

# Bloomberg Businessweek

Is Trump's nominee for Labor,  
Andrew Puzder, yet another reason  
for American workers to worry?

(Turn upside down for answer)

SEY

p42

Answer:

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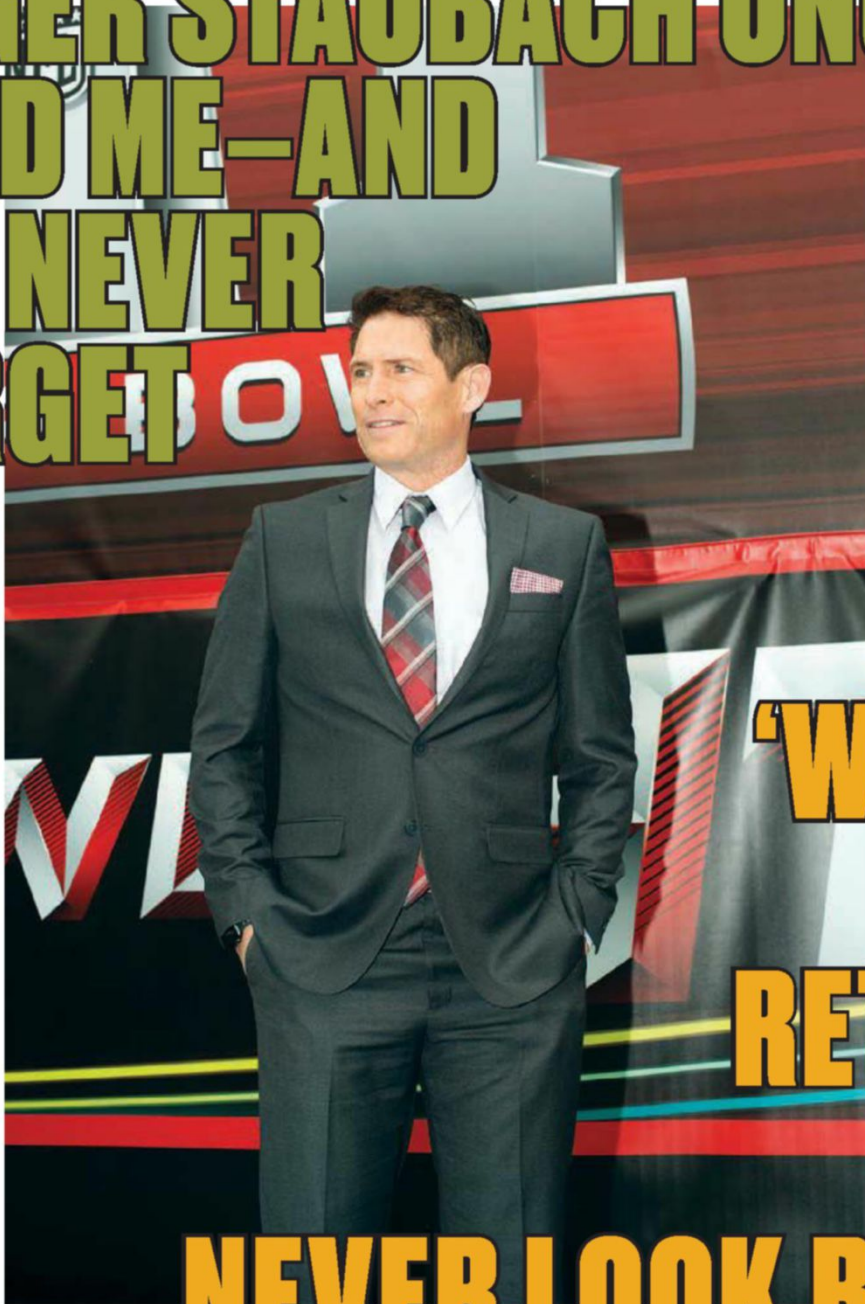
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**“ROGER STAUBACH ONCE  
TOLD ME—AND  
I’LL NEVER  
FORGET  
IT:**



**“WHEN  
YOU  
RETIRE,  
RUN.  
NEVER LOOK BACK””**

p54

**“If you have an idea  
and everybody  
thinks it’s great, it’s  
probably passé”**

p68

**“More government is not the  
solution to every problem. It’s  
the problem to every solution.  
They punish us for being  
in business to make a profit”**

p42

**“People who see  
globalization from 30,000  
feet in a think tank don’t  
know a damn thing about  
the way it really works”**

p22

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## Cover Trail

How the cover gets made

### Domestic Cover

“Cover story is on Andrew Puzder, Trump's nominee for labor secretary.”

“If I were to venture a guess, I'd assume he's a natural and universally liked choice, one who appeals to both parties because of his immaculate record and history of dedication to public service.”

(Sigh.)



### International Cover

“We have an exclusive interview with Jeff Immelt, the CEO of General Electric.”

“I'm a huge fan of their lightbulbs. How are things going for him?”

“He expresses concern about a few things, among them getting into a trade war with China.”

“Diplomacy is so 2016.”





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SECTOR	PERCENTAGE	INDEX	PERCENTAGE
TECH	1.2%	10000	0.5%
FINANCIAL	0.8%	20000	0.2%
HEALTHCARE	0.5%	15000	0.1%
INDUSTRIAL	0.3%	12000	0.1%
CONSUMER	0.2%	10000	0.1%



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**Watch These Spiderbots Train to Build a City on the Moon**

Robots from Siemens move like spiders and communicate with a hive mind. Oh, and they're 3D printers, too.

**Five Things You Need to Know to Start Your Day**

(Source: [unreadable])

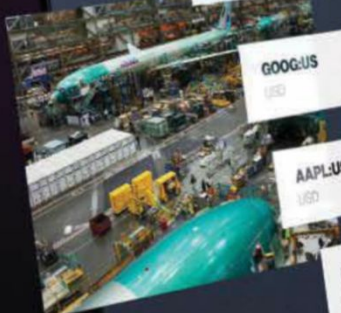


MY WATCHLIST 1

Total Gain (USD)	Value
<b>+127,085.99</b>	482,270.00
Day Gain (USD)	Cost
<b>+467.35</b>	57,825.00

**Want a Job in Silicon Valley? Keep Away From Coding Schools**

For-profit intensive engineering academies have become prevalent, but some graduates find themselves in debt and unprepared for tech jobs.



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USD	12.25	+7.04	

AAPL:US	111.66	+3.44%	55.65
USD	12.25	+3.71	

005930:KS	157M	-0.19%	271.80
KRW	257	-3.00K	

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**Treasuries Rise With Gold, Dollar as U.S. Stocks Edge Higher**



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## Opening Remarks

# How Much Room to Grow?

By Peter Coy

8

**Don't dismiss anomalous numbers just because they don't support your preferred theory**

Wall Street economists insisted for months that the labor market couldn't possibly get tighter without triggering wage inflation. "We are at full employment," Deutsche Bank Securities headlined a note to clients in October. "Leading indicators of inflation flashing red," it wrote days later. "On the cusp of full recovery," Goldman Sachs wrote in December. "Wage inflation continues to gain traction," JPMorgan Chase economists said in January.

Then came February, and Wall Street's much-anticipated wage pressure was nowhere to be seen. Even though employers added a more-than-expected 227,000 workers in January, average hourly earnings rose just 0.1 percent. Forecasters struggled to make sense of why Americans' pay had barely risen at all. "What happened with wages?" asked economists at Bank of America Merrill Lynch.

It's hard to blame the economists for overestimating wage growth; they're applying the time-honored law of supply and demand. It stands to reason that when workers are in greater demand, they'll be able to hold out for better pay. The mystery is why that hasn't been happening in the U.S., at least not as much as most experts expected.

The pay-growth puzzle bears on the vitality of the U.S. economy in coming years, to say nothing of the vitality of the Donald Trump presidency. If wage inflation really does threaten to overheat, the Federal Reserve under Chair Janet Yellen will feel obliged to raise interest rates to slow down the economy. That will prevent Trump from making good on his campaign promises to raise the growth rate to 3.5 percent, 4 percent, 5 percent, or more. If there's no wage inflation brewing, on the other hand, the Fed can afford to hold back, economic growth can accelerate, and the Republicans should do well in the 2018 midterm elections and beyond.

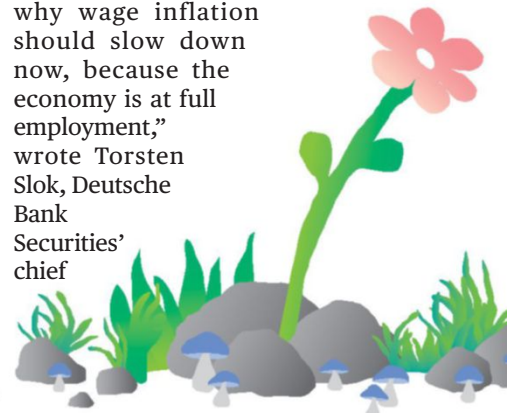
No matter what you think of Trump, you should be hoping that the U.S. economy isn't, in fact, already bumping up against its speed limit. Because if it is, it means that speed limit is distressingly low—and American living standards can improve only at a snail's pace. Output dropped sharply during the last recession. Instead of springing back like a yo-yo, it's drifted upward at a meager 2 percent a year. If the economy had grown since the end of 2007 at the average pace it did from 1947 to 2007, it would be 22 percent bigger than it is today. That's

a difference in annual gross domestic product of more than \$4 trillion.

The minuscule 0.1 percent increase in hourly earnings in January is, in this context, a strange mixture of good news and bad news. It's bad news because it means long-suffering workers still aren't getting the substantial raises they need to pay their bills. Labor has been getting a smaller share of the national income, while the share going to capital owners (business owners and shareholders) has been rising. And consumers can't buy more stuff if they aren't being paid more. The good news is that the small increase shows the economy can easily employ more people, and generate more goods and services, without overheating.

It's possible, of course, that the earnings growth number was a fluke. Economists found numerous reasons to play it down after its release by the U.S. Bureau of Labor Statistics on Feb. 3. For one thing, a lot of the January employment growth was in lower-paying jobs such as retail, leisure, and hospitality, which put a drag on average hourly earnings. For another, wages in the high-paying financial sector fell 1 percent—a rare and unexplained drop that might well be reversed in February.

Those who believe wage inflation is threatening point out that the labor market has indeed tightened over the past year by many measures. Earnings are up 2.5 percent over the past 12 months, and surveys of companies and consumers show the highest expectations for wage gains since the last recession. About half of small businesses report there are few or no qualified applicants for job openings, up from a quarter that said so in 2009. And people are voluntarily quitting jobs at a prerecession pace—something that could force employers to jack up pay to hang on to valued workers. "There are no good reasons why wage inflation should slow down now, because the economy is at full employment," wrote Torsten Slok, Deutsche Bank Securities' chief



international economist, in an e-mail.

It's dangerous, though, to dismiss anomalous numbers just because they don't appear to fit with economic theory. It might be that the tiny earnings gain in January wasn't a fluke after all, but rather an indicator that workers still lack bargaining power. David Weil, a Boston University Questrom School of Business economist who worked in the U.S. Labor Department under President Obama, says wages are suppressed because corporations have "fissured"—shunted their low-wage

employees to outsource workers who pay them even less.

One sign of slack is that companies haven't been adding overtime hours, which they tend to do when they can't hire as many workers as they need.

Another strong indication of slack is that the unemployment rate ticked up to 4.8 percent in January, from 4.7 percent in December, as people flooded into the labor market searching for work. The


rate of participation in the labor force, which fell sharply from 2008 through 2013, has stopped falling despite the retirement of many baby boomers. "It's far from obvious to me that we're on the cusp of an imminent break-out of wage growth," says Joseph LaVorgna, chief U.S. economist for Deutsche Bank Securities, parting from his colleague Slok.

In other words, Trump may be onto something in averring that the economy still has room for growth. He's not one to comb through the BLS website to deepen his understanding of the economy. During the campaign he called the official unemployment rate that the BLS publishes "one of the biggest hoaxes in American modern politics." That said, the president is "absolutely right in saying that the labor market has much more slack in it than the Fed and other commentators are thinking about," said David Blanchflower, a Dartmouth economics professor and former Bank of England policymaker, on Bloomberg TV before the latest unemployment report.

## The pay-growth puzzle bears on the vitality of the U.S. and this presidency

Yellen could yet prove to be one of Trump's most important allies in the fight for growth—even though he alleged during the campaign that the Fed was more political than Hillary Clinton. Blanchflower's comment about "the Fed and other commentators" isn't fair to Yellen, who's pushed back against economists who warn that the central bank will invite inflation if it doesn't aggressively raise interest rates to slow growth. "A natural question is whether monetary policy has fallen behind the curve," she said in a speech at Stanford in January. "The short answer, I believe, is no."

Economics makes strange bedfellows. Liberals who backed Obama's demands for fiscal stimulus are now worrying that Trump will somehow engineer a growth spurt that will carry Republicans past Democrats in the next one or two election cycles. "Nobody I know in Congress doesn't want job creation, but who gets the credit? That's hard on them," says Leo Hindery, a Democrat who's managing partner of private equity firm InterMedia Partners in New York. Democrats are left warning that stimulus, especially if it's in the form of tax cuts for the rich, will be a "sugar rush" that will leave ordinary Americans worse off.

When it comes to economic data, it can be difficult to separate what people believe to be true from what they want to be true. "People need to be a little more scientific and a little less political in the nature of their interpretation," says Robert Johnson, president of the left-leaning Institute for New Economic Thinking. "It's times like this when people are least scientific." 

—With Patricia Laya

## Trump's 'Big Number' On Dodd-Frank

He doesn't have the right picture of small business but has a point about regulation



At a meeting with small-business leaders on Jan. 30, President Donald Trump pledged to do “a big number” on the Dodd-Frank Wall Street Reform and Consumer Protection Act, which Congress passed in 2010 in the wake of the financial crisis but which he blames for cutting off the bank lending needed for growth. “It’s almost impossible now to start a small business, and it’s virtually impossible to expand your existing business,” he said.

Trump is wrong about small-business starts. Since early 2010, new-business creation has rebounded.

But he’s right, albeit with a whiff of exaggeration, that it’s harder to finance and expand a small business than it needs to be. Total bank lending to small businesses has declined by about 6 percent since Dodd-Frank was put in place. Although weak consumer demand is a major culprit, misdirected regulation has also created formidable obstacles.

Half a decade into Dodd-Frank’s life, it’s clear the rules aimed at large, complex institutions have fallen hard on banks with less than \$10 billion in assets—a group that accounts for about two-thirds of all small-business lending. These banks must sort their assets into myriad risk categories. It’s become a task that’s helped double the length of the quarterly reports they file with supervisors. Stringent, one-size-fits-all regulatory guidelines limit the ability of these banks to make mortgage loans—a major source of financing for entrepreneurs and small businesses.

Such requirements are entirely unnecessary for institutions that don’t get involved in derivatives, keep most of their loans on their own books, and run simple businesses that examiners understand well. Worse, the added red tape complicates precisely the kind of know-your-customer lending at which these smaller banks excel. That’s why some banking experts, including Thomas Hoenig, vice chairman of the Federal Deposit Insurance Corp., have proposed freeing smaller lenders of the

most onerous requirements if they maintain adequate levels of loss-absorbing capital.

Financial regulators have taken a step in the right direction, issuing a rule that will streamline quarterly reporting requirements for the smallest banks (with assets of less than \$1 billion).

Still, there’s plenty more the Trump administration and Congress can do, such as liberating well-capitalized community banks from risk-weighting requirements and certain mortgage-lending constraints.

Dodd-Frank was built primarily to address the excesses of sprawling, global institutions, not small-town banks that take risks on people they know. It’s a disconnect that should be recognized—and repaired.

## Guns for the Mentally Incompetent

The National Rifle Association wants payback for its political support

Of all the measures to improve gun safety, background checks are among the most reasonable and popular. House Republicans lost no time on Feb. 2 in voting to weaken them.

A bill approved on a mostly party-line vote in the House would rescind a rule on gun background checks that was initiated by the Obama administration in 2012 and finalized in December. President Trump is expected to sign the bill after its likely passage by the Senate.

The rule requires the Social Security Administration to submit records to the gun background check system for an estimated 75,000 beneficiaries annually who, because of mental illness, can’t work at all and require a representative to manage their Social Security benefits. The Gun Control Act of 1968 prohibits gun possession by the “mentally defective.”

Advocates for the mentally ill caution that mental illness shouldn’t be equated with a penchant for violence. They’re right. But America’s tragic experience with mentally ill gunmen—from shootings at Virginia Tech in 2007 to Newtown, Conn., in 2012—shows the folly of simply dismissing the danger. In recent years, Republicans have prioritized instant gratification for anyone who desires to buy a gun. Last year the National Rifle Association spent \$50 million on the campaigns of Trump and six GOP senators. NRA leader Wayne LaPierre wants payback.

The Obama rule established a process for identifying only Social Security beneficiaries who would be prohibited from possessing guns under existing law. It required beneficiaries to be notified of the prohibition and provided means to appeal the determination in court. Such provisions would safeguard individual rights. But they offend the fundamental principle that drives NRA, and thus Republican, gun politics: Anyone should be able to get a gun at any time for any reason and bring that weapon, loaded, anywhere. **B**



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# Movers

By Kyle Stock

▲ **Shares of Hasbro hit a high** after the company reported an 11 percent increase in sales for the holiday quarter. Monopoly and other board games were a bright spot.

▲ One of 2016's biggest private art deals recently came to light—**Oprah Winfrey sold Gustav Klimt's *Portrait of Adele Bloch-Bauer II*** for \$150 million, 71 percent above her 2006 purchase price.

▲ Boutique investment bank **Moelis & Co. won a coveted job advising Aramco on its coming IPO** in Saudi Arabia. At an estimated \$100 billion, the deal may be the largest equity sale in history.

▲ The U.S. Army Corps of Engineers said it would **approve the completion of the Dakota Access pipeline** without finishing an environmental assessment ordered by the Obama administration.



▲ ...hours and 23 minutes is the duration of **the world's longest commercial flight**. Qatar Airways sent a Boeing 777 from Doha to Auckland.

▲ Time Warner sales rose 11 percent, to \$7.9 billion, in the holiday quarter, **thanks to HBO's sci-fi thriller *Westworld***. HBO's streaming service has more than **2m** subscribers.

▲ Toy retailer PAO Detsky Mir raised **\$355m** in **Russia's first major stock sale since 2014**.



▲ Stephanie Perdue, the brains behind Yum! Brands' Doritos Locos tacos, is joining TGI Fridays as chief marketing officer. **She'll try to work some menu magic at TGIF's 900 struggling restaurants.**

▲ Billionaire **Betsy DeVos was confirmed as the U.S. secretary of education**. Vice President Mike Pence voted to break a Senate deadlock, the first tiebreaker for a cabinet confirmation.

## Ups

## Downs

▼ General Motors posted a 71 percent drop in profit in the yearend quarter, as a strong dollar dented foreign returns. **Driven by new SUVs, GM sales rose 11 percent** in the period, beating expectations.

▼ Walt Disney sales shrank 3 percent, to **\$14.8b**, for the quarter ended Dec. 31. The company blamed disappointing results on **falling viewership and ad revenue at ESPN**.

▼ The stars of the faux documentary ***This Is Spinal Tap* reunited to sue Vivendi** for **\$400m** in missing royalty payments. *Gimme Some Money* indeed.

▼ The **IMF said it might freeze financial support for Greece** after the country failed to hit targets in accord with its 2015 bailout. Without more aid, Greece could default on bond payments due in July.

▼ U.S. farm income is expected to drop **8.7%** in 2017, which would be a fourth consecutive year of declines. **Bumper crops are weighing on the prices of corn and wheat.**

▼ **Lorenzo Servitje, the co-founder of Mexican baking giant Grupo Bimbo, died at 98.** He pushed for vertical integration and marketed bread as healthier than pastries.

▼ **Tiffany & Co. CEO Frederic Cumenal stepped down** after a prolonged sales slump. Chairman Michael Kowalski will take over on an interim basis.

**"If trade stops, war starts. We have to actively prove that trade helps people communicate."**

▼ Alibaba founder **Jack Ma criticized a wave of protectionist policies** being considered in Washington.

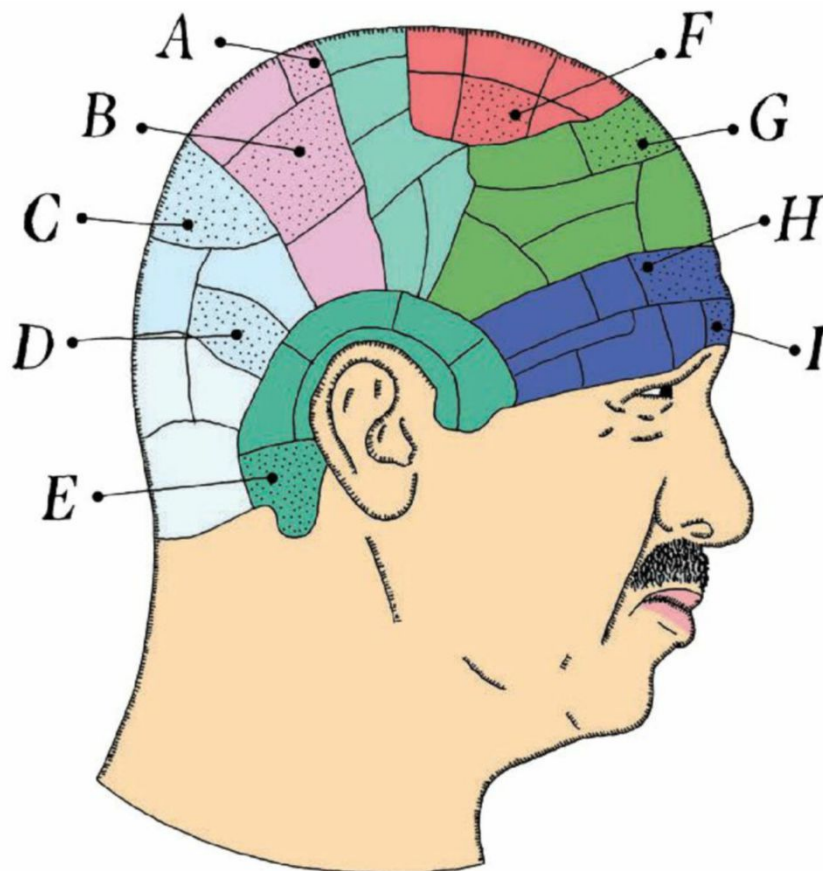


▼ Romania's center-left government was **forced to retract an ordinance that would have weakened a crackdown on government graft** after the move spurred the country's largest protests in almost 30 years.

▼ Eastern Outfitters, the company behind Bob's Stores and Eastern Mountain Sports, **filed for bankruptcy protection**. The company, which has 40 stores, had reorganized about a year ago.



FROM TOP: COURTESY/NEUE GALERIE; GETTY IMAGES; VCG/GETTY IMAGES; DARKO BANDIC/AP PHOTO; ILLUSTRATION BY OSCAR BOLTON GREEN



## Erdogan's Empire State of Mind

► His autocratic turn is transforming the secular state founded by Ataturk

► “We have broken feelings against our friends and allies, so we will change Turkey”

Mustafa Kemal Ataturk's statue in the main square of Rize, a small town nestled among tea plantations on Turkey's Black Sea coast, has been gone since December. Rize is the birthplace of President Recep Tayyip Erdogan, and his critics believe the question of what he really wants is finally clear after 15 years of rule: to erase the secular state that Ataturk built from the remains of the Ottoman Empire and to recast the republic in his own, more Islamist image.

Using the same top-down methods as Turkey's founder, Erdogan is remaking the republic as overtly religious, its political ambitions squarely on the former lands of the Ottoman Empire, says Soner Cagaptay, author of *The New Sultan*, a soon-to-be-published biography of the Turkish president. “Erdogan is the anti-Ataturk Ataturk,” he says.

Never has answering the riddle of Erdogan's true goals seemed more urgent. He's expected any day to

call an April referendum to approve constitutional changes that would concentrate executive power in the presidency, abolish the post of prime minister, and give the president greater control over judicial appointments.

“We are tailoring a new suit for Turkey,” says Nabi Avci, a longtime adviser to Erdogan and minister of culture and tourism. But this doesn't mean they're destroying Ataturk's republic or Turkish democracy, he says, accusing opponents of crying



Ataturk's statues are disappearing in Turkey

wolf. "A suit was made for Turkey to fit into at the beginning of the 20th century, but the world has changed a lot since then," he says, citing the collapse of the former Soviet Union, the Arab Spring, and other geopolitical shifts. Nativist populism sweeping Europe and the U.S. has loosened Turkey's Western anchor, as leaders such as U.S. President Donald Trump push to exclude immigrants from predominantly Muslim countries. Turkey's military, the second-largest in NATO, is fighting in Syria, and a once-booming economy has stalled under the weight of terror attacks and the clampdown after a failed military coup last July.

In Rize, Ataturk's statue is due to be replaced by a monument to those who died defending Erdogan against the attempted putsch, a victory that provides a founding myth for the new Turkey he wants to establish. Only a few weeks after the statue's removal, the Ministry of National Education published a draft of the school curriculum that would reduce coursework about Ataturk and eliminate the class on Darwin's theory of evolution.

The government is renaming streets and squares after the victory over the coup, which Erdogan calls Turkey's "second war of independence." The original was Ataturk's 1919-23 war to end Allied occupation, abolish the caliphate, and carve out national borders. Thousands of mosques have been built since Erdogan's Justice and Development Party, or AKP, came to power in 2002, including inside the compound of the vast new presidential palace. The number of students attending religious Imam Hatip schools—Erdogan went to one himself—rose to more than 1.1 million last year, from 71,000 when the AKP first formed a government, according to the Education and Science Workers' Union. "The amazing thing is how easy it ultimately turned out to be to undo the republic," says Soli Ozel, a professor of international relations at Istanbul's Kadir Has University.

Erdogan needs to legitimize his powers in a new constitution, even though that may also be a recipe for rolling crises, according to biographer

Cagaptay, the Turkey program director at the Washington Institute, a U.S. think tank. That's because Erdogan faces a literate, urbanized electorate on whose votes he depends, half of whom oppose him. In the 1930s, Ataturk imposed his reforms as an autocrat when many Turks were unschooled farmers.

The president and the AKP remain popular, in large part because they delivered efficient government and a rapid rise in wealth, with annual growth peaking just below 10 percent in 2010 and 2011. The economy slowed sharply last year, shrinking in the third quarter. Opponents say Erdogan's Islamist instincts are emerging, and they fear these will shape the "new Turkey" he always talks about. Supporters insist he's simply allowing the country to reflect the values of its conservative majority, suppressed by the militant secularism of the old republic. The new constitution would retain commitments to a secular state.

Minister Avci says Erdogan has big plans to restore Turkey to greatness by the 100th anniversary of the republic in 2023, a largely economic task. Greatness is a status that a country of Turkey's size and "historical depth"—an allusion to Ottoman days—has been denied for far too long, Avci says in his Ankara office, where the customary black-and-white portrait of Ataturk still hangs over his desk.

Turkish foreign policy is more focused on goals in the Middle East

than at any time since the Ottomans. Negotiations to join the European Union, which Erdogan started in 2004, are all but abandoned, with fault for the failure shared by both sides. He and top officials accuse the U.S. and Europe of plotting against Turkey on an almost daily basis. "We have broken

feelings against our friends and allies," Avci says, "so we will change Turkey."

The new constitution would bring the law into line with powers that Avci says Erdogan has already assumed "indirectly," so he can deal with threats from Islamic State and secessionist Kurdish militants. "We are making a choice between chaos and stability," he says.

One former supporter says the president may have been boxed into the role of autocrat. Ertugrul Gunay, a former member of Ataturk's Republican People's Party who served Erdogan for five years as minister for culture and tourism, says the president's early effort to fit into the secular political system was genuine, but he's driven the nation into a dead end. "Erdogan is a pragmatist and an opportunist" rather than an Islamist ideologue, Gunay says. "He is defending himself" from any attempts to topple him, including those from corruption charges against his family that he suppressed in 2013, says Gunay. "The problem is that we cannot make progress on any given path just based on one man protecting himself."

Erdogan saw an opportunity with the 2011 Arab Spring. As head of the region's most successful economy and democracy, he could become "the leader of the new leaders" he saw emerging in former Ottoman territories, Gunay says. Many of these regimes shared his roots in the Islamist Muslim Brotherhood and its offshoots. So

Erdogan started supporting Syrian rebels fighting to topple President Bashar al-Assad after he crushed Arab Spring protests. Gunay says he tried to warn Erdogan that Assad wouldn't fall easily and that Turkey shouldn't get involved in a sectarian war on its border. "He told me it would be over in six months," says Gunay, who resigned over the issue in 2012. The following year, Erdogan was shaken ▶



◀ by what began as green protests in Istanbul. He saw them as an extension of the Arab Spring, this time aimed at him, Gunay says.

The president cracked down hard. Protests had erupted in Egypt at the same time, ending in a coup that deposed President Mohamed Mursi, the Muslim Brotherhood leader backed by Turkey. Erdogan organized huge rallies at home to prove he could summon people to the streets if the military attempted a coup, as happened last summer.

Gunay sees the president's latest actions and new constitution as threats to democracy. But these actions lack the vision of modern Turkey's founder. "So many compare him now to Ataturk, some to please him and some to criticize him," he says. "But Erdogan is no Ataturk."

—Marc Champion and Onur Ant

**The bottom line** Erdogan is tightening his grip in the wake of mass demonstrations, wars with Syria and the Kurds, a coup attempt, and recession.

Geopolitics

## Meet Venezuela's New Iron-Fisted No.2

▶ **A strongman with alleged ties to Iran is in line for the presidency**

▶ **"Maduro's dilemma is how to deal with the opposition"**

Facing economic collapse in his country and anemic public support, Venezuelan President Nicolás Maduro has drafted one of the nation's most controversial and feared politicians as his vice president. A young star in the socialist party that's ruled Venezuela for almost two decades, Tareck El Aissami, 42, was governor of Aragua state until Jan. 4, when Maduro tapped him as his chief deputy. The son of Syrian and Lebanese immigrants, El Aissami is under investigation by U.S. authorities for his alleged role in helping Iran and its proxy, Hezbollah, gain footholds in Latin America, as well as for drug trafficking and money laundering. He's viewed by both supporters and critics as cunning and skilled. "He's an operator who functions very well for this new

19.7%

Approval rating of Nicolás Maduro in December, down from 55.2 percent when he was elected in April 2013

stage of the revolution," says Rocío San Miguel, president of Control Ciudadano, a citizen watchdog that monitors the military and other security forces. "Maduro's dilemma is how to deal with the oppo-

sition while closing internal divisions."

Since assuming the presidency in 2013, Maduro has presided over a punishing recession, soaring crime, and widespread social unrest. The opposition's efforts to stage a recall referendum to remove him from office before his term ends in early 2019 have foundered, as the courts and the national electoral council are under the government's control. Analysts say that if things continue to decline, the main risk to Maduro may come from within the military, whose influence over key areas of the economy has increased vastly since the late Hugo Chávez launched his socialist Bolivarian Revolution at the turn of the century.

El Aissami's selection addresses both concerns. Those seeking to oust Maduro via constitutional means probably dislike El Aissami more and might hesitate to do anything that would catapult him into the presidency. Also, unlike much of Maduro's cabinet, the new vice president didn't serve in the military and could be less tempted to take part in an army-led coup.

In the weeks since his appointment, Maduro has granted El Aissami wide-reaching decree powers and chosen him to lead a "commando unit" to ferret out suspected putschists and treasonous officials. Among those the unit has arrested are a legislator from a hard-line opposition party and a retired general who broke ranks with the government years ago. Neither the office of the vice president nor the information ministry responded to requests for an interview or comment.

One of five children, El Aissami was brought up in the Druze faith. His father was a leader of the small, Venezuelan branch of the Ba'athist party, sold shoes and furniture, and played supporting roles in Chávez's failed 1992 coup attempt and, six years later, in his successful presidential bid. El Aissami, who has described himself as "radically chavista," helped lead a leftist student movement at university, where he studied criminology and law.

Charismatic and meticulous, El Aissami graduated with honors and has cultivated the alliances he made at university throughout his political career. "It's very clear to him who his friends are," says Miguel Contreras, a professor of criminology at the Universidad de Los Andes, who was a tutor to El Aissami. Members of El Aissami's student movement have been tapped for top posts in the administration and at the state oil company since he was appointed vice president.

After college, El Aissami rose through the chavista ranks. He served as minister of the interior and justice from 2008 until 2012 and was elected governor of Aragua that same year. From that perch, he helped obstruct efforts to recall Maduro. A court in Aragua annulled the referendum there, charging the opposition with collecting fraudulent signatures.

Officials at the U.S. Department of Homeland Security and the U.S. Drug Enforcement Administration have had El Aissami on their radar since at least 2011. The man whom the Venezuelan opposition has tagged "the narco of Aragua" has allegedly leveraged his vast political network to turn Venezuela into a hub for drug dealers and Middle Eastern extremists. U.S. investigators say El Aissami helped Islamic militants procure Venezuelan passports. Testifying before the House Committee on Foreign Affairs in 2015, Joseph Humire, executive director of the Center for a Secure Free Society, a Washington think tank, said El Aissami had woven a web of 40 front companies to move money in and out of Venezuela. "The network is less ideological and more of a service provider," Humire says in an interview. "It's not so much built on an ideological affinity to anybody but who wants to pay to play."

El Aissami has publicly



Investigation launched into the legitimacy of his wife's job

denied any drug ties, saying the allegations are little more than media slander, and he's offered to hand himself over to authorities if anyone can produce proof. Those close to El Aissami portray him as a man of integrity. "He'd rather self-immolate before negotiating his principles," says Hugo Cabezas, a former classmate and ex-governor of Trujillo state.

Some believe El Aissami's promotion will help trigger a more aggressive policy toward Caracas by the Trump administration. "This is a clear one-finger salute to the United States," says Roger Noriega, who served as assistant secretary of state for Western Hemisphere affairs under George W. Bush. "Certainly it creates a pretext for Trump to be much more decided in his response to Venezuela."

Some on Capitol Hill are already advocating a tougher line. In a Feb. 8 letter, a bipartisan group of 34 U.S. lawmakers called on Trump to "thoroughly investigate" El Aissami's conduct and activity with an eye toward sanctions. The letter read in part: "Decisive, principled action in response to unfolding developments in Venezuela as one of the first foreign policy actions of your administration would send a powerful message to the Maduro regime." —*Andrew Rosati and Fabiola Zerpa, with Ben Bartenstein and Noris Soto*

**The bottom line** Venezuelan President Nicolás Maduro has tapped a feared politician to help quash opposition to his rule.

## Surprises

### In France, an Election Veers Off the Rails

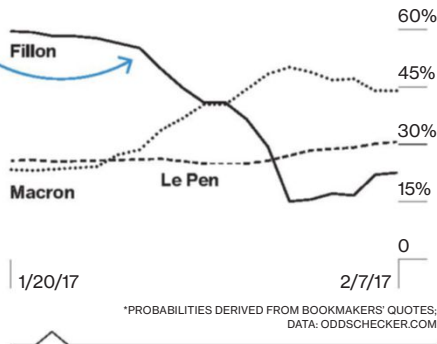
▶ **François Fillon was leading in January. No more**

▶ **"Can Macron embody the image of a president of a country ... at war?"**

If France's 2017 presidential election were a movie, there would be no shortage of possible titles. *Revenge of the Third Man* or *The Curse of the Front-Runner*. Don't like them? With two and a half months to go and the plot twists coming fast and thick, there

### France's Race

Probability of candidate winning French election\*



will be plenty of other possibilities.

The French go to the polls on April 23 to choose from a slate of at least five major candidates. If no one wins more than 50 percent—and no one ever has—then the top two face off on May 7. In the primaries held in November by the Republicans, the traditional center-right party, a late surge took François Fillon past former Prime Minister Alain Juppé and former President Nicolas Sarkozy. That victory made the 62-year-old Fillon the front-runner to be the next president. The most likely scenario seemed to be that he'd defeat the National Front's Marine Le Pen in the runoff as voters from other establishment parties coalesced around his candidacy to keep out the anti-European Union, anti-immigration Le Pen.

Fillon's campaign is now in turmoil. A newspaper reported in late January that his wife and two of his children were on the public payroll as his parliamentary assistants, earning a total of almost €1 million (\$1.1 million) over more than a decade. While it's not illegal for French lawmakers to hire family members, they must actually work for their pay. Prosecutors are trying to determine whether the *famille* Fillon held real jobs.

The Republicans are deeply split between those who say Fillon should stand his ground and clear his name and those who say he should step down. Adding to the confusion: The party has no procedure to replace a candidate so close to an election. At a Feb. 6 news conference, Fillon gave an impassioned defense of his wife's work and said he'd campaign with renewed vigor.

Fillon has plummeted in the polls, and though he seems to have halted the

slide, as things stand he wouldn't make the second round of voting. A poll conducted Feb. 7-8 by the Elabe survey group found that he'd run behind independent candidate Emmanuel Macron in the first round, with Macron getting at least 22 percent to Fillon's 17 percent. At 25.5 percent, Le Pen would take first place, but would be trounced by Macron in the second round, the poll found. That puts the 39-year-old Macron, who was minister of the economy from 2014 to 2016, in position to prevent France from becoming the first major European nation to fall to the populist wave that swept Donald Trump and Brexit to victory. A Le Pen win would almost certainly mean the end of the euro and maybe even the EU.

Macron's rallies are attracting crowds of believers in his vision of a plugged-in France open to the world and to new technologies. But he's under pressure to release a platform that goes beyond vision and gets into specifics. And with his technocratic background and belief in open borders, he's much shakier talking about national security in a country whose military is engaged in conflicts from the Sahara to Iraq and that's suffered more than 200 deaths at the hands of Islamic militants since January 2015. "Can Macron embody the image of a president of a country that's still at war, that's still facing a terrorism threat?" asks Bruno Cautres, a political scientist at Sciences Po in Paris. "That's Macron's big challenge."

At a rally in Lyon on Feb. 5, just two days after a soldier shot a machete-wielding attacker at the Louvre, Le Pen pushed the theme of Islamic terror and gave a Trump-like view of a defenseless France at the mercy of open borders. She got big cheers when she said Trump's win was a victory of the people. Macron also held a rally in Lyon that weekend and proudly said his program has no walls. Polls say most French reject Le Pen, largely because she wants to take France out of the EU. But with more than two months to go, there's still time for more surprises. —*Gregory Viscusi, with Carol Matlack*

**The bottom line** Front-runner Fillon's family scandal has made Macron the chief contender to defeat Le Pen in France's presidential election.

**B** Edited by Christopher Power and Cristina Lindblad  
Bloomberg.com

# Companies/ Industries

February 13 — February 19, 2017



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► Studios were set for a jump in China's quota on U.S. films this year. Then came President Trump

► "There is a disconnect between what Trump... might want to do and what Hollywood wants"

During a visit to Los Angeles five years ago this month, China's Xi Jinping gave Hollywood a much needed shot in the arm. The incoming Chinese leader agreed to ease an almost 20-year-old quota on American films, nearly doubling both the number of U.S. movies imported to China and Hollywood studios' share of the box-office receipts—a deal that temporarily settled a World Trade Organization case the U.S. brought against China.

There was an understanding that in 2017 the two nations would return to the table to increase the compensation to U.S. moviemakers and for China to open its market further. But now President Trump's rhetoric on China's trade practices has some executives worried that the film industry won't get its happy ending after all.

The Trump administration is creating uncertainty and "making everybody

very, very nervous," says Geetha Ranganathan, an analyst at Bloomberg Intelligence. The renegotiation "could be a casualty if he really wants to come down hard on it."

That would be bad news for movie companies on both sides of the Pacific, which have become increasingly interdependent since the 2012 accord. Chinese money has financed Hollywood blockbusters including installments of the *Transformers*, *Mission: Impossible*, and *Fast & Furious* franchises. Chinese conglomerate **Dalian Wanda Group** went on a buying spree to become the largest theater operator in the U.S. and also paid \$3.5 billion for its own American film production house, Legendary Entertainment. And while the U.S. box office is stagnating, China's market has been growing at an unparalleled rate—boosting global receipts for

the small number of American films shown there.

"The growth of China's film industry is important to China, just as the box office in China is important to U.S. studios," says Sanford Panitch, president of Sony's **Columbia Pictures**, one of six major Hollywood studios that stands to benefit from an eased quota. Last year, Columbia handled international distribution of China's all-time highest-grossing movie, *The Mermaid*, and struck a co-financing and marketing deal with Wanda. "We will hopefully see more U.S. films get into China," Panitch says.

It's easy to understand why Hollywood loves détente. Comcast's **Universal Pictures**, **Sony Pictures**, and Viacom's **Paramount Pictures** are among those that have deals with Chinese entities to fund their films and help market movies in China. Others

such as **Warner Bros. Entertainment**, in partnership with mainland companies, have started local-language productions. China since 2012 also has improved conditions for U.S. studios by cracking down on box-office fraud.

China accounted for 19 percent of global box-office sales in 2016, estimates IHS Markit, and has become a vital part of the success of the Hollywood blockbuster. **Walt Disney's Zootopia** was the highest-grossing international movie in China last year and the second-biggest release overall in the country, with \$236 million in ticket sales—23 percent of its global theatrical receipts, according to researcher Box Office Mojo.

China's meteoric box-office growth slowed to 3.7 percent in 2016, the first year of single-digit growth in a decade, according to researcher Artisan Gateway. The reasons include lower-quality local films and a lack of discounting from online ticket sellers. Still, the market averaged 35 percent annual growth from 2011 to 2016, says researcher EntGroup. That compares with a 2.2 percent average annual rate in the U.S., according to Motion Picture Association of America data. And China is still adding theater screens at a rapid rate—it averaged 26 a day in 2016—which allowed it to overtake the total in the U.S., says Artisan Gateway.

The number of American films released in China was more than expected in 2016, helping fuel a modest increase in China's box-office revenue. It rose to 45.7 billion yuan (\$6.7 billion), from 44.1 billion yuan in 2015, according to Chinese government data.

"If the quota were to expand, it will benefit our distribution and exhibition business, because there will be more quality films to work on," says Zhang Hui, board secretary of Shanghai Film, a subsidiary of state-owned **Shanghai Film Group**, which along with **Huahua Media** just signed a \$1 billion film-financing

agreement with Paramount. The money-losing U.S. studio says the deal will help it pursue Chinese co-productions. Such joint efforts allow U.S. studios to keep 43 percent of their ticket sales earned in China, more than the 25 percent box-office share American studios typically get for their films in the mainland.

The chances of a deal to raise the quota looked promising last year. In October, Zhang Hongsen, head of China's film bureau, said more foreign films would enter China starting in 2018 and that local titles would face more challenges, according to Chinese media reports.

But in recent months, a growing number of U.S. congressmen have called for greater scrutiny of Chinese companies' hunger for American media assets.

A handful of planned congressional visits to China this year are oversubscribed, says Chris Fenton, who helps organize the trips as a trustee of the U.S.-Asia Institute. Interest is so strong that the institute may add a trip solely focused on media and entertainment industry issues, says Fenton, who's also president of DMG Entertainment Motion Picture Group.

Under the previous agreement, if this year's consultations fail to produce a deal by Jan. 1, 2018, the U.S. could pursue procedural action against China in the WTO—a step many in the industry want to avoid. "We look forward to working with the administration to continue building on this progress and supporting creativity," Joanna McIntosh, an executive vice president at the MPAA, said in a statement.

It's unknown just how high a priority Hollywood's interests will be for the new administration. "There is a disconnect between what Trump and his appointees"—Robert

Lighthizer, set to be U.S. trade representative, and Peter Navarro, head of the newly formed White House National Trade Council—"might want to do and what Hollywood wants them

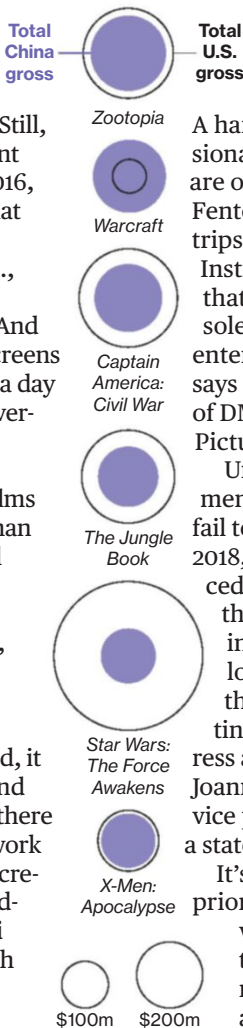
to do," says Stanley Rosen, a University of Southern California political science professor who studies the relationship between the mainland and the U.S. film industry. "They don't want the government to push China so much that Chinese investment in Hollywood

dries up or is blocked. So it's kind of a delicate dance." —*Anousha Sakoui, with Jeanne Yang*

"The growth of China's film industry is important to China, just as the box office in China is important to U.S. studios."  
—Sanford Panitch, president, Columbia Pictures

**The bottom line** China generates about 19 percent of the film industry's global box office. That share could rise if its quota on U.S. films is loosened.

### China Is Crucial For Many Films



### Food

## Big Meat Braces for A Labor Shortage

► Refugees help satisfy the need for low-skilled workers

► "It remains a challenge to fully staff the plant"

Word of President Trump's executive order barring the entry of international refugees shocked Fort Morgan, a town of 11,000 on the snowy plains of Colorado, some 80 miles northeast of Denver. Many of the workers at a Cargill Meat Solutions plant that's the town's largest employer emigrated from Somalia and Myanmar and had been waiting months, if not years, for relatives to join them. Now they're afraid that reunion might never happen. As a result, the plant in Fort Morgan and other meatpacking plants in the U.S. that have dozens of openings may have to scramble to find a new labor pool.

"The refugees that have family members, they're worried that they're never going to be able to come here," says Ryan Gray, program director in the Greeley, Colo., office of Lutheran

## Companies/Industries

◀ Family Services Rocky Mountains, a faith-based group that helps refugees and asylees obtain jobs, housing, and other services. Of the almost 450 individuals Gray's office helped resettle last year, about 40 percent got jobs at the **Cargill** plant in Fort Morgan or a rival **JBS** facility in Greeley.

Trump's decision to sharply curtail the number of refugees admitted into the U.S. may lead Big Meat to recalibrate its recruitment practices. While a federal court has temporarily suspended the administration's four-month ban on new arrivals, not affected is Trump's plan to slash refugee admissions from 110,000 to 50,000 in the current fiscal year.

Refugees have been a fixture within the meat processing workforce since 2006, when immigration officials under President George W. Bush raided plants in several states, leading to the arrest of about 1,300 undocumented workers.

Companies "realized that their business model of hiring undocumented people was causing problems for them," says Lavinia Limón, chief executive officer of the U.S. Committee for Refugees and Immigrants, a resettlement organization. "So they

**12%**  
Share of workers at  
Cargill's Fort Morgan  
plant who are East  
African immigrants

moved to the refugee population."

Immigrants hold 35 percent of the 441,000 animal slaughtering and processing jobs in the U.S., according to the U.S. Census Bureau. Census data don't specify what share of those immigrants are refugees; the Washington-based Migration Policy Institute estimates it's about 3 percent. Cargill spokesman Mike Martin says about 12 percent of employees at Fort Morgan hail from East Africa.

In statements, **JBS** and **Tyson Foods**, two heavyweights in the \$29.7 billion U.S. processed meat industry, said they are proud of their diverse workforces. Cargill CEO David MacLennan in a Feb. 3 online column called for "smart, inclusive policies on trade and immigration." Barry Carpenter, CEO of the North American Meat Institute, a trade group, issued a statement on Jan. 27 that said, "As the administration pursues changes to the nation's refugee policies, we hope it will give careful consideration to the ramifications policy changes like these can have on our businesses and on foreign-born workers."

Cargill's plant in Fort Morgan pays its workers a starting hourly wage of \$14.90—60 percent higher than Colorado's minimum wage—and offers health care and other benefits. Even so, a company spokesman says, "It

remains a challenge to fully staff the plant." Eric Ishiwata, an associate professor at Colorado State University who studies the refugee meatpacking workforce in the area, says, "The plants have no choice but to recruit workers outside the region."

The issue took on new urgency after Dec. 12, 2006. On that day, U.S. immigration agents staged simultaneous raids on meat processing plants in six states—including one in Greeley. In the aftermath, area meatpackers began recruiting workers from Minneapolis, a city with a large population of Somali refugees. Almost overnight, Greeley was hosting more than 1,000 immigrants from East Africa who spoke little or no English and needed assistance finding housing and enrolling their children in school. Local officials reached out to the Colorado office of Lutheran Family Services, one of hundreds of local nonprofits across the U.S. affiliated with private refugee resettlement agencies that are contracted by the U.S. Department of State to help new arrivals become economically self-sufficient. The group immediately dispatched case managers to Greeley and within a year had set up a permanent office in town.

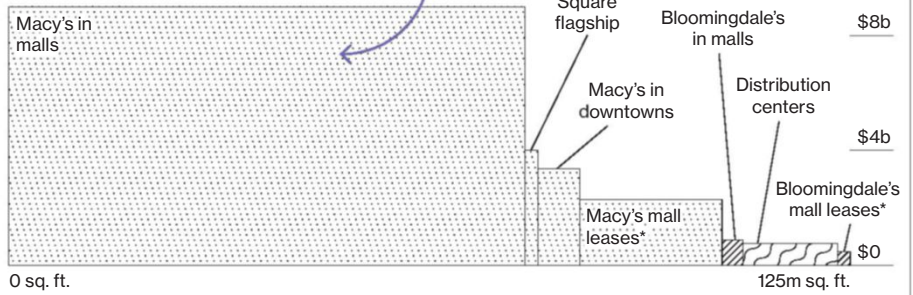
Limiting refugees alone may have a "marginal impact" on the meatpacking industry in the short term, says Randy Capps, director of research for



**\$14.90**  
Starting hourly wage at  
the plant, 60 percent  
higher than Colorado's  
minimum wage

The 407 mall stores owned by Macy's total 61 percent of the chain's square footage

Macy's Biggest Value: Real Estate?



plus its eponymous stores north of the border, is believed to have held early acquisition talks with the retailer, according to a person familiar with the matter.

HBC is borrowing from the Macy's playbook but with a twist. Chairman Richard Baker has focused on making money from the often prime real estate that merchants own. The idea is to sell the land and buildings to a real estate investment trust, which then collects rent from the stores. The REITs attract investors who want the stream of rents and potential property appreciation prime store locations and malls can provide.

HBC bought Saks in 2013 and later formed two joint ventures with **Simon Property Group** and **RioCan Real Estate Investment Trust** valued at about C\$2 billion (\$1.5 billion). Then in 2015 it agreed to buy the Galeria Kaufhof chain owned by Germany's **Metro** for €2.8 billion (\$3 billion).

If the two department-store companies strike a deal, HBC may fold Macy's assets, worth about C\$26 billion, into HBS Global Properties, its joint venture with Simon, says Steven Salz, an analyst at M Partners. Says Poonam Goyal, an analyst at Bloomberg Intelligence: "If you think of HBC, it's a retailer. But it's also an underlying REIT, and Macy's has plenty of real estate opportunities."

The REIT strategy has been tried repeatedly since activist investor Bill Ackman in 2008 unsuccessfully pushed **Target** to spin off properties he figured could fetch \$5.1 billion. Hedge fund manager Eddie Lampert, chief executive officer of **Sears**, put 235 Sears and Kmart stores into a REIT in 2015. The same year, activist Starboard Value pushed **Darden Restaurants**, which owns Olive Garden and other brands, to spin off 430 properties into a REIT. Then it encouraged Macy's to do the

same. Starboard estimated in 2015 that Macy's property accounts for about \$21 billion of the department-store chain's \$29 billion total value.

A deal could give HBC access to prime locations in the U.S. as well as exclusive brands it could introduce to Canada. Adding the stores to HBC's REIT would also give it a more diversified tenant base. Baker has said he's seeking to "fatten up" the REIT's store portfolio before taking it public.

Dirk Aulabaugh, a managing director of Green Street Advisors, says REITs can provide a chance for struggling merchants to take advantage of record real estate values. They can then use the cash they get from selling property to a REIT to invest in their core retail business. "I don't think that it is just a trend of the day," Aulabaugh says.

Such deals can pay off. The stock of **Seritage Growth Properties**, the REIT started by Sears in 2015, has gained 13 percent since its debut, while Sears shares have plunged 77 percent over the same period. But long-term bets on retail real estate could be risky. America has too many stores, and more than 10 percent of U.S. retail space—almost 1 billion square feet—may need to be closed, be converted to other uses, or charge less rent in coming years, according to real estate data provider CoStar Group. That could leave some REITs in trouble if they load up on losing properties or can't find tenants, or if real estate values plummet.

"It's an evolving picture," Aulabaugh says. "The larger retailers are shrinking their footprint. The question is, how far do they shrink it?" —*Lindsey Rupp*

**The bottom line** Macy's became the No. 1 department-store chain via acquisitions. Now Hudson's Bay may use Macy's real estate to thrive.

**B** Edited by James E. Ellis and Cristina Lindblad  
Bloomberg.com

U.S. programs at the Migration Policy Institute. Yet companies remain vulnerable to any actions that could further restrict the availability of low-skilled labor, he says: "It is one of the industries that stands the most to lose, depending on where the administration's immigration policy goes in the future."

Ann Corcoran, a Trump supporter who authors a blog called Refugee Resettlement Watch, says meatpackers would draw more native-born applicants if they raised their wages. She acknowledges that could lead to higher prices for consumers, but she says she and others could adapt: "I would be happy to eat less meat." —*Lauren Etter and Shruti Singh*

**The bottom line** U.S. meatpackers that have become dependent on refugee labor may have to raise wages to recruit workers.

Chain Stores

What Hudson's Bay Likes About Macy's

- ▶ Property may be the retailer's most valuable asset
- ▶ "Macy's has plenty of real estate opportunities"

**Macy's**, the largest U.S. department-store chain, got to its size by gobbling up rivals—regional chains such as Kaufmann's, Marshall Field's, Abraham & Straus, and Filene's. By 2005, after mergers with archrivals Federated Department Stores and May Department Stores, it slapped the Macy's name on its regional stores and got ready for the benefits that being the biggest kid on the block seemed sure to bring. It's still waiting. In January, Macy's reported disappointing holiday sales and announced a plan to cut 6,200 jobs. That news came months after it said it would shutter 100 of its 730 stores and jettison 4,000 workers—evidence that size helps only so much in an industry slammed by the internet and the falloff in mall traffic.

Now Macy's itself may be the target of a department-store consolidator. Canada's **Hudson's Bay** (HBC), owner of the Saks and Lord & Taylor chains,

## GE's Jeff Immelt

Since 2001, Jeff Immelt has shepherded General Electric through market tumult and political upheaval, as well as technological change. The chief executive officer of General Electric spoke with Bloomberg Editor-in-Chief John Micklethwait about Donald Trump's agenda, the slowdown in globalization, and the digitalization of GE.

### **Trump has been very vocal about the behavior of American multinationals.**

I think President Trump tweeting and calling people out—there's nothing wrong with that. At the end of the day, each of us in our own way has to navigate our own companies through this world we live in. I just got back from a trip outside the United States, and I would say to our customers, "Look, you have to trust me and GE to be able to be good citizens in the U.S. and still support our business around the world." We will figure that out. That's my job.

### **And the travel ban?**

I sent something out to all our employees. We have a lot of people who live outside the U.S., and they're concerned. We said, "We understand the context, safety. But we think there's maybe better ways to do it." We're not opposed to speaking out on that. Then the president sent out an executive order that said two regulations have to be canceled for every one that's added. I'm all for that, right? So, too frequently, we're sticking on all the negatives without standing back and saying, "There are some directions he's going in that are going to be very good for business." And we just have to navigate between the two.

### **Something like 62 percent of your workforce comes from outside the U.S. Don't bans stand in your way?**

From a business standpoint, we're running the play the president has outlined. We're a huge exporter. We're a small importer. And therefore, I think it's up to me to speak about how important it is that the U.S. has good relationships with our potential customers around the world. We have people on the ground that are Iraqis or Saudis. And they can help us with our local customers, provide that local face. Philosophically, we believe in trade, in the free flow of goods. Inherently, we don't think things like walls are good ideas. At the same time, I would say that

there's nothing wrong with President Trump wanting to add manufacturing jobs in the United States. The president of China wants to add manufacturing jobs. The president of Mexico wants to add manufacturing jobs.

### **You have, I think, \$1.4 billion in contracts with Iraq. Is that under threat?**

That's well-financed, well-structured. The teams are in place, and we've got a very strong local team in Iraq. Most of the

products come from the United States. I think those projects will go forward. But again, we prefer a time period where you've got good communications, good contacts between our government and governments around the world, while understanding that security is still a challenge. If we want to create jobs in the United States, we need relationships around the world. That's where business-people can communicate with the president to say, "Let's have more friends."





**On regulation, some say rules and complications actually give an advantage to large companies.**

Regulations do punish small business much more than big companies. We can hire as many lawyers as we need to, right? But it can be hard for a small company.

**What would you like to see deregulated?**

Let me start with taxes. You basically have an economy that is in what I would call an investment recession. Companies aren't reinvesting in capital expenditures in the U.S. That's been going on for a long time. Tax reform is one way to encourage the right behavior. Insofar as our tax policy is 30 or 40 years old, if we could get some improvement, it's going to help GE, but it's going to help everybody broadly to simplify the code. The ability to repatriate capital from around the world—just be like Germany or the U.K. or Japan. That would be great. That would be amazing. If the president can't act on tax reform with a Republican Congress, that's a big miss for where we are right now.

**GE may be America's most global company. Is the talk about tariffs affecting your trade outlook?**

We're a \$22 billion exporter from the U.S. And we import \$5 billion or \$6 billion. We move stuff around the world. You know, there are two times in business when you really feel great. One is when everything's perfect. Everybody loves each other, everybody gets along. And the other one is when everything's in chaos, but you're better than everybody else. We can navigate whatever system is put in front of us. But we would rather have the big trade deals.

**Does globalization now seem to be going in reverse?**

The essence of globalization had been changing long before Brexit and long before President Trump. The financial crisis, the role of China in the world—there's probably four or five things that are really seismic changes that have led to this, this Bretton Woods version of globalization, breaking down into more of a multi-local world. People who see globalization from 30,000 feet in

a think tank don't know a damn thing about the way it really works. Today it's country by country, deal by deal.

**You actually have a role to play in this administration. You're on Trump's manufacturing council.**

I was also on President Obama's jobs council, right? Believe me, I didn't agree with everything Obama said, either.

**Now that you've experienced the joys of Brexit, you get the possibility of a Marine Le Pen win in France. Are you confident about the future of Europe?**

Europe is oversold, in many ways. People have been so dark on Europe, because they need to differentiate. Some of the most productive workforces we have in the world are in Italy and France. We can export out of Europe all day long. We've never looked at Europe as Europe. We know the difference between France and Germany. When we were doing the Alstom [energy assets] deal in 2014, we were stopped in Paris by a set of decisions that basically violate Brussels's rules. We were kind of sitting there, an American company sucking our thumb in Paris. We had to fight our way out of Paris. Then we had to fight our way out of Brussels. So we've learned how to manage paradox as a company. We've learned how to manage subtlety.

**Can we talk about GE's transformation? You make a lot of noise about software. Can you elaborate?**

It wasn't an initiative to be in the software business. It was more the recognition that our new jet engines have a couple hundred sensors on them providing this stream of data. We made the decision that we want to model that data on behalf of our customers and not relegate it to somebody else. That led

**“Philosophically, we believe in trade, in the free flow of goods. Inherently, we don't think things like walls are good ideas”**

us back into the chain of adding software talent, building a software platform. Our theory is that every industrial company is going to have to be a digital and software company. We wanted to lead that, and that's how we've invested.

**Is the management ethos still at the core of GE?**

Management is key. You always have to be good at culture and leadership. But one of the things today is, nothing's general anymore. When I first became CEO, we were in pet insurance, media. That's too hard today. You've got to have this combination of depth and breadth. And you've got to have managers that are maybe more technical. Or else you can't pick the right ideas. You can't drive the kind of change that's required.

**How have you changed the company?**

I think the company's more technical. It's more global. It's more focused on the customer. Those are the main things. When I became CEO, we were 70 percent inside the United States. Now we're 70 percent outside the U.S.

**Does the prospect of the U.S. starting a trade dispute with China worry you?**

It does. Not just in the GE context. There's no good case for the two biggest economies on earth being in a trade war. A bilateral relationship is important—for the whole world. The Chinese are good. They have a worldview, just like we do. The president is smart enough to understand that having some kind of day-in-and-day-out relationship between the U.S. and China is critical. He's going to see that.

**If you look at Brexit, at Trump's win, does it seem like the people most fed up with the world are the ones a global company like yours can help?**

People didn't feel the system was working for them, whether that was because of technology or wages. I'm not sure I can make everybody feel differently about globalization. What's up to us is to navigate the system as it exists today but at the same time to say, “Look, if we want to create more jobs, we shouldn't alienate everybody around the world.” **■**

## Trump's New Math On Regulations

**Benefits**

**Costs**



On Jan. 30, Donald Trump did something that every U.S. president has done since Jimmy Carter: He directed the federal government to reduce the burden of regulation. As he signed an executive order in the Oval Office, surrounded by small-business owners, Trump declared that it would lead to “the largest-ever cut by far in terms of regulations.” In signing it, Trump made good on one of his core campaign promises—to roll back federal regulations that he repeatedly blamed for costing the U.S. economy \$2 trillion in annual growth.

The intent of Trump’s order isn’t new. The mechanics are. Rather than weigh the pros and cons of individual rules as they come, it directs federal agencies to adhere to a simple trade-off: For every new regulation finalized, two old ones must be phased out. The order also says agencies can’t create new net costs for companies or consumers. This sets up a sort of regulatory cap and trade, in which agencies can swap regulations with each other to stay under the cap.

The order, and the explanatory memo that accompanied it, stand apart from the consensus shared by the past five administrations on how to calculate the impact regulations have on society. As they decide on which rules to keep and which to throw away, federal agencies are instructed to consider only the costs of regulation. Regulations may have benefits, but for the purposes of the executive order, they’re irrelevant.

This flies in the face of decades of regulatory cost-benefit analyses done by the federal government. Jimmy Carter created a White House office to measure the effect of regulation. Ronald Reagan added an executive order saying that the costs of any “significant” new rule—defined as greater than \$100 million—couldn’t outweigh its benefits. The federal government currently follows a similar rule signed by Bill Clinton, using methods refined by George W. Bush. And an executive order from Barack Obama encouraged agencies to look back to see how their anticipated pros and cons had stacked up in real life.

By their nature, the costs of a

▶ Trump’s cost-benefit analysis is all cost and no benefit

▶ “These effects are extremely difficult to put a dollar amount on”

regulation are easier to calculate. They show up more quickly and often impose an identifiable expense on either a business or a consumer. A “direct” cost is what a manufacturer would pay, for example, to buy mandated safety equipment or to complete paperwork for a requirement. These are passed on to customers as higher prices, which might in turn reduce demand for what the company sells. A regulation can have an indirect cost, too, raising component prices for other businesses or making it too expensive for startups to complete their paperwork.

The benefits of regulation are far harder to determine. They're more diffuse and accumulate over a longer time, often in ways difficult to track or quantify. A regulation on air quality, for example, can reduce unnecessary death or sickness. To calculate what that's worth in economic terms, regulators rely on what they dryly refer to as “VSL”—the value of a statistical life. A regulation can improve quality of life, which in turn can be quantified through “revealed preferences,” such as how much people are willing to pay to live farther away from the noise of a highway or emissions of a factory.

Cost-benefit analysis was designed as an advisory tool. And for individual regulations, the U.S. is better at it than any other country, says Andrea Renda, a visiting fellow at the Kenan Institute for Ethics at Duke University. In 2013 he authored a 222-page study on cost-benefit analysis for the European Union. The danger, he says, comes when countries rely too much on calculations alone: “It's important to avoid spurious accuracy, because it looks like science. It's not science.”

Thomas Hopkins, a professor at Rochester Institute of Technology who worked in the Reagan White House on regulatory costs, says: “Some of these effects are extremely difficult to put a dollar amount on.” Some benefits, he

says, need to be described qualitatively, rather than with numbers, and put in another column altogether. “I don't know then how the decision-maker is going to proceed, but that other column shouldn't be wiped off the ledger.”

Trump's focus on cost alone didn't come out of nowhere. Republicans have long used “job-killing” to describe the word “regulation.” The disdain for federal rules is one of the rare areas of pure accord that exists between Trump and Republicans in Congress. As for the \$2 trillion of economic costs Trump cited while campaigning, the number comes from a 2014 report for the National Association of Manufacturers by Mark and Nicole Crain, husband-and-wife professors at Lafayette College in Easton, Pa. The number the Crains produced isn't a bottom-up sum of regulatory costs; rather, it's a top-down estimate derived from comparisons between the U.S. and other developed countries on regulatory quality and economic performance. The estimate reflects only the costs of regulation. “We didn't do benefits,” Nicole Crain says. “Costs are hard enough.”

The Crains say the current U.S. approach fails to either measure the costs of regulations below \$100 million or account for the compounded burden of many different regulations on a single company. “By putting out an estimate,” says Mark Crain, “it challenges people to say, ‘If you don't like that one, what's your number?’”

Renda says it's impossible to affix a dollar amount to any total estimate of regulatory impact. Is the \$2 trillion a back-of-the-envelope calculation? “Probably, it's on the hidden part of the envelope,” he says. “It's farther than the back of the envelope.” Renda adds that a single top-line number also doesn't help figure out which regulations should go.

Versions of Trump's one-in-two-out rule have been tried in Germany, the Netherlands, and the U.K. These other attempts used relatively straightforward accounting, simply adding up the capital and labor costs for a company to comply with a rule. A memo from Trump's Office of Management and Budget tells agencies to look at the

“opportunity cost of regulation”—sales and economic growth that a new regulation might prevent. “They have to phone their U.K. colleagues and Dutch colleagues, the countries that have a decade of experience in this,” Renda says. “There's going to be a lot to learn.”  
—*Brendan Greeley*

**The bottom line** The benefits of regulations have always been tough to calculate. Trump's apparent approach is to ignore them.

## K Street

# How to Lobby But Not Be a Lobbyist

► **Under Trump's pledge, former officials can still peddle influence**

► **Loopholes in its wording “are a huge disappointment”**

Each one of Donald Trump's 4,000 political appointees has to sign an ethics pledge agreeing not to lobby the agencies where they work for five years after leaving. That compares with a two-year ban Barack Obama's appointees had to sign. Yet ethics specialists say a subtle tweak in the language of Trump's order may open the door to more “shadow lobbying,” or influence peddling that doesn't quite meet the official definition of lobbying.

Under Obama, former appointees were banned from “communicating” with employees of their former agencies. That behavior included sending e-mails, having phone conversations, attending or arranging meetings with lawmakers, or even attaching one's name to a particular interest group's cause. Trump's ban instead focuses on “lobbying activities,” language that may narrow the scope of what is forbidden.

Current law defines a lobbyist as someone who spends at least 20 percent of his or her time representing clients' interests to decision-makers. Since 2007, when Congress last tightened the rules for K Street, the number of registered

**For every new regulation put in place, Trump wants federal agencies to get rid of two old ones**

## Law Pushing Back on Public Dissent

As political activists take to the streets in the largest numbers since the 1960s, Republicans in statehouses across the U.S. are devising laws to regulate public dissent. They say free speech doesn't cover the kind of violence that's accompanied recent protests, pointing to specific incidents, including disturbances on Inauguration Day in Washington, D.C., that led to 217 arrests. Critics say increasing the punishment for obstructing roadways, as several bills aim to do, is overreach. "I've never seen antiprotest legislation in states anywhere near as large as we're seeing this year," says Lee Rowland, senior staff attorney for the American Civil Liberties Union. —*Elise Young and Janan Hanna*

**Intimidation**

Bill would expand a criminal statute that now applies only to current officials



← **North Carolina:** Former Governor Pat McCrory, who signed a law restricting transgender access to public bathrooms, was chased down an alley in Washington on Inauguration Day by

protesters calling him a bigot and chanting "Shame!"  
 → **Proposed bill:** Anyone who threatens, intimidates, or retaliates against a former official for carrying out the duties of office would face up to five years in jail.

**Blocking commerce**

The bill would label some protests as "economic terrorism"



← **Washington:** Fossil fuel opponents blocked access to oil refineries, kayakers slowed down water traffic, and campers pitched tents on train tracks, while others set fires in downtown Olympia.

→ **Proposed bill:** Protesters who threaten public safety, block transportation, interfere with commerce, or damage property would be open to prosecution.

**Roadway deaths**



← **North Dakota:** Construction of the Dakota Access pipeline drew thousands of protesters, some of whom burned equipment and built barricades across state highways.

→ **Proposed bill:** Motorists who inadvertently injure or kill people deliberately obstructing traffic would be considered not guilty and exempt from liability for damages.

**Police costs**

Local police costs were at least \$2.5 million



← **Minnesota:** The shooting death of Philando Castile by a police officer during a traffic stop prompted peaceful protests that turned into violent riots, leaving 21 police officers injured.

→ **Proposed bill:** This proposal would allow government agencies to sue protesters to recover the costs of police response. It applies to those convicted of unlawful assembly or public nuisance.

**Masks**

Ferguson riots cost local taxpayers \$5.7 million in police overtime and property damage



← **Missouri:** Arson, gunfire, and looting broke out in response to the fatal shooting of Michael Brown, an 18-year-old black man, by a white police officer in Ferguson.

→ **Proposed bill:** Demonstrators would be arrested for concealing their identity with a "robe, mask or other disguise," including gas masks worn to avoid the effects of pepper spray.

**Blocking highways**



← **Iowa:** On Nov. 11, three days after Donald Trump's election, more than 100 protesters gathered on Interstate 80 in Iowa City and shut it to traffic for almost 30 minutes.

→ **Proposed bill:** This measure would make obstructing a highway a felony, punishable by as much as \$7,500 and five years in jail.

◀ Lobbyists in Washington has fallen to about 11,100 from 14,800, according to the Center for Responsive Politics. But that's no longer an accurate measure of the influence industry in Washington. A 2012 study of about 31,000 government-relations professionals found there were at least twice as many people in Washington working to influence federal decision-making as there were registered lobbyists.

Instead of registering as lobbyists, former officials, including House Speaker John Boehner and Jim Messina, the deputy chief of staff in Obama's White House, now become "strategic advisers" for corporate clients. Another way to avoid being labeled a lobbyist is by using the "Daschle rule," named after former Senate Majority Leader Tom Daschle, a Democrat from South Dakota. It allows former officials to arrange meetings for clients with federal decision-makers without registering as lobbyists—provided they don't advocate their clients' positions when arranging the meetings.

With his campaign slogan "drain the swamp," Trump promised to expand the definition of lobbyist and to "close all the loopholes that former government officials use by labeling themselves consultants and advisers." Trevor Potter, president of the Campaign Legal Center, which advocates for stricter limits on money and politics, says the current wording of Trump's ethics pledge leaves such influence peddling "unaddressed." Trump's order contains exceptions to the definition of lobbying that "are a huge disappointment," says Scott Amey, general counsel of the Project on Government Oversight, a non-partisan ethics group. Still, Amey says, the five-year ban "exceeds what we had for the past eight years."

Paul Miller, president of the National Institute for Lobbying & Ethics, a professional association for K Street practitioners, says Trump's five-year ban is unconstitutional and amounts to "out-right discrimination against a class of people based solely on their profession." On Jan. 30, Miller's group unveiled a proposal aimed at closing loopholes used to get around registering as a lobbyist. Under the plan, firms involved in lobbying that don't directly contact lawmakers, including public-relations shops and pollsters, would

have to register and disclose their activities and fees. Former officials would have to register if they arrange meetings, even if they don't advocate for their clients. And the 20 percent rule would be replaced by a requirement that anyone who spent 10 hours lobbying and generated fees and expenses of \$5,000 or more over three months must register. —*Bill Allison and Ben Brody*

**The bottom line** Trump's ethics pledge institutes a five-year ban on lobbying for appointees, but it may also open the door to more shadow lobbying.

## Diplomacy

### China Makes Nice With Ivanka and Jared

▶ Beijing seeks to cultivate Trump through his family

▶ "There is no obvious China point person in his cabinet"

As countries around the world try to figure out how to influence the new U.S. administration, China is going straight to the top: President Donald Trump's immediate family. In particular, Chinese officials are hoping to forge a closer relationship with the president's daughter Ivanka Trump and her husband, Jared Kushner, a senior White House adviser.

The strategy was on full display on Feb. 1 at the Chinese Embassy in Washington, where Ivanka and her daughter, Arabella, who was dressed in red for the Lunar New Year, met with Chinese Ambassador Cui Tiankai. Ivanka later posted a video of Arabella singing a song in Mandarin, further helping to quiet criticism after her father broke with convention by not sending a personal New Year's greeting.

Ivanka's very public meeting came after extensive behind-the-scenes discussions between Cui and Kushner, which have been positive, according to a White House official who asked not to be identified because the meetings were private. In bypassing traditional diplomatic channels such as the U.S. Department of State, China is looking to avoid a trade war or military confrontation after Trump signaled a willingness to challenge Beijing's red lines

on Taiwan and the South China Sea.

The reaction to Ivanka's New Year's visit in the Chinese media marked a change from largely defensive responses to previous Trump remarks. The *Global Times*, a Communist Party-run newspaper known for its nationalist tone, said Ivanka helped balance her father's "harsh posture" and that her appearance "could be invigorating to the China-U.S. relationship."

Still, Trump has plenty of staffers urging a harder line against China, including strategist Steve Bannon and trade adviser Peter Navarro, whose books include *Death by China: Confronting the Dragon—A Global Call to Action*. Criticism of China over trade policy was a centerpiece of Trump's campaign. Chinese President Xi Jinping has responded by urging countries to reject trade wars and protectionism, most notably in a speech to the World Economic Forum in Switzerland last month.

So far, Trump and his family have been in closer touch with Chinese businesses than with officials. Trump met last month with Jack Ma, chairman of **Alibaba Group**, to discuss creating jobs in the U.S. The Chinese government has been "testing and trying" different ways to avoid a major confrontation with the U.S. based on miscalculations, says Wang Fan, director of China Foreign Affairs University's Institute of International Relations. Ma's visit was an example of that approach, he says.

It's unclear what effect the moves might have on Trump himself. He still hasn't set up a call with Xi despite having spoken with more than a dozen world leaders since his inauguration. Trump's choice for ambassador to China, Terry Branstad, continues to serve as governor of Iowa, following a strict hands-off policy on China matters until after he's confirmed by the Senate. Until then, Ivanka and Kushner may fill the vacuum. "At this moment, there is no obvious China point person in his cabinet," says Wang. "All the previous China hands have gone." —*Bloomberg News*

**The bottom line** Ivanka Trump and Jared Kushner are emerging as key players in the tenuous relationship between China and the White House.

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Human pros losing a war of attrition against AI player Libratus at the Rivers Casino in Pittsburgh

## The Bot That Bluffed Me

► AI breakthroughs may make it tougher for humans to compete in online poker matchups

► “There was the idea that this game would be safer for much longer from these machines”

Four of the world's best poker pros spent most of January at the Rivers Casino in Pittsburgh, losing. They'd show up before 11 a.m. in stylish sneakers and sweatpants to sit in front of computer screens. Each of the four was supposed to play 1,500 hands of heads-up, no-limit Texas hold 'em online before going back to the hotel for the night. This often meant working past 10 p.m. Over the course of the day, Starbucks cups and water bottles piled up next to the players' keyboards. Chipotle bags lay at their feet.

Their opponent was a piece of software called Libratus, running at the Pittsburgh Supercomputing Center in Monroeville, a nearby suburb. Libratus played eight hands at once, two against each opponent. The AI

played differently from humans—pausing to think forever when little money was at stake, then making huge, sudden wagers of irregular amounts at odd intervals. Coming from a human, behavior like that would be irritating, reckless, and, over the long run, expensive. But Libratus is inhumanly good.

When the 20-day tournament at Rivers ended on Jan. 30, the pros had lost \$1.8 million to the artificial intelligence designed by Tuomas Sandholm and Noam Brown, computer scientists at Carnegie Mellon University. (The players didn't actually have to pay up.) Earlier in January, University of Alberta researchers published the results of a contest in which their own AI software, DeepStack, beat 11 poker pros in no-limit hold 'em. DeepStack played by

the same specialized rules as Libratus—one-on-one play with the chip stacks reset after each hand—and its margin of victory was triple the other bot's.

“It's the toughest opponent I've ever played, and I'm not just being generous,” poker pro Jason Les said, of Libratus, during the last week of the Rivers event. “It's stomping us out.”

While Sandholm and Alberta professor Michael Bowling disagree over who should get the credit for being the first to beat top human players, they agree AI has crossed a threshold. Bots have been able to beat mediocre poker players before, but now they've proved capable of besting the top ones. For more than a decade, the academic community has seen this as a challenge. Unlike chess and checkers, ►



Sandholm

Brown

◀ poker includes the element of chance and players don't know which cards their opponents have. So-called imperfect information games require a more human kind of intelligence—the ability to deceive an opponent without being deceived in turn.

“It has the reputation of being more of an art than a science,” says Adam Kucharski, author of *The Perfect Bet: How Science and Math Are Taking the Luck Out of Gambling*. “There was the idea that this game would be safer for much longer from these machines.”

Sandholm and Bowling say beating top human players was simply another threshold for AI. “These algorithms are not for poker,” says Sandholm, a former top-ranked windsurfer. But elements of programs like Libratus or DeepStack are migrating into the wild. Basic poker bots have been playing in online cash games for years, and several of Bowling's students have gone to work for online poker companies. At least one has sold bots used to play online.

Former Alberta researcher Richard Gibson was finishing up his Ph.D. in 2013 when a group of professional players approached him, offering to pay for software they could use in training. (Part of the deal was that they remain anonymous.) Gibson says he made about \$100,000 on that project in its biggest year, and his clients paid an additional \$20,000 to \$30,000 in fees related to the computing power it took to run the software.

Gibson founded **Robot Shark Gaming**, which builds AI programs for studying and playing strategic games, as

well as a fantasy sports company called **SportsBid**. In one case, he says, a client paid him tens of thousands of dollars to spend about six months building a basic poker bot. He didn't ask much about why—and didn't want to know—but the design pointed to a specific use. “My clients wanted a standalone thing they could load onto their laptop,” he said. “I imagine they're trying to play online with them.”

The University of Alberta research evolved from work on an unbeatable checkers bot, says Darse Billings, who helped start the program in the late 1990s and now heads poker strategy at online gaming company **Gamesys**. To account for the chance and hidden information of poker, the researchers developed a strategy based on a game theory concept known as a Nash equilibrium. The key is to play the strongest potential hands while remaining unpredictable. “When you bet your strong hands, there needs to be some doubt,” Billings says. This idea drew in game theory specialists such as Bowling, who joined the Alberta faculty in 2003, and Sandholm, who began similar research at Carnegie Mellon in 2004.

Both programs have taken big steps forward in the past couple of years. In January 2015, Bowling's team published a paper showing how it had solved heads-up limit hold 'em, which is simpler than the no-limit version because of restrictions on how players can bet. Sandholm and Brown held their first Brains vs. AI competition at Rivers Casino several months later.

At the time, their software wasn't yet as good as top humans. The 2015 model, Claudico, lost \$732,000 over 80,000 hands. Unlike Libratus, it tended to bluff at the wrong moments and had trouble accounting for how its odds changed based on the cards it knew had been removed from the deck.

Given the crossover between the research community and the gaming industry, this kind of work can't help but filter into real-world games. Besides the steady stream of researchers into the private sector, Sandholm and Bowling's Annual Computer Poker Competition, started in 2006, has included humans who also play in cash games. Bowling says his research papers are popular on message boards for people building bots.

“Of course, a lot of gambling people

are worried that it may kill internet gambling for money, because people are worried that bots are going to be so good that they're going to be had,” Sandholm says. “That could happen, but that's not really my concern.”

Despite losing to Libratus, Les, the poker pro, says he's not concerned about AI for now. A bot run by scientists and powered by a supercomputer is one thing, those currently trawling poker sites are another. “I've encountered players I'm very certain are bots, and I have won great amounts of money off of them,” Les says. “I'm pretty happy those people exist. But obviously, as the technology gets better over time, I'm not going to have the same opinion.”

—Joshua Brustein

**The bottom line** The bot that won \$1.8 million in the latest Brains vs. AI poker competition may be the beginning of the end for online gambling.

## Software

### Bringing CAD To the Cloud

▶ Onshape aims to give engineers new ways to collaborate

▶ “This really required a clean sheet of paper”

At **Onshape**, Fridays are for show and tell. Engineers at the computer-aided design (CAD) startup gather in the break room at its offices in Cambridge, Mass., to show off improvements in their cloud software to a chorus of oohs and aahs. On a recent Friday, one of the features presented, Sheet Metal, allowed an engineer to show, side-by-side, how changes to a metal sheet would affect the shape of the finished product.

But Onshape's biggest idea remains its core premise: CAD software that runs in the cloud, enabling engineers to collaborate in real time. The entrenched \$8.7 billion CAD software business, which looks much the same as it did a decade ago, remains dominated by software that long predates **Google Docs**—it's installed on individual PCs, with files that can't be viewed or worked on by multiple users at the same time. Onshape Chief Executive



Officer Jon Hirschtick says it's past time for that to change. He has a taste for the dramatic. "I believe the work we're doing can improve the way every manufactured product on earth is designed," he says, because he expects competitors to follow his lead.

Hirschtick co-founded Onshape, as Belmont Technology, in 2012 with colleagues who'd also helped him start SolidWorks, the leader in the conventional CAD software industry, two decades earlier. "Most major innovations happen with a platform shift," says Onshape co-founder John McEleney, another former SolidWorks CEO. "This really required a clean sheet of paper." Besides letting users work in the same file, Onshape works on mobile devices and has a built-in chat window and an internal app store for customization.

In its two years online, Onshape's software has won converts including packaging machine company **FEMC**, audio equipment maker **Bose**, and **Coca-Cola**, where engineer Neil Deshpande says it saved his team 6 to 10 weeks of work on designs for restaurant soda fountains in 2016. At \$100 a month per login, it's also cheaper than rival products. A SolidWorks license, for example, costs at least \$3,995 upfront, plus \$1,295 for a year's worth of upgrades. Onshape pushes its upgrades to users automatically at no charge.

The company has raised \$169 million from investors including Andreessen Horowitz. (Bloomberg LP, the parent of *Bloomberg Businessweek*, has invested in Andreessen.) Marc Halpern, an analyst for researcher Gartner, says Onshape's biggest challenge may be proving to the conventional-software faithful that it's an easy switch and has the features they need. "There is some concern about the maturity of Onshape's functionality," he says. Unlike SolidWorks and other rivals, Onshape can't yet create mirror images of assembled components or work with welded structures on its own.

Still, Onshape should be able to match those features soon, given the rate it's upgraded (every three weeks) and its pedigree, Halpern says.

**\$169**  
million

Investor funding  
Onshape has raised  
since 2012

Hirschtick says he's working on matching competitors' offerings and adding unique features, such as analytics for tracking the design changes made by each engineer. "When they see that," he says, "a lot of our competitors are gonna go, 'Holy s---.'" —*Michael Belfiore*

**The bottom line** Onshape is betting its mobile-friendly cloud CAD software can peel customers away from less flexible desktop standards.

## E-Commerce

### Survival of the Fitted

▶ **Old-line retailers enlist the help of data-rich startups**

▶ **"We're building a recommendation engine around clothing"**

Like many retailers, **French Connection** has seen its sales falter in recent years. The U.K.-based clothier hopes to improve its position with insights from a vendor some peers would regard as part of the problem: **Le Tote**, a five-year-old fashion rental service. "All we know is what went out the door and what was not returned," says Carolyn Glynos, vice president for U.S. sales and merchandising at French Connection, which sells through its own stores as well as through third parties. In contrast, Le Tote has amassed a vast trove of knowledge about its customers' preferences, along with the fit and quality of individual items—some of which it's willing to share with French Connection and its other suppliers at no charge.

Le Tote's customers pay as little as \$39 a month for a customized selection of clothing and accessories from French Connection, **Vince Camuto**, **Joie**, and other labels. Each customer receives a box with items she can purchase or return after a few wears. New subscribers are asked questions about their style preferences, which helps determine the contents of each shipment. They're also prompted to provide feedback on items they received, including fit, color, and number of times worn. The information helps the company ensure that subsequent deliveries contain more hits and fewer misses. About 75 percent ▶

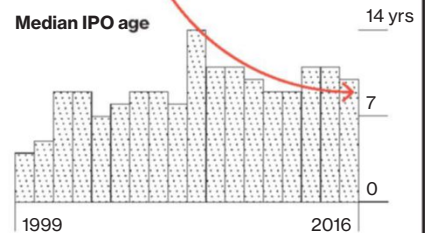
## Gadfly

### Snap Judgment

Many of the most prominent technology startups are avoiding an initial public offering—and the investor pressure that comes with it—while they work out their business models. Six-year-old Snap, the company behind messaging app Snapchat, may also be better off waiting.

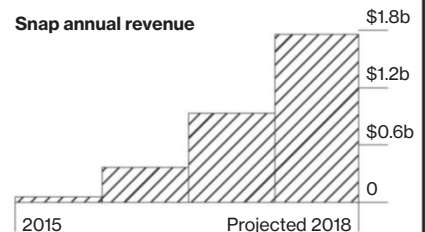
#### ① Rushing into it

- ▶ Companies such as Uber fund growth without IPOs, thanks to regular cash from wealthy backers.
- ▶ **Ten years** is the median age of a tech startup going public. At the dot-com boom's 1999 peak, the median age was four.



#### ② Just getting started

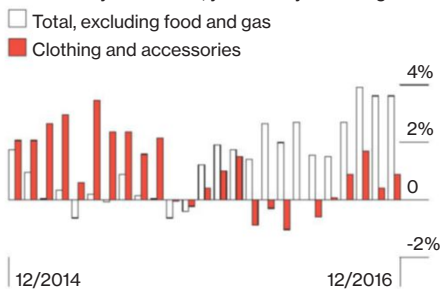
- ▶ Snap is going public with unresolved questions about its business model, which carries high costs and focuses on a relatively small audience.
- ▶ Investors' margin for error is slim, because Snap is valued as if it's figured out these problems and then some.



**The gamble** Snap is a throwback to a pre-Facebook era, when tech startups went public on promise, not financial reality. —*Shira Ovide*

## Hemmed In on Growth

U.S. monthly retail sales, year-over-year change



FIGURES ARE SEASONALLY ADJUSTED; DATA: U.S. CENSUS BUREAU

◀ of merchandise sent out garners reviews, says Le Tote’s chief merchandising officer, Ruth Hartman, which is far higher than for most online retailers. “We’re building a recommendation engine around clothing,” says Charlie Bowman, the company’s vice president for engineering.

Le Tote also knows how clothing holds up, because most pieces are shipped out multiple times. When it observed that a popular T-shirt style from French Connection was wearing out faster in woven areas than knitted areas, Le Tote shared that information with the clothier, which then tweaked the design, Glynos says. The retooled shirts will hit the market this spring.

Acting on other feedback from Le Tote, the clothier is also ditching numeric sizes on looser dresses sold in the U.S. in favor of the less precise designations of small, medium, and large to help eliminate confusion. “If this information is helping us provide better product and better fit, that’s going to help our customer,” Glynos says.

Can reams of e-commerce subscription data—from such companies as **Gwynnie Bee** and **Dia**—shore up traditional retail at a time when store closures and bankruptcies have become the norm? “I’m very excited about retailers’ ability to use data to grow,” says Kirsten Green, founder of Forerunner Ventures, a venture capital company in San Francisco that counts **Dollar Shave Club** and **Warby Parker** among its portfolio companies.

More intensive use of data in design and inventory management can boost sales, Green says, particularly at full price. Call it “dynamic retail,” a term that she says was coined by **Rockets of Awesome**, a mail-order service for children’s clothing that Forerunner backs.

The e-commerce startup assembles seasonally appropriate selections of items and ships them out to its customers four times a year. Parents keep what they like and return the rest.

French Connection also recently began working with **Stitch Fix**, a San Francisco startup that bills itself as a personal styling service for men and women. Stitch Fix Chief Algorithms Officer Eric Colson says the goal is to get to know customers well enough to send them only clothing they’ll want to buy. In traditional retail, he says, the burden falls on shoppers, who must discover on their own which brands suit them best.

Stitch Fix boasts it can sometimes identify preferences customers themselves may not be aware of. If scores of men send back a shirt and say the fit across the chest was off, Stitch Fix could compare that with other shirts the same customers bought and kept. It might then figure out that the second button on the returned shirt sat an inch higher—data it can share with suppliers.

In time, a shopper entering a brick-and-mortar store might be able to consult an app that would know her tastes so well it would steer her directly to an article of clothing she’d like. Give it a few years, Colson says, and you might hear a shopper say, “Remember when we had to wander around and find our own things?” —*Sarah McBride*

**The bottom line** In the U.S., French Connection is tweaking its clothing based on feedback supplied by mail-order styling services.

## Tech vs. Trump

### Startup Types Build Ready-Made Activism

▶ **Disparate coders are hacking together protest websites**

▶ **“We happen to have this extra little bit that we can do”**

As it grew clear on election night that Donald Trump would become president, Nick O’Neill, a 32-year-old San Francisco programmer, suddenly got a lot more interested in civic engagement. Even in the internet age, phone calls remain the primary means for constituents to pressure their congressional

representatives. O’Neill wanted an easy way to register dissent on a regular basis once Trump began trying to put various elements of his platform into effect.

With about two months’ worth of help from his wife, Rebecca Kaufman, and several friends, O’Neill created **5 Calls**, a website aimed at making complaints to members of Congress as easy as possible. Users type in their Zip codes and indicate which decisions or policy moves they oppose—a Trump cabinet pick, his Supreme Court nominee, the Jan. 27 ban on immigrants from seven mostly Muslim countries—and the site returns the local representative’s phone number and a script for the call, written by Kaufman. The site attempts to track the number of calls visitors have made by asking them to click a button after each one. Since the site went up on Jan. 17, the tally has topped 400,000.

More than 1,200 tech employees in the politically energized Bay Area have pledged to leave work on March 14 to attend a rally against the travel ban at Palo Alto City Hall. **5 Calls** is one of several new efforts by startup types to facilitate opposition in the age of Trump. During the eight years of the Obama administration, the rise of cloud software and other collaboration tools, as well as the culture of speed-coding hackathons, made it a lot easier for them to kludge together such websites cheaply without putting their day jobs on hold.

“It’s amazing, the ease with which someone can learn to code, build something, get access to the resources they need in terms of help and mentorship,” says Zack Shapiro, a programmer who created a similar site, **Call to Action**. “I think this election gives people a really targeted reason to build stuff.”

Call to Action, created over the weekend of Nov. 18 by programmers from around the country, also facilitates calls to Congress, though it doesn’t include scripts. The day it launched, podcaster and former Obama speechwriter Jon Favreau tweeted about it, and the site notched 21,000 visits. Since then, Shapiro says, traffic has slowed to about 4,600 visits a week. Yet collectively, sites like Call to Action and **5 Calls**, along with less

“Many citizens across this country are frustrated or alarmed by what’s going on, and everyone has the ability to go and protest.”  
—*Y Combinator partner Daniel Gross*

# Innovation

## Smart Security Cameras

coding-intensive projects like the **Indivisible Guide**, which offers a digital manual for political action, have helped flood congressional offices. For the past few weeks, callers have regularly reported busy signals and full voicemail in-boxes.

Some of the coder efforts are purely informational. **Greatcompany.org**, another weekend project, is a searchable database of the companies that have opposed Trump's immigration ban. More than 500 of the site's 30,000 visitors have added information about their employers, says creator Daniel Gross, a partner at leading startup incubator **Y Combinator**. The site also makes it simple for people to send tweets to their bosses, congratulating or questioning them on their stance on the ban, in the hope that public pressure could sway more executives.

**Track Trump**, a collection of status updates on the things the president promised to do during his first 100 days in office, has received more than 100,000 visits since its debut on Inauguration Day. The site shows a checklist of agenda items broken down by category (trade, education, health care) as well as a day-by-day timeline.

"I think people want to figure out how to contribute the best way they can to preserving values that we hold dear," says Track Trump creator Sam Altman, the president of Y Combinator. Altman has been one of the most outspoken anti-Trump voices in Silicon Valley since the inauguration, urging other tech executives to stand publicly against the travel ban and inviting the American Civil Liberties Union, which has sued the government over the policy, to join Y Combinator's program of funding and marketing mentorship.

Like the other coders, Gross and Altman say they didn't coordinate their projects. "Many citizens across this country are frustrated or alarmed by what's going on, and everyone has the ability to go and protest," says Gross. "We happen to have this extra little bit that we can do, which is that we can write software." — *Vauhini Vara*

**The bottom line** Techies are getting more political with a range of websites that walk visitors through, among other things, complaints to Congress.

**B** Edited by Jeff Muskus and Cristina Lindblad  
Bloomberg.com

### Form and function

Security cameras may be ubiquitous, but they still miss a lot. And humans have to monitor their feeds for unusual activity. The Movidius Myriad 2 vision-processing chip is designed to help newer-model cameras interpret images themselves.

### Innovators

Sean Mitchell and David Moloney

**Ages** 48 and 54

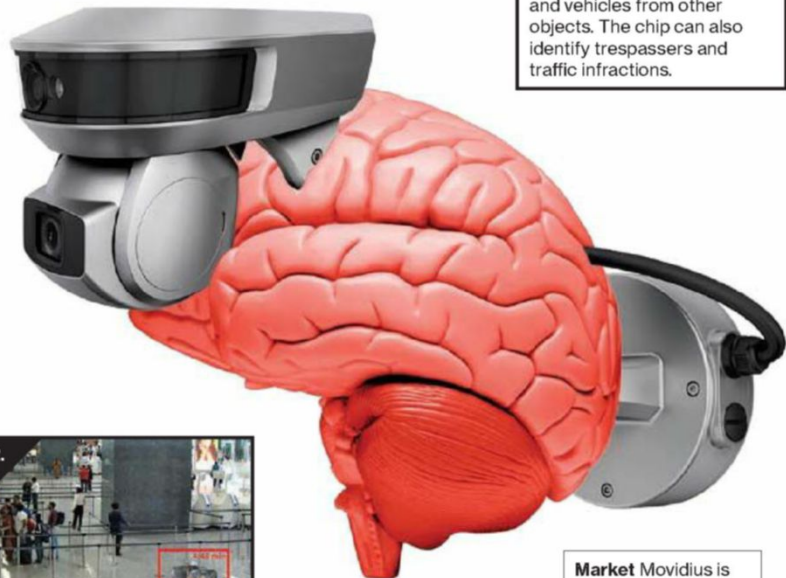
**Titles** Chief operating officer and chief technology officer of Movidius, a 180-employee company in San Mateo, Calif.

**Origin** Mitchell and Moloney, who'd worked as engineers for several Irish chipmakers, founded Movidius in 2005 after sketching out the idea for a smart-camera network in a Dublin pub.

**Funding** The company raised about \$87 million in venture capital before Intel announced plans to buy it late last year.



**Interpret** A camera equipped with Myriad 2 uses the chip's AI software and processing power to distinguish people and vehicles from other objects. The chip can also identify trespassers and traffic infractions.



**Alert** Multiple cameras, connected by the internet, can combine their analyses and send alerts to police or security guards.

**Market** Movidius is pitching Myriad 2 chips to highway departments and other government agencies, as well as companies and individuals looking for set-and-forget security.

### Next Steps

Dronemaker DJI's Phantom 4 drones use the Myriad 2 to help steer around obstacles. Hangzhou Hikvision, the leading maker of internet-connected cameras, says it's incorporating the chip into some of its cameras. "Smart cameras are the future of security cameras," says Anand Joshi, principal analyst at consulting company Tractica. Now that Hikvision is onboard, he says, "others are likely to follow suit." — *Michael Belfiore*



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# Blowing Down That Fiduciary Rule

▶ Donald Trump asks for a second look at a rule requiring brokers to put their customers first

▶ “Clients are savvier about hidden expense ratios and commissions”

Over the past decade, the way that millions of Americans invest for retirement has changed. Money has fled from many high-priced investment products. Companies that built their businesses on armies of commission-based salespeople are scrambling for cheaper ways to deliver advice. A 500-word memo signed on Feb. 3 by President Trump may slow this trend, but it's unlikely to reverse it.

Trump ordered the U.S. Department of Labor to reconsider the fiduciary rule, a regulation set to go into effect in April. It requires financial advisers to put their clients' interests first when handling retirement accounts. The U.S. retirement market is about \$25 trillion in assets, the Investment Company Institute says, so the rule goes right to the heart of the advice business. Many on Wall Street hate it.

Former **Goldman Sachs** President Gary Cohn, now director of Trump's National Economic Council, told the *Wall Street Journal* that the fiduciary

requirement limits investor choice, memorably comparing it to a menu with “only healthy food.” Trump didn't explicitly say he'd try to scrap the rule, but Press Secretary Sean Spicer said in a news conference that “the rule is a solution in search of a problem.”

The problem the Obama administration had pushed the Labor Department to solve was conflicted investment advice. It argued many brokers and advisers act more like salespeople and have financial incentives to recommend expensive, inferior products to clients who don't know the difference. But grant Spicer this: Even without the rule, many clients *do* know. “Prices are coming crashing down on money management,” says Sheryl Garrett, founder of the Garrett Planning Network.

Investors yanked \$340 billion from actively managed funds last year, according to Morningstar, and poured \$505 billion into index and exchange-traded funds, which typically cost far less and come without added sales

fees. “Clients are savvier about hidden expense ratios and commissions than they were just a few years ago,” the research company Cerulli Associates warned the industry in a recent report. Six years ago a Cerulli survey found 65 percent of investors either didn't know how much they were paying their financial adviser or incorrectly believed the advice was free. That fell to 44 percent by mid-2016.

It wasn't just the magic of markets that did all this. A wave of lawsuits forced large employers to seek lower-cost options for retirement plans, encouraging investment companies to improve their products. “You can no longer have large market share in the 401(k) space if you have low-quality products,” says Jonathan Reuter, a Boston College finance professor.

A surprisingly broad public debate over the fiduciary rule, which was finalized in 2016, brought attention to how some advisers sell. John Oliver devoted one of his HBO episodes to ▶

◀ the topic. People started coming to Garrett's network of planners asking for a fiduciary—someone who's already accepted a legal responsibility to put the client first. Garrett once believed it was a term the public wouldn't use. "Nobody knows how to spell it or what it means," she recalls thinking.

Some investment companies and insurers—which sell retirement products such as annuities—are ready.

**JPMorgan Chase and Bank of America Merrill Lynch** have said they'll stop charging commissions on individual retirement accounts. Moving from commissions to fees based on total assets lessens potential conflicts in choosing investments. It can also provide steady revenue and longer client relationships, says Michael Finke, dean of the American College of Financial Services, which trains advisers. "Many of these firms preferred the fee model and were hoping to eventually move advisers in that direction anyway," he says.

Still, the rule has enemies for a reason. Asset managers may find it harder to market higher-fee products. It disrupts the practices of brokers and insurance agents in congressional districts across the country, who argue they can help less affluent savers that many fee-based advisers don't work with. The rule also makes it easier for investors to sue financial companies.

Dennis Glass, chief executive officer of life insurance company **Lincoln National**, said in a Feb. 2 earnings call that he supported a delay to "improve" the rule and "remove some of the confusion in the marketplace that is contributing to the decline in annuity sales." Some are waiting until the last moment to adjust. **Raymond James Financial**, with 7,100 advisers, has said it won't announce changes to its sales practices until it knows if the rule is being implemented.

The trend toward low costs and transparency isn't reaching everyone. The Investor Rights Clinic at the University of Miami School of Law helps a steady stream of investors, many elderly or disabled, who had their life savings put in complex, risky, or expensive products. In January it began representing a woman in her mid-70s whose broker locked up more than half of her \$250,000 nest egg in nontraded real estate investment trusts

and other illiquid investments. Teresa Verges, director of the clinic, says none of her clients knew that advisers aren't always required to put the customer's interests first: "When we explain that to them, they're just shocked."

The U.S. has always had two markets for investment products, one for clients who know the questions to ask and another for novices. Without the fiduciary rule, the difference between them may become even more stark. —*Ben Steverman, with Katherine Chiglinsky*

**The bottom line** Many investors will seek out unconflicted advice even without a fiduciary rule—but perhaps not those who need it most.

### Monte Paschi

## A Sun-Dappled Tuscan Banking Mess

▶ **Bargain-priced estates are now the government's problem**

▶ **"There's no price for these properties ... there are no buyers"**

An abandoned Tuscan farmhouse known as the Aquilaia estate is a small monument to an enormous failure. Surrounded by acres of vineyards, it's one property among the many troubled loans that sank the world's oldest bank. Born around the same time as Michelangelo, **Banca Monte dei Paschi di Siena** has become a headache for Italian taxpayers after the government said in December it would rescue the bank. A plan is still in the works.

While the bank says it's already accounted for much of its potential loss, skeptics say the signs aren't promising. "It's very likely that Monte Paschi will need more help to fix its issues," says Pierluigi Piccini, a onetime mayor of Siena and a former manager at the bank in Paris. "The worst is yet to come." A spokeswoman for Monte Paschi declined to comment on its loans or underlying assets.

Even in a country whose banks hold almost €360 billion

(\$385 billion) in problem loans, Monte Paschi is remarkable. Almost 35 percent of all its loans were bad, overdue, or otherwise troubled as of June, according to data compiled by PwC. A chunk of Monte Paschi's assets are tied up in the picturesque Tuscan hills, which have drawn tourists, winemakers, and olive growers for centuries. What they haven't attracted recently are investors.

Monte Paschi pumped about €3 million into the Aquilaia estate. The money was intended to turn it into a 1 million-bottle-a-year wine business, according to private and public documents. Now the bank is stuck with an unpaid loan and no buyers for the property. The local court in Grosseto failed in at least two attempts to draw bidders for the estate, even after lowering the minimum acceptable price to €1.3 million, according to court documents. The property will be offered again for even less, though not until 2018, because of a backlog of foreclosures, according to a court employee who asked not to be identified.

"After the local real estate crisis, it's hard to sell properties in auction," says Lorenzo Mascagni, a Grosseto-based lawyer. Home prices in the country began to decline in 2008, on the back of an economic and demographic slump. Nine years later, they're still declining.

In nearby Scansano is another failure, Aia della Macina. The half-built tourist complex, overlooking a farm and vineyards, was backed by a €1.6 million loan from Monte Paschi in 2002. The bank foreclosed in 2006, and the property was later put on the market for €2 million. Even after six auctions no one has bought it. The court will try again this year at a lower minimum price, according to a website advertising auctions. "There's no price for these properties, simply because there are



Aquilaia

Hot Tickets

Angelica, Eliza...and Ponzi

U.S. prosecutors say an investment that promised profits of at least **10** percent from buying and reselling blocks of tickets to hot shows including *Hamilton* was a scam. Among the more than **125** unwitting investors were billionaire hedge fund manager Paul Tudor Jones and tech mogul Michael Dell, according to people with knowledge of the matter. —*Matt Robinson, Katherine Burton, Zeke Faux, and Christian Berthelsen*

There's no indication investors were aware of the fraud. Their spokesmen declined to comment.

*Hamilton's* ticket prices hit the highest in Broadway history.



no buyers," says Luca Desideri, a real estate agent in Grosseto.

The loans aren't worthless: Distressed-debt investors have been circling Italian banks for years to get their hands on nonperforming loan portfolios. Funds managed by **Fortress Investment Group** and **Pimco** are working with **UniCredit**, Italy's largest lender, to acquire a stake in companies managing about €18 billion of bad loans.

The problem for Monte Paschi is that it's so much weaker than its competitors. Selling loans cheaply to lure investors could have forced its capital levels below European Central Bank requirements. "You can't sell these properties unless the price is at least less than half of the pre-crisis value," says Amelia Colvin, a distressed-debt specialist working in London and Milan for Cadogan Securities. "Only when they try to sell the assets, banks realize they are worth much less than they expected."

The bank says it's committed to a plan to sell €27.7 billion of bad loans. The disposal was meant to follow a €5 billion share sale. When the rights issue failed, the government said it would step in and help plug a capital shortfall that the ECB says is €8.8 billion. There's a risk that some loans could continue to deteriorate after the cleanup, says Massimo Famularo, a Milan-based adviser on bad-loan deals at Frontis NPL.

Around Siena, the bank is known as Babbo Monte—Daddy Monte—because

of its historical support for nearby communities. A local foundation controlled the largest stake in Monte Paschi until 2014. "Before the crisis, you just needed to ask for money and Babbo Monte would provide it," says Francesco Zampetti, a retired dental technician and life-long Siena resident, as he tucks into his breakfast at a deli in the city center.



Montepo

After going public in 1999, Monte Paschi widened its horizons. The bank is on the hook for a Roman construction business, **ImpreMe**, owned by the Mezzaroma family, which is struggling to sell its residential properties on the outskirts of the capital. Monte Paschi increased its exposure to the company at the same time former Chairman Massimo Mezzaroma took over Siena's soccer team, according to people familiar with the matter. The team, which was also sponsored by the bank, failed in 2014. "ImpreMe is a solvent company, and it's working with Monte Paschi to restructure its debt," says a spokesman for the construction company.

Even luxury properties on the bank's books have struggled to find buyers. A short drive north of Scansano lies the medieval castle of Montepo and its 1,000-acre estate of vineyards and olive trees. The owner, Jacopo Biondi Santi, heir of the family that created the Brunello di Montalcino wine, borrowed almost €18 million from Monte Paschi, according to people familiar with

the matter. The bank foreclosed in 2011, and in November the property was put on auction for €13 million by the court. The estate received no bids. Now the property will be withdrawn from auction, because Biondi Santi has pledged to pay off the outstanding debt after his family sold a stake in a larger wine estate in December, says his lawyer, Giovanni Gatteschi. "Biondi Santi will pay back all his debt by the end of the month," Gatteschi says. Among Monte Paschi's borrowers, "he is one of the few who will settle his debt in full." —*Luca Casiraghi and Chiara Albanese*

**The bottom line** The fall in Italian property prices since 2008 has left Monte Paschi with soured loans it's struggling to get rid of.

Energy

Big Gas Finds, Bigger Political Problems

▶ **Egypt, Israel, and Cyprus are sitting on untapped fuel**

▶ **"Either everybody rises or everybody falls"**

As the helicopter roars its way west from the beaches of Tel Aviv, two dots emerge from the featureless blue. Closer up, they begin to take shape: giant platforms for extracting gas from under the Mediterranean. "A few years ago, there was nothing to see around here," Yossi Abu yells from the front seats. And soon, according ▶

◀ to the **Delek Drilling** chief executive officer, there'll be more. He points northward. "Over there, we'll build a new platform," he says. "To export gas to Egypt and Turkey."

Abu makes it sound easy. It won't be. Hundreds of miles of undersea pipelines will cost billions of dollars and pose technical challenges for their designers. But that task is dwarfed by the political engineering required to build stable energy routes through a conflict-ridden region.

That's true across the Eastern Mediterranean. It's becoming clear that Delek's discoveries were just a start: Cyprus, Lebanon, and Egypt may be sitting on even bigger gas fields. The U.S. Geological Survey estimates they could hold more than 340 trillion cubic feet of gas, an amount that would surpass U.S. proven reserves, though many in the industry say the total may be lower.

There's an ideal market nearby in Europe—rich, mostly lacking its own fuels, and desperate to wean itself from energy dependence on Russia. It's just that getting the gas there will require collaboration between countries with a history of feuding.

Many analysts see an Israel-Turkey pipeline via Cyprus as the best way to transmit gas to Europe. It could also be piped to liquid natural gas plants in Egypt and shipped from there. Israeli and European Union officials have even talked about building an ambitious pipeline all the way to Greece.

"This is the kind of opportunity where either everybody rises or

everybody falls," said Amos Hochstein, former U.S. Secretary of State John Kerry's energy envoy before he stepped down. Hochstein said the "complicated relationships" can be overcome, because "enough people now see the potential fruits."

They do in Egypt, where the Zohr field discovered by **Eni** is the region's largest to date—it was the tipping point that persuaded other majors to take the Eastern Mediterranean seriously. **BP** bought a 10 percent stake from Eni in November. For Egypt's economy, hamstrung since the 2011 revolution by a lack of foreign currency, gas exports could be a savior.

Then there's Turkish President Recep Tayyip Erdogan and Israeli Premier Benjamin Netanyahu, who spent years at loggerheads before reaching a reconciliation in 2016 that was partly driven by potential energy ties. Erdogan appointed his son-in-law, Berat Albayrak, as energy minister; a senior Israeli official says he speaks to Albayrak daily on WhatsApp.

Former U.S. diplomat Matthew Bryza is now a director of the Turkish company **Turcas Petrol**, which is in talks to buy Israeli gas. He says discoveries in the Mediterranean could also help end a much longer-running dispute. Since 1974, northern Cyprus has been under Turkish military occupation. Several attempts to reunify the island have failed, but this year's talks in Switzerland have rekindled hope, and gas could be one reason.

Eni, **ExxonMobil**, and **Total** are among companies keen to explore

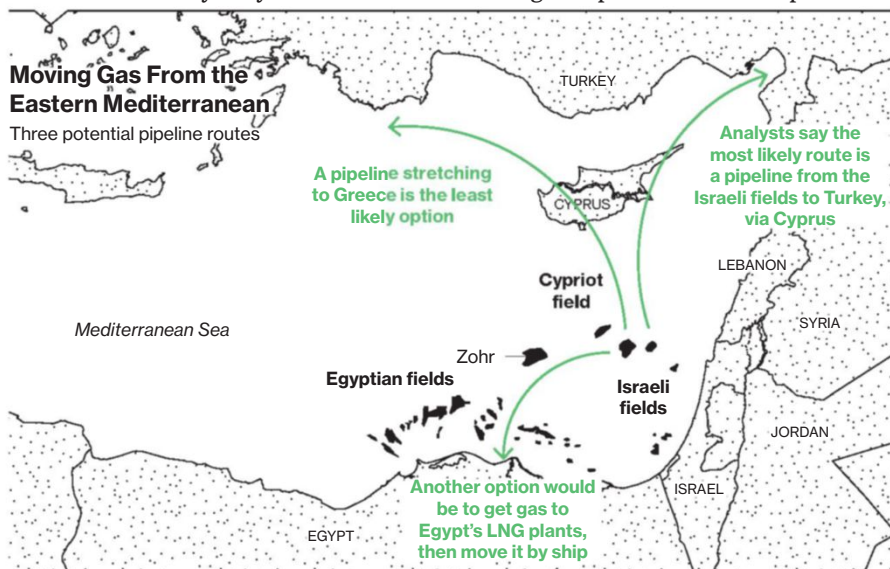
off Cyprus, and that would be much easier if the political obstacle were removed. Turkey insists that the Greek-Cypriot government has no right to dispose of energy resources on its own. It even sent a warship toward the island to make the point. While there are bigger issues to resolve, "if there's a deal on the horizon, then I think the potential for energy benefits could well pull the sides over the end line," Bryza says.

The big companies betting on the Eastern Mediterranean haven't all had smooth sailing there. Eni and Exxon have registered interest in exploring off Lebanon. The auction of rights there has been delayed since 2013. In Egypt, **Royal Dutch Shell's** liquefaction plant has been idle for years. **Noble Energy**, the only major foreign energy company to try its hand in Israel, has made money from domestic sales, but its export projects were tangled in a legal and regulatory web for years.

The region's geology, especially the massive trench along the seabed from Israel to Turkey, will make pipeline construction tough, according to Simon Henderson, director of the Gulf and Energy Policy Program at the Washington Institute. And there are price concerns: The global supply glut is curbing the industry's appetite for expensive projects. Lately, though, the industry's optimism is building. Eni sees Egypt as the center of a hub including Israel, Cyprus, and Libya that can provide "solutions for European energy security," according to CEO Claudio Descalzi.

Getting companies and governments on that track might require a nudge from the major powers. Brenda Shaffer, a senior fellow at the Washington-based Atlantic Council's Global Energy Center, says the EU already sees Mediterranean gas as a "top-priority project," though it lacks the financial tools to push it forward. The U.S. has been advocating for the reunification of Cyprus, and Hochstein helped to broker the reconciliation of Israel and Turkey. The U.S. interest level under President Donald Trump remains to be seen.

When America has backed energy routes in the region, it's often been trying to sideline Russia. Trump says he'll improve ties with Moscow and in general pay less attention to the







✓Yes



✓Yes



✓Yes



✓Yes



✓Yes



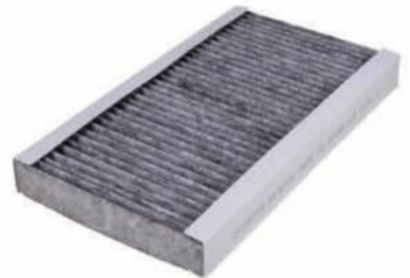
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✓Yes



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◀ outside world when U.S. interests aren't directly at stake. Still, Secretary of State Rex Tillerson, a former Exxon CEO, is no stranger to pipeline politics. "Control of energy will be a priority, even in his subconscious," Shaffer says. —*David Wainer*

**The bottom line** Eastern Mediterranean gas could help Europe diversify away from Russia. But the possible pipeline routes are difficult.

### Robo-advisers

## Passive Investing for The Social Activist

▶ **A startup aims to build portfolios tailored to its customers' values**

▶ **Sustainability "is absolutely somewhere you can differentiate"**

For many people, passively managed index funds have a powerful appeal: Buy one fund and be done. The 3,500-company Vanguard Total Stock Market Index Fund, for example, beats most funds in its category by owning essentially everything. But everything can also be a problem for those who want to put their money only into companies that are consistent with their values. For example, it means a liberal owning shares in gunmakers **Sturm Ruger** and **American Outdoor Brands** or companies that produce fossil fuels. You may be able to #deleteUber from your phone, but you can't call your index fund managers and ask them to extract **ExxonMobil** from your portfolio.

The founders of **OpenInvest**, an online startup with backing from early-stage venture capitalist **Y Combinator**, think a cohort of newly moneyed millennials will be willing to pay extra for a passive investment that allows for more of a voice. They hark back to an older model of investing—people choosing stocks directly, rather than getting them through diversified funds. "It used to be that investing was like owning a piece of that factory or that building next door and saying, 'I'm going to make some decisions that reflect what I care about,'" says Chief Strategy Officer Joshua Levin, 37, who joined OpenInvest in July from the World Wildlife Fund.

There have long been mutual funds that include social factors among their stock-selection criteria. The difference is that OpenInvest allows customization. Similar to so-called robo-advisers **Wealthfront** and **Betterment**, OpenInvest allows users with at least \$3,000 to invest to pick a mix of stocks and bonds based on their age and comfort with risk. The portfolio is periodically updated and rebalanced to stay on track.

But instead of buying stocks through index funds, as the other robos do, OpenInvest uses individual stocks. Users click through a series of menus to create an "issue profile," checking boxes to select investment themes—such as gender equality or reduced carbon emissions—as well as groups of companies to exclude. The preset screens lean left. Users can nix weapons manufacturers, tobacco companies, and even those whose executives have backed Donald Trump.

Based on those preferences, OpenInvest creates a basket of more than 60 stocks that both jibes with its customers' wishes and should, the company says, track the broader market. It balances factors such as size, sector, and each stock's sensitivity to the market's ups and downs. OpenInvest says it's still passive because beating the market isn't a goal.

Chief Executive Officer Conor Murray, 33, spent almost eight years building trading and analytics systems for **Bridgewater Associates**, the giant hedge fund manager in Connecticut. Looking for a chance to create something, he moved to California in 2014 without a new job lined up. There he connected with Phil Wei, 33, another Bridgewater alumnus. "Everyone who got fed up with the East Coast hustle after a few years just wanted to move out to California and have a positive impact on the world," says Wei, OpenInvest's chief technology officer.

They've entered a crowded field of online advisers. After launching in September, the company runs

\$2.5 million in assets. Wealthfront and Betterment have gathered about \$5 billion and \$7 billion, respectively. Brokerage giant **Charles Schwab** has also gotten into the mix, and money managers **Vanguard**, **Fidelity**, and **BlackRock** have all started or acquired similar services. "The big firms have deeper pockets, a lot more assets on the platform already that they can dedicate to their robo strategies," says Alois Pirker, director for research at Aite Group's wealth management practice. Carving out a niche may be a startup's best shot at survival. "Socially responsible investing is absolutely somewhere you can differentiate," he says. "And also a place where you can make yourself attractive to possible acquirers."

To be attractive to clients, OpenInvest will have to show that its custom portfolios do about as well as the market over time. For now, investors have to have faith in the company's algorithms. Index funds, by contrast, have decades-long records. Levin, the chief strategy officer, points to the work of Murray and Wei with "some of the most complex portfolio construction systems in the world" at Bridgewater.

OpenInvest costs 0.5 percent of assets per year. That's less than many actively managed funds but more than basic index funds. For example, the Vanguard Total Stock Market Index Fund charges 0.05 percent to 0.16 percent of assets a year, depending on the share class. Murray, Levin, and Wei say they'd like to bring down their fees as assets expand. They hope early adopters will accept the added cost as a fair trade for the ability to tailor their portfolios. "We see this mainstreaming of sustainable investing as part of the antidote to a lot of the mind-numbing corruption that we see in the current Wall Street culture," says Levin. —*Simone Foxman*

**The bottom line** Former hedge funders are bringing social responsibility to online investment advising, with some added cost and complexity.

**B** Edited by Pat Regnier  
Bloomberg.com





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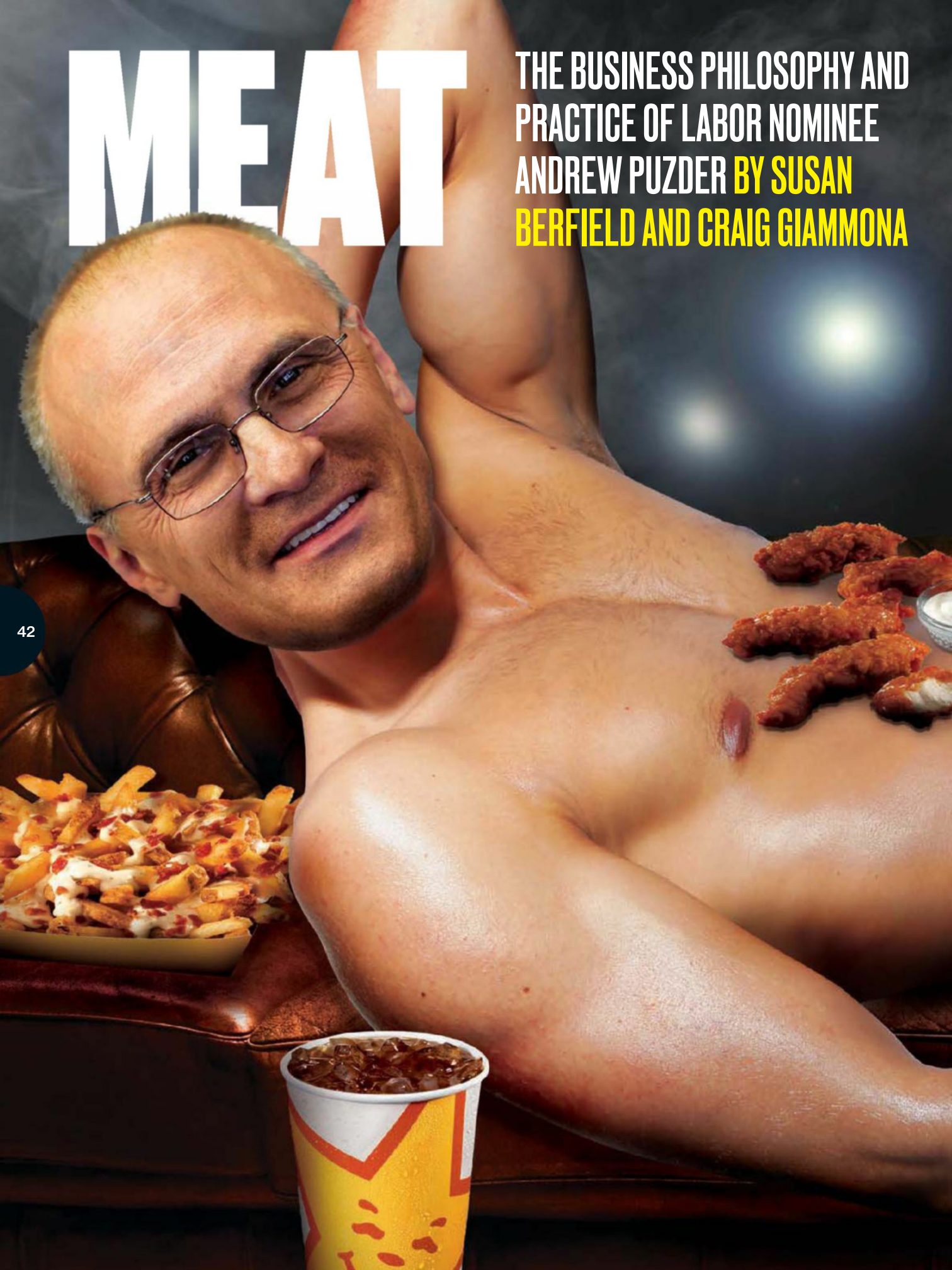
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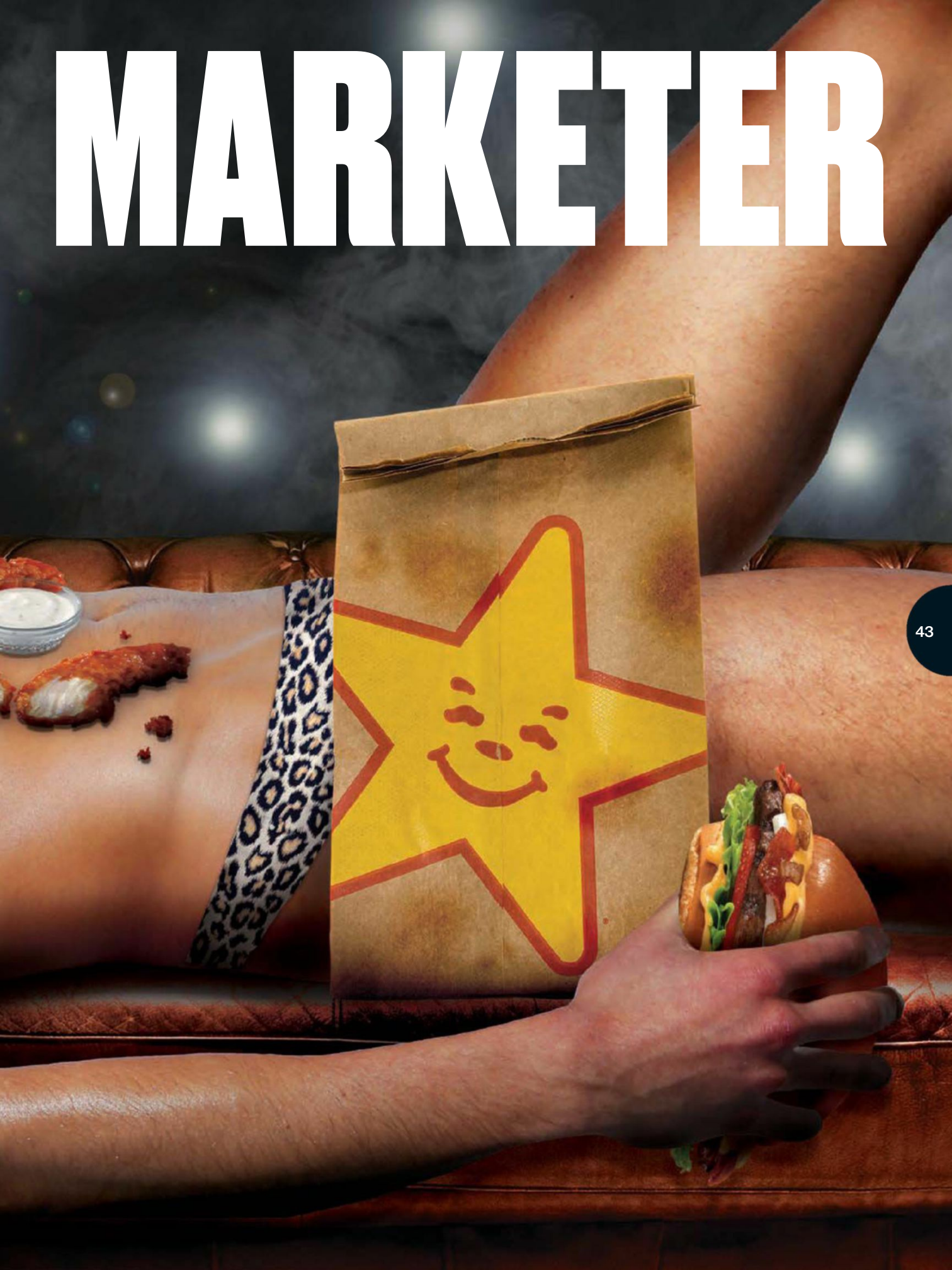
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# MEAT

THE BUSINESS PHILOSOPHY AND  
PRACTICE OF LABOR NOMINEE  
ANDREW PUZDER **BY SUSAN  
BERFIELD AND CRAIG GIAMMONA**



# MARKETER





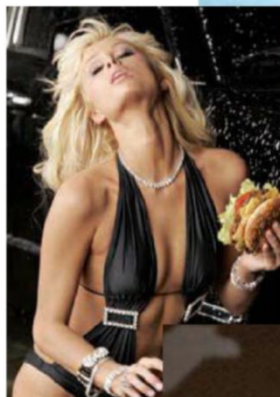
## hat's more American,"

the Carl's Jr. narrator asks in a 2015 advertisement for the Most American Thickburger, "than a girl [swimsuit model Samantha Hoopes, biting into a potato-chip-stuffed cheeseburger that's topped with a grilled hot dog] in a bikini [camera zooms out to reveal she's wearing a stars-and-stripes string bikini] in a hot tub [covered with stars and stripes] in a truck [a Crew Cab pickup with an American flag paint job] on an aircraft carrier [with fighter planes taking off] underneath the Statue of Liberty?" Final shot: Hoopes biting into the huge burger, then #mostAmerican.

This commercial is the marketing vision of Andrew Puzder, the chief executive officer of CKE Restaurants, owner of Carl's Jr. and Hardee's, and now President Donald Trump's nominee for secretary of labor. Puzder's appeal to "young, hungry guys" and their version of what makes America great helped two struggling fast-food chains become, if not top contenders, at least contenders. "I like beautiful women eating burgers in bikinis. I think it's very American," Puzder, who's 66, said of that ad to *Entrepreneur* magazine. "I used to hear, 'brands take on the personality of the CEO.' And I rarely thought that was true, but I think this one, in this case, it kind of did take on my personality."

That personality is also what makes him one of the most Trump-like of all Trump appointments. He got the president's attention in some of the same ways Trump got America's. Puzder has teased competitors, casually denigrated the workforce he relies on, and rallied customers with an anti-PC snubbing of the quinoa-eating elite.

Unlike Trump, though, Puzder maintains a consistent ideology: free markets, free trade, and zero-sum, trickle-down economics. Six days after the election, Puzder—lean, balding, dark-suited—addressed a restaurant industry event at the Bellagio Hotel in Las Vegas. "More government is not the solution to every problem, it's the problem to every solution," he said. "They punish us for being in business to make a profit." Within a few days he got word that he might be joining the government. Puzder's confirmation hearing, originally set for mid-January and now scheduled for Feb. 16, had been pushed back four times, in part because he believed he could transfer his holdings into a blind trust rather than divest, says someone familiar with the matter. Puzder's stake in CKE—in 2012 he owned about 4.3 percent of the private company, according to filings analyzed by Bloomberg—presented too much of a conflict of interest, though.



**FROM TOP: NINA AGDAL, PARIS HILTON, AND KATE UPTON REACH OUT TO CARL'S JR.'S TARGET DEMO**



Opponents have used the time to criticize his company's treatment of workers; supporters have produced line cooks and cashiers at the two chains to describe how much they love their jobs. Puzder has been mostly silent, except to defend himself for once employing a housekeeper he says he didn't realize was undocumented.

**Although Carl's Jr. is** a reflection of Puzder, for a long time it was a reflection of its namesake, Carl Karcher, who started selling hot dogs from a cart in South Central Los Angeles in 1941 and opened the first Carl's Jr. burger joint 15 years later. Karcher, a devout Catholic, married with 12 children, would hand out coupons for free burgers—with a Bible verse on the side. He began company meetings by reciting the Pledge of Allegiance and the prayer of St. Francis of Assisi. In 1978 protesters targeted his restaurants when he unsuccessfully backed a proposition that would have allowed public schools to fire gay teachers. Still, a year later, sales reached \$100 million, and Karcher opened his first restaurant outside California, in Las Vegas.

The company went public in 1981, and legal and financial woes followed, which is how he met Puzder. Like Karcher, Puzder came from a working-class Catholic family in Ohio. He got caught up in the counterculture, grew his hair, played guitar, went to Woodstock, and marched on Washington in 1969 to protest the Vietnam War. He was studying at Kent State when Ohio National Guardsmen killed four students in 1970. He dropped out, played in rock bands for three years, married, and had kids. He eventually graduated from Cleveland State University, then received a law degree from Washington University in St. Louis.

At some point, Puzder's politics seem to have shifted, though it's not something he's discussed in public. By the 1980s he was a member of the St. Louis Republican establishment, helping Missouri Governor John Ashcroft draft a strict anti-abortion law.

During those years, Puzder's first marriage fell apart. Lisa Henning, now Lisa Fierstein, alleged in divorce proceedings that he had attacked her, and while he acknowledged that police were called to their disputes twice, he denied any physical abuse. Fierstein retracted her allegations in 1990, and on Jan. 18 sent the Senate committee considering his nomination a page-and-a-half letter to clear any character damage she thought her accusations might have inflicted. "What we should have handled in a mature and private way," the letter said, "became a contentious and ugly public divorce."

Soon after the divorce, Puzder married his current wife, Deanna Descher. The next day he flew out to meet Karcher. CKE had been sued in Kansas City, Mo., and Puzder was referred to him as a good local trial lawyer. He became Karcher's personal attorney, helping him avoid bankruptcy, and then was

hired as general counsel for the company. The men went to the same church and shared political views.

In the late 1990s the company bought Hardee's, a struggling chain of about 3,000 restaurants located mostly in the South and Midwest, where Carl's Jr. hadn't established itself. The acquisition strained the company's finances, though, and Karcher was forced out. In 2000, Puzder was appointed CEO. "Well, I think they really just said, 'Let's see if the cocky lawyer can fix it,'" he recalled in a 2009 oral history of the company conducted by California State University at Fullerton.

The first memo Puzder wrote to Hardee's managers was direct: "No more people behind the counter unless they have all their teeth." He closed some restaurants and directed the franchisees, who owned about half of all Hardee's, to remodel, but that wasn't enough to revive the brand. "You go into a store, and there's a guy with a dirty shirt who is rude, and then you remodel the store, but the customers still go in and find a guy with a dirty shirt who is rude," he later recounted to a trade publication. Slowly, Hardee's came around. Sales in established restaurants increased in 2004 for the first time in years. Still, Puzder's estimation of the workforce remained low. Hardee's was "hiring the best of the worst. It's kind of the bottom of the pool," he said in a 2011 speech CNN recently dug up.

Puzder knew Hardee's and Carl's Jr. couldn't compete with McDonald's for families. Instead, they'd come up with big, calories-be-damned burgers to appeal to young men, the original and most loyal fast-food eaters, and market the brands as if they were beer labels. The first ad featured Paris Hilton, in a barely-there black bathing suit, soaping up a Bentley before biting into a Spicy Burger. A parents' group criticized the ad as "soft-core porn." Puzder told them to "get a life." And so it went for years: Padma Lakshmi ate a Bacon Western Thickburger, Kate Upton promoted the Southwest Patty Melt, Kim Kardashian introduced an indulgent salad, Heidi Klum bit into a Jim Beam Bourbon Burger. Charlotte McKinney walked naked through a farmers market, her body parts concealed by a series of visual double-entendres (chest blocked from view by melons, etc.) to introduce its All-Natural Burger during the 2015 Super Bowl. A Bacon 3-Way Burger commercial suggested just that.

Karcher, who died in 2008, told Puzder he hated the ads, women criticized them as misogynistic, and some franchisees were embarrassed. But millions viewed them. Puzder said his wife approved each one. Troi Martin Wierdsma and her husband are part-owners of about 200 Carl's Jr. restaurants in California. She says she first thought the ads were too raunchy but changed her mind when sales increased. "If you're in the business to make a profit, that's what you need," she says.

"Andy kept making the right decisions for the company," says Melissa Robinson-Coggins, who worked for CKE's marketing agency and then the company itself from 2008 to 2015. "He doesn't apologize, and I respect that."

In 2010, as the recession bit into sales, CKE was acquired by private equity firm Apollo Global Management for about \$1 billion, including \$310 million in debt. When Apollo tried to take the company public again in 2012, CKE's financial prospects weren't strong enough to attract any interest. Puzder blamed market conditions, the high price of corn, which made beef more expensive, and Obamacare. The initial public offering process was "an embarrassment and total waste of time for Apollo and CKE," restaurant consultant John Gordon told the *Los Angeles Times*. Company filings showed that Puzder had received a compensation package

of \$10 million in 2010, including \$30,000 for corporate jet and car travel. The following year he earned \$4.5 million.

In 2013, CKE was bought by Roark Capital Group, a private equity firm (named after Howard Roark, the Ayn Rand character) that owns Arby's, Cinnabon, Carvel, and other chains. It paid a reported \$1.6 billion, \$650 million in cash while taking on almost \$1 billion in debt. Afterward, CKE stopped matching contributions to employee retirement accounts. It also continued to sell off the restaurants it owned in the U.S. to raise cash and streamline operations, reducing the number from 892 to 237 in 2016. CKE, which earns 4 percent of franchisees' gross sales, reported U.S. revenue of \$913 million and net income of \$50 million in 2015, according to company documents. The average sales per restaurant grew 13 percent from 2006 to 2015, slightly below sales at its rivals. The chain, which is almost 95 percent franchised, has global sales of \$4.4 billion, a 33 percent increase since Puzder took over, CKE says.

Although Puzder and his would-be boss in the White House talk about job creation, most of the jobs CKE has created recently are, as at the Trump Organization, outside the U.S. When Puzder took over CKE in 2000, there were close to 3,500 Carl's Jr. and Hardee's outlets in the U.S. Now there are 3,000. The company's international presence, meanwhile, has expanded to include 750 restaurants in 40 countries. CKE says it hopes to double the number in the next five years. The biggest market so far is the Middle East, where about 350 Hardee's sell Frisco and Memphis BBQ burgers with ads that are more subdued—the men still ogle, but the women are fully clothed. Among CKE's newest markets are Australia, Cambodia, and Japan.

In the U.S., the chains are in a tough spot. Last year food deflation pushed down the price of groceries, so more Americans are eating at home. Larger rivals are engaged in a price war to draw in their most frequent customers, those on a budget. And higher-end chains such as Shake Shack, Smashburger, and Panera Bread are attracting younger diners with their less-processed ingredients.

Puzder has reluctantly conceded that tastes are changing. He's joked about having to offer gluten-free buns and spend money on advertising salads no one buys. The restaurants offer turkey burgers, which one of his marketing executives calls "food for women." Puzder eventually recognized that the marketing had to change, too. "It played itself out," says Cheryl Doerr, director for operations at a large franchisee in California. "It seems like we're done with girls in bikinis and the sauce dripping on the white shirt. Now we're showing our high-quality food."

**So maybe it's a** good time for Puzder to pivot, career-wise. If he does get confirmed as labor secretary, he'll oversee a staff of more than 17,000 civil servants. At CKE, some 85 people worked at the offices in Carpinteria, Calif., near Santa Barbara, and 320 at offices in Anaheim and St. Louis. Puzder traveled between them but was most often in the Carpinteria office. It had a gym, which he used, and running trails that overlooked the Pacific, which he also used. Everyone regularly ate the company's burgers and chicken sandwiches, though Puzder usually dispensed with the fattening toppings and occasionally the bun, too.

The top executives were mostly—and in 2016 entirely—male. "I felt respected," says Robinson-Coggins, the former marketer. "I was never intimidated by Andy. I wonder if maybe that's why we got along." A former senior manager and a franchisee, both of whom left the company with agreements



not to speak publicly, describe the culture as patriarchal, and Puzder as someone who tends to view the women around him as “the help.” Another former executive says that the atmosphere in the Carpinteria office was professional, but behind closed doors it was “good ol’ boys.” A fourth former executive describes Puzder as loyal, confident, and hard-nosed. She says that while he was a demanding boss who held people accountable, he didn’t believe in performance reviews. She thought that was a way to avoid lawsuits if he wanted to fire someone. “For my direct reports, I was happy to give a performance review to anyone who requested one, but nobody ever requested a formal review,” Puzder said via e-mail, noting that instead, he would have annual discussions about their performance.

Puzder’s business experience has been largely in a low-wage, low-margin industry built on a franchise model that tends to shift profits upward and responsibility downward. He claims 75,000 people as employees in the U.S. when presenting his qualifications for a cabinet position. But, like other fast-food executives, he tends to deflect blame for their treatment by franchisees when workers complain.

And many complain. About 60 percent of the U.S. Department of Labor’s investigations into CKE restaurants turned up at least one violation of the Fair Labor Standards Act, according to data compiled by Bloomberg BNA. Most other fast-food chains were even worse.

CKE has even had trouble with labor violations in Russia. In February 2015, the government determined that employees were owed back wages and severance totaling some \$82,000 after 50 restaurants closed. “That didn’t have anything to do with us. Franchisees are responsible for labor issues,” says Cathy Kellner-Diaz, vice president for international marketing at CKE. She says a new franchisee has opened 13 Carl’s Jr. restaurants in Russia.

Since Puzder took over, CKE has settled six cases brought by the U.S. Equal Employment Opportunity Commission, the two most serious of which concerned allegations of racial discrimination and sexual harassment. In 2002 the EEOC brought a claim against CKE saying a shift leader in a Carl’s Jr. in Elk

Grove, Calif., had bragged about being a skinhead and flying a Confederate flag at home. He allegedly told a young female black worker that he wanted to get a tattoo of a lynching. She notified her district manager, but the shift leader wasn’t disciplined, and she was fired. In 2005, CKE entered into a consent decree, denying the allegations and agreeing to pay \$255,000 in compensation and provide anti-harassment training to all its managers. Four years later, the EEOC obtained a \$75,000 settlement for a group of women who said they were sexually harassed at a Hardee’s in Livingston, Tenn. CKE notes that “there were no EEOC settlements of adverse findings” from 2010 to 2016.

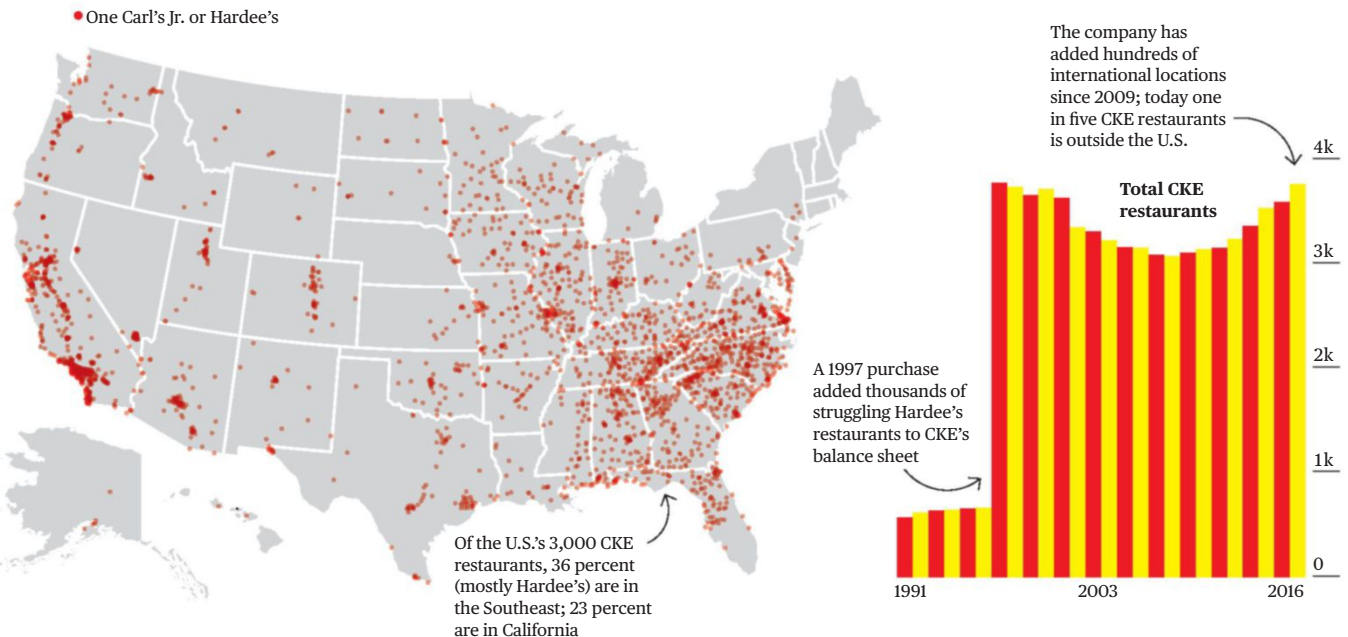
In a 2014 speech at Chapman University, a Christian university in California, Puzder said the company had spent \$20 million settling lawsuits related to overtime pay for some managers. He said the company had reclassified managers as hourly workers as a result. He thought that was unfortunate. Under the old system, “what they lose in overtime pay they gain in the stature and sense of accomplishment that comes from being a salaried manager. This is hardly oppressive,” he wrote in a *Wall Street Journal* op-ed.

Puzder’s decision about the pay structure, though, led to two other legal challenges, both pending in the California courts. The first alleges that CKE refused to pay back wages to general managers once it began applying the overtime rules. The trial is scheduled to begin in September. A second case concerns how CKE converted managers’ salaries to hourly wages. “Wage theft is distressingly common in the fast-food industry. It’s really the norm among franchisees,” says attorney Allen Graves, who is bringing both cases against CKE. “The thing that distinguishes these cases is that these restaurants were corporate-owned. I never thought that someone whose company’s conduct is bad enough to warrant a lawsuit would be in a position of public trust.” In an e-mail, CKE said it would vigorously defend both cases and declined to comment further, citing pending litigation.

On Jan. 27 current and former CKE workers filed more than

# CHAIN REACTION

As CKE’s U.S. expansion has slowed, more stores have opened overseas







FAST-FOOD WORKERS PROTESTING IN LOS ANGELES, JAN. 26

30 wage theft, harassment, and intimidation complaints with state and federal agencies. Robert Sunderlin, a 26-year-old shift leader at a Hardee's in Illinois, says his general manager had been altering his pay sheet and forging his signature to reduce the hours he worked. Concepción Betancourt, who's 39 and has been working at a Carl's Jr. in Oakland for 14 years, alleges that the restaurant has been systematically underpaying her for five years and that management has ignored her accusations.

"That's all politics," says franchisee Amir Siddiqi, who started as a dishwasher at a Carl's Jr. in 1985 and now owns 108 restaurants in California, none of which are named in the complaints, and works with Doerr.

Puzder has called California a socialist state that's killed capitalism with excessive regulation. "It's easier to open a restaurant in Karl Marx Prospect in Siberia than on Carl Karcher Boulevard in California," he's often said. During the oral history interview he gave in 2009, he said: "Have you ever been to a fast-food restaurant and the employees are sitting and you wonder, 'Why are they sitting?' They are on what's called a mandatory break. Your restaurant can be falling apart, and you can't move. You sit and watch till your rest break's over. So we don't build restaurants in California anymore."

That's not entirely true: In its 2015 disclosure documents, CKE reported that it expected to build two new company-owned restaurants in the state—the only place in the country where it was doing so. That might have something to do with the help the company received from the government. The Governor's Office of Business and Economic Development described to *Bloomberg Businessweek* via e-mail how in 2011 they'd worked with CKE to push through permits in six weeks for 300 outlets that were expanding their kitchens because it would add one or two more employees per restaurant.

"They want to protect workers, and there's nothing wrong with that," Puzder continued in the oral history. "But this nanny-state philosophy where the government's going to be responsible for protecting you and you aren't responsible for protecting yourself is not going to produce... a class of people who are interested in really developing themselves or this economy."

In March 2016, Puzder announced he was moving CKE's headquarters to Tennessee, where it's easier to do business. CKE is getting \$2 million in state and local tax incentives. Early this year, more than one-third of the corporate employees at the Carpinteria and St. Louis offices received word that they'd be laid off (with what the company calls generous severance packages) as a result. Joe Caruso, a franchising consultant who was CKE's director for franchise development in the 1990s, told *Bloomberg BNA* that Puzder's top concern as CEO must be his fiduciary responsibility. That said, he added:

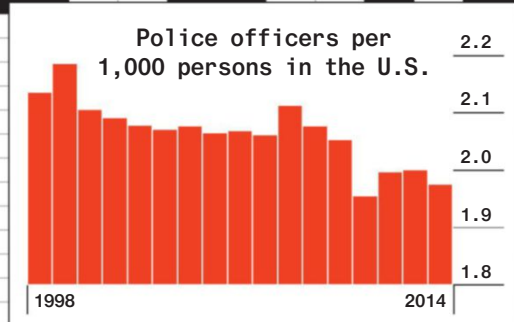
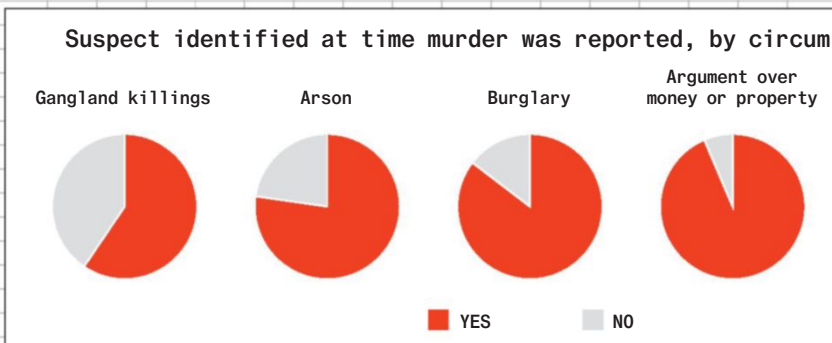
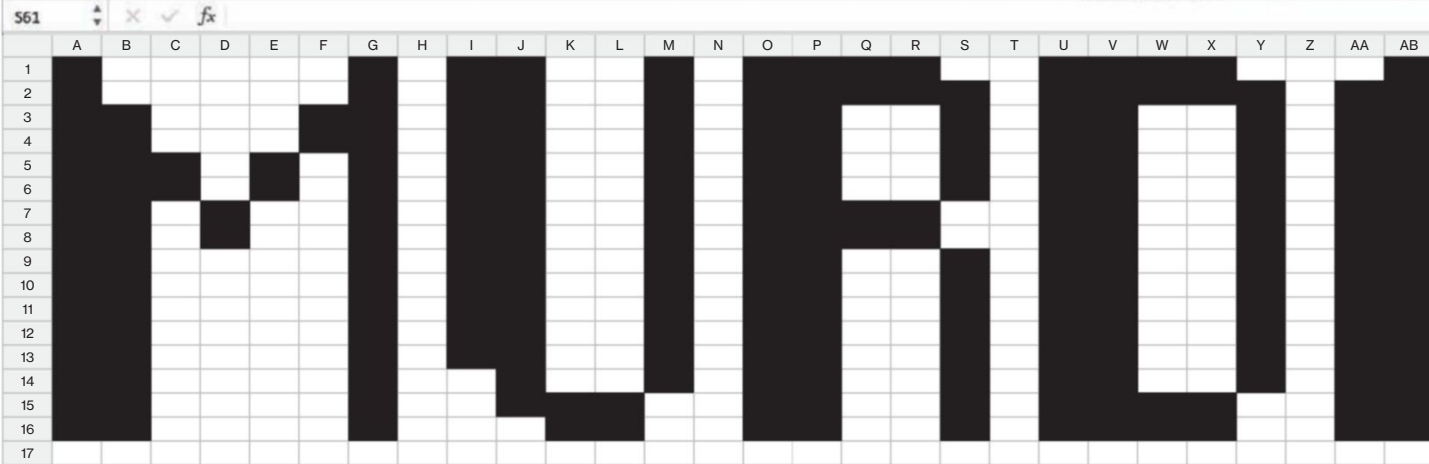
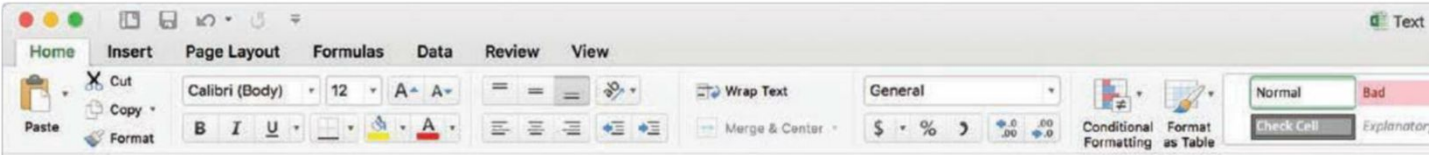
"I think at times it can come off as not having an emotional attachment" to workers.

**If Puzder set out** to make his career an audition for a role in the Trump administration, he couldn't have done much better. Around the time CKE became a private company, he began to brand himself as a straight-talking defender of commonsense business practices. He co-wrote a book, published in 2010, called *Job Creation: How It Really Works and Why Government Doesn't Understand It*. He joined the commentariat, giving speeches, writing op-eds, and appearing on Fox News Channel criticizing Obamacare, overtime pay, and the fight for a \$15-an-hour minimum wage. He had a blog. He tweeted, sometimes in Trumpian ALL CAPS. Puzder and his wife gave \$150,000 to Trump's Victory fund in May 2016, and when the *Access Hollywood* sexual assault video hit, he came to Trump's defense. In an appearance on Fox Business in early November, he was asked if he'd want to work in Trump's cabinet. His answer: "I think it would be... the most fun you could have with your clothes on."

Trump promised working-class voters that they would benefit from a strong Trump economy, but he rarely spoke about the biggest group of working-class voters, those in the service sector, or one of their most off-cited concerns, raising their hourly wages. Like Trump, Puzder promotes a nostalgic vision that occludes the reality of the American permanent low-wage workforce while enjoying the profits of the complex globalized world. "There's nothing more fulfilling than seeing new and unskilled employees work their way up to managing a restaurant," he told a Senate committee in 2014. Fast food is an inverted funnel, though, with very few such positions at the top. To get by, workers at CKE's restaurants rely on about \$250 million a year in taxpayer-funded safety net programs, according to the National Employment Law Project.

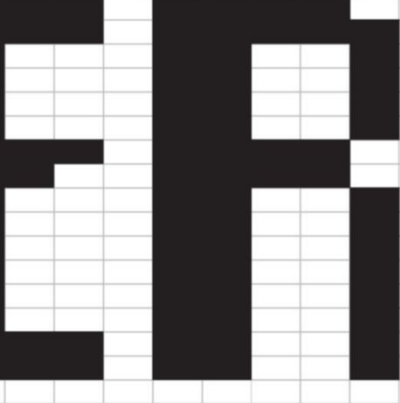
Puzder has said he doesn't oppose a modest increase to the minimum wage. But he told *Business Insider* in March 2016 that if wages were raised too high, restaurants would replace cashiers with machines. Many executives in the fast-food industry and beyond have suggested the same. Puzder went one step further. "They're always polite," he said of the proposed robots. "They always upsell, they never take a vacation, they never show up late, there's never a slip-and-fall, or an age, sex, or race discrimination case."

Assuming Puzder does get confirmed, what could he actually do to enact his economic ideals? He could narrow the recently widened definition of who's an employee in "gig economy" companies—Uber, for example—and who's an independent contractor. That's important because company employees are covered by federal labor laws, while independent contractors aren't. He could limit three guest worker programs, including the H-1B visas for high-skilled employees that Silicon Valley in particular depends on. Judging from his record at CKE, he'd likely push back on attempts to hold companies equally responsible with their franchisees for labor violations. And even if a Puzder Labor Department doesn't formally eliminate some of the 180 laws and thousands of regulations it oversees that affect 125 million people, it could accomplish more or less the same thing by simply not enforcing them. The department is also home to the bureau that releases the monthly employment numbers, statistics that Trump formerly derided as "phony." But as of the latest release showing the creation of 227,000 jobs in January, he now says they're "great." **E** — *With Carol Matlack, Ben Penn (Bloomberg BNA), and Leslie Patton*



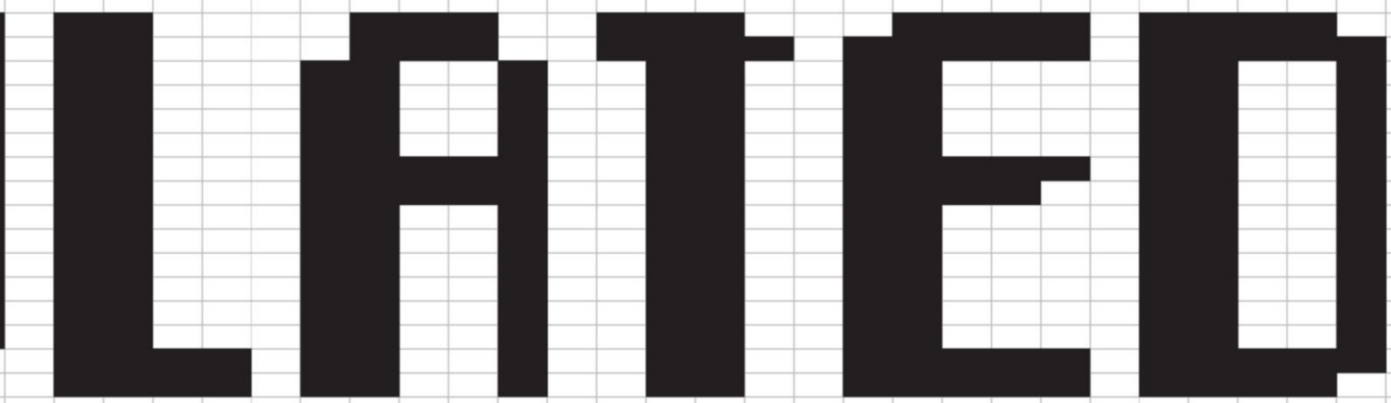
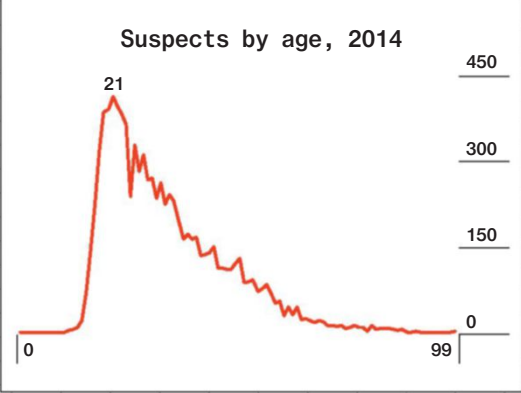
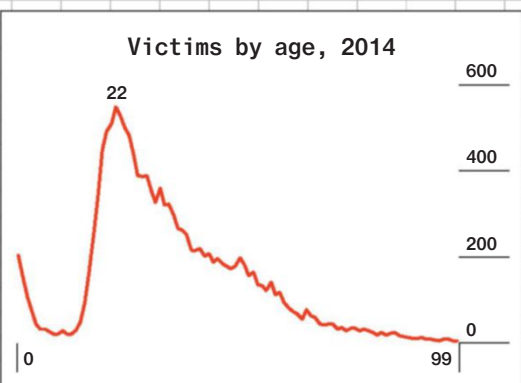
By Robert Kolker

AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE



stance, 2014

Lovers triangle



A tenacious data miner has built a tool that can help find serial killers and bring down murder rates—if police are willing to use it

On Aug. 18, 2010, a police lieutenant in Gary, Ind., received an e-mail, the subject line of which would be right at home in the first few scenes of a David Fincher movie: “Could there be a serial killer active in the Gary area?”

It isn’t clear what the lieutenant did with that e-mail; it would be understandable if he waved it off as a prank. But the author could not have been more serious. He’d attached source material—spreadsheets created from FBI files showing that over several years the city of Gary had recorded 14 unsolved murders of women between the ages of 20 and 50. The cause of each death was the same: strangulation. Compared with statistics from around the country, he wrote, the number of similar killings in Gary was far greater than the norm. So many people dying the same way in the same city—wouldn’t that suggest that at least a few of them, maybe more, might be connected? And that the killer might still be at large?

The police lieutenant never replied. Twelve days later, the police chief, Gary Carter, received a similar e-mail from the same person. This message added a few details. Several of the women were strangled in their homes. In at least two cases, a fire was set after the murder. In more recent cases, several women were found strangled in or around abandoned buildings. Wasn’t all of this, the writer asked, at least worth a look?

The Gary police never responded to that e-mail, either, or to two follow-up letters sent via registered mail. No one from the department has commented publicly about what was sent to them—nor would anyone comment for this story. “It was the most frustrating experience of my professional life,” says the author of those messages, a 61-year-old retired news reporter from Virginia named Thomas Hargrove.

Hargrove spent his career as a data guy. He analyzed his first set of polling data as a journalism major at the University of Missouri, where he became a student director of the university’s polling organization. He joined an E.W. Scripps newspaper right out of college and expanded his repertoire from political polling data to practically any subject that required statistical

analysis. “In the newsroom,” he remembers, “they would say, ‘Give that to Hargrove. That’s a numbers problem.’”

In 2004, Hargrove’s editors asked him to look into statistics surrounding prostitution. The only way to study that was to get a copy of the nation’s most comprehensive repository of criminal statistics: the FBI’s Uniform Crime Report, or UCR. When Hargrove called up a copy of the report from the database library at the University of Missouri, attached to it was something he didn’t expect: the Supplementary Homicide Report. “I opened it up, and it was a record I’d never seen before,” he says. “Line by line, every murder that was reported to the FBI.”

This report, covering the year 2002, contained about 16,000 murders, broken down by the victims’ age, race, and sex, as well as the method of killing, the police department that made the report, the circumstances known about the case, and information about the offender, if the offender was known. “I don’t know where these thoughts come from,” Hargrove says, “but the second I saw that thing, I asked myself, ‘Do you suppose it’s possible to teach a computer how to spot serial killers?’”

Like a lot of people, Hargrove was aware of criticisms of police being afflicted by tunnel vision when investigating difficult cases. He’d heard the term “linkage blindness,” used to describe the tendency of law-enforcement jurisdictions to fail to connect the dots between similar cases occurring right across the county or state line from one another. Somewhere in this report, Hargrove thought, could be the antidote to linkage blindness. The right person, looking at the information in the right way, might be able to identify any number of at-large serial killers.

Every year he downloaded and crunched the most recent data set. What really shocked him was the number of murder cases that had never been cleared. (In law enforcement, a case is cleared when a suspect is arrested, whatever the eventual outcome.) Hargrove counted 211,487, more than a third of the homicides recorded from 1980 to 2010. Why, he wondered,



PHOTOGRAPH BY CAIT OPPERMAN FOR BLOOMBERG BUSINESSWEEK

wasn't the public up in arms about such a large number of unsolved murders?

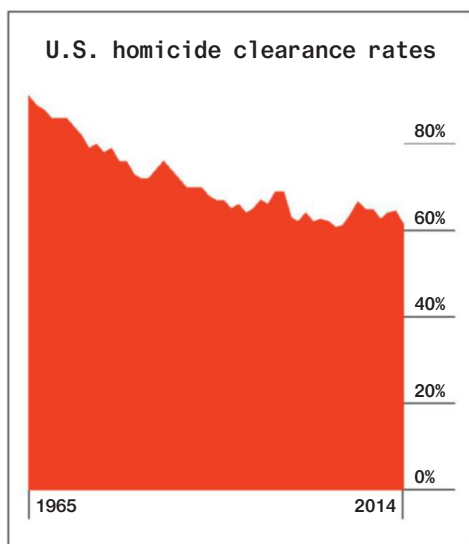
To make matters worse, Hargrove saw that despite a generation's worth of innovation in the science of crime fighting, including DNA analysis, the rate of cleared cases wasn't increasing but decreasing—plummeting, even. The average homicide clearance rate in the 1960s was close to 90 percent; by 2010 it was solidly in the mid-'60s. It has fallen further since.

These troubling trends were what moved Hargrove to write to the Gary police. He failed to get any traction there. Sure enough, four years later, in October 2014, in Hammond, Ind.—the town next door to Gary—police found the body of 19-year-old Afrikka Hardy in a room at a Motel 6. Using her phone records, they tracked down a suspect, 43-year-old Darren Deon Vann. Once arrested, Vann took police to the abandoned buildings where he'd stowed six more bodies, all of them in and around Gary. Anith Jones had last been seen alive on Oct. 8; Tracy Martin went missing in June; Kristine Williams and Sonya Billingsley disappeared in February; and Teaira Batey and Tanya Gatlin had vanished in January.

Before invoking his right to remain silent, Vann offhandedly mentioned that he'd been killing people for years—since the 1990s. Hargrove went to Gary, reporting for Scripps, to investigate whether any of the cases he'd identified back in 2010 might possibly be attributed to Vann. He remembers getting just one helpful response, from an assistant coroner in Lake County who promised to follow up, but that too went nowhere. Now, as the Vann prosecution slogs its way through the courts, everyone involved in the case is under a gag order, prevented from speculating publicly about whether any of the victims Hargrove noted in 2010 might also have been killed by Vann. “There are at least seven women who died after I tried to convince the Gary police that they had a serial killer,” Hargrove says. “He was a pretty bad one.”

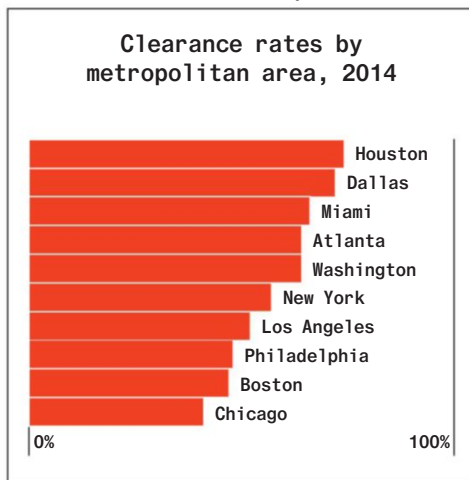
Hargrove has his eye on other possible killers, too. “I think there are a great many uncaught serial killers out there,” he declares. “I think most cities have at least a few.”

We're in a moment when, after decades of decreases nationally in the overall crime rate, the murder rate has begun creeping upward in many major U.S. cities. For two years running, homicides in major cities jumped on average more than 10 percent. (Those increases aren't uniform, of course: Chicago leapt from 485 reported killings in 2015 to 762 in 2016, while the



number of murders dipped in New York and Baltimore.) President Trump, in the campaign and since, has vowed to usher in a new era of law and order, hammering away on Twitter at Chicago's “carnage” in particular.

Threats of federal intervention aside, it will be difficult to fix the problem of high murder rates without first addressing clearance rates. So it's fortuitous, perhaps, that we are living in an age in which the analysis of data is supposed to help us decipher, detect, and predict everything from the results of presidential elections to the performance of baseball players. The data-focused approach to problem-solving was brought to life for a lot of people by Michael Lewis's *Moneyball*, which introduced the non-baseball-nerd public to the statistical evaluation of Major Leaguers and made a hero of Billy Beane, an executive with the Oakland A's. Law enforcement would seem to be a fertile area for data to be helpful: In the 1990s the New York Police Department famously used data to more shrewdly deploy its officers to where the crimes were, and its CompStat system became the standard for other departments around the country.



What Hargrove has managed to do goes a few orders of magnitude beyond that. His innovation was to teach a computer to spot trends in unsolved murders, using publicly available information that no one, including anyone in law enforcement, had used before. This makes him, in a manner of speaking, the Billy Beane of murder. His work shines light on a question that's gone unanswered for too long: Why, exactly, aren't the police getting any better at solving murder? And how can we even dream of reversing any upticks in the homicide rate while so many killers remain out on the streets?

It took a few years for Hargrove's editors at Scripps to agree to give him enough time to lose himself in the FBI's homicide data. With help from a University of Missouri grad student, Hargrove first dumped the homicide report into statistics software in 2008. He spent months trying to develop an algorithm that would identify unsolved cases with enough commonalities to suggest the same murderer. Eventually, he decided to reverse-engineer the algorithm by testing his ideas against one well-known case, that of Gary Ridgway, the so-called Green River Killer, who confessed to killing 48 women over two decades in the Seattle area. Hargrove thought that if he could devise an algorithm that turned up the Green River Killer's victims, he'd know he was on the right track.

“We found a hundred things that didn't work,” he recalls. Finally, he settled on four characteristics for what's called a cluster analysis: geography, sex, age group, and method of killing. For gender, he stuck with women, since they make up the vast majority of multiple-murder victims who aren't connected to gang-related activity. When he used women between the ages of 20 and 50—the cohort most commonly targeted by serial killers—the algorithm lit up like a slot machine. “It became clear that this thing was working,” he says. “In fact, it was working too well.”

The Green River Killer came up right away in this algorithm. That was good news. Hargrove's algorithm also pulled up 77 unsolved murders in Los Angeles, which he learned were attributed to several different killers the police were pursuing (including the so-called Southside Slayer and, most recently, the Grim Sleeper), and 64 unsolved murders of women in Phoenix.

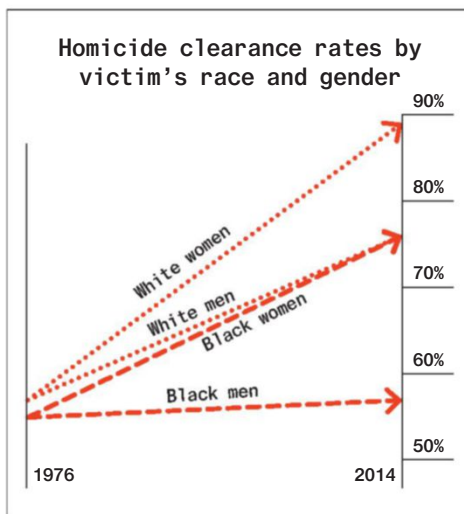
Then there was a second group of possible serial killers, those unrecognized by local police. “The whole point of the algorithm was to find the low-hanging fruit, the obvious clusters,” Hargrove says. “But there were dozens and dozens of them all over the country.”

In 2015, Scripps spun off the last of its newspapers, and Hargrove and the other print reporters lost their jobs. “The only guy who left with a skip was me,” he says. Hargrove, who was 59 at the time and had worked at the company for 37 years, qualified for a large severance and a nice pension, leaving him well-covered. Now he had enough time to go all in on his data project. He founded the Murder Accountability Project, or MAP, a tiny non-profit seeking to make FBI murder data more widely and easily available.

Using Freedom of Information Act (FOIA) requests, MAP has tried to chase down data from the many municipalities and counties that weren’t supplying their murder data to the FBI, out of bureaucratic laziness, a lack of manpower, or perhaps just rank incompetence. MAP has already assembled case details on 638,454 homicides from 1980 through 2014, including 23,219 cases that hadn’t been reported to the FBI. This is the most complete list of case-level details of U.S. murders available anywhere, and the group’s website has open-sourced all of it. Anyone with statistical analysis software, available for free online, can start looking, across jurisdictions, for serial killers. Anyone can compare convicted killers’ timelines against the timing of unsolved murders to determine if a connection is plausible. “You can call up your hometown and look and see if you see anything suspicious,” Hargrove says. “If you’re the father of a murdered daughter, you can call up her record, and you can see if there might be other records that match. We wanted to be able to crowdsource murder.”

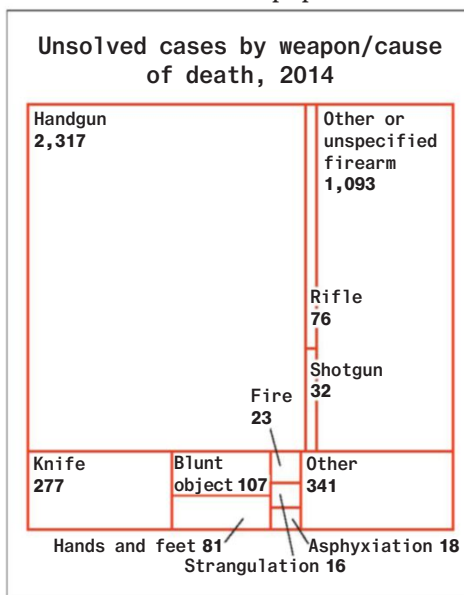
**T**he police have never been great at leveraging the power of their own statistics. Police culture is notably paper-based, scattered, and siloed, and departments aren’t always receptive to technological innovation. The National Crime Information Center (NCIC) database gives police access to information such as fugitive warrants, stolen property, and missing persons, but it’s not searchable for unsolved killings. The Center for Disease Control and Prevention’s National Violent Death Reporting System compiles death-certificate-based information for homicide victims in 32 states, but, again, can’t be searched for uncleared cases. Some states have their own homicide databases, but they can’t see the data from other states, so linkage blindness persists.

In the 1990s the FBI created another voluntary reporting database, this one specifically for violent and sexual crimes, called the Violent Criminal Apprehension



Program, or ViCAP. It never succeeded, either, primarily because it’s voluntary, making it easy for police departments to ignore. “Most law enforcement agencies don’t have a real solid understanding of what the purpose of ViCAP is,” says Gregory Cooper, who ran the program for three years. “The frustration is, I’ve got a car, but no one’s putting any gas in it.” Hargrove calls ViCAP “an experiment that was never properly funded, and most police departments never really bought into the idea.”

All of this contributes to, or at least fails to mitigate, the trend in the Uniform Crime Report and its Supplementary Homicide Report. Hargrove’s analysis of that data shows that the clearance rate, already so low compared with what it was decades ago, dropped from 64.5 percent in 2014 to 61.5 percent in 2015. That translates into 6,043 murder cases in 2015 that didn’t result in arrests. He picked apart those findings and learned that large cities tend to have worse clearance rates than small towns, perhaps because major cases are more rare in less populated areas



and therefore tend to get special attention. (This might at least partially explain why about 75 percent of Canada’s 500 to 600 homicides each year are cleared.)

Hargrove also learned that not all big cities are the same when it comes to murder. “The variance is breathtaking,” he says. Los Angeles, New York, and Houston are well above the average clearance rates—in the low- to mid-70s. The bottom of the class includes New Orleans, Detroit, and St. Louis, all bumping along in the mid-40s.

Police in large cities with stubbornly high murder rates point the finger at gang- and drug-related killings, and the reluctance of witnesses to come forward to identify the murderers. “The biggest problem is that everyone knows everyone,” Chester, Pa., Police Commissioner Darren Alston told the *Philadelphia Daily News* in September. (Chester’s homicide rate outstrips all other U.S. cities—and is more than double that of nearby Philadelphia.) City residents, in turn, point to a lack of trust in the police. But one other obvious problem is resources. “We fund homicide investigations like we fund education—it comes down to a local tax,” Hargrove says. “When an economy fails enough and we just have to start firing cops, we see everything going to hell.”

MAP tracks staffing trends on its website, too. Hargrove notes that Flint, Mich., and Dayton, Ohio, have seen their clearance rates fall more than 30 percentage points since the 1990s, coinciding with huge reductions in police manpower (330 to 185 officers in Flint; 500 to 394 in Dayton). When Hargrove’s group filed a FOIA request to get homicide data about a suspected serial killer in Detroit, the response was that the police lacked the budget to fulfill the request. “What do you do when a city says, ‘We’re too broke to even try to pull the records?’” Hargrove says. “I joke that what we’ve done is to create what amounts to a failed government detector.”

There is a case to be made, though, that clearance rates aren’t just a function of a police department’s staffing. Priorities and management also figure heavily. In 2000, Charles Wellford, a criminologist at the University of Maryland, published a seminal paper in which he identified the commonalities for departments that do effective murder clearance. No. 1 on that list was ensuring that cops are able to chase leads in the critical early hours after a murder, even if that means earning overtime pay. Wellford’s current research looks closely at the amount of money spent per officer, the amount spent per case, and the percentage of detectives on

“If you leave the killers to walk the street, why wouldn’t that cause more killings? The answer is, it does”

the force. Clearance rates, Wellford says, “are very much determined by priorities and resources. I’m beyond thinking that’s an open question. The question now for me is: How can we use the resources departments have to improve what they’re doing in clearing serious crimes?”

The most discouraging thing Hargrove has learned since starting his organization is how many police departments around the country not only ignore the FBI’s data but also don’t bother sharing their data with the FBI at all. Among the offenders: the state of Illinois, which MAP has sued for the information. Hargrove recently reported that homicides were more likely to go unsolved in Illinois in 2015 than in any other state: Only 37.3 percent of the 756 homicides were cleared. That dreadful clearance rate would seem to go a long way toward explaining Chicago’s notoriously climbing homicide rate, just as the president and others start searching for solutions.

From his experience with the Gary police, Hargrove learned the first big lesson of data: If it’s bad news, not everyone wants to see the numbers. Lately, he’s taken to forcing the issue. Together with MAP Vice-Chairman Eric Witzig, a retired FBI investigator who worked with ViCAP, Hargrove has conducted teaching sessions with homicide detectives at meetings of the International Homicide Investigators Association and at the FBI’s Training Division in Quantico, Va. Hargrove gets the attention of the detectives in the room by using the JonBenét Ramsey case as a test for the database. The detectives watch as he selects “Colorado” under state, “strangulation” under weapon, “female” under victim’s sex, and “6” under victim’s age. Colorado has only one such case, JonBenét. But then Hargrove broadens the criterion to include strangulations of girls ages 5 through 10, and a second Colorado case pops up: Melanie Sturm, a 10-year-old girl found strangled in Colorado Springs in 1985. Then he broadens it nationwide and finds 27 unsolved cases, 11 of them in Western states. He shows them how easy it is to download this information into a list. It’s like something from *CSI*. “I believe every law enforcement agency should be made aware of and utilize this program’s database,” Janet Oliva, president of the FBI’s International Criminal Investigative Analysis Fellowship, told Hargrove.

The police in Atlanta are working with MAP now to trace a long string of unsolved murders. But elsewhere, there’s still

some skepticism about the power of transparent data to serve the public good. For one thing, it’s expensive. “This is an open debate,” Hargrove says. “Things are getting so bad out there financially that the mayors are wondering, ‘Does it make sense for me to spend my resources on solving crimes against the dead when I’ve got the living who need help, too?’” Why not just grab the easy cases—the cases with witnesses, ballistics, and DNA—and put the hard ones on the back burner?

The answer, at least intuitively, would seem to be that at least some of these murderers will kill again. But if that were true, it ought to affect the murder rate. Sure enough, using his database, Hargrove has confirmed that this is the case. Pulling up information from 218 metropolitan jurisdictions in the 2014 Uniform Crime Report, he found that in the places with poor clearance rates, the homicide rate was almost double that of places where the clearance rate was better—from 9.6 homicides to 17.9 per 100,000 people.

“It makes perfect sense,” Hargrove says. “If you leave the killers to walk the street, why wouldn’t that cause more killings? The answer is, it does.”

Others have reached the same conclusions in different ways. In *Ghettoside*, a powerful examination of the unsolved-murder epidemic in Los Angeles, author Jill Leovy raises the notion that solving murder cases legitimizes the social order, undermining the ad hoc phenomenon of “street justice” that emerges in lawless areas and makes people feel powerless. So much attention has been paid to police racial bias cases that another sort of injustice—lack of thorough policing—gets overlooked. “It’s not enough to just stop doing the wrong kind of policing,” Mark Funkhouser, a former mayor of Kansas City, Mo., and now publisher of the magazine *Governing*, wrote last fall. “It’s vital that we do much more of the right kind.”

A number of studies over the years show that strong community policing and giving high priority to casework can raise clearance rates, independently of workload and budget. This is where management comes in. “When Michael Nutter campaigned for mayor of Philadelphia in 2007, he was saying, ‘I’ll make solving major crimes a major issue in my administration,’” Hargrove says. “Well, damned if they didn’t elect him and damned if he didn’t do just that.” Over two years, Philadelphia raised its homicide clearances from 56 percent to 75 percent.

In Santa Ana, Calif., the clearance rate climbed from about 28 percent in 1993 to almost 100 percent in 2013, after a new police chief created a special homicide unit for gangs and attracted anonymous donations to offer higher rewards for tips leading to arrests. In Oakland, where clearance rates dropped to 30 percent in 2012, the police worked with the FBI to add five agents to the department’s squad of 10 full-time homicide investigators; in 2015 the clearance rate rose to 60 percent. MAP has joined forces with a local TV news station to shine a light on other underperforming police departments in the Bay Area.

“I don’t want to blast a particular politician,” Hargrove says, “but it’s been my experience that when you ask a police chief or a mayor in a well-performing police jurisdiction what their clearance rate is, the mayor and the police chief can snap those figures off, because they’re paying attention.”

As are the police in Austin. Vann, the Gary murderer, was caught not long after moving back to Indiana from Texas, where he’d spent a number of years. While Hargrove never heard back from the Gary police, he did hear from the police in Austin. “They said, ‘We need to know whether he could’ve killed anyone here.’”

Hargrove sent the Austin police data on every strangulation death in Texas. It looked like Vann had kept his nose clean; Hargrove couldn’t see any cases there that matched his pattern. “They must have agreed,” Hargrove says, “so that’s a kind of consultation.” The first, perhaps, of many. **E**

# YOUNG

**BY ALEX SHERMAN  
PHOTOGRAPH BY  
NATHANAEL TURNER**





# LOTS OF EX-ATHLETES GO INTO FINANCE. STEVE YOUNG IS ACTUALLY GOOD AT IT

**B**efore a *Monday Night Football* game in Minneapolis in October, Steve Young seems to be doing the typical work of an ex-quarterback. Still fit and even boyish-looking at 55, Young is roaming a patch of sideline, chatting and taking pictures with a group of men, all of whom look thrilled to be near the San Francisco 49ers legend. Then Young ducks over to a nearby ESPN set, where he talks about the Vikings' offense for an audience of several million viewers. Then back to the same gaggle of men. The process repeats: glad-handing, TV hit, glad-handing.

Soon enough, though, it's clear that Young is paying a lot more attention to one of these tasks than the other. The moment the ESPN cameras are off, he bolts to the group on the sideline. And once he's there, talk rarely turns to football. Young is schmoozing people connected to the private equity firm, HGGC, that he co-founded a decade ago. The firm has a niche within a niche—it specializes in acquiring majority stakes of enterprise software companies worth \$300 million to \$500 million—and it uses *Monday Night Football* games as marketing events. When the season begins, Young and his partners buy a luxury suite for virtually every Monday matchup. Young, HGGC Chief Executive Officer Rich Lawson, and a handful of others from the firm travel from NFL city to NFL city, meeting with portfolio companies, acquisition targets, and customers.

In Minneapolis, the guest of honor is a company HGGC acquired in April. Called FPX, it makes a cloud-based price-quoting system, and its executives have invited potential clients, including UnitedHealth, the \$153 billion health-care behemoth headquartered nearby. After the group leaves the sideline for HGGC's luxury box, Young gives a younger colleague some pointers on how to pitch FPX's software.

Lots of professional athletes retire and attempt a second career in finance. Many fail. Others hang on as front-office window dressing, celebrity their only value. Young turns out to be the rare ex-jock who's actually good at private

equity—doing original research to find takeover targets, learning how to model deals in Microsoft Excel, and helping to manage the companies after acquisition. HGGC has generated an average annual yield of 66 percent over the last three years, according to a firm presentation obtained by Bloomberg News.

Young says he may have quit ESPN years ago if not for his private equity partners, who like him to keep a high profile. When he works a *Monday Night* game for the network, he spends no more than an hour or two at the stadium preparing his commentary, he says; the rest of the time, he's holed up in HGGC's suite, cramming for deals. Once the game starts, he barely watches the action. A couple of transactions, he notes, have even been agreed to with handshakes in the suites.

"My wife hates football, and my kids don't really care," Young says. "I see myself as a deal guy first. I've put football behind me. Roger Staubach once told me—and I'll never forget it: 'When you retire, run. Never look back.'"

**T**here's a moment in Young's recently published autobiography, *QB: My Life Behind the Spiral*, when he's at college and calls his dad to say he needs a loan for a car. He's a varsity quarterback for Brigham Young University and wants to get around campus in style. His father has a more economical idea: He'll drive cross-country to deliver Young his Oldsmobile, with more than 200,000 miles on the odometer. Young responds: "Oh, c'mon, Dad. No way!"

Young was about 21 when he theoretically said this. It's hard to imagine a 21-year-old speaking that way—like a character from *The Andy Griffith Show*. And yet Young really may have chirped these Mayberry-ish words. His preferred drink is milk. As a practicing Mormon, he won't touch alcohol and doesn't believe in sex before marriage. Young's aw-shucks attitude helps him professionally. He thinks before he speaks and doesn't answer in platitudes, which makes him not only an excellent



# MONEY

football commentator but also an endearing dealmaker, especially when everyone else around the negotiating table tends toward the mercenary.

Young's father, LeGrande "Grit" Young, grew up poor and worked his way through law school at the University of Utah as a janitor, getting four hours of sleep a night. He got a job with Anaconda Copper Mining as an in-house labor lawyer, and eventually, in 1970, after getting a transfer to the New York office, moved his family from Utah to Greenwich, Conn. Steve was entering the third grade. He grew up surrounded by some of the country's wealthiest bankers and investors and studied his father's approach to the law. Grit usually wore nice clothes to work, but not when he had a meeting with the mining company's labor organizers. "I used to watch my father wear frayed shirts to relate to the union workers," Steve says. "It definitely taught me some things about negotiation."

In Greenwich, Grit kept his four sons and one daughter grounded by lying about his salary, claiming he made only \$6 a day. If Steve or his siblings wanted new cleats or a baseball glove, Grit would say, "I'd love to, but, you know, I only make so much." All the Young children took part-time jobs. All of them were also gifted athletes, but Grit told them to focus on grades and education. "Steve dreamed a lot about football," says Grit, now 80, from his house in Las Sendas, Ariz. "He had Staubach's poster on his bedroom wall. But sports are a dream. You have to be educated. You need to get skills when football falls apart." Football never fell apart for Steve, though. As he excelled at each level of the game, Grit was bewildered. "Starting in high school,

quarterback under Joe Montana, and over the course of seven off-seasons, he pursued a law degree at BYU. (His great-great-grandfather was Brigham Young himself.)

Young eventually got the starting job, and in 1992 he won the first of his two Most Valuable Player awards. He says, "There was one day when I turned to my dad and said, 'Guess what? The plan and the dream merged!' And he said, 'No, it didn't. What are you going to do when you graduate? You play until you're in your 30s. Then what? There's a whole 'nother life you're going to have.'"

Young won three Super Bowls with San Francisco during his law school years—two as a backup to Montana and one as a starter, in 1995. "When he graduated from law school, I was really proud of him," Grit says. "It's hard to equate that exactly with how I felt after he won the Super Bowl. But for me, when he graduated—that was the height of my expectations."

**O**n Sept. 27, 1999, while playing against the Arizona Cardinals on *Monday Night Football*, Young dropped back to pass. Cornerback Aeneas Williams blitzed. None of the 49ers' linemen laid a hand on Williams as he left his feet at full speed to hit Young, who slammed his head into another player's thigh and then the ground. Young remained very still for a very long time, and he never played again. It was his seventh official concussion. (Young says he's never experienced lingering symptoms from head injuries.)

Seventy-eight percent of former NFL players go bankrupt or come under financial stress just two years after they retire,

## "WHAT ARE YOU GOING TO DO WHEN YOU'RE IN YOUR 30s. THEN WHAT? THERE'S A WHO

I was just flabbergasted. Then he succeeds in college—I couldn't believe it. And then as a professional athlete....Honestly, Steve's personality is probably a better fit for law or business."

An unusually agile runner, Steve developed his distinctive left-handed passing game at BYU, finishing second in voting for the 1983 Heisman Trophy, awarded to the nation's most outstanding college player. He went pro by signing a bizarre \$42 million, 43-year contract with the Los Angeles Express of the short-lived

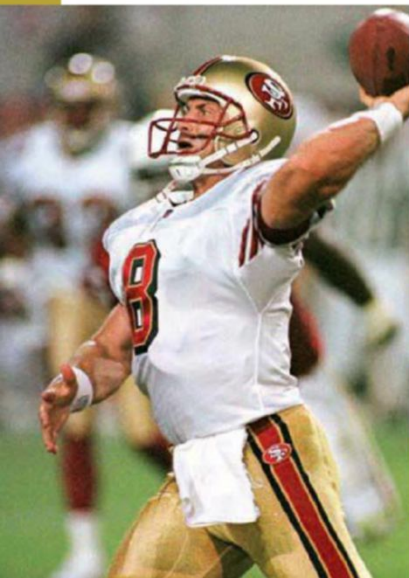
United States Football League. The agreement, structured as an annuity in part because of the team's shaky finances, technically made Steve the highest-paid player in all of professional sports. But Grit still wasn't convinced football was a viable career. "I saw him in the off-seasons, and he was just goofing off with his friends back in Provo," he says. "I said, 'You've got to get some skills to succeed in business, or in life. Why don't you go to law school?'"

Steve did so after switching to the NFL. (He got only \$3.5 million from his USFL contract.) After a stint with Tampa Bay, he signed with San Francisco. During the season, he apprenticed as a

according to a 2009 report in *Sports Illustrated* that cataloged profligacy, poor investments, fraud, and other causes. Young was better positioned than most. He'd been lucky to play in the 1990s for San Francisco—a boomtown, with entrepreneurial activity everywhere. His first taste of the corporate world came when he joined the board of directors at PowerBar, the energy bar company. There he met Larry Sonsini, whose law firm, Wilson Sonsini Goodrich & Rosati, is a mainstay of Silicon Valley mergers and acquisitions, and Warren Hellman, a co-founder of private equity firm Hellman & Friedman. They helped Young figure out that he could put his law degree to use through investing without having to take the bar or become a practicing attorney.

After retiring from the NFL, Young got a job at Northgate Capital, a so-called fund of funds—an investment company that places clients' money with other investment companies, charging a fee along the way. Young got bored. "A fund of funds is a tollbooth," he says. He didn't want to just fundraise—the cliché of the ex-jock in finance who shakes hands, solicits checks, and leaves the investing to others. Young wanted something more competitive, and so did a rising Morgan Stanley banker named Rich Lawson.

While Young spent the 1990s winning titles and getting concussed, Lawson was learning about the burgeoning technology industry as an investment banker. Bain Capital, the private equity firm co-founded by Mitt Romney, asked Lawson to run one of its investments, a dot-com called Found. Bain also asked Young, who had been an early investor in the firm, to serve as Found's chairman. Young and Lawson formed an odd-couple bond. Lawson is always slickly dressed and would be an easy fit in any corporate boardroom. Young grew up never tying his shoelaces. "He's like a brother to me," says Lawson, now 45.



In 1999, against the Arizona Cardinals



At HGGC's offices in Palo Alto

In 2001, Young left Northgate. He, Lawson, and a Bain executive named Bob Gay helped co-found a private equity firm called Sorenson Capital. Lawson taught Young corporate finance, showing him how to model company cash flows. “Those first years with Rich, it was just him, all day long, with Excel spreadsheets,” Young says. “I didn’t fall out of law school with modeling skills.” The sense that he was learning genuine finance technique made Young more comfortable using his celebrity. He could get business owners to call him back, while Lawson was still a relative unknown in Silicon Valley. “We complemented each other,” Lawson says. The two came to specialize in enterprise software—

executives and firing employees. As an investor, Young’s earnestness is sincere and strategic. Some businesses really don’t want to sell, and not many funds play in this “partnership only” game, where a business owner can trust that she won’t be steamrollered or removed by a new majority shareholder.

Buying companies is only half the work of private equity. Young’s upbringing is on display when selling them, too. Sonsini, the PowerBar mentor, describes a deal to sell one of HGGC’s companies, Hybris, in 2013. One potential buyer, Adobe Systems, offered \$75 million more than another, SAP. At most private equity firms, there would hardly be any discussion about whom to sell to. But Hybris executives wanted to operate independently within a larger company and were attracted to how SAP had marketed an earlier acquisition, SuccessFactors, as “SuccessFactors—an SAP company.” Young pushed Hybris to sell to SAP, despite the lower offer. “Steve was calling the meetings. He was on the phone with me and my team, asking complex, detailed questions about how you make distinctions about price, deal certainty, deal execution, and fiduciary duty,” says Sonsini, who was a consultant on the transaction. “At that point in time, he was just starting to do big deals, but those types of questions in the middle of negotiations you usually only get from experienced investors.”

Hybris put HGGC on the map in the private equity world as a legitimate player, not just a pigskin tosser’s retirement lark. SAP ended up paying \$1.4 billion for Hybris, and Young’s firm earned more than five times its initial investment, taking home more than \$1 billion in cash.

## U GRADUATE? YOU PLAY UNTIL YOU’RE IN LE ’NOTHER LIFE YOU’RE GOING TO HAVE”

applications, usually subscription-based, that companies rely on to manage their essential operations. But they could afford only to invest in lower-midmarket companies. In 2007 they saw an opportunity to move up a notch.

Gay, a Mormon, had gone on a three-year volunteer trip to Ghana; while he was there, he co-founded a U.S.-based private equity firm with a fellow church member, the industrialist Jon Huntsman Sr., that they called Huntsman Gay Global Capital. Young and Lawson flew to Ghana to persuade Gay to bring them aboard the new venture. With Lawson and Gay in the front seat of a dilapidated car and Young in the back taking notes, the trio negotiated terms. In an unexpected turn, Huntsman wasn’t able to access millions of his own money that he’d planned to invest, and Gay later took a reduced role. Lawson became CEO, and he and Young rebranded the firm as HGGC. “Maybe we should have changed the name to something else,” Young says. “HGGC sort of sounds like an acronym for nothing.”

**Y**oung and Lawson set up shop in Palo Alto. The HGGC offices are filled with autographed 49ers jerseys and footballs, and one of Young’s MVP trophies sits by the reception desk. After Young began commenting for *Monday Night Football* in 2009, the firm built him a studio in the office so he could do remote TV appearances during the week with minimal disruption to his investing work. He regularly travels to such places as Abu Dhabi, Dubai, Beijing, and Seoul to raise money.

When an enterprise software company decides to sell a stake to private equity, HGGC must compete against dozens of larger buyout firms. To differentiate themselves, Young and Lawson invest only in companies where management stays on after the sale. That cuts against private equity’s reputation for replacing

The firm last month closed a \$1.8 billion fund, its third, after raising funds of \$1.1 billion and \$1.3 billion. Young invests tens of millions of his own wealth in each fund. (He didn’t respond to a question about his net worth.) “We could have raised a lot more money,” Lawson says. “Other funds that started around the same time as us—they’re huge now. We’re competing against their junior funds. Steve and I are competing against a bunch of 28- to 32-year-olds for business. And that’s an advantage for us.”

Young says his celebrity cuts both ways; some people don’t take him seriously. “I think it’s a net neutral,” he says. “Maybe I’ll get someone to return a phone call. But the other half of the time, it’s like, ‘What in the heck’s going on here?’”

“I was definitely skeptical,” says Drew Smith, vice president for alternative assets at Advantus Capital Management, which invests with HGGC. “Celebrity, that’s not what we do here. I’ve had talks with athletes before, and you do some digging and you realize they don’t really show up. Steve shows up.” Young also tries to bring other ex-athletes into the game. At HGGC’s annual meeting last May, the attendees included Junior Bryant, a former 49er, and Brooks Laich, who played 764 games in the NHL. Both are interested in finance. “The door’s open,” Young says. “It’s an educational forum. Come and learn. We’re not talking about becoming a deals partner, we’re talking about seeing how sophisticated investors act and talk.”

On a Friday in January, Young is working in his office, considering an investment. Physically, there’s zero giveaway that he ever played quarterback—at any level of the game. In a suit, he could easily be just another finance guy who voraciously cycles or swims. For lunch, he grabs a hot dog and a cookie, then heads toward his minivan. He’ll eat on the drive to San Francisco, where he’ll pitch another deal. **B**



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# Life Now!



THE PROMISE OF A MORE PERFECT LIFE AWAITS LESS THAN AN HOUR OUTSIDE ATLANTA

BY SHEILA MARIKAR  
PHOTOGRAPHS BY JOHNATHON KELSO



**O**n a recent Tuesday, Steve Nygren was leading a tour of Serenbe, a planned community of 240 homes he began carving out of the woods outside Atlanta in 2000. Most of the group, myself included, clutched half-full coffees against the 30-degree weather. “Does anyone want to get rid of their cups?” asked Nygren, 71. “I want to show you how we deal with trash.” He stooped down in front of a wide, wooden front porch and lifted up what appeared to be a manhole cover. His paper cup thunked softly into a subterranean metal can. “We pick it up with an electric golf cart. Most places have Herby Curbys”—those green and blue bins synonymous with suburbia. “It’s visual pollution. Six a.m., the trash truck comes, ‘beep, beep, beep,’ waking everybody up. Noise pollution,” he said. “We wonder why antidepressant use has increased fourfold over the last two decades. It’s because our built environment is not a good place to be.”

If linking antidepressant use to above-ground garbage cans sounds like a stretch, you haven’t been to Serenbe. The cosmopolitan hamlet in the bucolic wilds of Georgia seeks to change the notion of what a planned real estate development can be. Founded on the principles of agricultural sustainability and biophilia—which holds that people innately yearn to connect with nature—Serenbe is ideologically distinct from the gated golf course-McMansion mashups that tend to define planned communities in America.

Planned communities are increasingly popular. In January, RCLCO, a real estate advisory company, released a report showing that combined home sales at the 20 top-selling communities in the country were up 6 percent in 2016 from the year before. Serenbe is growing, too: In December residents began moving into Mado (derived from the Creek Indian term for “life in balance”), the third neighborhood in the development, after Selborne and Grange. When construction wraps on Mado’s Eastern medicine center, spa, and Scandinavian-inspired cottages, Serenbe’s population is expected to jump to 1,000 from 550, raising the value of the development to a cool billion dollars, community representatives say—a vast increase from Nygren’s initial \$15 million investment.

Nygren grew up in rural Colorado and moved to Atlanta to help Stouffer’s open a hotel in 1969. When he realized the French-bread-pizza company’s plan to expand into hospitality might not pan out, he started developing restaurants throughout the Southeast on his own. In 1991, seeking a weekend refuge from the city, he bought a farm 33 miles southwest of Atlanta. His wife, Marie, fixed up a cottage on the property for their daughters, and the charms of the country quickly lured the family there full time. “It was a value shift,” Nygren says. “I sold the company, I sold the house, I resigned from all the boards.”

One morning in 2000, while jogging with one of his daughters, Nygren spotted a bulldozer mowing down trees near their

property, which by that point had expanded to 300 acres. He panicked, calling neighboring landowners and brainstorming plans to stop what he saw as the inevitable onslaught of strip malls and suburban sprawl. He spent the next two years researching nature-friendly housing developments, until he stumbled on a study by the nonprofit Urban Land Institute showing that 92 percent of people who owned lots on golf-course developments played golf twice or less a year. “Meaning,” he said, “they were buying it for the open space, not to be on the golf course.”

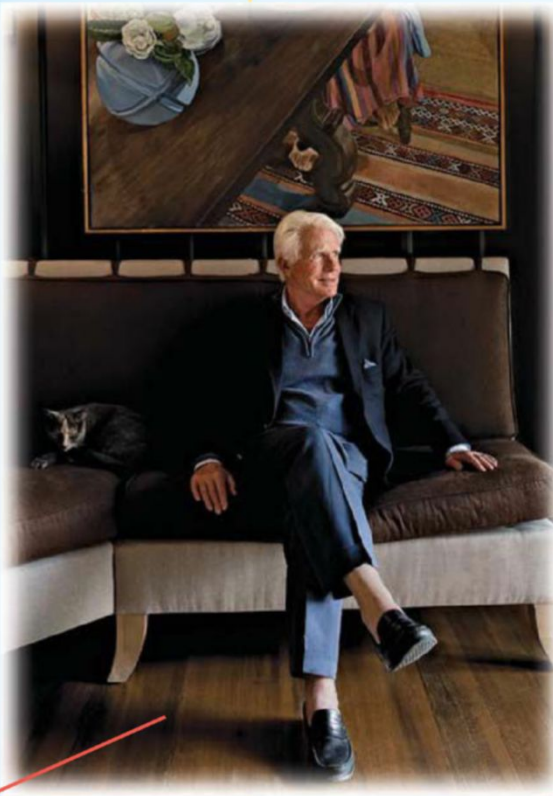
Over wine-fueled dinners at his house, Nygren organized the county’s 500 landowners and lobbied to change the zoning of their combined 40,000 acres. His vision: to turn a small portion of their land into a walkable town, modeled after English villages and demographic “blue zones” (places where a disproportionate number of people live past 100) while preserving the rest as forest. He established rules to ensure architectural uniformity and encourage neighborly comity: Houses can be Craftsman

or modern but not both. Porches must take up 70 percent of the first floor and be at least 8 feet wide. Front lawns are all but forbidden; instead, homes back onto a web of trails forming shortcuts through town. Mailboxes are placed in centralized huts rather than in front of houses. “Sometimes it takes two hours to get the mail, I run into so many people,” says Monica Olsen, Serenbe’s vice president for marketing and communications, who moved to the development in 2009, five years after the Nygrens sold their first lot.

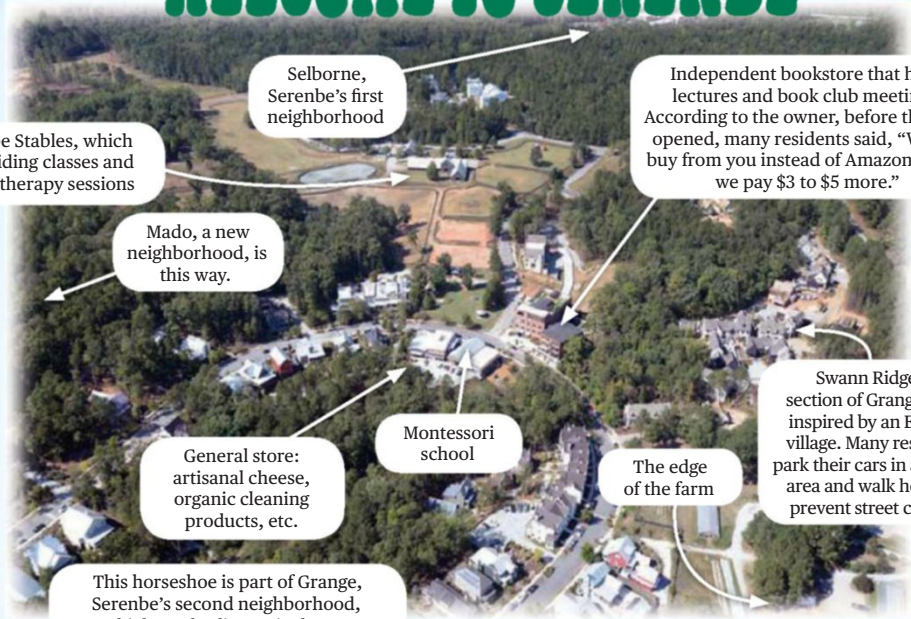
Garnie Nygren, Steve’s 32-year-old daughter and Serenbe’s director for operations, manages the community’s 60 service workers. She also co-owns a clothing boutique and a raw juice company whose offerings are so healthful, she says, “you’d need to eat 10 pounds of produce to get the nutrients contained in one bottle.” Serenbe’s populace includes more than a few aging hippies nourishing their chakras,

but it’s also home to an organizer of the National Prayer Breakfast and people of various genders and sexualities. There are pilots and management consultants, entrepreneurs and artists. Thirty-five percent of Serenbeans are in their 30s, and 70 percent work remotely part or full time. Steve Nygren has identified two common denominators: “Everyone at Serenbe has a passport, and there’s a real sense of hope.”

With its manufactured charm, Serenbe has the feel of a town conceived in Hollywood—even its name, an amalgam of “serenity” and “be,” sounds as if it were drummed up in a writer’s room. Residents talk about it with glassy-eyed zeal. “The first time I came here, I had to drive through some odd areas. But all of a sudden, it’s like, the clouds part, the sun shines, the angels sing,” says Michelle Mason, a 38-year-old pharmaceutical executive who moved to Serenbe from New York City in 2015. “I’ve heard



# WELCOME TO SERENBE



Selborne, Serenbe's first neighborhood

Independent bookstore that hosts lectures and book club meetings. According to the owner, before the store opened, many residents said, "We will buy from you instead of Amazon even if we pay \$3 to \$5 more."

Serenbe Stables, which holds riding classes and equine therapy sessions

Mado, a new neighborhood, is this way.

Swann Ridge, a section of Grange, was inspired by an English village. Many residents park their cars in a central area and walk home to prevent street clutter.

General store: artisanal cheese, organic cleaning products, etc.

Montessori school

The edge of the farm

This horseshoe is part of Grange, Serenbe's second neighborhood, which "embodies agriculture." Its 25-acre farm grows more than 300 certified organic varieties.

people say, 'Isn't that a cult?' Which I could see from the outside."

As people moved in, they created businesses: *SimCity* writ large. Nadine Bratti, an ex-New Yorker and wine consultant, runs a general store fit for Brooklyn (craft beer, French cheese, organic cleaning products). The Nygrens' onetime weekend home is now an inn that hosts about 10 executive retreats a month, and a 25-acre organic farm lies in the middle of Grange, the agriculture-focused neighborhood. There's a florist, a bike shop, and a ripped-from-Pinterest artisan market that sells a vast assortment of candles.

Serenbe is technically part of Chatahoochee Hills, population 2,800, a city that didn't formally exist until the Nygrens and their neighbors pushed for its incorporation in 2007. The planned community accounts for 45 percent of the city's tax base, providing some financial security for the family-run farms that make up much of the rest and funding the police and fire departments. They don't have a whole lot to do. "There's almost no crime," says Mayor Tom Reed, who moved into one of Serenbe's villas in 2006. "There's not much going on, frankly."

The community has a Montessori school that goes up to the third grade, and kids learn how to drive golf carts—the main form of transportation on town streets, alongside Priuses—around age 12. There are no traffic lights, just warnings on wooden signs to drive slow ("Children and adults at play"). "In 11 years, we've had three couples get divorced," Garnie says. The playhouse puts on well-attended productions such as *Miss Saigon*. The independent bookstore hosts lectures about topics including the origin of the word "word." Over a lamb tagine and an Oregon pinot noir at the low-lit, bustling bar of the Hil bistro, I chatted with residents about politics and the shows they were

**"SOMETIMES IT TAKES TWO HOURS TO GET THE MAIL, I RUN INTO SO MANY PEOPLE"**

binge-watching. I almost forgot I was in the middle of the woods.

Other planned communities have also seized on people's desires to marry cosmopolitanism and nostalgia. Poundbury, a traditionalist English village conceived by Prince Charles, was derided as a feudal Disneyland; now, according to the *Guardian*, it's home to more than 3,000 residents and 185 businesses. In the U.S., Silo Ridge, a \$500 million development of 245 luxury homes in New York's Hudson Valley, will come with all the traditional perks—golf course, clubhouse, security gates—in addition to skeet shooting, fly-fishing, and bird hunting. Tom Brady and Gisele Bündchen reportedly bought a plot of land there.

Mike Meldman, the founder of Discovery Land, the company behind Silo Ridge and 19 other high-end planned communities, describes his Hudson Valley offering as "very Rockwellian."

Sustainability-focused developments such as Serenbe represent a small, though growing, segment of U.S. planned communities. In Texas, there's Mueller; in Oregon, Pringle Creek Community; and in Arizona, Agritopia. But beyond the medicinal herb garden and horse-studded pastures, the wastewater treatment plant and antifertilizer policies, Serenbe sells, above all else, an invented heritage. Didn't come from a small, whimsical town? Now you can live in one.

But while charm can be engineered, diversity tends to defy advance planning. Anyone can live at Serenbe, provided he can afford a home, which costs \$475,000, on average. There's no test to assess whether a buyer is fit for the community. A certain sameness prevails, though. Politically, the place leans left, and though I noticed a few residents of color during the three days I spent there, the majority of them are white. The service workers I saw—the inn's housekeeping and waitstaff—were minorities.

The community also breeds a certain insularity, in which fringe beliefs can quickly become mainstream. One evening, over dinner at the home she shares with her chef husband and a Persian cat named Goose, Garnie Nygren elaborated on why she doesn't drink plastic bottled water ("It causes cancer") and cited a TED Talk by a therapist who claimed that to feel whole, people need a multitude of simultaneous, platonic relationships in their life. Almost everyone at Serenbe drinks water out of a thermos. And during my three days there, four people mentioned the TED Talk.

An open-door policy pervades the place, and those who value privacy may balk. Windows are wide, with thin curtains that are often undrawn. While drinking coffee in the kitchen of my 900-square-foot rental cottage one morning, I found myself ducking to avoid eye contact with a neighbor going about his own routine. Drivers roll down their windows to say hi to passersby. Secrets seem hard to keep.

Not everyone can handle it. Garnie says 5 percent of residents leave Serenbe each year. "Community is a personal thing," she says. "It has accountability. If people aren't ready for the intimacy of community—this is like college for adults, true community within a built-in environment—then it's easy to go back to the city and be anonymous. This should not work for everyone." **E**

# How Do You Handle an Office Romance?



*Love is a many-splendored thing, until you find the intern having sex on your desk. By Katie Morell*

“I was at a company with about 1,000 employees, and the president invited the top 60 people to a conference. There was a lot of alcohol. A senior-level employee hooked up with one of her male employees. Everyone knew. I pulled her aside and asked her to be discreet. For 10 months they stayed professional. But then her employee cheated. One night she contacted our maintenance department. She said the employee had been fired—he hadn’t—and changed the locks to his office. Things calmed down, but she then piled on an unfair amount of work, and we had to fire her.”

**Kelly Sullivan**

*Managing director, Bedford HR Executive Search & Consulting, New York*

“I worked at a nonprofit several years ago, and we had a competent staffer who never gave me any reason to doubt her. She needed an assistant, so I delegated the hiring process to her, and she hired a young man who turned out to be good at his job. A year after his hiring, one of my staff told me they were married—and had been so prior to his start date. I was shocked. Later, I learned that she rigged the recruiting process and that he’d drop her off a block from the office every morning so they’d arrive separately. I tried to confront them, but they called in sick the next day. I called, e-mailed, and sent a certified letter but heard nothing. Since they’d abandoned their posts, they were terminated.”

**Larry Kaplan**

*Founder, Larry Kaplan Consulting, Los Angeles*

“We hired two people to start on the same day. They were working at the same location and apparently began dating. No one knew until months later, when we scheduled the opening of a new store. The staff was getting ready for the opening when the couple approached me to say that they couldn’t make it because they were going to the courthouse to get married. We were all floored. They had been so professional about it. They went to the courthouse, got married, had a small party with a cake shaped like our logo, and came back to work. They recently welcomed a baby girl.”

**Chloe Rosenthal**

*Director of human resources, &Pizza, Washington, D.C.*

“We had a young intern who was open about being a virgin. He didn’t find women his age attractive. Knowing this, I’d cringe every time I saw him talking with one older female employee. On his birthday, I decided to take him out for happy hour, and the female employee came along. I had to leave early, but on my way home I remembered that I’d left files in my office. I drove back, opened my office door—and let’s just say they were engaged in some interesting activities on my desk. I didn’t do anything about it. What happens between two adults is their own business.”

**Andrew Reeves**

*Founder and chief executive officer, Luxe Translation Services, Beverly Hills*

“I was working as a human resources manager for a small retailer in Houston. One day a couple was working at a store, putting together a window display. Those spaces get tight, and they started fighting. It got verbal and uncomfortable for everyone. I was forced to play therapist, which was ironic, because I hadn’t even had a boyfriend yet.”

**Roberta Matuson**

*Expert on talent, Matuson Consulting, Brookline, Mass.*





# PIRATES OF THE RUST BELT

*In Glass House, corporate America raids a glass manufacturer and leaves an Ohio town reeling. By Justin Fox*

In the ranks of towns battered by deindustrialization, Lancaster isn't exactly the worst off. It's 30 miles from Columbus, making it part of one of the Midwest's most economically healthy metropolitan areas. The population, about 40,000, is growing. There's an Ohio University satellite campus. And not only is the old Anchor Hocking glass factory—long Lancaster's economic heart—still operating, but the town is also home to the headquarters of its parent company, the Oneida Group.

Ah, but therein lies a story. It's one of several that veteran journalist and author Brian Alexander tells in *Glass House: The 1% Economy and the Shattering of the All-American Town* (\$26.99, St. Martin's Press), a melancholic but gripping account of his 13-month stay, from December 2014 to January 2016, in the troubled, drug-ravaged city where he grew up. There are tales of a heroin deal gone bad, an annual music festival fighting to survive, and people struggling to build a future in a place with a happier past. But it's the Anchor Hocking saga at the heart of it all that makes this book more than another elegy for good times in Middle America.

Anchor Hocking was one of several glassmakers that set up shop in Lancaster after cheap natural gas was discovered under the town in the 1880s. By the middle of the 20th century it had grown into a major corporation—in 1955 it was No. 286 on the first Fortune 500 list. It was never the city-defining corporate citizen that, say, Corning was and is in Corning, N.Y. But its executives and those of smaller rival Lancaster Glass lived in Lancaster, gave to its charities, and sent their kids to its schools. So did the glassworkers, who never got paid all that much but could count on receiving solid health and retirement benefits and

having a pleasant, affordable place to live.

What changed this, in Alexander's telling, wasn't competition from Mexico or China—or at least not just that. "Corporate America is what happened," a local policeman tells the author. Alexander narrows that down, blaming it on "the slow-motion terrorism of pirate capitalism."

The first of the pirate-terrorists was Carl Icahn, who's still making headlines with his activist raids and his role as President Trump's special adviser on regulation. In 1982, Icahn acquired 6.1 percent of Anchor Hocking, grumbled about inefficiencies, and demanded a board seat. The company bought Icahn's shares at a \$3 million premium, and he went away. But now Anchor Hocking was in play, and life was never quite the same in Lancaster.

**FIRINGS,  
CUTBACKS,  
AND OTHER  
INDIGNITIES**

A 1987 hostile takeover by the debt-fueled acquisition machine Newell led to the firing of most of the headquarters staff and a succession of other cutbacks and indignities during the next 17 years. Then, starting in 2004, came the private equity era: Anchor Hocking fell into the hands of Cerberus Capital Management, then Monomoy Capital Partners. In both cases, the parent companies the private equity firms established to run Anchor Hocking became burdened with debt and ended up filing for bankruptcy. Under Oneida, Anchor Hocking is part of an assortment of "tabletop and food preparation" brands. Alexander doesn't see a bright future.

There are those who argue that leveraged acquisitions and restructurings of the sort that Anchor Hocking has endured make companies more efficient and steer capital to better uses. Maybe they're right. Alexander makes a persuasive case,

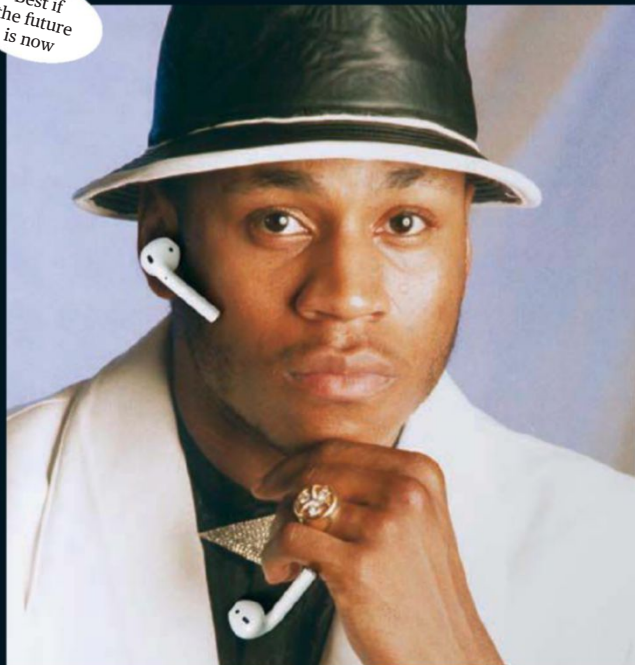
though, that from the perspective of Lancaster, it's been one big fleecing. Every acquirer of Anchor Hocking squeezed concessions out of workers and local governments in the supposed interest of keeping it competitive. Only rarely did they reinvest any of those savings

in the glass factory or the town. Instead, they kept pulling money out of Lancaster, over and over, leaving behind a city with a weakened economic base and a shredded social fabric—and precious few resources to repair them with. **B**



# Headphone Hall of Fame

Best if the future is now



**Apple AirPods**  
\$159; [apple.com](http://apple.com)

There's tons of tiny tech in these things. Sensors can tell when they're in or out of your ears, causing music to play or pause, and accelerometers activate the microphones if they sense that you're talking.

Best for a budget



**Jabra Move wireless**  
\$80; [jabra.com](http://jabra.com)

Worried about the expense of cutting the cord? These provide the same sound quality as others costing two or three times as much, which should sound pretty good to you.

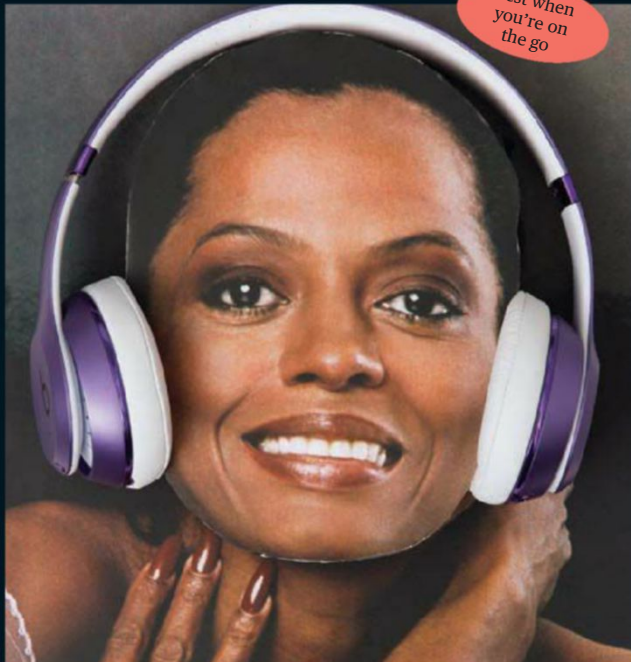
Best if you're not just working a 9-to-5



**Bang & Olufsen Beoplay H8**  
\$500; [beoplay.com](http://beoplay.com)

Each of the H8's earphones functions as a touch panel—taps, swipes, and circular motions control a host of features—so say goodbye to blindly feeling your way around a tiny set of buttons dangling at your neck.

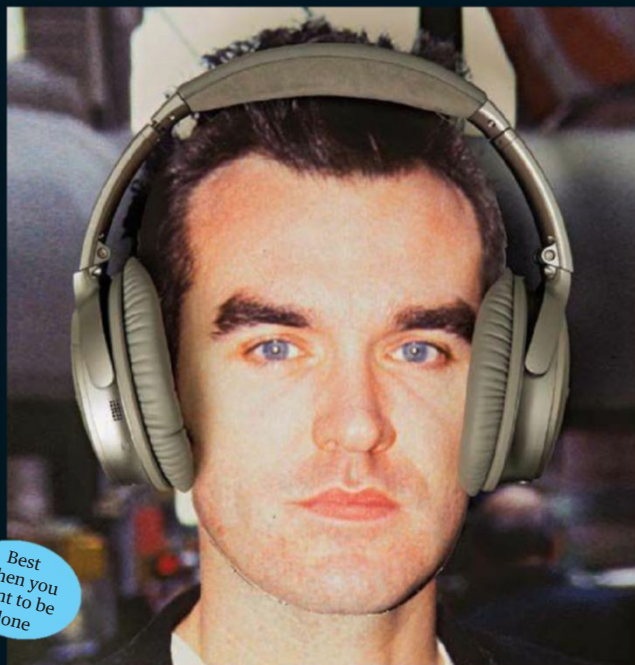
Best when you're on the go



**Beats Solo3 wireless headphones**  
\$300; [apple.com](http://apple.com)

You're paying for class-leading power efficiency: The Solo 3s can be used for 40 hours after a 2-hour charge, or 3 hours after being plugged in for just 5 minutes.

If you don't have a wireless pair, you're probably eyeing one. But which models are worth it? We're pretty jazzed about these eight. By Sam Grobart



Best when you want to be alone

**Bose QuietComfort 35 wireless headphones**  
\$350; [bose.com](http://bose.com)

If you work in a noisy office—like, oh, say, at a business magazine—you know what a lifesaver Bose's famous noise-canceling technology can be. Now you can roam from workstation to workstation listening to whatever.



Best when you smell like more than teen spirit

**Jaybird X3 wireless Bluetooth headphones**  
\$130; [jaybirdsport.com](http://jaybirdsport.com)

The rubberized earpieces wedge comfortably in the outer ear, keeping these securely in place no matter how hard you hit the gym. An eight-hour battery life ensures you'll have tunes even during two-a-days.



Best of all worlds

**Bowers & Wilkins P5 wireless headphones**  
\$300; [bowers-wilkins.com](http://bowers-wilkins.com)

These occupy a sweet spot between itty-bitty earbuds and hardcore ear cans. The 17-hour battery life can't beat Beats, but the sound quality is tough to top—B&W is renowned for engineering some serious loudspeakers.



Best splurge

**Sennheiser HD1**  
\$500; [sennheiser.com](http://sennheiser.com)

Active noise cancellation. A 22-hour battery life. Soft-cushioned leather ear pads. A foldable design for portability. This pair will be your greatest love of all.

PHOTOGRAPHS BY CAROLINE TOMPKINS FOR ELLE.COM; BOWERS BUSINESS WEEK PHOTOS (BARTON, BOSE) ALAMY; (HARRY, ANTONIO, BARCZA) GETTY IMAGES; (COOL, J, MICHAEL, OCHS) GETTY IMAGES; (LOVE, COBBIN) TERRY O'CONNOR/GETTY IMAGES; (RON GALE) L'ESPEY; (MORRISSEY) VINNIE SUFFRANTE/GETTY IMAGES; (HOLISTON) PAUL NATKIN/GETTY IMAGES

# HARDER, BETTER, FASTER, STRONGER

Boutique gyms are bringing the mentality of CrossFit—the fierce strength-and-conditioning program—to their classes. Here are six that elevate workouts to an 11. By Kayleen Schaefer

## Level 3: Extreme

RiseNation, Los Angeles  
\$30 for three 30-minute classes; [rise-nation.com](http://rise-nation.com)

All sessions at celebrity trainer Jason Walsh's studio take place on VersaClimbers, which mimic a full-body vertical climbing motion. This class lives up to its name: To simulate an arduous mountain ascent, it distills a regular hour session into half the time, requiring participants to climb faster and take longer strides.

## BurnOut

New York Pilates, New York  
\$39 for 55 minutes; [newyorkpilates.com](http://newyorkpilates.com)

The Pilates "reformer"—a platform with springs, pulleys, and loops for your hands and feet that increases resistance while exercising—looks like a torture device. New York Pilates owner Heather Andersen makes it one for this session, which features planks, squats, and situps on the machine ("Lots of them," she says) but not the more fluid moves of a standard Pilates class.

## The Machine Gun

Dogpound, New York  
\$42 for 60 minutes; [thedogpound.com](http://thedogpound.com)

This mix of rapid-fire exercises—yoga, resistance training, boxing, core-strength activities, ballet, and cardio—is uniquely calibrated depending on whether you want to get leaner, become more flexible, increase core strength, or bulk up.

## Super Slow TRX

It's Working Out, Cincinnati  
\$25 for 50 minutes; [itsworkingout.com](http://itsworkingout.com)

TRX is an abbreviation for "total resistance exercise." That's what this class offers, with a grueling series of swinging leg curls, pullups, tricep extensions, and crunches, using bands attached to the ceiling or a wall. Each rep lasts a superslow 12 seconds, vs. TRX's typical 2, for an added endurance challenge.

## Brawl

The Barre Code, Chicago  
\$22 for 50 minutes; [thebarrecode.com](http://thebarrecode.com)

Brawl takes the studio's standard glute-burning barre routine of pliés and leg lifts and adds a cardio-kickboxing sequence—float-like-a-butterfly-style jabs, 180-degree jumping turns, and speed-bag work. "What makes the class intense is not a specific movement, but the way the movements fit together in sequence," says Dana Farber, director for brand development.

## Firestarter

Equinox gyms nationwide  
Free with membership, 30 minutes; [equinox.com](http://equinox.com)

This is interval training on steroids, condensing a 45-minute class into 30 with a blitz of lightning-fast moves. Think power leaps over a step bench, tuck jumps (leap and pull your knees to your chest like a cheerleader), and squat hops (hop from—and land in—a squat position).



# STEVEN TRISTAN YOUNG

41, vice president for growth, GrubHub, New York

**Your vest is sporty.** I got it at a tech conference. Vests are so big in tech—that's kind of how I connect.

**What's going on with your shirt?** I was drawn to it because of the mandarin collar. If I wear it without a suit jacket, I look dressed, not stiff.

**You don't dress how most tech guys dress.** I'm meeting with agencies, media planners, creative teams, and tech teams. There's this idea that tech people only wear hoodies. I don't want to look that way, but I don't want to look Banana Republic business casual either.

**How would you describe your style?** I like to say I'm neopreppy.

**WOORYOUNGMI**

**You have a grown-up backpack.** It's all about form and function. I want something I can take to the office but can bring to an event afterward without feeling like I'm heading to third period.

**PATAGONIA**

**MICHAEL BASTIAN**

**No Apple Watch?** An old-school gadget like this reminds you to be present. It's the one analog thing I have on me when everything else is digital.

**ROLEX**

**Those aren't dress pants.** I'm particular, because I have an athletic build and rower's legs. I love the reinforced knees on these. They're motorcycle pants and meant to be protective in case you fall off your bike.

**EN NOIR**

**Are you more of a loafer guy?** Yeah, totally. I don't like shoes with laces. I want to slip them on and off.

**GUCCI**



# ROY PRICE

Head of Amazon Studios

“I grew up in Beverly Hills. My father ran movie studios, and Lee Majors taught me to swim.”



With Majors, 1972

“I realized that the people who ran the entertainment business either dropped out of school, like [David] Geffen and [Jeffrey] Katzenberg and [Barry] Diller, or were lawyers. It was too late for me to drop out, so I had to go to law school.”

### Education

Phillips Academy, Andover, Mass., class of 1985

Harvard, class of 1989

University of Southern California Gould School of Law, Los Angeles, class of 1995

“I studied all the time—math and physics and computers. My Harvard interviewer spent most of the time asking why I wasn’t applying to MIT.”



With Sidney Poitier, 1986

### Work Experience

1989–90  
Film set assistant

1990–92  
Financial analyst, Allen & Co.

1995–2000  
Vice president for series development and current programming, Walt Disney

2001–02  
Consultant, McKinsey

2003–04  
Principal, Price Entertainment

2004–09  
Group product manager, director, Amazon Video on Demand

2009–14  
Director, Amazon Studios

2014–Present  
Head of Amazon Studios, VP for Prime Video, Amazon

“I have no outside interests. My interests are film, TV, literature, computers, and video games. And that’s it.”



With a Disney colleague, 1997

“I was looking at startup opportunities in digital video.”

At the *Manchester* premiere with Michelle Williams, 2016

“We saw *Manchester by the Sea* at Sundance and moved aggressively to get it. It’s gratifying and exciting that the movie received six Oscar nominations—we’re incredibly proud of the cast, crew, and everyone behind the film.”



On the set of *Return to the Blue Lagoon*, 1990

“I’d gotten some exposure to film development, but I wanted more exposure to the finance part.”

“We did a deal with TiVo, which was significant, because it helped us get to televisions. On the way, I picked up 14 patents.”



At Amazon’s Emmy Awards party with Jeff Bezos, 2016

“I had to help everybody around Hollywood understand what we were trying to do and what the opportunity was for them and also help everybody in Seattle understand what to expect from the business.”



### Life Lessons

1. “If you have an idea and everybody thinks it’s great, it’s probably passé.” 2. “Always have a slightly unrealistic vision. You’ll be surprised by what can be realistic.” 3. “If it’s not a little scary, then it’s probably not interesting or daring.”

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