported from Mexico, with local ingredients such as high-quality Danish cheeses and gooseberries, which she subs in for tomatillos in recipes that call for them. One of her signature dishes features Danish potatoes covered in an al pastor sauce normally served on tacos.

In February, Sanchez was invited to introduce some of her specialties—including a breakfast taco with egg yolks cured by her team—for one day at Shake Shack in New York. Diners lined up before the 7:30 a.m. opening, and the tacos were sold out by 9 a.m.

This high-flying career began humbly at Chicago's Farragut Career Academy. “It was a pretty bad school—you have to watch the metal detectors, like *Dangerous Minds*—but they also had these vocational programs,” she says. “I went into food service, and I graduated eighth in my class.”

Afterward she studied at an outpost of Le Cordon Bleu in Chicago and worked for a couple of years there in an unpretentious neighborhood bistro and in catering. Her original plan was to become a culinary teacher, but she found she enjoyed restaurants so much—especially working with desserts—that she moved to New York and got a job at Wd-50 under pastry chef Alex Stupak. After three years in the city, she decided to seek experience traveling across Europe.

She got temporary placements, known as *stages* in French, at establishments such as the Fat Duck near London and at El Celler de Can Roca in northern Spain. (Both have also won the World's Best Restaurant title.) She studied under Spaniard Paco Torreblanca, a leading pastry chef. Then, in 2011, a friend working at Noma emailed to say there was a job at the restaurant. Noma's Redzepi, known as one of the most creative minds in the



Sanchez's namesake restaurant in Copenhagen has a clean, Nordic vibe

business, was becoming famous for his plates that use Nordic ingredients and traditions as a starting point for flights of fancy. For Sanchez, it was like getting a call to go on tour with Beyoncé.

"I said yes right away," she recalls. "I cut my stages short, and I said, 'Sorry guys, I really need to do this now.'" She'd been looking for a challenge, and the Noma opportunity presented

a lot of unknowns. "I didn't know anything about Denmark, and it was a little hard to begin with," Sanchez says. "But once I got into it, it was really amazing." She experimented with flavors and a culture she'd never known, creating unorthodox desserts, including "potato and plums," a deceptively complex dish of sweetened potato and plums that were pureed,

reduced, dried, and turned into foam.

After half a decade, Sanchez yearned to open a place of her own, inspired by Mexican culture. She left in 2015 to open Hija de Sanchez, a taqueria in Copenhagen's Torvehallerne Market—a destination for foodies that receives 115,000 visitors a week. She added a second, in March 2016, in the city's Meatpacking District.

But in 2016, the siren call of Noma returned: Redzepi asked her to join him on an adventure. Having already opened pop-ups in Sydney and Tokyo, where he and his team studied local foodways and created dishes with aboriginal ingredients, he told Sanchez: "I think we are going to go to Mexico, and you have to come with us." She replied, "Yes! Are you kidding?"

She left her restaurants in the care of deputies and joined the group in Tulum on the Yucatán Peninsula, where she created desserts such as a chili pepper filled with dark chocolate ice cream and grilled avocado with mamey seed oil (which tastes like marzipan). "It was the best fun I have ever had," she says, finally smiling. "It was like a band coming back together and saying, 'Let's make some hits.'" Plus, she says, "I have always wanted to actually cook in Mexico."

Her parents didn't spend time making complex Mexican dishes such as mole at home, but throughout her career, Sanchez keeps finding her way back to the flavors of her childhood. "There's a certain soup that reminds me of my mom, because she always made it," she says. "And I know the feeling of it: I can sense when it needs a little bit more oregano. I feel very grateful to have experienced that by growing up in a community that really holds on to their culture." By opening her restaurants in Copenhagen, half a world away from Chicago, Sanchez hopes to bring that sense of home to her adopted milieu. "I do have that connection," she says, where Mexican food "touches you a little bit in the heart." **E**





# Driving the Market

Luxury automakers are finally realizing the scale of female buying power—and changing their tactics accordingly. *By Hannah Elliott*

Until recently, the long-wheelbase Rolls-Royce Phantom was the perfect car for a woman of means in Saudi Arabia. At 20 feet long, it appealed to those who, in accordance with Shariah law, preferred to remain distant from their male driver. But now that Saudi women will be able to legally operate vehicles, as of June 24, 2018, smart observers expect the 3-ton \$450,000 V-12 coach to be overtaken in popularity by something rather more fun, such as the sporty two-door Rolls-Royce Wraith. (That car costs \$320,500—no one is expecting these women to scrimp.)

“Now it’s personal,” says Rebecca Lindland, an executive analyst at Kelley Blue Book Co. who lived in Saudi Arabia for two years to study car-buying habits. “Before, those cars had a practical purpose. Now, with women driving, I can see them definitely showing so much more personality through their purchases.”

The luxury car market for women in Saudi Arabia has tremendous potential, Lindland says. “This is something these women have fought for for decades,” she says. “They cannot wait.” And the new law, announced by royal decree last September, will have deep effects on the car business there. TV commercials and print editorials marketing cars to women appeared overnight.

As hard-won as this victory was, it coincides with a natural swell in attention that luxury automakers are paying to wealthy female buyers worldwide. Automobili Lamborghini SpA recently produced its first fully modern SUV; Ferrari NV and Aston Martin Lagonda Ltd. will soon do the same. According to IHS Markit, women buy more compact and midsize luxury SUVs—the single largest growth market among luxury brands—than any other vehicle type.

“Women are driving the CUV [cross-over utility vehicle] revolution among luxury brands,” says Marc Bland, a vice president for diversity and inclusion at IHS Markit. “They have made luxury SUVs better sellers than luxury sedans ever since Lexus introduced the mid-size RX in 1998.”

Since at least 2015, Aston Martin Chief Executive Officer Andy Palmer has said he views women as a way to increase the brand’s dwindling sales. As of that year, Aston had sold fewer than 70,000 vehicles in its century-long history.

Last year, Aston created a female advisory panel to review current and future products and give feedback to shape vehicles. A hypothetical customer named Charlotte—a “wealthy and attractive American woman in her late 30s”—is the target audience for cars like the peppy 2017 DB11 Volante convertible, priced at \$216,495. The marque is targeting a valuation of as much as £5 billion (\$6.9 billion) in a potential initial public offering, according to Bloomberg News. Investors will have an eye on Aston’s planned expansion into the SUV segment, starting in 2019.

Meanwhile, in 2015, McLaren Automotive Ltd. developed a sport series specifically to appeal to “a broader range of drivers.” (This often means women.) The line has doubled company sales.

Dealers are responding to a shift in interest, too. “I have noticed quite a significant uptick in the amount of women who come in to buy something special,” says Brett David, the 30-year-old owner of a Miami Lamborghini dealership, Prestige Imports. He’s building a marketing plan for the Lamborghini Urus and expects female shoppers to play a large role. “There

is a new demographic,” he says. Lamborghini has also aggressively extended its financing options to lure buyers across the board.

In this way, top-tier brands are following the trend of the middle-priced (relatively speaking) automakers, such as BMW, Mercedes-Benz, and Audi, which have made billions on SUVs they sell to families. In the past three years, European brands Jaguar, Alfa Romeo, and Maserati have followed with utility vehicles—and subtle marketing efforts—of their own. A recent Super Bowl ad for Alfa Romeo’s Giulia was narrated by a woman; a 2017 holiday promo for the Infiniti Q50 featured a woman grabbing the keys from her husband and fleeing the kitchen for an excuse to drive.

But automakers haven’t always done well when they’ve tried to connect with women. From the Dodge La Femme in the 1950s—it came with lipstick, a “stunning shoulder bag in soft rose leather,” and abysmal sales—to the Cadillac SRX, which was marketed with an ad featuring dorky dads drooling over a mom at school drop-off, overtures have oftentimes been embarrassing. Even the first push for electric automobiles more than 100 years ago failed after the vehicles were marketed as “ladies’ cars.” The line between engaging and patronizing is a fine one—as recently as July 2017, Audi had to apologize for an ad it ran in China where a future mother-in-law inspected a bride like she would a used car.

“It would be so ignorant to identify the buyer of a car today based on paint color or trim preference,” says Prestige Imports’ David. “That’s ridiculous. It’s not about whether there is a hole in the back seat for a purse. It’s about a new experience. Women want a car that means something.” **B**



The private pool in one of Miavana's 14 villas

## Eighth Wonder

To visit Madagascar is to undertake a journey of epic proportions. Miavana, the country's new—and only—luxury resort, is where to land on arrival

*By Brandon Presser*

It's said that when King Solomon wanted to build his temple, he sent his best carpenters to scour the Earth in search of its finest timber. They eventually made it to Madagascar, where they felled majestic trunks of sweet-smelling rosewood to bring to the Holy Land. A few of the men fell under the spell of the island's beauty and chose to remain. To this day, some Malagasy claim distant Jewish ancestry.

Whether you take the tale as a fable or accept it at face value, the so-called Eighth Continent is still likely to hold an unsuspecting traveler in its grip. Most visitors come to see its population of skyward lemurs—Madagascar has roughly 100 species, and they're found nowhere else. Others are eager to experience the

Jurassic-looking jungles—where nighttime wildlife tours reveal prehistoric creatures such as the spiral-tailed panther chameleon—or the Avenue of the Baobabs, a forest of skyscraper-tall trees that look as if they've been uprooted and flipped upside down.

Thierry Dalais, 59, who serves as chairman of a young, ambitious consortium of eco-luxe safari lodges called Time + Tide, arrived as most people before him: wide-eyed and curious about the mythical island nation. He invested in a seaweed-farming company, but his crops failed, the victim of marine degradation. Dalais's next idea was to tap into conservation and its potential to draw tourists to this special place in the shadow of 1,000-year-old trees, 700 miles away from his home on Mauritius.



Miavana sits on Nosy Anka, once a pirate haven and now a protected area

That's how the island's first five-star resort was born—its name, Miavana, means “to come together” in the local dialect. It opened last May with 14 retro-style megavillas along an arcing strip of beige sand on the island of Nosy Anka. It's by far the most ambitious hospital-ity project the country has ever seen.

Getting here from most major cities is itself a journey of biblical proportions, involving a long-haul flight to Johannesburg, a half-day's transit through the capital of Antananarivo to the north of Madagascar, and a helicopter charter across a strip of the Indian Ocean. But once you step off the chopper and into the hands of your private butler—who welcomes you with freshly cracked coconut—you'll immediately relax. The property's developers

want to position it as a viable vacation alternative to the private-island oases of the nearby Seychelles, and it succeeds.

For one thing, Dalais used the same architects who created North Island, the extravagant Seychelles resort where Kate Middleton and Prince William famously honeymooned. The South Africa-based firm founded by husband-and-wife duo Silvio Rech and Lesley Carstens is known for crafting tropical paradises in Kenya and Zambia. With Dalais, they imagined the resort from the sand up. Sleek, understated cottages are built out of hand-hewn stone etched to resemble the ropy, mosaiclike bark of the local trees. Inside are platform beds with mosquito nets that hang from the ceiling. Bathrooms open up to generous, walled-off outdoor shower areas. Turquoise water and a palm-flanked beach are visible through a series of glass-paneled walls that fold together like a Chinese screen.

Days at Miavana begin in an open-air, thatched-roof dining room, where breakfasts are prepared with the precision of a Japanese tea ceremony (the granola is hand-sorted) and served by kind, mostly local staffers. It would be perfectly acceptable to hide away on the resort all day long, kite surfing in the quiet lagoon or getting botanical-infused



massages on your private deck. It's just as easy to spend a full week exploring the natural bounty nearby: Diving excursions take place among bowmouth guitarfish and humpback whales in valleys of pristine cauliflower coral. Private helicopters can take travelers on a wide variety of untrammelled adventures. Safaris in vine-strewn jungles provide an opportunity to spot mustachioed golden crowned sifakas and other nocturnal lemurs; hikes through Ankarana Reserve pass spiky, limestone *tsingy* formations that resemble overgrown crocodile teeth.

Although Madagascar has dealt with outbreaks of the plague almost annually since 1980, they've tended to be concentrated in major cities, far from Miavana. In early February the World Health Organization issued a statement saying that last year's especially strong contagion has been brought under control.

At Miavana, everything is inclusive with your stay, including a \$100 conservation levy that goes directly to the Time + Tide Foundation. The not-for-profit arm of Dalais's company has a holistic approach to environmentalism that also considers economic impact. He says he hopes to use those funds for job creation and wildlife conservation, which often go hand in hand. Already, he's getting students from the town of Andasibe involved in reforestation efforts (critical to the lemurs' survival) and shifting jobs from slash-and-burn agriculture to hospitality. All this should help ensure that the last of Solomon's trees will remain preserved for thousands of years. *Nightly rates start at \$2,900 per person. Booking your trip with a locally savvy operator, such as Mango African Safaris (mangoafricansafaris.com), is essential to streamline the complicated travel logistics.* **B**





## A Crowning Achievement

*Black Panther* feels of-the-moment, but it's the result of years of smart forward thinking. *By Alex Bhattacharji*

"It's your time to rule." In *Black Panther*, Marvel Studios LLC's movie due out on Feb. 16, that line is delivered to T'Challa, the titular character. But it could as easily be a pronouncement about the film itself, which has already sold more advance tickets than any other superhero movie—and sparked a grass-roots campaign for screenings and fundraisers to help school-age children see it.

It's worth remembering that *Black Panther's* ascent to blockbuster status wasn't always a foregone conclusion. Hollywood hand-wringers had their pick of regressive reasons: The film is set in Africa, its cast is predominantly black, and it shares a name with a controversial revolutionary movement. The lesser-known character first appeared in 1966, in an issue of *Fantastic Four*, three months before Huey P. Newton and Bobby Seale founded the Black Panther Party.

Rather than shy away from this context, the movie wraps itself in it like armor. *Black Panther* is unapologetically Afrocentric, empowering without being earnest. It begins in Oakland, Calif., but the bulk of the story concerns Wakanda, a secretive, affluent, and technologically advanced African nation. Young T'Challa, played by Chadwick Boseman, has

ascended to the throne after his father's assassination and must prove he's ready to rule. His rival is Erik Killmonger, an American-born mercenary played by Michael B. Jordan. The stakes are higher than claiming the title of head of state; hanging in the balance are the country's deposits of vibranium, a fictional element that's given Wakanda an ability to produce weapons of mass destruction. Killmonger wants to use that power to subjugate other countries, exact payback on colonizers, and net a tidy profit all at once.

Boseman, who's played boundary-breaking figures Jackie Robinson and Thurgood Marshall, is assured in his portrayal of T'Challa. A 20-minute chase scene set in Busan, South Korea, makes a compelling argument that he, not Idris Elba, should be the first black 007. But Jordan's antihero packs more of a punch. He's a philosophical if violent opponent, an antagonist whose militant worldview evokes that of many original Black Panthers. "I waited my whole life for this," he says at one point. "I'ma burn it all!"

Jordan isn't the only scene stealer. Letitia Wright plays T'Challa's sharp-tongued sister, Shuri, Wakanda's reigning technological genius, and comes off as a smarter, sassier Q from the James Bond movies. Danai Gurira is Okoye, the head of a cadre of all-female royal bodyguards who are as inspiring as anything from *Wonder Woman*, last year's surprise hit.

Although seemingly tailor-made for today—the film arrives in the wake of Black Lives Matter; neo-Nazis marching in Charlottesville, Va.; and President Trump's profane description of African countries—*Black Panther* is the rare product of forward thinking in the film industry. As long ago as 2009, Marvel's president, Kevin Feige, recognized a lack of diversity in both characters and genres. Foreseeing franchise fatigue, he made Marvel's flagship an ensemble, *The Avengers*, then delved into comedic fare such as *Deadpool* and the spaced-out *Guardians of the Galaxy*.

When Feige selected director Ryan Coogler in 2014, Coogler's sole feature film was *Fruitvale Station*, based on the police shooting of an unarmed black man in Oakland. His second, *Creed*, radically reinvented the *Rocky* franchise. He's raised the bar even higher here. Visually, *Black Panther* is unlike any movie I've ever seen, probably because there's never been a \$140 million action film that's created a world based on African designs and aesthetics, one with armor-plated battle rhinos, high-tech spears, and towering skyscrapers that reference the adobe-and-wood architecture of Mali.

But it's precisely because of such perceived risks, not despite them, that *Black Panther* is bound for glory. As with *Wonder Woman*, by Marvel rival DC Entertainment, the movie appeals to groups far outside the traditional Comic-Con crowd, an audience large enough that carmaker Lexus is betting on it to help reinvigorate flagging sales. In an inspired bit of product placement, the brand's LC 500 model is the characters' ride of choice, illustrating again that few things grease the wheels of progress like a profit.

Late in the film, T'Challa gets this advice: "Only *you* can decide what kind of king you want to be." If audience buzz is any indication, he'll be one who rules for years to come. **B**

# Your Skin's New Savior

An abundant natural ingredient from the Philippines is the secret to this effective serum and lotion pairing

*Photograph by Janelle Jones*



## THE CHARACTERISTICS

The key to Pili Ani's skin-care line is the nutritionally rich pili nut, which grows wild on trees in the Philippines. Most commonly eaten as a sweet, high-protein snack, the nuts also provide a natural source of antioxidants and linolenic acid, which is said to have anti-inflammatory and moisture-retentive properties when applied to the skin. Pili Ani's Intense Hydrating facial cream and facial oil both feature high concentrations of pili oil; used in tandem, the skin-softening and anti-aging treatments make a luxurious, functional addition to your regimen.

## THE COMPETITION

At \$110 for the lotion (1.76 ounces) and \$125 for the oil (1.35 fl oz.), the Pili Ani system costs about the same as other high-end serum and moisturizer duos. Japanese brand SK-II sells slightly larger bottles of its R.N.A. Power face cream (2.8 oz.) and facial treatment essence (2.5 fl oz.) to a cultlike following for \$230 and \$99, respectively. But these products are for skin-care junkies—an average user might not notice the difference between them and, say, an \$18 tub of L'Oréal Revitalift and the \$23 RoC Retinol Correxion deep-wrinkle serum available at most drugstores.

## THE CASE

The vitamin retinol remains the one magic wrinkle eraser dermatologists agree on, but you can't get the high-concentration stuff without a prescription. Ingredients such as pili oil or SK-II's Pitera (a fermented fluid rich in amino acids) are effective, naturally sourced alternatives. After two months of testing, Pili Ani smoothed out fine creases, and the viscous oil lent skin that sought-after dewy look. What's more, harvesting the nuts brings much-needed sustainable jobs to the Philippines. And who doesn't want to do good while looking good? *From \$110; [piliანი.com](http://piliანი.com)*

# Steve Streit

The man who invented prepaid debit cards just reinvented his company for mobile payments. *By Jenny Surane*



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**IT WAS 2012, AND PAYMENT** systems entrepreneur Steve Streit could see that banking was moving to mobile. He also knew that his company couldn't get there in time.

In what may have seemed like an unorthodox move, Streit, the founder and chief executive officer of the country's largest prepaid card provider, Green Dot Corp., decided to acquire the failing location-based dating app Loopt for \$43 million—not for its technology but for its talent. Loopt's co-founder and CEO, Sam Altman, stayed on for a time to lead Green Dot's mobile development program. (He went on to become president of the famed tech incubator Y Combinator.) Streit's gamble paid off last year when he announced that Green Dot would power Apple Inc.'s new person-to-person payments offering, Apple Pay Cash.

Other deals followed the Loopt acquisition. Now “we’re the bank of Apple and Uber and Intuit,” Streit says. “People that don’t know they’re using a Green Dot account are using a Green Dot account.”

Streit grew up in 1960s North Miami and studied broadcast management at the University of Florida before dropping out in his senior year for a job as a late-night radio

DJ. In 1999, with online shopping on the rise, he abruptly switched gears and created a prepaid debit card teenagers could use to shop online. Kids were only moderately interested in his invention, but it quickly took off among adults who didn't have a bank account or credit history. A decade later, Green Dot went public. “We’re actually one of the most distributed and ubiquitous banks in the entire country,” Streit says. Last year, to expand the company’s reach, it acquired competitor UniRush, founded by the former rap mogul Russell Simmons.

Steven Kwok, an analyst at Keefe Bruyette & Woods Inc., reserves particular praise for Green Dot's recent innovations. “They’ve been able to transform themselves over time from just a regular prepaid provider to almost a financial-services company,” he says. “They focused on using their capital to invest in these acquisitions. It fit together nicely.”

Green Dot's mobile payments platform will be especially valuable as technology companies seek to push into financial services. “It’s very rare that you have a bank that speaks tech,” Streit says. “That is why I think we’ve been so successful.” **B**

b. 1962, North Miami, Fla.

Estimates his first job as a late-night radio DJ brought in about 10 listeners, “which was probably 10 more than I deserved”

Green Dot's original product was called iGen, which stands for “internet generation”

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