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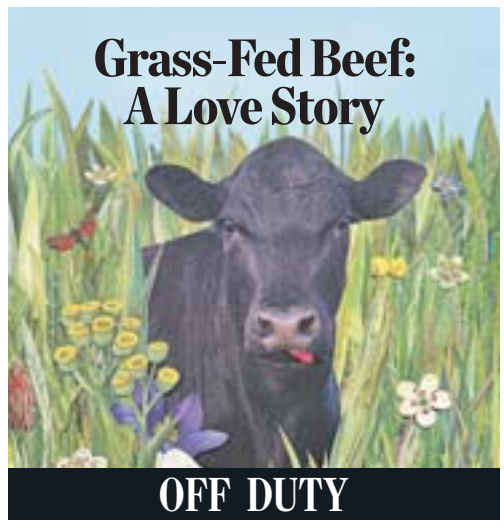

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WSJ.com

Jobless Rate Falls in Sign of Revival

Increased hiring points to economic pickup, as sinking rate suggests coming wage pressures

By Eric Morath

Hiring increased in April, and the unemployment rate fell to its lowest level in a decade, signs the U.S. economy is rebounding after a lackluster winter.

The unemployment rate dropped 0.1 percentage point to 4.4% in April, matching the low point reached in the last economic expansion in May 2007, not long before a brewing housing bust sent the economy and financial system into a decadelong crisis and recovery.

The pickup in hiring last month was broad-based, with particularly strong gains in business services and health care.

The falling unemployment rate suggests wage pressures could start to build as businesses compete for scarcer workers, though so far wage increases have been modest. It also means the Federal Reserve is likely to raise short-term interest rates for the second time this year at its next policy meeting in June, and then likely again in September, before beginning to wind down a $4.5 trillion securities portfolio late in the year.

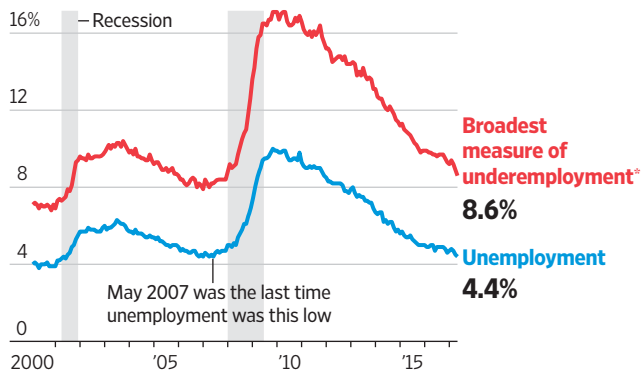
The Fed's objective is to gently pull back the stimulus it pumped into the economy during and after the crisis now that it appears to be on a more even footing. Still, the Fed sees the economy stuck on a growth path of about 2% this year, meaning that officials don't expect to push short-term rates as high as they have tended to go in the past when unemployment was this

Please see JOBS page A2

◆ Heard: Job market tightens the screws..... B10

Steady Decline

The U.S. jobless rate has fallen to the lowest level in a decade.



*Includes unemployed, involuntary part-timers and marginally attached.
Note: Seasonally adjusted
Source: Labor Department
THE WALL STREET JOURNAL.

What's News

World-Wide

Republican senators planned to begin a full rewrite of the House GOP health-care bill, driven in part by a sense that it made insurance cheaper for young people but costlier for older Americans. **A1**

◆ **French presidential** candidate Macron's party said its computers were hacked ahead of Sunday's vote. **A6**

◆ **A Russian envoy** said U.S. aircraft are barred from "de-escalation zones" in Syria, but U.S. officials dismissed the admonition. **A5**

◆ **A Senate panel** asked former associates of the Trump campaign for information and records, a sign its Russia probe is heating up. **A4**

◆ **North Korea accused** the CIA of trying to assassinate Kim Jong Un in a terrorist attack involving biochemical substances. **A7**

◆ **Trump's nominee** for Army secretary withdrew amid controversy over stands he previously had taken on social issues. **A4**

◆ **The Interior Department** unveiled a list of monuments and marine preserves to be reviewed for possible downsizing or elimination. **A3**

Business & Finance

◆ **Hiring increased** in April and the unemployment rate fell to its lowest in a decade, signs the economy is rebounding after a slow winter. **A1**

◆ **The largest** U.S. companies are posting their strongest quarterly profits in five years as they reap the benefits of belt-tightening. **A1**

◆ **Solid corporate earnings** and a healthy jobs report lifted the S&P 500 and Nasdaq to fresh records. **B9**

◆ **Firms are fighting** CFPB enforcement actions more often, as Republican control of the White House has put the agency's future in doubt. **B1**

◆ **Canada's Trudeau** said he would consider retaliatory measures in response to the U.S. imposing a 20% tariff on lumber imports. **A6**

◆ **Syngenta's shareholders** approved a $43 billion takeover by ChemChina, which now faces challenges in integrating the Swiss firm. **B1**

◆ **Berkshire Hathaway sold** about a third of its shares in IBM this year, Buffett said. Berkshire's net fell 27%. **B2**

◆ **J&J was hit** with a $110 million verdict in favor of a woman who said talc in the firm's baby powder gave her ovarian cancer. **B3**

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When the CEO Met the CEO President

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MIGUEL GUTIERREZ FOR THE WALL STREET JOURNAL

Maria Planchart holds her year-old son, Jean Pierre, who is recovering from severe malnutrition and chickenpox at a Caracas hospital.

VENEZUELA IS STARVING

Hobbled by economic policies, Latin America's once-richest country can no longer feed its people

By Juan Forero

YARE, Venezuela—Jean Pierre Planchart, a year old, has the drawn face of an old man and a cry that is little more than a whimper. His ribs show through his skin. He weighs just 11 pounds.

His mother, Maria Planchart, tried to feed him what she could find combing through the trash—scraps of chicken or potato. She finally took him to a hospital in Caracas, where she prays a rice-milk concoction keeps her son alive.

"I watched him sleep and sleep, getting weaker, all the time losing weight," said Ms. Planchart, 34 years old. "I never thought I'd see Venezuela like this."

Her country was once Latin America's richest, producing food for export. Venezuela now can't grow enough to feed its own people in an economy hobbled by the nationalization of private farms, and price and currency controls.

Venezuela has the world's highest inflation—estimated by the International Monetary Fund to reach 720% this year—making it nearly impossible for families to make ends meet. Since 2013, the economy has shrunk 27%, according to local investment bank Torino Capital; imports of food have plunged 70%.

Hordes of people, many with children in tow, rummage through gar-

Please see STARVE page A10

Senators Tackle Health Bill Rewrite

By Stephanie Armour and Kristina Peterson

Republican senators planned Friday to begin a formal full rewrite of the House GOP health-care bill, driven in part by a sense that the House version made insurance cheaper for young people but costlier for older Americans—an influential, mostly GOP voting bloc.

Among the provisions senators are tackling is one that allows insurers to charge older Americans five times as much as younger people and lets states obtain waivers that could make that disparity even larger.

Sen. John Thune (R., S.D.) is seeking to alter the bill's tax credits, and at least one version of his proposal would provide more money to the elderly.

Those are among the proposals being scrutinized by a working group of 13 GOP senators led by Senate Majority Leader Mitch McConnell (R., Ky.) that hopes to reach an agreement spanning its own ideological spectrum before working to win over the rest of the Senate GOP.

"We have people who are conservatives, we have people who are much more moderate," Sen. Ted Cruz (R., Texas), a forceful conservative and a member of the group, told a Texas radio station. "It frankly

Please see HEALTH page A4

◆ A look at key players as health bill hits the Senate.. A4

This Arctic Village Loves Visitors, Unless They're Automotive Spies

* * *

In Sweden's Arjeplog, host to secretive car tests, photographers get the cold shoulder

By Chester Dawson

ARJEPLOG, Sweden—When Andreas Mau started coming to this village of about 3,000 near the Arctic Circle, the photojournalist quickly learned of a deep local bias against one particular group of outsiders: strangers with cameras.

While trying to complete assignments, the 50-year-old Mr. Mau says, he was physically threatened, had drivers try to run him off the road and was blacklisted from some local hotels. "It was like the Wild, Wild West."

There was a reason for Arjeplog's chilly attitude: This town in the Lapland wilderness is where many auto makers bring new models and prototypes for winter testing—to the town's economic benefit.

As a "spy" photographer, Mr. Mau nabs shots of top-secret cars going through their paces. Desirable shots, according to people at publishers that buy them, can fetch anything from $300 to more than $1,500 depending on their rarity.

Some residents of Arjeplog (pronounced AH-rreeyeh-ploog) say they worried that snoops like Mr. Mau might drive off auto makers.

To protect their carefully scripted car-debut plans and avoid tipping off rival manufacturers, auto makers perform

Please see SPIES page A10

Profits Jump, Spending Lags

By Thomas Gryta And Theo Francis

The largest U.S. companies are posting their strongest quarterly profits in five years, as firms reap the benefits of years of belt-tightening and finally see a pickup in demand.

Part of that improvement has come from keeping a lid on spending for new plants and equipment—and there is little sign that is changing.

Profits at S&P 500 companies jumped an estimated 13.9% in the first quarter from a year earlier, growing nearly twice as fast as revenue on a per-share basis. The gains stretched across industries, from Wall Street banks to Silicon Valley web giants, and were helped by a rebound in the battered energy sector. The picture was a marked improvement from a year ago, when profits fell 5%, and was the best percentage gain since the third quarter of 2011.

While the latest government data show the labor market is healthy and the U.S. economy continues to slowly expand, CEOs of the biggest companies aren't yet opening their wallets wide on capital investment.

"We continue to focus on driving savings where possible, taking a zero-based approach to capex and capital spending," James Saccaro, chief financial officer of medical products firm Baxter International Inc., told investors last week. Zero-based budgeting means starting a spending plan from scratch each period, justifying every dollar rather than adjusting the amount spent previously.

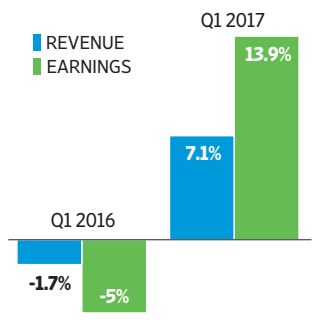
Years of slow economic growth have trained companies to be lean, something that amplifies earnings when the top line finally does pick up. Heavy-equipment maker Caterpillar Inc. reported its first quarterly sales increase since 2015, with revenue rising about 4%, and doubled its profit, excluding restructuring costs.

"It's the perfect storm in a positive sense for earnings," said Jim Russell, portfolio manager at Bahl & Gaynor Investment Counsel in Cincinnati. For example, a company cutting costs to maintain profit in the face of slower orders or sales would benefit drastically from a turnaround without

Please see PROFIT page A9

Earnings Gain Steam

Change from a year earlier in revenue and adjusted earnings per share for the S&P 500*



Note: Figures reflect actual results for 327 companies reporting as of May 2 and analyst estimates for others.
Source: Thomson Reuters
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U.S. NEWS

THE NUMBERS | By Michael Driscoll

Kentucky Derby Is a Favorite for 'Super' Bets

On Saturday, as 20 jockeys climb aboard 20 thoroughbreds and enter the starting gates at the Kentucky Derby, 160,000 fans at Churchill Downs will cheer them on. And bettors will rejoice.

"I love it," said Jonathan Kinchen, co-host of the Daily Racing Form's "Players' Podcast." "As a betting opportunity, the pools are so large on that day, and the racing is so good."

For casual fans, betting on Derby day might be a matter of picking a horse with a quirky name. But for seasoned players, the race's popularity and large field offer a chance to pull off a lucrative version of racing's superfecta—correctly predicting in order the first four horses to cross the finish line.

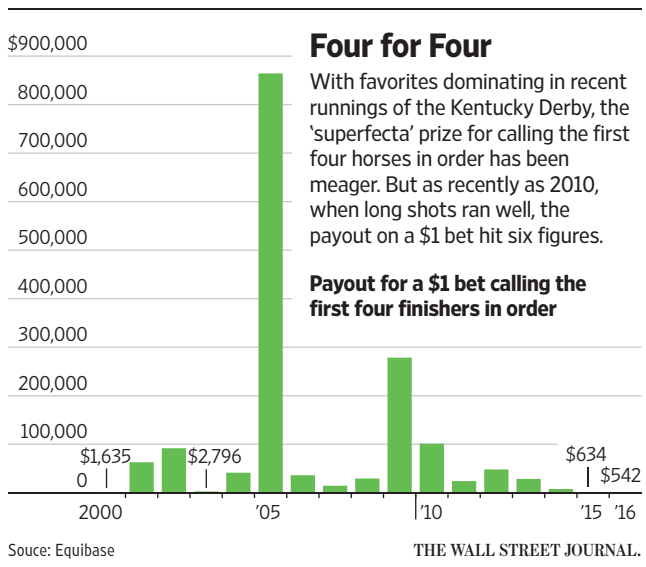
The average payout for a $1 bet on the wager since 1996 at the Derby has been $78,415.12, according to online-betting site Xpressbet. In recent years, with favorites dominating, payouts have been much smaller.

The superfecta score of horseplayers' dreams comes when an overlooked entry or two breaks into the top four. The fattest prize ever came at the 2005 Derby, when long shots Giacomo and Closing Argument finished first and second, and another lightly regarded horse, Don't Get Mad, ran fourth. (Afleet Alex, who had much shorter odds, came in third.) A $1 bet on the superfecta paid $864,253.50. Seven winning tickets were sold.

This year's race has an early favorite, Classic Empire, but it generally is viewed as wide open and therefore primed for a big superfecta payout.

The Derby is unpredictable for many reasons, including that it is limited to 3-year-olds, meaning the horses are relatively untested, and its mile-and-a-quarter length generally is farther than the entrants have previously raced.

For bettors, it is especially important that the Derby draws so many horses—20 is double the field of many races—and that it attracts orders of magnitude more betting dollars than out-of-the spotlight races. With more horses, the race is harder to predict. Odds tend to get longer. Meanwhile, the money pours in, and potential payouts grow.



Souce: Equibase THE WALL STREET JOURNAL.

"When you have 20 betting interests, you're gonna get high prices on all the horses in there," said Mike Battaglia, the longtime oddsmaker at Churchill Downs. "That's just logic."

While the possibilities are enticing, the superfecta is a tough bet to win. With a full field of 20 contestants, the odds of nailing the superfecta are 116,280 to 1.

To improve those odds, horse players identify legitimate contenders and eliminate entrants they think have no shot. "The thought is that not each runner has an equal chance," said William Alempijevic, director of business development for the New York Racing Association.

Trimming the list of legitimate contenders to five and placing $1 bets that cover every combination of them finishing first through fourth would cost $120.

Bettors arrive at the $120 number by multiplying four numbers together, to account for first through fourth place. They take the number of horses they want to include (in this case, five), then multiply it by the next lowest integer (four), then the next lowest (three), and the next (two). The multiplier drops by one at each step since a horse can't finish in both first place and second place, for example. Five multiplied by four, then by three, then by two equals 120.

In the past two years, favorites have performed well in the Derby. Simply betting on the five horses with the best odds would have landed the winning superfecta ticket, earning around $600 for each race, minus the $120 cost of the bet.

Still, the large amount of cash to be claimed at the Derby—the total bet on the race in 2016 was $124.7 million, according to Churchill Downs—makes it a compelling superfecta play.

For a comparison, Mr. Kinchen pointed to a recent day at the Keeneland track in Lexington, Ky.: "The first race at Keeneland, there is $32,000 in the super pool, so it can't pay more than $32,000." The pool for last year's Derby superfecta—the total amount handed over for such wagers—was $10,897,824.

"It's an opportunity...to have a life-changing score," Mr. Kinchen said. "You can't just do that on a Wednesday at Aqueduct."

Another superfecta approach to the big Derby field is to whittle down the runners and bet on eight horses—a little under half the field. Covering eight with a $1 bet in any order, first through fourth, costs $1,680.

That's a pricey ticket, so some gamblers join forces. Mr. Battaglia and Mr. Kinchen both said they may separately do just that.

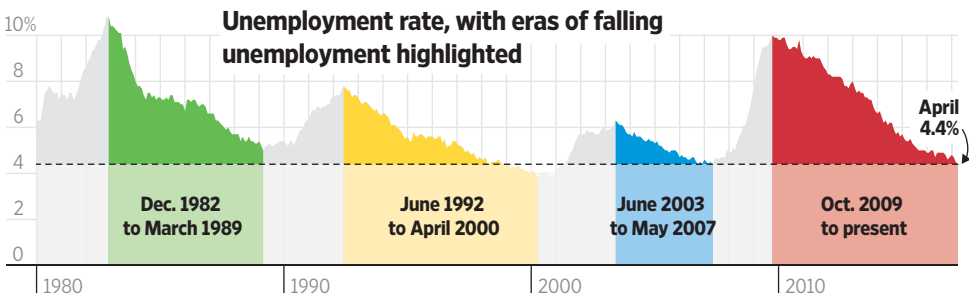
Not that winning will be a cinch.

"The lure of the bigger prices really overshadows the fact that it's harder," Mr. Battaglia said. "It's not supposed to be an easy game. It's a tough game."

◆ How to pick the Kentucky Derby..... A14

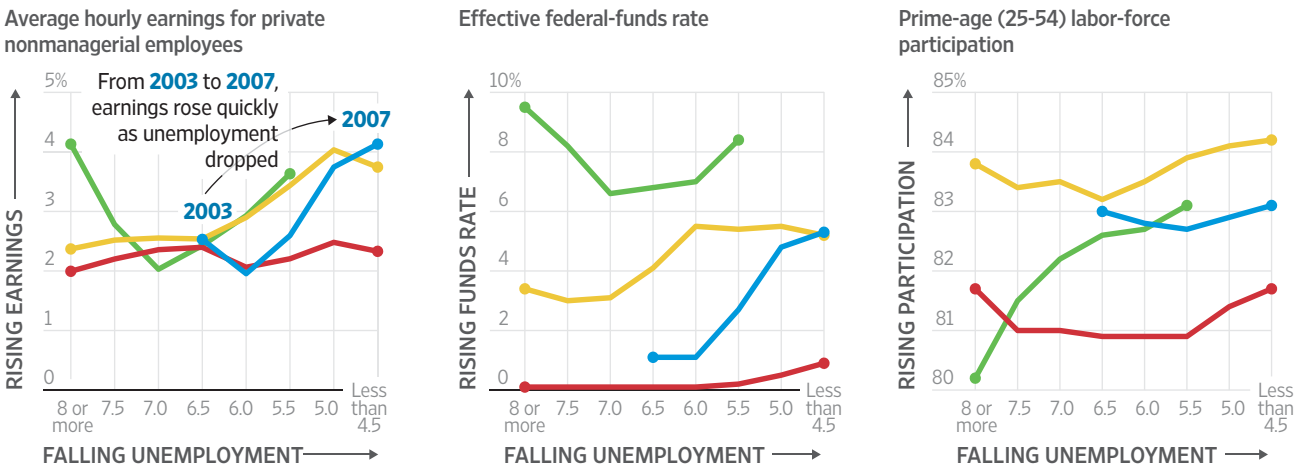
Economy Slow to React to Low Unemployment

In past expansions, falling unemployment has quickly led to rising wages and interest rates—as economic orthodoxy would predict. This time, the response from the Fed and the economy has been muted.



The relationship between unemployment and other indicators during each recovery

Each point on the line shows what an indicator averaged when the unemployment rate fell within each threshold



Source: Commerce Department (employment and earnings); Federal Reserve via Federal Reserve Bank of St. Louis (monthly average effective rate) THE WALL STREET JOURNAL.

JOBS

Continued from Page One

low.

The Labor Department reported that businesses added 211,000 jobs in April, after adding just 79,000 jobs the month before. The pickup in hiring underpinned projections that economic growth is set for an upturn. Output grew at an annual rate of just 0.7% in the first quarter. After seeing the latest numbers, economists at forecasting firm Macroeconomic Advisers increased their projection for second-quarter growth to 4%.

U.S. stocks rose modestly after Friday's jobs report and some positive corporate earnings. The Dow Jones Industrial Average gained 55.47 points, or 0.26%, to 21006.94. The S&P 500 and the Nasdaq Composite both rose 0.4% to record closes. The yield on the 10-year Treasury note settled at 2.352%, compared with 2.354% on Thursday.

"This is an unambiguously strong economic report and suggests that consumers will have the wherewithal to increase spending in the second quarter," said David Berson, economist at Nationwide Mutual Insurance Co.

The report was greeted as a win by the Trump administration, even though President Donald Trump was a frequent critic of jobs data when he was campaigning for office in 2016. "Steady and sustained increase in job creation equals new paychecks for American workers and income for American families," Labor Secretary Alexander Acosta said Friday.

Mr. Trump tweeted, "JOBS, JOBS, JOBS!"

The economy has added an average 185,000 jobs a month in 2017, roughly matching 2016's pace of job creation and a slower pace than in 2014 and 2015. During former President Barack Obama's tenure, the unemployment rate fell from an October 2010 peak of 10% to below 5%.

The early months of the Trump administration have been a bit of a puzzle to economists because many measures of household, business and investor confidence have surged while growth remained lackluster.

Though it is still early to say momentum can be sustained, some signs that so-called animal spirits are invigorating spending and hiring are emerging.

"I'm excited about the manufacturing environment," said Vicki Holt, chief executive of Proto Labs, a Maple Plain, Minn. company that uses 3-D printing and injection molding to make prototypes for manufacturing customers. It added 17 workers to its staff in April. Ms. Holt said the firm often sees orders increase ahead of a broader improvement in factory output.

"I'm looking forward to seeing a couple more quarters of strength to show this is going to be sustainable," she said.

The company raised wages for its entry-level workers, jobs that typically required a high-school diploma, because a recently opened Amazon.com Inc. distribution center made it more difficult to attract workers. Those jobs now pay about $12 an hour.

The economy has added an average of 185,000 jobs a month in 2017.

In theory, a stronger jobs market should pull nonparticipants off the sidelines, expanding the pool of available workers. But the low unemployment rate now comes with a caveat: A smaller share of Americans are participating in the labor force compared with a decade ago, partly a result of retiring baby boomers. The labor-force participation rate ticked down to 62.9% in April, and it is little changed over the past four years. The rate remains only narrowly above a four-decade low.

As a result, the size of the labor force was virtually unchanged last month, causing employers to draw down the ranks of the unemployed.

So far, there is only modest evidence that the low unemployment rate is putting upward pressure on incomes and inflation. Average hourly earnings for private-sector workers rose 2.5% in April compared with a year earlier. The growth rate of pay increases has slowed in recent months but remains near the fastest pace since the recession ended.

Consumer prices have grown nearly as fast, meaning inflation-adjusted wages are little changed.

One explanation for why wages haven't grown even faster is that worker productivity has declined so far this year. Low productivity makes it difficult for businesses to generate higher profits, invest and raise workers' pay.

The Full Picture On the Job Market

The labor market is wringing out the last of the slack.

The unemployment rate fell in April to a seasonally adjusted 4.4%, matching the lowest level since the 2001 recession, the Labor Department said Friday. Businesses are struggling to find workers and in some cases have started to raise wages at a faster clip.

"The job market is getting tighter," said Kate Warne, an economist at Edward Jones. "As we get closer to full employment, businesses will need to pay more for workers."

Full employment is seen by economists as the point at which people who want jobs have them, and the unemployment rate largely reflects the natural churn of the labor market. April's unemployment rate was below the 4.7%-to-5% range Federal Reserve officials view as normal over the long run.

In 2009, the end of the most recent recession, more than 15 million Americans wanted jobs and couldn't find them. Now the number of unemployed has fallen to 7.1 million.

The Fed's survey of regional economies last month noted that firms are reporting higher turnover rates and more difficulty holding on to workers in industries ranging from hospitality to manufacturing to energy.

Average hourly wages rose 2.5% in April from a year earlier, but recent gains remain historically low. In the 20 years before the most recent recession, wages routinely grew more than 3% annually. As wages have risen, so have price pressures. Consumer prices rose 2.4% in March from a year earlier, the Labor Department said. That means many workers are taking home little more after accounting for inflation.

—Eric Morath

U.S. WATCH

TEXAS

Officer Is Set to Be Charged in Killing

A Texas police officer who shot and killed a black 15-year-old in a Dallas suburb will face murder charges, law enforcement officials said Friday.

An arrest warrant was issued Friday for Roy Oliver, a former police officer in Balch Springs, Texas, according to a spokeswoman for the Dallas County Sheriff's Department.

An attorney for Mr. Oliver didn't respond to messages seeking comment. Mr. Oliver had not been arrested and wasn't in custody Friday evening, according to law enforcement officials.

Mr. Oliver is accused of firing into a vehicle that the teen, Jordan Edwards, was riding in, killing the boy as the vehicle drove away from a party last Saturday.

Police said officers were responding to reports of underage drinking at a large house party when they heard gunshots and encountered a chaotic scene as teens began fleeing.

After initially saying that the car had backed aggressively toward officers, Balch Springs Police Chief Jonathan Haber said video footage of the incident showed the vehicle was actually moving away from police when Mr. Oliver fired on it.

Chief Haber fired Mr. Oliver earlier this week.

—Zusha Elinson

ECONOMY

Yellen Cites Benefits Of Working Women

Janet Yellen, the first female chief of the Federal Reserve in its more than 100-year history, highlighted the economic benefit of government policies that boost women's participation in the workforce, an unusual instance in which she has spoken on gender issues.

If obstacles such as the gap between men's and women's pay, the struggle to combine work and family, and other factors continue to discourage many women from working, "we will squander the potential of many of our citizens and incur a substantial loss to the productive capacity of our economy," Ms. Yellen said Friday in a speech at Brown University.

—Harriet Torry

FDA

Agency Approves Drug to Treat ALS

The Food and Drug Administration approved the first drug in more than two decades for the treatment of ALS, the paralyzing and fatal malady often called Lou Gehrig's disease.

The federal agency's approval of the drug Radicava occurred after it took the unusually aggressive step of asking its maker, Mitsubishi Pharma America Inc., to apply for U.S. approval after learning of the drug's use in Japan for ALS.

ALS Association officials said they "applaud FDA for swift approval of Radicava."

—Thomas M. Burton

HIGHER EDUCATION

Purdue Defends Deal After Faculty Objects

Purdue University on Friday defended its plan to acquire Kaplan University, a day after the public university's faculty gave a thumbs down to the deal to take over the for-profit, mostly online school.

The faculty senate demanded that Mitch Daniels, president of the Indiana school, rescind the offer in a resolution that passed by a roughly 6-to-1 margin Thursday afternoon, said senate President David Sanders, a professor of biology.

The school said in a statement, "Purdue views this opportunity as an extension of its land-grant mission to address an unmet need."

—Douglas Belkin

CORRECTIONS & AMPLIFICATIONS

The Mexican peso rose nearly 9% against the U.S. dollar this year through May 4. A U.S. News article on Friday about the U.S. trade deficit with Mexico incorrectly said the peso had fallen by more than 8%.

House Republican leaders came up short in two previous attempts to pass a health-care bill, including in late March. In some editions Thursday, a Page One article about their efforts to advance legislation to replace most of the Affordable Care Act incorrectly said a bill had faltered in late May.

Readers can alert The Wall Street Journal to any errors in news articles by emailing **wsjcontact@wsj.com** or by calling 888-410-2667.

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Interior Puts Utah Preserves In Review

By Jim Carlton

The Interior Department unveiled a list of about two dozen national monuments and marine preserves to be reviewed for possible downsizing or elimination, including two of the more contentious in recent years: Bears Ears and Grand Staircase-Escalante in Utah.

The 22 land monuments and five ocean preserves, most of them in the Pacific Ocean, on the list released by the agency Friday total about 210 million acres, and were all created or expanded by former Presidents Bill Clinton and Barack Obama.

They include some of those presidents' most high-profile land-preservation actions, and are likely to spark opposition from environmentalists who have fought for preservation of public lands.

However, the review is welcomed by those who have complained about government overreach in its control of federal lands, an issue that played out in dramatic fashion across the West with standoffs in Nevada and Oregon between ranchers and federal officials.

Besides reviewing the Grand Staircase monument that Mr. Clinton created in 1996, Interior Secretary Ryan Zinke is looking at eight other Clinton monuments, including Grand Canyon-Parashant in Arizona and Nevada's Basin and Range monument.

Some of Mr. Obama's biggest monuments made the list, too, including a large swatch of Pacific Ocean around Hawaii that he expanded in 2016.

In releasing the list, officials also announced the start of a public-comment period as part of the review, scheduled to begin May 12.

"Today's action, initiating a formal public comment process finally gives a voice to local communities and states when it comes to Antiquities Act monument designations," Mr. Zinke said in a statement. "I look forward to hearing from and engaging with local communities and stakeholders as this process continues."

The action comes after President Donald Trump on April 26 signed an executive order for the review of national-monument designations made since 1996, when Mr. Clinton set aside about 1.8 million acres of Utah canyonlands as the Grand Staircase monument.

In signing his order, Mr. Trump said his predecessors had abused the Antiquities Act by cordoning off federal land into monuments without seeking adequate local agreement.

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A vacant lot is seen on the corner of Manchester and Vermont streets in Los Angeles. A shopping center stood there before it was burned down in the 1992 riots.

South Los Angeles Still Struggles

By Zusha Elinson And Paul Overberg

LOS ANGELES—Former hedge-fund trader Sam Polk's newest venture sells healthy food in an unusual location for an unusual price.

Everytable is located in a South Los Angeles neighborhood where 43% of the population lives below the poverty line and it offers meals such as jerk chicken with coconut rice, beans, kale and plantains for under $5. "There's a lot of communities that are incredible that just get overlooked," Mr. Polk said.

This community has a turbulent history. Twenty-five years ago this week, the Rodney King riots tore apart South Los Angeles for six days, leaving more than 50 people dead and causing more than $1 billion in property damage. Community leaders and entrepreneurs are still trying to revive the local economy. There are signs of success, but poverty persists.

South L.A.'s location near a rapidly developing downtown and the relatively low cost of housing compared with other parts of the city make it a prime target for gentrification. The median home value in the area jumped 13.6% to $418,100 in March from a year earlier, according to Zillow.

"There's a lot of new attention to South L.A., there's a lot of new people moving in—more middle class, more professional, more white," said Manuel Pastor, a University of Southern California professor who has studied the area for years. "There's a lot of concerns about gentrification and displacement, but there's a lot of possibility of what that might mean for retail development and jobs."

Yet wholesale economic change has yet to arrive in this 50-square-mile portion of Los Angeles that is home to 800,000 people. The poverty rate in South Los Angeles was 31.3% in 1990 and an average of 34.3% from 2011 through 2015, compared with 22.1% for the whole city, according to census data.

Unemployment over that time stood at 13.8% in South L.A. compared with 10.3% for the whole city.

Development is transforming much of Los Angeles. But private economic investment in South L.A. hasn't materialized even as crime has dropped and police-community relations have thawed, said Marqueece Harris-Dawson, a city council member who grew up in South Los Angeles.

In 1992, South L.A. gang wars and a booming crack trade fueled a record 1,094 murders in the city. Last year, there were 294.

"Since '92, the community behavior has changed, the police department has changed," Mr. Harris-Dawson said. "The people whose behavior has not changed is the financial sector." Mr. Harris-Dawson points to the corner of Manchester and Vermont streets where a shopping center stood during his youth. Rioters burned it to the ground in 1992. Plans have come and gone, but the lots remain vacant today.

Retail businesses have been slow to return to the area because "insurance costs were astronomical" owing to the stereotype that the area was "prone to conflagration," said Josh Sides, a professor at Cal State Northridge.

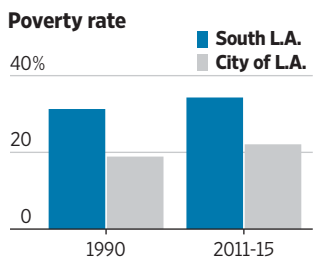
The racial and ethnic makeup of South Los Angeles has shifted dramatically since the riots. In 1990, half of the population was African-American and 45% was Latino, according to census data. Today, South Los Angeles is 65% Latino and 29% African-American.

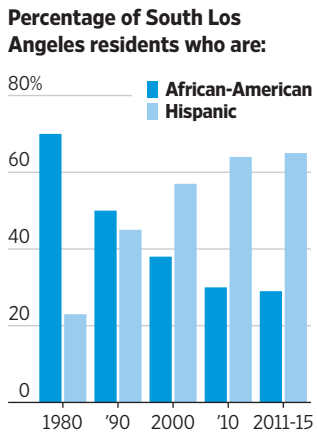
Mr. Pastor, the USC professor, said people in the area face two problems: working poverty among Latino immigrants and higher unemployment for African-Americans.

"The employment challenge in South L.A. requires a lot of small solutions," he said. "Promotion of small business, a lot of antidiscrimination work in hiring, and a lot of work around job programs for those leaving incarceration."

Poverty Persists

Twenty-five years after the Rodney King riots, incomes remain low in South Los Angeles.





Sources: U.S. Census Bureau; University of Southern California; Minnesota Population Center

THE WALL STREET JOURNAL.

Plexiglass Irks 'El Chapo' Lawyers

By Sara Randazzo

The flight risk of drug cartel leader Joaquín "El Chapo" Guzmán, who twice escaped from maximum-security prisons in Mexico before being extradited to the U.S., is playing a central role in his federal criminal case in Brooklyn, N.Y.

Attorneys for Mr. Guzmán, who appeared in court Friday for the first time in three months, told a judge that the strict conditions of his solitary confinement were beginning to make communicating with their client untenable.

Separated by thick plexiglass with only shoddy speakers to communicate, the attorneys are having trouble reviewing Mr. Guzmán's case with him, federal public defender Michelle Gelernt said. And with large volumes of papers and recordings expected to be turned over by the Brooklyn U.S. attorney's office, the situation is only going to get worse, she said.

"Are we supposed to sit there and hold up 10,000 pages for hours at a time?" she asked U.S. District Judge Brian Cogan. The prosecution pointed out that Mr. Guzmán does have access to a computer loaded with the discovery documents, but the defense argued that trying to get Mr. Guzmán to call up the same document they have in their hands is too difficult. Instead, Ms. Gelernt suggested that she and the other defense attorneys should be allowed direct access to Mr. Guzmán.

JANE ROSENBERG/REUTERS

Joaquín 'El Chapo' Guzmán, right, with his attorney in court Friday.

"Just lock us on the same side of the counsel booth," said Ms. Gelernt.

Judge Cogan said the situation did seem overly cumbersome and that he would send a magistrate judge to the correctional facility to look for a solution. At the same time, the judge expressed concern that "the mere movement of him out of [solitary confinement] raises the security issues" that have come up at every stage of the case.

Mr. Guzmán, who has pleaded not guilty to 17 criminal charges in federal court in Brooklyn, including drug trafficking and money laundering, has been kept in solitary confinement for 23 hours a day in the Metropolitan Correctional Center in downtown Manhattan. The judge has denied requests to loosen his confinement, but did agree this week to let him send prescreened written messages to his wife to discuss both personal matters and the issue of how to hire and pay for private lawyers.

'Are we supposed to sit there and hold up 10,000 pages for hours at a time?'

Mr. Guzmán has complained in court documents about the size of his windowless cell, the presence of phantom music, and the lack of access to television.

For now, Mr. Guzmán continues to be represented by government-appointed lawyers, though recent court filings indicate that he is looking for private counsel.

During Friday's hearing, Mr. Guzmán told the judge through a translator that for now he would like to continue to work with federal defenders despite a perceived conflict of interest.

Prosecutors had argued that because different lawyers in the federal defenders' office have represented four potential witnesses with ties to the Sinaloa drug cartel, Mr. Guzmán should seek new counsel. But Mr. Guzmán and his lawyers said Friday that they didn't see a problem with the arrangement and that in the unlikely event one of the four unnamed witnesses—all serving time in U.S. prisons—was called to testify, they would work around it.

"I thank you, sir, and I would like to continue with my current attorneys because I feel well with them," Mr. Guzmán said through a translator.

Judge Cogan said he is eager to move the case along as swiftly as possible and set a tentative trial date of April 16, 2018.

Both sides said they would need months to prepare given the voluminous documents and wiretaps involved in the case. Prosecutors said Friday the trial could take two to three months.

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A Who's Who As Health Bill Hits Senate

The Senate has become the arena for debating changes to the nation's health-insurance system, now that the House has passed its overhaul of the Affordable Care Act.

By Kristina Peterson, Michelle Hackman and Louise Radnofsky

Here are some of the senators who will affect the course of the overhaul legislation, with the roles they play in the chamber.

AARON P. BERNSTEIN/GETTY IMAGES

Sens. Cory Gardner, at the lectern, flanked by, from left, John Barrasso, John Thune and Mitch McConnell, on Capitol Hill this month.

The GOP Leader

Senate Majority Leader **Mitch McConnell** (R., Ky.) is a master when it comes to Senate procedure and political strategy, and both will play crucial roles in the chamber's health-care fight. It will be up to Mr. McConnell to find a way to knit together at least 50 of the Senate's 52 Republicans to pass any legislation, a challenging task given the strong and potentially clashing opinions of the conservative and more-centrist wings of the Senate GOP.

Mr. McConnell is expected to prioritize shielding any vulnerable Senate Republicans up for re-election in 2018 to ensure the GOP doesn't lose its Senate majority.

The Chairmen

Sen. **Orrin Hatch** (R., Utah), chairman of the Finance Committee, and Sen. **Lamar Alexander** (R., Tenn.), who heads the Health, Education, Labor and Pensions Committee, lead the Senate's two bill-writing panels primarily responsible for drafting health-care legislation. Though both are fierce critics of the Affordable Care Act, they have sent early signals that they are willing to take a more conciliatory approach.

Both have made public statements suggesting they would be willing to work to repair the law rather than topple it entirely. Look for Mr. Alexander in particular to take steps to shore up individual insurance markets. His home state of Tennessee is at risk of having no insurers willing to sell individual market plans in a cluster of counties.

The Minority Leader

Sen. **Chuck Schumer** of New York, the Democratic leader, plans to highlight the political peril Republicans could face if they roll back elements of the 2010 health law that have become popular.

Under rules tied to the budget, Republicans don't need any Democratic votes to pass the health bill, meaning Mr. Schumer won't have legislative leverage because the legislation could be passed by a simple majority.

The Centrists

Sens. **Susan Collins** of Maine and **Lisa Murkowski** of Alaska, both Republicans, have proven they are willing to buck their party, as both voted against the nomination of Betsy DeVos, President Donald Trump's choice for education secretary. Both senators may be willing to break from the GOP on health care too.

Already, the two have demonstrated that they oppose stripping federal funding from women's health provider Planned Parenthood. Both have concerns over the House bill's cuts to Medicaid and are expected to push for changes to the safety-net program.

MARK WILSON/GETTY IMAGES

ANDREW HARNIK/ASSOCIATED PRESS

TOM WILLIAMS/CQ ROLL CALL/NEWSCOM/ZUMA PRESS

Sens. Chuck Schumer, left, Susan Collins and Lamar Alexander are key players to watch.

Ms. Collins has already joined with Sen. **Bill Cassidy** (R., La.), who sits next to her on the Senate's health committee, to float alternative legislation aimed at bridging the gap between conservatives and centrists, by allowing states to opt out of the 2010 health law.

The Conservatives

Conservative and libertarian Republicans in the Senate could pose an even greater challenge to the GOP health-care bid than they did in the House—not because they are more numerous, but because the party's margin for error is even slimmer in the Senate.

Broadly speaking, they want what the conservative House Freedom Caucus wanted: major changes to the 2010 Affordable Care Act.

In 2015, Sens. **Mike Lee** of Utah and **Ted Cruz** of Texas, both Republicans, worked to force Congress to take an aggressive stance on a symbolic repeal of the Affordable Care Act. This time around, Mr. Lee marked himself out as an early opponent of Republican leaders' health-care plans, saying they were insufficient in uprooting the law.

He was swiftly followed by Sen. **Rand Paul** (R., Ky.), who allied himself with House Freedom Caucus members and incurred the wrath of the White House in the process. Mr. Cruz is expected to follow Mr. Lee.

Medicaid Minders

Sens. **Rob Portman** of Ohio, **Shelley Moore Capito** of West Virginia and **Cory Gardner** of Colorado, all Republicans, hail from states that took advantage of the Affordable Care Act's Medicaid expansion.

In March, these three Republicans, along with Ms. Murkowski, wrote a letter expressing concern about repealing the expansion entirely, noting that states would buckle under the weight of covering their expansion populations. Look for them to try to strike a compromise that would preserve some federal funding for expansion populations, or at least maintain the funding for a longer period than under the House bill.

HEALTH

Continued from Page One

is the process I think the House of Representatives should have started with, and they didn't."

Mr. Cruz and Sen. Mike Lee of Utah have talked about rolling back regulations to lower the cost of premiums. Others have voiced concerns about the House bill's plans to cut Medicaid funding and freeze its expansion in 2020; they include Sens. Cory Gardner of Colorado, Tom Cotton of Arkansas and Rob Portman of Ohio.

There are no women lawmakers on the Senate working group, which spurred swift criticism on social media.

The working group is essentially setting aside the House bill to craft a package they hope can attract at least 50 of the 52 GOP senators and avoid Senate procedural rules that could require 60 votes for passage, given that no Democrats are expected to vote for it. Many of their alterations are expected to be aimed at softening the blow for the elderly.

"Older people buying their own insurance, especially those with lower incomes, are probably the hardest-hit group under this bill," said Larry Levitt, a senior vice president at the Kaiser Family Foundation, a nonprofit focused on health-care issues.

Signs are already emerging that the GOP could pay a price if it doesn't address that issue. The AARP, a powerful group representing older Americans, is concerned, among other things, about a provision allowing states to get waivers so insurers could charge higher premiums to people with pre-existing health problems who let their coverage lapse.

That is a risk for the 25 million people age 50-64 who have pre-existing conditions, according to the AARP. The group sent a letter to Capitol Hill warning it is carefully watching how lawmakers vote on the health proposals.

Fourteen of the 23 House Republicans in districts won by Democrat Hillary Clinton in last year's presidential race voted for the GOP health bill, and following Thursday's vote, the Cook Political Report changed its evaluation of 20 House seats in a direction favoring Democrats in 2018.

A Senate working group began meeting before it was clear the House bill would pass.

Democrats should be careful not to overstate the bill's impact, said Nathan Gonzales, who analyzes House races for the Rothenberg & Gonzales Political Report.

"Perception can be more powerful than reality in elections," he said. But, he added, "if Democrats spend the next year-and-a-half telling people the sky is falling and it doesn't, it could dampen the party's ability to gain seats."

Rep. Bill Flores (R., Texas) said he sees no reason for Democrats to celebrate.

"If they think this is good for them, then they forgot what they did to the American people," Mr. Flores said, referring to the Affordable Care Act, commonly known as Obamacare.

Under the House bill, people would no longer have to pay a penalty for not having health coverage, but that is largely a perk for younger consumers who are generally healthier.

The bill would let people who don't have coverage through their job get refundable tax credits that increase with age. The credits start at $2,000 for people under age 30 and go up to $4,000 for people who are 60 and older—far less than they receive on average under the law now.

Annual premiums for adults ages 60-64 would rise 22%, based on a study by Milliman, an actuarial firm that did the research for AARP. States could also obtain federal waivers that would allow insurers to make that disparity—and premium increase—even greater.

"Washington Republicans turned their backs on millions of Americans," Rep. Cheri Bustos (D., Ill.) said on the House floor this week.

The impact on older people weighed on some House Republicans, some of whom have begun distancing them from the bill by saying they supported it even though they believe it needs changes in the Senate.

Rep. Tom MacArthur (R., N.J.) a centrist who played a key role in the bill's passage, said he was concerned when the House bill first came out of committee that the legislation put heavier financial burdens on older Americans. He said he worked to add more money for the disabled and older Americans using Medicaid; he said that problem was solved in the final version.

"I think it's trying to strike a balance," Mr. MacArthur said. "The Affordable Care Act did just the opposite. It made it so younger people weren't buying into insurance. That's one of the reasons Obamacare failed."

The Senate working group began meeting weeks ago, but it wasn't clear until recently that the House bill would pass.

—Michelle Hackman and Natalie Andrews contributed to this article.

Nominee for Army Secretary Withdraws

By Ben Kesling And Gordon Lubold

WASHINGTON—President Donald Trump's nominee for secretary of the Army pulled his name from consideration after a siege by lawmakers and advocates who objected to stands he previously had taken on social issues.

The nominee, Mark Green, withdrew Friday, citing "false and misleading attacks" against him. He is the second of Mr. Trump's nominees for Army secretary to drop out prior to appearing before the Senate for confirmation. Mr. Trump's first nominee for Navy secretary also withdrew before confirmation hearings.

In a statement expressing "deep regret" for the decision to pull out, Mr. Green said he supported Mr. Trump's goals but that his nomination had become a distraction.

"Tragically, my life of public service and my Christian beliefs have been mischaracterized and attacked by a few on the other side of the aisle for political gain," he said. "I believe it is critical to give the president the ability to move forward with his vision to restore our military to its rightful place in the world."

ERIK SCHELZIG/ASSOCIATED PRESS

Mark Green faced attacks over his views on social issues.

The White House had been expected to nominate former Army Ranger Ryan McCarthy as undersecretary of the Army, according to people familiar with the matter. Given Mr. Green's withdrawal, should Mr. McCarthy get the nod for the undersecretary post, he is likely to end up serving as acting Army secretary, possibly for many months. One U.S. official said Mr. McCarthy also could be formally nominated as Army secretary.

Mr. Green, a Tennessee state senator, physician and chaplain of the state's Republican caucus, was nominated in early April and immediately drew criticism for previous statements about homosexuality, evolution and other social issues.

Defense Secretary Jim Mattis spoke out in favor of Mr. Green at the time of his nomination. "He had my full support during the selection process, and he will have my full support during the Senate confirmation process," Mr. Mattis said then.

A West Point graduate, Mr. Green has publicly spoken about his doubts concerning evolution, and he holds controversial positions.

"If you poll the psychiatrists, they're going to tell you that transgender is a disease," he told a group in 2016 while speaking about LGBT issues in the military. "We've tolerated immorality," he said.

The nominee's positions stand in contrast to those of Eric Fanning, the first openly gay Army secretary, who was selected by former President Barack Obama. Mr. Green would have succeeded him.

Mr. Green also has referred to Mr. Obama as "B. Hussein Obama" in Facebook posts upbraiding the former president for allegedly being lenient toward Islamist radicalism.

Last year, Mr. Green told a group in Tennessee that he wouldn't tolerate the teaching of certain aspects of Islam in public schools, agreeing with a member of the audience who said people need to take a stand against indoctrination of students.

Pressure started mounting on Mr. Green over the past week as lawmakers began criticizing him and advocacy groups stepped up their opposition.

—Louise Radnofsky contributed to this article.

Trump Campaign Aides Questioned Over Russia

By Paul Sonne And Shane Harris

WASHINGTON—The Senate Intelligence Committee sent letters to at least four former associates of the Trump campaign asking for information and records about their activities before and after the 2016 election, a sign that the committee's probe into alleged Russian campaign interference is heating up.

The committee, which carries subpoena power, sent letters to former Trump campaign Chairman Paul Manafort, former national security adviser Mike Flynn, former campaign adviser Roger Stone and former campaign foreign-policy adviser Carter Page, according to people familiar with the matter.

The letters, sent in recent days, come as a follow-up to a formal committee request earlier in the year asking the former Trump campaign associates to preserve all communications, documents and other materials for the purposes of the probe.

The latest letters request specific information from the former Trump campaign associates, most of whom had left the campaign by the time of the election. Mr. Flynn was forced to resign his White House position in February after misleading officials about the nature of his conversations with the Russian ambassador to the U.S.

All four men have denied aiding Russia in its alleged efforts to interfere with the 2016 campaign. The U.S. intelligence community concluded in a report released in January that Russia undertook an operation to influence the outcome of the 2016 presidential election in favor of President Donald Trump as part of a broader ambition to undermine the Western liberal order. Russia has denied a role in the election.

A representative for the Republican majority on the Senate panel didn't respond to a request to comment on Friday. A representative for the minority Democrats on the committee also declined to comment.

—Byron Tau and Alan Cullison contributed to this article.

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U.S. Rejects Flight Ban Over Syria Zones

Russia bars aircraft in four 'de-escalation' areas, but Washington says operations go on

By Thomas Grove in Moscow and Felicia Schwartz in Washington

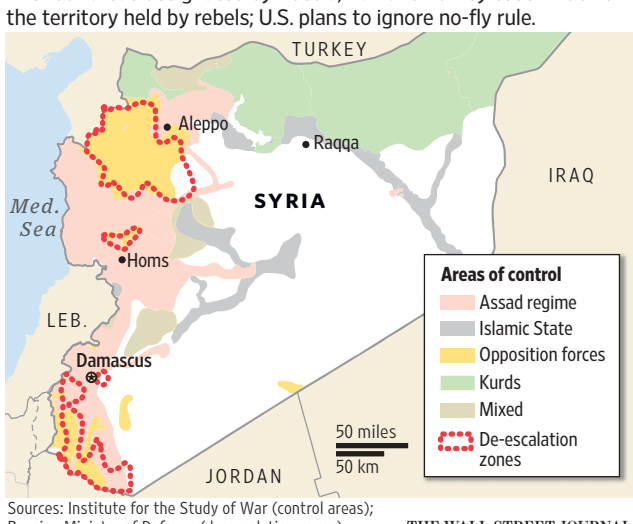
A Russian envoy said U.S. aircraft are barred from flying over the "de-escalation zones" that Russia, Iran and Turkey recently agreed to establish in Syria, but U.S. officials dismissed the admonition as the U.S.-led coalition continues its operations to target Islamic State.

The disagreement left deeply uncertain the status of the zones that were established this week without explicit U.S. consent during talks on Syria in Kazakhstan.

Alexander Lavrentiev, Russian President Vladimir Putin's envoy for Syria, didn't indicate what role Russian aircraft would have in enforcing the no-fly rule. The ban also applies to aircraft of the U.S.-led international coalition fighting Islamic State militants, said the envoy.

Planned Syrian De-Escalation Zones

The four areas designated by Russia, Iran and Turkey cover much of the territory held by rebels; U.S. plans to ignore no-fly rule.



Sources: Institute for the Study of War (control areas); Russian Ministry of Defense (de-escalation zones) THE WALL STREET JOURNAL.

RODI SAID/REUTERS

Russia, Turkey and Iran say the zones will allow delivery of aid and the return of refugees.

"From this time forward, these zones are closed for their flights...with or without notification," Mr. Lavrentiev was quoted as saying in the Kazakh capital Astana, where Russia, Iran and Turkey signed a memorandum on Thursday to create at least four safe zones across Syria.

The zones being set up under the agreement are intended to bolster fragile cease-fires and allow for the delivery of humanitarian aid and the return of refugees, officials from the three nations said. U.S. officials had reacted warily to the agreement, saying any deal involving Iran was suspect and noting that past efforts to reduce violence in Syria had failed. After Mr. Lavrentiev's comments Friday, the Trump administration said it didn't plan to change the U.S. posture.

"As we said yesterday, the United States supports any effort that can genuinely de-escalate the violence in Syria, insure unhindered humanitarian access, focus energies on the defeat of ISIS and other terrorists, and create the conditions for a credible political resolution of the conflict," a State Department official said.

"The coalition will continue to strike ISIS targets in Syria," the official said. "The campaign to defeat ISIS will continue at the same relentless pace as it is proceeding now."

U.S. Secretary of State Rex Tillerson and Russian Foreign Minister Sergei Lavrov spoke on the phone Friday to discuss "efforts to de-escalate the ongoing conflict in Syria," State Department spokeswoman Heather Nauert said. They will also meet next week on the sidelines of an Arctic Council meeting in Alaska.

Russia, Iran and Turkey support opposing sides in the war, with Moscow and Tehran backing the regime of President Bashar al-Assad and Ankara allied with rebel groups. Russian air support for ground operations by government forces and their allies has been crucial in tipping the war in the regime's favor.

—Carol E. Lee in Washington contributed to this article.

Navy SEAL Killed in Somalia on Mission Against Militants

By Ben Kesling, Gordon Lubold and Matina Stevis

WASHINGTON—A U.S. Navy SEAL was killed while fighting an al Qaeda-affiliated militant group in Somalia, defense officials said Friday.

Two other service members were wounded in a firefight with al-Shabaab militants near the capital, Mogadishu, on Thursday, Pentagon officials said.

Defense officials said it appeared to be the first U.S. combat death in Somalia since 1993, when 18 U.S. service members were killed in what became known as the battle of Mogadishu, memorialized in the film "Black Hawk Down."

"U.S. forces were conducting an advise and assist mission alongside members of the Somali National Army," according to a statement from the U.S. Africa Command, which oversees American personnel on the continent.

Thursday's firefight took place near Barii, Somalia, approximately 40 miles west of Mogadishu.

FARAH ABDI WARSAMEH/AP

Wreckage of a car-bomb blast in Mogadishu, Somalia, last month

"The entire team was able to return fire and suppress" the militants, a Pentagon spokeswoman said Friday.

President Donald Trump was briefed on the incident Friday by his national security adviser, Lt. Gen. H.R. McMaster, White House spokeswoman Sarah Sanders said.

Ms. Sanders offered condolences to the family of the Navy SEAL. She said Mr. Trump wasn't expected to issue a statement because the process for notifying the families is still under way.

In late March, a change in policy by Mr. Trump allowed the military to step up its fight against al-Shabaab, declaring Somalia an area of active hostilities.

Mr. Trump has given military commanders more leeway world-wide in fights against Islamic State and other militant organizations.

Al-Shabaab has been ramping up small-scale attacks using mostly improvised explosive devices in recent months, especially since February when the country elected its new president. President Mohamed Abdullahi Mohamed declared war on al-Shabaab in April, in a symbolic gesture diplomats interpreted as a relaunch of efforts to defeat the group.

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Macron's Party Reports Hacking Attack

Documents are posted on internet before Sunday's final round of voting in France

By Matthew Dalton
William Horobin
And Sam Schechner

PARIS—The political party of French presidential candidate Emmanuel Macron said its computer systems had been hacked, after thousands of emails and electronic documents purporting to come from the party were posted anonymously on the internet Friday evening.

The files had been obtained several weeks ago from the personal and work email accounts of party officials, according to a statement from Mr. Macron's party, called En Marche, or On the Move.

The file dump comes less than two days before the final round of voting in France's presidential race, pitting Mr. Macron, a pro-European Union centrist, against far-right nationalist Marine Le Pen. Polls have predicted that Mr. Macron will handily defeat Ms. Le Pen.

The massive cache includes both authentic and falsified documents, the party said, "with the goal of sowing doubt and disinformation."

Louis Gautier, who leads the prime minister's national security office, said his team has been aware of the breach for several days.

"We've been activated and are investigating," Mr. Gautier said. "We are in regular contact with the campaign."

Mr. Macron's campaign said the published files reveal no illegal activity and "show the normal functioning of a presidential campaign."

"The release makes public internal data, but not of a kind that worries us about its legality," En Marche said.

The cyberattack marks another dramatic intervention by hackers in a Western election. Last year, Russian agents allegedly hacked email accounts in the U.S. belonging to the Democratic Party and presidential Hillary Clinton's campaign and gave the files to WikiLeaks.

Russian officials have repeatedly denied any interference in the U.S. election. Officials didn't respond to questions about the hacking of Mr. Macron's party.

In France, concerns were running high that the Kremlin would attempt to interfere in the election in favor of Ms. Le Pen, a strong supporter of Russian foreign policy, by either hacking Mr. Macron's computer systems or spreading disinformation about him.

During a visit by Ms. Le Pen to the Kremlin in March, President Vladimir Putin of Russia said his government wouldn't interfere in the French election.

DAMIEN MEYER/AGENCE FRANCE-PRESSE/GETTY IMAGES

Workers prepare a polling station ahead of the final round of voting in France's presidential election.

Earlier this week, Mr. Macron's campaign was forced to debunk documents posted in a far-right online forum purporting to show he owns a shell company in the Caribbean island of Nevis, a noted tax haven. Nevis officials said they have no record of such a company ever existing.

The timing of Friday's document dump suggests the hackers may have calculated their leak to inflict maximum political damage. French law prohibits political candidates from communicating publicly on the day before the vote, with the deadline passing at midnight Saturday. Mr. Macron's campaign emailed his statement just four minutes before the deadline.

France's electoral commission called on journalists not to report on the content of the leaked files because of the blackout period, saying violators could face criminal penalties. Because of the blackout period, a Macron campaign official said the campaign couldn't comment on the veracity of individual files.

The documents were posted by a user named EMLEAKS on Pastebin.com, a website allowing computer programmers and other users to share large quantities of text.

The Macron campaign has for months warned that it was being targeted by Russian government hackers. French security officials have said they are on high alert to the threat. Mr. Gautier declined to comment further on why the government had been unable to protect the campaign despite previous warnings.

Among the leading candidates, Mr. Macron has taken the least conciliatory stance with Moscow. Ms. Le Pen has called for closer ties with Mr. Putin and proposed to pull France out of the European Union and other Western alliances that Mr. Putin views as a threat.

Some French Voters Favor Nobody

PARIS—The presidential election is breathing life into Stéphane Guyot's six-year campaign to ensure that votes for nobody count for something. Under current election rules, the so-called *ballot blanc*, or white ballot, is purely symbolic. Mr. Guyot, who leads the advocacy group Citizens of the White Ballot, wants to change that.

Candidates in French presidential elections need more than 50% of the vote to win. If white ballots were included in the official tally, Mr. Guyot says, voters could use them to deprive candidates of an absolute majority and force fresh elections. "It would be very efficient," he says.

Pollsters are forecasting a record number of white ballots on Sunday. After mainstream candidates were sidelined in the April 23 first round, these voters now say they don't identify with the positions of either Mr. Macron—who wants to reinvigorate European Union integration—or Ms. Le Pen—who says France would be better off out of the bloc and the euro.

—Max Colchester and David Gauthier-Villars

Canada Considers Retaliation Versus U.S.

By Paul Vieira

OTTAWA—Canadian Prime Minister Justin Trudeau said Friday he would consider retaliatory measures in response to the U.S. imposing a 20% tariff on lumber imports from its northern neighbor.

Mr. Trudeau said in a letter to the premier of British Columbia that he would "seriously and carefully" review the province's request to respond to the U.S. tariff. The bulk of Canada's softwood lumber, used in the construction of homes, originates in British Columbia.

The Pacific Coast province wants the federal government to ban the shipment of U.S. thermal coal bound for customers in Asia. Ports in Canada fall under federal authority.

U.S. producers have shipped thermal coal, used by power plants to produce electricity, to British Columbia export terminals due to a lack of capacity in U.S. ports. The British Columbia government estimates that last year the Port of Vancouver handled 6.2 million metric tons of U.S. thermal coal.

British Columbia Premier Christy Clark is in the final stages of a re-election campaign, and her right-leaning Liberal Party is in a tight race with her left-leaning opponent, polling indicates. The prime minister's letter comes four days before residents in Canada's third-largest province head to the polls.

The U.S. Commerce Department imposed the tariff after concluding Canada was unfairly subsidizing its lumber producers. Mr. Trudeau said in his letter to Ms. Clark that Canada "disagrees strongly" with the finding. "The accusations are without merit, as we have made clear to the U.S. administration," he said.

Representatives for the U.S. embassy in Ottawa and the Commerce Department weren't immediately available for comment.

The lumber tariff emerged as the Trump administration escalated its rhetoric against Canada and the North American Free Trade Agreement. President Donald Trump said last week he was considering a formal withdrawal from the continental trade pact but decided renegotiation was the best course after speaking with Mr. Trudeau and Mexican President Enrique Peña Nieto.

Not all are pleased with British Columbia's idea of retribution. Westshore Terminals LP, a Vancouver-based coal terminal, urged Mr. Trudeau in a letter last week to reject Ms. Clark's recommendation.

PETER BYRNE/ZUMA PRESS

Election staff counted ballot papers for the Greater Manchester mayoral election on Friday. The Conservatives, also known as Tories, won four of six mayoral contests.

Conservatives' Gains Bode Well for U.K.'s May

By Jason Douglas
And Jenny Gross

LONDON—The U.K.'s governing Conservative Party made significant gains in local elections, underscoring the chances of a big win for Prime Minister Theresa May in a nationwide vote next month.

The contests—for seats on district councils in Scotland, Wales and parts of England in addition to a handful of new city mayoralties—offer a sample of British public opinion almost a year after 2016's Brexit vote and ahead of national elections to form a new Parliament on June 8.

The results suggest British voters are swinging behind Mrs. May as she prepares for talks with the European Union over terms of Britain's exit from the 28-member bloc. The Conservatives gained in all areas of the country, including some once considered opposition strongholds, while the small, pro-EU Liberal Democrats failed to turn any lingering anti-Brexit feeling into concrete electoral gains.

Pollsters say Mrs. May appears on course to substantially extend her majority in Parliament next month, a potential victory she says would strengthen her hand in divorce talks that are expected to take two years. In the past week, a series of thorny issues concerning Britain's departure from the bloc—including the size of a so-called exit bill it might have to pay—have raised tensions on both sides.

Elections were held Thursday for 88 councils in Scotland, Wales and England, for a total of 4,851 seats. According to a tally published late Friday by the British Broadcasting Corp., Mrs. May's Conservatives had won 1,899 seats, a net gain of 563.

The main opposition Labour Party suffered heavy losses, shedding 382 of its council spots, including some in its former industrial heartlands in Wales and Scotland. The Liberal Democrats lost 42.

The UK Independence Party—whose anti-immigration and anti-EU message for years helped advance the possibility of Brexit on the political agenda—had by late afternoon held on to only a single seat, losing 145 councilors.

Of the six mayoral contests, the Conservatives won four and Labour two.

The gains reinforce expectations that Mrs. May's Conservatives are headed for victory in the nationwide poll. A survey of more than 2,000 voters conducted May 2 and 3 by pollster YouGov PLC put Conservative support nationwide at 35% against Labour's 23%, with the remainder undecided or planning to vote for smaller parties or abstain.

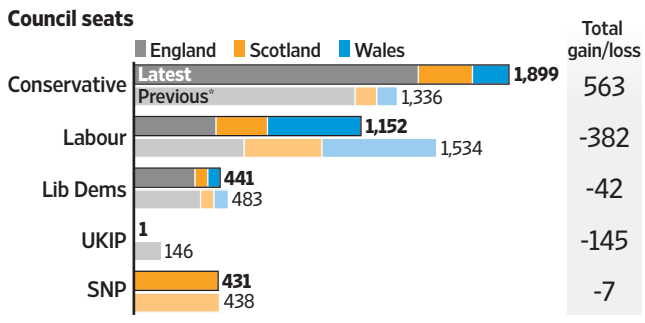
Pollsters say the Conservatives could extend their majority in the House of Commons to more than 100 seats, from 17 now.

Labour's performance in Thursday's contests may foreshadow one of its worst national defeats in years. Its current leader, veteran left-wing politician Jeremy Corbyn, is wildly popular with the party's rank-and-file but deeply disliked by the wider electorate.

The party's economy spokesman, John McDonnell, a close ally of Mr. Corbyn, said Labour hasn't suffered the "wipeout" many predicted, but analysts said its losses are notable given that incumbent governments in Britain tend to perform poorly in local contests.

Tory Tide

The ruling Conservatives gained seats across the country in district-council elections, while some of its rivals saw heavy losses.



*Scotland/Wales results vs. 2012; England results vs. 2013
Source: British Broadcasting Corp

THE WALL STREET JOURNAL.

U.S. Jet Fighters Flex Muscle Amid Tensions With Russia

ROBERT WALL/THE WALL STREET JOURNAL

Two of the U.S.'s radar-evading F-35As, center and center right, train with F-15 fighter jets in Europe.

R.A.F. LAKENHEATH, England—The Pentagon deployed its newest combat plane, the stealthy F-35A fighter, to Europe for a first overseas training mission in a show of allied strength intended in part to deter Russian aggression.

The U.S. Air Force deployed eight of the radar-evading jets last month to this British air base, following through on an Obama administration-era project to show support to European allies.

The deployment puts in a spotlight the F-35 that drew early criticism from President Donald Trump for its cost. Mr. Trump hasn't publicly criticized the program since the Pentagon and Lockheed Martin Corp. reached a deal on planned cost reductions.

The jet fighters are training with British Royal Air Force Typhoon jets and other North Atlantic Treaty Organization aircraft. The planes, during their stay of several weeks in Europe, also have made excursions to Estonia and Bulgaria, reaching NATO's eastern front.

The drills are part of a broader U.S. military-support effort that started amid Moscow's support for separatist fighters in Ukraine. Washington created in 2014 what it called the European Reassurance Initiative.

The U.S. plans to permanently base F-35As in Europe, but not until after 2020.

Gen. Tod Wolters, the head of U.S. Air Forces in Europe, said one of the goals of the deployment was to "enhance NATO's deterrence posture." Speaking at the jets' arrival ceremony in April, he said the current deployment would lay the groundwork for their full-time operation in England.

—Robert Wall

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North Korea Alleges CIA Plot

By Jonathan Cheng

SEOUL—North Korea accused the U.S. Central Intelligence Agency of trying to assassinate its leader Kim Jong Un in a terrorist attack involving biochemical substances, in a fresh reflection of the heightened tensions between Washington and Pyongyang.

North Korea frequently makes dramatic claims in its state media and regularly accuses the U.S. and South Korea of trying to overthrow its government or smear the dignity of its leadership.

The latest claim comes amid a flurry of statements from Washington and Pyongyang about the possibility of unilateral military action, as the U.S. seeks to curb North Korea's nuclear and missile programs. The CIA declined to comment on the allegation. South Korea's government, which Pyongyang said was an accomplice, didn't respond to a request to comment.

The accusations on Friday from North Korea's Ministry of State Security, published by the state-run Korean Central News Agency, were unusual in their detail and specificity. The ministry said the U.S. and South Korean agents paid an overseas North Korean laborer in the Russian Far East to detonate a bomb with radioactive and "nano poisonous" substances in Pyongyang during a military parade. North Korea held a military parade in central Pyongyang last month.

The plot was aimed at "the supreme leadership" of North Korea, it said, employing a term commonly used for Mr. Kim.

The North's claims came after South Korea officials accused the regime of masterminding a plot to kill Kim Jong Nam, the half brother of Kim Jong Un, in Malaysia's international airport with a deadly nerve agent. North Korea has denied those accusations. Pyongyang has also accused the U.S. of sponsoring terrorism, a charge that comes as the U.S. mulls relisting North Korea as a state sponsor of terrorism.

North Korea frequently makes dramatic claims, though its state media can be a source of information on what is happening in the isolated country. Earlier this week, North Korea's state media was the first to report a flyover of B-1B bombers near the Korean Peninsula.

Amid the tensions, North Korea has also lashed out at its key ally China on Wednesday in a state media commentary that said Beijing was "dancing to the tune of the U.S." by hardening its line on Pyongyang's weapons programs.

KCNA/AGENCE FRANCE-PRESSE/GETTY IMAGES

North Korea's Kim Jong Un in an undated government photo.

Paper Points to Pemex Bribe

By Juan Montes

MEXICO CITY—A former top official of Brazilian construction giant **Odebrecht** SA testified that he was asked in 2014 to bribe the then-head of Mexican state oil firm **Petróleos Mexicanos**, according to a document filed with Brazil's Supreme Court as part of a broader corruption probe.

In the document, a copy of which was reviewed by The Wall Street Journal, Brazilian prosecutors informed the court that Hilberto Mascarenhas, who was head of Odebrecht's Structured Operations division, said he received a request to pay a bribe of $5 million to Emilio Lozoya, then-chief executive at Pemex. The request came at a meeting also attended by another Odebrecht official, according to the document.

The document was earlier reported by the nonprofit organization Mexicans Against Corruption and Brazilian news magazine Veja. It doesn't say whether it was Mr. Lozoya himself who requested the bribe or whether the money was actually paid.

Odebrecht, Latin America's largest construction firm, admitted in December it paid some $800 million in bribes to win contracts in 12 countries across four continents.

Mr. Lozoya, a former investment banker, has said since the testimony emerged in April that he never requested or received bribes from Odebrecht or any other company and that he always acted with honesty while the head of Pemex from December 2012 to February 2016.

Pemex's former communications director said Mr. Lozoya was traveling and couldn't respond to a request to comment from the Journal. Mr. Mascarenhas couldn't be reached to comment.

Mr. Lozoya has encouraged authorities to investigate and punish any corrupt practice inside the state-owned company, which had sales of $52 billion last year and provides around 16% of the Mexican government's revenue.

Mexico's Attorney General's Office hasn't filed charges against any former or current Pemex officials. An official of the office said Brazilian prosecutors had shared relevant aspects of their investigation with their Mexican counterparts, whose own investigation was continuing. Pemex has also opened an internal investigation of Odebrecht's contracts but hasn't announced any results.

During his time at Pemex's helm, Mr. Lozoya became one of the main promoters of Mexico's historic effort to open its oil industry to private investors for the first time in eight decades. Any evidence of impropriety on his part could undermine the credibility of the energy-sector overhaul, the flagship economic initiative of President Enrique Peña Nieto.

The government promised in 2013 when the overhaul was enacted that the oil opening would bring more transparency and less corruption inside the state oil firm.

As a part of the anticorruption settlement between Odebrecht and authorities from the U.S., Brazil and Switzerland, the Brazilian company admitted paying $10.5 million in bribes to Mexican officials from 2010 to 2014.

Between December 2013 and late 2014, Odebrecht said, it paid bribes of $6 million to a top official at an unnamed Mexican state company to help secure projects. Pemex was the only Mexican federal entity that signed contracts with Odebrecht in that period, according to Mexican records.

In 2014 and 2015, during Mr. Lozoya's tenure as chief executive, Odebrecht won four engineering and construction contracts from Pemex totaling around $1.5 billion, including upgrading refineries and building a major gas pipeline in northern Mexico, according to public records.

All the contracts were awarded without a public bidding contest. Previously, the company had won only one construction contract from Pemex.

Odebrecht Mexico didn't respond to requests to comment. A Pemex spokesman declined to comment on the contract process.

BEN STANSALL/AGENCE FRANCE-PRESSE/GETTY IMAGES

An ex-Odebrecht official said he was asked to offer a bribe to Pemex chief Emilio Lozoya, above.

Odebrecht's Pemex Construction Deals

2005 Upgrading Lazaro Cardenas refinery along with several partners: $317 million

2010 Supply gas contract with Pemex. The parties agreed Pemex would supply natural gas to Odebrecht's petrochemical plant in Mexico

Dec. 2012 Peña Nieto takes office

February 2014 Upgrading Tula refinery: $76 million. Amount was increased by $19 million in November of that year

July Construction contract to build a pipeline in northern Mexico: $1.2 billion

November Upgrading Salamanca refinery: $85 million

November 2015 Upgrading Tula refinery in Hidalgo state: $102 million

—Staff reports

WORLD WATCH

INDIA

Death Sentences Upheld in Rape Case

India's highest court upheld the death sentences for four men convicted of the 2012 rape and murder of a college student that exposed the country to searing global scrutiny and drove changes in the law meant to better protect women.

In the men's final chance to avoid the death penalty, the Supreme Court on Friday sided with two lower courts.

The 23-year-old physiotherapy student was attacked as she rode a bus home in Delhi with a male friend. The attackers beat the friend and raped and tortured the student as the bus traveled, before dumping them by the side of the road. The woman, whose name was withheld under Indian law, died of her injuries. Her friend survived.

In 2013, a court convicted four men of rape and murder and sentenced them to hang. The four petitioned the High Court, but it rejected their plea. They then appealed to the Supreme Court.

A fifth defendant died in jail during the trial. A sixth suspect was tried under the juvenile-protection law and released after spending the maximum-allowed three years in a reform facility.

—Krishna Pokharel

EUROPEAN UNION

Trump to Meet With Senior EU Officials

The top leaders of the European Union will meet with President Donald Trump during his visit to Brussels this month, officials from the bloc said.

Ahead of the gathering of North Atlantic Treaty Organization leaders on May 25, Mr. Trump will meet with European Council President Donald Tusk and European Commission President Jean-Claude Juncker. European officials pushed for the meeting, given past statements by Mr. Trump that Europeans have seen as critical of the bloc.

The visit to Brussels is one of several stops on Mr. Trump's first overseas trip, which also will take in Saudi Arabia, Israel, Rome and the Group of Seven gathering in Sicily.

—Julian E. Barnes

ALGERIA

Ruling Coalition Returns to Power

The ruling National Liberation Front and its coalition ally won a majority of seats in Algerian parliamentary elections that were marked by a low turnout.

FLN, President Abdelaziz Bouteflika's party, won 164 of the 462 seats in the lower house of parliament, Interior Minister Noureddine Bedoui told a press conference. FLN's coalition ally, Rassemblement National Democratique, finished second with 97 seats.

The Interior Ministry said about 38% of 20 million eligible voters cast ballots. Analysts said bribery scandals during the campaign have deepened long-running distrust of politicians.

—Associated Press

INDONESIA

Scores of Inmates Escape in Jail Break

Authorities were searching for scores of inmates who escaped Friday from an overcrowded prison on Sumatra island.

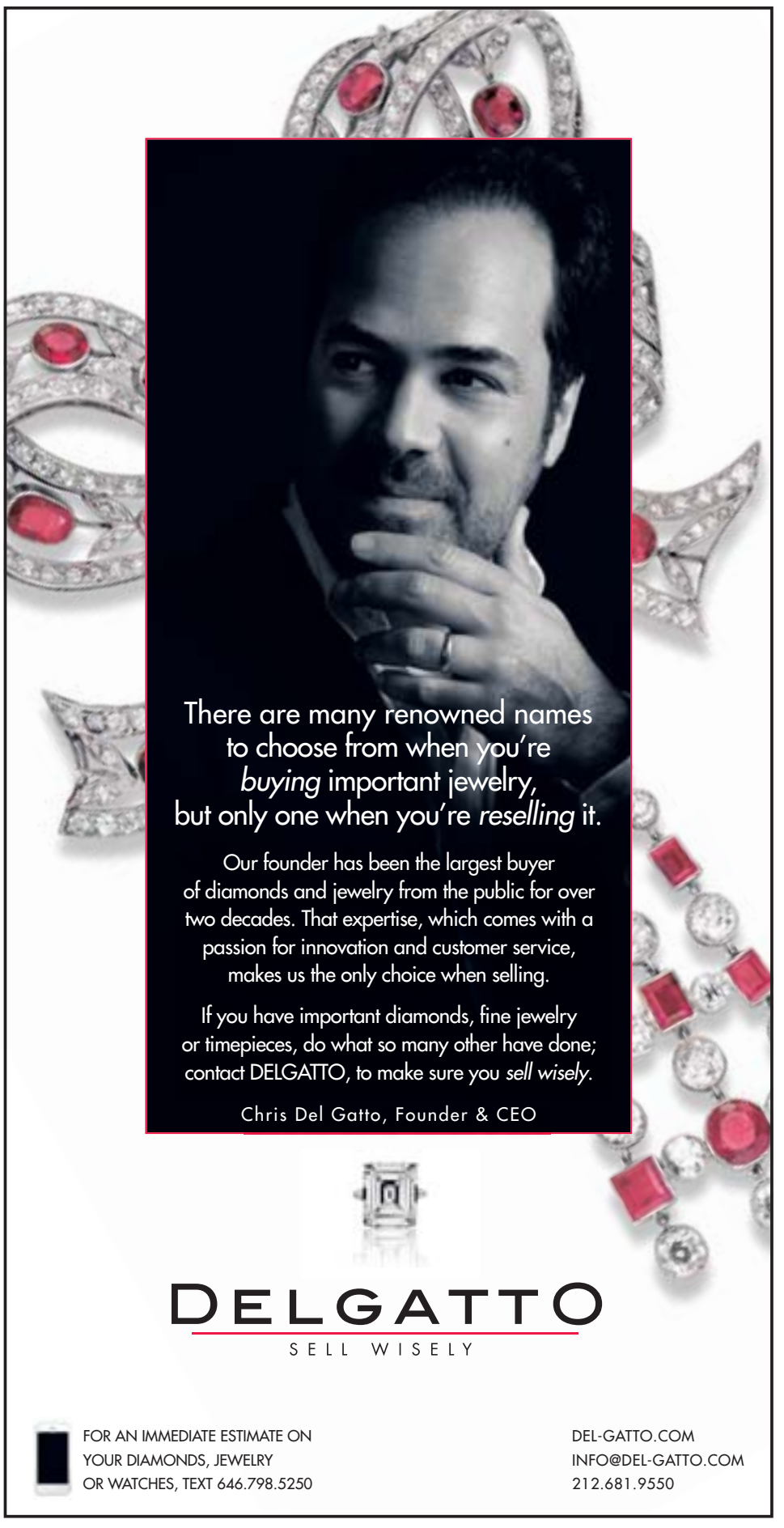
Hundreds of police and soldiers were deployed near Sialang Bungkuk Prison in Riau province and were blockading roads to its capital and other provinces, justice ministry official Wayan Dusak said. He added the escape occurred when prisoners were let out of their cells to take part in Friday prayers and overwhelmed the six guards on duty.

Officials were unsure how many inmates escaped. Indonesian media, citing police, said the number was more than 300. The prison holds about 1,800 inmates.

—Associated Press

RAJAT GUPTA/EUROPEAN PRESSPHOTO AGENCY

The mother, right, and father, left, of the murdered 2012 gang-rape victim leaving the Supreme Court in New Delhi on Friday, after the top court upheld death sentences for four men.



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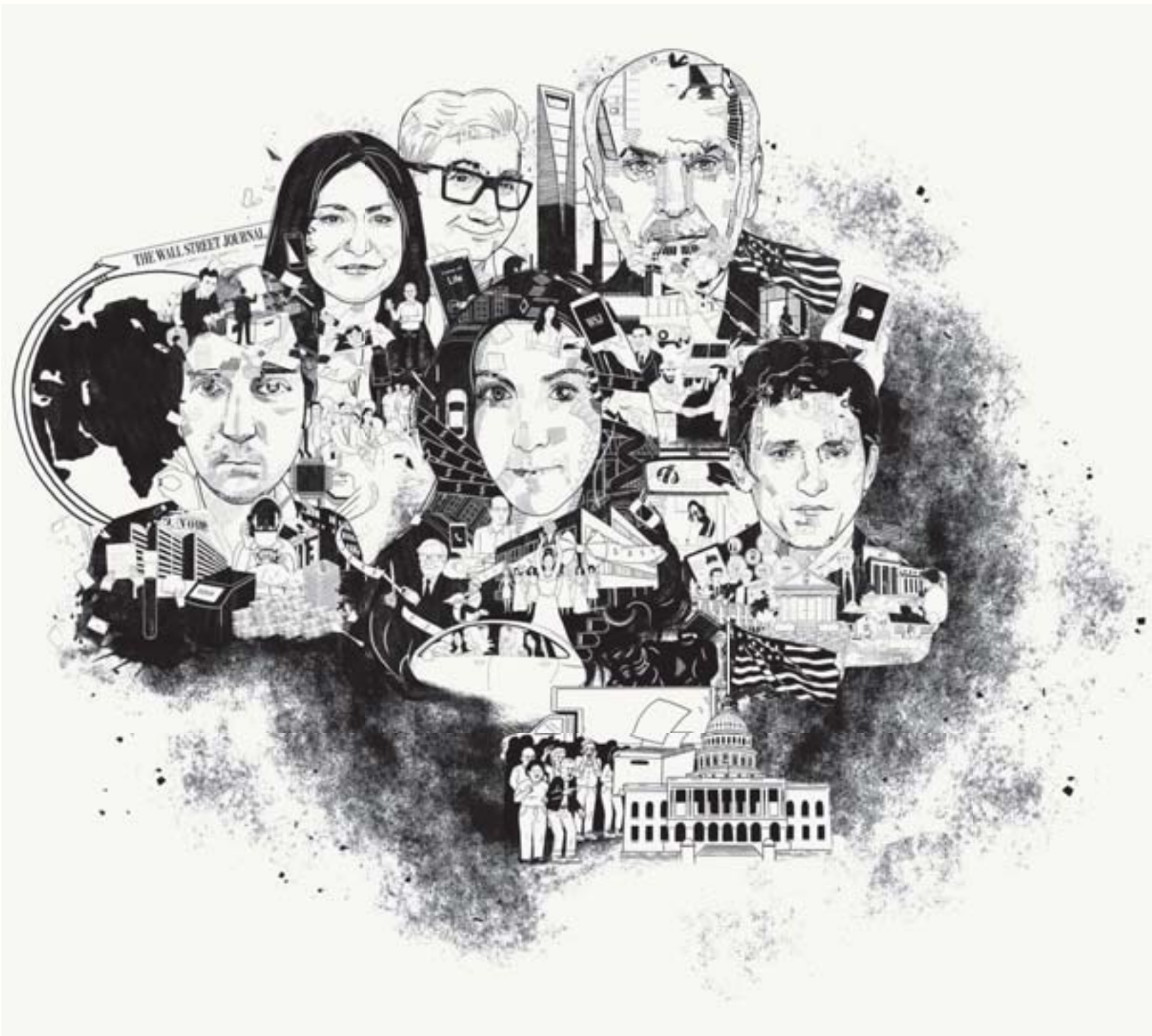

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OBITUARIES

ROBERT RATLIFF
1931 — 2017

He Turned Castoff Brands Into Business

When he was in his late 50s, Robert Ratliff's career prospects looked dim.

After working for decades as a senior executive in the truck and tire businesses, he had started a tire-retreading company in 1986. Two years later, he had to shut it down when his financial backers pulled out.

Then came an unexpected opportunity. Klöckner-Humboldt-Deutz AG of Germany had bought much of the farm-equipment business of Allis-Chalmers Corp., renamed it Deutz-Allis and was struggling to turn it around. The German company hired Mr. Ratliff as chief executive of Deutz-Allis.

In 1990, he led a group of executives who founded AGCO Corp. to buy Deutz-Allis. "We took a flying leap," as he later put it. In its first 15 years, AGCO made 21 acquisitions, obtaining Massey Ferguson, Gleaner and other storied brands that had fallen on hard times. Annual sales rose to more than $5.4 billion in 2005 from $200 million in 1990 as AGCO welded together one of the world's biggest makers of farm machinery.

Mr. Ratliff died April 21 at his home in Johns Creek, Ga. He was 85.

His proudest moment, he once said, was being enshrined in the Hall of Fame of the Association of Equipment Manufacturers in 2014.

—James R. Hagerty

TRISH VRADENBURG
1946 — 2017

Writer Changed Script After Mother's Illness

Trish Vradenburg was fully occupied with her career as a writer of television sitcoms in 1987 when, as she put it, her mother's life "suddenly began to unravel."

Her mother, Bea Lerner, a stylish and forceful Democratic Party activist, grew confused and helpless. Then came the diagnosis: Alzheimer's. "I barely knew what the disease was," Ms. Vradenburg wrote.

She learned quickly while juggling her career and care for her mother, who died in 1992.

Ms. Vradenburg wrote a play about the ordeal, adding humor and romance. It flopped on Broadway in 1996, closing after one performance, but was revived as "Surviving Grace" and performed in New York, Washington and other cities.

She and her husband, George Vradenburg, a lawyer who served in the 1990s as a senior executive at America Online Inc., in 2010 founded UsAgainstAlzheimer's, a nonprofit group that pushes for increased spending to improve care and search for a cure. The group estimates that 5.5 million people in the U.S. have the disease.

"We have to get people to come out of the closet and demand research, money, a cure, a vaccination, anything," Ms. Vradenburg told the Washington Post in 2013.

Ms. Vradenburg died of a heart attack April 17 at her home in Washington, D.C. She was 70.

—James R. Hagerty

RICHARD HAYNES
1927 — 2017

Lawyer Used Theatric Flair To Defend His Clients

By James R. Hagerty

As a criminal-defense lawyer, Richard "Racehorse" Haynes always liked a challenge.

"My clients admit they pulled the trigger, plunged the knife, swung the club," The Wall Street Journal quoted the Texas lawyer as saying in 1978. "I have to show why, because sometimes the pulling, plunging or swinging was justified. When all else fails, I just ask the jury for mercy. They usually oblige me."

In the 1970s and 1980s, at his career's peak, Mr. Haynes was one of the most famous lawyers in the U.S., rivaling F. Lee Bailey. His courtroom exploits, which included poking himself with a cattle prod to prove it wasn't deadly, inspired books, movies and even a country song. His nickname of "Racehorse," bestowed by a junior high-school football coach after watching him gallop toward the sidelines, enhanced his notoriety.

The Journal described him during a 1978 trial "tearing at the testimony of a shaking witness like an errant hunt dog at a chicken." His questions came in fusillades: "What time was that? You don't rightly remember? Morning? Evening? What did you do next? You can't recall? Did you go home? Back to work? Go visit someone? Who? What time was that?"

The witness finally confessed that he was confused about the facts.

Even the most credible-looking witness might be mistaken, and Mr. Haynes made sure juries understood that.

"There's nobody I couldn't defend," he said. "If I'd been Mr. Nixon's lawyer, the man would still be in office today."

Mr. Haynes died April 28 in Trinity, Texas. He was 90.

Typically decked out in black ostrich-skin boots and a three-piece suit, Mr. Haynes wasn't all flash. He did his scientific analysis, expertly sized up prospective jurors and trained younger lawyers. But he was a master of drama.

"A lawyer should be willing to do anything to make his point," he said. "He should be on the floor and have the witness come and place the baseball bat near the body where he says he saw it on the night of the murder. He should slam the pipe wrench onto the rail in front of the jury to show how lethal it can be. Doesn't matter if people think he's crazy as a road lizard, he owes it to his client."

Among the clients he successfully defended were motorcycle gang members accused of nailing a woman to a tree and a plastic surgeon charged with letting his wife die after serving her poisoned French pastries.

He sometimes defended poor clients free but didn't apologize for the high fees he charged others: "I'm worth every dollar," he said. "What's money when you're faced with spending 25 to life in the Crossbar Hotel?"

Richard Haynes was born April 3, 1927, in Houston. His father was a plasterer, and the family was poor. Young Richard spent some of his early years with a grandmother in San Antonio. "She was a little old lady from England," he recalled in a video interview. Her talents included reciting Shakespeare and rolling cigarettes with one hand.

After high school, Mr. Haynes served in the Navy during World War II and was decorated for valor in Iwo Jima. He then studied accounting at the University of Houston before serving as an officer in the Army during the Korean War. After that second round of military service, Mr. Haynes earned a law degree at the University of Houston in 1956.

As young lawyer, he developed a reputation for getting clients cleared of driving-while-intoxicated charges. Later in his career, one of his specialties was defending abused women on the basis that they had killed their husbands in self-defense. He once said he had represented three dozen such women. "I won all but two of those cases," he said in a 2009 interview. "And I would have won them if my clients hadn't kept reloading their gun and firing."

Mr. Haynes is survived by three children, eight grandchildren and six great-grandchildren. His wife, the former Naomi Younger, died in 2013.

Over the years, his cars included a canary-yellow Rolls-Royce and a silver Porsche Carrera. He seemed happiest, though, when sailing in the Gulf of Mexico. He called his boat Integrity—a sly way of disarming critics who accused him of lacking that. Mr. Haynes also had a dinghy. He called it Humility.

◆ Read a collection of in-depth profiles at **WSJ.com/Obituaries**

FROM PAGE ONE

PROFIT

Continued from Page One

having to invest immediately.

Improvements in the quarter were led by financial, technology and basic-materials companies. The best sector was energy, where profits were up 647% from the year-ago period, while revenue leapt 31%.

Profit gains were more muted for industrials, utilities and consumer staples. Many food and household-products makers, including Colgate-Palmolive Co. and PepsiCo Inc., reported weak starts to the year.

Excluding the energy sector, which surged after more than a year of punishment from low crude-oil prices, S&P 500 quarterly earnings rose 10% in the first quarter from a year ago, when earnings were up 0.4% on the same basis, according to Thomson Reuters. Revenue climbed 5.3% from a year earlier.

The calculation excludes write-downs, restructurings and other items considered unusual. It is based on actual results from two-thirds of the S&P 500 and analyst expectations for the rest.

Data on capital expenditures suggest companies remain cautious. An analysis of results from 215 companies in the S&P 500 shows that spending on things such as equipment and buildings rose roughly 1.5% in the first three months of the year, according to S&P Global Market Intelligence. Half of the sectors measured showed a decrease in capital spending in the quarter from a year earlier.

Exxon Mobil Corp.'s first-quarter profit doubled but the company said its capital expenditures dropped 19% to $4.2 billion as it "remained disciplined in its investment." At Union Pacific Corp., finance chief Robert Knight highlighted that the railroad has cut annualized capital spending by $1.2 billion to $3.1 billion in the past couple of years.

There was one notable exception to the profit and sales gains: the U.S. telecom industry. Thomson Reuters estimates the group's revenue dropped 4.7%, while earnings fell 4.5%.

The biggest telecom providers, Verizon Communications Inc. and AT&T Inc., cut prices and rolled out unlimited data plans in the quarter to combat customer defections to smaller rivals. With few new customers left to capture, the companies are struggling to grow when prices decline.

Some companies see more value in returning cash to shareholders than reinvesting it in their business. Semiconductor company Skyworks Solutions Inc. spent $55 million on capital expenditures in the quarter, while paying dividends of $52 million and repurchasing $95 million in shares. FlowServe Corp., a maker of pumps and valves, is planning to pay out $100 million in dividends in 2017 in addition to capital expenditures of $90 million.

Last week, U.S. Secretary of Commerce Wilbur Ross said the initial reading of first-quarter gross domestic product—growth of just 0.7%—included increased business investment mostly from mining exploration shafts and oil wells. He made the case for the Trump administration's business policies to help boost growth.

"Business and consumer sentiment is strong, but both must be released from the regulatory and tax shackles constraining economic growth," Mr. Ross said.

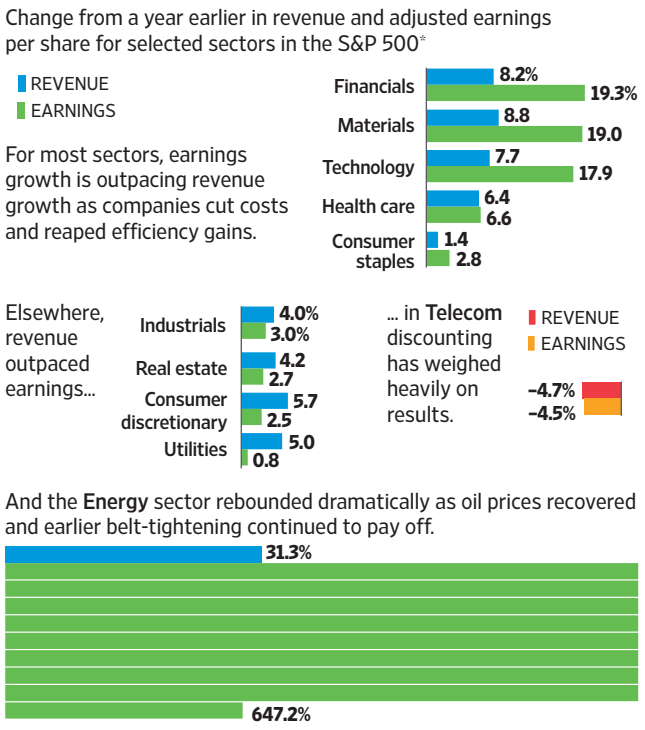
United Rentals Inc. CEO Michael Kneeland said the renter of construction equipment plans $1.5 billion in 2017 capital spending, up from $1.3 billion in 2016, citing positive market trends. "We feel comfortable with that number, and it should match up well against the demand," he said on a conference call with investors.

"There really was nothing but tailwinds behind big companies in the first quarter," said Mark Zandi, chief economist of Moody's Analytics, noting that business conditions should remain good but profit margins may weaken as spending rises. The biggest hurdle facing companies is going to be the increasingly tight labor market.

"This is probably as good as it gets," he said. "I think businesses will have no choice but to invest aggressively in capex to improve productivity in the face of rising wages and compensation."

Earnings Scorecard by Sector

Change from a year earlier in revenue and adjusted earnings per share for selected sectors in the S&P 500*



*Figures reflect actual results for 327 companies reporting as of May 2 and analyst estimates for others.
Source: Thomson Reuters

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STARVE

Continued from Page One

bage, an uncommon sight a year ago. People in the countryside pick farms clean at night, stealing everything from fruits hanging on trees to pumpkins on the ground, adding to the misery of farmers hurt by shortages of seed and fertilizer. Looters target food stores. Families padlock their refrigerators.

Three in four Venezuelans said they had lost weight last year, an average of 19 pounds, according to the National Poll of Living Conditions, an annual study by social scientists. People here, in a mix of rage and humor, call it the Maduro diet after President Nicolás Maduro.

'This is an epidemic'

For more than a month, Venezuelans have protested against the increasingly authoritarian government of Mr. Maduro; by Friday, more than 35 people had been reported killed in the unrest. The country's Food Ministry, the president's office, the Communications Ministry and the Foreign Ministry didn't return calls or emails requesting comment for this article.

"Here, for the government, there are no malnourished children," said Livia Machado, a physician and child malnutrition expert. "The reality is this is an epidemic, and everyone should be paying attention to this."

Dr. Machado and her team of doctors are seeing a dramatic increase in emaciated infants brought to the Domingo Luciani Hospital in Caracas, where they work.

The problem is no better in towns like Yare, south of Caracas, where the government's leftist movement was long popular. "To eat," said Sergio Jesus Sorjas, 11 years old, "I sometimes go to the butcher and I say, 'Sir, do you have any bones you can give me?' "

The boy receives nutritional formula or a traditional Venezuelan corncake from the parish priest. Sergio said he hasn't tasted meat in months: "Sometimes, I don't eat at all."

The Catholic charity Caritas and a team led by Susana Raffalli—a specialist in food emergencies who has worked in Guatemala, Africa and other regions tormented by hunger—are monitoring conditions here.

The most recent Caritas study of 800 children under the age of 5 in Yare and three other communities showed that in February nearly 11% suffered from severe acute malnutrition, which is potentially fatal, compared with 8.7% in October. Caritas said nearly a fifth of children under age 5 in those four communities suffered from chronic malnutrition, which stunts growth and could mark a generation.

"What's serious is not that we're at the crisis threshold, but rather the velocity at how we got there," Ms. Raffalli said.

By World Health Organization standards, Caritas's findings constitute a crisis that calls for the government to marshal extraordinary aid. But authorities have resisted offers of food and aid from abroad.

The country's growing malnutrition is made worse by a breakdown in health care, the spread of mosquito-borne illness and what the Pharmaceutical Federation of Venezuela has called a severe shortage of medicines.

Belkis Diaz watched her newborn, Dany Nava, wither away last summer from lack of food. There was no baby formula, and Ms. Diaz couldn't nurse, said Albertina Hernandez, the baby's grandmother.

"We couldn't find food, we couldn't find the milk, and he began to get thinner and thinner," Ms. Hernandez said.

By the time Dany arrived at the hospital, he had a serious cough and soon died. "He was so, so tiny," his grandmother said.

In past years, the farms south of here produced at capacity, everything from chickens to soybeans.

Alberto Troiani, 48 years old, still works the hog farm that his father, an Italian immigrant, founded in the 1970s. His business has now been battered by price controls, a shortage of supplies and criminal gangs.

The farm has gone from 200 female pigs, each producing a dozen piglets, to 50. Mr. Troiani can't afford the high-protein feed and medicines he once used. Full-grown pigs now weigh 175 pounds instead of 240 pounds. What is worse, he said, walking past half-empty pens, is seeing his pigs sometimes bite off the tails and ears of others.

"We used to send 120 to 150 pigs a month to slaughter," Mr. Troiani said. "Now it's 50, 60 animals, a joke." He makes 93 cents per kilogram, or 2.2 pounds, of meat, he said, but needs $1.17 to make a profit. Since 2012, 82% of Venezuela's pig producers have closed, and production has fallen 71%, according to industry representatives.

Mr. Troiani talked about leaving Venezuela with his mother, Yolanda Facciolini, 69 years old, who arrived from Italy in the 1960s. He said he would have no buyers: All around him, people are abandoning their farms. Thieves take what is left behind, he said—copper wire, tractors, weed killer.

The agricultural companies the government has taken over, including milk factories and distributors of fertilizer and feed, are closed or barely operating, according to economists and farm groups.

"The system is created so you can't win," said Alberto Cudemus, who heads the national association of pig farmers. "The government thinks its survival is in communism, not in us, not with production. And that's where they're wrong."

MIGUEL GUTIERREZ FOR THE WALL STREET JOURNAL

Keithy Olivo's infant daughter, Thaikelys, above, suffers from severe malnutrition; below, the Palma family outside their home in Yare.

Survival skills

Diogenes Alzolay, 65 years old, once had two small construction companies and later drove a cab. He is now trying to sell the freezers of the small store he once ran along with his books, lamps, photocopier and taxi.

He and his wife, Nidea Cadiz, need money to feed their children, who include a 2-year-old boy and a 7-year-old girl. He also has three teenagers, ages 13, 16 and 19.

On a recent day, Mr. Alzolay was frying sardines. To stretch the food they have, a couple of family members skip eating one day to leave enough for the others. Meals are sometimes the local corncakes known as arepas, vegetables, mangoes and the occasional canned fish.

"I've thought about running away, but I can't do it because of our very little kids," Mr. Alzolay said. "Getting to this extreme makes me want to cry."

Nine in 10 homes said they don't make enough money to buy all their food, according to the poll of living conditions. Nearly a third of Venezuelans, 9.6 million people, eat two or fewer meals a day, up from 12.1% in 2015, the poll found; four of out five in the nation are now poor.

Cesar Augusto Palma, 75 years old, lays out the grim arithmetic of high inflation on a fixed income. His pension is now worth about $10 a month, he said, enough to buy four boxes of milk.

His grown daughter and three grandchildren are financial dependents. Mr. Palma and his grandson Germain, 11 years old, eat less food to leave more for the two younger children. Germain's once-thick hair is turning yellow.

"They need it more than me," said Germain, who weighs 50 pounds instead of 70 pounds, about the average for a boy his age. Nearby, his brothers, Cesar Augusto, 10 years old, and Angel Jose, age 4, try to fly a handmade kite.

"I am hungry," Germain said. "I feel like a pain in my belly." Asked his favorite meal, he said, "Arroz con pollo," rice and chicken, which he last ate in 2015.

Bits of corn or bread

At the Domingo Luciani Hospital in Caracas, Ms. Planchart cried when she recalled the ways she tried to feed baby Jean Pierre and her four other children. She went through trash bags, searching for bits of corn or bread free of maggots. "I'd stand there and say, 'I can't do it,' " she said, worried of being seen by neighbors. "I said to myself, 'If I don't do it, this, what will I take to my children?' "

Ms. Planchart had a string of jobs: cashier, hair salon worker, cook. Then the work disappeared; inflation and food shortages made everything worse. At one point, she said, a neighbor cooked a dog.

As she watched Jean Pierre grow thinner and then stop moving, she decided to seek help from Dr. Machado and other malnutrition experts at the hospital. The doctors don't have vitamins, antibiotics or serum for sick babies.

"We're not feeding him well in this hospital," Dr. Machado said. "No boy like this is going to get better with bananas and cheese."

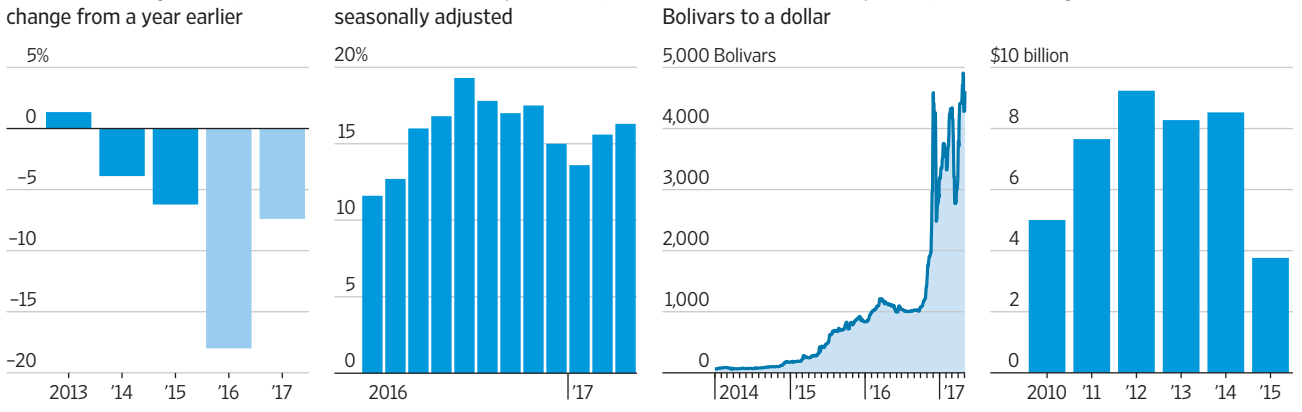
Ms. Planchart, meantime, rocked Jean Pierre in her arms, a balm for both.

"He hasn't fully recovered," she said of her baby, who now has chickenpox. "The idea is for him to get his weight up and that we get his metabolism to where it should be. But he's delicate."

—Maolis Castro in Caracas contributed to this article

Venezeula's High-Speed Crash

Once Latin America's richest country, Venezuela now has the world's highest inflation rate, making it nearly impossible for families to make ends meet. The economy has contracted by more than a quarter since 2013.



*estimates start in 2016
Sources: IMF (GDP); Torino Capital (inflation); DolarToday (currency); World Trade Organization (food imports)

THE WALL STREET JOURNAL.

SPIES

Continued from Page One

camouflage tricks on vehicles such as fake grilles, sheets of black plastic cladding and full-body wraps in dizzying geometric patterns to trick the eye.

They also do their endurance testing in such places as Spain's undulating mountains and Death Valley's scorching dunes, away from all but the most dogged prying eyes.

"When they do use public roads, they do so in remote locations," says Colum Wood, vice president at VerticalScope Inc., a Toronto company that owns auto-news sites AutoGuide.com and The Truth About Cars.

Nevertheless, trying to hide a 14-foot long, 4,000-pound piece of machinery from someone with a telephoto lens and time to spare is often a losing battle.

"They are everywhere," says Tobias Moers, chairman of Daimler's Mercedes-AMG high-performance division. "I met the same people in Death Valley that I met in Spain and in Sweden," he says. "There was always a lady from the U.S."

In Arjeplog, roughly 500 miles northwest of Stockholm, "There are more snowmobiles than women," according to an official town "Fun Facts" sheet. The town, which also claims it posted the lowest temperature on record in any of the Nordic countries (minus 62 degrees Fahrenheit), has developed a specialty preparing tracks on iced-over lakes for car tests.

Many auto makers have secured long-term leases and made investments in nearby garages and workshop facilities. Lakeside residents rent out their homes to auto engineers during the three-month winter testing season.

Arjeplog doesn't have an official stance on car spies, says town spokesman Fredrik Westerlund. "We realize that they sometimes are a nuisance or worse, and that they sometimes are part of the business."

Those mixed feelings are shared by Johan Fjellström, an Arjeplog resident and founder of a local print newsletter that until several years ago featured a regular column with mug shots of car spies to warn test drivers.

"The spies are back!" Mr. Fjellström wrote in a Facebook post in December.

Local businesses in the past sometimes circulated lists of photographers and their vehicle license-plate numbers, townspeople say, to hotels and auto makers. "We thought of spy photographers as the most wanted, heinous criminals," says Mr. Fjellström.

Car spy photographers have a difficult job, even without vigilantes pursuing them. They lug telephoto lenses while trekking among sand dunes or plowing through snowy woods in white snowsuits. "We try to blend in as much as we can," says Brenda Priddy, a semiretired U.S.-based car spy photographer. Scoping out Death Valley, she says, requires several gallons of water, a wide-brimmed hat and thick-soled shoes that don't melt on the hot sand.

Getting to winter sites, she says, can require a snowmobile or cross-country skis.

During test season, Mr. Mau drives about 80 miles from his home to Arjeplog, sometimes parking near a key intersection and waiting for a lucky break. Other times, he hikes through knee-deep snow in white camouflage into the woods to a test track's edge.

Photographers say they learned to keep a low profile by using fake names to book hotel rooms and avoiding sit-down restaurants. Townspeople sometimes threatened to report them to local police or car companies, say Mr. Mau and some locals.

'We thought of spy photographers as the most wanted, heinous criminals.'

Lore among auto-industry officials in the area has it that someone found a motion-sensing camera installed on a gas pump by an unknown car spy to catch prototype vehicles as they stopped to refuel.

Mr. Fjellström kept a close watch for interlopers. "There is a car spy on the prowl in Arjeplog right now!" he wrote in a 2013 post after being tipped off by a car tester. "He has been seen near Porsche in Kuorrokveik and also by the kindergarten."

A Swedish author, Jakob Mjöbring, was so fascinated by photographers' clashes with residents and car testers that he wrote a 2016 novel, "Köld" (translation: "cold"), in which police investigate the murder in Arjeplog of a car spy tied up naked in a vehicle and left to freeze with eyelids propped open.

"I was fascinated by these cars," he says, "and the idea of paparazzi sneaking around, risking getting beat up."

The cold war in Arjeplog appears to have thawed somewhat in recent years. Some residents say they feel more secure that the auto makers aren't going to leave even if there are car spy photographers lurking.

Mr. Mau says he no longer gets dirty looks from townspeople. Stefano Vigolo, recently appointed manager of the company that runs the local Hotell Silverhatten, says there is no ban on car spies at the hotel today, "but there might have been at one time."

Even Mr. Fjellström in an introspective moment in February posted a semi-confessional saying he "did something unusual" by helping a car spy transfer images of a prototype car.

"This made me think of the moral dilemma of such action," he wrote. "If I help a spy photographer I might irritate someone in some car company, but on the other hand pictures of new models serves the interests of people looking to buy a new ride."

Meanwhile, some auto makers have figured out how to turn the tables, some car spies say, using snooping photographers to drum up a bit of free publicity.

"Sometimes I know they've spotted my hiding place, but then a few minutes later a really hot prototype comes rolling out," Mr. Mau says. "That's when you know they want the images out there."

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OPINION

THE WEEKEND INTERVIEW with Gregory Hayes | By Joseph Rago

When the CEO Met the CEO President

New York

"It's an uncomfortable thing when the president-elect calls," says Greg Hayes. "That's a powerful, persuasive perch." The CEO of United Technologies is recounting the finale of his company's 2016 cameo as the Jeb Bush of corporate America.

Perhaps it was inevitable that Donald J. Trump would conscript a blue-chip firm as his political foil. United Technologies Corp. is a multinational manufacturing conglomerate, with subsidiaries like Pratt & Whitney and Otis Elevator that were founded 90 and even 160 years ago, that makes everything from escalators to jet engines. Last November UTC's Carrier unit, which makes heating, ventilation and air conditioning equipment, became a symbol of how Mr. Trump claimed trade and globalization had undermined American workers.

United Technologies' head on how Trump kept the Carrier plant open—and the high-paid factory jobs he's having trouble filling.

"My wife calls me 'patient zero,' " Mr. Hayes says with a good-natured laugh, "because I was kind of the first one in the hopper and I survived, and so really a measure of success is the fact that we were able to deal with this." He visited the Journal this week to discuss what it's like to be a chief executive riding a political whirlwind—and the obligations of business leaders in an age of economic populism.

* * *

Mr. Hayes played football at Cornell, transferred to Purdue, and then joined Sundstrand, which was acquired by United Technologies in 1999. He rose through management and took over in late 2014. He had a rough first year, with shares slipping 18%. In 2015 UTC rolled out a restructuring plan to shed $1.5 billion in costs over three years.

The plan included closing two high-cost campuses in Indiana. One, outside Indianapolis, made gas furnaces. The other, in small-town Huntington, made electronic circuit boards. About 2,100 jobs would be lost in total, while furnace production would shift to Monterrey, Mexico.

Most of the furnace industry—both UTC's competition and suppliers—has already moved to low-cost Mexico. The Indianapolis plant is an old-fashioned production line, where a component moves every couple of seconds and an operator performs a rote task, like installing fasteners in a handle. The jobs are relatively low wage and low skilled.

Mr. Hayes and his board concluded that closing the plants "was the right thing to do for the business long-term" to remain competitive in the market. If the larger business wasn't profitable, then nobody would have job security. He thought UTC "could tell a story" about the higher-wage, higher-skilled domestic jobs it was creating in aerospace.

United Technologies also offered workers a yearslong lead time to plan their next steps, generous severance, and its 20-year-old Employee Scholar program, which pays full freight for two or four years of college education or vocational technical training for all employees, even after a plant shuts down.

"Look, we know there's a dislocation associated with trade," Mr. Hayes says. "There will be people left behind, and it's the measure of how we treat those people and how we deal with those people that'll determine whether or not we are ultimately successful." Combined with globalization's benefits—such as reducing the share of the world's population that lives in poverty to 10% from 42% in 1981—he thought all this would be enough to gut out the politics.

KEN FALLIN

"My political prognostication skills are about zip," Mr. Hayes concedes. A familiar business terror struck in February 2016: a cellphone video that outraged the internet and then hit cable news. The 3½-minute recording, now viewed 3.9 million times on YouTube, showed a Carrier executive informing workers on the shop floor that their jobs would be moving to Mexico. "I want to be clear, this is strictly a business decision," the executive said, amid jeers.

History records hardly a campaign stop where Mr. Trump failed to assail Carrier. The candidate provided a flavor as early as Feb. 27, 2016, at a rally in Bentonville, Ark. "Let me tell you about Carrier," Mr. Trump said. "So I watched Carrier, because it just happened a week ago, and I watched these people, they were devastated. They were there for a long time. Good people, good air conditioners. I buy a lot of Carrier air conditioners. I'm not buying them anymore."

The candidate promised to call the CEO: "They're going to say it's terribly unpresidential, but I don't care, all right? . . . I'd say to the head of Carrier, congratulations on your new plant. But here's the story, folks. Every single air conditioner that you make as it passes the border, and we will have a real border, OK? We will have a real border, the illegals will not be able to carry those air conditioners in." Goods that crossed the border, "every single one, you're going to pay a 35% tax on, OK?"

Nine months later, when Mr. Hayes received Mr. Trump's post-election call, he notes that "there was no threats, there was no quid pro quo, you do this or else." As he recounts the conservation:

"He said, 'Greg, you've got to help me.' I'm like, 'Sir, you know, we have looked at this, this is a cost—there is just no way. We got the plant already built down in Mexico.' He goes, 'No, Greg, you don't understand. You got to help me. You got me elected. . . . I didn't have a great campaign, a great focus on the campaign early on, but once I got this Carrier thing I used it everywhere.' I said, 'Yeah, I noticed.' "

Mr. Hayes agreed to "take a hard look." His "biggest fear," he says, wasn't tariffs but reputational damage. Carrier air conditioners are among UTC's few consumer-facing products, and "having Mr. Trump tarnish the brand—there was a huge cost to that." Then again, the president also didn't have to make the same 35% threat personally that he'd made in public hundreds of times.

UTC stayed, and also left. Indiana gave the company $7 million in tax incentives over a decade, and Carrier will invest $16 million to modernize the gas-furnace factory. The decision saved about 800 factory jobs in Indianapolis, as well as 300 HQ and engineering jobs, but the Huntington facility closed.

Mr. Trump dropped by Carrier in December as a conquering hero. The president-elect mused about his new friendship with "a great executive": "I think if I lost, he wouldn't have returned my call. I don't know if—where is Greg? If I lost and called you, I don't think you would have called. I would have tried for you, but I think it would have been tougher, right? What do you think, Greg? Yes, he's sort of nodding yes, you're right."

Mr. Hayes hasn't been invited to Mar-a-Lago, but he did join Dow Chemical CEO Andrew Liveris's White House advisory council on manufacturing. "The rhetoric on trade is not helpful," Mr. Hayes says, but he thinks Mr. Trump is "trying to move in the right direction" on deregulation and tax reform, plus he's a better listener than his predecessor.

The drawback of the tumultuous Trump presidency so far, Mr. Hayes says, is uncertainty: "It's bad for business, and there's certainly a lot of uncertainty being created on a daily basis that is not helpful for us. For my people, they're looking and say, 'What do we do?' I say, 'Well, just relax, they'll all be fine, right?' You need to take everything with a bit of a grain of salt that comes out of Washington these days, and understand that there is a process, things will work themselves out."

* * *

A populist might say that a company expecting sales of between $57.5 billion and $59 billion in 2017—more than Goldman Sachs or Coca-Cola—can afford to pay more for American labor. The Carrier deal cost UTC about $25 million a year over the original plan, or about two cents a share. "We're a big company," Mr. Hayes says. "We can certainly deal with that kind of financial headwind."

Still, there's a cost. "I truly believe that if you have open markets, and you have the ability to let capital flow to most efficient uses, you are going to get better results than if you try to direct capital," he says. But he admits: "I got it completely wrong, in terms of the political sentiment in the U.S., and I—you know, frankly I should've known better, because there is a large portion of the population that has been disenfranchised by globalization."

Mr. Hayes's solution is to improve education, specifically with a national apprenticeship program that would guide local public-private partnerships to train and prepare the workforce better. He knows the problem firsthand: "I've got thousands of job openings."

Do you really?

"Thousands," he replies. "A lot of this is because we've got growth in business on the aerospace side, but we'll be adding thousands of jobs in the next three years, and right now I cannot hire mechanics who know how to put together jet engines. But it's not just jet engines. We also make fan blades, other products, very sophisticated things. These are the high-value manufacturing jobs that America can actually support."

A Pratt machinist earns $34 to $38 an hour, which with overtime works out to more than $100,000 a year—"pretty good money," Mr. Hayes says. The positions can be filled by high-school graduates with "basic competencies in math and English" sufficient to, say, read a blueprint.

Mr. Hayes's apprenticeship idea is about teaching such candidates the technical skills they need for the manufacturing jobs of the future—the kind that aren't becoming obsolete due to automation and artificial intelligence. Labor arbitrage, like moving to Mexico, can only work so long, as rising wages in China show. But humans can't compete with robots, which, as he says one of his Chinese managers put it, "never get sick, never ask for a raise, and they work 24/7."

Labor mobility is another concern. People are less willing to move to where jobs are. UTC recently built a factory in Lansing, Mich., to make engine housings for a new type of titanium-aluminum fan blade and needs to bring on about 1,000 new people. The work pays $23 an hour on average, yet some workers in Huntington, who earned $15 on average, "won't move two hours north to Lansing."

Mortgages, kids in school and cultural attachments can lead to such mismatches, but Mr. Hayes worries because labor mobility used to be "just a given." His own career took him from Rockford, Ill., to San Diego to Valparaiso, Ind., to Hartford, Conn., over the years.

Whatever the obstacles, "we have to migrate from these very low-skill manufacturing jobs to the middle-skill and the higher-skill jobs," Mr. Hayes says. His model is the 19th-century transition to an industrial economy from a rural one, in which 97% of American workers were farmers.

The irony is that for someone cast in 2016 as a villain, and despite U.S. law instructing executives to maximize shareholder value, Mr. Hayes believes companies are also accountable to other parties, including employees, consumers and the communities where they're based—an obligation that extends to financial support for academic research and the arts. "You try and balance these things without saying, 'Hey look, it's just business, we are just going to do what's right for us,' " he says. "You have to at least understand and have some empathy for the other stakeholders in this."

Over the long run, the danger is that the Carrier ruction won't be an isolated incident but part of a populist trend. "I think that we have to as a society face the reality that the jobs that we have today aren't going to be here 20 years from now," Mr. Hayes says, "and if we don't do something fundamentally different soon, we are going to have class warfare, and that's a scary thing."

For business leaders, Mr. Hayes has a suggestion: "We have to defend what we think is right, what we think is the better course for the country, and I think it's OK to speak up—you know, you're going to get smacked down—and will the president and I be friends?" He lets the thought trail off.

Mr. Rago is a member of The Wall Street Journal's editorial board.

Big Labor Looks at California's Marijuana Market and Sees Green

CROSS COUNTRY
By Allysia Finley

When California voted 57% to 43% last November to legalize recreational marijuana—the eighth state to do so—it fertilized a national market whose value by some estimates could top $20 billion by 2020. The ballot initiative was backed by a phalanx of progressives—Napster founder Sean Parker provided the seed funding—and liberal interest groups such as the American Civil Liberties Union. But now as state lawmakers debate how to regulate the industry, one worry is that the Teamsters will hijack the process and corner the pot market.

California was the first state to legalize medical marijuana, in 1996. For two decades, local governments took the helm on regulation, which worked fine so long as most growers and dispensaries were mom-and-pop operations. But large businesses with sprawling operations necessitated a uniform statewide system. In 2015 the Legislature issued guidelines regulating the cultivation, manufacturing, delivery, testing, taxation and sale of pot for medicinal use.

The regulations, modeled on those enacted to control alcohol after Prohibition, established 17 different licenses. Manufacturers and cultivators can hold dispensary licenses, and dispensaries can be licensed to grow weed. But third-party distributors are required to negotiate the exchange between growers and retailers.

These middlemen are responsible for collecting taxes and transporting pot to laboratories for testing. They are forbidden from cultivating or selling cannabis. This framework of three tiers—cultivation, distribution and retail—is supposedly intended to ensure that every ounce of pot can be accounted for and that growers don't illegally divert their product to the black market.

Law-enforcement officials are urging lawmakers to adopt the same model for recreational marijuana, since they believe a small number of wholesalers would be easier to audit than thousands of growers and retailers. They're joined by the Teamsters, who hope to cash in on the pot market. "I'm not hiding our self-interest," Teamsters lobbyist Barry Broad told Politico. "This is a growing industry and we'd like it to grow unionized."

Yet progressives who championed the ballot initiative worry that mandating a three-tiered system would upend the free market and create the same kind of distortions that have beset the alcohol industry. Craft distillers and wineries have long complained that a few large alcohol distributors exercise oligopoly power. Spirits producers that refuse to pay distributors a sizable cut can get shut out of stores. Big businesses have an advantage because they can pay distributors more to negotiate primo shelf space. Retailers protest that their selection is limited because they cannot purchase directly from producers. As a result, consumers pay more and have fewer options.

'This is a growing industry,' says a Teamsters lobbyist, 'and we'd like it to grow unionized.'

The California Cannabis Industry Association—joined by business groups such as the California Retailers Association and the National Federation of Independent Business—is warning lawmakers that mandating third-party marijuana distribution would increase prices and introduce organized crime, a dig at the Teamsters' history of racketeering.

Last month, cannabis groups sent a letter urging Gov. Jerry Brown to reject the idea: "We believe that allowing cultivators and manufacturers to hold distribution licenses is in the spirit of developing policies that will undo the illicit market rather than reinforce it, and provide opportunities for small producers to compete with larger players."

For their part, the Teamsters argue that a three-tiered system is necessary to prevent vertical integration that could lead to higher prices. "It raises really significant antitrust issues that we don't think are accounted for," Mr. Broad, the union lobbyist, told the Sacramento Bee. "It's quite conceivable that the entire market can be owned by someone who also controls distribution and access to the market."

But vertical integration can produce efficiencies, and it's doubtful that one large business could corner the market unless granted a monopoly by the government. The state doesn't mandate a three-tiered system for fresh produce, but farmers and grocers go through wholesalers anyway because it's economical. A tomato grower may not want to negotiate individually with hundreds of restaurants or store managers. Nonetheless, a farmer may want the ability to sell his produce directly to customers at a farmers market.

The bigger risk is that a few distributors could control access to the market, and that the Teamsters could disrupt the free flow of marijuana by going on strike. Yet Mr. Broad seems confident the legislature will see things his way. "To have local government, organized labor and law enforcement all together is a pretty potent alliance," he told Politico. "What's on the other side? A couple marijuana people with illusions of grandeur?"

Never underestimate the clout of labor unions in Sacramento. Still, the Teamsters may find themselves outgunned by pot businesses and investors that have billions at stake in ensuring the industry's growth isn't inhibited.

Ms. Finley is an editorial writer for the Journal.

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OPINION

REVIEW & OUTLOOK

Houses of Lobbyists

Why should the tax code subsidize home buyers over renters?

President Trump wants American families to pay lower taxes without having to take the time and trouble to itemize. One way he hopes to do this is by doubling the standard deduction, which would make the first $24,000 of income for a married couple tax-free. What's not to like?

Plenty, says the housing lobby. The National Association of Homebuilders (NAHB) and the National Association of Realtors each bashed the larger standard deduction on grounds that it would make the tax subsidy to their industries less appealing.

At the NAHB, Chairman Granger MacDonald put it this way: Doubling the standard deduction "could severely marginalize the mortgage interest deduction, which would reduce housing demand and lead to lower home values."

On their blog the Realtors chimed in with this: "The new standard deduction won't be high enough to offset what they would lose on the itemization side. Yes, they would retain the option of taking the deductions for mortgage interest and charitable contributions, but unless these amounts totaled more than the standard deduction, it would not make sense to claim them." It goes on to argue that some of the deductions eliminated as part of the Trump tax simplification—e.g., local property taxes—mean home ownership might not pay off as well as they say it does now.

Translation: Without a federal tax subsidy to encourage people to take out mortgages, folks might not buy what we're selling.

This is less an indictment of the proposed Trump reform than a reminder of how misguided the mortgage-interest deduction is. For starters, it distorts the allocation of capital by favoring housing, a form of consumption, over investments that might be more productive and raise everyone's living standards.

The deduction also disproportionately benefits the affluent, who buy more expensive homes with bigger mortgages. A 2013 Congressional Budget Office study found that 75% of the benefits of the mortgage-interest deduction goes to the top 20% of income earners. Two of three American tax filers don't even itemize, which means they can't deduct mortgage interest even if they have it.

It's also not clear the mortgage deduction is as critical to home ownership as advocates contend. Canada and Britain have similar rates of home ownership as the U.S. (nearly two thirds of their citizens) without a mortgage-interest deduction. If the housing industry really depends on a tax subsidy, maybe it's time we ask why the U.S. tax code should favor buyers over renters.

The shame is that neither Mr. Trump nor House Republicans are proposing to eliminate the deduction for mortgage interest. They know it would be good tax policy but they figure it's too politically difficult. Yet the housing lobby gives them no credit and still yelps about the standard deduction.

The tax debate is still in its early stages, and Republicans should reconsider giving housing a pass. For example, the GOP could limit the amount of mortgage-interest that could be deducted, or limit the deduction to borrowing below, say, $250,000. This would make the tax benefit less tilted to the affluent, and it would also provide more revenue for lower tax rates.

Even after its role in promoting the housing mania and panic a decade ago, the housing lobby wants more subsidies and more political favoritism. If tax reform were really about fairness, housing would be treated no differently than any other industry.

The Labor Market Tightens

Wages are rising but there's still a growing worker shortage.

The April jobs report showed a healthy rebound from the March dip, and more important a tightening labor market that has some messages for policy makers. A shortage of workers in much of the country could soon put a restraint on economic growth.

The Labor Department said the economy added 211,000 jobs in the month, a reassuring jump after a meager 79,000 new jobs in March. The last month of winter now looks like an exception and not a trend, which is a good sign that the slow first quarter GDP growth of 0.7% was also temporary.

The national unemployment rate fell to 4.4%, which is the lowest since before the recession began in 2007. A year ago in April the jobless rate was still 5%, and the progress downward suggests a tightening labor force that is approaching full employment—at least for Americans who are still looking for work.

The number of Americans working part-time for economic reasons also fell by an enormous 281,000 in April to 5.3 million. These are people who would have preferred to work full-time if they could, and they are best understood as the economy's readiest available labor supply. Over the past year this number has fallen by 698,000, which means there are fewer workers for business to call on.

These macro-numbers are consistent with what we keep hearing from CEOs of large and small businesses around the country. They have openings but finding workers with the right skills who can pass a drug test isn't easy.

This week Gregory Hayes of United Technologies and Andrew Liveris of Dow Chemical stopped by the Journal, and both said they have or will have thousands of job openings for skilled technicians that pay a healthy middle-class wage with benefits. Both companies already devote enormous resources to training and retraining their employees, but the U.S. education system isn't preparing young people to take many of these higher-skill positions.

All of this underscores the need for more state and local apprenticeship and skill certification programs that can help workers meet these opportunities. A national certification standard that can apply across state lines would also help worker mobility, which has been declining. President Trump and Attorney General Jeff Sessions may not want to hear this, but the labor shortage also underscores the need for more legal immigration for guest workers.

Sooner or later a tight labor market can become a restraint on how much the economy can expand. Employers can raise wages, and they are increasingly doing so, to attract workers still on the sidelines. But if workers aren't available at all, which is true in parts of the U.S. and in some industries, then the only way to grow the economy is with capital investment to make each worker more productive. If Republicans want to lift GDP growth to 3% from the Obama 2%, a tight labor market makes tax and health-care reform even more urgent.

A Korean Election Nail-Biter

A Trump blunder has helped the soft-on-North-Korea candidate.

President Trump correctly refuses to accept a nuclear North Korea as a fait accompli, and he is trying to enlist China to stop it. Unfortunately his off-hand remark in the thick of a South Korean election may help elect a left-wing president who would hamper U.S. efforts to increase pressure on the North to give up its nuclear program.

The candidate is Moon Jae-in, and he is favored to win South Korea's presidential election on Tuesday despite having a mere 40% plurality in the polls. He benefits from the fracture in conservative ranks since the impeachment of President Park Geun-hye in March, which led to multiple candidates dividing conservative and centrist support.

Mr. Trump gave Mr. Moon an undeserved boost with an off-the-cuff demand that South Korea pay for the Thaad missile-defense system that became operational Monday. The remark came out of the blue in an interview with Reuters, and National Security Adviser H.R. McMaster has since walked it back, confirming the U.S. will pay for the $1 billion system as originally agreed. But the incident reinforced South Korean fears that Mr. Trump is an unreliable ally who could mismanage the threat from the North.

This is no small irony because Mr. Moon is partly responsible for the North's success in developing nuclear weapons and the missiles to deliver them. He was chief of staff to the late President Roh Moo-hyun, who in the mid-2000s gave Pyongyang the opportunity to earn $100 million a year in hard currency through the Kaesong Industrial Zone. The zone closed in 2016, and Mr. Moon has pledged to reopen it.

During the campaign Mr. Moon has struck some tougher notes on the North and reaffirmed the importance of the U.S. alliance to the South's security. While he expressed anger that the caretaker government and the U.S. rushed the deployment of Thaad, he has moderated his opposition to it.

But as President Mr. Moon could hamper U.S. efforts to increase pressure on the North to give up its nuclear program. He agrees with Mr. Trump that the Obama Administration's policy of "strategic patience" was a failure—but only because he believes the U.S. should pursue talks with Kim Jong Un. That would allow the North to seek more bribes in return for promises to suspend its weapons programs—promises it has never kept.

The Thaad system is crucial to the effort to stop Pyongyang's nuclear ambitions and show Beijing that support for the North has strategic consequences. China is currently using diplomatic and economic pressure to punish Seoul for the Thaad deployment. If Mr. Moon wins, China will try again to drive a wedge between the U.S. and South Korea.

The latest polls show conservative candidate Hong Joon-pyo, backed by the Liberty Korea Party, surging with about 17% support. Centrist Ahn Cheol-soo is polling around 21% but is fading after poor debate performances. About 20% of the electorate is still undecided, and an upset is possible if center-right voters rally around a single candidate. And if Mr. Trump keeps quiet.

LETTERS TO THE EDITOR

We Must Be Smarter in Buying Needed Arms

In his April 28 op-ed "The U.S. Navy Must Be Everywhere at Once," former Navy Secretary John Lehman proposes a two-pronged strategy to reduce defense procurement costs: fewer design changes and more fixed-price competition. Combined, and in the right situations, these are a powerful elixir to reduce costs. But there are two ways this often fails. First, fixed-price contracts without the control of design changes has proven to be even worse than the current system. Second, using fixed price for programs with unproven technologies doesn't work, as change is inevitable.

The 1980s and '90s saw many high-stakes contract disputes over fixed-price programs. Design changes after a contract award drove up costs, and contractors sued the government to recover damages. Cynics note that contractors used changes to recover profits after bidding low to win. The most notable dispute was the A-12 aircraft program, which led to 25 years of litigation. Total costs (including countless attorneys and forensic accountants involved in the dispute) was far higher than a fixed-price contract.

So yes, let's add fixed-price contracting to the mix, when appropriate. The Air Force is doing this well on the KC-46 tanker. Boeing won the program with a fixed-price bid to modify a proven commercial-aircraft platform. Since the award, the Air Force has largely avoided changes. Thus program overruns remain the contractor's responsibility and government costs are lower. As a bonus, fixed-price programs give industry strong incentives to invest and improve efficiency. Cost-plus contracting gives a perverse incentive to stay inefficient.

TAMARA KETT AND TOM MULLEN
PA Consulting
Boston

Saving vs. Spending: What Is Wealth For?

In my retirement, I am deriving pleasure from assuming the strategy "I am through saving, now I am spending," judiciously, to be sure, but nevertheless with a view to obtaining satisfaction ("When Good Money Habits Turn Against You," Journal Report, April 24). Thus, my wife and I have made some long-desired renovations to our home. We schedule at least two major overseas vacations a year and supplement our children's financial needs at times when they need it and when I can see the result.

I devote more time and financial support to charitable work. I continue to spend time exercising at a local athletic club, now free, thanks to SilverSneakers. I read more and indulge in my love of classical music. All of this gives me significant satisfaction. Of course, I wake up every morning thankful for this and that I have good health and enough strength to enjoy all these activities, something that I know will not continue indefinitely. I am gladly faced with the prospect that, at this rate, my assets will outlive me, and my wife and I will still have something to leave to my children, something my father was unable to do at the same level.

JEFF SCHOENWALD
Thousand Oaks, Calif.

Spending isn't the only way to enjoy money. A person can derive a great deal of satisfaction from one's savings just by having it. The feeling of security is great. Second, getting a bargain while shopping gives a rush of pleasure that can't be matched.

ELLIS BURRUSS
Brunswick, Md.

The Bad Side Effects of Personalized Medicine

Regarding Peter Huber and Paul Howard's "Personalized Medicine Is Here" (op-ed, May 1): In 2011 I was diagnosed with Ewing's sarcoma and was one of the lucky 1,000 sarcoma patients given a free 23andMe kit. After cheerfully determining that I was not going to succumb to Alzheimer's, Parkinson's or even breast cancer, I decided to search my results for sarcoma.

I apparently have three genes related to sarcoma—the first puts me at an elevated risk, the second at a neutral risk and of course, the third has me at a lower risk. Thank God this useless testing was free. In a world where we share 88% of our genetic material with mice and 24% with a wine grape, we really should think twice before we talk about "precision medicine." While genes play a role in life and disease, there are clearly, perhaps innumerable, epigenetic triggers that differentiate us from wine grapes and each other.

The most profound medical lesson I've learned was on my first day of medical school: "Half of what you will learn over the next four years and the rest of your lives will be wrong. We just don't know which half." Big data and genetic analysis present both opportunity and danger. When there is only Google for patients to look at, there is room to talk them down from self-diagnosis. When we are talking about a patient's actual genetic code, it will be difficult to convince them that "half is wrong."

JONATHAN S. LEIBOWITZ, M.D.
Brooklyn, N.Y.

My first thought on seeing the TV ads for 23andMe was who will have access to my DNA?

SHERRY WOESSNER
Centerville, Ohio

This may be a blessing and a curse. The information being collected by 23andMe and the wearable devices of millions of people may create the largest ever database of pre-existing conditions or probable existing conditions that we have ever seen. Coupled with the emerging Republican ideas for health care, it may spell financial ruin for millions of Americans.

CATHLYNN GROH
Santa Fe, N.M.

Messrs. Huber and Howard claim personalized medicine will usher in cures for such things as Parkinson's and Alzheimer's. Though the authors' optimistic view may be correct, I suspect there is just as good a chance that this style of personalized medicine will be used to: produce designer babies; abort anyone who may be likely to develop Parkinson's, Alzheimer's or a host of other diseases, and pressure the living to "die with dignity" before their diseases have a chance to "destroy who they really are."

I, for one, am not at all ready to "raise a glass to the future of precision medicine."

JIM KREMER
Stillwater, Minn.

Former Socialiste Macron Is Not a Politician of the Center

Joseph C. Sternberg reprises the press errors of the Clinton/Trump drama by positioning Emmanuel Macron as the "Hope of France" while relegating his opponent Marine Le Pen to the "far right" ("Macron Is Mightier Than Le Pen, but Will His Reforms Stick?," op-ed, April 28).

Though the latest polls show him well ahead, he only finished the primary a few points ahead of Ms. Le Pen. It is true he is indeed a "fresh-faced reformer," but as a longtime member of the French Parti Socialiste, he is just a less shaggy version of socialist Bernie Sanders, not a centrist like John Kennedy. The reason Mr. Macron has a "lack of a serious party apparatus" is that he, like Bernie Sanders, opportunistically changed party registration to try to fool everyone about his socialistic views that he knows would sink him *au bas mot*.

LARRY STIRLING
San Diego

We Need More Saving, Not Less: Hands Off the 401(k)s

Yes, Congress should keep the tax advantage of contributions to individual-retirement accounts, as detailed in Jason Zweig's "The Intelligent Investor: Grab the Pitchforks, Your 401(k) May Need to Ward Off Congress" (Business & Finance, April 22). In addition, a similar tax advantage should be extended to premiums for long-term-care insurance. Just add one more line to the list of credits used to adjust an individual's gross income. The rationale is the same: encourage individuals to plan for their retirement and for long-term care.

HANNA HILL
Minneapolis

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Pepper ... And Salt

THE WALL STREET JOURNAL

". . .and a final word of thanks to those hard-working scholars who never sleep — the term-paper ghostwriters."

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OPINION

Decades in an Asylum Wasn't the Worst Fate

By Howard Husock

To say I didn't know my great-uncle, Wolfe Levine, would understate things. Though my grandfather and I were close, for years I didn't know he had a brother. In retrospect, it's clear Wolfe was simply unmentionable. We'd write it off today as the stigma of mental illness.

Wolfe's story is tragic, dating from an era of large public asylums that America has sought to forget. His journey to the Lima State Hospital for the Criminally Insane in Lima, Ohio, began in 1910 with a criminal conviction: one to five years in a reformatory for pickpocketing.

My mentally ill great-uncle spent 72 years in custody. Today he'd be isolated in a prison cell—or maybe homeless and dangerous.

Six years before, Wolfe had immigrated to America at age 14. Theft was not a shocking charge for a young man in Cleveland, living on a block of ramshackle frame houses with his widowed mother and her three other children. Once convicted Wolfe would never again be a free man.

After less than two years in the reformatory—later made famous as the setting for "The Shawshank Redemption"—he exhibited "persecutory delusions" and "auditory hallucinations." That's how he wound up in Lima, where the conditions were so bad that by 1974 a federal judge chastised Ohio for failing to ensure "dignity, privacy and humane care."

My great-uncle was still there. He died in custody in 1982, at 92, and was buried near Toledo, the costs covered by a fund for indigents supported by a local Jewish federation. Wolfe had spent 72 years in institutions. In the language of reformers, he had been "warehoused" for his entire adult life. His aspiration to be a playwright, the occupation he listed when admitted to the reformatory, would prove a dark irony for someone formally diagnosed with dementia praecox—schizophrenia, as it later came to be called.

Yet the story is not so straightforwardly bleak as it seems, and it casts light on how far America has come—and not come. Are we treating the severely mentally ill better today than we did a century ago?

Wolfe did not do well at the reformatory. In a year's time, more than 300 days were added to his sentence for misbehavior. This almost certainly reflected an onset and worsening of his mental illness. The family may have been involved in the decision to transfer him to the hospital. My great-aunt, now nearly 100, recalls my grandparents discussing what to do with Wolfe. "Dave and Ethel were just starting their own family," she says. "They just couldn't take care of him." Nor was his extended family well-off. My grandmother's immigrant father was still making deliveries on Cleveland's East Side with a horse-drawn wagon well into the 1920s.

Thus did Wolfe arrive at Lima in 1915. Little information exists on daily life there, but census records portray an institutionalized American melting pot. My great-uncle was listed as a "Russian Jew"; his neighbors—all of whose occupations were listed as "patient"—included natives of Alabama, Indiana, Germany, Bohemia, Hungary, England and Italy. The hospital was enormous, with 17 wings for 1,400 patients. It was considered the largest poured-concrete structure in the world until the Pentagon.

The nationwide hospital system was the product of a 19th-century reform movement, led by Dorothea Dix and Horace Mann, outraged by the imprisonment of so many of the mentally ill. By 1940, America had institutionalized 450,000 patients. Though the care given was far from perfect, it aspired to be therapeutic.

OHIO HISTORY CONNECTION

Wolfe Levine in 1910.

A little-known book provides a remarkable window into the era. In 1931, a 52-year-old journalist named Marle Woodson checked himself into Eastern Oklahoma Hospital in an attempt to kick his alcohol problem. As he dried out, he wrote "Behind the Door of Delusion," which did not describe a quiet warehouse: "About me the daytime activities of the hospital hummed. All the work was done by the patients. There was little detailed supervision by the attendants, although they were here, there, and everywhere all the time." A "floor gang" polished and shined, and a crew for making up beds did its work "with a neatness which would shame many of the maids in good hotels." Patients worked in the "art department, bakery, the store, or other departments of the institution."

There was darkness, too. "I was to learn," Woodson wrote, "that a patient who apparently is in sound mind most of the time can suddenly suffer a paroxysm of wild hallucinations and become thoroughly and irresponsibly insane or even dangerously violent, then, after a period, return to an apparently normal state." Straitjackets were used, as were opiates or barbiturate sedatives.

My great-uncle may have been restrained or sedated. Such were the limited tools then available. They did not change Wolfe for the better. For decades he was seemingly a shell of a human. Yet he also may have found satisfaction in helping with the chores, perhaps while mentally composing plays that would never be produced. He may have been comforted by visits from a Toledo rabbi. He was, without doubt, kept safe and warm through the cold Ohio winters.

Instead of investing in such facilities when the level of care deteriorated, the movement toward "deinstitutionalization" shut them down. Today people like my great-uncle end up in prisons and jails. The Bureau of Justice Statistics once estimated that 365,000 adults with serious mental illnesses are behind bars. They are often kept isolated because of the risk of disruption or suicide.

Imagine a latter-day Wolfe. After his arrest he would be given medication for his delusions. If he didn't respond he might be isolated throughout his jail term. Then he would be released to his poor, immigrant neighborhood, either to await another arrest or to complicate life for his family. No one could force him to continue taking medication. If he threatened violence but committed no crime, he could not be involuntarily committed.

Yet he might present a danger. The psychiatrist E. Fuller Torrey estimated in 2013 that 1% of the 12.3 million Americans suffering from serious mental illness pose a threat to themselves or others. That's 123,000 people—including those who push subway riders onto the tracks or open fire at college campuses.

Providing for the severely mentally ill does not mean re-creating a sprawling hospital system. At their height, asylums housed many others—the senile elderly, those suffering what were incurable diseases, such as syphilis. The population that would have to be addressed today—those 123,000—is not unmanageable.

A doctor at the Kankakee State Hospital in Illinois wrote in 1893 that the public had an obligation to provide every mentally ill person with "the benefit of treatment and supervision by a competent physician." Leaving Wolfe Levine's successors on the street or in isolation behind bars suggests we have—in practice, at least—become not more but less compassionate.

Mr. Husock is a contributing editor of City Journal, from whose Spring issue this essay is adapted.

Peggy Noonan is away.

Let's Get Metaphysical About Trump and the 'Post-Truth Era'

By Crispin Sartwell

Occasionally metaphysics invades politics, to the surprise even of metaphysicians like me. In this "post-truth era"—according, for example, to many of those who participated in the recent March for Science—the very nature of truth itself is at stake because of the Trump administration's "alternative facts" and the growth of "fake news."

In the Trump era, says celebrity physicist Neil deGrasse Tyson—who adds that this the most important thing he's ever said—people "have lost the ability to judge what is true and what is not." The Washington Post quotes Cara Santa Maria, a "science communicator": "The very idea of evidence and logic and reason is being threatened by individuals and interests with the power to do real harm."

The New York Times's philosophy blog declares that "Trump stirs up confusion about the veracity of settled knowledge and, through sheer assertion, elevates belief to the status of truth." Meantime, "We're here to talk about the truth," comedian Hasan Minhaj recently told the White House Correspondents' Association dinner. "It is 2017 and we are living in the golden age of lying."

The nature of truth may be the hardest philosophical problem. It may even be strictly insoluble, because many theories of truth might be true according to themselves, which doesn't mean they're true. The answers philosophers have given through the millennia have been as various and as mutually incompatible as could readily be imagined.

Truth has been held, among other things, to be the correspondence of what we say to reality; to be a matter of the way a set of beliefs hang together; to be what we all agree about or would agree about in the long run; or to be, as William James said, "what works best in leading us" to solutions to our practical problems. Gigantic systems of metaphysics have been built on the foundation of truth—or on its dismissal as a delusory question, as trivial or redundant.

Whatever truth may be, politicians have often been dishonest in various respects, and many or even all regimes engage in propaganda and fabrication of various sorts. To people such as those quoted above, however, the current situation appears to be qualitatively new and different. The lies, it seems to them, are more thorough and destructive, coming from more authoritative sources, and the public is more gullible or vulnerable.

Philosophers may not know what truth is, but the sudden flourishing of alethiology in politics and media holds some lessons about what it is not. Let us take seriously for a moment the commonplace claim that left and right, or blue and red, live in "different realities"—each fed by different streams of information, each figuring out what to believe by feeling for the consensus of people they believe are like themselves.

Far from suggesting that the truth is a matter of coherence within a set of beliefs, or the way they hang together, this suggests that nobody on either side thinks that at all. Each side thinks the other side's version of reality is globally false, and that its own is globally true. That does not commit anyone to saying they are both right—though they may both be quite wrong—but it does commit each of them to saying that a belief system can hang together very well and not be true.

The nature of truth is a difficult philosophical problem, but the president hasn't made it any harder.

That is, if you're on the left, you probably think the right is getting its information from bad sources, believing whatever serves its agenda, producing a false worldview. If you're on the right, you likely believe that the mainstream media is feeding people slanted information, a false narrative. But both sides agree the coherence of their opponent's worldview is irrelevant to its truth. In some ways, the better it hangs together, the more dangerous and deluded it is.

Likewise, truth cannot be a matter of social consensus. That groups are in agreement has no tendency to show that what they believe is true, or else flat contradictions are true in a situation in which we are polarized into groups with contradictory beliefs. As consensus tightens, it degenerates into self-confirmation and collective delusion. Each side already believes this about the other, so each side is committed to the view that truth is something more than agreement. Nor can "truth" mean merely what works, if by "works" one means persuading people or guiding their behavior or opinions in some desirable direction.

That makes it very odd to formulate the thing in terms of alternative realities or the disintegration of truth itself. Both sides need the truth, and they need it not to be relative to any group's particular set of beliefs—or they need to stop attacking their opponents. There's nothing unusual about a situation in which people disagree about what the truth is, and the concept of truth itself is not particularly at stake right now.

It's a bizarre misapprehension, in short, that truth is disintegrating or in crisis. Fabrications do not undermine truth—they presuppose it. Lies can harm people, but they can't harm truth itself. They conceptually depend on it. The right conclusion from all this isn't that truth is disintegrating, but that truth is hard and intrusive, that it does not readily bend to human will or agreement or narrative. The power of the Russian intelligence services or a Sean Spicer press briefing is considerable, but it does not include the ability to bend the fabric of reality.

Mr. Sartwell, a professor of philosophy at Dickinson College, is author of "Entanglements: A System of Philosophy" (State University of New York, 2017).

GOP Health-Care Sausage Is Good for You

BUSINESS WORLD
By Holman W. Jenkins, Jr.

Hooray, Republicans have saved America's health-care system.

OK, we exaggerate, but there are inklings of a salvation. Let's start with pre-existing conditions. In principle, this should be a transitional problem in a world where everyone has access to attractive, fairly priced health insurance. By giving new options to the states, the House bill would make subsidizing pre-existing conditions a general obligation of the taxpayer, as it always should have been.

ObamaCare was unsustainable for many reasons, not least because it partly shifted to young customers the burden of subsidizing those who joined the pool already sick. ObamaCare went out of its way to be a bad deal for the young and healthy, who didn't sign up. The GOP fix, if adopted in the Senate, would go a long way toward letting individual premiums be fairly and attractively priced to these people.

As for those critics now pointing out that taxpayer-funded pools for the already-sick have an uneven history in some states, guess what? The problem was inadequate funding, exactly the problem already undermining the ObamaCare approach to pre-existing conditions in different form. The Republican approach at least is honest and transparent, and any failures will be easier to diagnose than when the identical failure (as it is now doing) causes ObamaCare to unravel.

Next up, the individual mandate. It remains philosophically repugnant to some GOPers, but notice something: In a world where individual insurance is fairly priced, a mandate would be less burdensome. As candidate Obama said in 2008, with a smidgen of hyperbole, if health insurance is a good deal, nobody would need to be forced to buy it.

If the Incredible Hulk were House speaker instead of Paul Ryan, Republicans might have been made to swallow their tongues and quietly let the individual mandate stand, mumbling something about the perfect being the enemy of the good. Instead, they wussed out with a semi-mandate, in which anybody who lets coverage lapse and then tries to re-enter the system will pay a penalty.

The Senate might rethink. The philosophical premises of the Republican and Democratic individual mandates could not be further apart. The original Republican mandate, hatched by the Heritage Foundation in 1989, was aimed at making sure would-be free riders paid their fair share, no longer transferring their financial risk to the taxpayer or other health-care consumers.

The House bill points toward a day when Americans won't overspend on medical care.

ObamaCare turned the mandate into a tax—a way to overcharge the young, healthy and (let's face it) male to generate funds to subsidize voter blocs Democrats wanted to subsidize.

How much more realistically the once-upon-a-time Heritage mandate corresponds with research and experience showing millions of Americans won't willingly spend their own money on health insurance no matter how favorable the pricing. It also accords with a new reality: To a lot of non-customers, ObamaCare became "free" insurance—in the sense that it was there if they needed it.

We'll say it again, now for the Senate's benefit: Apply a few GOP-style fixes and ObamaCare, or something like it, becomes a solution to America's health-care muddle. You could phase out every other federal program, including Medicare, Medicaid and the giant tax handout to employers, and roll their beneficiaries into ObamaCare.

Congress could start making rational judgments about whom to subsidize and whom not to subsidize. Do all seniors need a handout, or only the poor ones? And surely no Congress would re-up to the current employer tax benefit, which gives its biggest handout to the highest earners while producing all the pathologies the employer-centric payment system is heir to.

All this lies in the realm of potential, we hasten to add. But it pays to take a long view. Down this road lies hope that Americans will stop channeling extravagant gobs of their income to the medical-industrial complex. Down this road Medicare could be rethought, perhaps with rational Democrats lending a hand. We know these things will have to happen anyway. Otherwise the country is bankrupt.

P.S. Don't kid yourself that Democrats have a plan other than blindly defending more subsidies for more health-care consumers. Single-payer is not a plan. It's an invitation for the health-care industry—doctors, hospitals, the research establishment—simply to turn their full attention to serving the self-paying rich.

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SPORTS

HEARD ON THE FIELD

Djokovic Cans Coaches In 'Shock Therapy'

Novak Djokovic's frustrating slump brought him to a surprise conclusion: He needed to fire everyone.

Djokovic, looking for a boost, announced on Friday morning that he no longer works with his three long-time coaches, Marian Vajda, fitness coach Gebhard Phil-Gritsch and physiotherapist Miljan Amanovic. The former No. 1, who ended his coaching relationship with former champion Boris Becker late last year, said he wouldn't rush to hire a new one. "I am a hunter and my biggest goal is to find the winning spark on the court again," he said in a statement.

Breaking up with a coach is not uncommon in tennis: Roger Federer split up with former champion Stefan Edberg in 2015 and hired Ivan Ljubicic. But "shock therapy," as Djokovic called it, is a surprise for a player who will turn 30 later this month and, despite a long slump, is still ranked No. 2 in the world.

Djokovic had worked with Vajda since 2006, Amanovic since 2007 and Phil-Gritsch since 2009. He dominated the sport in recent years, including a magical 2011, when he won three of the four majors. Djokovic also won four Grand Slam tournaments in a row from Wimbledon in 2015 to last year's French Open.

This year has not gone as well. Djokovic was beaten in the second round of the Australian Open to a player ranked No. 117, lost on hard courts in consecutive weeks to young rising star Nick Kyrgios and, most recently, stumbled in three sets against David Goffin on clay in Monte Carlo.

Meanwhile, Federer and Rafael Nadal have had excellent seasons.

All this can change quickly. Sometimes hiring a new coach—or running away from all of them—can inspire a player. And as much as Nadal is dominating clay again, the 30-year-old has struggled with health often in the past year. Before the French Open begins, the players will compete in two top-ranking clay tournaments that could brighten Djokovic's hopes—or dim them further. "I want to find a way to come back to the top stronger and more resilient," Djokovic said.

—Tom Perrotta

PGA TOUR

How Pro Golf Became a Bromance

Top stars appear friendlier with each other, but not everyone thinks chumminess is the best look

BY BRIAN COSTA

Smylie Kaufman, left, and Jordan Spieth during the Sony Open in Honolulu in January. Below, Sergio Garcia and Justin Rose hug it out at the Masters in April.

CLIVE BRUNSKILL/GETTY IMAGES

T-B: STAN BADZ/PGA TOUR/GETTY IMAGES; HARRY HOW/GETTY IMAGES

IN THEORY, professional golf after Tiger Woods has become fiercer than ever. The competition at the top is tighter, the cast of rivals is bigger and supremacy is more fleeting. But as an entertainment product, the PGA Tour isn't a survival drama. It's a bromance.

Last month alone, the scenes have included Sergio Garcia and Justin Rose exchanging high fives as they battled each other to win the Masters and then hugging after Garcia won. Days later, another Sunday pairing at Augusta, Jordan Spieth and Rickie Fowler, joined Justin Thomas and Smylie Kaufman on a group vacation in the Bahamas.

Years after American golf was headlined by Woods and Phil Mickelson, whose relationship was notoriously frosty, top golfers have never seemed so fond of each other.

"This is a very chummy, very friendly group," said Jim Furyk, a 46-year-old Tour veteran.

The difference is partly a function of media exposure. For the second year in a row, the Bahamas vacation group profusely shared moments from their trip on social media. In January, Golf Channel's coverage of the Sony Open in Hawaii included live shots of Spieth and Kaufman's post-round kayaking excursion. But some players say there is also a substantive difference in the social dynamic within the sport.

"You can definitely see a big shift," said Henrik Stenson, 41. "We just love each other more now."

The change is generational. More and more, the PGA Tour has become the domain of players in their 20s, some of whom are barely beyond college age. Many have been friends since they met playing in elite junior events as children. A lot of them are unmarried and reside in the same area of South Florida, just north of West Palm Beach.

When Fowler won the Honda Classic, held in that same area in February, it was partly a reflection of their friendship that Thomas showed up to congratulate him near the 18th green. But it was also indicative of the geographical clustering of golfers. Thomas had missed the cut, meaning he wasn't even playing that day, but the course was only a short drive from his home. Out on Tour, the venues change, but that neighborly feel does not.

"Very rarely will we eat dinner by ourselves, or without the other one," Thomas said. "We all know each other's parents. It's really like one massive family."

The public nature of friendships among some of the best young golfers is partly a business calculation on their part. They compete in an era in which players make references to their "brands" as casually as they mention their swings.

Kaufman said social media offers them "a huge opportunity" to appear relatable and likable to a wider audience. He described the Bahamas group almost as if he were talking about characters on a show.

"Rickie is the go-getter, the racer, the fearless kid," he said. "Jordan's the genuine, honest, Arnold Palmer-type of kid. Justin is the kid who's always been successful at every level. And I'm just the one that likes to have a good time."

Not everyone thinks chumminess is the best look for the sport. In an interview with author John Feinstein, Palmer once bemoaned the impact of growing riches on the Tour's competitive verve, saying players had become too friendly with each other. "I just think our tour has become too comfortable," he said.

That interview was in 1994, when six players earned more than $1 million in prize money. In 2016, there were 107 such players.

If any of the game's modern stars embody Palmer's spirit, it is Rory McIlroy. He has mentioned repeatedly his annoyance at the scene he witnessed in the final round of the 2014 PGA Championship, which he won by one stroke. Playing in the group ahead of him, Fowler and Phil Mickelson high-fived and fist-bumped each other after birdies.

"There's a bit of that that goes on," McIlroy said. "I just think there's a time and a place. The final round of a major, when you've dreamed all your life of winning one of these, it doesn't matter if I have my best friend beside me. If I'm playing against him, I don't care about you."

When asked if he could ever imagine himself waiting by the 18th green to cheer a friend's victory, as a few other players have done over the past year, McIlroy said flatly, "No."

Even Thomas said balancing his competitiveness and friendships is something he has had to learn over time. He struggled playing alongside Spieth when he first came on Tour. In retrospect, he said he might have been too laid back around him on the course.

There are trends driving players further apart. The appearance of chumminess among some well-known friends belies what Geoff Ogilvy, the 2006 U.S. Open winner, said is a more cliquey Tour than the one he joined in 2001.

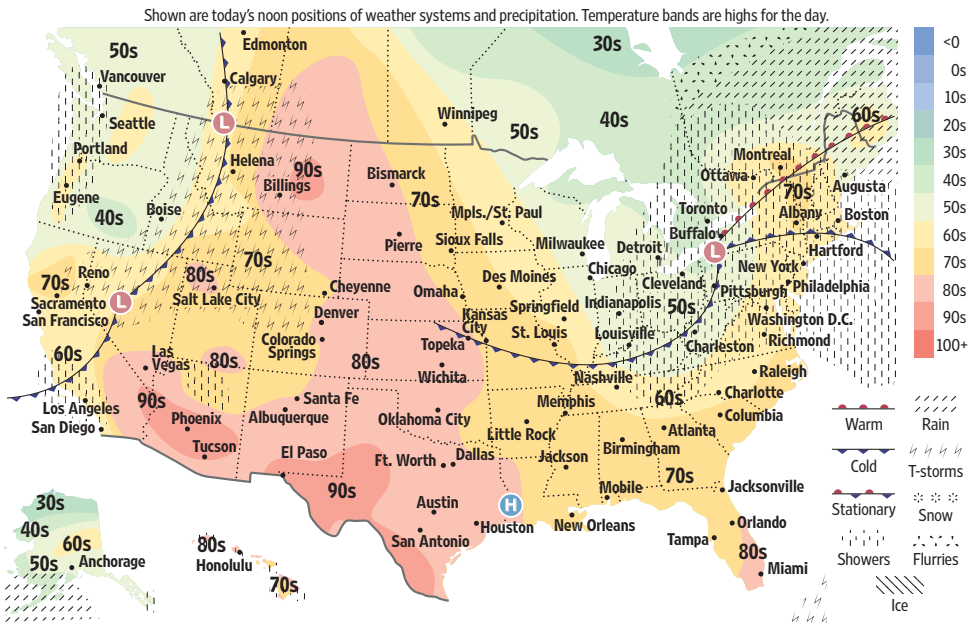
Stewart Cink, the 2009 British Open champion, said time that players used to have with each other is instead spent with their outsized personal teams, which include agents, trainers, coaches, massage therapists, psychologists and the like. But when they are among their peers, many players have come to believe that life in an individual sport is easier when it's not quite so individual.

"Without that kind of relationship where you're all trying to support each other," Cink said, "it's really lonely."

Weather

AccuWeather.com

Shown are today's noon positions of weather systems and precipitation. Temperature bands are highs for the day.



U.S. Forecasts

s...sunny; pc... partly cloudy; c...cloudy; sh...showers; t...t'storms; r...rain; sf...snow flurries; sn...snow; i...ice

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Anchorage	55	43	pc	52	40	c
Atlanta	70	50	s	70	48	s
Austin	87	57	s	88	62	s
Baltimore	63	47	sh	62	42	pc
Boise	59	43	c	64	41	pc
Boston	63	51	sh	60	44	c
Burlington	71	50	sh	60	42	sh
Charlotte	66	46	t	67	46	pc
Chicago	57	37	pc	57	34	s
Cleveland	50	43	sh	53	38	s
Dallas	84	61	s	87	62	s
Denver	83	52	s	81	47	pc
Detroit	56	38	sh	55	32	s
Honolulu	85	73	s	86	72	pc
Houston	84	58	s	85	63	s
Indianapolis	56	36	sh	58	35	s
Kansas City	77	49	s	76	56	s
Las Vegas	87	57	pc	67	53	pc
Little Rock	78	53	s	79	55	s
Los Angeles	65	52	sh	62	52	t
Miami	83	65	s	85	67	s
Milwaukee	54	38	s	54	35	s
Minneapolis	64	42	s	65	44	s
Nashville	69	43	pc	69	45	s
New Orleans	77	58	s	80	60	s
New York City	66	50	c	60	44	pc
Oklahoma City	81	55	s	83	58	s
Omaha	78	48	s	76	53	s
Orlando	78	55	s	85	61	s
Philadelphia	67	49	pc	61	44	pc
Phoenix	95	64	s	73	57	pc
Pittsburgh	50	39	r	52	34	c
Portland, Maine	57	46	sh	57	43	pc
Portland, Ore.	61	41	pc	65	42	s
Sacramento	72	54	pc	78	55	sh
St. Louis	70	47	s	71	48	s
Salt Lake City	83	59	c	78	55	pc
San Francisco	64	50	pc	69	51	pc
Santa Fe	82	48	pc	77	50	pc
Seattle	58	43	pc	61	44	s
Sioux Falls	73	46	s	72	50	s
Wash., D.C.	64	50	pc	63	44	pc

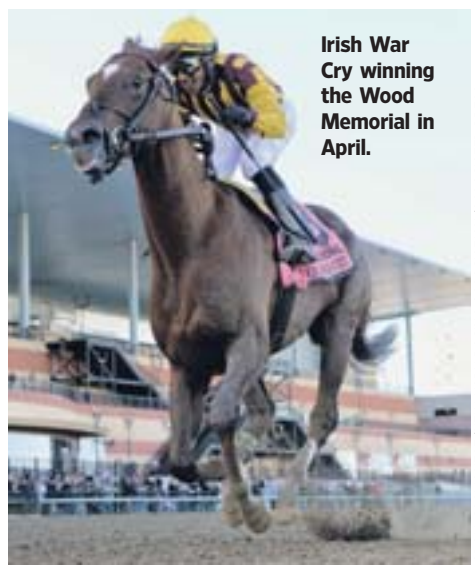
International

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Amsterdam	63	48	c	60	43	c
Athens	83	62	s	81	63	s
Baghdad	94	66	pc	100	69	pc
Bangkok	92	80	t	92	80	pc
Beijing	84	50	s	89	54	s
Berlin	63	46	c	62	45	c
Brussels	67	48	c	61	43	c
Buenos Aires	77	62	s	77	61	c
Dubai	104	88	s	103	87	pc
Dublin	55	43	c	61	44	pc
Edinburgh	57	43	s	56	40	c
Frankfurt	69	52	c	65	46	t
Geneva	57	48	r	55	47	r
Havana	82	64	s	84	69	s
Hong Kong	85	76	pc	83	76	pc
Istanbul	67	57	sh	72	60	pc
Jakarta	89	77	t	90	75	t
Jerusalem	73	54	s	75	54	s
Johannesburg	74	47	c	75	50	pc
London	62	45	c	64	43	pc
Madrid	70	48	s	80	52	s
Manila	94	79	pc	95	79	pc
Melbourne	66	48	sh	57	51	pc
Mexico City	79	58	pc	79	56	pc
Milan	63	50	r	74	53	c
Moscow	60	32	sh	49	34	pc
Mumbai	93	84	s	93	83	s
Paris	58	51	r	63	45	c
Rio de Janeiro	79	69	t	78	69	pc
Riyadh	102	74	pc	102	76	pc
Rome	73	53	pc	70	52	pc
San Juan	88	76	pc	86	77	pc
Seoul	69	51	s	74	52	s
Shanghai	77	60	pc	80	61	s
Singapore	88	79	pc	86	78	pc
Sydney	77	59	pc	67	54	s
Taipei	80	72	t	79	73	pc
Tokyo	78	61	pc	72	61	pc
Toronto	47	35	r	44	31	sh
Vancouver	56	41	s	58	44	s
Warsaw	70	50	t	61	44	r
Zurich	60	48	r	55	47	r

HORSE RACING

HOW TO PICK THE KENTUCKY DERBY

BY JIM CHAIRUSMI



Irish War Cry winning the Wood Memorial in April.

ADAM COGLIANESE/NEW YORK RACING ASSOCIATION/ASSOCIATED PRESS

LOUISVILLE, Ky.—More than most years, handicapping Saturday's Kentucky Derby is less about picking the right horse than picking the right strategy.

And though the post-time favorite has won each of the past four Run for the Roses, this year's wide-open field presents an opportunity for a longshot in the tradition of Mine That Bird, who went off at 50-1 in 2009 and produced one of the biggest upsets in Kentucky Derby history.

"This year reminds me of that race," says Caton Bredar, an analyst for the racing network TVG. "There hasn't been a real standout, a horse that has been dominant coming into the Derby."

Here are a few tactics the smart money is taking:

Watching the Weather

The forecast for Churchill Downs on Saturday calls for a 80% chance of rain, so it's worth considering a mudder, or a horse that has shown an affinity for a wet track.

The current favorite, **#14 Classic Empire** (4-1), has previously won on a wet track, but so have five other horses in the race.

#1 Thunder Snow (20-1), **#8 Hence** (15-1), **#11 Battle of Midway** (30-1), **#16 Tapwrit** (20-1) and **#18 Gormely** (15-1) have run well in the mud before.

Surveying the Small Tracks

The Sunland Derby in New Mexico doesn't have the same clout as traditional preps like the Santa Anita Derby, the Arkansas Derby or the Blue Grass Stakes, but the track outside of El Paso, Tex., is at an elevation of about 3,700 feet and some believe that can be a boost. To name one: former Mine That Bird trainer Chip Woolley, who credited his horse's training in altitude.

Sunland Derby winner **#8 Hence** (15-1), will be a longshot to watch on Saturday.

Tracking the Backside Buzz

Mike Welsch, a correspondent for the Daily Racing Form, has been monitoring the morning workouts of all the Derby horses, and says he has been most impressed by **#15 McCraken** (5-1) and **#17 Irish War Cry** (6-1). "McCraken has looked well. He likes this race track" with three wins at Churchill Downs, Welsch said. "Irish War Cry has also looked terrific since he's gotten here."

Welsch says he has reservations about **#5 Always Dreaming** (5-1), who has been expending a lot of energy fighting his rider during routine gallops. "Too rambunctious."

My pick: **Irish War Cry**, who ran two fantastic preps for the Derby—one more than many of Saturday's top contenders. A sloppy track shouldn't bother him—his sire, Curlin, won the Breeders' Cup in the mud.

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AUTOS VW'S DIESEL RUN B3

BUSINESS & FINANCE

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MARKETS A MATERIAL SLUMP B10

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* * * * * * THE WALL STREET JOURNAL. Saturday/Sunday, May 6 - 7, 2017 | B1

DJIA 21006.94 ▲ 55.47 0.3% NASDAQ 6100.76 ▲ 0.4% STOXX 600 394.54 ▲ 0.7% 10-YR. TREAS. ▲ 1/32, yield 2.352% OIL $46.22 ▲ $0.70 GOLD $1,224.80 ▼ $1.70 EURO $1.0999 YEN 112.72

Companies Bite Back Against Watchdog

Executives are willing to challenge enforcement actions as GOP pushes to defang the CFPB

By Yuka Hayashi

WASHINGTON—Companies targeted by the Consumer Financial Protection Bureau are more frequently choosing to fight enforcement actions rather than settle, as Republican control of the White House has put the agency's future in doubt.

Of 21 enforcement actions announced by the watchdog agency in 2017, one-third have been challenged, the CFPB said. Those seven challenges already exceed the number last year, when the bureau brought 36 enforcement cases and faced six challenges, according to data compiled by Christopher Peterson, a University of Utah law professor.

The shift has occurred as Republican critics press for an overhaul of the CFPB, established in 2011 by the Dodd-Frank financial law, and for the firing of its independent director, Richard Cordray, by the Trump administration.

"We are seeing more resistance to CFPB actions," said Joseph Rubin, a senior counsel at Arnall Golden Gregory who advises clients on regulatory matters. "We anticipate that as it gets closer to the end of Cordray's term, the CFPB may find it more difficult to obtain quick consent orders from financial institutions." His term ends in July 2018.

Among those fighting the bureau this year are such large companies as student-loan firm Navient Corp. and mortgage servicer Ocwen Financial Corp. In the past, challenges typically came from small firms arguing that their survival was threatened by a CFPB action.

The companies' defiance is pushing the bureau into new legal territory. In February, TCF National Bank of Minneapolis became the first commercial bank to challenge the bureau's action.

Companies say they are responding to aggressive policing by an embattled bureau trying to assert its power over specific industries. Some companies also are fighting in the hope they might receive more lenient treatment in the future, lawyers say. The Trump administration is expected to eventually appoint a successor to Mr. Cordray.

The CFPB said it doesn't intend to change its approach. It was created after the financial crisis to protect consumers from any harmful practices by financial companies.

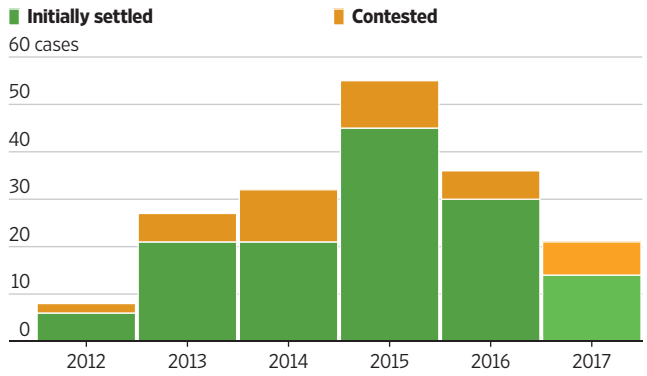
"We remain focused on carrying out our mission, and we will take action where necessary to enforce the law and achieve relief for harmed consumers," a CFPB spokesman said.

Republican lawmakers have tried several ways to curb the agency's powers, including

Please see CFPB page B2

Putting Up a Fight

Companies have challenged one-third of 21 enforcement actions by the Consumer Financial Protection Bureau so far in 2017, exceeding challenged cases for all of 2016. Over the years, the CFPB has been contested in about 23% of cases.



Note: 2017 data is through April
Source: Christopher Peterson/University of Utah and the CFPB

THE WALL STREET JOURNAL.

Chinese Secure Largest Foreign Takeover

China reached a milestone in global acquisitions as shareholders of Swiss agro-giant **Syngenta** AG approved a $43 billion takeover by China National Chemical Corp., sealing the country's biggest foreign deal to date.

*By **Brian Spegele** in Beijing and **Kane Wu** in Hong Kong*

The hard work may just be beginning, however, as China National Chemical, known as ChemChina, faces challenges ranging from financing the deal to fusing the acquired business into its own operations.

"Life begins after closing," said Grace Fan-Delatour, a partner at law firm **K&L Gates** LLP, who advises state-owned Chinese companies on outbound investment and how to avoid the pitfalls that often bedevil big takeovers.

Executives at state-owned ChemChina will have to manage a balancing act as they expand Syngenta's seed and pesticide businesses in China's fragmented and inefficient agriculture sector while ensuring stability at the Swiss company's operations in the U.S. and around the world.

ChemChina also must attract new equity investment to help cover Syngenta's hefty price tag amid concerns over its debt levels.

And more upheaval may be on the way: China's government is contemplating a merger of ChemChina with state-owned conglomerate Sinochem Group, according to two people familiar with the situation.

Both companies, which previously denied reports of a planned tie-up, didn't respond to requests for comment Friday. China's state-owned Assets Supervision and Administration Commission, which is in charge of state-run companies, also didn't respond to inquiries.

In a joint statement, ChemChina and Syngenta on Friday said 80.7% of the Swiss company's shares were tendered for the deal, based on a preliminary count, well above the 67% minimum needed for approval.

Syngenta closed at 459.2 Swiss francs ($465) a share Thursday, about 20% above the price before the deal was announced in February 2016. ChemChina will also pay a special dividend of five Swiss francs a share before the deal's closing.

With the deal, China has

Please see CHINA page B2

China Breaks Through With Its First Big Commercial Airliner

GREG BAKER/REUTERS

AVIATION HISTORY: A Comac C919 prepared to land at Shanghai's Pudong airport after its maiden flight on Friday. Producing passenger jets is part of China's effort to move into more advanced manufacturing, though skeptics say competing with Boeing and Airbus for global orders will be a costly undertaking.

An Unconventional High-Speed Trader

Cifu's reputation is helped by his openness and a willingness to share expertise

By Alexander Osipovich

High-frequency trading firms are often cast as villains. **Virtu Financial** Inc. Chief Executive Douglas Cifu is determined to be seen as one of the good guys.

That's increasingly important to the silver-haired, 51-year-old Long Island native as his firm moves to take over rival **KCG Holdings** Inc. If the deal is completed, Virtu's trading volumes in U.S. equities would more than double, and it would handle around 20% of all shares traded, on par with current leader **Citadel Securities** LLC.

WEEKEND PROFILE

High-frequency trading or HFT firms use computers to trade assets in fractions of a second. Low volatility, competition and increased costs have squeezed their bottom lines in recent years. Virtu's stock has lost more than 30% of its value since the firm went public in 2015.

In addition, the industry has faced heightened scrutiny after Michael Lewis's 2014 book "Flash Boys." The best-seller accused ultrafast traders of sniffing out stock orders to jump ahead of them, resulting in worse prices for financial institutions. HFT advocates reject such allegations and say high-frequency trading cut costs for investors.

FLORIDA PANTHERS

Virtu CEO Douglas Cifu addresses the crowd at the annual Florida "Panthers Palooza" in January.

Mr. Cifu, a champion debater in high school and former practicing lawyer, says even he was cowed by the firestorm sparked by "Flash Boys," which prompted Capitol Hill hearings and delayed Virtu's plans to go public.

"It's not easy when you read the paper or watch TV and people are basically accusing you of criminality," Mr. Cifu told The Wall Street Journal. "For a while I was just telling people I was a lawyer, because it was easier than trying to debate HFT with a bunch of strangers."

Mr. Cifu, one of three brothers, grew up east of New York City in Syosset. His father was an electrical engineer, his mother a nurse. As a teen, he made money landscaping for neighbors and working at the local Carvel ice-cream branch. At Columbia University, he majored in political science and was a commentator for football and basketball games.

Upon finishing Columbia Law School in 1990, he joined the white-shoe firm of Paul, Weiss, Rifkind, Wharton & Garrison LLP. He made partner in 1999 and became a rainmaker in corporate deals, heading the firm's private-equity group.

In 2005, Mr. Cifu met Vincent Viola, now the billionaire chairman of Virtu. At the time, Paul Weiss was advising private-equity firm General Atlantic on buying a stake in the owner of the New York Mercantile Exchange. Mr. Viola, an ex-Nymex chairman, was involved in the talks.

The two men had different styles. Mr. Viola had started his career in the rough-and-tumble of the Nymex gasoline futures pit. He nonetheless hit it off with the Ivy League-trained corporate lawyer.

In 2007, the two had a conversation that Mr. Cifu likens

Please see CIFU page B2

INTELLIGENT INVESTOR

By Jason Zweig

Problems Solved? Maybe Not

Everywhere investors turn, mathematics and machines seem to be rendering human judgment obsolete.

BlackRock Inc., the world's biggest money manager by assets, recently said it would rely more heavily on computers to pick stocks. Rob Arnott, a leading advocate of mechanical investing approaches, said this past week that it's "actually relatively easy to beat the market," if you get the math right.

Not so fast, says Richard Bookstaber, author of an important and elegantly written new book, "The End of Theory."

When you measure markets, you change them, Mr. Bookstaber says. When individuals become part of groups, their behavior changes in ways that are hard to predict. Investors who forget these facts and conclude that all problems have been solved are, sooner or later, in for a shock.

Computers and mathematical models excel in environ-

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BUSINESS & FINANCE

NATI HARNIK/ASSOCIATED PRESS

An image of Warren Buffett is seen as Berkshire shareholders shop for Pampered Chef merchandise in Omaha on Friday.

Berkshire Cuts IBM Stake

By Nicole Friedman

Berkshire Hathaway Inc. sold about a third of its shares in **International Business Machines** Corp. this year, Berkshire Chairman Warren Buffett told CNBC.

Berkshire held about 81 million IBM shares at the end of last year, making it Big Blue's largest shareholder with a stake of 8.6%, according to FactSet. Berkshire sold 24 million or 25 million shares, CNBC said, with Mr. Buffett telling the network he has "revalued it somewhat downward" because of strong competition.

The report came ahead of Berkshire's widely attended annual meeting on Saturday in Omaha, Neb., and the release of the company's first-quarter earnings results.

Berkshire said its first-quarter net earnings fell 27%, hurt by weaker investment gains.

The company reported first-quarter net earnings of $4.06 billion, or $2,469 per Class A share equivalent, from $5.59 billion, or $3,401 a share, in the year-earlier period. Operating earnings, which exclude some investment results, fell to $3.56 billion, or $2,163 a Class A share, from $3.74 billion, or $2,274 a Class A share, in the year prior. Investment gains totaled $205 million in the first quarter, down from $2.38 billion a year ago.

The IBM sale adds to Berkshire's growing cash pile. Berkshire held $96.5 billion in cash at the end of the first quarter, up from $86 billion at year-end.

Berkshire sold the IBM shares above $180 each, Mr. Buffett said. Berkshire's average purchase price for its IBM stake was roughly $170, according to the company's annual report. IBM shares, which ended trade Thursday at $159.05, hovered above $180 from late February to early March. Friday, shares of the Armonk, N.Y.-based company fell 2.5% to $155.05.

An IBM representative didn't provide an immediate comment on the news.

Mr. Buffett told CNBC that IBM Chief Executive Ginni Rometty met with him "a few weeks ago" and asked him about reports that he was selling IBM stock. Mr. Buffett said he confirmed the selling but didn't provide the rationale or the details.

Berkshire first bought IBM in 2011. Mr. Buffett had avoided technology stocks for years, saying he didn't understand them. After Berkshire's IBM stake was first revealed, Mr. Buffett told The Wall Street Journal that IBM "fits all my principles...it's something we expect to own indefinitely."

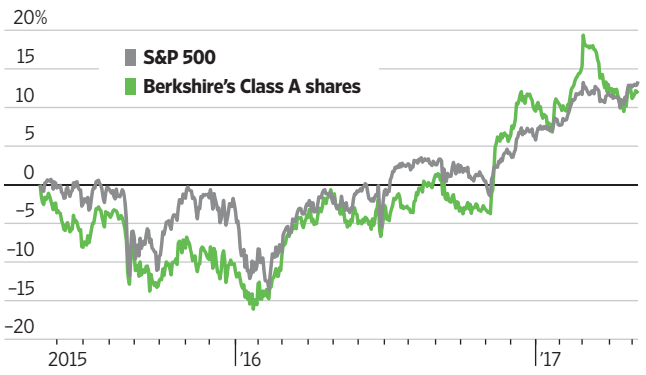
The divestiture is the latest blow to IBM, which said last month that its revenue fell for the 20th consecutive quarter in the first three months of the year. Ms. Rometty has been working to offset waning older businesses with younger ones like cloud computing, where Amazon.com Inc.'s Amazon Web Services dominates, and artificial intelligence, a stronghold of Alphabet Inc.'s Google division.

—Ted Greenwald contributed to this article.

The Buffett Boost

Berkshire Hathaway owns so much that its overall holdings are often considered a proxy for the overall U.S. economy. But its shares have also been more volatile than the S&P 500.

Performance over the past two years



Source: FactSet THE WALL STREET JOURNAL.

CIFU

Continued from the prior page

to a scene in "The Graduate" where an older man tells Dustin Hoffman's character that his future lies in plastics. In Mr. Cifu's memory, Mr. Viola told him: "Why don't you come form the greatest electronic market-making firm in the world with me?"

Mr. Cifu said the idea seemed "crazy" but in 2008, he quit his law job and co-founded Virtu with Mr. Viola and Graham Free, now a trader with the firm.

It was a timely move. HFT firms made billions from U.S. stocks trading amid the high volatility and heavy volumes following the financial crisis. From 2009 to 2014, Virtu lost money on just one of 1,485 trading days, according to paperwork filed with the Securities and Exchange Commission before the firm went public.

One reason for Virtu's good-guy reputation is its focus on market-making.

That revelation stirred outrage in some quarters: HFT-skeptic blog ZeroHedge called it proof that markets are a "regulator-endorsed cesspool of HFT fraud." Mr. Cifu says Virtu's winning streak was due to the law of large numbers: Even if a trade has a slim likelihood of profitability—say, 51%—it will lead to consistent profits if repeated millions of times a day.

Mr. Cifu has courted HFT critics. In 2015, Virtu agreed to share technology with T. Rowe Price Group, which has slammed "predatory" high-speed trading practices.

"He's not afraid to go on TV and do interviews, and he explains his business model," said Joe Saluzzi, a partner at brokerage Themis Trading LLC and vocal HFT critic. "So many of these guys in the high-frequency trading industry are secretive."

One reason for Virtu's good-guy reputation is its focus on market-making, a strategy that helps markets function smoothly. Market makers buy and sell the same assets throughout the day, earning profits by collecting a small "spread" between the buy and sell price. This ensures a steady stream of price quotes available for anyone else to trade against.

Virtu also has been a supporter of IEX Group Inc., the upstart trading venue whose founders were the heroes of "Flash Boys." Virtu was the only major electronic trader to back IEX's effort to become a full-fledged stock exchange, saying it had no objections to IEX's "speed bump," a feature that imposes a brief delay on trades and was designed to foil certain HFT strategies.

A sports fan, Mr. Cifu has used his deal-making skills to buy the Florida Panthers, a National Hockey League franchise. Mr. Viola and Mr. Cifu took control of the team in 2013 for $240 million. They sought to turbocharge the team by applying data-driven, "Moneyball"-style analytics to hiring players.

Their record has drawn mixed reviews. They stabilized the team's finances, and in the 2015-16 season, the Panthers won first place in the NHL's Atlantic division, though they were quickly knocked out of the playoffs.

But in November, the Panthers unexpectedly fired coach Gerard Gallant, a move scorned by many NHL-watchers. Hockey commentators pilloried Mr. Viola and Mr. Cifu as "computer boys," and the team ended the season with a losing record.

Mr. Cifu promises to get the Panthers back on track, but says it will be an uphill battle to win over critics.

"My second-biggest challenge in the world beyond Michael Lewis is the Canadian hockey media," he said.

OMAR VEGA/INVISION/ASSOCIATED PRESS

Douglas Cifu and Virtu Chairman Vincent Viola celebrate after the Florida Panthers defeated the Pittsburgh Penguins in 2013.

CFPB

Continued from the prior page

shutting it down entirely or squeezing its funding. But companies are doing most of the fighting at the moment.

In a pending court case brought by **PHH** Corp., the mortgage lender questions whether the structure of the bureau is constitutional and whether the president can fire its director at will. That case is to go before the full U.S. Court of Appeals for the District of Columbia Circuit this month. An earlier ruling by a three-judge panel said the bureau's structure is unconstitutional and gave the president power to fire the CFPB director at will.

The case started in 2014 when the CFPB claimed PHH was illegally accepting kickbacks from mortgage insurers.

Several companies have cited questions over the bureau's constitutionality when contesting CFPB enforcement actions, citing the PHH court decision. Others have accused the bureau of being overly aggressive in asserting its authority.

Navient said in January, after it was sued by the CFPB, that "the timing of this lawsuit—midnight action filed on the eve of a new administration—reflects their political motivations."

The case is to go to trial this summer in a Pennsylvania federal court.

The bureau recently received tough verdicts in other courtrooms. A federal judge in North Dakota on March 28 dismissed the CFPB's complaint against payment-processing company **Intercept** Corp. and senior executives. The judge said the CFPB "failed to provide sufficient factual allegations" to back up its claim that Intercept violated a consumer-protection law prohibiting unfair, deceptive or abusive practices.

Another blow came on April 21 when a federal appeals-court ruling stopped the CFPB from investigating an organization that accredits for-profit colleges, some of which are being probed by the agency over alleged fair-lending violations. The CFPB took the accreditor to court after it refused to comply with the bureau's request to provide information for its investigation.

Since the CFPB began operating in 2011 through the end of last year, 29 of its 123 public enforcement actions have been challenged, about one-quarter.

Mr. Peterson, who served as an adviser at the CFPB from 2012 to 2016, said those challenges have led to a small number of losses for the bureau. He said four cases in the bureau's short history could "arguably be characterized as a loss," including the PHH case.

Ocwen Quickly Fired Back After Suit Was Filed

WASHINGTON—Five days after it was accused of illegally foreclosing on more than 1,000 struggling mortgage borrowers, **Ocwen Financial** Corp. turned to audacious action: It asked a court to dismiss the lawsuit, saying the watchdog agency making the allegations is unconstitutional.

The swift counterattack by Ocwen, a mortgage servicer facing numerous regulatory woes, is an extreme example of how some companies are using the uncertainty surrounding the **Consumer Financial Protection Bureau** to their advantage.

As the Trump administration and Republican lawmakers take aim at the CFPB, companies this year have contested enforcement actions from the agency at a much faster pace. Unlike in the past, some challenges have come from big companies like Ocwen, not just small firms whose survival is threatened by a single action from the regulator.

"Ocwen plans to argue that this case must be dismissed because it is the product of an agency, and a director, whose structure and operation violate the Constitution," the company's lawyers wrote in a document submitted to the U.S. District Court for the Southern District of Florida in April.

The mortgage servicer's maneuvering came after the CFPB alleged that the company harmed thousands of customers by failing to properly implement a wide range of basic functions to service home loans. The company, which had settled similar allegations from the CFPB in 2013, also received orders to address violations from regulators in more than 20 states. Worries over regulatory problems have pushed down Ocwen's shares to about $2.50 from the peak of nearly $60 before the CFPB's first enforcement action in 2013.

Ocwen requested that the Florida court expedite the hearing of its case, given that a panel of the federal appeals court in Washington ruled last year that the CFPB was unconstitutional in a case involving PHH Corp., a New Jersey mortgage lender.

—Yuka Hayashi

CHINA

Continued from the prior page

shown it remains willing to spend top dollar for prized overseas assets despite worries about capital outflows—a concern that is tamping down Chinese global deal making in general.

The Syngenta transaction also portends a profound shift in the agriculture sector globally, with China set to play a greater role in the food supply chain of U.S. and other countries as it scoops up technologies for its own farms. It also comes against the backdrop of broad industry consolidation, which has triggered objections from farmers over less choice and potentially higher costs.

At its heart, however, the deal will help China modernize farming techniques that have made it increasingly reliant on imports to feed its population of 1.4 billion. Giving farmers access to foreign technology—including genetically modified seeds developed by Syngenta—fits into efforts to industrialize farming in China. With few exceptions, genetically modified seeds aren't allowed in China. Industry observers say the Syngenta deal could work to change that.

For Ren Jianxin, ChemChina's chairman and founder, the acquisition solidifies his place as one of China's top deal makers, adding to such transactions as the takeover of Italian tire maker Pirelli & C. SpA.

The political and strategic considerations help to explain why the Syngenta transaction was greenlighted by China's government while other deals have sputtered amid tightened capital controls.

"The reality is this: When China wants to do a deal, it will get the deal done," said Hilary Lau, who advises on Chinese deals for Herbert Smith Freehills LLP.

The Syngenta deal has been approved by regulators in the U.S., European Union, China and Mexico, among others.

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J&J Loses Suit Tying Cancer To Baby Powder

By Anne Steele And Jonathan D. Rockoff

Johnson & Johnson was hit with a $110 million jury decision in favor of a woman who said talc in the company's baby powder gave her ovarian cancer, the latest—and largest—verdict yet in the litigation saga.

The company said it would appeal the verdict awarded by a St. Louis jury, the fourth such defeat for J&J and **Imerys** SA, the talc mining company.

A J&J spokeswoman said a jury decision in the company's favor in St. Louis in March and the dismissal of two cases in New Jersey in September 2016 "highlight the lack of credible scientific evidence behind plaintiffs' allegations." In the New Jersey cases, a state court judge ruled that plaintiffs' scientific experts couldn't adequately support their theories that talcum powder causes ovarian cancer.

J&J has said talc is safe to use in cosmetic products and that its baby-powder labeling is appropriate.

"We are preparing for additional trials this year and we will continue to defend the safety of Johnson's Baby Powder," she said.

Many jury verdicts are often reduced, if not thrown out, on appeal.

J&J, which is based in New Brunswick, N.J., has argued that juries in St. Louis, in particular, have been tainted by a deluge of trial-lawyer advertisements promoting a link between talcum powder and ovarian cancer, but a judge refused the company's requests to move the trials.

J&J won the most recent trial in March but lost three others, which led to verdicts totaling more than $194 million that are now on appeal. Thursday's verdict in St. Louis in favor of a 62-year-old Virginia woman capped the fifth trial alleging the company's talc is tied to ovarian cancer.

Lawyers for the plaintiff said the litigation continues with "thousands more claimants across the globe."

"We don't care how many trials it takes," said James Onder, one of the trial attorneys, noting that his firm will continue to support those suing the companies "until Johnson & Johnson and Imerys stand up and do the right thing."

In its natural form, talc contains some asbestos, which can "cause cancers in and around the lungs when inhaled," according to the American Cancer Society.

But manufacturers have been removing asbestos from talc products since the 1970s, and evidence of any link between asbestos-free talc and cancer is "less clear," the society said.

Studies probing a connection between talc and ovarian cancer have returned mixed findings. If talc does raise the risk of ovarian cancer, the increased risk "is likely to be very small," according to the American Cancer Society.

An independent review of 16 studies examining whether there is a link to talc exposure and ovarian cancer, conducted for the National Cancer Institute's cancer-information database, found the "weight of evidence does not support an association."

Pictures Plus Thousands of Words

ABEDIN TAHERKENAREH/EUROPEAN PRESSPHOTO AGENCY

BAGGING BOOKS: Attendees at the Tehran International Book Fair on Friday. Organizers say the event draws 600 foreign publishers.

Pearson Looks to Sell U.S. Assets

By Rory Gallivan

LONDON—**Pearson** PLC shares rose more than 10% on Friday after the world's largest education company said it may sell its U.S. school-courseware publishing business and will cut more jobs.

The London-listed provider of textbooks, language courses and other educational products and services has been grappling with falling sales, hurt by declining college enrollment and tough competition in the U.S.

Weakness at its K12 courseware business in the U.S. was a major reason for Pearson's 9% revenue fall in 2016 and its profit warning in January, which caused the company's shares to fall by about a third.

Pearson said Friday it would launch a review of the K12 business. It also said it expects to achieve an additional £300 million ($387 million) in annual savings by the end of 2019 by cutting administrative costs in North America and other measures.

"There will be job losses, but there will also be jobs created," Chief Executive John Fallon said, without giving details of how many jobs will be lost.

Pearson announced 4,000 job cuts last year as part of a restructuring to save £350 million a year. The company, which has 35,000 employees, said it would give more details on its cost-cutting plans later this year.

The measures announced Friday are part of a yearslong restructuring at Pearson involving multibillion-dollar asset sales amid tough market conditions in the U.S. Those sales include the disposal of Pearson's Financial Times newspaper arm two years ago,

Pearson on Friday also reported an encouraging start to 2017, with underlying sales in the first quarter rising 6% from a year earlier.

Pearson said it benefited from growth in North American higher-education products, professional certification, South African school textbooks and U.K. student assessment.

Also Friday, Pearson faced a shareholder revolt against its executive remuneration policy, with around 66% of votes going against the company's annual remuneration report.

Mr. Fallon received a 20% pay raise for 2016, taking his total pay to £1.5 million. Shares in the company have fallen by roughly 40% since he became chief executive in 2013.

Unleashed, VW Diesels Race Off

By Mike Colias

Volkswagen AG is suddenly experiencing a run on diesels.

The auto maker's TDI diesel cars are back on sale after being yanked from the U.S. market 18 months ago, sparking a race among buyers still interested in the niche technology but faced with an extremely limited supply.

VW dealerships were barred from selling their signature diesel cars after regulators found software the company designed to sidestep diesel emissions tests. Dealers recently received the green light from regulators to fix and sell the 12,000 new vehicles sidelined by the emissions scandal.

Amir Mahmoud, a 36-year-old sales manager at **Caterpillar** Inc. near Milwaukee, contacted about 30 stores nationally before finding a gray 2015 Passat TDI sedan at a dealership close to home. "I think it's my last chance to get my hands on an unused one," said Mr. Mahmouds.

Dealers sold about 3,100 new diesel cars in April—their first month back on the market—leaving fewer than 9,000 in stock, a Volkswagen of America spokeswoman said. A flood of used TDI cars should begin popping up in coming months as VW processes hundreds of thousands of buybacks that are offered under a $10 billion civil settlement in the wake of the scandal.

Volkswagen executives told reporters in Wolfsburg, Germany, on Friday that technical fixes will likely be completed for most of the affected vehicles in the U.S. by year's end.

HOLGER HOLLEMANN/ZUMA PRESS

Volkswagen officials at the company's annual news conference in Wolfsburg, Germany, on Friday.

The German auto giant has indicated it may not return to the U.S. with diesel passenger cars, which never caught on with American drivers the way they did in Europe.

General Motors Co. and Volkswagen's German rivals are among companies still offering diesel passenger-car options in their lineups. Diesel engines account for less than 1% of total car sales in the U.S.

Volkswagen was the leader in the segment until it admitted in 2015 that it equipped about 480,000 TDI Golfs, Jettas, Beetles and other cars with so-called defeat devices that misrepresented the level of pollutants being spewed by the cars. Before the scandal broke diesel accounted for roughly a fourth of VW's U.S. sales, and the brand had pegged its U.S. expansion strategy to the TDI engines for more than a decade.

Volkswagen remains committed to diesel in Europe and other markets. But the U.S. withdrawal leaves behind a loyal following of TDI enthusiasts who are hooked on the combination of fuel economy, durability and peppy torque produced by a diesel in a small car. TDI stands for turbocharged direct injection.

Matt Enders typically gets 50 miles a gallon in his 2011 diesel Jetta commuting to his job in operations for a ski-apparel company in Seattle. Because TDI sales were frozen, he considered replacing his Jetta with a gasoline-powered VW.

"We were bummed about the idea of getting into a 'gasser' and filling up the tank every 300 miles, instead of every 600," Mr. Enders said. He drove five hours to a dealership in Spokane, Wash., last week to pick up a new 2015 TDI Golf Sportwagen.

Most of VW's 650 U.S. dealerships have been storing dozens of the 2015 cars in off-site lots. Some of the cars Mr. Enders looked at showed signs of long exposure to the elements, including traces of moss on rubber sections and water spots on the paint finish.

VW has been compensating dealers for taking care of the stranded cars. Dealers were instructed to start them monthly and check fluid levels and battery charge. Preparing them for sale is a several-hours process that includes detailing and routine maintenance along with the software fix.

"We've been sure to feed and care for them every month," said Matthew Welch, general manager of Auburn Volkswagen outside Seattle. He has sold nearly all of the store's 20 remaining TDIs.

VW is offering significant discounts on the cars, some of which are now more than two years old. Buyers are offered $5,000 off the sticker price.

China Slaps Curbs On Anbang Life

By Chao Deng

BEIJING—China's insurance regulator clipped the wings of highflying **Anbang Insurance Group** Co., barring the firm's life insurance subsidiary from selling two investment products and seeking approval to sell new ones for three months.

The **China Insurance Regulatory Commission** said Friday that **Anbang Life Insurance Group** Co. marketed rule-bending investment products.

The regulator also said the firm disguised a two-year investment product as long-term insurance and didn't get a necessary signoff from an actuary for another product.

The product that dodged regulations "disrupted order in the market," and "there has been a violation" of rules on how the firm designs its products, the commission said.

Aside from banning further sales of those products, the regulator effectively kept the unit from generating additional business with the three-month ban on new product applications, a restriction that went into effect Thursday.

An Anbang spokesman said the life insurer would post a statement on its website and declined further comment.

Friday's announcement is the latest move by regulators to rein in an insurance sector that has expanded rapidly by offering high-yielding investment products. Anbang, known for buying the Waldorf Astoria hotel in New York, has been in authorities' crosshairs for months, as Beijing becomes worried that aggressive deal making may add to risks in the financial system.

Anbang's success in selling an array of high-yielding products has enabled the firm to amass large stakes in publicly listed firms at home and assets overseas. More than half of the life-insurance subsidiary's 1.45 trillion yuan ($210 billion) in total assets last year was overseas, according to the firm.

Since late last year, China's securities regulator has criticized unnamed insurers for acting like corporate raiders, a swipe some analysts took as directed at Anbang, among others.

The insurance commission followed up by tightening rules on how much insurers may invest in stocks and stepping up calls for insurers to go back to the basics of providing protection for citizens.

Meanwhile, Anbang's overseas deal making has hit roadblocks.

A government clampdown on money flowing offshore has made it difficult for companies to complete overseas deals. Anbang's complicated ownership structure, with multiple layers of holding companies, has drawn scrutiny from foreign regulators.

The Chinese regulator says Anbang marketed rule-bending investment products.

A proposed deal to buy U.S. life insurer Fidelity & Guaranty Life was called off last month, coming apart after Anbang balked earlier in the year at providing detailed information about its ownership structure to New York state regulators, according to people familiar with the matter. Talks of a deal with the family real-estate firm of Jared Kushner, President Donald Trump's son-in-law, to buy a New York skyscraper also ended earlier this year.

In the past week, Anbang has been fighting with Caixin Media, a Chinese financial publication.

A Caixin article questioned Anbang's shareholder structure and rapid expansion. Anbang, in response, threatened to sue Caixin and its editor in chief, accusing the magazine of publishing false statements about its chairman, Wu Xiaohui, and smearing the company's reputation. Caixin said it stands by its coverage.

The public spat, unusual in China, has been taken by Chinese market watchers as a sign that Anbang is falling out of favor with the government.

Verizon Bows to Reality on Its Credit Rating

By Drew FitzGerald And Thomas Gryta

Verizon Communications Inc. warned it won't be able to boost its credit rating as quickly as promised after a major debt-ratings firm gave it less room for error in a sagging wireless industry.

In a research note Wednesday, **S&P Ratings Services** noted that Verizon is exposed to the mature and highly competitive U.S. wireless business, the source of 70% of its revenue. As a result, S&P raised the debt standard that Verizon needs to meet to improve its credit rating from triple-B-plus.

"We like the long-term potential for the wireless industry but the near term is very competitive," said Allyn Arden, S&P's primary analyst for Verizon. "For AT&T and Verizon, it is going to be hard for them to differentiate on their network alone."

Verizon has long promised investors it would return its debt ratings to their level before its $130 billion purchase of **Vodafone** PLC's minority stake in its wireless business.

The massive Vodafone deal was a major bet on the U.S. wireless market for Verizon, just two years after rival AT&T Inc. was blocked from pursuing a similar course with its bid for T-Mobile US Inc. AT&T shifted direction and bought satellite broadcaster DirecTV in 2015, and is continuing down that path of diversifying with its pact in October to acquire media company Time Warner Inc. for $85 billion. AT&T gets about 45% of its revenue from wireless service.

In a securities filing Friday, Verizon said given S&P's change of view "we no longer expect to be able to achieve an upgrade to our pre-Vodafone credit rating" by 2018 or 2019. The company declined to comment further. The comments could add to investor pressure on Verizon to make a big acquisition that eases its dependence on the cellphone business, analysts said. Verizon shares gained 1.8% on Friday to $46.69, but are still down 13% year to date.

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BIGGEST 1,000 STOCKS

How to Read the Stock Tables

The following explanations apply to NYSE, NYSE Arca, NYSE MKT and Nasdaq Stock Market listed securities. Prices are composite quotations that include primary market trades as well as trades reported by Nasdaq OMX BXSM (formerly Boston), Chicago Stock Exchange, CBOE, National Stock Exchange, ISE and BATS.
The list comprises the 1,000 largest companies based on market capitalization.
Underlined quotations are those stocks with large changes in volume compared with the issue's average trading volume.
Boldfaced quotations highlight those issues whose price changed by 5% or more if their previous closing price was $2 or higher.

Footnotes:
i-New 52-week high.
l-New 52-week low.
dd-Indicates loss in the most recent four quarters.
FD-First day of trading.
h-Does not meet continued listing standards
lf-Late filing
q-Temporary exemption from Nasdaq requirements.
t-NYSE bankruptcy
v-Trading halted on primary market.
vj-In bankruptcy or receivership or being reorganized under the Bankruptcy Code, or securities assumed by such companies.

Wall Street Journal stock tables reflect composite regular trading as of 4 p.m. and changes in the closing prices from 4 p.m. the previous day.

Friday, May 5, 2017

NYSE

YTD %Chg	52-Week Hi	52-Week Lo	Stock	Sym	Yld %	PE	Last	Net Chg
i18.22	24.92	18.72	ABB	ABB	3.0	24	24.91	0.12
-2.58	13.32	10.49	AES	AES	4.2	dd	11.32	0.23
6.82	76.88	66.50	Aflac	AFL	2.3	12	74.35	-0.04
-9.33	43.89	36.10	AT&T	T	5.1	19	38.56	0.55
0.46	71.06	51.33	AXIS Capital	AXS	2.3	14	65.57	-0.08
16.22	45.84	36.76	AbbottLabs	ABT	2.4	46	44.64	0.05
6.98	68.12	55.06	AbbVie	ABBV	3.8	17	66.99	-0.24
3.75	126.53	108.66	Accenture	ACN	2.0	20	121.52	0.70
-19.78	280.89	169.53	AcuityBrands	AYI	0.3	27	185.20	5.39
21.13	76.09	39.66	Adient	ADNT	1.5	dd	70.98	0.92
-14.27	177.83	132.98	AdvanceAuto	AAP	0.2	23	144.98	0.17
22.02	6.64	4.39	AdvSemiEngg	ASX	4.1	17	6.15	0.01
-2.35	5.84	3.36	Aegon	AEG	5.1	23	5.40	0.10
8.12	49.66	31.45	AerCap	AER	...	9	44.99	-1.12
i13.52	140.85	104.59	Aetna	AET	1.4	44	140.77	0.68
6.48	177.76	130.48	AffiliatedMgrs	AMG	0.5	18	154.71	-0.72
i24.32	56.96	40.72	AgilentTechs	A	0.9	36	56.64	-0.06
11.12	60.10	35.05	AgnicoEagle	AEM	0.9	39	46.67	1.32
-9.00	111.88	83.15	Agrium	AGU	3.8	17	91.50	1.10
2.36	150.45	124.02	AirProducts	APD	2.6	23	147.22	2.46
-3.93	101.43	54.51	AlaskaAir	ALK	1.4	14	85.24	-0.19
27.80	112.73	66.67	Albemarle	ALB	1.2	25	110.01	1.30
13.32	39.78	20	Alcoa	AA	...	dd	31.82	0.78
3.33	120.96	92.47	AlexandriaRealEst	ARE	2.9	dd	114.83	0.55
32.15	118.69	73.30	Alibaba	BABA	...	52	116.04	0.18
-2.77	667.19	510.17	Alleghany	Y	...	20	591.29	-22.26
21.09	82	61.47	Allegion	ALLE	0.8	31	77.50	0.15
16.63	261.27	184.50	Allergan	AGN	...	7	244.94	-0.31
11.81	266.25	185.02	AllianceData	ADS	0.8	34	255.49	1.81
-10.87	25.12	20.40	AllianceBernstein	AB	8.8	10	20.90	0.30
5.73	40.99	34.88	AlliantEnergy	LNT	3.1	24	40.06	0.19
14.22	40.02	26.36	AllisonTransm	ALSN	1.6	25	38.48	0.15
15.29	86.03	65.27	Allstate	ALL	1.7	14	85.45	-0.12
3.63	23.62	14.84	AllyFinancial	ALLY	1.6	9	19.71	0.14
4.88	76.55	60.82	Altria	MO	3.4	10	70.92	0.61
11.85	13.85	7.22	AlumofChina	ACH	...	60	11.42	-0.13
20.57	6.34	4.70	Ambev	ABEV	...	25	5.92	-0.02
4.42	56.57	46.30	Ameren	AEE	3.2	20	54.78	-0.03
22.91	15.69	11.02	AmericaMovil	AMX	1.7	25	15.45	0.28
23.82	15.66	10.83	AmericaMovil A	AMOV	1.8	24	15.23	0.16
-5.97	54.56	44.65	AmCampus	ACC	3.8	72	46.80	0.19
8.66	71.32	57.89	AEP	AEP	3.4	48	68.41	0.39
5.72	82	57.15	AmericanExpress	AXP	1.6	14	78.32	-0.01
i12.90	100.58	69.06	AmericanFin	AFG	1.3	13	99.49	-0.91
6.15	23.98	16.15	AmerHomes4Rent	AMH	0.9	dd	22.27	-0.42
-3.98	67.47	48.41	AIG	AIG	2.0	dd	62.71	0.04
i21.77	128.84	99.72	AmerTowerREIT	AMT	1.9	62	128.69	1.30
5.93	85.24	69.41	AmerWaterWorks	AWK	2.2	28	76.65	0.97
-5.15	50.11	40.81	Amerigas	APU	8.4	89	45.45	0.25
16.12	135.20	84.92	Ameriprise	AMP	2.6	16	128.82	0.72
9.85	94.50	68.38	AmerisourceBrgn	ABC	1.7	17	85.89	-0.64
23.85	60.69	43.28	Ametek	AME	0.6	27	60.19	-0.20
7.34	73.75	54.94	Amphenol	APH	0.9	26	72.13	0.29
-24.58	73.33	44.81	AnadarkoPetrol	APC	0.4	dd	52.59	0.65
14.36	136.08	98.28	AB InBev	BUD	3.5	171	120.58	1.11
15.75	12.06	9.83	AnnalyCap	NLY	10.4	4	11.54	0.07
8.58	35.74	22.86	AnteroMidstream	AM	3.6	27	33.53	0.75
-10.15	30.50	20.16	AnteroResources	AR	...	dd	21.25	0.85
25.41	184.45	114.85	Anthem	ANTM	1.4	17	180.30	0.41
i9.63	122.39	100.55	Aon	AON	1.2	24	122.27	1.07
-22.34	69	46.09	Apache	APA	2.0	dd	49.29	1.39
-3.28	47.91	39.14	ApartmtInv	AIV	3.3	385	43.96	0.79
36.62	27.78	14.25	ApolloGlobalMgmt	APO	7.4	9	26.45	0.29
7.06	35.83	28.03	AquaAmerica	WTR	2.4	25	32.16	0.43
2.80	38.30	31.38	Aramark	ARMK	1.1	29	36.72	0.27
8.49	9.37	4.18	ArcelorMittal	MT	2.5	16	7.92	0.34
-7.05	47.88	37	ArcherDaniels	ADM	3.0	18	42.43	0.03
47.25	30.69	16.75	Arconic	ARNC	0.9	...	27.30	0.68
i49.55	144.94	60.51	AristaNetworks	ANET	...	58	144.72	4.52
l7.35	77.16	58.52	ArrowElec	ARW	...	13	76.54	1.29
12.96	128.19	105.50	AshlandGlobal	ASH	0.6	dd	123.45	1.76
11.91	106.02	78.50	Assurant	AIZ	2.0	13	103.92	-0.55
11.49	35.04	25.55	AstraZeneca	AZN	...	25	30.46	-0.17
11.48	55	43.25	Athene	ATH	...	13	53.50	0.46
i10.82	82.37	68.51	AtmosEnergy	ATO	2.2	23	82.17	0.79
-8.24	126.31	93.31	Autoliv	ALV	2.3	16	103.83	0.89
-10.70	819.54	680	AutoZone	AZO	...	17	705.31	0.73
i8.81	192.89	158.32	Avalonbay	AVB	2.9	26	192.75	1.72
16.47	46.74	35.42	Avangrid	AGR	3.9	22	44.12	0.53
i19.87	84.28	68.55	AveryDennison	AVY	2.1	22	84.17	0.47
14.74	33.06	24.27	AxaltaCoating	AXTA	...	116	31.21	0.15
-7.00	49.88	32.85	BB&T	BBT	2.7	17	43.73	-0.33
5.23	49.03	41.83	BCE	BCE	4.7	18	45.50	0.69
-3.61	41.79	25.75	BHPBilliton	BHP	4.6	37	34.49	0.67
-5.15	37.44	22.37	BHPBilliton	BBL	5.4	32	29.84	0.72
-5.56	38.68	30.66	BP	BP	6.8	59	35.30	0.98
-10.57	18.12	10.60	BRF	BRFS	...	dd	13.20	0.25
-11.64	33.50	19.14	BT Group	BT	3.0	13	20.35	0.39
-8.68	68.59	41.74	BakerHughes	BHI	1.1	dd	59.33	1.92
6.62	82.24	67.51	Ball	BLL	0.5	29	80.04	-0.45
i28.51	8.70	5.14	BancoBilbaoViz	BBVA	6.5	13	8.70	0.26
5.52	76.22	58.40	BancodeChile	BCH	3.5	14	74.34	0.99
10.15	25.55	17.83	BcoSantChile	BSAC	4.3	15	24.09	0.06
i34.94	6.99	3.60	BancoSantander	SAN	3.4	15	6.99	0.24
10.36	42.58	31.77	BanColombia	CIB	3.2	10	40.48	0.69
7.42	25.80	12.05	BankofAmerica	BAC	1.3	15	23.74	-0.11
-1.92	78	60.93	BankofMontreal	BMO	3.8	9	70.54	1.17
0.57	49.54	35.72	BankNY Mellon	BK	1.6	15	47.65	0.04
0.92	62.89	47.29	BkNovaScotia	BNS	4.1	13	56.19	1.54
-2.73	12.05	6.76	Barclays	BCS	3.7	22	10.70	-0.19
37.12	308.41	203.63	Bard CR	BCR	0.3	39	308.05	1.45
1.06	23.47	13.80	BarrickGold	ABX	0.7	13	16.15	0.15
26.18	56.50	42.22	BaxterIntl	BAX	1.1	17	55.95	-0.01
11.99	187.63	161.29	BectonDickinson	BDX	1.6	31	185.40	0.54
1.49	73.17	54.56	Berkley	WRB	0.8	14	67.50	-0.12
2.41	266445	205074	BerkHathwy A	BRK/A	...	17	250000	460.00
2.19	177.86	136.65	BerkHathwy B	BRK/B	...	17	166.55	0.21
14.65	56.43	34.98	BerryGlobal	BERY	...	24	55.87	0.16
20.97	52.67	28.76	BestBuy	BBY	2.6	13	51.62	0.75
i19.67	224.24	135.94	Bio-RadLab A	BIO	...	232	218.14	-2.63
10.85	42.20	31.81	BlackKnightFin	BKFS	...	62	41.90	0.10
0.85	399.46	317.60	BlackRock	BLK	2.6	19	383.76	0.45
12.02	31.69	22.45	BlackstoneGroup	BX	11.5	15	30.28	0.02
3.69	18.95	15.56	BoardwalkPipe	BWP	2.2	14	18	0.48
18.84	185.71	122.35	Boeing	BA	3.1	23	185.01	1.94
-0.64	38.54	27.12	BoozAllen	BAH	1.9	21	35.84	-0.01
5.81	44.24	27.52	BorgWarner	BWA	1.3	64	41.73	0.40
-1.49	144.02	113.69	BostonProperties	BXP	2.4	46	123.90	0.53
22.56	26.60	19.67	BostonScientific	BSX	...	83	26.51	0.16
1.27	23.15	10.82	Braskem	BAK	3.6	13	21.48	0.35
-5.63	77.12	46.01	Bristol-Myers	BMY	2.8	19	55.15	-0.04
-20.80	29.14	18.55	BrixmorProp	BRX	5.4	21	19.34	0.06
3.94	71.74	58.66	BroadridgeFinl	BR	1.9	28	68.91	-0.26
i14.33	37.89	31.66	BrookfieldMgt	BAM	1.5	19	37.74	0.40
19.75	40.31	27.79	BrookfieldInfr	BIP	4.3	43	40.08	1.17
-3.97	45.77	34.27	Brown&Brown	BRO	1.3	23	43.08	0.07
7.03	55.31	45.17	Brown-Forman A	BF/A	1.5	19	49.50	0.62
9.11	51.55	43.72	Brown-Forman B	BF/B	1.5	19	49.01	0.61
0.26	75.10	61.37	BuckeyePtrs	BPL	7.5	16	66.33	0.37
-3.75	82.66	56.69	Bunge	BG	2.4	19	69.53	-0.26
i19.81	101.63	51.19	BurlingtonStores	BURL	...	34	101.54	1.68
36.80	23.50	11	CBD Pao	CBD	0.1	dd	22.64	0.23
i16.77	36.78	24.11	CBRE Group	CBG	...	20	36.77	0.92
2.07	71.07	49.92	CBS A	CBS/A	1.1	59	66.16	1.39
2.48	70.09	48.88	CBS B	CBS	1.1	58	65.20	1.35
-9.72	37.17	20.77	CF Industries	CF	4.2	dd	28.42	1.35
0.46	50.58	40.88	CGI Group	GIB	...	14	48.25	0.37
9.28	47.40	28.33	CIT Group	CIT	1.3	dd	46.64	0.14
9.18	46.25	38.78	CMS Energy	CMS	2.9	22	45.44	0.31
9.90	46.44	29.38	CNA Fin	CNA	2.2	12	45.61	0.41
-7.37	138.36	112.32	CNOOC	CEO	5.2	1699	114.82	2.03
5.97	16.75	10.02	CPFLEnergia	CPL	1.7	32	16.32	0.08
i9.83	38.04	25.82	CRH	CRH	2.6	23	37.76	0.31
2.72	106.67	69.30	CVS Health	CVS	2.5	17	81.06	-0.07
3.47	26.74	20.02	CabotOil	COG	0.8	dd	24.17	0.69
i13.96	15.94	11.69	CAE	CAE	1.5	18	15.92	0.30
-2.03	90.91	75.36	CamdenProperty	CPT	3.6	17	82.36	0.61
-5.08	67.89	52.59	CampbellSoup	CPB	2.4	36	57.40	0.16
-2.49	92.22	72.62	CIBC	CM	4.9	7	79.57	1.50
10.74	76.10	55.73	CanNtlRlwy	CNI	1.6	21	74.64	1.12
-2.79	35.28	26.72	CanNaturalRes	CNQ	2.6	dd	30.99	0.88
8.49	157.34	119.50	CanPacRlwy	CP	1.0	15	154.89	2.22
i19.94	33.75	27.18	Canon	CAJ	4.2	23	33.75	0.26
-5.70	96.92	58.02	CapitalOne	COF	1.9	13	82.27	-0.22
0.69	85.52	62.70	CardinalHealth	CAH	2.6	17	72.47	-0.27
-6.11	116.40	98.22	Carlisle	CSL	1.4	28	103.55	1.53
-7.27	69.11	45.06	CarMax	KMX	...	18	59.71	1.00
21.05	63.41	42.94	Carnival	CCL	2.5	16	63.02	0.05
i22.90	63.21	43.45	Carnival	CUK	2.5	16	62.91	0.14
7.44	105.98	69.03	Caterpillar	CAT	3.1	dd	99.64	0.25
9.73	93.06	60.59	Celanese A	CE	2.1	15	86.40	1.09
14.36	9.25	5.28	Cemex	CX	...	13	8.83	0.23
1.19	10.13	7.43	Cencosud	CNCO	3.2	14	8.50	0.06
l-37.48	16.82	9.18	CenovusEnergy	CVE	1.6	dd	9.46	0.25
36.05	77.60	50	Centene	CNC	...	24	76.88	1.01
13.84	28.86	21.25	CenterPointEner	CNP	3.8	28	28.05	0.07
-25.22	7.70	1.70	CentraisElBras	EBR	...	7	5.13	-0.05
-0.76	33.45	22.33	CenturyLink	CTL	9.2	23	23.60	-0.14
86.69	42.63	5.82	Chemours	CC	0.3	76	41.24	1.34
-10.12	119	97.53	Chevron	CVX	4.1	69	105.79	0.98
20.27	30.90	21.38	ChinaEastrnAir	CEA	...	11	26.88	-0.04
15.15	16.27	10.07	ChinaLifeIns	LFC	2.2	28	14.82	-0.14
4.10	63.89	51.73	ChinaMobile	CHL	2.9	13	54.58	1.05
10.69	84.88	64.61	ChinaPetrol	SNP	6.3	11	78.61	-0.21
31.16	36.95	25.60	ChinaSoAirlines	ZNH	1.8	11	33.72	-0.24
4.14	53.87	42.29	ChinaTelecom	CHA	2.8	15	48.04	0.38
12.81	14.48	9.89	ChinaUnicom	CHU	2.0	203	13.03	0.11
25.97	497.48	352.96	Chipotle	CMG	...	144	475.30	2.90
4.26	140.56	120.95	Chubb	CB	2.0	14	137.75	-0.55
8.56	38.47	31.28	ChunghwaTelecom	CHT	5.1	22	34.25	0.07
14.91	53.68	42.55	Church&Dwight	CHD	1.5	28	50.78	-0.07
i20.14	161.57	115.03	Cigna	CI	0.0	22	160.25	3.52
-11.48	146.96	106.85	CimarexEnergy	XEC	0.3	dd	120.30	4.47
1.36	62.53	38.31	Citigroup	C	1.1	12	60.24	0.03
3.76	39.75	18.34	CitizensFin	CFG	1.5	19	36.97	-0.37
10.72	140.47	111.24	Clorox	CLX	2.4	26	132.89	0.53
21.82	43.83	34.07	Coach	COH	3.2	23	42.66	0.10
5.38	46.01	39.88	Coca-Cola	KO	3.4	31	43.69	0.03
26.56	54.37	30.55	Coca-Cola Euro	CCE	2.2	29	39.74	0.59
16.01	84	59.44	Coca-Cola Femsa	KOF	2.4	22	73.71	1.35
9.73	75.38	63.43	Colgate-Palmolive	CL	2.2	26	71.81	-0.14
-11.86	16.09	9.70	ColonyNorthStar	CLNS	7.3	35	13.15	0.28
5.12	75	36.82	Comerica	CMA	1.5	21	71.60	-0.34
8.53	11.22	7.01	SABESP	SBS	0.7	7	9.42	0.07
-4.58	41.68	33.08	ConagraBrands	CAG	2.1	27	37.74	0.04
-2.29	147.55	111.93	ConchoRscs	CXO	...	119	129.57	2.46
-6.72	53.17	38.80	ConocoPhillips	COP	2.3	dd	46.77	0.85
8.32	81.88	68.76	ConEd	ED	3.5	19	79.81	0.93
i16.44	178.66	144	ConstBrands A	STZ	1.2	26	178.51	1.31
i15.62	177.13	147.95	ConstBrands B	STZ/B	1.1	26	177.13	5.44
-19.79	60.30	37.98	ContinentalRscs	CLR	...	dd	41.34	1.34
i17.60	206.67	152.09	Cooper	COO	0.0	34	205.71	0.82
19.12	29.18	18.23	Corning	GLW	2.1	8	28.91	0.07
-1.31	30.13	16.95	Coty	COTY	2.8	dd	18.07	-0.26
-0.33	173.79	133.66	Credicorp	BAP	2.4	12	157.34	0.28
10.20	16.17	10.01	CreditSuisse	CS	4.5	dd	15.77	0.30
-29.29	**18.95**	**9.02**	**CrescentPoint**	**CPG**	**2.8**	**dd**	**9.61**	**0.49**
-3.72	28.30	16.15	CrestwoodEquity	CEQP	9.8	dd	24.60	0.50
10.55	102.82	79.38	CrownCastle	CCI	4.0	82	95.92	1.14
8.03	57.49	48.04	CrownHoldings	CCK	...	15	56.79	-0.02
4.67	97.56	57.94	Cullen/Frost	CFR	2.5	19	92.35	-0.27
13.76	163.36	105.33	Cummins	CMI	2.6	18	155.48	-0.56
6.12	105.81	86.81	DTE Energy	DTE	3.2	18	104.54	0.35
13.23	78.60	64.06	DXC Tech	DXC	...	dd	78.39	0.83
7.73	88.01	72.59	Danaher	DHR	0.7	26	83.86	-0.22
20.09	87.63	59.50	Darden	DRI	2.6	22	87.33	...
1.95	78.77	54.50	DaVita	DVA	...	11	65.45	0.21
9.77	114.13	76.73	Deere	DE	2.1	24	113.11	1.08
22.41	67.80	42.02	DellTechnologies	DVMT	...	dd	67.29	0.97
30.22	89.58	58.04	DelphiAutomotive	DLPH	1.3	21	87.70	-0.36
-1.00	52.76	32.60	DeltaAir	DAL	1.7	9	48.70	0.06
i19.74	19.36	9.99	DeutscheBank	DB	1.0	dd	19.35	0.57
-16.75	50.69	29.60	DevonEnergy	DVN	0.6	69	38.02	1.04
i15.02	119.55	99.46	Diageo	DEO	2.0	24	119.55	0.50
-3.77	62.88	37.96	Dick's	DKS	1.3	20	51.10	0.34
15.83	115.47	85.63	DigitalRealty	DLR	3.3	49	113.81	1.94
-16.35	74.33	50.32	DiscoverFinSvcs	DFS	2.0	10	60.30	-0.25
7.46	116.10	90.31	Disney	DIS	1.4	20	111.99	0.82
14.38	55.02	44.06	DolbyLab	DLB	1.1	28	51.69	0.19
-0.61	96.88	66.50	DollarGeneral	DG	1.4	17	73.62	0.25
2.14	79.36	68.71	DominionRscs	D	3.9	22	78.23	0.93
i21.28	193.53	117.60	Domino's	DPZ	1.0	41	193.12	2.73
11.91	47.68	31.52	Donaldson	DCI	1.5	29	47.09	0.61
5.22	40.79	31.95	DouglasEmmett	DEI	2.4	67	38.47	0.32
5.11	82.56	62.89	Dover	DOV	2.2	21	78.76	1.70
10.26	65.42	47.51	DowChemical	DOW	2.9	17	63.09	1.67
0.60	99.47	81.05	DrPepperSnap	DPS	2.5	20	91.21	...
-9.81	54.73	39.04	DrReddy'sLab	RDY	0.7	45	40.84	-0.09
10.54	82.37	61.12	DuPont	DD	1.9	30	81.14	2.35
6.91	87.31	72.34	DukeEnergy	DUK	4.1	27	82.98	0.39
4.93	28.99	22.47	DukeRealty	DRE	2.7	29	27.87	0.23
0.12	33.40	26.15	ENI	E	5.4	dd	32.28	1.00
-10.11	109.37	77.03	EOG Rscs	EOG	0.7	dd	90.88	2.28
-10.98	80.61	55.36	EQT	EQT	0.2	dd	58.22	1.97
-3.10	82.99	69.20	EQT Midstream	EQM	4.8	14	74.30	1.03
5.85	82.39	62.70	EastmanChem	EMN	2.6	13	79.61	1.50
14.56	79.31	54.30	Eaton	ETN	2.0	18	76.86	1.02
7.89	129.85	110.65	Ecolab	ECL	1.2	30	126.47	0.25
2.43	10.05	7.65	Ecopetrol	EC	...	37	9.27	0.30
10.71	81.33	67.44	EdisonInt	EIX	2.7	19	79.70	-0.08
18.01	121.75	81.12	EdwardsLife	EW	...	37	110.58	0.13
5.72	64.36	48.45	EmersonElectric	EMR	3.3	27	58.94	0.77
-28.49	26.36	16.95	EnbridgeEnPtrs	EEP	7.7	dd	18.22	0.50
-1.64	45.77	38.40	Enbridge	ENB	4.3	21	41.43	0.93
-6.64	**13.85**	**5.89**	**Encana**	**ECA**	**0.5**	**dd**	**10.96**	**0.56**
23.14	10.77	7.50	EnelAmericas	ENIA	3.5	18	10.11	0.05
19.12	6.17	4.25	EnelChile	ENIC	...	11	5.42	0.03
23.61	28.34	18.35	EnelGenChile	EOCC	8.1	9	24.03	0.25
-8.03	20.05	10.56	EnergyTrfrEquity	ETE	6.4	19	17.76	0.65
-5.45	31.49	21.52	EnergyTransfer	ETP	9.4	22	22.71	0.30
-6.35	19.89	12.89	EnLinkMidPtrs	ENLK	9.0	dd	17.25	0.30
5.29	82.08	66.71	Entergy	ETR	4.5	dd	77.36	0.80
-0.44	30.25	24.01	EnterpriseProd	EPD	6.2	22	26.92	0.52
-9.07	82.37	53.12	EnvisionHlthcr	EVHC	...	dd	57.55	-0.21
17.41	139.89	110.87	Equifax	EFX	1.1	31	138.81	1.95
13.84	83.19	65.87	EquityLife	ELS	2.4	41	82.08	0.30
1.76	73.05	58.28	EquityResdntl	EQR	3.1	46	65.49	1.08
i7.69	251.97	200.01	EssexProp	ESS	2.8	32	250.37	-0.12
21.40	95.86	75.30	EsteeLauder	EL	1.5	31	92.86	1.00
13.87	258.30	169.19	EverestRe	RE	2.0	10	246.42	-1.96
7.82	60.50	50.56	EversourceEner	ES	3.2	20	59.55	0.06
-3.24	37.70	29.82	Exelon	EXC	3.8	16	34.34	0.29
-4.98	94.81	68.09	ExtraSpaceSt	EXR	4.3	26	73.39	0.08
-9.13	95.55	80.30	ExxonMobil	XOM	3.8	34	82.02	0.38
29.58	75.93	41.80	FMC	FMC	0.9	269	73.29	2.56
0.39	183.64	147.83	FactSet	FDS	1.2	19	164.07	0.05
-6.57	171.08	126.02	FederalRealty	FRT	3.0	43	132.78	1.38
3.34	201.57	145	FedEx	FDX	0.8	27	192.42	1.23
24.67	11.65	5.45	FiatChrysler	FCAU	...	8	11.37	0.17
i22.32	41.78	31.64	FidelityNatlInfo	FNF	2.4	22	41.54	0.30
-1.09	14.50	10.55	FNFV Group	FNFV	...	8	13.55	-0.25
9.80	84.97	68.03	FidelityNtlInfo	FIS	1.4	42	83.05	-0.47
47.86	55.28	27.58	58.com	WUBA	...	dd	41.40	-0.17
12.76	16.67	9.90	FirstData	FDC	...	35	16	0.24
2.60	97.43	63.97	FirstRepBank	FRC	0.7	24	94.54	-0.16
-6.91	36.60	28.21	FirstEnergy	FE	5.0	dd	28.83	-0.04
-5.74	176.42	121.52	FleetCorTech	FLT	...	27	133.40	1.29
4.02	52.50	39.13	Flowserve	FLS	1.5	54	49.98	1.35
-8.26	58.37	44.05	Fluor	FLR	1.7	24	48.18	-2.42
17.37	100.57	73.45	FomentoEconMex	FMX	1.5	28	89.45	0.53
8.28	79.43	50.90	FootLocker	FL	1.6	16	76.76	0.63
-8.16

BIGGEST 1,000 STOCKS

Continued From Page B4

YTD %Chg	52-Week Hi	52-Week Lo	Stock	Sym	Yld %	PE	Last	Net Chg
10.79	26.94	21.17	NiSource	NI	2.9	23	24.53	0.25
-18.47	42.03	29.39	NobleEnergy	NBL	1.3	dd	31.03	0.42
▲28.48	6.19	4.04	Nokia	NOK	2.9	dd	6.18	0.15
4.58	6.80	3.33	NomuraHoldings	NMR	...	10	6.17	...
2.25	62.82	35.01	Nordstrom	JWN	3.0	24	49.01	-0.13
8.27	125	78.73	NorfolkSouthern	NSC	2.1	20	117.01	0.17
7.02	253.80	206.69	NorthropGrumman	NOC	1.4	19	248.91	3.16
6.84	83.58	66.93	Novartis	NVS	3.5	29	77.82	0.01
14.05	57.44	30.89	NovoNordisk	NVO	1.6	18	40.90	-0.73
1.60	68	44.81	Nucor	NUE	2.5	19	60.47	-0.62
-7.07	55.64	43.41	NuSTAREnergy	NS	9.5	39	46.28	0.96
2.51	37.41	29.55	OGE Energy	OGE	3.5	20	34.29	-0.04
-11.79	59.47	38.51	ONEOK	OKE	4.9	30	50.64	1.30
15.18	57.41	34.84	ONEOK Partners	OKS	6.4	22	49.54	1.18
-15.20	78.48	57.20	OccidentalPetrol	OXY	5.0	dd	60.40	2.38
-25.38	4.78	2.15	Och-Ziff	OZM	3.2	dd	2.47	...
6.63	21.19	16.51	OldRepublic	ORI	3.8	13	20.26	0.05
2.88	38.09	28.11	OmegaHealthcare	OHI	7.8	16	32.16	0.48
-1.67	89.66	75.61	Omnicom	OMC	2.6	17	83.69	0.76
18.54	46.99	37.62	Oracle	ORCL	1.7	22	45.58	0.11
8.98	17.78	13.98	Orange	ORAN	5.1	67	16.50	0.45
12.42	102.72	67.04	OrbitalATK	OA	1.3	20	98.63	0.34
0.21	82.58	61.38	Orix	IX	...	8	77.99	0.39
▲20.77	63.42	46.45	OwensCorning	OC	1.3	16	62.27	2.39
10.48	68.29	56.39	PG&E	PCG	2.9	18	67.14	0.18
30.60	46.13	25.50	PLDT	PHI	3.1	19	35.98	1.66
5.27	131.83	77.40	PNC Fin	PNC	1.8	16	123.12	-0.33
12.05	66.63	40.80	POSCO	PKX	...	16	58.88	0.76
16.67	113.49	89.64	PPG Ind	PPG	1.4	66	110.56	0.67
13.16	39.92	32.08	PPL	PPL	4.1	14	38.53	0.09
13.70	115.40	82.10	PVH	PVH	0.1	15	102.60	1.44
▲20.49	102.50	62.41	PackagingCpAm	PKG	2.5	21	102.20	1.68
-6.99	165.69	107.31	PaloAltoNtwks	PANW	...	dd	116.31	0.67
-12.47	33.40	25.40	ParkHotels	PK	6.6	...	26.17	0.13
13.71	166.60	99.10	ParkerHannifin	PH	1.7	23	159.20	-0.59
-11.21	**39.82**	**23.20**	**ParsleyEnergy**	**PE**	**...**	**dd**	**31.29**	**2.25**
-4.60	**13.20**	**7.04**	**Pearson**	**PSO**	**8.9**	**dd**	**9.53**	**1.12**
1.69	33.52	27.44	PembinaPipeline	PBA	4.8	32	31.85	0.99
18.48	66.99	53.80	Pentair	PNR	2.1	24	66.43	1.14
8.21	114.61	98.50	PepsiCo	PEP	2.8	24	113.22	0.26
▲18.12	61.98	45.35	PerkinElmer	PKI	0.5	29	61.60	1.11
-11.80	111	65.47	Perrigo	PRGO	0.9	dd	73.41	0.29
-7.87	81.80	63.43	PetroChina	PTR	1.6	31	67.90	0.09
-7.81	**12.55**	**5.45**	**PetroleoBrasil**	**PBR**	**...**	**dd**	**9.32**	**0.47**
1.14	11.77	4.29	PetroleoBrasilA	PBR/A	...	dd	8.91	0.40
3.08	37.39	29.83	Pfizer	PFE	3.8	28	33.48	0.03
22.69	115.63	86.78	PhilipMorris	PM	3.7	25	112.25	1.05
-8.17	88.87	73.67	Phillips66	PSX	3.5	29	75.39	1.11
8.55	61.65	41.47	PinnacleFoods	PF	2.0	33	58.02	-0.07
8.77	86.63	70.11	PinnacleWest	PNW	3.1	21	84.87	0.42
-5.81	199.83	146.08	PioneerNatRscs	PXD	0.0	dd	169.61	3.98
-12.08	33.95	21.80	PlainsAllAmPipe	PAA	7.7	69	28.39	0.99
-15.89	36.59	23.06	PlainsGP	PAGP	7.5	dd	29.17	1.12
4.26	99	70.14	PolarisIndustries	PII	2.7	34	85.90	2.42
-9.01	20.27	15.21	Potash	POT	2.4	26	16.46	0.21
▲10.49	129.53	106.31	Praxair	PX	2.4	24	129.48	3.16
11.20	65.67	38.03	PrincipalFin	PFG	2.9	14	64.34	-0.09
2.88	92	79.41	Procter&Gamble	PG	3.2	25	86.50	0.05
▲14.76	40.76	30.54	Progressive	PGR	1.7	20	40.74	0.37
3.54	55.93	45.69	Prologis	PLD	3.2	24	54.66	0.55
4.49	114.55	66.51	PrudentialFin	PRU	2.8	11	108.73	-0.40
▲14.93	45.73	29.14	Prudential	PUK	3.3	23	45.73	0.34
-0.16	46.81	39.28	PublicServiceEnt	PEG	3.9	42	43.81	0.33
-6.82	267.34	200.65	PublicStorage	PSA	3.8	30	208.25	0.62
21.55	24.43	17.58	PulteGroup	PHM	1.6	12	22.34	0.19
16.53	107.73	75.10	QuestDiag	DGX	1.7	22	107.09	-0.13
9.53	85.59	61.21	QuintilesIMS	Q	...	76	83.30	1.10
▲18.38	19.87	14.92	RELX	RENX	3.2	26	19.84	0.14
▲16.81	21	16.19	RELX	RELX	3.0	28	20.99	0.12
-2.25	56.40	46.25	RPM	RPM	2.3	35	52.62	0.29
-10.96	46.92	29.50	RSP Permian	RSPP	...	221	39.73	1.43
-9.09	114	75.62	RalphLauren	RL	2.4	47	82.11	1.77
-23.69	46.96	24.67	RangeResources	RRC	0.3	dd	26.22	0.75
9.72	81.92	46.30	RaymondJames	RJF	1.2	20	76	-0.41
▲12.26	159.43	127.01	Raytheon	RTN	2.0	21	159.41	1.53
-1.50	72.30	52.72	RealtyIncome	O	4.5	50	56.62	0.84
27.13	89.22	68.54	RedHat	RHT	...	64	88.61	0.72
-9.11	85.35	61.51	RegencyCtrs	REG	3.3	65	62.67	0.12
-0.56	16.03	7.80	RegionsFin	RF	2.0	16	14.28	0.01
0.83	132.79	90.26	ReinsuranceGrp	RGA	1.3	11	126.87	...
-5.26	88.58	65.10	RelianceSteel	RS	2.4	17	75.36	0.65
3.01	150.74	110.96	RenaissanceRe	RNR	0.9	13	140.32	-0.06
10.83	64.11	47	RepublicServices	RSG	2.0	34	63.23	0.13
11.83	73.46	55.92	ResMed	RMD	1.9	30	69.39	0.39
▲23.50	58.89	39.28	RestaurantBrands	QSR	1.3	31	58.86	1.94
▲15.58	64.92	43.38	ReynoldsAmer	RAI	3.1	28	64.77	0.27
1.14	47.11	26.95	RioTinto	RIO	6.5	16	38.90	0.83
-3.83	50.98	34.34	RobertHalf	RHI	2.0	18	46.91	0.10
16.36	165	107.17	Rockwell	ROK	1.9	26	156.39	1.49
12.18	107.57	78.54	RockwellCollins	COL	1.3	19	104.06	0.62
19.05	47.42	37.03	RogersComm B	RCI	3.1	26	45.93	0.76
▲18.41	40.14	26.58	Rollins	ROL	1.1	50	40	0.39
20.66	225.57	159.28	RoperTech	ROP	0.6	34	220.90	2.68
1.43	76.01	57.01	RoyalBkCanada	RY	3.9	10	68.68	1.25
27.49	7.60	3.91	RoyalBkScotland	RBS	...	dd	7.05	0.11
32.40	110.60	64.95	RoyalCaribbean	RCL	1.8	17	108.62	0.70
-0.28	56.39	46.57	RoyalDutchA	RDS/A	6.9	31	54.23	1.55
-3.26	59.56	48.18	RoyalDutchB	RDS/B	6.7	32	56.08	1.89
▲20.19	103.90	71.39	SAP	SAP	1.3	32	103.88	1.52
▲27.91	138.05	97.65	S&P Global	SPGI	1.2	16	137.55	0.94
3.20	64.80	42.64	SINOPECShanghai	SHI	6.5	6	55.86	0.23
11.87	26.07	19.31	SK Telecom	SKM	...	12	23.38	0.22
-1.90	120.63	93.90	SLGreenRealty	SLG	2.9	48	105.51	0.65
27.04	87.20	66.43	Salesforce.com	CRM	...	322	86.97	0.45
▲21.46	49.44	36.81	Sanofi	SNY	3.2	25	49.12	0.16
5.63	32.40	24.85	Sasol	SSL	2.5	19	30.20	0.51
-10.02	76.41	64.20	Scana	SCG	3.7	16	65.94	1.02
-14.27	87.84	70.22	Schlumberger	SLB	2.8	dd	71.97	1.03
1.67	43.65	23.82	SchwabC	SCHW	0.8	29	40.13	-0.03
-5.65	98.82	65.80	ScottsMiracleGro	SMG	2.2	39	90.15	1.23
0.99	50.62	42.01	SealedAir	SEE	1.4	19	45.79	0.61
-19.95	7.74	3.84	SemicondctrMfg	SMI	...	2	6.10	0.08
11.44	114.66	92.95	SempraEnergy	SRE	2.9	21	112.15	0.78
1.90	45.30	32.07	SensataTech	ST	...	25	39.69	0.18
13.49	33.20	24.90	ServiceCorp	SCI	1.6	21	32.23	0.18
▲31.92	98.19	63.51	ServiceNow	NOW	...	dd	98.07	2.05
6.28	21.84	18.09	ShawComm B	SJR	4.1	23	21.32	0.28
▲25.86	339.56	239.48	SherwinWilliams	SHW	1.0	27	338.24	-0.37
13.52	43.98	30.57	ShinhanFin	SHG	...	9	42.73	0.29
▲99.51	**85.82**	**24.96**	**Shopify**	**SHOP**	**...**	**dd**	**85.53**	**4.18**
0.83	31.35	16.94	SilverWheaton	SLW	1.4	33	19.48	0.55
-7.40	229.10	163.30	SimonProperty	SPG	4.3	29	164.52	-0.90
5.94	65.19	47.61	SixFlags	SIX	4.0	57	63.52	0.06
▲16.85	55.38	37.74	SmithAO	AOS	1.0	29	55.33	0.52
13.36	35.38	26.96	Smith&Nephew	SNN	2.2	21	34.10	0.99
-1.55	157.31	122.05	Smucker	SJM	2.4	22	126.08	0.48
-5.27	29.44	18.90	Snap	SNAP	...	dd	23.19	0.60
-0.48	181.73	145.17	SnapOn	SNA	1.7	18	170.45	0.69
19.90	37.24	19.46	SOQUIMICH	SQM	1.2	32	34.35	1.05
0.19	55.58	45.02	SonocoProducts	SON	3.0	19	52.80	-0.19
▲24.08	34.85	23.62	Sony	SNE	...	67	34.78	0.19
1.79	54.64	46.20	Southern	SO	4.6	20	50.07	0.28
5.48	39.50	24.90	SoCopper	SCCO	0.9	33	33.69	0.68
17.17	59.68	35.42	SouthwestAirlines	LUV	0.7	18	58.40	0.06
-1.64	49.45	40.19	SpectraEnerPtrs	SEP	6.2	16	45.09	0.66
5.98	146.09	111.40	SpectrumBrands	SPB	1.3	24	129.64	0.24
-7.57	62.90	41.27	SpiritAeroSys	SPR	0.7	15	53.93	-0.02
-4.51	9.65	3.39	Sprint	S	...	dd	8.04	0.10
45.12	20.42	8.42	Square	SQ	...	dd	19.78	-0.12
20.86	140.06	103.86	StanleyBlackDck	SWK	1.7	18	138.61	0.43
1.41	23.46	19.49	StarwoodProp	STWD	8.6	15	22.26	0.08
7.57	85.38	50.59	StateStreet	STT	1.8	16	83.60	-0.12
-5.70	**19.27**	**14.98**	**Statoil**	**STO**	**5.1**	**dd**	**17.20**	**0.86**
12.35	75.83	63.26	Steris	STE	1.5	46	75.71	0.46
▲47.14	16.70	5.24	STMicroelec	STM	1.4	65	16.70	0.48
13.48	136.79	106.48	Stryker	SYK	1.3	31	135.96	0.98
-1.57	8.30	5.43	SumitomoMits	SMFG	...	10	7.52	0.01
8.93	85.98	67.95	SunCommunities	SUI	3.2	199	83.45	0.57
-6.90	40.57	30.38	SunLifeFinancial	SLF	3.6	9	35.76	0.46
-4.56	33.79	25.31	SuncorEnergy	SU	3.0	34	31.20	0.86
5.45	61.69	37.71	SunTrustBanks	STI	1.8	16	57.84	-0.09
-21.12	38.05	23.25	SynchronyFin	SYF	1.8	11	28.61	-0.06
▲18.28	93.53	74.52	Syngenta	SYT	1.1	37	93.50	0.55
-0.11	57.07	47.15	Sysco	SYY	2.4	30	55.31	0.71
71.35	123.60	52.03	TAL Education	TAL	...	95	120.20	-1.15
8.91	79.69	54.54	TE Connectivity	TEL	2.0	13	75.45	-0.20
20.38	26.65	17.91	Tegna	TGNA	2.2	13	25.75	0.75
4.52	34.12	30.31	Telus	TU	4.4	16	33.29	0.58
34.83	16.81	9.15	TIM Part	TSU	0.6	33	15.91	0.18
4.74	83.64	71.50	TJX	TJX	1.6	23	78.69	-0.28
▲19.72	34.44	22.75	TaiwanSemi	TSM	2.7	17	34.42	0.28
-10.17	61.83	35.35	TargaResources	TRGP	7.2	dd	50.37	1.46
-20.64	80.51	52.72	Target	TGT	4.2	12	57.32	0.03
-4.83	44.79	27.95	TataMotors	TTM	0.0	18	32.73	-1.19
-10.13	37.09	24	TechnipFMC	FTI	...	...	31.93	0.91
-7.44	33.76	9.06	TeckRscsB	TECK	0.8	7	18.54	0.39
9.67	10	6.95	Telecomltalia	TI	2.7	...	9.75	0.31
9.33	8.20	5.61	Telecomltalia A	TI/A	3.7	...	7.97	0.32
24.32	211.22	136.53	Teleflex	TFX	0.7	42	200.34	-2.49
10.76	15.69	11.28	TelefonicaBras	VIV	...	21	14.82	0.43
▲26.41	11.64	8.15	Telefonica	TEF	6.2	23	11.63	0.16
11.52	34.65	25.86	TelekmIndonesia	TLK	2.3	18	32.52	...
-13.05	37.21	25.14	Tenaris	TS	1.7	123	31.05	0.87
40.16	36.59	18.07	Teradyne	TER	0.8	dd	35.60	0.02
-7.54	93.06	69.49	Tesoro	TSO	2.7	13	80.86	1.94
2.60	60.14	43	TesoroLogistics	TLLP	7.2	28	52.13	0.48
-14.10	56.44	30.21	TevaPharm	TEVA	4.4	194	31.14	0.27
-4.00	50.93	34	Textron	TXT	0.2	14	46.62	0.37
▲21.23	171.15	139.07	ThermoFisherSci	TMO	0.4	31	171.06	0.94
2.40	46	38.23	ThomsonReuters	TRI	3.1	22	44.83	0.68
▲11.66	199.90	163.17	3M	MMM	2.4	24	199.40	-0.11
19.45	97.29	56.98	Tiffany	TIF	1.9	26	92.49	1.49
1.91	100.60	68.97	TimeWarner	TWX	1.6	19	98.37	0.07
18.10	37.37	25.29	Toll Bros	TOL	0.9	17	36.61	0.14
4.16	79.53	57.16	Torchmark	TMK	0.8	17	76.83	0.12
▲19.16	66.75	40.43	Toro	TTC	1.0	31	66.67	0.56
-4.84	54.44	41.36	TorontoDomBk	TD	3.9	10	46.95	0.93
▲3.65	52.87	44.06	Total	TOT	4.9	17	52.83	1.34
17.19	58.84	46.22	TotalSystem	TSS	0.7	32	57.46	-0.08
-6.22	123.18	98.02	ToyotaMotor	TM	...	10	109.91	0.75
3.83	49.77	39.13	TransCanada	TRP	3.9	167	46.88	1.35
2.42	294.38	203.72	TransDigm	TDG	...	31	254.98	4.94
▲32.82	41.08	28.92	TransUnion	TRU	...	45	41.08	0.70
-0.91	125.49	103.45	Travelers	TRV	2.4	12	121.30	0.49
20.72	9.89	6.35	Turkcellletism	TKC	20.6	17	8.33	0.19
-18.58	3.80	2.56	TurquoiseHill	TRQ	...	19	2.63	0.06
14.66	25.25	13.72	Twitter	TWTR	...	dd	18.69	0.21
16.42	175.77	139.21	TylerTech	TYL	...	62	166.21	-0.22
2.68	77.05	55.72	TysonFoods	TSN	1.4	13	63.33	0.36
▲12.64	17.71	11.93	UBS Group	UBS	3.4	17	17.65	0.04
▲4.11	38	32.79	UDR	UDR	3.3	47	37.98	0.36
7.44	50.55	40.31	UGI	UGI	2.0	19	49.51	0.95
▲5.49	29	22.19	US Foods	USFD	...	31	28.99	0.48
12.05	24.50	18.38	UltraparPart	UGP	2.4	28	23.24	0.08
-29.12	44.68	18.40	UnderArmour A	UAA	...	52	20.59	0.17
-24.16	42.94	17.05	UnderArmour C	UA	...	49	19.09	0.28
28.76	52.99	38.41	Unilever	UN	2.9	26	52.87	-0.03
27.05	52.02	38.58	Unilever	UL	3.0	26	51.71	-0.07
6.79	115.15	80.68	UnionPacific	UNP	2.2	21	110.72	0.39
3.32	76.80	37.41	UnitedContinental	UAL	...	12	75.30	0.39
-6.29	120.44	100.05	UPS B	UPS	3.1	27	107.43	0.38
3.20	134.28	58.83	UnitedRentals	URI	...	16	108.96	1.60
0.78	56.61	38.48	US Bancorp	USB	2.2	16	51.77	-0.54
-34.90	41.83	12.77	US Steel	X	0.9	dd	21.49	0.21
▲10.70	121.45	96.89	UnitedTech	UTX	2.2	19	121.35	0.35
8.80	176.14	128.53	UnitedHealth	UNH	1.4	22	174.12	0.10
14.67	139.46	99.72	UniversalHealthB	UHS	0.3	17	121.99	-0.51
6.03	50.27	29.79	UnumGroup	UNM	1.7	11	46.58	-0.09
-7.21	11.09	7.44	VEREIT	VER	7.0	dd	7.85	0.18
2.10	65.51	48.05	VF	VFC	3.1	19	54.47	0.45
▲18.03	92.98	73.25	Visa	V	0.7	47	92.09	-0.53
▲24.88	202.04	124	VailResorts	MTN	2.1	46	201.44	2.07
7.22	11.70	3.85	Vale	VALE	6.9	9	8.17	0.22
-4.36	71.40	46.88	ValeroEnergy	VLO	4.3	13	65.34	0.97
8.56	112.69	97.62	Valspar	VAL	1.3	27	112.48	-0.02
7.09	66.24	50.52	Vantiv	VNTV	...	51	63.85	0.44
15.88	94.48	68.75	VarianMed	VAR	...	30	92.13	0.55
14.49	17.34	5.47	Vedanta	VEDL	15.4	dd	14.22	-0.04
33.64	54.78	26.53	VeevaSystems	VEEV	...	111	54.39	0.22
1.97	76.80	56.20	Ventas	VTR	4.9	39	63.75	1.10
-12.53	56.95	45.76	Verizon	VZ	4.9	16	46.69	0.81
-16.46	44.95	30.01	VermilionEnergy	VET	5.5	dd	35.23	1.07
25.16	17.41	10.21	Vipshop	VIPS	...	40	13.78	...
19.36	94.82	54.44	VMware	VMW	...	33	93.97	1.15
-8.31	111.72	86.35	VornadoRealty	VNO	3.0	18	95.70	0.69
-6.27	42.96	22.75	VoyaFinancial	VOYA	0.1	dd	36.76	0.28
2.07	138.18	105.71	VulcanMaterials	VMC	0.8	44	127.74	-0.60
11.96	121.17	84.48	WABCO	WBC	...	21	118.85	-1.34
5.03	66.10	53.66	WEC Energy	WEC	3.4	21	61.60	0.33
5.60	72.89	55.77	W.P.Carey	WPC	6.4	34	62.40	1.23
-0.02	89.18	65.54	Wabtec	WAB	0.5	25	83	0.94
▲10.68	76.60	62.72	Wal-Mart	WMT	2.7	17	76.50	0.16
18.21	93.81	65.44	WasteConnections	WCN	0.8	56	92.90	0.45
3.50	74.58	60.13	WasteMgt	WM	2.3	27	73.39	0.44
29.47	174.79	130.82	Waters	WAT	...	27	174	0.30
▲24.64	171.87	91.61	WellCareHealth	WCG	...	28	170.86	1.02
...	59.99	43.55	WellsFargo	WFC	2.8	14	55.11	-0.07
4.29	80.19	59.39	Welltower	HCN	5.0	39	69.80	0.81
▲13.82	96.87	69.79	WestPharmSvcs	WST	0.5	40	96.55	0.74
-6.80	57.50	50.35	WestarEnergy	WR	3.0	22	52.52	0.27
4.84	47.82	33.93	WesternGasEquity	WGP	4.4	28	44.40	0.41
-5.04	67.44	45.12	WesternGasPtrs	WES	6.3	35	55.80	0.64
-10.73	22.70	18.07	WesternUnion	WU	3.6	42	19.39	-0.01
10.97	68.08	39.48	WestlakeChem	WLK	1.2	20	62.13	1.57
8.77	27.05	20.32	WestpacBanking	WBK	5.3	16	25.54	0.30
8.37	56.32	35.77	WestRock	WRK	2.9	77	55.02	0.91
11.50	35.50	26.55	Weyerhaeuser	WY	3.7	24	33.55	0.45
1.85	194.10	145.91	Whirlpool	WHR	2.4	16	185.14	1.21
-2.86	32.69	18.55	Williams	WMB	4.0	dd	30.25	0.72
6.42	42.32	26.12	WilliamsPartners	WPZ	5.9	dd	40.47	1.37
2.79	12.47	9	Wipro	WIT	0.6	19	9.95	...
▲25.97	40.31	23.84	WooriBank	WF	3.2	9	40.31	0.57
38.99	93.35	65.79	Workday	WDAY	...	dd	91.86	1.21
25.80	102.44	62.60	Wyndham	WYN	2.4	16	96.07	0.44
26.32	54.70	22.23	XPO Logistics	XPO	...	65	54.52	1.87
10.69	45.44	38	XcelEnergy	XEL	3.2	20	45.05	0.13
22.96	7.69	5.72	Xerox	XRX	3.5	dd	7.07	0.14
5.61	54.99	41.25	Xylem	XYL	1.4	38	52.30	0.78
49.09	26.48	15	YPF	YPF	1.3	dd	24.60	...
▲9.43	69.40	56.32	YumBrands	YUM	1.7	18	69.30	0.32
29.52	35.57	23.79	YumChina	YUMC	...	...	33.83	-0.67
14.50	18.45	11.14	ZTO Express	ZTO	...	...	13.82	-0.02
3.04	35.65	26.10	ZayoGroup	ZAYO	...	dd	33.86	0.10
12.93	133.21	95.63	ZimmerBiomet	ZBH	0.8	48	116.54	-0.31
▲11.10	59.61	45.28	Zoetis	ZTS	0.7	35	59.47	0.60

NASDAQ

YTD %Chg	52-Week Hi	52-Week Lo	Stock	Sym	Yld %	PE	Last	Net Chg
11.36	21.42	17.30	AGNC Invt	AGNC	10.7	5	20.19	0.19
▲31.04	121.38	81.41	Ansys	ANSS	...	39	121.20	1.71
▲21.07	135.92	90.43	ASML	ASML	1.0	...	135.84	0.78
18.06	134.82	92.03	Abiomed	ABMD	...	115	133.03	2.22
▲49.07	54.75	35.12	ActivisionBliz	ATVI	0.6	122	53.83	0.73
30.98	135.70	90.35	AdobeSystems	ADBE	...	51	134.84	0.23
-21.82	71.64	47.80	AkamaiTech	AKAM	...	28	52.13	-0.73
5.29	157.02	109.12	AlexionPharm	ALXN	...	62	128.82	-1.33
43.59	145.24	73.85	AlignTech	ALGN	...	51	138.03	-3.86
7.39	62.50	36.71	Alkermes	ALKS	...	dd	59.69	-0.72
19.92	959.14	672.66	Alphabet A	GOOGL	...	32	950.28	-4.44
20.12	935.93	663.28	Alphabet C	GOOG	...	31	927.13	-4.53
24.57	954.40	656.01	Amazon.com	AMZN	...	176	934.15	-3.38
6.56	62.65	54.12	Amdocs	DOX	1.4	23	62.07	-0.11
-0.04	399.16	307.80	Amerco	UHAL	...	16	369.46	-6.69
-4.67	50.64	24.85	AmericanAirlines	AAL	0.9	11	44.51	0.60
12.04	184.21	133.64	Amgen	AMGN	2.8	16	163.81	-0.48
4.37	84.24	52.17	AnalogDevices	ADI	2.4	26	75.79	0.13
▲28.61	148.98	89.47	Apple	AAPL	1.7	17	148.96	2.43
▲29.63	41.89	19.46	AppliedMaterials	AMAT	1.0	21	41.83	0.21
12.67	99.11	67.50	ArchCapital	ACGL	...	17	97.22	0.03
▲52.87	37.01	20.51	Atlassian	TEAM	...	dd	36.81	0.28
25.98	93.99	49.82	Autodesk	ADSK	...	dd	93.24	-0.01
-3.40	105.67	84.36	ADP	ADP	2.3	26	99.29	0.19
1.41	86.78	56.08	BOK Fin	BOKF	2.1	20	84.21	0.03
8.28	197.80	155.28	Baidu	BIDU	...	38

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MARKETS DIGEST

EQUITIES

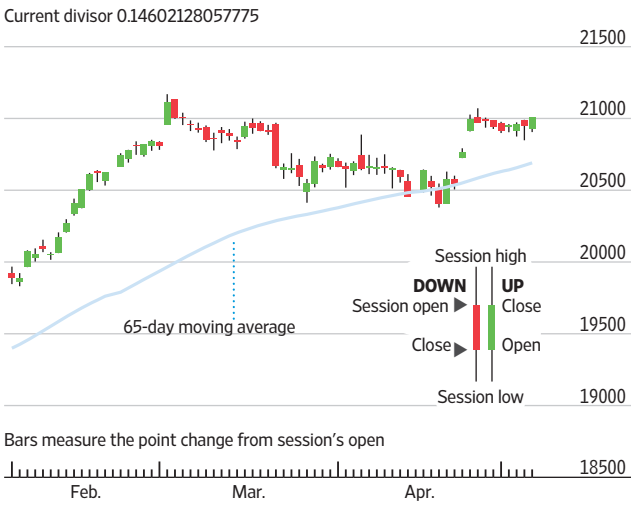
Dow Jones Industrial Average

21006.94 ▲55.47, or 0.26%

High, low, open and close for each trading day of the past three months.

	Last	Year ago
Trailing P/E ratio	20.51	19.01
P/E estimate *	17.78	16.91
Dividend yield	2.32	2.59
All-time high	21115.55, 03/01/17	

Current divisor 0.14602128057775



S&P 500 Index

2399.29 ▲9.77, or 0.41%

High, low, open and close for each trading day of the past three months.

	Last	Year ago
Trailing P/E ratio	23.76	23.66
P/E estimate *	18.44	17.59
Dividend yield	1.97	2.20
All-time high:	2399.29, 05/05/17	

Nasdaq Composite Index

6100.76 ▲25.42, or 0.42%

High, low, open and close for each trading day of the past three months.

	Last	Year ago
Trailing P/E ratio *	26.09	21.75
P/E estimate *	20.97	18.01
Dividend yield	1.08	1.30
All-time high:	6100.76, 05/05/17	

Weekly P/E data based on as-reported earnings from Birinyi Associates Inc.

Major U.S. Stock-Market Indexes

	Latest High	Low	Close	Net chg	% chg	52-Week High	Low	% chg	% chg YTD	3-yr. ann.
Dow Jones										
Industrial Average	21006.94	20905.00	**21006.94**	55.47	0.26	21115.55	17140.24	18.4	6.3	8.3
Transportation Avg	9190.76	9127.97	**9189.97**	51.84	0.57	9593.95	7093.40	18.7	1.6	6.2
Utility Average	705.26	700.81	**703.02**	4.05	0.58	720.45	625.44	6.6	6.6	8.7
Total Stock Market	24866.14	24745.40	**24865.61**	119.38	0.48	24868.78	20583.16	17.5	6.8	8.0
Barron's 400	641.15	635.99	**641.14**	3.70	0.58	643.82	491.89	25.0	6.6	7.7
Nasdaq Stock Market										
Nasdaq Composite	6100.76	6067.16	**6100.76**	25.42	0.42	6100.76	4594.44	28.8	13.3	13.8
Nasdaq 100	5646.09	5619.60	**5646.09**	19.78	0.35	5646.09	4201.05	30.4	16.1	16.1
Standard & Poor's										
500 Index	2399.29	2389.38	**2399.29**	9.77	0.41	2399.29	2000.54	16.6	7.2	8.4
MidCap 400	1738.56	1724.39	**1738.52**	14.34	0.83	1758.27	1416.66	19.7	4.7	8.5
SmallCap 600	849.00	842.22	**848.96**	3.97	0.47	863.08	670.90	23.4	1.3	9.3
Other Indexes										
Russell 2000	1397.21	1385.20	**1397.00**	8.15	0.59	1419.43	1089.65	25.3	2.9	7.4
NYSE Composite	11615.59	11552.36	**11615.59**	80.88	0.70	11661.22	9973.54	12.7	5.1	3.0
Value Line	524.00	519.59	**523.96**	4.37	0.84	529.13	435.06	15.7	3.5	2.6
NYSE Arca Biotech	3679.91	3625.35	**3651.12**	-24.50	-0.67	3675.62	2818.70	24.7	18.7	12.6
NYSE Arca Pharma	518.05	515.54	**517.80**	-0.18	-0.03	554.66	463.78	3.8	7.5	0.3
KBW Bank	93.14	92.25	**92.64**	-0.27	-0.29	99.33	60.27	38.5	0.9	10.8
PHLX§ Gold/Silver	80.94	78.64	**80.28**	2.03	2.59	112.86	73.03	-9.3	1.8	-4.7
PHLX§ Oil Service	151.85	146.11	**151.65**	5.50	3.77	192.66	146.14	-10.2	-17.5	-19.8
PHLX§ Semiconductor	1011.05	1001.68	**1011.03**	4.21	0.42	1023.29	630.77	58.6	11.5	20.6
CBOE Volatility	10.98	9.99	**10.57**	0.11	1.05	25.76	10.11	-28.2	-24.7	-7.3

§Philadelphia Stock Exchange

Sources: SIX Financial Information; WSJ Market Data Group

Late Trading

Most-active and biggest movers among NYSE, NYSE Arca, NYSE MKT and Nasdaq issues from 4 p.m. to 6 p.m. ET as reported by electronic trading services, securities dealers and regional exchanges. Minimum share price of $2 and minimum after-hours volume of 5,000 shares.

Most-active issues in late trading

Company	Symbol	Volume (000)	Last	Net chg	After Hours % chg	High	Low
SPDR S&P 500	SPY	10,266.8	239.97	0.27	0.11	240.05	238.73
Energy Transfer Equity	ETE	7,644.2	17.80	0.04	0.23	17.80	17.45
Sibanye Gold ADR	SBGL	5,899.3	7.70	0.11	1.45	7.70	7.59
PwrShrs QQQ Tr Series 1	QQQ	4,443.6	137.61	0.07	0.05	137.68	137.20
VanEck Vectors Jr Gold	GDXJ	3,451.2	30.34	0.07	0.23	30.40	30.27
Reynolds American	RAI	3,261.2	64.77	...	unch.	64.82	64.77
Yahoo!	YHOO	3,188.1	48.49	...	unch.	48.90	48.49
GGP	GGP	2,970.0	22.27	...	unch.	22.27	22.27

Percentage gainers...

DDR Corp	DDR	6.5	10.77	0.88	8.90	10.77	9.89
Zogenix	ZGNX	1,001.8	12.65	0.90	7.66	12.65	11.75
YRC Worldwide	YRCW	12.9	9.17	0.59	6.90	9.17	8.53
Ramco-Gershenson Prop	RPT	5.8	13.56	0.59	4.55	13.56	12.97
Arbor Realty Trust	ABR	12.0	8.98	0.35	4.06	8.98	8.61

...And losers

Superior Energy Svcs	SPN	212.1	10.75	-0.54	-4.75	11.29	10.75
Amer Midstream Partners	AMID	25.0	12.90	-0.45	-3.37	12.90	12.90
iShares MSCI Mexico Cap	EWW	7.5	49.95	-1.58	-3.07	51.60	49.95
Callon Petroleum	CPE	53.9	11.73	-0.35	-2.87	12.08	11.73
Diamond Offshore	DO	59.5	14.63	-0.34	-2.30	15.00	14.55

Trading Diary

Volume, Advancers, Decliners

	NYSE	NYSE MKT
Total volume*	827,300,198	10,821,523
Adv. volume*	648,516,618	7,247,706
Decl. volume*	164,302,651	3,343,434
Issues traded	3,103	328
Advances	2,151	191
Declines	822	120
Unchanged	130	17
New highs	183	4
New lows	28	7
Closing tick	19	11
Closing Arms†	0.69	0.62
Block trades*	6,889	140

	Nasdaq	NYSE Arca
Total volume*	1,870,016,002	245,471,180
Adv. volume*	1,264,307,683	216,240,371
Decl. volume*	573,266,115	28,046,095
Issues traded	2,995	1,333
Advances	1,647	1,049
Declines	1,184	257
Unchanged	164	27
New highs	183	233
New lows	75	28
Closing tick	78	144
Closing Arms†	0.63	0.64
Block trades*	8,435	1,305

* Primary market NYSE, NYSE MKT NYSE Arca only.
†(TRIN) A comparison of the number of advancing and declining issues with the volume of shares rising and falling. An Arms of less than 1 indicates buying demand; above 1 indicates selling pressure.

International Stock Indexes

Region/Country	Index	Close	Latest Net chg	% chg	YTD % chg
World	**The Global Dow**	**2754.32**	14.40	0.53	8.8
	The Global Dow Euro	**2360.38**	3.44	0.15	4.4
	DJ Global Index	**354.86**	1.62	0.46	8.8
World	**DJ Global ex U.S.**	**236.86**	1.02	0.43	10.7
Americas	**DJ Americas**	**576.84**	3.15	0.55	6.7
Brazil	**Sao Paulo Bovespa**	**65709.74**	847.13	1.31	9.1
Canada	**S&P/TSX Comp**	**15582.04**	185.34	1.20	1.9
Mexico	**IPC All-Share**	**49485.67**	487.56	1.00	8.4
Chile	**Santiago IPSA**	**3715.05**	-8.27	-0.22	15.3
Europe	**Stoxx Europe 600**	**394.54**	2.56	0.65	9.2
Euro zone	**Euro Stoxx**	**392.06**	3.30	0.85	11.9
Belgium	**Bel-20**	**4037.94**	34.28	0.86	12.0
France	**CAC 40**	**5432.40**	59.98	1.12	11.7
Germany	**DAX**	**12716.89**	69.11	0.55	10.8
Israel	**Tel Aviv**	**1409.95**	...	Closed	-4.1
Italy	**FTSE MIB**	**21483.86**	313.94	1.48	11.7
Netherlands	**AEX**	**533.27**	4.83	0.91	10.4
Spain	**IBEX 35**	**11135.40**	122.50	1.11	19.1
Sweden	**SX All Share**	**588.72**	1.32	0.22	10.1
Switzerland	**Swiss Market**	**9016.66**	36.64	0.41	9.7
U.K.	**FTSE 100**	**7297.43**	49.33	0.68	2.2
Asia-Pacific	**DJ Asia-Pacific TSM**	**1564.27**	-4.94	-0.31	9.9
Australia	**S&P/ASX 200**	**5836.60**	-39.80	-0.68	3.0
China	**Shanghai Composite**	**3103.04**	-24.33	-0.78	-0.02
Hong Kong	**Hang Seng**	**24476.35**	-207.53	-0.84	11.3
India	**S&P BSE Sensex**	**29858.80**	-267.41	-0.89	12.1
Japan	**Nikkei Stock Avg**	**19445.70**	...	Closed	1.7
Singapore	**Straits Times**	**3229.73**	1.11	0.03	12.1
South Korea	**Kospi**	**2241.24**	...	Closed	10.6
Taiwan	**Weighted**	**9899.94**	-67.70	-0.68	7.0

Sources: SIX Financial Information; WSJ Market Data Group

Percentage Gainers...

Company	Symbol	Latest Session Close	Net chg	% chg	52-Week High	Low	% chg
Systemax	SYX	16.69	3.75	28.98	17.18	7.05	88.2
Data I/O Corp	DAIO	5.98	1.21	25.37	5.98	2.07	146.1
Energy Focus	EFOI	3.39	0.68	25.09	6.97	2.45	-49.5
Universal Display	OLED	111.30	21.45	23.87	113.00	47.88	99.4
China Lending	CLDC	6.70	1.28	23.62	10.25	4.13	-34.0
Workhorse Group	WKHS	3.62	0.67	22.71	10.30	1.85	-49.9
California Resources	CRC	12.46	2.30	22.64	23.42	8.79	-28.0
Altimmune	ALT	7.91	1.41	21.69	35.00	4.70	-66.1
Patriot National	PN	3.11	0.55	21.48	9.95	2.00	-61.3
Applied Optoelectronics	AAOI	55.96	9.15	19.55	60.19	8.08	429.9
Kratos Defense Sec Sols	KTOS	9.08	1.41	18.38	9.19	3.75	112.1
SPX Corp	SPXC	28.29	4.25	17.68	28.46	14.00	73.5
Immunomedics	IMMU	6.36	0.95	17.56	7.15	1.95	75.7
Fluidigm	FLDM	5.90	0.88	17.53	11.05	4.31	-35.8
Synchronoss Technologies	SNCR	17.99	2.54	16.44	49.94	11.15	-48.5

Percentage Losers

Company	Symbol	Latest Session Close	Net chg	% chg	52-Week High	Low	% chg
Ampliphi Biosciences	APHB	1.20	-1.70	-58.62	37.23	1.16	-95.6
Brightcove	BCOV	6.03	-2.68	-30.75	13.80	5.40	-0.4
National CineMedia	NCMI	8.67	-3.06	-26.07	16.10	8.34	-38.3
ArcBest	ARCB	19.75	-6.50	-24.76	33.95	14.85	15.6
Revlon Cl A	REV	19.30	-5.95	-23.56	37.96	18.30	-45.8
YRC Worldwide	YRCW	8.58	-2.12	-19.78	16.97	7.91	4.1
Ovid Therapeutics	OVID	12.25	-2.75	-18.33	...	...	...
American Superconductor	AMSC	4.00	-0.85	-17.53	11.90	3.98	-65.0
GAIN Capital Holdings	GCAP	6.12	-1.28	-17.30	8.75	4.54	-11.3
Ocular Therapeutix	OCUL	7.63	-1.47	-16.15	12.43	4.04	-24.9
Puma Biotechnology	PBYI	30.70	-5.85	-16.01	73.27	19.74	30.7
Rosehill Resources Cl A	ROSE	8.25	-1.44	-14.86	11.69	8.25	-16.9
InVivo Therapeutics Hldgs	NVIV	2.90	-0.50	-14.71	7.94	2.60	-47.4
IES Holdings	IESC	17.10	-2.65	-13.42	23.00	11.00	36.8
Goldfield Corp	GV	4.65	-0.70	-13.08	8.65	2.19	93.8

Most Active Stocks

Company	Symbol	Volume (000)	% chg from 65-day avg	Latest Session Close	% chg	52-Week High	Low
Spirit Realty Capital	SRC	65,557	732.1	7.51	11.92	13.97	6.64
Chesapeake Energy	CHK	61,677	55.3	5.46	6.43	8.20	3.56
VanEck Vectors Gold Miner	GDX	56,704	-8.5	21.55	2.13	31.79	18.58
Bank of America	BAC	55,868	-41.3	23.74	-0.46	25.80	12.05
iShares MSCI Emg Markets	EEM	51,517	-1.4	40.19	0.83	40.63	31.70
SPDR S&P 500	SPY	51,298	-33.5	239.70	0.39	240.32	198.65
Advanced Micro Devices	AMD	51,218	-28.2	10.19	0.89	15.55	3.45
Finl Select Sector SPDR	XLF	46,012	-37.9	23.84	-0.17	25.30	17.31
iPath S&P 500 VIX ST Fut	VXX	43,284	-16.0	14.45	0.56	71.48	14.29
Zynga	ZNGA	41,167	353.6	3.20	12.68	3.23	2.27

* Volumes of 100,000 shares or more are rounded to the nearest thousand

Volume Movers

Ranked by change from 65-day average*

Company	Symbol	Volume (000)	% chg from 65-day avg	Latest Session Close	% chg	52-Week High	Low
ClearBridge All Cap Grw	CACG	734	14432	24.95	0.35	24.95	24.84
PS Russell Top 200 Pure G	PXLG	587	4551	38.83	0.15	38.83	31.20
Bank of Commerce Hldgs	BOCH	863	3259	11.10	0.45	11.45	6.05
Brightcove	BCOV	5,192	2482	6.03	-30.75	13.80	5.40
VWR	VWR	17,093	1757	33.28	-2.26	37.25	24.42
GoDaddy Cl A	GDDY	14,116	1615	38.90	0.08	40.27	28.13
Nuveen Multi-Market Incm	JMM	154	1079	7.44	-0.90	7.71	6.95
Hartford Multifactor REIT	RORE	67	1077	15.06	1.01	16.26	13.88
Revlon Cl A	REV	1,252	1071	19.30	-23.56	37.96	18.30
MFA Financial	MFA	20,541	1052	7.92	-3.18	8.52	6.83

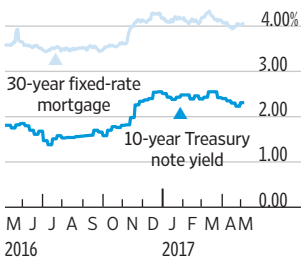
* Common stocks priced at $5 a share or more with an average volume over 65 trading days of at least 5,000 shares †Has traded fewer than 65 days

CREDIT MARKETS

Consumer Rates and Returns to Investor

U.S. consumer rates

A consumer rate against its benchmark over the past year



Selected rates

30-year mortgage, Rate

Bankrate.com avg†:	**4.06%**
Capital Funding Mortgage	**3.75%**
Newtown, PA	215-860-1513
Fidelity Bank Trust	**3.75%**
Dubuque, IA	563-557-2300
Pinnacle Mortgage Solutions Inc	**3.87%**
Henderson, NV	702-966-8216
Advantage One Mortgage	**3.88%**
Tulsa, OK	918-665-6199
Commonwealth Mortgage	**3.88%**
Beaverton, OR	503-516-9119

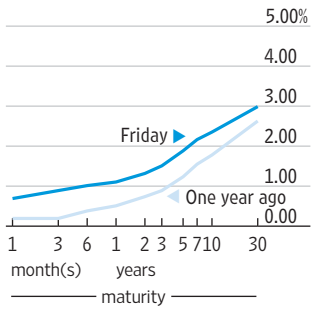
Interest rate	Yield/Rate (%) Last	Week ago	52-Week Range (%) Low	High	3-yr chg (pct pts)
Federal-funds rate target	**0.75-1.00**	0.75-1.00	0.25	1.00	**0.75**
Prime rate*	**4.00**	4.00	3.50	4.00	**0.75**
Libor, 3-month	**1.18**	1.17	0.62	1.18	**0.96**
Money market, annual yield	**0.32**	0.30	0.22	0.34	**-0.08**
Five-year CD, annual yield	**1.30**	1.31	1.17	1.31	**-0.09**
30-year mortgage, fixed†	**4.06**	4.04	3.43	4.33	**-0.32**
15-year mortgage, fixed†	**3.27**	3.24	2.70	3.50	**-0.25**
Jumbo mortgages, $424,100-plus†	**4.60**	4.59	4.02	4.88	**-0.06**
Five-year adj mortgage (ARM)†	**3.35**	3.28	2.97	4.03	**-0.14**
New-car loan, 48-month	**3.11**	3.11	2.87	3.36	**0.18**
HELOC, $30,000	**4.91**	4.93	4.57	4.96	**0.21**

Bankrate.com rates based on survey of over 4,800 online banks. *Base rate posted by 70% of the nation's largest banks. † Excludes closing costs.

Sources: SIX Financial Information; WSJ Market Data Group; Bankrate.com

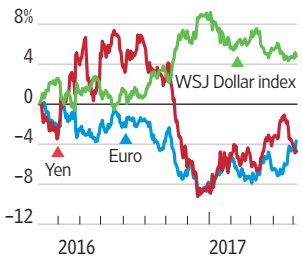
Treasury yield curve

Yield to maturity of current bills, notes and bonds



Forex Race

Yen, euro vs. dollar; dollar vs. major U.S. trading partners



Sources: Ryan ALM; Tullett Prebon; WSJ Market Data Group

Corporate Borrowing Rates and Yields

Bond total return index	Close	Yield (%) Last	Week ago	52-Week High	Low	Total Return (%) 52-wk	3-yr
Treasury, Ryan ALM	1441.186	**2.036**	1.977	2.237	1.141	**-1.703**	2.646
10-yr Treasury, Ryan ALM	1713.810	**2.352**	2.282	2.609	1.366	**0.491**	2.876
DJ Corporate	n.a.	**n.a.**	3.082	n.a.	n.a.	**n.a.**	n.a.
Aggregate, Barclays Capital	1903.100	**2.590**	2.530	2.790	1.820	**0.303**	2.507
High Yield 100, Merrill Lynch	n.a.	**n.a.**	5.174	n.a.	n.a.	**n.a.**	n.a.
Fixed-Rate MBS, Barclays	n.a.	**2.870**	2.820	3.120	1.930	**0.342**	2.466
Muni Master, Merrill	n.a.	**n.a.**	2.044	n.a.	n.a.	**n.a.**	n.a.
EMBI Global, J.P. Morgan	778.533	**5.564**	5.511	6.290	5.134	**8.698**	5.548

Sources: J.P. Morgan; Ryan ALM; S&P Dow Jones Indices; Barclays Capital; Merrill Lynch

CURRENCIES

U.S.-dollar foreign-exchange rates in late New York trading

Country/currency	Fri in US$	per US$	US$ vs, YTD chg (%)
Americas			
Argentina peso	.0651	15.3533	-3.3
Brazil real	.3147	3.1777	-2.4
Canada dollar	.7325	1.3652	1.6
Chile peso	.001489	671.40	0.2
Colombia peso	.0003396	2944.67	-1.9
Ecuador US dollar	1	1	unch
Mexico peso	.0526	18.9986	-8.4
Peru new sol	.3062	3.266	-2.6
Uruguay peso	.03578	27.9500	-4.8
Venezuela b. fuerte	.098942	10.1070	1.1
Asia-Pacific			
Australian dollar	.7421	1.3475	-3.0
China yuan	.1449	6.9031	-0.6
Hong Kong dollar	.1285	7.7841	0.4
India rupee	.01555	64.315	-5.4
Indonesia rupiah	.0000751	13322	-1.5
Japan yen	.008872	112.72	-3.7
Kazakhstan tenge	.003140	318.44	-4.6
Macau pataca	.1253	7.9786	0.8
Malaysia ringgit	.2305	4.3375	-3.3
New Zealand dollar	.6919	1.4453	0.1
Pakistan rupee	.00955	104.750	0.4
Philippines peso	.0201	49.824	0.4
Singapore dollar	.7118	1.4049	-2.9
South Korea won	.0008805	1135.71	-6.0
Sri Lanka rupee	.0065574	152.50	2.7
Taiwan dollar	.03314	30.176	-7.0
Thailand baht	.02884	34.670	-3.2
Vietnam dong	.00004405	22700	-0.3
Europe			
Czech Rep. koruna	.04112	24.318	-5.3
Denmark krone	.1479	6.7612	-4.4
Euro area euro	1.0999	.9092	-4.4
Hungary forint	.003528	283.41	-3.7
Iceland krona	.009471	105.58	-6.5
Norway krone	.1164	8.5923	-0.6
Poland zloty	.2612	3.8286	-8.6
Russia ruble	.01722	58.060	-5.2
Sweden krona	.1137	8.7945	-3.4
Switzerland franc	1.0129	.9873	-3.1
Turkey lira	.2822	3.5441	0.6
Ukraine hryvnia	.0377	26.5000	-2.2
UK pound	1.2981	.7704	-4.9
Middle East/Africa			
Bahrain dinar	2.6522	.3771	-0.03
Egypt pound	.0553	18.0803	-0.3
Israel shekel	.2785	3.5910	-6.7
Kuwait dinar	3.2871	.3042	-0.5
Oman sul rial	2.5982	.3849	-0.02
Qatar rial	.2746	3.641	0.03
Saudi Arabia riyal	.2666	3.7509	0.01
South Africa rand	.0745	13.4187	-2.0

	Close	Net Chg	% Chg	YTD % Chg
WSJ Dollar Index	89.71	-0.10	-0.12	-3.47

Sources: Tullett Prebon, WSJ Market Data Group

COMMODITIES

	Close	Friday Net chg	% Chg	52-Week High	Low	% Chg	YTD % chg
DJ Commodity	**551.06**	3.93	**0.72**	589.81	498.06	**8.56**	-2.85
TR/CC CRB Index	**177.92**	0.92	**0.52**	195.82	177.01	**-1.10**	-7.58
Crude oil, $ per barrel	**46.22**	0.70	**1.54**	54.45	39.51	**3.49**	-13.96
Natural gas, $/MMBtu	**3.266**	0.080	**2.51**	3.93	1.96	**55.45**	-12.30
Gold, $ per troy oz.	**1224.80**	-1.70	**-0.14**	1364.90	1127.80	**-5.27**	6.50

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TAX REPORT | By Veronica Dagher

How to Position for Any Potential Overhaul

How can individuals make the most of President Donald Trump's tax proposal?

Mr. Trump's plan, unveiled last week, was long on ambition but short on details. Furthermore, the proposals may not survive negotiations with Congress or be materially changed.

While financial advisers generally say to wait to make moves until details are clear, there are some steps taxpayers could do now to take advantage of provisions that might go away or capitalize on proposals should they become law.

Give to Charity

Mr. Trump's proposal leaves the charitable deduction intact. However, it doubles the standard deduction from the 2017 levels of $6,350 for single filers and $12,700 for married couples filing jointly. Therefore, fewer people may be inclined to itemize and claim the charitable deduction in 2018.

Because of this, it may make sense for taxpayers who think they might use the standard deduction to accelerate charitable contributions to this year, says Karen Altfest, executive vice president at Altfest Personal Wealth Management in New York.

Some tax specialists also say that people in top brackets who expect their rates to drop may want to make donations in 2017 because the deduction is more valuable against higher rates.

Defer Income

If tax rates fall next year, it may be worth deferring income into 2018 where possible, says Jeff Fosselman, a senior wealth adviser at Relative Value Partners in Northbrook, Ill.

For example, if the 3.8% surtax on net investment income is eliminated, deferring a stock sale until that happens would result in about 16% tax savings, notwithstanding any other tax changes, Mr. Fosselman says.

Have an Estate Plan

Even if the estate tax is eliminated, as Mr. Trump has proposed, there are other issues in question such as whether the step-up in basis would also be eliminated, says Ms. Altfest.

Currently, if an investor sells a highly appreciated asset, he might have a large capital gain. If he holds it until death, heirs can avoid capital-gains taxes due to the step-up in basis, which adjusts for income-tax purposes the value of an appreciated asset to the value at the time of inheritance. With this provision in place, the investor might determine that the potential tax benefit is worth the risk of holding a position he might otherwise sell earlier, Ms. Altfest says.

If the step-up is eliminated, the heirs would have to pay the tax regardless, so the benefit of holding the position is reduced, she says.

Set Up a Business

If Mr. Trump's proposals take effect, now may be a good time to begin setting up a business, financial advisers say. The reason: Mr. Trump proposed that the business income of pass-through entities—such as partnerships, S corporations and limited liability companies that "pass through" to their owners a proportional share of income, losses and other tax items—would be taxed at 15% depending on the details. That is a huge cut from the current top rate of 39.6%.

Businesses such as accounting firms, law firms and mom-and-pop shops are typically set up as pass-throughs. Some wealthy people use pass-through entities to shield them from personal liability and to give them privacy.

Setting up a pass-through under Mr. Trump's plan could yield tax savings.

For example, a consultant who made $250,000 after expenses might pay about $62,000 in taxes, assuming a roughly 25% effective tax bracket. Under Mr. Trump's proposal, if that consultant took the necessary steps to qualify for the 15% rate, that $250,000 would bring a roughly $37,000 tax bill.

INVEST

Continued from page B1

ments "where they can be trained on history and variables will behave in the future the way they did in the past," says Mr. Bookstaber in an interview.

But a financial market doesn't consist only of digitized streams of information. A market is made of human beings. Some are patient and prudent; others trade as if the world will end in the next half-hour.

Mr. Bookstaber, who has a Ph.D. in economics from the Massachusetts Institute of Technology, criticizes the world of financial math from the inside. Formerly a senior risk manager at Salomon Brothers, **Morgan Stanley** and **Bridgewater Associates** LP, the world's largest hedge fund by assets, he also has been an official at the Treasury Department and Securities and Exchange Commission. He is now chief risk officer for the investment office of the University of California, which manages $106 billion.

CHRISTOPHE VORLET

Mr. Bookstaber says several factors combine to make quantitative models, and the funds and risk-management techniques based on them, fatally flawed.

Mind you, unaided human judgment is painfully fallible. Think of the fund managers who overloaded on **Valeant Pharmaceuticals International** Inc. before that stock collapsed.

Human judgment coupled with the mathematical rigor of computer modeling can make better decisions than either alone. But, says Mr. Bookstaber, when humans put blind faith in quantitative models, that's dangerous.

A crowd isn't the simple sum of its parts. Individuals, acting as a group, behave differently than in isolation. As a crowd becomes ever-so-slightly larger or smaller, its behavior can change in big, and unpredictable, ways.

The likelihood of events varies over time. Home prices had gone for decades without a severe nationwide drop until they collapsed in 2006-07, helping to set off the global financial crisis.

Next is what Mr. Bookstaber calls "radical uncertainty." The world is a Pandora's box of surprises. Think of the "flash crash" of 2010, when $40 stocks momentarily traded at prices as low as one penny and then bounced right back.

Above all, "people act on what happens relative to their expectations, which changes the world in ways that change those expectations," Mr. Bookstaber says. "And that, in turn, changes the world again, and so on."

Say you discover that companies with three Y's in their corporate names have outperformed, and you share that information until investors put billions of dollars into such stocks. The triple-Y shares will shoot up until they all become so expensive that no one else will want to buy them, at which point they are doomed to underperform.

When massive computing power and the promise of precision lure billions, or hundreds of billions, of dollars into a mathematical investing strategy, that paradox can unfold faster and go further than it would by human action alone.

Success carries the seeds of its own failure. No wonder Mr. Bookstaber writes, "If you can model it, you're wrong."

His message isn't entirely pessimistic.

Novel "agent-based modeling" techniques that learn how individuals and groups interact in real time show promise, he argues, although he says development is roughly at the stage weather forecasting was at in, say, the 1950s.

You can apply Mr. Bookstaber's warnings in a couple of ways.

First, be wary of investing in mathematical approaches that are coupled with floods of new money chasing recent performance.

You can also recognize that, during market crises, investors who were naively eager to buy become desperately anxious to sell.

Having the cash and courage to buy from them at bargain prices is a good way to raise your future returns. Not joining them as blind-faith buyers is an excellent way to reduce your risk, now and in the future.

Futures Contracts

Metal & Petroleum Futures

	Open	Contract High	hi lo Low	Settle	Chg	Open interest
Copper-High (CMX)-25,000 lbs.; $ per lb.						
May	2.5015	2.5270	2.4955	**2.5195**	0.0175	3,947
July	2.5120	2.5390	2.5030	**2.5285**	0.0170	127,893
Gold (CMX)-100 troy oz.; $ per troy oz.						
May	1227.00	1233.70	1225.10	**1224.80**	–1.70	84
June	1228.50	1236.00	1226.20	**1226.90**	–1.70	297,426
Aug	1232.60	1238.80	1229.80	**1230.40**	–1.60	72,892
Oct	1235.00	1242.00	1233.60	**1233.70**	–1.50	7,715
Dec	1238.50	1245.40	1236.50	**1237.00**	–1.50	54,864
Feb'18	1242.20	1247.20	1239.90	**1240.30**	–1.60	7,716
Palladium (NYM) - 50 troy oz.; $ per troy oz.						
May	812.80	812.80	812.80	**812.90**	12.40	1
June	801.40	815.00	799.05	**813.05**	12.40	30,879
Sept	801.80	813.90	800.15	**812.55**	12.20	5,632
March'18	807.00	807.00	807.00	**813.90**	12.10	2
Platinum (NYM)-50 troy oz.; $ per troy oz.						
May	949.80	949.80	947.50	**907.70**	2.40	36
July	904.70	918.30	902.60	**910.20**	2.50	67,432
Silver (CMX)-5,000 troy oz.; $ per troy oz.						
May	16.290	16.465	16.195	**16.215**	–0.029	606
July	16.315	16.530	16.230	**16.274**	–0.029	145,009
Crude Oil, Light Sweet (NYM)-1,000 bbls.; $ per bbl.						
June	45.51	46.68	▼ 43.76	**46.22**	0.70	577,422
July	45.89	47.04	▼ 44.13	**46.60**	0.70	304,082
Aug	46.18	47.33	▼ 44.45	**46.91**	0.72	116,202
Sept	46.46	47.60	▼ 44.76	**47.20**	0.73	187,216
Dec	47.26	48.33	▼ 45.52	**47.98**	0.75	273,892
Dec'18	47.73	48.81	▼ 46.20	**48.53**	0.91	132,398
NY Harbor ULSD (NYM)-42,000 gal.; $ per gal.						
June	1.4114	1.4536	▼ 1.3748	**1.4366**	.0243	128,407
July	1.4200	1.4602	▼ 1.3846	**1.4437**	.0240	86,749
Gasoline-NY RBOB (NYM)-42,000 gal.; $ per gal.						
June	1.4825	1.5141	▼ 1.4500	**1.5046**	.0234	135,453
July	1.4858	1.5172	▼ 1.4543	**1.5079**	.0231	83,389
Natural Gas (NYM)-10,000 MMBtu.; $ per MMBtu.						
June	3.199	3.282	3.183	**3.266**	.080	262,030
July	3.283	3.361	3.272	**3.350**	.079	215,981
Aug	3.320	3.390	3.304	**3.382**	.077	97,663
Sept	3.301	3.381	3.294	**3.369**	.076	125,922
Oct	3.324	3.399	3.311	**3.389**	.076	170,636
Jan'18	3.565	3.635	3.560	**3.631**	.068	100,392

Agriculture Futures

	Open	Contract High	hi lo Low	Settle	Chg	Open interest
Corn (CBT)-5,000 bu.; cents per bu.						
May	359.00	365.50	359.00	**361.75**	3.75	2,233
July	367.50	373.75	366.75	**370.75**	4.25	737,554
Oats (CBT)-5,000 bu.; cents per bu.						
May	...	...	...	**254.00**	4.75	12
July	240.00	249.50	239.25	**248.75**	4.75	4,608
Soybeans (CBT)-5,000 bu.; cents per bu.						
May	965.50	973.50	960.00	**963.00**	–2.25	1,341
July	973.75	983.00	967.75	**973.00**	–1.25	369,916
Soybean Meal (CBT)-100 tons; $ per ton.						
May	313.90	315.40	312.50	**312.30**	–1.80	1,580
July	318.40	320.50	316.30	**316.90**	–1.70	206,758
Soybean Oil (CBT)-60,000 lbs.; cents per lb.						
May	32.49	33.19	32.30	**32.71**	.38	446
July	32.45	33.47	32.34	**32.90**	.40	215,323
Rough Rice (CBT)-2,000 cwt.; $ per cwt.						
May	...	...	...	**962.00**	–3.00	157
July	994.50	994.50	985.00	**986.50**	–4.00	10,134
Wheat (CBT)-5,000 bu.; cents per bu.						
May	428.00	428.00	428.00	**427.50**	1.50	133
July	438.50	444.00	436.00	**442.25**	4.50	262,758
Wheat (KC)-5,000 bu.; cents per bu.						
May	...	432.75	...	**438.00**	5.50	42
July	444.50	451.50	442.50	**450.00**	5.50	153,497
Wheat (MPLS)-5,000 bu.; cents per bu.						
May	...	542.00	539.50	**542.00**	7.00	124
July	546.75	556.00	546.75	**554.25**	6.75	31,326
Cattle-Feeder (CME)-50,000 lbs.; cents per lb.						
May	148.600	148.600	143.775	**143.775**	–4.500	6,788
Aug	157.075	157.275	153.425	**153.425**	–4.500	32,861
Cattle-Live (CME)-40,000 lbs.; cents per lb.						
June	131.300	131.350	128.300	**128.300**	–3.000	150,340
Aug	123.900	123.925	121.175	**121.175**	–3.000	114,921
Hogs-Lean (CME)-40,000 lbs.; cents per lb.						
May	69.500	69.500	69.150	**69.400**	.400	1,844
June	76.575	77.100	75.875	**76.325**	–.150	70,311
Lumber (CME)-110,000 bd. ft., $ per 1,000 bd. ft.						
May	389.90	389.90	382.40	**383.00**	–5.50	783
July	395.00	396.60	386.60	**388.80**	–6.30	3,772
Milk (CME)-200,000 lbs., cents per lb.						
May	15.45	15.65	15.45	**15.58**	.10	4,803
June	15.66	16.13	15.64	**15.87**	.18	5,409
Cocoa (ICE-US)-10 metric tons; $ per ton.						
May	1,836	1,866	1,836	**1,866**	27	38
July	1,850	1,877	1,805	**1,866**	27	159,645
Coffee (ICE-US)-37,500 lbs.; cents per lb.						
May	132.90	133.00	132.40	**133.10**	.40	13
July	135.05	136.25	134.10	**135.70**	.75	107,716
Sugar-World (ICE-US)-112,000 lbs.; cents per lb.						
July	15.37	15.68	▼ 15.24	**15.31**	–.06	388,205
Oct	15.74	15.91	▼ 15.53	**15.59**	–.04	159,852
Sugar-Domestic (ICE-US)-112,000 lbs.; cents per lb.						
July	29.24	29.24	29.24	**28.58**	–.10	1,577
Sept	28.59	28.74	28.59	**28.68**	–.11	1,544
Cotton (ICE-US)-50,000 lbs.; cents per lb.						
May	80.64	80.64	79.95	**79.76**	–1.07	23
July	79.02	79.02	77.71	**77.77**	–1.14	141,874
Orange Juice (ICE-US)-15,000 lbs.; cents per lb.						
May	155.00	155.00	155.00	**147.25**	–3.55	47
July	146.00	150.20	145.95	**146.35**	.50	8,109

Interest Rate Futures

	Open	Contract High	hi lo Low	Settle	Chg	Open interest
Treasury Bonds (CBT)-$100,000; pts 32nds of 100%						
June	151-230	152-080	151-140	**151-260**	3.0	649,839
Sept	150-270	150-310	150-150	**150-190**	2.0	1,777
Treasury Notes (CBT)-$100,000; pts 32nds of 100%						
June	125-050	125-110	124-275	**125-070**	1.5	3,292,002
Sept	124-265	124-305	124-240	**124-285**	1.5	17,039
5 Yr. Treasury Notes (CBT)-$100,000; pts 32nds of 100%						
June	118-020	118-062	117-280	**118-035**	.7	3,178,170
Sept	117-195	117-197	117-147	**117-175**	.7	20,220
2 Yr. Treasury Notes (CBT)-$200,000; pts 32nds of 100%						
June	108-067	108-082	108-050	**108-067**	–.2	1,381,220
Sept	108-010	108-020	108-010	**108-017**	–.2	3,604
30 Day Federal Funds (CBT)-$5,000,000; 100 - daily avg.						
May	99.095	99.095	99.093	**99.090**	–.005	230,065
July	98.915	98.920	▼ 98.895	**98.905**	–.015	201,833
10 Yr. Del. Int. Rate Swaps (CBT)-$100,000; pts 32nds of 100%						
June	92.250	92.656	91.906	**92.359**	.109	30,262
1 Month Libor (CME)-$3,000,000; pts of 100%						
June	98.8150	98.8150	▼ 98.8100	**98.8150**	–.0125	409
March'18	98.5100	98.5150	▲ 98.5100	**98.5250**	...	2
Eurodollar (CME)-$1,000,000; pts of 100%						
May	98.7975	98.8000	98.7900	**98.7950**	...	153,010
June	98.7100	98.7100	98.6900	**98.6950**	–.0100	1,451,112
Dec	98.5050	98.5200	98.4850	**98.4950**	–.0100	1,631,296
Dec'18	98.1000	98.1250	98.0750	**98.1050**	...	1,393,335

Currency Futures

	Open	Contract High	hi lo Low	Settle	Chg	Open interest
Japanese Yen (CME)-¥12,500,000; $ per 100¥						
May	.8885	.8923	.8869	**.8882**	–.0016	381
June	.8902	.8936	.8879	**.8893**	–.0016	198,260
Canadian Dollar (CME)-CAD 100,000; $ per CAD						
May	.7260	.7330	▼ .7252	**.7309**	.0042	558
June	.7279	.7334	▼ .7254	**.7312**	.0042	197,072
British Pound (CME)-£62,500; $ per £						
May	1.2924	1.2986	▲ 1.2905	**1.2977**	.0053	539
June	1.2934	1.3004	▲ 1.2914	**1.2988**	.0053	264,262
Swiss Franc (CME)-CHF 125,000; $ per CHF						
June	1.0166	1.0169	1.0122	**1.0152**	–.0002	46,051
Sept	1.0205	1.0227	1.0184	**1.0212**	–.0002	211
Australian Dollar (CME)-AUD 100,000; $ per AUD						
May	.7408	.7425	▼ .7368	**.7412**	.0013	303
June	.7405	.7421	.7362	**.7408**	.0014	113,437
July	.7404	.7417	▼ .7360	**.7405**	.0014	132
Sept	.7379	.7411	.7354	**.7399**	.0014	1,804
Dec	.7365	.7400	▼ .7358	**.7391**	.0014	127
Mexican Peso (CME)-MXN 500,000; $ per MXN						
June	.05207	.05239	.05192	**.05235**	.00028	177,644
Euro (CME)-€125,000; $ per €						
May	1.0984	1.1008	▲ 1.0953	**1.0993**	.0011	925
June	1.1004	1.1024	▲ 1.0968	**1.1011**	.0011	407,445

Index Futures

	Open	Contract High	hi lo Low	Settle	Chg	Open interest
Mini DJ Industrial Average (CBT)-$5 x index						
June	20876	20972	20813	**20954**	83	122,245
Sept	20801	20917	▲ 20761	**20904**	82	432
S&P 500 Index (CME)-$250 x index						
June	2379.40	2398.40	▲ 2379.40	**2397.70**	12.20	69,358
Mini S&P 500 (CME)-$50 x index						
June	2386.00	2398.75	2379.00	**2397.75**	12.25	2,968,492
Sept	2383.00	2396.75	▲ 2376.50	**2395.25**	12.25	22,247
Mini S&P Midcap 400 (CME)-$100 x index						
June	1724.10	1737.80	1718.10	**1737.10**	14.50	96,138
Mini Nasdaq 100 (CME)-$20 x index						
June	5627.0	5649.5	▲ 5612.5	**5648.3**	22.5	275,141
Sept	5629.3	5654.8	▲ 5618.5	**5654.0**	22.5	837
Mini Russell 2000 (ICE-US)-$100 x index						
June	1389.10	1397.50	1381.90	**1397.10**	8.70	581,018
Sept	1391.60	1391.60	1391.60	**1395.90**	8.70	233
Mini Russell 1000 (ICE-US)-$100 x index						
June	1324.60	1331.00	▲ 1322.50	**1331.00**	9.00	7,619
U.S. Dollar Index (ICE-US)-$1,000 x index						
June	98.63	98.90	▼ 98.41	**98.53**	–.12	72,790
Sept	98.48	98.61	▼ 98.24	**98.35**	–.12	1,525

Source: SIX Financial Information

Global Government Bonds: Mapping Yields

Yields and spreads over or under U.S. Treasurys on benchmark two-year and 10-year government bonds in selected other countries; arrows indicate whether the yield rose(▲) or fell (▼) in the latest session

Coupon (%)	Country/ Maturity, in years	Yield (%) Latest(●)	Previous	Month ago	Year ago	Spread Under/Over U.S. Treasurys, in basis points Latest	Prev	Year ago
1.250	**U.S.** 2	**1.322** ▲	1.314	1.238	0.722			
2.250	10	**2.352** ▼	2.358	2.337	1.744			
5.250	**Australia** 2	**1.719** ▼	1.721	1.711	1.694	**39.7**	40.8	**97.2**
4.750	10	**2.658** ▲	2.653	2.616	2.401	**30.6**	29.5	**65.7**
0.000	**France** 2	**-0.423** ▲	-0.444	-0.504	-0.414	**-174.5**	-175.8	**-113.7**
1.000	10	**0.842** ▲	0.829	0.922	0.538	**-151.0**	-152.9	**-120.5**
0.000	**Germany** 2	**-0.680** ▲	-0.698	-0.797	-0.506	**-200.2**	-201.2	**-122.8**
0.250	10	**0.420** ▲	0.398	0.261	0.164	**-193.2**	-196.0	**-158.0**
0.300	**Italy** 2	**-0.134** ▼	-0.120	-0.077	-0.036	**-145.6**	-143.4	**-75.8**
2.200	10	**2.168** ▼	2.255	2.092	1.499	**-18.4**	-10.4	**-24.5**
0.100	**Japan** 2	**-0.201**	-0.201	-0.190	-0.240	**-152.3**	-151.5	**-96.2**
0.100	10	**0.020**	0.020	0.066	-0.110	**-233.2**	-233.8	**-185.4**
2.750	**Spain** 2	**-0.288** ▲	-0.292	-0.228	-0.057	**-161.0**	-160.6	**-77.9**
1.500	10	**1.549** ▼	1.593	1.614	1.603	**-80.3**	-76.5	**-14.1**
1.750	**U.K.** 2	**0.145** ▲	0.107	0.129	0.428	**-117.8**	-120.7	**-29.5**
4.250	10	**1.117** ▼	1.119	1.096	1.465	**-123.5**	-123.9	**-27.9**

Source: Tullett Prebon

Corporate Debt

Price moves by a company's debt in the credit markets sometimes mirror and sometimes anticipate moves in that same company's share price.

Investment-grade spreads that tightened the most...

Issuer	Symbol	Coupon (%)	Maturity	Spread*, in basis points Current	One-day change	Last week	Stock Performance Close ($)	% chg
Macquarie Infrastructure	**MIC**	2.875	July 15, '19	**125**	**–52**	n.a.	81.69	**1.82**
Home Depot	**HD**	2.000	June 15, '19	**7**	–24	30	155.73	**0.56**
Bank of America	**BAC**	8.000	Jan. 30, '49	**–45**	–17	–14	23.74	**–0.46**
American Express	**AXP**	2.250	Aug. 15, '19	**48**	–16	65	78.32	**–0.01**
Deutsche Bank AG	**DB**	4.500	April 1, '25	**215**	–12	244	19.35	**3.04**
Gilead Sciences	**GILD**	2.950	March 1, '27	**105**	–12	113	67.80	**–0.41**
Credit Suisse AG	**CS**	2.300	May 28, '19	**61**	–11	75	15.77	**1.94**
Old Republic International	**ORI**	4.875	Oct. 1, '24	**132**	–11	143	20.26	**0.25**

...And spreads that widened the most

Societe Generale	**SOCGEN**	6.000	Jan. 27, '49	**350**	15	355	...	**...**
Barclays	**BACR**	6.625	Sept. 15, '49	**260**	11	n.a.	...	**...**
Anadarko Petroleum	**APC**	6.600	March 15, '46	**230**	10	210	52.59	**1.25**
CBL & Associates	**CBL**	5.950	Dec. 15, '26	**395**	9	395	8.34	**–1.18**
CBS	**CBS**	3.500	Jan. 15, '25	**113**	9	n.a.	65.20	**2.11**
Marathon Oil	**MRO**	5.200	June 1, '45	**233**	9	220	14.29	**0.85**
Suncor Energy	**SUCN**	3.600	Dec. 1, '24	**95**	9	85	...	**...**
Williams Partners	**WPZ**	3.900	Jan. 15, '25	**147**	9	140	40.47	**3.50**

High-yield issues with the biggest price increases...

Issuer	Symbol	Coupon (%)	Maturity	Bond Price as % of face value Current	One-day change	Last week	Stock Performance Close ($)	% chg
California Resources	**CRC**	8.000	Dec. 15, '22	**74.250**	2.75	77.000	12.46	**22.64**
Tru Taj	**TOY**	12.000	Aug. 15, '21	**92.500**	1.75	90.500	...	**...**
Calumet Specialty Products Partners	**CLMT**	7.625	Jan. 15, '22	**87.500**	1.50	84.750	3.90	**...**
EP Energy	**EPENEG**	9.375	May 1, '20	**91.500**	1.50	94.750	...	**...**
Whiting Petroleum	**WLL**	6.250	April 1, '23	**98.500**	1.25	100.438	8.23	**5.65**
Sanchez Energy	**SN**	6.125	Jan. 15, '23	**90.250**	1.06	92.000	7.93	**7.45**
Dynegy	**DYN**	5.875	June 1, '23	**88.000**	1.00	90.000	6.47	**9.11**
Gw Honos Security	**GWCN**	8.750	May 15, '25	**104.250**	1.00	n.a.	...	**...**

...And with the biggest price decreases

Revlon Consumer Products	**REV**	6.250	Aug. 1, '24	**91.500**	–6.50	97.500	...	**...**
Genon Americas Generation	**GENONE**	8.500	Oct. 1, '21	**81.000**	–5.56	91.000	...	**...**
Cenveo	**CVO**	8.500	Sept. 15, '22	**55.500**	–2.50	n.a.	5.11	**5.58**
Pacific Drilling	**PACD**	5.375	June 1, '20	**46.000**	–2.00	49.250	1.77	**6.63**
Comstock Resources	**CRK**	10.000	March 15, '20	**101.500**	–1.75	102.750	7.92	**2.59**
NRG Energy	**NRG**	6.250	May 1, '24	**96.950**	–1.68	99.650	15.03	**2.95**
Carrizo Oil & Gas	**CRZO**	6.250	April 15, '23	**98.500**	–1.38	100.750	25.18	**4.39**
Continental Resources	**CLR**	4.900	June 1, '44	**84.810**	–1.19	87.000	41.34	**3.35**

*Estimated spread over 2-year, 3-year, 5-year, 10-year or 30-year hot-run Treasury; 100 basis points=one percentage pt.; change in spread shown is for Z-spread.
Note: Data are for the most active issue of bonds with maturities of two years or more

Sources: MarketAxess Corporate BondTicker; WSJ Market Data Group

NEW HIGHS AND LOWS

WSJ.com/newhighs

The following explanations apply to the New York Stock Exchange, NYSE Arca, NYSE MKT and Nasdaq Stock Market stocks that hit a new 52-week intraday high or low in the latest session.
% CHG-Daily percentage change from the previous trading session.

Friday, May 5, 2017

NYSE highs - 183

Stock	Sym	52-Wk Hi/Lo	% Chg
ABB	ABB	24.92	0.5
AdamsDivEquityFd	ADX	14.19	0.5
Aetna	AET	140.85	0.5
AgilentTechs	A	56.96	-0.1
Alteryx	AYX	19.39	4.5
AmericanFin	AFG	100.58	-0.9
AmerTowerPfdB	AMTpB	119.79	0.9
AmerTowerREIT	AMT	128.84	1.0
AnworthMtg	ANH	5.96	1.2
Aon	AON	122.39	0.9
ApolloGlMgmtPfdA	APOpA	25.73	0.4
Aptargroup	ATR	82.17	0.6
ArborRealty	ABR	8.80	2.6
AristaNetworks	ANET	144.94	3.2
ArmourResPfdB	ARRpB	24.72	0.1
ArmourResPfdA	ARRpA	25.40	0.5
ArrowElec	ARW	77.16	1.7
AshlandGlobalWi	ASHw	61.23	0.2
AtHomeGroup	HOME	18.43	2.2
AtmosEnergy	ATO	82.37	1.0
Avalonbay	AVB	192.89	0.9
AveryDennison	AVY	84.28	0.6
Azul	AZUL	25.57	1.7
BancoBilbaoViz	BBVA	8.70	3.1
BancoSantander	SAN	6.99	3.6
BankofButterfield	NTB	35.33	...
Bankrate	RATE	11.95	5.7
Bio-RadLab A	BIO	224.24	-1.2
BlackHills	BKH	69.36	1.3
BlkRkGlOpEqTr	BOE	13.13	0.8
BlkRkMultiIT	BIT	18.03	0.7
BlockHR	HRB	25.32	0.4
Box	BOX	18.39	0.8
BrightHorizons	BFAM	79.46	4.5
BrookfieldMgt	BAM	37.89	1.1
BurlingtonStores	BURL	101.63	1.7
CBRE Group	CBG	36.78	2.6
CRH	CRH	38.04	0.8
CAE	CAE	15.94	1.9
CallawayGolf	ELY	13.35	6.7
Canon	CAJ	33.75	0.8
CapitalOnePfdH	COFpH	25.95	0.5
Carnival	CUK	63.21	0.2
Catalent	CTLT	34.81	9.7
Cigna	CI	161.57	2.2
CleanHarbors	CLH	61.62	2.6
Cohen&SteersInfr	UTF	22.95	0.8
ChnStrsGlbInc	INB	9.47	0.7
ColonyNrthStPfA	CLNSpA	25.81	0.3
CLSelPrTechGrFd	STK	23.11	1.6
Conduent	CNDT	17.76	2.4
ConstBrands B	STZ/B	177.13	3.2
ConstBrands A	STZ	178.66	0.7
Cooper	COO	206.67	0.4
DelEnhGlDivInc	DEX	11.30	0.3
DeutscheBank	DB	19.36	3.0
Diageo	DEO	119.55	0.4
Domino's	DPZ	193.53	1.4
DoubleLineIncm	DSL	20.91	1.2
Ducommun	DCO	34.88	14.3
EPAM Systems	EPAM	80.70	0.2
EtnVncTxAdvGbl	ETG	17.00	1.1
EtnVncTxAdvOpp	ETO	24.10	0.6
EtnVncTxMngOpp	ETW	11.36	0.7
EmployersHldgs	EIG	41.95	-2.4
EssexProp	ESS	251.97	...
EuropeanEqFd	EEA	9.10	0.9
Everi	EVRI	6.66	5.0
FB Financial	FBK	38.59	1.9
Ferrari	RACE	82.53	1.3
FidelityNatlFin	FNF	41.78	0.7
FortressTransport	FTAI	15.98	1.9
GCPAppliedTechs	GCP	34.23	1.0
GOLLinhas	GOL	17.47	2.8
GabelliGlbSmall&MC	GGZ	11.95	0.4
GenAmInv	GAM	34.30	0.4
GlobalPayments	GPN	86.62	-0.1
GldmnSachs pfA	GSpA	24.38	-0.7
GoldmanSachsPfB	GSpB	27.19	0.4
Graco	GGG	110.00	0.6
GraniteREIT	GRP/U	37.15	4.1
GreatAjaxNts24	AJXA	26.38	1.1
GrubHub	GRUB	45.91	1.8
HDFC Bank	HDB	82.55	1.1
Haemonetic	HAE	43.24	2.0
Headwaters	HW	24.25	1.9
Heico	HEI	73.05	1.1
HewlettPackard	HPE	18.85	0.4
HiltonGrandVac	HGV	37.21	0.4
Humana	HUM	230.53	0.4
HysterYaleMatls	HY	73.49	2.0
ICICI Bank	IBN	9.45	2.0
ING Groep	ING	17.35	2.2
Ingersoll-Rand	IR	90.18	0.2
InterXion	INXN	44.20	1.5
JapanSmlCap	JOF	11.14	1.4
HancockHdgEquity	HEQ	17.04	0.1
JonesLangLaSalle	JLL	126.80	7.5
KeyCorpPfdE	KEYpI	28.67	0.5
KoninklijkePhil	PHG	36.49	1.2
LazardGlblFd	LGI	15.77	0.2
Leaf	LFGR	9.35	-0.6
Leidos	LDOS	55.25	0.1
LiveNationEnt	LYV	35.13	8.2
Luxottica	LUX	59.60	1.1
MacqGlblInfra	MGU	23.74	0.9
MagnaChipSem	MX	10.20	4.1
MarriottVacations	VAC	124.94	-4.2
MasTec	MTZ	47.90	8.5
McDonalds	MCD	143.98	0.4
MettlerToledo	MTD	566.49	4.8
Moody's	MCO	119.99	-1.0
MotorolaSolutions	MSI	87.69	-1.9
NewGermanyFund	GF	16.27	1.1
NewIrelandFd	IRL	14.33	-0.8
NYTimes A	NYT	17.10	1.2
NextEraEnergy	NEE	135.21	...
Nokia	NOK	6.19	2.5
NuvPfdSecsIncmFd	JPS	9.93	0.4
OwensCorning	OC	63.42	4.0
PCM Fund	PCM	10.64	0.6
PIMCOCorp&Incm	PTY	16.32	0.7
PIMCOCorporate	PCN	16.73	0.7
PIMCO DynIncmFd	PDI	29.58	0.4
PackagingCpAm	PKG	102.50	1.7
PaycomSoftware	PAYC	64.95	1.8
Penumbra	PEN	89.50	0.3
PerkinElmer	PKI	61.98	1.8
PIMCO IncStrFd	PFL	11.84	...
Praxair	PX	129.53	2.5
PrefApartment	APTS	15.82	3.2
Progressive	PGR	40.76	0.9
Prudential	PUK	45.74	0.7
Q2Holdings	QTWO	39.70	0.5
Quantum	QTM	9.19	1.7
RELX	RENX	19.87	0.7
RELX	RELX	21.00	0.6
RH	RH	58.08	10.2
Raytheon	RTN	159.43	1.0
RegalBeloit	RBC	83.20	5.4
RestaurantBrands	QSR	58.89	3.4
RexfordIndlRealty	REXR	25.75	1.1
ReynoldsAmer	RAI	64.92	0.4
Rollins	ROL	40.14	1.0
SAP	SAP	103.90	1.5
S&P Global	SPGI	138.05	0.7
SPX	SPXC	28.46	17.7
SPX FLOW	FLOW	37.47	3.9
Sanofi	SNY	49.44	0.3
ServiceNow	NOW	98.19	2.1
SherwinWilliams	SHW	339.56	-0.1
Shopify	SHOP	85.82	5.1
SmithAO	AOS	55.38	0.9
Sony	SNE	34.85	0.5
SourceCap	SOR	38.48	0.4
STMicroelec	STM	16.70	3.0
StoneHarborEMTot	EDI	16.25	0.8
SummitMaterials	SUM	28.71	-2.2
SwissHelvFd	SWZ	12.27	-0.2
Syngenta	SYT	93.53	0.6
Systemax	SYX	17.18	29.0
TaiwanSemi	TSM	34.44	0.8
Telefonica	TEF	11.64	1.4
TerrenoRealty	TRNO	32.16	-0.2
ThermoFisherSci	TMO	171.15	0.6
3M	MMM	199.90	-0.1
Toro	TTC	66.75	0.8
Total	TOT	52.87	2.6
TransUnion	TRU	41.08	1.7
Tri-Continental	TY	23.90	0.1
UBS Group	UBS	17.71	0.2
UDR	UDR	38.00	1.0
US Foods	USFD	29.00	1.7
UnitedTech	UTX	121.45	0.3
Visa	V	92.98	-0.6
VailResorts	MTN	202.04	1.0
VoyaGlbAdvantage	IGA	10.84	1.6
Wal-Mart	WMT	76.60	0.2
WellCareHealth	WCG	171.87	0.6
WestPharmSvcs	WST	96.87	0.8
WooriBank	WF	40.31	1.4
YumBrands	YUM	69.40	0.5
Zoetis	ZTS	59.61	1.0

NYSE lows - 28

Stock	Sym	52-Wk Hi/Lo	% Chg
Avnet	AVT	36.61	1.3
CBL Assoc	CBL	8.21	-1.2
CBL AssocPfdE	CBLpE	22.56	0.9
CenovusEnergy	CVE	9.18	2.7
ClearwaterPaper	CLW	45.35	-0.3
CobaltIntlEner	CIE	0.28	0.8
CypressEnergy	CELP	7.69	-5.5
Entercom	ETM	10.90	-3.1
500.com	WBAI	8.12	-6.5
GenesisEnergy	GEL	29.50	4.1
HeclaMiningPfd	HLpB	53.38	-2.2
HelixEnergy	HLX	5.62	2.6
HornbeckOffshore	HOS	2.94	-3.9
Keane	FRAC	12.42	6.2
Luby's	LUB	2.82	-1.0
Manning&Napier	MN	5.15	...
NaturalGrocers	NGVC	9.89	-8.3
PengrowthEnergy	PGH	0.76	7.4
PA Reit	PEI	12.10	-2.6
Regis	RGS	9.02	-2.2
Revlon	REV	18.30	-23.6
StoreCapital	STOR	20.71	-1.0
SeaDrill	SDRL	0.56	9.2
SuperiorEnergy	SPN	10.45	6.9
SuperiorIndsIntl	SUP	19.75	-0.7
WarriorMetCoal	HCC	17.32	0.3
WestmorelandRes	WMLP	4.04	-6.7
WhitestoneREIT	WSR	11.46	3.1

NYSE Arca highs - 233

Stock	Sym	52-Wk Hi/Lo	% Chg
ALPSIntlDivDogs	IDOG	26.48	0.9
ARKInnovationETF	ARKK	25.76	1.0
AlphaCloneAltAlpha	ALFA	39.24	0.6
BarcETNFIEnhEur50	FEEU	117.33	2.6
BarclaysETN FI Enh	FLEU	140.04	2.4
BarcETN+FIEnhGlHY	FIGY	148.81	1.3
BarclaysETNShiller	CAPE	106.27	0.4
CambriaGlbValue	GVAL	23.33	1.4
ColumbiaSustGlb	ESGW	29.08	0.7
CS FI LC Growth	FLGE	172.63	0.6
DeutschexFTSEDev	DEEF	26.99	1.2
DeutscheXMSCIAWxUS	DBAW	26.33	0.8
DeutscheXMSCIEAFE	DBEF	30.81	1.0
DeutscheXEAFEHiDiv	HDEF	24.89	0.5
DeutscheXMSCIEur	DBEU	28.34	1.1
DeutschextrMSCIEur	DBEZ	30.90	1.5
DeutscheXMSCIGerm	DBGR	28.28	1.4
DeutscheXMSCIJapan	DBJP	38.85	0.8
DeutscheXMSCSKorea	DBKO	27.54	0.4
DeutXS&PHdgGlb	DBIF	25.85	1.3
DiamondHillVal	DHVW	28.04	0.3
DirexAeroBl3	DFEN	25.35	3.3
DirexDevMktBl3	DZK	64.90	3.3
DirexEuroFinBll2	EUFL	44.55	3.5
DirexFTSEEurBull3x	EURL	30.94	4.0
DirexIndlsBl3	DUSL	25.23	0.9
DirexJapanBl3	JPNL	52.85	1.3
DirexUtilBl3X	UTSL	25.55	2.5
Direx iBillionaire	IBLN	28.13	0.7
EmgMktInternetEcom	EMQQ	30.53	1.7
ElemntsRogrMrngstr	WMW	27.46	0.6
FIEnhancedEur50ETN	FIEU	119.72	1.5
FIEnhEurope50ETN	FIEE	155.30	2.7
FidelityLowVol	FDLO	27.62	0.3
FidelityMSCIIT	FTEC	42.75	0.5
FT DJ GlbSelDiv	FGD	25.17	1.0
FT HlthCareAlpha	FXH	64.06	0.1
FTHorizonMgdVolDev	HDMV	32.20	0.6
FTSTOXXEurSel Div	FDD	13.22	1.4
FT TechAlphaDEX	FXL	43.38	0.8
FT USEqityOpp	FPX	59.21	0.9
FlexShrIntQualDiv	IQDE	24.29	0.8
FlexShrIntQuDivDyn	IQDY	26.68	0.9
FlexShrIntQualDiv	IQDF	25.26	1.1
FlexShMDevMktxUS	TLTD	62.87	1.1
FlexShSTOXXGlb	NFRA	46.73	1.1
FranklinIntlOpps	FLIO	26.85	0.4
GlbXFTSENordReg	GXF	22.35	1.7
GlbX FTSE SE Asia	ASEA	14.73	0.9
GlbX GuruIndex	GURU	26.54	1.0
GlbX JPM US SecRot	SCTO	25.20	0.5
GlbXMSCIArgentina	ARGT	29.97	4.0
GlbX MSCIGreece	GREK	9.48	2.4
GlbXMSCIPortugal	PGAL	10.97	0.6
GlbXSciBetaEurope	SCID	26.06	0.6
GlbXSciBetaJapan	SCIJ	28.51	0.6
GSActiveBetaIntlEq	GSIE	27.51	0.9
GSActiveBetaJapan	GSJY	29.68	0.5
GSActiveBetaUSLC	GSLC	47.67	0.4
GuggDefEqty	DEF	42.04	0.3
GuggFronMkts	FRN	13.27	0.7
Gugg$&P500EWHlthcr	RYH	166.56	0.2
Gugg$&P500PureGr	RPG	92.21	0.5
GuggIntlMltAst	HGI	16.50	0.9
GuggS&PGlblWtr	CGW	32.50	0.8
HartfordMultiDvxUS	RODM	26.81	0.9
IQ50%HdgFTSEEur	HFXE	19.52	1.3
iShAggrAllocation	AOA	51.08	0.7
iShGrwthAllocation	AOR	43.11	0.6
iShCoreMSCIEAFEETF	IEFA	61.14	1.0
iShCoreMSCIEurope	IEUR	47.30	1.2
iShMSCIIntlDev	IDEV	53.49	1.1
iShModAllocation	AOM	36.86	0.3
iShCoreS&PUSGrowth	IUSG	47.64	0.4
iShCurHdgMSCIACWI	HACW	26.84	0.9
iShCurHdgMSCIEAFE	HEFA	28.64	1.0
iShCurHdgMSCIEAFE	HSCZ	28.51	0.7
iShCurHdgMSCIEurozn	HEZU	30.57	1.5
iShCurHdMSCIGrmny	HEWG	29.07	1.3
iShCurHdMSCIJapan	HEWJ	29.05	0.7
iShCurHdgMSCISpain	HEWP	24.63	1.7
iShCurHdgMSCISwitz	HEWL	26.82	0.8
iShIntlSelDividend	IDV	32.62	1.3
iShU.S.Technology	IYW	140.48	0.4
iShEdgeMSCIIntlMom	IMTM	27.84	1.3
iShEdgeMSCIIntlQual	IQLT	27.57	0.5
iShEdgeMSCIMinEAFE	EFAV	68.82	0.7
iShEdgeMSCIMnVlEur	EUMV	24.49	1.2
iShEdgeMSCIMinVol	ACWV	78.55	0.5
iShEdgeMSCIMultif	ACWF	26.52	0.9
iShEdgeMSCIMultInt	INTF	26.42	1.2
iShEdgeMSCIMlntSC	ISCF	28.04	0.8
iShEdgeMSCIUSAMom	MTUM	85.42	0.5
iShEuropeETF	IEV	44.89	1.1
iShGlobal1000	IOO	84.43	0.5
iShJPX-Nikkei400	JPXN	57.23	0.5
iShMSCIAustriaCap	EWO	20.25	1.5
iShMSCIBelgiumCap	EWK	20.45	1.3
iShMSCI EAFE	EFA	65.59	1.1
iShMSCIFranceETF	EWQ	29.48	1.8
iShMSCIGermanyETF	EWG	30.91	1.5
iShMSCIEAFEGrowth	EFG	73.44	0.9
iShMSCIIrelandCap	EIRL	43.84	1.2
iShMSCIIsraelCap	EIS	52.44	0.3
iShMSCIItalyCapped	EWI	28.10	2.4
iShMSCIJapanETF	EWJ	52.79	0.6
iShMSCIJapanSC	SCJ	68.42	0.4
iShMSCIKLD400Soc	DSI	88.48	0.4
iShMSCIKokusaiETF	TOK	59.93	1.1
iShMSCINetherlands	EWN	29.17	0.8
iShMSCIPolandCap	EPOL	24.18	1.4
iShMSCISouthKorea	EWY	63.43	0.6
iShMSCISpainCapped	EWP	33.94	2.1
iShMSCISwedenETF	EWD	34.12	1.2
iShMSCISwitzerland	EWL	34.44	0.8
iShMSCIUSAESGSelct	KLD	100.21	0.4
iShMSCIUK	EWU	33.71	1.3
iShMSCIEAFEValue	EFV	52.85	1.1
iShMSCIWorldETF	URTH	80.11	0.5
iShMorningstarLC	JKD	144.27	0.6
iShMornLCGrowth	JKE	137.29	0.1
iShMornMCGrowth	JKH	179.80	0.8
iShMornSCGrowth	JKK	156.36	1.2
iShRussell1000Gwth	IWF	117.37	0.4
iShRussellTop200Gr	IWY	63.62	0.3
iShS&P500Growth	IVW	135.23	0.4
iShGlobalTechETF	IXN	129.88	0.5
iShGlobalConsDiscr	RXI	99.86	0.4
iShGloInd ustrial	EXI	83.95	0.8
iShGlblConStaples	KXI	102.20	0.5
iShNATech-Software	IGV	133.30	0.8
iShRussellMCGrowth	IWP	106.29	0.6
HancockDevIntl	JHMD	28.17	1.5
JPMDivReturnEurope	JPEU	56.31	1.3
JPM DivRetGlEq	JPGE	56.00	0.9
JPM DivRetIntl	JPIH	28.50	0.6
JPM DivRetIntlEq	JPIN	55.03	0.8
KnowldgLdrDevWrld	KLDW	29.95	0.6
OShsFTSEEurQltyDiv	OEUR	24.81	1.0
OppGlbESGRevenue	ESGF	27.95	0.2
PwrShAerospace	PPA	45.27	0.7
PwrShCEF Incm	PCEF	23.62	0.4
PwrShCleantch	PZD	37.91	1.2
PwrShDynBldg&Con	PKB	30.07	0.3
PwrShDynNetwork	PXQ	44.24	1.3
PwrShDevMkt xUS	PXF	41.79	1.2
PwrShFTSERAFIDevMk	PDN	30.51	0.6
PwrShGlbClEngy	PBD	11.57	1.5
PwrShS&PIntlDev	IDHQ	22.11	0.6
PwrShRussMCGrw	PXMG	35.23	0.3
PwrShRussTop200G	PXLG	38.83	0.2
PwrShRuss2000GrW	PXSG	28.81	0.7
PwrSh$&P500XRate	XRLV	30.16	0.4
PwrSh$&PIntDev	IDLV	31.91	0.7
ProShDJBrkGlIn	TOLZ	42.79	1.3
ProShHdgReplic	HDG	44.10	0.1
ProShShtVIXST	SVXY	152.05	-0.6
ProShUltFTSEEurope	UPV	50.40	1.1
ProShUltMSCIEAFE	EFO	109.79	1.6
ProShrUltraJapan	EZJ	100.34	0.8
ProShrUltraQQQ	QLD	115.50	0.7
ProShrUlTech	ROM	132.54	1.0
PureFundsDroneEcon	IFLY	29.69	1.2
PureFdsISEBigData	BIGD	26.65	1.5
PureFISEMobilePymt	IPAY	28.70	0.3
PureFundsVideoGame	GAMR	37.10	1.5
RenaissanceIPOETF	IPO	24.58	1.4
RenaissanceIntlIPO	IPOS	20.57	0.3
SPDREUROSTOXX50	HFEZ	40.91	1.3
SPDREUROSTOXXSC	SMEZ	56.76	1.3
SPDRFactSetInnTech	XITK	68.06	1.1
SPDRGlobalDow	DGT	76.69	0.9
SPDRMSCIEAFEStrat	QEFA	60.94	0.8
SPDRMSCIDEStrat	QDEU	60.22	1.3
SPDRMSCISpainStrat	QESP	51.00	1.7
SPDRMSCIUKStrat	QGBR	51.78	1.0
SPDRMSCIWorldStrat	QWLD	69.09	0.2
SPDRS&P500Growth	SPYG	116.90	0.4
SPDRS&PGlbDividend	WDIV	66.28	0.8
SPDRS&PIntlDivCurr	HDWX	45.29	0.2
SPDRS&PSft&Svs	XSW	60.90	0.9
SPDRS&PTechHardwr	XTH	70.85	0.4
SPDRSSgAGlbAll	GAL	35.25	0.5
SchwabFundIntlLrgCo	FNDF	27.81	1.4
SchwabFundIntlSmCo	FNDC	32.06	0.8
SchwabIntEquity	SCHF	31.28	1.1
SchwabIntlSC	SCHC	32.83	1.0
SchwabUS LC Grw	SCHG	62.40	0.4
SerenityShImpact	ICAN	25.53	0.9
SPDR EurSTOXX	FEZ	39.71	1.6
SPDR MSCI exUS	CWI	35.49	0.9
SPDR S&P ConDis	IPD	40.06	0.6
SPDR S&P ConStpl	IPS	45.08	0.9
SpdrSPIntDiv	DWX	39.30	0.9
SPDR S&P IntInd	IPN	34.48	0.9
SPDR S&P IntTech	IPK	41.21	0.5
SPDR IntISC	GWX	32.50	0.6
SPDR S&P exUS	GWL	28.98	1.2
SPDR STOXX Eu50	FEU	34.34	1.3
Whiskey&SpiritsETF	WSKY	27.45	2.1
UBS FIEnhGlbHY	FIHD	145.52	1.5
UBS FIEnhLCGrw	FBGX	171.70	0.4
USCFRestaurant	MENU	18.40	1.0
VanEckGlbAltEn	GEX	58.25	1.7
VanEckIsrael	ISRA	29.85	0.5
VanEckMornWideMoat	MOAT	38.49	0.5
VangIndfoTech	VGT	140.92	0.5
VangdAWxUSSC	VSS	106.78	0.9
VangdFTSEDevMk	VEA	41.13	1.0
VangdFTSE Europe	VGK	55.59	1.3
VangdFTSE Pac	VPL	64.40	0.4
VangdFTSEAWxUS	VEU	49.78	1.0
VangdGrowth	VUG	125.52	0.4
VangdMegaGrwth	MGK	98.82	0.4
VangdMCGrowth	VOT	116.45	0.7
VangdS&P500 Grw	VOOG	121.33	0.4
VangdTotlWrld	VT	67.08	0.7
WisdTrEuropeHdg	HEDJ	67.29	1.4
WisdTrEuropeHdgSM	EUSC	30.35	1.0
WisdTrEurQualDiv	EUDG	25.26	1.3
WisdTrEuropeSC	DFE	64.87	0.8
WisdTrGlbXMexico	XMX	26.39	0.2
WisdTrGlbxUSDiv	DXUS	25.34	0.8
WisdTrGlbxUSQual	DNL	52.29	0.7
WisdTrIntDivxFin	DOO	40.74	0.9
WisdTrIntlEquity	DWM	52.21	1.1
WisdTrIntlHdgQual	IHDG	30.07	0.6
WisdTrIntlHiDiv	DTH	42.20	1.2
WisdTrIntlLC Div	DOL	47.74	1.1
WisdTrIntlMC Div	DIM	63.80	0.9
WisdTrIntlSC	DLS	69.16	0.7
WisdTrJapanHdg	DXJ	52.53	0.7
WisdTrJapanSC	DFJ	69.04	0.6

NYSE Arca lows - 28

Stock	Sym	52-Wk Hi/Lo	% Chg
iPathS&P500VIXST	VXX	14.29	0.6
DBAgricDoubleLgETN	DAG	3.11	1.9
DirexDevMktBear3	DPK	16.50	-3.0
DirexEuroFinBr1	EUFS	17.61	-4.7
DirexMexicoBl3	MEXX	23.55	-1.7
DirexS&P500Br3	SPXS	43.06	-1.2
DirexS&P500Br1	SPDN	34.45	-0.4
DirexTechBear1	TECZ	19.63	...
ETFSBloomAllCmdty	BCD	23.66	-1.3
E-TRACS CMCI	UCI	11.97	1.4
E-TRACS Food	FUD	18.91	-1.1
GlbXMSCINigeria	NGE	14.80	-11.1
iPathBloomSugarTR	SGG	33.00	...
PIMCOBrdUSTIPSIdx	TIPZ	55.96	...
ProShShMSCI EAFE	EFZ	28.04	-1.0
ProShShortQQQ	PSQ	40.63	-0.3
ProShShrt&P500	SH	33.94	-0.4
ProShUltraOil&Gas	UOP	22.50	-1.5
ProShUltVIXST	UVXY	12.82	1.0
ProShUltProShS&P	SPXU	16.32	-1.2
ProShrUltShFTSEEur	EPV	37.22	-2.7
ProShrUSInd	SIJ	22.37	-1.8
ProShrUS MSCI EAFE	EFU	27.89	-3.5
ProShrUS MSCI Jpn	EWV	35.30	-1.1
ProShUltShtQQQ	QID	17.65	-0.6
ProShUltSht&P500	SDS	13.02	-0.8
ProShrUSTech	REW	23.32	0.5
ProShsVIXSTFut	VIXY	11.90	0.4

NYSE MKT highs - 4

Stock	Sym	52-Wk Hi/Lo	% Chg
AbrdFstIsrael	ISL	19.00	0.8
IntellicheckMob	IDN	3.42	10.2
inTEST	INTT	7.80	1.4
StraightPath	STRP	170.00	-0.7

NYSE MKT lows - 7

Stock	Sym	52-Wk Hi/Lo	% Chg
AdCareHealth	ADK	0.95	0.6
AmpliphiBiosci	APHB	1.16	-58.6
CorMedix	CRMD	0.51	-3.0
GoodrichPetrol	GDP	12.71	2.0
ImmunoCellular	IMUC	1.55	-11.8
Libbey	LBY	8.30	-1.3
TransEnterix	TRXC	0.52	5.8

Nasdaq highs - 183

Stock	Sym	52-Wk Hi/Lo	% Chg
ACI Worldwide	ACIW	23.87	5.7
Ansys	ANSS	121.38	1.4
ASML	ASML	135.92	0.6
AccelerateDiag	AXDX	29.95	0.9
ActivisionBliz	ATVI	54.75	1.4
AdvisoryBoard	ABCO	54.50	3.7
AirTransportSvcs	ATSG	23.37	4.8
AmericanWoodmark	AMWD	94.75	0.6
AmeriServFin	ASRV	4.13	1.2
Angie'sList	ANGI	10.97	1.2
Apple	AAPL	148.98	1.7
AppliedMaterials	AMAT	41.89	0.5
Atlassian	TEAM	37.01	0.8
AtriCure	ATRC	23.31	11.2
AxcelisTechs	ACLS	22.85	9.4
AxoGen	AXGN	12.95	8.1
BlackBerry	BBRY	9.50	2.6
BldrsDev100	ADRD	21.96	1.0
BldrsEur100	ADRU	21.64	1.8
BluStrTABIGIIsrael	ITEQ	29.29	0.4
BoingoWireless	WIFI	15.49	13.5
CEVA	CEVA	41.60	3.0
CSX	CSX	52.50	1.5
CalAmp	CAMP	18.81	2.3
CasellaWaste	CWST	15.85	-0.3
CentrueFin	CFCB	26.99	...
CheckPointSftw	CHKP	106.37	-0.2
CitizensFirst	CZFC	21.69	3.3
ClearBr AC Grw	CACG	24.95	0.4
CoastwayBancorp	CWAY	20.25	1.0
CognizantTech	CTSH	63.34	4.1
Coherent	COHR	225.26	4.6
CombiMatrix	CBMX	6.00	11.3
CombiMatrixWt	CBMXW	1.57	40.0
Control4	CTRL	18.25	5.5
CoStarGroup	CSGP	253.17	1.7
DataIO	DAIO	5.98	25.4
Dave&Buster's	PLAY	66.36	1.2
DavisWorldwide	DWLD	21.92	1.2
EXACT Sci	EXAS	35.83	10.9
eHealth	EHTH	17.91	4.2
EldoradoResorts	ERI	20.15	2.3
ElectronicArts	EA	95.87	1.0
Equinix	EQIX	426.45	0.5
Expedia	EXPE	141.41	-0.5
FSB Bancorp	FSBC	15.10	0.2
51job	JOBS	43.00	3.3
FirstSouthBancorp	FSBK	13.54	1.9
FT CapStrength	FTCS	45.17	0.1
FT DevMkts	FDT	54.42	0.6
FT DorseyIntl5	IFV	19.78	1.3
FT EuropeAlpha	FEP	34.99	1.7
FT EurozoneAlpha	FEUZ	39.14	1.6
FT GerAlpha	FGM	42.95	1.7
FT JapanAlpha	FJP	52.12	0.6
FT NasdCleanEdge	QCLN	17.07	2.3
FT NasdClEdSmGr	GRID	44.85	3.4
FT Nasd100Tech	QTEC	62.06	0.5
FT RiverFrDynDev	RFDI	60.02	1.1

Bank Claims Puerto Rico Is in Default

By Andrew Scurria

Puerto Rico's entry into court protection is exacerbating tensions between Wall Street firms holding sales-tax bonds that the territory's federal overseers want impaired.

Bank of New York Mellon Corp., the trustee for $17 billion in sales-tax bonds issued by the public entity known as Cofina, notified Puerto Rico in a Thursday letter that it believes defaults have occurred, according to a copy reviewed by The Wall Street Journal.

The alleged defaults stem from the fiscal plan that Puerto Rico's oversight board adopted as its framework for restructuring $73 billion of public debt. Last week, Gov. Ricardo Rossello signed a law to comply with the fiscal plan that allows him under certain circumstances to break the lockbox securing the sales-tax revenue and move them into Puerto Rico's grasp.

"As a result of these limitations and restrictions on Cofina's rights and ability to meet its obligations to bondholders, the commonwealth's enactment of the fiscal plan compliance law constitutes a default," BNY Mellon said in the letter. A spokeswoman declined to comment further.

A spokesman for the federal oversight board didn't immediately respond to a request for comment.

Creditors holding Cofina bonds, which Puerto Rico began issuing a decade ago as an alternative way to borrow, have continued to be paid even after Puerto Rico stopped servicing other debts.

Even so, Bank of New York's position has become increasingly untenable. All signs indicate that Cofina's special status is likely to end, leaving the bank caught between senior creditors arguing that the oversight board's stated plans to confiscate the pledged sales-tax revenue are a default, and junior creditors who want to avoid an acceleration of the senior bonds.

This past week, the oversight board placed Puerto Rico under a restructuring proceeding akin to bankruptcy that empowers a federal court to write down bonds by force. The fiscal plan allocates roughly $800 million a year in payments for creditors, compared with the $35 billion they are owed over the next decade.

Sales taxes that had previously serviced only Cofina bonds would be commingled with other revenue streams and used for general purposes.

U.S. Supreme Court Chief Justice John Roberts on Friday appointed Judge Laura Taylor Swain of the U.S. District Court for the Southern District of New York, in Manhattan, to preside over the proceeding.

Late Friday, the oversight board also invoked the same bankruptcy option for Cofina.

ALVIN BAEZ/REUTERS

The oversight board for Puerto Rico has adopted a plan for restructuring $73 billion of debt. Above, the Capitol in San Juan.

Morgan Stanley Takes On Vanguard

By Sarah Krouse
And Michael Wursthorn

Morgan Stanley is considering compensation changes for its financial advisers that could discourage them from keeping clients in **Vanguard Group** mutual funds, ratcheting up tensions between one of Wall Street's biggest brokerages and the popular index-fund provider.

In calculating advisers' compensation for customer accounts that are charged an annual fee, Morgan Stanley may no longer count client assets in mutual funds that don't pay the bank for distribution, according to people familiar with the matter. No decision has been made, and the firm is considering alternatives that may still pay advisers for those funds, the people added.

Vanguard, an index-fund pioneer that has been a beneficiary of the growing popularity of passive investing, is unusual in the money-management industry because it doesn't pay other firms to sell its funds. The Malvern, Pa., fund company's policy has long been the ire of firms that distribute mutual funds and make money from revenue sharing or other financial arrangements with money managers.

Morgan Stanley has already decided that as of next week its brokers will no longer be able to sell clients new positions in Vanguard mutual funds. But a spokesman for the New York bank on Thursday said clients who already hold Vanguard mutual funds wouldn't be forced to sell them and could add to existing positions through early 2018. (Vanguard's exchange-traded funds won't be affected.)

Morgan Stanley's aggressive stance toward Vanguard's products is the product of long-simmering tensions in the money-management industry over how fund managers are expected to compensate brokerages for distributing their products, analysts said.

Those tensions have risen in the past year as brokerage and fund managers adapt to the Labor Department's fiduciary rule requiring brokers to act in the best interest of retirement savers. Fund managers and brokerages have been in talks since last year about pricing and distribution changes in order to comply with the rule's goal of minimizing conflicts.

Still, Vanguard isn't likely to change its practices in light of the Morgan Stanley move.

"They have a model where they want to be compensated for being on their platform in one form or another, and that's just something we won't do," Vanguard Chairman and Chief Executive Bill McNabb said Thursday on CNBC. "We think it raises inherent conflict."

Compensation is typically calculated based on the fees and commissions financial advisers generate with their respective books of business, the total client assets under management.

RUSSELL BOYCE/REUTERS

Morgan Stanley might change brokers' compensation for clients' assets in Vanguard mutual funds.

Blankfein Cautions London Over Brexit

By Philip Georgiadis

London's expansion as a financial center could stall and banks may need to consider moving staff out of the country because of Brexit, the chief executive of **Goldman Sachs Group** Inc. said.

Lloyd Blankfein said the City of London, as the financial district is known, is at risk of backtracking, but that the bank hopes to be able to continue to conduct its business as close as possible to the way it does now once the U.K. leaves the European Union.

"I don't think it will totally reverse," Mr. Blankfein said in an interview with the British Broadcasting Corp. that was published Friday.

"It will stall, it might backtrack a bit, it just depends on a lot of things about which we are uncertain, and I know there isn't certainty at the moment.

"If you cannot benefit from the access to the EU from the U.K....the risk is there will be some adjustment that will cause some people to have a smaller footprint in the U.K." he said.

The U.S. bank, which employs about 6,000 people in London, has a range of contingency plans in place to move staff out of the U.K. and into other European cities, including Paris, Dublin and Frankfurt, if needed in the wake of Brexit.

Mr. Blankfein didn't say how many employees could eventually move out of London, although the bank has previous indicated it would initially move hundreds of jobs to the EU.

However, the culture, language and special relationship between the U.K. and U.S. leaves Goldman eager to "try to stay as close to home as possible," he said.

Mr. Blankfein called for a clear signal from the U.K. and EU on how a possible transitional period following Britain's exit from the bloc could work.

S&P 500, Nasdaq End Week at Records After Solid Jobs Data

By Corrie Driebusch
And Jon Sindreu

FRIDAY'S MARKETS

Solid corporate earnings and a slightly stronger-than-expected April jobs report lifted the S&P 500 and Nasdaq Composite to fresh records.

Hiring data released by the Labor Department on Friday bolstered the case that the broader economy is strengthening after weak signals earlier this year.

Still, many investors brushed off concerns about the U.S. economy's soft first-quarter patch and this past week the Federal Reserve suggested it is committed to tightening monetary policy. Friday's jobs report encouraged more confidence in the stock market, some investors and analysts said.

"It calms the folks that thought we were headed toward a labor-market slowdown," said Sameer Samana, global quantitative and technical strategist at Wells Fargo Investment Institute.

The S&P 500 rose 9.77 points, or 0.4%, Friday to 2399.29. The Nasdaq Composite gained 25.42 points, or 0.4%, to 6100.76, its third record close of the week. The Dow Jones Industrial Average rose 55.47 points, or 0.3%, to 21006.94. All three indexes posted a third consecutive week of gains.

Nonfarm payrolls rose by a seasonally adjusted 211,000 in April from the prior month. Economists surveyed by The Wall Street Journal had expected 188,000 new jobs.

"That bodes well for the continued outperformance of value stocks," said Jason Bloom, global market strategist at PowerShares by Invesco, referring to the jobs report. "Healthy economic growth and a healthy labor market usually translate into an advantage toward value over growth."

The yield on the 10-year Treasury note slipped slightly to 2.352% Friday, from 2.354% on Thursday.

Also benefiting stocks: growth in corporate earnings.

Technology companies have posted some of the strongest earnings growth, with companies in the S&P 500 on track to grow 17% from a year ago, according to FactSet. The tech sector rose 1.4% for the week and remains the best performer in the broader index year to date, up 16% in 2017.

16%

Increase by the S&P 500's tech sector so far this year

"In an economy with 2% or 2.5% growth, these companies are growing at double digits. They're going to be the engines of growth for the economy," said Ketu Desai, principal at i-squared Wealth Management.

Gains in tech shares helped offset a steep drop in the S&P 500's energy sector, which fell 0.7% in the past week.The energy sector was one of just two S&P 500 sectors to notch a decline for the week, along with telecommunications.

U.S. crude prices fell 6.3% during the week to $46.22 a barrel, touching their lowest levels since November. Most of the drop followed Wednesday's data that showed a smaller-than-expected fall in U.S. oil inventories and rising production.

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MARKETS

China Jitters Rattle Commodities

Softening demand for construction materials is again a big concern pushing down prices

A global commodities slump deepened Friday before prices stabilized later in the day, but iron-ore prices continued to plummet over growing concerns about excess supply and weakening Chinese demand.

Market jitters pushed crude prices down more than a $1 a barrel, or 3%, in the space of 10 minutes in early Asia trading, although prices recovered and settled higher in London and New York.

COMMODITIES

The slide briefly took oil prices down 10% for the week, one of the biggest drops since January 2016, when global markets plummeted on concern about the health of China's economy.

The price of iron-ore futures, considered an indicator of demand for the key steel-making ingredient, dropped 7.5% Friday on China's Dalian Commodity Exchange. That followed an 8% tumble to the trading limit the previous day.

Iron-ore futures are now at their lowest levels since November and down 31% from the 2½-year high reached in February. Futures prices for a pair of steel products traded in Shanghai fell as much as 8% for the week.

Iron ore's losses may have been aggravated because it is primarily traded in China, where the markets are notorious for speculative trading. Investors also aren't nearly as skeptical about the outlook for China's economy as they were during market selloffs early last year.

But analysts say concerns over softening demand in China for construction materials such as steel are once again a big factor in the falling prices. Those concerns reflect weaker manufacturing data and recent moves by Chinese regulators that could curb growth in areas such as housing and infrastructure construction.

Inventories of imported iron ore at China's 45 major ports rose to a record of more than 130 million yuan at the end of March, and climbed to more than 135 million tons this past week, according to the China Iron and Steel Industry Association.

"There has been a visible shift of sentiment in the financial market," said Sun Yonggang, an analyst at Chaos Ternary Futures Co. "Over 80% of the steel traders we talked with were upbeat about the outlook in the first quarter. But now they have all turned pessimistic."

The fall in oil prices this past week took crude to its lowest intraday level since November, right before the Organization of the Petroleum Exporting Countries and other oil producers such as Russia supported the market by announcing a six-month agreement to cut production.

A decision on whether to extend, and possibly increase, those cuts is due at an OPEC meeting later this month. But traders in recent days have lost faith that the current production caps are doing much to reduce the global oil glut that has pressured prices since 2014. Global oil inventories are still robust. And American shale-oil producers are producing even more than many analysts had expected in the wake of the OPEC production cuts.

Moreover, some estimates show that despite the November deal, OPEC's total production is still above the agreed-upon cap. That could be confirmed by the cartel's production report for April, which is scheduled for release in the coming week.

"OPEC's failure to raise oil prices is fundamentally linked to their failure to bring down petroleum inventories," Bernstein Research said in a report on Friday.

Another factor depressing oil prices is that China could be buying less than previously expected.

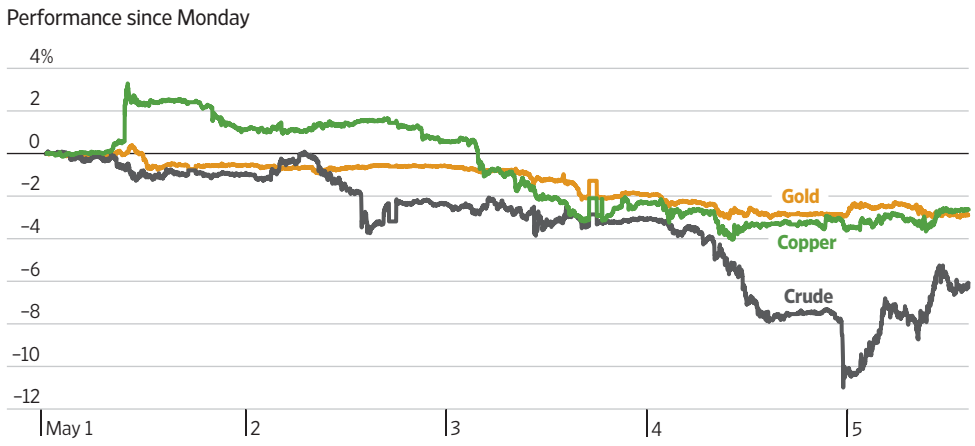
That is because of a new rule, announced in the previous week, that the country will no longer accept applications from privately owned refineries, known as "teapots," for the right to import crude. The rule doesn't apply to 21 refiners that have already been issued the necessary permits.

—Jenny W. Hsu and Yifan Xie

Heavy Metals

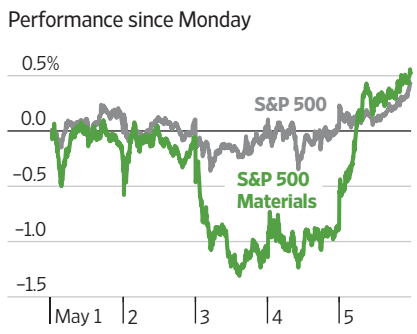
Swings in commodities prices this past week weighed on major stock indexes, which finished higher as economic data pointed to continuing growth.

Oil and metals fell amid concerns about stockpiles and demand.



The volatility gauge hit a decade low on Monday and has remained muted.

The materials sector trailed as metal prices declined, before recovering Friday.



The yield on the 10-year Treasury note edged higher.

*Copper and Gold closed at 1:30 p.m. EDT
Sources: FactSet (commodities, VIX, S&P 500); Thomson Reuters (yield)

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As Crude Falls, Bulls Still Keep The Faith

By Stephanie Yang

Some Wall Street analysts are keeping their bullish forecasts for oil prices, despite a 13% plunge in crude over the past three weeks.

A production cut by the major oil-producing nations hasn't brought about the significant drawdown in oil storage that many analysts expected. But banks are still betting that the oil glut will ease this year.

Goldman Sachs Group Inc. analysts wrote Friday that fundamental supply and demand continued to improve in April. The bank attributes the recent selloff to bearish momentum and a broader commodity drop led by metals and Chinese demand concerns.

Oil prices fell to a five-month low on Thursday. Prices recovered on Friday, gaining 1.5%, to $46.22 a barrel, but crude fell 6.3% for the week.

Expectations for the Organization of the Petroleum Exporting Countries to extend cuts this month have added to the upbeat perspective.

"We further expect inventory draws to accelerate, supported by our expectation for robust demand growth, despite recent concerns and potentially further helped later this year by the building consensus among OPEC producers on extending the cuts," Goldman said in the Friday report.

Still, traders are focusing on increasing U.S. shale activity and high levels of crude and products in storage.

"Patience was already wearing thin" this past week, Credit Suisse Group AG analysts said in a Friday note. "However, we think fundamentals are looking incrementally constructive."

HEARD ON THE STREET

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LendingClub Experiences Growth Woes

LendingClub seems stuck in the doldrums, and investors are running out of patience.

The company, which makes loans online to consumers and sells them to investors, reported first-quarter earnings that beat analyst expectations and raised its full-year forecast slightly. Nonetheless, shares fell 5.6% Friday. Weaker-than-expected revenue and profit guidance in the second quarter were partly to blame.

A more fundamental issue is a lack of growth. Loan originations have essentially been flat for four straight quarters. Initially, this reflected a strike by buyers of the company's loans following last year's sales-practice scandal and management shake-up. They gradually returned to the platform as new management and safeguards were put in place.

Now, it is concern over consumer-credit quality that has been constraining demand, says Guggenheim Securities.

LendingClub didn't directly address investor concerns, but it began tightening lending standards in the first quarter.

The company is also seeking new sources of growth. In October, it started making loans to car owners using their vehicles as collateral. Asked by an analyst about rising risks in this area, Chief Executive Scott Sanborn said he sees an opportunity to be "greedy when others are fearful."

But ultimately, LendingClub can only be as greedy as its now-cautious buyers. It may be time to stop thinking of LendingClub as a growth stock.

—Aaron Back

Job Market Tightens the Screws

The job market has gone from tightening to tight. It is a difference that matters to investors.

The Labor Department on Friday reported the U.S. added 211,000 jobs in April, and that the unemployment rate dropped to a 10-year low of 4.4%. Average hourly earnings rose 0.3% from March, but were still only up 2.5% from a year earlier. There are some takeaways from those numbers.

First, even though the economy has been expanding slowly and consumers are spending cautiously, employers are still in hiring mode. That suggests companies are struggling to wring any extra productivity out of their businesses and must hire to meet even slight increases in demand. And as the economy needs to add fewer than 100,000 jobs to keep up with population growth, the current pace of hiring will only make the job market tighter.

Sharing Economy

Employee compensation as a share of gross domestic product

Source: Commerce Department

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Second, the job market *is* tight. That is reflected not just in the unemployment rate, but also the Labor Department's broader measures of unemployment, which are all near decade lows. At a simpler level, the argument that the economy has hordes of potential workers who have given up on the job hunt, and are therefore uncounted in the labor statistics, may have had merit when the unemployment rate was 6%, but is harder to argue now. If a 4.4% unemployment rate isn't enough to pull the people back into the labor force, what is?

Third, companies so far have gotten away with raising wages only slowly, but that will change soon. A 4.4% unemployment rate is reflective of a job market in which many workers can demand better pay or take their work elsewhere. That prospect is more than enough to keep the Federal Reserve in tightening mode and makes the case for a June rate increase even stronger.

For businesses, it is time to think differently about growth and labor costs. Profit growth for big companies in the first quarter was strong despite the sluggish economy because executives kept a tight lid on spending, including on workers. Unless higher labor costs are offset by stronger growth, it could mean that the first quarter marked peak profitability.

Investors have been winners in the long-running battle between capital and labor. That could be changing.

—Justin Lahart

OVERHEARD

From the people who didn't exactly cover themselves in glory during the financial crisis come some not-very-reassuring words about South Korea. Moody's Investors Service thinks that a military conflict with North Korea would be "credit negative" for its southern neighbor.

Moody's gives South Korea's vibrant economy a relatively high AA2, between the ratings placed on peaceful, prosperous Austria and Belgium and the same as Kuwait's. The country's main stock index just hit a record.

But calling a military conflict "credit negative" puts reassurances about subprime mortgages being "contained" to shame should a conflict actually come to pass. Aside from its 10 to 20 nuclear warheads, North Korea has one of the world's largest militaries.

Sounds far scarier than a basket of liar loans.

How General Motors Might Unlock a Tesla-Like Valuation

Tesla being worth more than Ford Motor or—as of this week—**General Motors** is the most visible implication of the valuation gap between old car tech and new car tech. But a bigger one for executive teams concerns portfolio management: It has become harder to own both in the same listed entity. As long as the gap remains, calls for GM to split will become only louder.

An example was set this week by component supplier Delphi Automotive, which was itself spun out of GM in 1999. Delphi said Wednesday that it was splitting its engine-parts business from its other divisions, which are focused on the kind of electronics necessary to turn cars into self-driving mobile devices. The shares jumped 11% as investors factored in a higher stand-alone valuation for the "RemainCo," which doesn't face the same questions around the transition to electric vehicles as the "SpinCo."

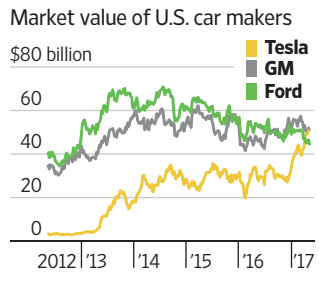
The potential for GM to do something similar is on Wall Street's radar. Chief Executive Mary Barra sounded more open to a spinoff last week, when GM announced first-quarter numbers, than she did three months earlier. "We continue to evaluate" the possibilities, she said. Her comments hinted that Cruise Automation, a San Francisco self-driving technology startup GM bought last year, might provide a means to do so.

The problem GM faces is its rock-bottom valuation. Its shares trade at 5.5 times prospective earnings, or roughly $5,000 for every car it sold last year. Tesla's almost identical market value is equivalent to about $500,000 a car, based on the annualized first-quarter run rate of deliveries.

Investors that buy GM stock are inclined to see investments in electric and autonomous vehicles as a cost, while those that buy Tesla shares focus on their potential. Spinning off a chunk of Cruise Automation, together with GM's electric-vehicle projects and perhaps its stake in ride-hailing company **Lyft**, could attract tech-hungry shareholders that would never buy into GM, giving it a much cheaper source of equity capital to compete with Tesla. This capital could also incentivize flighty Silicon Valley staff.

Fuel Injection

Market value of U.S. car makers



Source: FactSet

There are risks. A spinoff would incur transaction fees and duplicate some costs, while bringing only minor commercial advantages. It could therefore erode economic value even as it engineered a higher valuation. If the car-tech bubble burst, it would end up looking like an expensive, faddy mistake.

Still, as long as the costs can be contained, it makes sense for GM to pursue the idea. Ms. Barra is under pressure to do something about the company's valuation, not least from activist David Einhorn, who is pushing the less convincing notion of creating two GM share classes. Tesla's valuation partly reflects the extreme scarcity of stocks offering pure-play exposure to the car industry's technological transition. Intel's purchase of self-driving tech leader Mobileye eliminated one of the few alternatives.

By providing a new outlet for investor demand, a GM spinoff might come with the added bonus of knocking froth out of Tesla's stock.

—Stephen Wilmot

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Investor Sam Zell on the joys of being frank, contrarian and on a motorcycle **C11**

REVIEW

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SONY PICTURES/EVERETT COLLECTION

JAMES FRANCO, Seth Rogen and Jay Baruchel in 'This Is the End,' a 2013 comedy. 'To a growing number of Americans, acting like a grown-up seems like a kind of role-playing,' writes Sen. Ben Sasse (R., Neb.).

Perpetual Adolescence

And What to Do About It

Too many young people in the U.S. are failing to reach self-sustaining adulthood. **Sen. Ben Sasse** on how he and his wife are encouraging their own children to become fully formed grown-ups.

WE ALL KNOW the noun *adult*. But I was perplexed last year to hear the new verb *to adult*. In social media, especially on Twitter and Instagram, it birthed a new hashtag: #adulting. As in: "Just paid this month's bills on time #adulting," or "Decided I couldn't watch Netflix 8 hours straight and went to the grocery store instead #adulting." It even got a nomination from the American Dialect Society for the most creative word of 2015.

"Adulting" is an ironic way to describe engaging in adult behaviors, like paying taxes or doing chores—the sort of mundane tasks that responsibility demands. To a growing number of Americans, acting like a grown-up seems like a kind of role-playing, a mode of behavior requiring humorous detachment.

Let me be clear: This isn't an old man's harrumph about "kids these days." I still remember Doc Anderson standing in the street in 1988, yelling at me to slow down as I drove through his neighborhood in our small Nebraska town. I was 16 and couldn't stand that guy. Years later, when I had children of my own, I returned to thank him. Maturation.

What's new today is the drift toward *perpetual* adolescence. What's new is seeing so much less difference now between 10-year-olds and young adults in their late teens and early 20s.

As many parents can attest, independent adulthood is no longer the norm for this generation. Data from the Pew Research Center show that we crossed a historic threshold last year: "For the first time in more than 130 years, adults ages 18 to 34 were slightly more likely to be living in their parents' home than they were to be living with a spouse or partner in their own household." Fully one-quarter of Americans between 25 and 29 live with a parent—compared with only 18% just over a decade ago.

Let me be clear: This isn't an old man's harrumph about 'kids these days.'

A great many factors have contributed to this shift toward perpetual adolescence. The economy has something to do with it, of course—but social and cultural developments do too. The list of culprits includes our incredible wealth and the creature comforts to which our children are accustomed; our reluctance to expose young people to the demands of real work; and the hostage-taking hold that computers and mobile devices have on adolescent attention.

Our nation is in the midst of a collective coming-of-age crisis. Too many of our children simply don't know what an adult is anymore—or how to become one. Perhaps more problematic, older generations have forgotten that we need to teach them. It's our fault more than it's theirs.

My wife, Melissa, and I have three children, ages 6 to 15. We don't have any magic bullets to help them make the transition from dependence to self-sustaining adulthood—because there aren't any. And we have zero desire to set our own family up as a model. We stumble and fall every day.

But we have a shared theory of what we're aiming to accomplish: We want our kids to arrive at adulthood as fully formed, vivacious, appealing, resilient, self-reliant, problem-solving souls who see themselves as called to love and serve their neighbors. Our approach is organized around five broad themes.

Resist consumption. Although we often fail at it, Melissa and I aim to imprint in our children the fact that *need* and *want* are words with particular and

Please turn to the next page

Mr. Sasse, a former college president, is the junior U.S. senator from Nebraska. This essay is adapted from his new book, "The Vanishing American Adult: Our Coming-of-Age Crisis—and How to Rebuild a Culture of Self-Reliance," which will be published on May 16 by St. Martin's Press.

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TOMASZ WALENTA

MIND & MATTER:
MELVIN KONNER

A Twins Study Shows ADHD Isn't Just Genetic

WE ALL KNOW the longstanding debate about nature versus nurture in determining our traits and personality. How much of our identity has to do with genetics and how much with our environment? Studies of twins—both identical (from one fertilized egg) and nonidentical (from two)—have been a prime tool in sorting this out because they allow scientists to isolate more easily the effect of genes.

Such research has been especially helpful in trying to understand the widespread problem known as Attention Deficit/Hyperactivity Disorder. Multiple studies, with identical and nonidentical twins, have led scientists to conclude that genes cause 70% of the differences that could lead to an ADHD diagnosis.

What about the rest of the equation, the "nurture" part? When children's restless and inattentive behaviors interfere with life, they often get an ADHD diagnosis and medication. But are there ways other than drugs to mitigate ADHD? A new twins study suggests that environmental changes could help too.

In the study, psychologist Luisa Livingstone of the University of New England in Australia and colleagues included only identical twins with the goal of understanding the *nongenetic* part of the problem. Among the 1,024 pairs of identical twins in the paper, published in the Journal of Abnormal Psychology, any differences between the twins in a pair had to be due almost completely to the environment.

The researchers followed the children—in Australia, the U.S. and Scandinavia—from kindergarten to third grade. Every year, parents rated each twin using the Disruptive Behavior Rating Scale, which has nine questions each about hyperactivity and inattentiveness. Other studies have found this scale to reflect actual behavior.

Using sophisticated statistics, the researchers tracked the difference between the twins across these school years. Many twins didn't show a difference in behavior. Some showed a consistent difference for all four years, suggesting that something had happened in their lives before the reporting period, causing the divergence. But most of the differences between twins appeared only briefly—occurring at just one age. This implies that something in their environment had changed to affect their behavior.

The study didn't address what caused the problems, nor whether the ADHD-like behavior would lead to a longer-term or recurrent problem. But because most of the differences came and went in a year or so, it suggests that we may be able to adjust the environment to address at least some disruptive behavior.

Cutting back on school recess may exacerbate the problem.

We know from the history of ADHD that the school environment matters enormously. In fact, although the disorder causes other life problems, ADHD was essentially unrecognized before the era of universal schooling.

My own research suggests how critical such factors are. The hunter-gatherer children I studied in the 1970s in Botswana had a lot to learn—how to determine the age of animal tracks, for example, or where to dig for tubers—but they learned on the move, in playful groups. When economically developed cultures started asking children to sit still for seven hours a day, we soon discovered that a minority of them—10% or more, especially boys—couldn't do it.

Anthropologists view ADHD as a "mismatch" disorder—due to a discrepancy between the world we evolved in and our world now. So what is the solution, aside from medication? We could give children a break. We have long known that frequent recess and play improve attention; such activity is routine in countries such as Finland and Japan.

Yet Olga Jarrett of the Georgia State University College of Education, writing on the website of the US Play Coalition, a play-advocacy group, has shown that the recent trend in the U.S. has been, absurdly, to abolish recess, dismantle playgrounds and ignore nature. This is no way to reduce the number of children, now in the millions, on medication for ADHD.

How to Raise an Independent Adult

Continued from the prior page

distinct meanings. When our 6-year-old son points to a toy at Target and says, "I need that," we let him know that "need" actually has nothing to do with it. His survival doesn't depend on securing that toy.

In a 2009 study called "Souls in Transition," Notre Dame sociologist Christian Smith and his colleagues focused on the spiritual attitudes and moral beliefs of 18- to 23-year-old "emerging adults." They were distressed by what they discovered, especially about the centrality of consumption in the lives of young people. Well over half agreed that their "well-being can be measured by what they own, that buying more things would make them happier, and that they get a lot of pleasure simply from shopping and buying things."

But consumption is no route to long-term happiness, as a raft of studies by psychologists, neuroscientists and sociologists demonstrate. Part of learning to be an adult is figuring out that our real needs can be separated from the insistent call of our wants. Maturity requires imagining life without material wealth, resolving that we could be happy in such a state, and actually experiencing mild deprivation from time to time.

Parents can impart such lessons many ways. The occasional camping trip, off the grid, can teach the basic definition of shelter—and make the comforts of home look like the luxuries they are. You can shop differently too. One of our daughters is a serious runner, so we purchase high-quality shoes to protect her developing bones—but most of her other clothes come from hand-me-downs and secondhand shops.

We want our children to learn the habit of finding pleasure in the essentials of life and feeling gratitude for them. We'd like to think that, when they strike out on their own someday, they'll have a clear sense of what they really need.

Embrace the pain of work. Many of the same social scientists highlighting the emptiness of consumption point to a very different key to happiness: meaningful work. Over the years, I've found that just about everyone interesting I've ever met possesses a strong work ethic, focused on doing even humble jobs well, and they typically learned it early in life. They usually have a passionate answer to the question: "What was the first really hard work you did as a kid?"

Suggesting that our children should have similar experiences seems countercultural today. Strenuous, unpleasant work seems harsh, potentially scarring. Worse, for middle-class parents hoping to get their children into selective colleges, it might interfere with the "enrichment" activities that impress admissions committees. But character comes before credentials. If our children are to become real adults, they need to know that difficult tasks are things to be conquered, not avoided.

A KEY LESSON: learning how to conquer hard work.

Last year, we sent one daughter to spend a month working on a cattle ranch. She was 14 and surprisingly eager to get her hands dirty. We left her with little advice other than to make us proud by working hard, to ask for coaching and never to let her bosses hear her complain.

Once she settled in, she would send regular text messages about what she'd done that day. It was smelly, wet, demanding work, but she reveled in it: *Got an orphaned baby girl to take her whole bottle. (Also got tons of nose slime & snot on my jeans.)*

Other parents will tackle the challenge in their own way, but it isn't a duty any of us can shirk.

I don't mean to suggest that there are no hard workers among young people now. But "work" is more than advancement in school. Our children need to appreciate not just the privilege they enjoy in being free from the demands of physical labor but also—especially—their own capacity to fix the messes that life will throw at them.

Start young: Send your 2-year-old to get your socks every morning. It creates a rhythm and pattern that can be easily upgraded to more complicated and "adult" tasks. Re-evaluate every service you're paying for at home and ask if your children could do it instead. Mowing is a good example; household repairs count too. Babysit together. Make your children learn to change diapers.

Connect across generations. Today, young people's lives are driven by one predominant fact: birth year. In person and online, teenagers hang out overwhelmingly with friends of the same year in school. Correspondingly, senior citizens live out their years in nursing homes where they interact mainly with their age peers.

A 2014 Boston Globe article neatly summarized much of the recent research on this question. One study found that, among Americans 60 and older, only a quarter had discussed anything important with anyone under 36 in the previous six months. And when relatives are excluded, the percentage drops to just 6%.

This isolation is no way to raise responsible adults. The anthropologist Alice Schlegel, co-author of a classic study of 186 preindustrial cultures, concluded that age segregation is correlated "to antisocial behavior and to socialization for competitiveness and aggressiveness." Social science confirms what parents know from watching older siblings care for younger ones: Adolescents acquire vital social skills by interacting with people outside their peer bubble.

There are many ways to make these connections. The simplest are activities like taking your children to bake cookies with an elderly neighbor or volunteering at a senior center. But the occasional visit isn't enough. We need to encourage our children to build lasting connections—some degree of friendship and familiarity—with older people who aren't members of the family.

Perspective is invaluable: It lets your children hear about previous eras, including those first hard jobs, and gives them a longer view of what it means to struggle with hardships and persevere.

Travel meaningfully. Decades ago, the historian Daniel Boorstin drew a distinction between the nobility of travel and what he saw as the boredom of touring, with its large groups and controlled itineraries. What he called "the lost art of travel" involved going out "in search of people, of adventure, of experience."

When we travel this way, we subject ourselves to the vertigo that accompanies leaving familiar surroundings, customs, language and food. It's especially valuable for adolescents. Like hard work, it makes them appreciate not just the comfort of their own lives but the satisfaction of trying new and difficult things. It also forces them to look at the material nature of their lives. Do I really need so much stuff when I feel freer away from it?

Children will obviously not all have the same experiences as they learn about travel. Some of us come from more outdoorsy families; others come from wealthier families that can afford the airfare to fly overseas. "Where" isn't nearly as important as how.

The key is putting children into situations outside their comfort zone, seeing things they don't ordinarily see. And when you're done with your trip, don't just return immediately to everyday life. Pause to summarize the experience and reflect on it.

Become truly literate. Reading done well is not a passive activity like sitting in front of a screen. It requires attention, engagement and active questioning. Unfortunately, according to the Bureau of Labor Statistics, the average American now reads only 19 minutes a day—and the younger you are, the less you read.

That our young people take so little interest in reading is sad, but not just for them. It also keeps them from growing into the sort of engaged, responsible citizens our republic needs. America's founders understood literacy as a prerequisite for freedom and self-government, and we are paying the price today for failing to take that truth seriously.

The first step is to encourage them to become quantity readers. A friend introduced Melissa and me to a challenge called "The Century Club." To be a member, you must read 100 books in a year. Quite a few people can read two solid books in a week, but knocking out almost two a week for an entire year is daunting.

With children, you have to start with light books to set them on the path to 100. But as they develop the habit of reading, you can add more challenging titles. Our children haven't yet hit a hundred in a year, but it has become a healthy, behavior-shaping goal.

Quantity is important, but quality is the bigger, long-term goal. When our girls were not yet teens, we let them pick just over half of the books in their sequence. Now we have them propose a handful of books for us to select from, and if the books aren't rigorous enough, we intervene more aggressively.

They're pretty good about wanting to stretch themselves, but we've also steered them to especially important books that will help them not just to learn their place in the world but also to comprehend the riches of the traditions they're inheriting.

What's on that bookshelf? Other people's broad headings will vary, but ours include God, the Greeks, Shakespeare, the American idea and markets.

These are just some of the ideas—the habits—that Melissa and I are developing with our children to ensure they won't be paralyzed by the prospect of adulthood. Other parents will have their own ways of tackling the challenge, but it isn't a duty that any of us can shirk. The country needs this broader conversation about reaching adulthood, especially in an era of lifelong job disruption.

The analogy that we've embraced for parental duty is teaching children to ride a bike. I'm a decidedly "no training wheels" guy. My method: pad them in coats and ski pants, set them off down a slightly declining street and run behind them straddling the back wheel. I gently knock them side to side in the shoulders as we move along, and at some point, they suddenly find their balance, mostly by accident. And then they can ride! It's a life-changing moment.

FROM TOP: ISTOCK; RYAN NICHOLSON FOR THE WALL STREET JOURNAL

SEN. SASSE with his three children, from left to right: Alex, age 13, Breck, age 6, and Corrie, age 15.

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The Protestant Legacy of Liberty

Luther's religious rebellion sparked a political revolution

BY ALEC RYRIE

A PORTRAIT of Martin Luther.

ALAMY

"IT'S JUST another squabble between monks," the pope is supposed to have said when he first heard about the argument that broke out in 1517 at a university in Germany. But one of those monks, Martin Luther, turned out to be pretty stubborn. The squabble he started—the Reformation, whose 500th anniversary we mark this year—deeply undermined the power of the papacy and set forces in motion that continue to shape our lives to this day, perhaps nowhere more so than in America.

The U.S. is a secular republic, but Protestantism has always been its default religion. "You know," Franklin Roosevelt joked in 1942, "this is a Protestant country, and the Jews and Catholics are here on sufferance." Today's America may be more diverse, but it still owes a lot to those religious refugees who crossed an ocean to escape persecution.

The great sociologist Max Weber famously argued that Protestantism fostered the "spirit of capitalism." As evidence, he pointed to that most archetypal American, Benjamin Franklin, who quoted the book of Proverbs: "Seest thou a man diligent in his business? He shall stand before kings." Weber's idea fits with a tangle of America's founding myths: prosperity built on honest hard work, a can-do spirit and a sturdy disregard for authority. But is it actually true?

There is no real correlation between Protestantism and capitalist prosperity. Cradles of modern capitalism like 15th-century Italy, 19th-century Belgium and 20th-century Japan were Protestant-free zones, while Africa hasn't surged ahead economically, despite now being home to around half the world's Protestants.

Still, Weber was on to something. Protestantism profoundly shaped America's national character, and its long shadow can be seen in our own age of political trench warfare. But what is its actual legacy?

First, let us dispense with an awkward, blindingly obvious truth: Protestantism is about God. Sure, it's a culture, an identity, a philosophy, but before any of that, it's about lives being transformed by faith. "All Christians are priests," Luther said, and so "have the power to test and judge what is correct or incorrect in matters of faith." The Reformation began with Luther's shattering personal encounter with God, and that same direct, unfiltered access to revealed truth has given Protestantism its energy ever since.

Luther's revolution may have started as something intimate and spiritual, but it soon became political. When the Scottish Protestant John Knox declared in 1558 that "all man is equal," he didn't just mean spiritually. He meant that it was everyone's responsibility to stand up against a tyrant. Before long his queen was deposed, imprisoned and beheaded.

Protestants don't let other people tell them what to believe, and they don't like being told to shut up. The history of Protestantism is one long, raucous, many-sided argument. That bare-knuckled process has continuously generated new ideas, revived old ones and worn down censorship. Slowly and reluctantly, one notion that a few radicals put about—that religious difference and free speech ought to be accepted as a matter of principle, rather than tolerated as an unavoidable necessity—became Protestantism's orthodoxy and then the world's.

Their main demand: to be left alone to worship God as they see fit.

This spirit of principled defiance has made Protestantism a whirlwind of creativity in theology, politics, the arts and science. But Protestants' suspicion of priests who say they know best also extends to priesthoods of learning. A robust contempt for experts is a hallmark of Protestants and very much a going concern today.

Protestantism's leveling spirit was a revolutionary idea. If "all man is equal" before God, what happens to boundaries of wealth, class, nation and race? It was Protestants who began, hesitantly at first, to ask if slavery was intrinsically wrong. Racism, imperialism and nationalism have had many Protestant defenders, but they have been swimming against the tide of their own beliefs.

Puritans also taught that "souls have no sexes." Protestant missionaries championed women's rights and today, even in conservative churches, Protestant patriarchy is being hollowed out.

As early as the 1590s, the Scottish King James VI worried that his Protestant subjects were plotting "a democratic form of government." In fact, precious few Protestants before the 19th century believed in democracy. But the egalitarian undertow pulled them in. French Protestants took up arms to defend themselves from a persecuting king. Radical English Protestants did the same and ended up cutting off his head.

America's revolution was led by deists, but its foot soldiers were evangelicals whose consciences answered only to God. Martin Luther King Jr.'s Southern Christian Leadership Conference stands in that same tradition.

Such battles for justice could produce self-righteous theocracies, like Puritan New England, but Protestants' mulish independence usually leads them in a different direction. Their main political demand is to be left alone, to have a spiritual space where political authority does not apply.

The results are paradoxical. Protestants have been willing to accept and even collaborate with vile governments so long as their own separate sphere is respected, but regimes that don't respect that space have faced their stubborn opposition. Protestants have frequently mobilized to oppose totalitarian ideologies that do not leave space for religious freedom, from Marxism in Latin America to Islamism in Nigeria.

It is in the U.S. that Protestants created something truly unique: a new country with the notion of limited government in its bones, where woe betide any political leader who forgets that his or her first duty is to let the people live their lives as they see fit. American Protestantism has fostered an ornery independence, an insistence on due process and a conviction that every one of us has an equal right to life, liberty and the pursuit of whatever you damn well please.

We live so much in a world made by Protestants that we think that these things are natural. Surely it is obvious that common humanity ought to transcend divisions of gender, class, nation and race, that we should get to choose our own rulers, and that those rulers' power should be hemmed in by the law. But neither liberty nor democracy is humanity's normal state of being, and the combination of the two least of all.

So, as the U.S. is on the point of becoming less Protestant than ever before, we might ask: Will its traditional mixture of liberty and democracy endure? You don't need to be a Protestant to have a stake in the answer.

This essay is adapted from Mr. Ryrie's new book, "Protestants: The Faith That Made the Modern World," published by Viking.

FOR ARAB MONARCHIES, ISRAEL EMERGES AS AN ALLY

BY YAROSLAV TROFIMOV

FOR DECADES, rejection of Israel—sometimes mixed with outright anti-Semitism—has been a defining theme of Arab politics, uniting bickering countries against a common foe.

Former Egyptian President Mohammed Morsi, a Muslim Brotherhood leader who was deposed in a 2013 coup, had gone on TV three years earlier to brand Jews as "descendants of apes and pigs." In 1988, the Palestinian militant group Hamas adopted a covenant that cited the notorious anti-Semitic forgery known as the Protocols of the Elders of Zion as proof of a global Jewish conspiracy.

But attitudes are beginning to change in some parts of the Arab world. Mohammad bin Abdul Karim al-Issa, the secretary-general of the Muslim World League, a Saudi-based global organization that has been accused of spreading extremism, recently pointed to a lesson in coexistence from Islam's past. "The neighbor of the Prophet [Muhammad] was a Jew, and when that Jew was ill, the Prophet visited him and gave him kind words," said Mr. al-Issa, who is also a former Saudi minister of justice. "The hard-liners don't wish to know that."

This new tone toward Jews—and, to a lesser degree, Israel—is becoming particularly prominent in the Gulf states, led by Saudi Arabia. For these wealthy Sunni monarchies, it is Shiite and Persian Iran that poses the most pressing current threat to their interests. They view the Jewish state—a foe of the regime in Tehran and its regional proxies, including Lebanon's Hezbollah militia—as their de facto ally.

This unlikely partnership has gathered steam with the rise of Saudi Arabia's new deputy crown prince, Mohammed bin Salman, the architect of the Yemen war, who wants a more vigorous response to Iran. And it has received new momentum since the election of Donald Trump, the preferred candidate of Israel and the Gulf states. The White House said Thursday that Mr. Trump's first foreign trip as president will feature stops in both Israel and Saudi Arabia.

GETTY IMAGES

SAUDI DEPUTY CROWN PRINCE Mohammed bin Salman wants a firm response to Iran.

"We have the same enemy, the same threat," Saudi Maj. Gen. Ahmed Asiri, now the kingdom's deputy intelligence chief, said in February. "And we are both close allies of the Americans."

Pressure from the Gulf—particularly from Hamas's longtime backer Qatar—played a key role in the Palestinian group's decision Monday to remove slurs against Jews from its revised charter. Israel scoffed at the changes, noting that Hamas retained its goal of "liberating" all of historic Palestine—which would mean eradicating the Jewish state.

Still, some Israeli officials have praised the Gulf monarchies' shift on Hamas. "Most of [Hamas's] support came from Saudi Arabia and the Gulf in the past," said Ayoob Kara, a lawmaker from Prime Minister Benjamin Netanyahu's Likud Party and the only Arab minister in Israel's cabinet. "Now the Saudi Arabian coalition understands more and more that Hamas is an extremist organization and that extremism and terror are also against them, not just against Israel."

The Gulf states also shape opinion across the Arab world: Most of the influential TV news channels and pan-Arab newspapers are owned by Saudis, Qatari or Emiratis. "On TV, we no longer hear the usual words 'Israeli aggression.' Now, it's mostly about the 'Persian aggression,' " said Ahmad al-Ibrahim, a Saudi businessman and political analyst.

Sympathy for the Palestinian cause and rejection of Israel still run deep in the region, particularly in countries far from Iran that don't view it as much of a threat. Such feelings are widespread among the people of the Gulf states too, so most of the recent cooperation with Israel—focusing on intelligence and security matters—has occurred in secret.

But some small steps have been public. An unofficial Saudi delegation, led by a retired general, visited Jerusalem last year and met with Israeli officials. The United Arab Emirates has permitted a small Israeli mission to the U.N.'s renewable-energy agency, based in Abu Dhabi, and Emirati officials are weighing whether to allow low-key Israeli participation in the 2020 Dubai World Expo.

Such an erosion of Arab hostility to Israel rattles many Palestinians. "I am in favor of normalizing between Israel and all Arab countries—one minute after an independent Palestinian state is established," said Ayman Odeh, the head of the Arab bloc in Israel's parliament. "Agreements between Israel and Arab countries before the Palestinian issue is solved will weaken the Palestinian cause."

Many in the Gulf shrug at such complaints. "Saudi Arabia has always wanted to support the Palestinian cause. It negotiated on their behalf, it spent a lot of money on their behalf," said Mr. Ibrahim. "But unfortunately, the Palestinian leaders do not want to get along and are not working for their own people. You cannot just say no to everything."

—Margherita Stancati contributed to this article.

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REVIEW

WORD ON THE STREET: BEN ZIMMER

The Sinister History of 'Going Left'

LAST WEEK, the Fyre Festival, a deluxe music and arts gathering that was supposed to take place on an island in the Bahamas, went horribly wrong. Hyped as "the cultural experience of the decade," the event swiftly descended into chaos, as guests arrived to find an apparently half-finished site, with reports of roaming feral dogs, limited staffing and subpar food and amenities.

When the festival was abruptly canceled, one of its organizers, the rapper Ja Rule, issued a peculiar apology on Twitter. "I don't know how everything went so left but I'm working to make it right," it read in part.

Ja Rule is not the first to use "go left" to mean "go wrong," playing on the double meaning of "right." The turn of phrase has been popularized recently in hip-hop circles, appearing in two songs released late last year: "The Left," by Atlanta's Gucci Mane, and "Flexin," by Blake, a rapper from San Antonio.

The expression's musical roots go back to 1974, when the Motown recording artist Syreeta Wright sang "I'm Goin' Left," composed with her ex-husband, Stevie Wonder. "I'm goin' left / 'til you lead me to the right / lead me to what is right," goes the song, which was later covered by Jerry Butler and Eric Clapton.

"Going left" is just the latest manifestation of "left" being used for things taking a sinister turn. Indeed, the word "sinister" in Latin originally meant "on the left," which was considered an unfortunate position. The superstitious belief dates back to ancient Greek times, when oracles reading omens would face north; a flight of birds coming from the west, on the left side, was an inauspicious sign.

In French, the left-handed word "gauche" came to be synonymous with "clumsy" or "lacking grace." The English word "left" derives from a Germanic root meaning "weak, useless." And the Scottish adverb "widdershins," used for moving in a left-handed or counterclockwise direction, carries on the tradition of seeing leftward motion as unlucky.

From omens to an ill-fated music festival.

One precursor of the modern sense of "going left" can be found in an 1821 letter written to Washington Irving by his friend Henry Brevoort, describing a party that got out of hand: "Everything went left handed and a score of absurdities were committed."

In baseball, "left field" became "the metaphorical location for oddness," as Paul Dickson observes in "The Dickson Baseball Dictionary." The exact historical rationale for this is unknown; some speculate that it has to do with a mental hospital situated beyond the left field of an old Chicago ballpark. At any rate, "out in left field" has come to describe "odd, eccentric, unexpected, or exceptionally misguided or mistaken people and ideas in all walks of life," Mr. Dickson writes.

If things coming out of "left field" are unanticipated, wrongheaded or downright bizarre, then those shades of meaning could also contribute to contemporary understandings of "going left." Surely those frustrated by the Fyre Festival fiasco could identify with all of those unwelcome connotations.

BUILD CHANGE

AFTER AN EARTHQUAKE struck her village in April 2015, mother and grandmother Brinda Timilsina worked with the nonprofit group Build Change to retrofit her house in Bethanchok, Nepal.

WORK IN PROGRESS: HANNAH BLOCH

Better Buildings to Save Lives

IN JANUARY 2001, while working on her Ph.D. in civil engineering at the University of California, Berkeley, Elizabeth Hausler was riveted by news of a massive earthquake that struck Gujarat, in western India, and killed more than 20,000 people. She particularly recalls seeing "so many collapsed masonry buildings" in a photo collection of the disaster produced by the Earthquake Engineering Research Institute. It wasn't the quake itself that had caused the deaths in Gujarat, she realized: It was poorly designed and built structures, especially houses and schools. "It could have all been prevented," Dr. Hausler says. "I felt it was wrong for so many people to die in an earthquake."

She went to India in 2002-03 on a Fulbright fellowship to study postquake reconstruction there firsthand. In 2004, she started a nonprofit group to promote better building quality and safer construction in the developing world, in hopes of reducing the loss of life in natural disasters. Her Denver-based organization, Build Change, works directly with those who have lost homes to help design and build new or retrofitted housing. It trains builders, helps provide access to financing, works with governments to develop building codes and enforcement mechanisms, and conducts information campaigns to convey the basics of safe construction.

Structures capable of withstanding disasters.

For those rebuilding after a disaster, the organization "operates a little like an engineer to someone who can't afford an engineer, and a friendly inspector," Dr. Hausler says—right down to testing the quality of the bricks and the concrete being used.

Over the years, Build Change says, it has improved the safety of more than 257,000 people world-wide by creating more than 51,000 earthquake-resistant homes and school buildings, with either new construction or retrofitting. It has trained some 28,000 homeowners and builders in how to check construction quality.

The organization—which has received support from the Skoll Foundation, the Clinton Global Initiative, the Caterpillar Foundation and many others—works in Indonesia, the Philippines, Nepal, Haiti, Guatemala and Colombia, and it previously worked in China. The group has produced three primers on post-disaster construction for the U.S. Agency for International Development. While much of Build Change's work has occurred after disasters, Dr. Hausler says that it increasingly focuses on prevention—aiming to retrofit housing "before the next disaster strikes."

After the trauma of a quake, tsunami or other natural calamity, "You have to overcome people's initial feeling of hopelessness with 'Yes, you can build a safe house,' " Dr. Hausler says. Planning a new home can be transformative for those whose lives have been upended. "We hold their hands through their own design and construction process. You can just see how it changes people," she says. The resulting peace of mind extends well beyond the value of sturdy, reinforced walls, she notes—particularly for women and children, who are vulnerable to threats of illness, violence or trafficking if they have been left homeless after a disaster.

Dr. Hausler, 48, has long been fascinated by construction. As a teenager growing up outside Chicago, in Plano, Ill., she spent summers working with her father, a bricklayer who ran a masonry and construction business and first taught her the trade. "It was very rewarding," she recalls. "You can see what you've done at the end of the day—you've built part of a house." Over time, she became an experienced bricklayer and mason in her own right and earned an engineering degree from the University of Illinois, Urbana-Champaign. Besides her Berkeley doctorate, she also holds an M.S. in environmental science from the University of Colorado.

Dr. Hausler still calls her father, Don Hausler, her inspiration. Now retired, he visited twice in his late 60s as Build Change began its work in Indonesia more than a decade ago—and even laid bricks for new homes there. These days, his daughter says, "I feel like I'm carrying on the family business, but with a twist, doing it in my own way."

R&D: DANIEL AKST

The Benefits of Political Access

IS RUBBING shoulders with top U.S. government officials good for business? The answer appears to be yes, according to an intriguing new study by two finance professors at the University of Illinois, Urbana-Champaign.

Using White House visitor logs from 2009 through 2015, Jeffrey R. Brown and Jiekun Huang looked at 2,286 meetings between executives of companies in the Standard & Poor's 1500 Index and Obama administration officials. The index covers 90% of publicly traded U.S. firms.

The professors found that White House meetings were associated with higher short-term stock returns. Those returns probably weren't the result of merely having access, the professors say, because canceled meetings weren't followed by such extra returns. White House meetings also were followed by more government contracts and even regulatory relief, at least as measured by the tenor of subsequent regulatory news relevant to the companies in the study.

Meetings at the White House—and then higher stock prices.

"Consistent with the notion that campaign contributions 'buy' access," the professors write in a new working paper, "we find that firms that contributed more to Obama's presidential election campaigns are more likely to have access to the White House. We also find that firms that spend more on lobbying, firms that receive more government contracts, larger firms, and firms with a greater market share are more likely to have access to influential federal officials."

Although canceled meetings weren't associated with additional stock returns, firms with access to the Obama White House probably did enjoy elevated valuations, the researchers found, since their shares underperformed the market (and lagged behind shares of comparable firms) in the three days after the election of Donald Trump as Mr. Obama's successor.

The stock movements and other effects found in the research weren't trivial, the professors write. For example, shares of companies with meetings outperformed the market by nearly 1 percentage point during the period starting 10 days before the meeting and ending 40 days after it. On the flip side, shares of firms with access to the Obama White House lagged behind those of no-access firms in their industry by 1.3 percentage points in the three days after Mr. Trump's victory.

What accounts for the benefits associated with White House meetings? Dr. Huang suggests that the visiting executives might have received special consideration for their political support, or that officials simply gained information useful for developing more efficient policies and regulations (which benefited firms). "Overall," the professors write, "our results provide evidence suggesting that political access is of significant value to corporations."

Kevin Lewis, a spokesman for former President Barack Obama, declined to comment. The Trump administration, meanwhile, has said that it won't disclose White House visitor logs, which will be kept secret until at least five years after Mr. Trump leaves office.

Dr. Brown said that the Obama White House was hardly unique in terms of meetings and changes in firm value. "I would expect these results to hold true in all modern presidential administrations," he said, "regardless of party."

"All the President's Friends: Political Access and Firm Value," Jeffrey R. Brown and Jiekun Huang, National Bureau of Economic Research Working Paper (April)

PHOTO OF THE WEEK

THOMAS DELLEY/EUROPEAN PRESSPHOTO AGENCY

Saints and Dinners Saint Bernard pups ate Tuesday at the Barry Foundation, which breeds them in Martigny, Switzerland.

Answers
To the News Quiz on page C13

1.A, 2.D, 3.C, 4.A, 5.A, 6.D, 7.D, 8.D

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BRITAIN'S SPYMASTER EXTRAORDINAIRE **C6** | A LIFE OF SAM SHEPARD **C8** | THE NEW URBAN CRISIS **C9** | BEST SELLERS **C10**

BOOKS

THE WALL STREET JOURNAL.

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Chaos in the High Command

Until Grant took the reins, the Army of the Potomac was dysfunctional and defeatist

Lincoln's Lieutenants
By Stephen W. Sears
Houghton Mifflin Harcourt, 884 pages, $38

BY RUSSELL S. BONDS

ON APRIL 15, 1861, three days after Confederate forces fired on Fort Sumter, President Abraham Lincoln issued a proclamation calling for 75,000 militiamen to oppose "combinations too powerful to be suppressed by the ordinary course of judicial proceedings." As men across the North rallied to the Old Flag, the focus turned from manpower to leadership. The U.S. Army's general-in-chief was 74-year-old Winfield Scott, "Old Fuss and Feathers," whose best days were plainly behind him. A national hero who had served every president since Thomas Jefferson, Scott weighed 300 pounds and could no longer mount his horse. His contributions to the war effort would be strategic and administrative, his posting a desk in the War Department or a corner table at Delmonico's.

Meanwhile, many of the Army's finest officers had resigned and gone South: Robert E. Lee, Joseph Johnston, Albert Sidney Johnston, James Longstreet, P.G.T. Beauregard. As impressive as the Union mobilization may have been, this loss of talented leadership was alarming. "We are gathering a great army," Secretary of State William Seward said. "What I do not yet foresee is how it is to be led. What are we to do for generals?"

In "Lincoln's Lieutenants: The High Command of the Army of the Potomac," Stephen W. Sears revisits the generals of the primary Union army in the east with a monumental group biography. More than tactics and maneuvers, Mr. Sears deals with logistics, administrative detail and headquarters politics. This is a book about "org charts" and orders, not ordnance.

He opens with Fort Sumter and marches apace to the White House and the halls of the War Department as Lincoln and Scott struggle to settle on a grand strategy. Rivalries flare as veteran officers seek out new commands and squabble over seniority and brevets and backdated promotions. Ohioan Irvin McDowell emerged from the pack to take command of the Army of Northeastern Virginia, a handful of brigades assembled near Washington. Soon to be renamed the Army of the Potomac, these bluecoats would become "somewhat the army of everyone," as one memoirist noted. "Everybody meddled in its affairs, blamed this one, praised that one, exalted such a one, abused such a one." In July, prodded by the president and the press, McDowell marched against the Confederate force posted just 25 miles from the capital on the banks of a stream called Bull Run—and came back bloodied. This would be no 90-day war.

GETTY IMAGES

UNION CATALOGUE Covers of biographies of Civil War leaders included in packs of Duke cigarettes beginning in 1888.

Thus begins the first in a series of Union setbacks: the embarrassing skedaddle at Manassas, a subsequent debacle at Ball's Bluff, and then a catalogue of failures by generals from John Pope to Ambrose Burnside to Joseph Hooker. The first half of the book is dominated by the figure of George McClellan, elevated by Lincoln in November 1861 to replace the aging Scott and promptly anointed "the Young Napoleon" by the newspapers. Mr. Sears charges McClellan with all manner of military sins, from sluggishness to outright cowardice, as the general builds and trains a magnificent army and then for months fails to use it. Urged by Sen. Benjamin Wade to replace him, Lincoln asked, "If I relieve McClellan, who shall I put in command?" Anybody, Wade cried. "Wade," Lincoln replied, "anybody will do for you, but not for me. I must have somebody."

Following an unsuccessful campaign on Virginia's York-James peninsula, McClellan finally fought Lee to a stalemate at Antietam on Sept. 17, 1862, the bloodiest single day in American history. Mr. Sears finds his stride in the battle chapters, describing not only the cauldron of the front lines but the confusion that often prevailed at headquarters. The view presented is that of the Federal commanders; Mr. Sears spends little time on Confederate actions or actors. Antagonists like Lee and Stonewall Jackson and Jeb Stuart occasionally surface in the narrative like sharks circling the wobbly boat of the Union, soon to strike and fade back, too often unpursued. So it was in the weeks following Antietam, and Lincoln at last gave up on McClellan. As Lincoln put it, he had "tried long enough to bore with an auger too dull to take hold."

Perhaps the most fascinating aspect of "Lincoln's Lieutenants" is the pervasive and open hostility among the Army of the Potomac's top commanders. The atmosphere was not merely one of ambition or jealousy or

> Squabbling Union generals hoped that the Rebels would humiliate rival colleagues in battle.

even personal distaste but rather one of generals—McClellan chief among them—actually hoping that the Rebels would humiliate rival colleagues in battle. Writing in September 1862, Attorney General Edward Bates complained of "a criminal tardiness, a fatuous apathy, a captious, bickering rivalry, among our commanders who seem so taken up with their quick made dignity, that they overlook the lives of their people & the necessities of their country."

It was up to Lincoln to make these bitter, selfish men work together toward victory. The president's presence, voice and resolution are fascinating throughout, from his early days attempting to learn from Scott, to the frustrating months trying to prod McClellan into action, to his eventual warm partnership with Ulysses S. Grant. Fighting impatience and lacking meaningful military experience himself, Lincoln led the Army and the nation with common sense, frontier wisdom and, when called for, considerable backbone. "General, I understand you have used the word 'capitulate,' " Lincoln told McClellan's pessimistic chief of staff; "that is a word not to be used in connection with our army."

The fortunes of the Army and the nation began to turn at Gettysburg in July 1863. Succeeding the blustering Joe Hooker, George G. Meade led Union forces to a brilliant victory. Then and thereafter, other stalwart, reliable officers—Winfield Scott Hancock, Henry Hunt, Phil Sheridan,

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Two Fronts in the Same War

Women in the World of Frederick Douglass
By Leigh Fought
Oxford, 401 pages, $29.95

BY FERGUS M. BORDEWICH

FREDERICK DOUGLASS bestrides the history of abolitionism like a colossus, dwarfing the memory of his fellow activists, except perhaps for John Brown, William Lloyd Garrison and Harriet Tubman. Many other black abolitionists, in particular, deserve to be better remembered than they are,

> Douglass saw freedom for slaves and power for women as fundamental matters of human justice.

among them David Ruggles, James McCune Smith, Mary Ann Shadd, Charles Remond, William Wells Brown and William Nell. That Douglass should loom so large in public memory should not be surprising, however. His remarkable life story, as recounted in his three autobiographies—all available in a single Library of America edition—make riveting reading even today, not least because he was a talented writer whose brisk prose was unencumbered by the stilted syntax that weighs down so much 19th-century literary composition.

Born into slavery in Maryland, Douglass (1818-95) escaped to freedom with help from the Underground Railroad and eventually rose to become the most famous African-American of his time: a spellbinding orator, a newspaper editor and eventually a political figure in his own right. He was also, it turns out, one of the age's most passionate male feminists, as Leigh Fought shows in "Women in the World of Frederick Douglass," a fresh and surprising account of Douglass's life.

Douglass saw the emancipation of slaves and the empowerment of women as two fronts in the same war for fundamental human justice. His support for feminist goals was more than political pragmatism, argues Ms. Fought, a professor of history at Le Moyne College in Syracuse, N.Y. Throughout his life, Douglass's relationships with women were complex, varied and often remarkably intense, not to say shocking to many in the mid-19th century.

NATIONAL PARK SERVICE

ACTIVIST Douglass ca. 1884 with his second wife, Helen (right), and her sister. From the biography **'Picturing Frederick Douglass' (Liveright, 288 pages, $49.95)**, by John Stauffer, Zoe Trodd and Celeste-Marie Bernier.

In previous biographies of Douglass, Ms. Fought writes, "women periodically entered as supporting characters with only vague references to their influence on Douglass's development. Their role at each step of his advancement through the antislavery movement has been diminished, leaving the impression that he occupied an almost entirely masculine world." In fact, the antislavery movement was populated with well-educated and outspoken women whose public roles and ardent service to the cause challenged the assumed supremacy of their male counterparts. Indeed, open discrimination against female delegates at the London world antislavery conference, in 1840, led in a more or less straight line to the first public demands for equal rights and the seminal Seneca Falls Convention of 1848.

Douglass's identification with women's rights was early and adamant. He "witnessed women who brazenly called attention to themselves" at antislavery meetings, Ms. Fought writes. For years, women served beside him in roles of authority. Most were middle-class Yankee reformers, such as Maria Weston Chapman and Amy Post, who both became close friends. They later fell out with Douglass when he embraced direct political action and rejected Garrison's dogmatic philosophy of moral persuasion, a debate over tactics that roiled and divided the abolitionist movement as a whole.

Douglass's feminism was put to its greatest test after the Civil War, when the coalition between black-rights advocates and women's-rights advocates fractured over the 15th Amendment, which gave black men the right to vote but postponed female suffrage indefinitely. (It would not come until 1920, with the 19th Amendment.) The American Antislavery Society, which had long spearheaded the campaign for emancipation, threw itself behind efforts to achieve political equality for blacks. In May 1865, Wendell Phillips, the society's president, declared: "This hour belongs to the negro." Feminist leaders who had long supported abolition—among them Elizabeth Cady Stanton, Susan B. Anthony and Lucy Stone—retorted that it was also "the hour for woman to make her demand."

The newly established, feminist American Equal Rights Association, Ms. Fought recounts, sought to ensure that no black civil-rights legislation passed without it also including women. Republican leaders, however, few of whom supported full rights for women, believed that their best chance to retain the party's ascendancy in the South was to enfranchise

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'I want to be with those who know secret things.' —Rainer Maria Rilke

The Pied Piper of MI5

Agent M
By Henry Hemming
PublicAffairs, 354 pages, $28

BY RICHARD DAVENPORT-HINES

COURTESY OF JOHN DICKSON

SPYMASTER EXTRAORDINAIRE
Maxwell Knight.

HENRY HEMMING has found a peach of a subject. Typically, English eccentrics are futile, self-indulgent loners who make nothing but a passing show. But the little-known spy Maxwell Knight (1900-68) made a lasting difference. He was a sort of Pied Piper of Hamelin who used his weird, sympathetic powers of charm and patience to become one of the great 20th-century spymasters.

The man who taught a blue Amazonian parrot to imitate the sounds of a cork being drawn from a bottle and of wine being poured stood outside the range of human normality. As a child he nursed wounded creatures, rescued orphaned birds, tamed rats, and cherished lizards, hedgehogs, worms and toads. The same quality of watchful empathy enabled him as an adult to understand the kinks of human nature.

Knight grew up in a characterless district of south London. His father was a small-time lawyer and spendthrift who died when Knight was 14. His guardian then condemned him to a brutal adolescence on a training ship for merchant seamen. In early manhood he worked as a lowly clerk in a government ministry and as the sports master of a school for boys. He lived in an apartment in the staid London suburb of Putney with his mother and a baboon, became a jazz fiend, took clarinet lessons from Sidney Bechet and kept a bear who, when Knight exercised her in the suburban streets on a chain, was mistaken for an overgrown puppy.

In the mid-1920s, Knight came to work for Sir George Makgill, a hard businessman of the sort who metaphorically liked his breakfast eggs boiled in widows' tears. Makgill was a Freemason who ran a secretive anti-union and antiforeigner outfit called the Industrial Intelligence Bureau on the model of a Masonic lodge. Makgill instructed Knight to join the far-right British Fascisti. There he became associated with such insalubrious characters as the Irish-American fascist William Joyce, later notorious for his "Lord Haw-Haw" broadcasts from Nazi Berlin. Knight was involved in kidnapping a communist leader from a train and in burgling and wrecking communist offices.

In 1925 Knight took a fascist bride named Gwladys and began living with her and a mongoose named Rikkitikki, a sherry-drinking bush baby named Pookie and a wheezing bulldog named Fatty. It seems that the marriage was sexually inactive. After 11 years his wife died of a probably accidental overdose of barbiturates.

After Makgill's death in 1926, Knight and his wife managed a country hotel without much satisfaction to themselves or their guests. In 1929 he was approached by Desmond Morton of MI6—later Churchill's intelligence adviser and favorite spook—to join a new counter-espionage network against Soviet spies in Britain. Knight began to run sub-agents reporting on both far-left and far-right extremists. Initially he split his services between Special Branch (part of London's Metropolitan Police) and the Special Intelligence Service (SIS), which was the British counterpart to the CIA. In 1931 he was transferred to MI5, which was a badly funded knockoff of the FBI. For the next 30 years, until his retirement in 1961, he specialized in placing agents inside the British communist party. To a limited extent, during World War II, he was involved in monitoring the numerically small and very cranky pro-Nazi cells in Britain. In the 1950s he combined his MI5 work with a busy career as a television and radio broadcaster of programs about pets and wildlife.

> He kept a pet bear, studied clarinet with Sidney Bechet and ran spies within both far-left and far-right groups.

There are abundant books—often headline-grabbing, crassly sensationalized and full of hoary half-truths—about English espionage and counter-espionage. "Agent M," by contrast, is full of new material, fresh interpretations and uncompromising integrity. Mr. Hemming writes in a relaxed, sometimes almost too conversational, way that might make readers underestimate the depth of his research or the novelty of his discoveries. As someone who knows the archive well, I can say that he has been heroically pertinacious. His patience, his memory for small details and his ingenuity in connecting them are astounding.

Only one of Knight's agents has hitherto been named. "Miss X"—an informant embedded in the British communist party who in 1937-38 entrapped Percy Glading, the leader of a spy ring stealing naval armaments secrets from a government arsenal—has long been known to have been Olga Gray. Mr. Hemming, however, retells the story of her lonely, nerve-racking undercover work with brio. She was first recruited during a lawn game at a summer garden party. "In the moments that followed, Olga had to make a life-changing decision," Mr. Hemming writes. "It is possible that she put down her putter."

But Mr. Hemming's great coup is to identify a score of Knight's agents who have hitherto been known by such designations as M/1 and M/2. In doing so, he has transformed our knowledge of MI5 recruitment, procedures and successes.

M/1 turns out to have been an eminent English bibliophile and scholar, Graham Pollard, who had been a pupil at the school where Knight was sports master. Pollard won a top history scholarship to Oxford University in 1922, a year after his presumed first meeting with Knight. At Oxford he joined the decadent Hypocrites Club and beat fellow Hypocrite Evelyn Waugh in a spitting contest. Probably at Knight's instigation, he then proclaimed himself as an Oxford communist and proceeded to become an invaluable and deadly informant for Knight inside the Communist Party of Great Britain. Until now, Pollard has been best known for his detection of the crimes of a notorious book forger and thief named T.J. Wise.

Agent M/2 is identified by Mr. Hemming's superb detective work as Mona Maund, a spinster from a landowning family. Another of Knight's agents was Jimmy Dickson, a civil servant who toiled in one of the duller government departments as well as a former fascist paramilitary, a fast-talking, chain-smoking womanizer and a failed actor who wrote pulp thrillers. An even odder character dug up by Mr. Hemming is E.G. Mandeville-Roe, a devout fascist who nevertheless acted as MI5's informant on far-right plotters and a furious anti-Semite who grew a Hitler moustache while spying on behalf of the Board of Deputies of British Jews.

Gray, Maund, Pollard, Dickson and others came from right-wing and often upper-middle-class backgrounds. It was a measure of Knight's oddness of mind and devious skill that he trained conventionally minded conservatives and avowed fascists to assimilate into communist organizations. They kept their cover by saying the right things, going to the right places and knowing the right people. These complicated deceptions required the trickiest tradecraft but often brought great payoffs.

For too long popular historians have echoed the narrative offered by defecting spies such as Guy Burgess and Kim Philby who wished to damage the reputations of the British security services. According to this travesty, MI5 was class-bound, inflexible, snobbish, obtuse and incompetent. Mr. Hemming vindicates a maligned organization. He has managed the great feat of producing a rattling good read that is also a major piece of revisionist history.

Mr. Davenport-Hines is the author, most recently, of "Edward VII: The Cosmopolitan King."

Lincoln's Generals

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John Gibbon—began to emerge, focused on ultimate victory rather than on their own petty grievances. Finally, more than 600 pages into our story, U.S. Grant steps onto the stage of the Eastern Theater as general-in-chief. He was pleasantly surprised by what he found. "The Army of the Potomac is in splendid condition," he wrote, "and evidently feels like whipping some body."

Lincoln's search for capable generals has long been a focus of historians and is one of the great story arcs of the Civil War, recounted in his many biographies and retold by narrative historians from Bruce Catton to Shelby Foote. More specialized studies include Russel Beatie's three-volume "Army of the Potomac" series and Ethan Rafuse's thought-provoking "McClellan's War."

Formerly an editor at American Heritage and a pre-eminent chronicler of Civil War history, Mr. Sears is the author of detailed accounts of the battles of Antietam, Chancellorsville and Gettysburg, along with a leading biography of McClellan. In 1998, he abridged and edited Douglas Southall Freeman's classic three-volume study "Lee's Lieutenants" (1942-44), which perhaps sparked the idea for a similar review of the Union high command.

Mr. Sears's diligent research and decades of experience are apparent throughout, but the text itself is dense and complex. The cast of characters is unavoidably large, and the author's thoroughness at times may overwhelm the reader. (In one early chapter, he rattles off the names of no fewer than 27 senior and subordinate Federal officers on a single page.) Even dedicated students of the war may struggle to follow passages like: "[Heintzelman] discounted the opinion of Newton, only a brigade commander, and Burnside was vague about Porter's opinion. Yet Keyes certainly and Franklin probably had not reneged on their earlier statements to the president."

> Despite horrific losses and inconstant leadership, the Army's rank and file never lost their resolve.

Mr. Sears quotes extensively from the diaries and letters of dozens of commanders and correspondents, and it is here that we find telling insights and stinging characterizations of McClellan (" 'the little corporal' of unfought fields"), McDowell ("savage as a meat axe"), Pope ("our miserable humbug-bag of gas"), and Hooker ("his failing was more in the way of women than whiskey"). More than 150 illustrations complement the text—most of them not the familiar black-and-white Civil War photos but rather rare battlefield sketches and scathing political cartoons. The book's intricate hand-drawn battlefield maps, although handsome, are more intriguing than informative—as they depict towns, roads and geographical features but do not show troop positions or movements.

To his credit, Mr. Sears consistently emphasizes the human cost of battle—not only with casualty figures but with poignant anecdotes and a roll call after each chapter of the generals lost in the fighting. On one occasion, he notes, Gen. Alpheus Williams hosted a shade-tree luncheon for his officers even as the opening shots were fired in the Battle of Cedar Mountain in northern Virginia. Hours later, every one of his guests had been killed or wounded. By the closing days of the war, some 20 generals "were dead and gone serving the Army of the Potomac." Yet notwithstanding horrific losses from the Wilderness to Appomattox, "Grant was unrelenting," Mr. Sears notes. Or as Lincoln put it: "It is the dogged pertinacity of Grant that wins."

"Lincoln's Lieutenants" reminds us that the outcome of the Civil War was not a foregone conclusion. The war was won through hard fighting, persistence and steadfast leadership in the Union Army—a victory earned over a determined foe at an appalling cost. When Confederate Maj. Gen. George Pickett was asked why the South had lost the Battle of Gettysburg, his explanation was a simple one. "I always thought that the Yankees had something to do with it," he said.

Mr. Bonds is the author of "War Like the Thunderbolt: The Battle and Burning of Atlanta."

Frederick Douglass

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black men and only black men. Most painful to Douglass was the defection of longtime friends, including Stanton and Anthony, who embraced crude racial appeals in their unsuccessful attempt to defeat the 15th Amendment.

Stanton predicted that, by giving blacks the vote, the amendment would unleash "fearful outrages on womanhood, especially in the southern states," while Anthony complained that the amendment had "elevated the very last of the most ignorant and degraded classes of men to the position of master over the very first and most educated and elevated classes of women." Such rhetoric, Ms. Fought notes, fed into an already toxic atmosphere in which black men were baselessly accused of designs on white women and sometimes lynched. Although Douglass strongly supported the 15th Amendment, he never descended to insulting polemics and remained a staunch advocate of women's rights to the end of his days.

Douglass's political relationships are well-documented, less so his more intimate ones. Ms. Fought works heroically, if not entirely satisfyingly, to pull from the shadows Douglass's enslaved mother and beloved grandmother, from whom he was torn away in early childhood. Making sense of his marriage to his first wife, Anna, has also proved a perennial challenge to historians. Illiterate, focused on home and family, Anna remains something of a mystery to historians; her silence is all the more acute when posed against the expressiveness of her supremely eloquent husband.

Even fellow abolitionists tended to belittle Anna "as too base and uncultured" to be taken seriously, Ms. Fought says. One observer savagely dismissed her as a "stupid old hag." Ms. Fought considers such judgments groundless as well as cruel. She argues, for the most part persuasively, that Anna collaborated with Frederick as an equal partner in the creation of a visibly stable, dignified and tightly knit middle-class black family (with five children)—something that was by definition denied to slaves and difficult even for free blacks, most of whom lived in deep poverty. All this was no small achievement, given Frederick's often precarious finances and long absences on lecture tours.

As rigorously respectable as Douglass kept his home, it was noted by many that he was very attractive to women. "You can hardly imagine how he is noticed, petted I may say by ladies," observed a British abolitionist during Douglass's first trip to England. "Some of them really a little exceed the bounds of propriety, or delicacy." Douglass's enemies often accused him—speciously, Ms. Fought believes—of seducing white women, a facile slur that could always be exploited to feed widespread fears and fantasies about sexually insatiable black males.

Particular targets for these allegations were Julia Griffiths, an English abolitionist who crossed the Atlantic to become the business manager for the North Star, Douglass's first newspaper, saving it from collapse. Another was the beautiful German journalist Ottilie Assing, who, like Griffiths, virtually moved into the Douglasses' crowded home for months at a time. Assing was probably in love with Douglass. "If you are in as close of a relationship with *one* man as I am with Douglass," Assing gushed to her sister, "you get to know the whole world, men and women, from perspectives that would otherwise be hidden." Ms. Fought finds no evidence that either relationship ever became sexual, but she astutely observes that Griffiths and Assing, like others, fed the great pleasure that Douglass took in the company of intelligent women.

> Douglass, his wives and their female supporters were partners in protest against political inequality.

Two years after Anna's death in 1882, Douglass married again, this time to a white woman, an appealing social reformer named Helen Pitts, who had taught freed slaves during the Civil War and now worked on Douglass's staff in the office of Washington's Recorder of Deeds. This unglamorous office essentially served as a patronage pool during the Jim Crow years, providing jobs for educated black Republicans and others, such as Pitts, who could not find respectable work elsewhere. The marriage was publicly criticized by both racist whites and by blacks who regarded his choice of a white woman as an affront to African-Americans.

Though sickly, Pitts had moral grit and was devoted to Douglass, and she would fight hard to protect his legacy after his death. "For Frederick," writes Ms. Fought, "this marriage, like his first, emerged from the desire to choose his companion and to have that choice legally and socially recognized. In doing so, he had defied slavery with his marriage to Anna and the prohibitions against interracial marriage with his wedding to Helen." Like so much of Douglass's life, his years with Pitts were a defiant demonstration of his determination to exercise his independence in every aspect of his life, no matter who objected, not just for his own sake but for the future freedom of all black Americans.

Mr. Bordewich's most recent book is "The First Congress: How James Madison, George Washington, and a Group of Extraordinary Men Invented the Government."

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'What a curious picture it is to find man . . . going underground to escape the consequences of his own folly.' –J. William Fulbright

The Nuclear Winter White House

Raven Rock
By Garrett M. Graff
Simon & Schuster, 529 pages, $28

BY HOWARD SCHNEIDER

TALK ABOUT a deep state. Garrett M. Graff's "Raven Rock: The Story of the U.S. Government's Secret Plan to Save Itself—While the Rest of Us Die" is an encyclopedic chronicle of how the American government, for more than 60 years, has prepared for nuclear attack, most notably with bunkers underground and inside mountains to shelter government officials and other personnel—men and women who could retaliate against the enemy with nuclear weapons and begin to rebuild society. "Raven Rock" contains everything one could possibly want to know about these seemingly still-continuing measures to confront Armageddon.

COG—continuity of government—is the acronymic *idée fixe* that has underpinned these doomsday preparations. A bunker was installed in the White House after Pearl Harbor, but the nuclear age (particularly after the Soviet Union successfully tested an atomic bomb in September 1949) introduced a nationwide system of protected hideaways, communications systems, evacuation procedures and much else of a sophistication and ingenuity—and expense—never before conceived.

In 1950, during renovations to the White House, a new "secret" bomb shelter was built beneath it, with a 4-inch-thick door that "opened into a shower room, to allow occupants to rinse off radioactive fallout," Mr. Graff writes. President Truman issued an executive order in 1950 creating the Federal Civil Defense Administration. The agency dispatched Alert America convoys throughout the nation—"costumed staffers dressed as Bert the Turtle handed out pamphlets and literature"—and produced films and brochures. "Signs posted in every New York taxicab," Mr. Graff says, "explained that in the event of an enemy attack, the cab would immediately pull to the curb and disgorge its passengers."

Strategies for evacuating government VIPs began in earnest in the early 1950s with the construction of Raven Rock, an "alternate Pentagon" in Pennsylvania near what would become known as Camp David, and Mount Weather, a nuclear-war sanctuary in Virginia for civilian officials. Both would be modernized over the years and would become, in effect, subterranean cities. "The two facilities," according to Mr. Graff, "would serve together as the core of the government's Doomsday planning for the next seven decades."

THE GREENBRIER

DOOMSDAY HIDEAWAY A concealed entrance to the congressional bunker at the Greenbrier resort in West Virginia.

Every subsequent president would be involved with COG concerns. President Eisenhower took the planning very seriously but was pessimistic about its merit, dubious about whether the nation—or the world—would survive a nuclear war between America and the U.S.S.R. In 1957, when a report that he had ordered urged a "massive shelter-building program," the president dissented, Mr. Graff notes, arguing that "widespread serious planning for a nuclear exchange was a waste of finite resources." Nevertheless, during his administration COG planning continued apace. In 1959, construction began on a secret refuge for Congress underneath the Greenbrier, a resort in West Virginia. In the event of an attack, members of Congress would have been delivered by special train and housed in dormitories with name-plated bunk beds.

The most important COG-related activities during the Kennedy administration came during the Cuban Missile Crisis in October 1962, the closest this country has come to a nuclear war. Not only was the military mobilization chaotic—"one pilot bought fuel for his bomber with his personal credit card"—but VIP evacuation measures were, for the most part, a debacle: "In many cases, the plans for what would happen after [a nuclear attack on the U.S.] were so secret and so closely held that they were almost useless." During the Johnson administration, presidential succession was addressed with the passage of the 25th Amendment, which "delineated a clear process to declare a president unable to serve, as well as a clear process for the president to resume power once recovered."

Jimmy Carter, at least initially, immersed himself in the COG world. Evacuation drills were conducted, and Mr. Carter, according to Mr. Graff, "scheduled regular telephone calls with military field commanders, in part to familiarize the military leaders with the president's voice and manner of speech." The Air Force also acquired, for the president's use, four Boeing 747 "Doomsday planes" with state-of-the-art communications technology, which were nicknamed "Air Force One When It Counts." Mr. Carter personally inspected Raven Rock and Mount Weather—even though he indicated in his diary that, during a nuclear war, "my intention is to stay here at the White House as long as I live to administer the affairs of government, and to get Fritz Mondale into a safe place, underground or in a command airplane."

> The president's bunker was equipped with a 4-inch-thick door and a shower to rinse off fallout.

Probably the most fraught 24 hours in the history of COG worrying occurred on Sept. 11, 2001, when al Qaeda terrorists attacked the World Trade Center and the Pentagon. COG projects and training had been ceaselessly initiated and honed for a half-century; but, as Mr. Graff writes with impressive understatement, "the U.S. government [wasn't] prepared very well at all." Fighter planes were dispatched to head off a hijacked aircraft heading toward Washington, D.C., but as one pilot later disclosed, "I reverted to the Russian threat. . . . I'm thinking cruise missile from the sea. . . . No one told us anything."

While Vice President Dick Cheney had been swiftly hustled to the White House bunker, "those officials outside the bunker, even high-ranking ones, had little sense of where to go, whom to call, or how to connect back to the government," Mr. Graff writes. But there were enough people in the bunker to deplete the oxygen supply and raise the carbon-monoxide level, and so "nonessential staff" were ordered to leave. When House Speaker Dennis Hastert tried to call Mr. Cheney on a secure phone, he couldn't get through. He later said, "To use the secure phone, you have to push a button and turn a key. On that dreadful day I couldn't make the thing work. No matter what I did, I couldn't connect with the vice president."

When President George W. Bush heard the news about the attacks that morning, he was in Florida. He was whisked into Air Force One, which, Mr. Graff notes, "took off at 9:54 a.m., with no specific destination in mind." It would eventually land, and the president would address the country. But "Air Force One's limitations"—it wasn't one of the Doomsday planes—"came into stark relief." For one thing the plane's communications systems were woefully inadequate for what was required on 9/11. "On the worst day in modern U. S. history," Mr. Graff writes near the end of his exhaustingly detailed account (I sometimes felt buried alive under its mass of data), "the president of the United States was, unbelievably, often less informed than a normal civilian sitting at home watching cable news." There was more of the same that day. In retrospect, the nation was fortunate that the catastrophe wasn't worse.

Mr. Schneider reviews books for newspapers and magazines.

Setting a Trap for a Terrorist

Incendiary
By Michael Cannell
Minotaur, 289 pages, $26.99

BY PETER DUFFY

THE CRIMINAL PROFILER is a staple of American pop culture. Confronted by a heinous crime with a confounding pattern of evidence, police authorities, cable-news anchors and Hollywood scriptwriters call on a sagacious investigator, a modern Oracle of Delphi, who will conjure a portrait of the wrongdoer based on a broad outline of the case facts.

"Well, he's a white male," says Clarice Starling (Jodie Foster) in "The Silence of the Lambs" (1991), flipping through a sheaf of papers on a serial killer known as Buffalo Bill. "He's not a drifter. He's got his own house somewhere, not an apartment . . . He's in his 30s or 40s. He's got real physical strength combined with an older man's self-control. He's cautious, precise, and he's never impulsive. He'll never stop."

The father of profiling—known variously as the "Prophet of Twelfth Street," the "Sherlock Holmes of the Couch" and the "Psychiatric Seer"—was Dr. James Brussel. In "Incendiary," a brisk and cinematic account of an episode of crime-solving drama from atomic-age America, Michael Cannell describes Brussel as a "wiry figure with a droll smile and a pencil mustache dyed to match his dark, combed-back hair." The doctor was quite a character: a fast talker with a theatrical manner, an amateur pianist and composer (whose operetta "Dr. Faustus of Flatbush" received "a riotous reception at a psychiatric convention"), a Demerol addict and a man who never went anywhere without his snub-nosed revolver. "And, believe me, if I ever need to shoot—I will," he said.

Mr. Cannell, a former editor at the New York Times and the author of two previous books of history and biography, investigates the case that made Brussel's reputation: the odd tale of an elusive figure known to the press as the Mad Bomber. Beginning in 1940 and continuing until his arrest in January 1957, "F.P.," as the bomber signed himself in taunting letters, planted 32 homemade pipe bombs in public places in New York City. He was motivated, he made clear, by a grievance against the Consolidated Edison energy company. He targeted Radio City Music Hall, Penn Station, the Paramount Theater in Times Square, Grand Central Terminal and the main branch of the New York Public Library on Fifth Avenue. Fifteen people were injured in the blasts. Miraculously, no one was killed.

> Brussel boldly predicted that the 'Mad Bomber' loose in New York City would be caught wearing a double-breasted suit.

Mr. Cannell is a gifted portraitist. There is the street-smart intellectual in charge of the New York Police Department, Stephen Kennedy, who eschewed the conviviality of the corner tavern for quiet nights at home listening to Puccini. The dean of the wise-cracking police reporters was Patrick Doyle of the Daily News, "nicknamed the Inspector for his sly way of gathering information by impersonating a detective." The commander of the brave souls of the bomb squad was Capt. Howard Finney, "a science-minded criminologist" with a "steel-grey crew cut." The squad hauled away several of F.P.'s bombs before they could cause injury to life and limb.

All leads were exhausted when cops made the novel choice of consulting Brussel, an assistant commissioner at the New York State Department of Mental Hygiene with a reputation for insight into the criminal mind. After two hours of reviewing crime-scene photos, F.P.'s letters and other materials, Brussel told detectives to search for a middle-aged man of medium build who resided with an older female relative and had a history of workplace disputes. The stilted language in the letters (which were sent from Westchester County, north of the city) suggested that F.P. was a Slav, probably living among fellow Eastern Europeans in an industrial town in Connecticut. The suspect had a self-righteous insistence on order. When you arrest him, Brussel predicted, he'll be wearing a double-breasted suit. "And it will be buttoned."

MINOTAUR

BOMB SQUAD Removing one of F.P.'s devices from Grand Central Terminal.

According to Mr. Cannell's timeline, the New York Times ran a truncated version of Brussel's profile, which piqued the interest of Seymour Berkson, the dashing publisher of the New York Journal-American, a middle-of-the-pack daily struggling to be noticed in a crowded media landscape. The Journal-American decided to publish an open letter to the bomber offering him "the full chance to air whatever grievances you may have as the motive of your acts." F.P. wound up writing three handwritten letters to the newspaper revealing his outrage over "the dastardly acts against me" by Con Ed and complaining about the "Mad Bomber" nickname. "Calling me names—is just frustrated stupidity in action."

One of the readers of the bomber's ravings was Alice Kelly, a clerk with Con Ed who had been assigned to review sensitive files that had so far escaped police scrutiny. She came upon the case of George Metesky, an employee who had been injured in a boiler explosion in 1931. After the denial of his workman's compensation claim was upheld in 1936, Metesky told the company that he would "take justice into my own hands" for its "dastardly deeds." Said Kelly: "As I pulled this typewritten letter, I knew I had something. I saw some words that I had seen in the Journal-American."

Cops promptly descended upon Metesky, a 53-year-old of Lithuanian descent who was living with two older sisters in Waterbury, Conn. He was fastidiously dressed, Mr. Cannell writes, in "sensible brown rubber-soled shoes, red-dotted necktie, brown cardigan sweater and"—yes—"double-breasted blue suit." Flashing a creepy grin for photographers who were on hand for his perp walk in Manhattan, Metesky admitted his crimes. F.P., he told police, stood for "Fair Play," which was all he was seeking. He was deemed "medically insane" and confined to mental institutions until 1973. The Mad Bomber died in 1994 at age 90.

Brussel went on to consult for police departments and train early FBI profilers. He worked on the Boston Strangler and Sirhan Sirhan cases. Over time, he evolved into a media-ready huckster. He wrote a book called "Instant Shrink: How to Become an Expert Psychiatrist in Ten Easy Lessons." He penned magazine stories on the dangers of sunburn and high blood pressure. "Had he been born a generation later," Mr. Cannell writes, "Dr. Brussel could easily have hosted a daytime television show devoted to health issues." He was a true American original—just as much an early version of Dr. Phil as he was a prototype for Clarice Starling.

Mr. Duffy's latest book is "Double Agent: The First Hero of World War II and How the FBI Outwitted and Destroyed a Nazi Spy Ring."

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'I believe in my mask—The man I made up is me / And I believe in my dance—And my destiny.' —Sam Shepard

Not Written But Real

Sam Shepard: A Life
By John J. Winters
Counterpoint, 432 pages, $30

BY ETHAN MORDDEN

TRUE WEST Sam Shepard in 1985.

ALAMY

THE LIGHTS COME up on a blindfolded cowboy in jeans and a T-shirt strapped into an electric chair. He speaks of a pickup truck he intends to buy and of horse breeding. He falls silent for a full minute, then starts up again with "Dude says he can give me a deal on that blue truck." After more of this, the lights fade and, as they go to black, the chair lights up, the cowboy is dead and the play is over.

Or consider the saga of an outstandingly dysfunctional family, one that takes in adultery, incest and the murder of a baby. Half the time no one knows who anyone is, though most of the characters are closely related. You could die in the living room and no one would notice.

These are, respectively, "Killer's Head" (1975) and "Buried Child" (1978), two of the many plays of Sam Shepard, plays that concentrate on drifters, dreamers, incompetent criminals and various masterminds of the obtuse and unseemly, all acting as if they are omnipotent in their domain when in fact they can scarcely find their way downstairs. Mr. Shepard tells of inhospitable places, usually rotten motel rooms, where everyone's on the move, going absolutely nowhere.

Born in Illinois in 1943 but raised mainly in Southern California, Mr. Shepard became, bit by bit, the poet of the uncelebrated class and the voice of the American West. His legend has him, as a teenager, getting into the rambunctious trouble befitting a future visionary—joy riding in stolen cars and insulting authority figures. But, as John J. Winters tells us in his excellent biography, Mr. Shepard had much the same high-school life as most of his generation, going out for sports, joining the 4-H Club and even appearing in the musical comedy "Finian's Rainbow." He can at least claim a rough relationship with his hard-drinking father, and a final blowup between them led to Mr. Shepard's lighting out, in 1963, for New York, the capital of the experimental-theater movement.

Writing came easily to him. "He was good and he was lucky," Mr. Winters explains. Mr. Shepard himself says: "The stuff would just come out, and I wasn't really trying to shape it or make it into any big thing." Yet that's what beguiles. His characters don't sound "written": They're real. And, like their progenitor, they're thoroughly unpredictable. Fall asleep on a couch and someone might well sneak up and shear off your hair—as happens in "Buried Child." Mr. Shepard, says Mr. Winters, "can be shy, difficult, reserved, obstreperous, openhearted, taciturn, sentimental, social, isolated, funny, angry, inspired, dull, brilliant and ordinary."

> Shepard's plays tell of inhospitable places, where everyone's on the move, going absolutely nowhere.

He is also tall and handsome, which is why he's not only a playwright but a movie star, even earning an Oscar nomination for playing pilot Chuck Yeager in "The Right Stuff" (1983) and starting a family with fellow Hollywood celebrity Jessica Lange. He's the counterculture's Gary Cooper, with the thousand-yard stare of the bedrock American hero but the playful glitches of the mischief-maker.

Mr. Shepard seemed uniquely in tune with the outlaw worldview of the Vietnam era. His characters do battle with destiny on the Shakespearean level—and destiny is your tyrannical father, forever declaring wars on you and calling for regime change in your life. In these plays, no family member is safe. The violence is overt, yet there is no Hitchcockian undertow of menace. His people—like the cowboy in the electric chair in "Killer's Head"—converse for the most part in the language of the everyday as they lurch discursively from one theme to another. In "The Rock Garden," a woman tells how her father liked to dine alone. "He ate with the cats in the attic," she says. "He had a lot of cats. He had one called Ty Cobb because it played ball so well. . . . I never saw Ty Cobb, but he told me that was his favorite."

Mr. Winters notes a certain parallel between Mr. Shepard and Harold Pinter, and both playwrights do avoid plot-driven scenarios, preferring to let us listen to their characters and see where they take us. Pinter's art, however, focuses on banal people speaking eccentrically, while Mr. Shepard presents eccentrics uttering banalities. Still, his plays, like Pinter's, are anything but banal. Mr. Winters quotes actor Gary Sinise on "Buried Child": "It has all the elements—mystery, horror and pain—and it's hysterically funny. [Mr. Shepard] doesn't write things that are all logical and linear. Just like life, he leaves many questions unanswered."

In the preface to "Sam Shepard: A Life," the author warns us that his book "is not an examination or analysis of Shepard's work." Nevertheless, while guiding us through the comings and goings of his subject's story, Mr. Winters give us a good sense of the more interesting plays—"Curse of the Starving Class," "The Tooth of Crime," "The Mad Dog Blues"—and how they relate to "his ideas, and his life."

Mr. Winters is especially good on the backstage of one of Mr. Shepard's most frequently revived works, "True West" (1980). As so often with Mr. Shepard's work, the premise is offbeat: Two brothers switch places, though one is a settled middle-class family man who writes screenplays and the other a typical Shepard ne'er-do-well who dabbles in burglary.

As Mr. Winters looks in on different productions of the play, we see the difficulty for the actors, who must harmonize two such disparate backgrounds. How can they be brothers? Casting is everything: At New York's Public Theater in 1980, with Tommy Lee Jones and Peter Boyle, the production did not work, but Gary Sinise and John Malkovich made the piece a hit in Chicago and New York in 1982. More recently, "True West" attracted extra attention on Broadway when John C. Reilly and Philip Seymour Hoffman alternated in the two roles from one performance to another, thereby affirming the elusive link between the two siblings.

Mr. Winters has an interesting story to tell, and he recounts it ably, bringing us close to a figure who, he admits, avoids intimacy. Maybe that's why Mr. Shepard has lasted so long, evading the typical Hollywood fame spiral—"Get me Sam Shepard!," "Get me a Sam Shepard type!," "Who is Sam Shepard?"—by writing naturally, acting naturally, living naturally. Working on the film "Cold in July" (2014), he made no diva demands. "Shepard's needs were simple," Mr. Winters tells us. "A lamp, a chair, and a desk for his typewriter."

Mr. Mordden's most recent book is "When Broadway Went to Hollywood."

SCIENCE FICTION: TOM SHIPPEY

Here Be Dragons

TWO STRANGE worlds, like but not like ours. Two heroines, rising from Cinderella status to become pivots of imperial politics. Two increasingly complex scenarios, in which readers must immerse themselves to get full value. The comparison between two new fantasy novels, both trilogy openers, or maybe series openers, invites one to wonder what's necessary for good epic fantasy.

Depth is the answer. It's vital to have that feeling of perspectives being opened, of there being a real world that surrounds the story, so that you always want a bit more of it. One way to create this expansiveness is by using what people nowadays call "paratext," supplementary information conveyed directly outside the narrative. Mark Lawrence's **"Red Sister" (Ace, 467 pages, $27)** opens with a section setting out the tribes of the people of Abeth and the grades of the Sisters of the Convent of Sweet Mercy. The latter is a martial order, as you might have guessed, though it also includes Mystic Sisters, who walk the Path. What's the Path? One of those things you have to read on to find out . . .

> Two fantasies that, like all good fairy tales, create a sense of yearning in the reader.

Deborah A. Wolf's **"The Dragon's Legacy" (Titan, 487 pages, $24.95)** begins more conventionally with a map, which looks rather like the one of the world of the far past in Robert E. Howard's tales of Conan the Barbarian, with strange names superimposed on shapes that are fairly familiar. Ms. Wolf's map seems to be centered on the Red Sea. Egypt, India and China are recognizable, and there's a quasi-Greece off to the north. Ms. Wolf also opts for a long glossary that introduces us to bone-singers and dreamshifters, lionsnakes and daespawn, reavers—they're insectoid humans with venomous bites—and a great deal else.

Magic is vital to epic fantasy, and so is the idea of non-human intelligent competitors—Ms. Wolf has not only dragons (not quite in focus in this volume), but also dragon relatives in the shape of wyverns, mymycs and intelligent sabertooths.

So how do humans fit in? Mr. Lawrence's "Red Sister" opens with a bang: Two hundred mercenaries have been sent to hunt down one nun. A 9-year old girl mounts the steps to the gallows to be hanged. She morphs into the nun, and the story tells us how she is shaped from victim into killing machine. It's a training story, in a way like Harry Potter's at Hogwarts. Classes, punishments, rivalries and in the background, but coming closer, the secret past of little Nona as she grows (like Conan) to be a shaker of thrones.

"The Dragon's Legacy" likewise starts with a just-graduated heroine, a teenage warrior facing new challenges. But Sulema also has a hidden past, a connection to the Dragon King of Atualon, the not-quite-Greece of this world. There's a sense in the book, deeper buried than in Mr. Lawrence's, of some cataclysmic world-shift soon to be triggered, when the dragon wakes.

What do such stories do for their readers, and why have they become possibly the most popular literary form of this generation? Like fairy tales, fantasies offer a sense of potential. With the right training, we too could become, not Snow Whites or Cinderellas, but terrifying, invulnerable super-Rambos, even the gentlest of us. Couldn't we?

And again like fairy tales, stories like these generate a sense of yearning. Wouldn't it be great to live in a world full of intelligent animals, that you could have a relationship with—especially dragons? And to be in a world where magic works, even if it takes a shaman to work it? Beats the daily commute, that's for sure.

But to appreciate these scenarios fully, you have to surrender to the domination of the author, and trust that he or she isn't just freewheeling. Otherwise you lose that precious sense of depth, which J.R.R. Tolkien, J.K. Rowling and George R.R. Martin were all able to sustain over multiple books. Mr. Lawrence and Ms. Wolf are off to a good start so far.

FICTION CHRONICLE: SAM SACKS

Murderous Mothers and Children

NEARLY 2,500 years separates the Greek tragedian Aeschylus' trilogy "The Oresteia" from Colm Tóibín's novelistic retelling, **"House of Names" (Scribner, 275 pages, $26)**, a gap of time that has sharpened the unfamiliarity of a story that, even by the standards of ancient mythology, was already plenty strange. In brief, it goes like this: While sailing to Troy, Agamemnon, the commander of the Greeks, appeases some annoyed deities and ensures a favorable wind by sacrificing his daughter Iphigenia. When, 10 years later, he returns home victorious, his vengeful wife, Clytemnestra, aided by her lover, Aegisthus, murders him in the bath. Agamemnon's surviving children, Orestes and Electra, eventually repay the deed by killing Clytemnestra.

> Colm Tóibín reimagines an ancient Greek story of primal taboos and unnatural slaughter

Writers have on occasion reprised this tale of primal taboos and unnatural slaughter—Eugene O'Neill's Civil War-era drama "Mourning Becomes Electra," for instance, and Jonathan Littell's ghastly Holocaust fiction "The Kindly Ones." But literature today typically prizes realism and psychological subtlety. Mr. Tóibín is exemplary of modern methods, a careful, Jamesian portraitist of exquisite finesse and understatement. What has brought him to the bloody House of Atreus?

The answer has to do with motherhood, and the love and hatred it arouses. It's a theme whose variations Mr. Tóibín has explored in the story collection "Mothers and Sons"; in the novel "Nora Webster," about a small-town Irish widow modeled after his own mother; and even in the novella "The Testament of Mary," narrated by the angry and heartbroken mother of Jesus.

"House of Names" alternates among the points of view of Clytemnestra, Orestes and, to a lesser extent, Electra. Clytemnestra is fiercely determined to mete out justice to Iphigenia's killer, but her wrath is colored by despair at the thought that there is no divine sanction to her retribution. "There is no one among the gods to whom I appeal. I live alone in the shivering, solitary knowledge that the time of the gods has passed." She can only carry out her plan by recruiting the help of Aegisthus, which splinters her family further, as he immediately asserts control over the palace and sends Orestes into exile.

The teenage Orestes spends much of the book in a remote compound hiding from Aegisthus' henchmen, accompanied by a character that Mr. Tóibín has invented, a decisive and politically savvy young man named Leander. Orestes is a curious figure—fate is grooming him to be a killer, yet he's naïve and passive by temperament, and when he does avenge his father, the murder seems like the action of a sleepwalker. "More and more," he thinks after the fact, "his killing of his mother seemed almost unreal to him, something that no one mentioned, as though it had not happened."

A feeling of spectral unreality characterizes "House of Names," as if it were all a dark Freudian dream, hazily imagined rather than fully inhabited. Mr. Tóibín has traded out the rage and horror of "The Oresteia" for ambivalence and disquiet. His adaptation is as finely written as any of his books, but it occupies an artistic nether region, lacking the archetypal power of the ancient dramas and the plausibility of realism.

UNEASY A gold funerary mask found at Mycenae in 1876 that was initially thought to be Agamemnon's.

GETTY IMAGES

"Kill me!" demands a hospitalized old woman in Japanese writer Minae Mizumura's novel **"Inheritance From Mother" (Other Press, 447 pages, $27.95)**. "There's no point in going on living this way, so just kill me!" Since this isn't Aeschylus, her middle-aged daughter Mitsuki demurs, but in her heart, as she cares for her mother through injury, illness and senility, she harbors the furtive wish that the old woman would give her a break and die already.

Ms. Mizumura's frank, talky novel confronts the emotional and financial toll of looking after an ailing parent. Mitsuki's mother, Noriko, was a vain and energetic social climber who clawed her way to an elite station in Japanese society. But now that she's bedridden—beneath the fanciest linens available—her "unceasing quest for exhilaration" merely torments her. Mitsuki's marriage is on a rocky downslope as well. She finds out that her husband has been industriously cheating on her for years.

It's the opposite of a storybook tale, yet Ms. Mizumura has tricked it out in the fashion of a 19th-century page-turner. Conceived, she states in a prefatory note, as "an homage to the dying tradition of serial novels," it first appeared in installments in a Japanese newspaper in 2010 and 2011. The 66 chapters are brief, emotionally combustible and, in Juliet Winters Carpenter's translation, liberally strewn with clichés (blood freezes, people stop in their tracks and reach for the stars). There are also fascinating asides about the history of the serial novel in Japan, because Mitsuki believes that these fairy-tale melodramas were responsible for shaping her mother's acquisitive personality and may have contributed to her own marital unhappiness. So Ms. Mizumura craftily mixes the old with the new, creating a highly readable throwback to popular dime novels that replaces gilt with guilt and romance with real talk.

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BOOKS

'Any city, however small, is in fact divided into two, one the city of the poor, the other of the rich.' —Plato

Gentrification and Its Discontents

The New Urban Crisis
By Richard Florida
Basic, 310 pages, $28

BY EDWARD GLAESER

IN TODAY'S SAN FRANCISCO there is hardly any room for the middle class. Soon-to-be tech millionaires leave the city each morning on the Google Bus, headed to company headquarters in Silicon Valley, while the homeless and the permanently poor watch them pass. The Bay Area is home to more than 71 billionaires (second in the world only to the New York metro area) while about 14,000 (or 13%) of San Francisco's children live in poverty. The very success of the information economy has caused the area-wide median sales price of existing single family homes to soar to more than $800,000 in 2016, beyond the reach of most of those in the middle. There is something very wrong with this picture.

Fifteen years ago, Richard Florida's book "The Rise of the Creative Class" correctly argued that in the 21st century urban success would stem from skills and innovation, not smoke stacks and heavy industry. Now he has issued a wake-up call about a new crisis that threatens the future vitality of our cities. Unlike the urban crisis of the 1970s, he writes, this one does not primarily reflect "economic abandonment of cities and their loss of economic function" but rather the agonies that can accompany their success.

Quite often, urban success generates positive "spillovers," through which the wealth of one person improves the lot of her neighbors by reducing the risk of crime or increasing the demand for their labor. But sometimes, especially when urban growth is restricted, success creates negative spillovers. Most obviously, the flourishing of a single urban industry, such as finance, can increase housing costs for everyone else. As a result of such processes, over the past 35 years urban inequality has become more extreme, generating gentrification and political upheavals. "The New Urban Crisis" bracingly confronts this tension between big-city elites and the urban underclass.

Cities have always contained enormous inequality, largely because they attract both rich and poor people. The rich are drawn to cities by amenities and opportunities, but they also offer many job options for the less skilled, especially within service industries. Social services are often more extensive than in rural or suburban communities, and urban public transportation eliminates the need to own a car. But urban poverty can have terrible consequences: Even if poorer people choose cities for good reasons, their children can become "stuck in poverty for generations."

GETTY IMAGES

WITHOUT The number of homeless in San Francisco has increased since 2010, according to U.S. government data.

Mr. Florida sees segregation—both by race and by class—as a leading cause of such poverty traps. Young African-Americans have far worse outcomes when they grow up in more racially segregated metropolitan areas, and when a child of poorer parents moves to a more segregated city, that child's future income prospects fall dramatically. Segregation by race has been declining for the last 40 years, but segregation by wealth and income has replaced it. Mr. Florida notes that "knowledge-based metros" like San Francisco are also increasingly segregated by education and occupation. Cities with more blue-collar jobs, he points out, are less economically segregated.

The strongest part of "The New Urban Crisis" is the author's discussion of how to combat such segregation, particularly by building more middle-class housing. His excoriation of NIMBYs—the exponents of a "Not In My Back Yard" anticonstruction ideology—is delightful: He calls them "destructive" urban rentiers who "have more to gain from increasing the scarcity of usable land than from maximizing its productive and economically beneficial uses." He coins a wonderful phrase, "The New Urban Luddism," to describe the antigrowth advocates who oppose not only homebuilding but all infrastructure, including "the transit and subway lines required to move people around."

These NIMBYs have transformed some of the world's most successful cities, including New York and Paris, into zero-sum spaces, where each new elite pushes out a poorer household. Urban areas that enable growth, such as Houston today or New York in the 1920s, have historically remained affordable for middle-income residents by enabling abundant new construction. When San Francisco and Boston stymie development with an "enormous and complex thicket of zoning laws and other land use regulations," these cities ensure that they are too exclusive and expensive, and their poorer residents inevitably view the rich with envy and anger.

The best policy tools we have against segregation are to permit more middle-class rental housing in urban cores and to replace existing, segregated housing units with portable housing vouchers. Mr. Florida argues that local regulations "need to be liberalized and modernized," but he fears that such deregulation "is likely to mainly add more expensive luxury towers" and in any case will "do little to provide the kinds of affordable housing our cities really need." I'm less sure: If we permitted enough new units, we'd run out of billionaire buyers. But, by all means, fast-tracking the approval of projects with middle-income units should be something we can all agree on.

Mr. Florida shares many other good ideas. To spur the creation of middle-class clusters, he argues, we should ditch the property tax, which creates "disincentives to add density" because payments scale up with the size of structure. Instead, let's try a land-value tax, under which the owner of an empty parking lot would pay the same as the owner of a high-rise apartment building, and thus have an incentive to build something useful. (But those incentives will only induce more building if regulations allow more building.) Mr. Florida also favors reducing America's subsidies for socially engineering homeownership, embodied in the home-mortgage interest deduction. This makes sense: High-rise buildings are overwhelmingly rented; single-family homes are overwhelmingly owner-occupied. When we use the tax system to favor owners over renters, we push people away from higher-density living.

> Cities attract the rich with amenities and the poor with services. They are failing the middle class.

Mr. Florida is right to emphasize the ills of high-cost urban housing markets, but he believes the problem of what he calls "winner-take-all urbanism" encompasses not just inequality within cities but among superstar cities, "such as New York, London, Hong Kong, Los Angeles and Paris," and other urban places, like Detroit and Newark. He also closes his book by describing "the burgeoning crisis of the suburbs, where poverty, insecurity, and crime are mounting, and economic and racial segregation are growing deeper."

In these areas there are few easy answers. The unequal success of cities is an eternal problem. When the age of steam-powered rail replaced the age of the clipper ship, New Bedford, Mass., declined and Boston thrived. Should the success of 19th-century Boston have been checked to promote more equality across New England towns? Mr. Florida supports high-speed rail, which he thinks can help "link separate metros together in larger and more formidable mega-regions." This remains a theoretical possibility, but in the past most claims about the larger economic benefits of modern rail investments have proven to be well-spun fantasies. The answer to getting people moving between cities is more likely to come in the form of a 21st-century technology, like autonomous buses on dedicated smart lanes, than from a 19th-century technology like trains. And even that solution isn't coming soon.

Mr. Florida is right that there are really twin crises: inequality and segregation. But only segregation truly qualifies as a particular urban crisis. Rising inequality is a nationwide phenomenon, driven by globalization and technological change. To overcome problems of persistent poverty, Mr. Florida argues, we need "comprehensive and coordinated place-based investments in disadvantaged neighborhoods." Yet the track record of federally funded, place-based strategies is somewhere between mixed and dismal; they often aid property owners and connected contractors more than the disadvantaged.

The government should concentrate on helping poor people, not poor places. After all, the American economy will not benefit from stemming the flow of people from less productive places to more productive ones. The answer instead is, as Mr. Florida nicely puts it in his conclusion, a "new and better urbanism." Cities are a force of tremendous strength and their success rests above all on their human capital. The dynamism of urban economies suggests to me that cities are not a cause of but a cure for global inequality.

Mr. Glaeser is a professor of economics at Harvard, a senior fellow at the Manhattan Institute and author of "Triumph of the City."

How Your Brain Digests Your Dinner

Flavor
By Bob Holmes
Norton, 310 pages, $26.95

BY STEVEN POOLE

IF, LIKE ME, you've always assumed that flavor is something that resides in foods, this fascinating book will add chewy philosophical complications to mealtimes. Flavor, as Bob Holmes demonstrates elegantly, exists nowhere but in the mind of the eater. And so modern culinary and physiological science revives the old idealist philosophy. To exist is to be perceived, said Bishop Berkeley. And to have flavor is to be eaten.

Let's break it down. Taste occurs on the tongue, which is sensitive to five basic tastes: sweet, salt, sour, bitter and umami. (Five, that is, at the latest count: We meet in these pages some scientists who suggest that "fat" is another basic taste, and yet more are proposed.) But flavor also depends in great part on the sense of smell: specifically "retronasal olfaction," the wafting of food odors up into the nose from the back of the throat. This is why food seems so bland when we have a head cold, though, as Mr. Holmes points out with characteristic acuity, our habit of calling it "tasteless" is the opposite of the truth: what we are experiencing is "taste alone, in isolation, with smell taken out of the equation."

To create what we experience as flavor, you have to combine taste and smell, add the factors called mouthfeel (crunchiness, creaminess and so forth) and then take into account the eater's own psychological expectations—which seem not only to change the conscious experience of eating but actually to change the sensory perceptions themselves: What is known as expensive, for instance, or is poetically described, will taste better. Only when all these streams are synthesized in the mind can we talk about flavor—and we humans may, as the author suggests, be the only animals to experience it.

Mr. Holmes, a correspondent for New Scientist magazine, pursues his reporting among biologists, flavorists at food companies and speakers at scientific conferences, keeping the story moving with a pleasant cheerfulness. (I suspect he took a sly pleasure in referring to someone as "a CIA-trained chef," the agency in question here being the Culinary Institute of America.) The author even has his own genome sequenced, in order to demonstrate the variation of DNA on flavor experiences. It turns out he has a variant in the gene T1R3 that makes people less sensitive to sweet tastes, so he finds pleasant a sugar concentration that others would find disgustingly syrupy. (Other genetic variants contribute to some people being what are called "supertasters", who are more sensitive to bitterness: to them, cilantro tastes like soap.)

> The perception and appreciation of flavor may be a uniquely human gift.

As well as genetic variation, of course, cultural variation can affect taste. Different groups carve up the universe of millions of potential flavor-inducing molecules: I think the Argentinian fabulist Jorge Luis Borges, who wrote a celebrated surreal taxonomy of animals, would have approved of the various terms for smells used by the Jahai tribe of Thailand, which include "edible," "fragrant" or "attractive to tigers."

When you eat something, Mr. Holmes writes, you're "engaging more brain systems than for any other behavior." But what that means, exactly, and whether it follows that eating is therefore the most important or sophisticated thing we do, is very unclear. (It certainly seems possible that sight-reading a piano piece, or reading a Russian novel, provides more of a beneficial neural workout.) Luckily, there is relatively little of this vague cheerleading in "Flavor," at least compared to many books that draw on brain science. Most of the time, Mr. Holmes is careful to point up scientific disagreements, places where evidence is insufficient and holes in our current understanding.

GETTY IMAGES

Some of these holes lurk in surprising places: It is apparently still not understood, for example, just how the tongue senses the salty and sour tastes. It is very pleasant to know, however, that there is a solid scientific reason why red wine and steak make such a happy match.

Smug foodies will not be comforted when Mr. Holmes points out that, according to the available studies, organic food does not generally taste any better, or when he straightforwardly points out that, since "most kitchens have recourse to pure chemical seasonings" in the form of salt, sugar or vinegar, there is no good reason why a cook shouldn't also keep a bottle of monosodium glutamate on hand as well. (The idea that MSG makes you sick, he demonstrates, originated in a single 1960s letter to a medical journal speculating about "Chinese restaurant syndrome.") On the other hand, purists may be drawn to one particularly interesting chapter on the scientific battle to restore flavor to supermarket tomatoes, and why they got that watery way in the first place. (Since the 1970s, breeders have selected for maximum yield, producing tomatoes that have fewer sugars and volatile aroma molecules.)

The author's overarching advice, by the end, is one with which we are by now familiar in all kinds of contexts: Be mindful. We can all, he says, get better at appreciating flavor. Pay heed to what you are eating, and you will enjoy it more. The only exception seems to be that of hot chili peppers. As one researcher points out to the author, traditional techniques for cooling the mouth, such as taking a swig of milk or olive oil, don't really help much. Instead, the scientist cheerfully suggests: "Go kick a brick wall or take a hammer to your thumb. You'll forget all about your tongue." So it seems that, in extremis, anti-mindfulness beats paying attention.

Suavely anti-authentic, too, is this useful hint to maximize your guests' pleasure at a dinner party: Serve them cheap wine—which is what most people prefer in a blind tasting—but tell them it's expensive, which will cause them to enjoy it more than if they knew its real price. Now that is a scientific discovery that could concretely increase the merriment of all.

Mr. Poole is the author of "Rethink: The Surprising History of New Ideas" and "You Aren't What You Eat."

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BOOKS

'If there is to be any vanished or vanishing Atlantis to speak of . . . it should and would be all our life lived till yesterday.' —Nirad C. Chaudhuri

CHILDREN'S BOOKS: MEGHAN COX GURDON

CANDLEWICK

Gruff and Ready

THE CELEBRATED illustrator Jerry Pinkney has satisfied a long-held desire with **"The Three Billy Goats Gruff" (Little, Brown, 40 pages, $17.99)**, a reinterpretation of the folk tale. In the traditional telling, the troll that menaces three goats trying to cross his bridge gets a fatal comeuppance. As Mr. Pinkney explains in an afterword, he wanted the troll to have a chance to learn his lesson.

So at the climax of the story, when the biggest goat butts the creature into the river, the artist has arranged for a monstrous toothed fish to erupt from the depths and echo the troll's challenge to the goats: "Who's that splish-splashing in my river?" In the roiling tumult of Mr. Pinkney's pencil-and-watercolor pictures, the villain escapes ("a bit too sour and green to make a tasty meal"), flounders back to land and, as hungry goats trot across what used to be his bridge, builds a new dwelling, chastened but alive.

Anyone who has hesitated on the brink of something daunting—a brave act or a big decision—will feel a rush of kinship with the small protagonist of Gaia Cornwall's picture book **"Jabari Jumps" (Candlewick, 32 pages, $15.99)**. On the front cover, we see the boy poised in trepidation at the tip of a diving board. From the title, we know he's going to do the deed. Nonetheless, readers ages 2-8 will get vicarious pleasure as Jabari prepares, stalls, demurs—and then steels himself by recalling his father's advice. "Sometimes if I feel a little scared," his father had said, "I take a deep breath and tell myself I am ready. And you know what? Sometimes it stops feeling scary and feels a little like a surprise." Aquamarine water (see above) and beige-and-pale-green collage surroundings give a dash of chic to this cheering tale.

For the "Cozy Classics" board books that introduce literary greats to very young children, brothers Jack and Holman Wang condense sprawling treasures to a dozen words set amid exquisite, hand-felted tableaux. Now to a series that includes "War and Peace" and "Jane Eyre" comes a delicious technicolor version of L. Frank Baum's best-loved work. **"The Wonderful Wizard of Oz" (Chronicle, 24 pages, $9.95)** presents Dorothy's adventures through 12 words: "storm, oops, yellow, silly, stuck, scared, green, wizard, witch, water, wish," and, of course, "home." The soft-felted characters have such expressive delicacy that we almost feel the jolt as Dorothy sluices the witch with cold water—devised, ingeniously, from pearly dollops of dried glue.

In a new board-book series, "Baby University," Chris Ferrie hopes to effect a similar sort of early intellectual exposure for small children, although with science rather than literature. There's natural appeal to such a project in these STEM-infatuated days: If a toddler can learn to identify puppies and kittens, why oughtn't she, at bedtime, also get a grounding in electrons, black holes and gravitational waves?

> Old-school life lessons and new-school STEM prep for the young and the much too young.

To ask the question, alas, may be to answer it, for toddlers will find much to perplex in **"General Relativity for Babies"** and **"Quantum Physics for Babies" (Sourcebooks, 24 pages each, $9.99 each)**. Even with radical simplicity of image and text ("mass drags space, space drags mass"), these esoteric subjects are no match for the extreme youth of the intended reader, whose powers of abstract reasoning won't kick in for years. The going may be slightly easier with **"Newtonian Physics for Babies"** and **"Rocket Science for Babies,"** each of which deals in observable phenomena ("this apple feels the force of gravity") and logic ("the faster the fuel goes, the faster the [rocket] ship goes") that may be a mite more accessible to readers still in diapers. But only a mite.

FIVE BEST: A PERSONAL CHOICE

Sarah Ruden
on lost worlds

JENNY MILLER

MS. RUDEN is the author, most recently, of 'The Face of Water: A Translator on Beauty and Meaning in the Bible.'

The Bostonians
By Henry James (1886)

1 'THE BOSTONIANS' is a tale of genteel high-mindedness meeting stubborn passion, a witty and complex saga of warfare not a little rooted in ideology. It pits indomitable Boston activist Olive Chancellor against her conservative Southern cousin, who has set his sights on whisking Olive's appealing young protégée, Verena, off to a traditional life away from politics. Puritan and Transcendental and scholarly and reformist America have existed as cultures both evanescent and eternal—rooted more in ideas than realities—and nowhere more so than in this city. In an old joke, a Boston hostess says to a house guest from the Midwest who suggests a little shopping, "Boston ladies do not buy hats; we *have* hats." I can imagine James's Beacon Hill feminist Olive Chancellor rising above everything in similar terms.

The Waves
By Virginia Woolf (1931)

2 LEONARD WOOLF'S favorite among his wife's works can evoke a certain dread even among Virginia's devotees, and has fewer readers than it deserves. In physical sensations and unspoken thoughts, six young friends in the garden of an Edwardian boarding school experience within a few seconds the agony of their differences. An impulsive kiss is received with humiliated outrage, a jealous witness runs away sobbing and her sympathetic pursuer abandons a rueful playmate, while another child maintains her trance-like solitude, a shield against panic. The group's failed efforts to connect and communicate will outlast passions, comforts, hopes, lives. Finally, the novel's gorgeous language itself fails, surrenders itself. In the words of Bernard, the last first-person narrator standing: "I need a howl; a cry. When the storm crosses the marsh and sweeps over me where I lie in the ditch unregarded I need no words. . . . I have done with phrases." For Virginia Woolf, a series of deaths in the proud and prosperous literary family she grew up in, and then the unspeakable devastation of World War I, started her on a paradoxical mission: to describe in unforgettable language the loss of everything.

GETTY IMAGES

TIME AND TIDE The bay in Cornwall, England, where Virginia Woolf spent holidays as a child.

The Age of Grief
By Jane Smiley (1987)

3 IN THIS IMPRESSIVE novella, Jane Smiley shows more plausible insight into ordinary men's inner lives than I have come across in any other author, male or female. David Hurst is a dentist in successful joint practice with his wife; they have three small daughters, a new vacation home, a busy life in a medium-size town. He has always treated his wife's energy, determination and discontent as his own psychic engine, taking a quiet, ironic enjoyment in such things as the exaggerated perils of her pregnancies. "I used to meditate over my patients in the dental school, but it wasn't enough. I wanted to be a dentist and have drama too." He is unprepared for her restlessness to take her to a place he can't reach. Now the dramas—of identity, of purpose—will be his. He finds reconciliation, but only through resignation; there is nothing to replace his self-image as the irreplaceable unifying and stabilizing hero. "It seems to me that marriage is a small container, after all, barely large enough to hold some children."

In the Country of Last Things
By Paul Auster (1987)

4 'YOU HAVE SEEN none of this, and even if you tried, you could not imagine it. These are the last things. A house is there one day, and the next day it is gone. A street you walked down yesterday is no longer there today." In a precious notebook, purchased with the proceeds from many hours of scavenging, a young woman writes about life in a ruined, anarchic but inescapable city. Paul Auster's post-apocalyptic nightmare is wonderfully imaginative. The pavements and the plumbing are broken, but the impulses to create a culture still work wonders: There are the sects of the Runners, the Crawlers, and the Smilers, the professions of the Fecalists and the Resurrection Agents; there is even loyalty, art and love—depicted without sentiment but instead with the believability of despair.

Life & Times of Michael K
By J.M. Coetzee (1983)

5 IN THIS NOVEL a country that collapses into civil war leaves serene a person for whom no one ever felt responsible. Michael K, a homeless gardener from Cape Town, makes his way though the devastation and dangers of an alternate South Africa, wheeling his dying mother (who abandoned him at birth) in an improvised handcart and then carrying her ashes in a cardboard box. Fleeing the shifty heir to an abandoned farm (one of many captors and users), he feels his hidden young pumpkin plants (his "children") wilting without his care: "Perhaps if I started at sunrise and ran all day, I would not be too late to save them." But he finds peace in stillness and solitude, into which hunger blends, hardly resisted. "Everything else was behind him. When he awoke in the morning, he faced only the single huge block of the day, one day at a time." With scripture-like simplicity and power, Mr. Coetzee builds to the question that survives nations and civilizations: Michael K says of the doctor who takes a perplexed and tormented interest in him, "What am I to this man? I ask myself: What is it to this man if I live or die?"

Best-Selling Books | Week Ended April 30

With data from NPD BookScan

Hardcover Nonfiction

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Option B Sheryl Sandberg/Knopf Publishing Group	1	new
Make Your Bed William H. McRaven/Grand Central Publishing	2	1
The Operator Robert O'Neill/Scribner Book Company	3	new
The Plant Paradox Steven R. Gundry/Harper Wave	4	new
Shattered J. Allen & A. Parnes /Crown Publishing Group (NY)	5	7
Old School: Life in the Sane Lane Bill O'Reilly/Henry Holt & Company	6	2
This Fight Is Our Fight Elizabeth Warren/Metropolitan Books	7	3
The Secrets of My Life Caitlyn Jenner/Grand Central Publishing	8	new
Blast the Sugar Out! Ian K. Smith /St. Martin's Press	9	new
Killers of the Flower Moon David Grann/Doubleday Books	10	5

Hardcover Fiction

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Golden Prey John Sandford /G.P. Putnam's Sons	1	new
The Fix David Baldacci/Grand Central Publishing	2	1
Oh, the Places You'll Go! Dr. Seuss/Random House Children's Books	3	2
The Black Book James Patterson&David Ellis/Little, Brown and Company	4	3
Anything is Possible Elizabeth Strout/Random House;	5	new
Double Down (DWK #11) Jeff Kinney/Amulet Books	6	6
All By Myself, Alone Mary Higgins Clark/Simon & Schuster	7	5
Beartown Fredrik Backman/Atria Books	8	new
Wonder R. J. Palacio/Alfred A. Knopf Books For Young Readers	9	9
Dog Man Unleashed (Dog Man #2) Dav Pilkey/Graphix	10	10

Methodology

NPD BookScan gathers point-of-sale book data from more than 16,000 locations across the U.S., representing about 85% of the nation's book sales. Print-book data providers include all major booksellers (now inclusive of Wal-Mart) and Web retailers, and food stores. E-book data providers include all major e-book retailers. Free e-books and those sold for less than 99 cents are excluded. The fiction and nonfiction lists in all formats include adult, young adult, and juvenile titles; the business list includes only adult titles. The combined lists track sales by title across all print and e-book formats; audio books are excluded. Refer questions to Peter.Saenger@wsj.com.

Nonfiction E-Books

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Option B Sheryl Sandberg/Knopf Doubleday Publishing Group	1	new
Lion Saroo Brierley/Penguin Publishing Group	2	--
Shattered J. Allen & A. Parnes /Crown/Archetype	3	1
The Secrets of My Life Caitlyn Jenner/Grand Central Publishing	4	new
Aging Backwards Miranda Esmonde-White/HarperCollins Publishers	5	--
Hillbilly Elegy J.D. Vance/HarperCollins Publishers	6	3
The Operator Robert O'Neill/Scribner	7	new
Orange Is the New Black Piper Kerman/Random House Publishing Group	8	--
Sully C. B. Sullenberger III with J. Zaslow/HarperCollins	9	--
Killers of the Flower Moon David Grann/Knopf Doubleday Publishing Group	10	2

Nonfiction Combined

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Option B Sheryl Sandberg/Knopf Publishing Group	1	new
Make Your Bed William H. McRaven/Grand Central Publishing	2	2
Shattered J. Allen & A. Parnes /Crown Publishing Group (NY)	3	1
The Operator Robert O'Neill/Scribner Book Company	4	new
The Plant Paradox Steven R. Gundry/Harper Wave	5	new
The Secrets of My Life Caitlyn Jenner/Grand Central Publishing	6	new
The Zookeeper's Wife Diane Ackerman/W. W. Norton & Company	7	6
Lion Saroo Brierley/Berkley Books	8	--
Milk and Honey Rupi Kaur/Andrews McMeel Publishing	9	7
Hillbilly Elegy J.D. Vance/Harper	10	8

Fiction E-Books

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Golden Prey John Sandford /Penguin Publishing Group	1	new
The Fix David Baldacci/Grand Central Publishing	2	1
The Missing Ones Patricia Gibney/Patricia Gibney	3	4
Wicked Abyss Kresley Cole/Gallery Books	4	new
The Handmaid's Tale Margaret Atwood/Houghton Mifflin Harcourt	5	--
The Letter Kathryn Hughes/Headline Book Publishing Ltd.	6	3
No Easy Target Iris Johansen/St. Martin's Press	7	new
The Black Book James Patterson & David Ellis/Little, Brown & Co.	8	8
Hideaway Fern Michaels/Kensington	9	new
Anything Is Possible Elizabeth Strout/Random House Publishing Group	10	new

Fiction Combined

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Golden Prey John Sandford /G.P. Putnam's Sons	1	new
The Fix David Baldacci/Grand Central Publishing	2	1
Thirteen Reasons Why Jay Asher/Razorbill	3	2
The Handmaid's Tale Margaret Atwood/Anchor Books	4	--
The Black Book James Patterson & David Ellis/Little, Brown & Co.	5	4
Everything, Everything Nicola Yoon/Ember	6	7
Oh, the Places You'll Go! Dr. Seuss/Random House Children's Books	7	9
Anything Is Possible Elizabeth Strout/Random House	8	new
The Woman in Cabin 10 Ruth Ware/Gallery/Scout Press	9	5
A Man Called Ove Fredrik Backman/Washington Square Press	10	6

Hardcover Business

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Strengths Finder 2.0 Tom Rath/Gallup Press	1	1
Business Boutique Christy Wright /Ramsey Press	2	new
The Power of Positive Leadership Jon Gordon /Wiley	3	new
Captivate Vanessa Van Edwards/Portfolio	4	new
Lean In Sheryl Sandberg/Knopf Publishing Group	5	—
Unshakeable Tony Robbins/Simon & Schuster	6	2
The Five Dysfunctions of a Team Patrick M. Lencioni/Jossey-Bass	7	3
Total Money Makeover Dave Ramsey/Thomas Nelson	8	6
The Graduate Survival Guide Anthony Oneal /Ramsey Press	9	—
Extreme Ownership Jocko Willink & Leif Babin/St. Martin's Press	10	7

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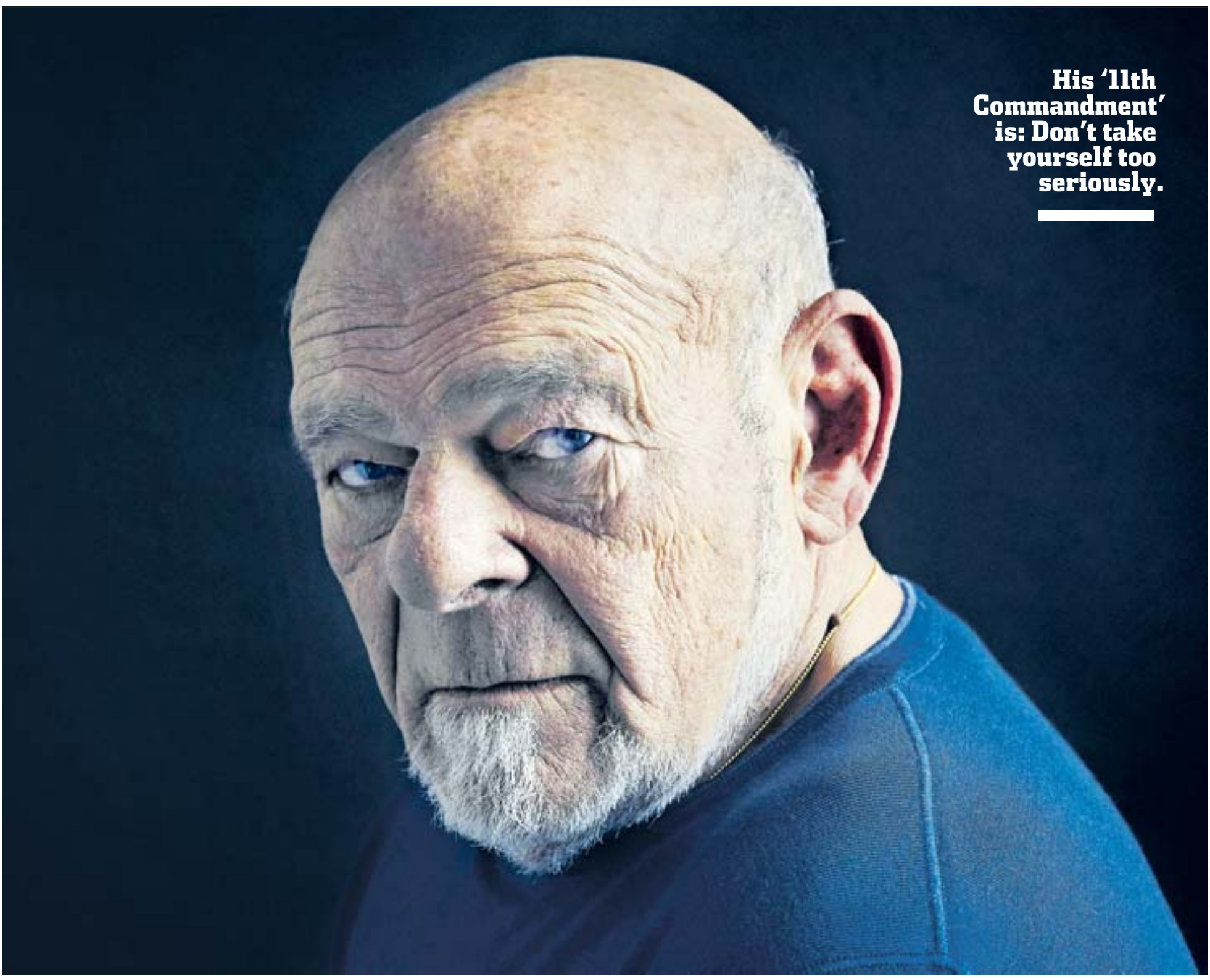

SAVERIO TRUGLIA FOR THE WALL STREET JOURNAL

WEEKEND CONFIDENTIAL: ALEXANDRA WOLFE

Sam Zell

The notoriously blunt real-estate magnate on the lessons that he's learned

FORTY-FIVE MINUTES into our interview, billionaire real-estate investor Sam Zell uses the F-word. He is a bit surprised at himself, having kept it clean up to that point. "I've done really well!" he says. Sometimes when he's on a panel, participants who know him bet on how long it will take before he curses.

Mr. Zell, 76, built one of the biggest real-estate empires in the country; he is especially known for turning around distressed properties and troubled assets. The notoriously blunt businessman shares the ups and downs of his career and the lessons he's learned in business—with just a little profanity—in a new book, "Am I Being Too Subtle?"

Worth an estimated $5 billion, Mr. Zell has also been involved in such industries as health care, energy and media. Over his long career, he says, "the thing I'm most proud of is nobody has ever left a meeting with me and said, 'What do you think he meant?' A lot of times you don't agree, and a lot of times...you could be irate, but you're not going to come back and say, 'What did you say?' "

The book, he says, is an attempt to "lay it all out there" for his three children and nine grandchildren. He talks about the importance of being hungry and contrarian. The most successful people go right when everyone else goes left, he says: "These are the people who excelled beyond belief, and did so because they in effect didn't follow conventional wisdom."

The advice on offer in his book includes: be ready to pivot, stay loyal and ethical, and obey what he calls the "11th Commandment"—not taking oneself too seriously. He writes that a successful person always says "no problem" when faced with a challenge or difficult request.

Mr. Zell learned to take risks in part from his parents, Jews who escaped from Poland just before the Nazis bombed their hometown. His father, a grain merchant, and his mother, a homemaker, moved to Seattle and then to Chicago, where Mr. Zell was born. He remembers once setting up a chess board with the pieces arranged in a way that he thought would stump his father—who checkmated him in one move, shrugged and left the room. "I was crushed," writes Mr. Zell. "He didn't make anything easier or softer. That just wasn't who he was."

Mr. Zell took to entrepreneurship early. At age 12, he bought Playboy magazines for 50 cents at a newsstand in the city and sold them to friends in the suburbs at a steep markup. As a student at the University of Michigan, he developed a taste for real estate. When he found out that a friend's landlord was planning to tear down two houses and build an apartment building for students, he and his friend pitched the landlord on letting them run it. The landlord agreed. Mr. Zell and his friend designed the interiors of the units and managed the building after it was done—later adding two other buildings that the landlord built.

After earning his undergraduate degree from Michigan in 1963 and his law degree there three years later, Mr. Zell went to work for a law firm in Chicago. He lasted four days before deciding to go into business for himself. In 1968, he started the predecessor to his current firm, the privately held Equity Group Investments, which has stakes in a mix of private and public companies. His deals within the past few years include selling off more than 23,000 apartments controlled by his firm Equity Residential for $5.4 billion to Starwood Capital Group in 2015.

One of his biggest stumbles was his 2007 leveraged buyout of the Tribune Co., a media group including the Chicago Tribune and Los Angeles Times newspapers, Tribune Broadcasting and a number of radio stations. It declared bankruptcy less than a year later. (The company emerged from bankruptcy in 2012 with new owners and a new board. Mr. Zell lost his $315 million investment and is no longer involved in the company.)

Tribune employees criticized him for cutting jobs while rewarding executives with bonuses, for saddling the company with debt and for blurring the line between advertising and editorial. Mr. Zell says that the main problem was a culture that said, "But we've always done it this way," in response to any suggestion of change.

Mr. Zell lives mainly in Chicago with his wife, Helen, but they also have homes in New York and Malibu, Calif., among other places. He spends a lot of his time reading both news and novels.

He wears jeans to work—something he's done since the 1960s. "If I'm comfortable with who I am and I'm comfortable with the decisions I've made, then I don't need a suit and tie to protect me," he says. "To a lot of people, a perk is the bathroom key, but to me, the real perk is freedom."

That is why he likes riding motorcycles. He has a group of friends he rides with called Zell's Angels who take trips around the world to places such as Poland, Abu Dhabi and Chile. "That's what riding a motorcycle is—freedom," he says.

MOVING TARGETS: JOE QUEENAN

More Nasties Get a Novel Makeover

BEST-SELLING AUTHOR Margaret George has just published a novel repackaging the Roman Emperor Nero, whose name has evoked mayhem and recreational pyromania for the past 2,000 years, as a misunderstood stripling. In "The Confessions of Young Nero," the callow, sensitive, art-loving youth is forced to take on an imperial role that he never sought.

Was Nero sometimes mean? Yes. But basically it was all mom's fault. From the moment he was born, nothing the poor kid did ever satisfied her. To her—before he lethally struck back—he was Nero the Zero. And that was all she wrote.

Recent years have seen numerous literary efforts to rehabilitate history's monsters. Historians have routinely pilloried Henry VIII's right-hand man, Thomas Cromwell, as a conniving serpent, but he gets a very nice makeover in Hilary Mantel's "Wolf Hall" and "Bring Up the Bodies," where he comes off as a resourceful working-class guy with a chip on his shoulder.

Similarly, in "The Sunne in Splendour," Sharon Key Penman donned kid gloves when writing about the widely reviled Richard III, whom she portrays as an unjustly maligned sweetheart. This is similar to the tack taken decades ago by Gore Vidal in recasting the scheming, vindictive, downright nasty Aaron Burr as a perfectly swell old chap who was unjustly slandered by jealous rivals. Not unlike Gore Vidal.

But "The Confessions of Young Nero" raises the ante. If the depraved Nero's image can be rehabilitated, anybody's can, and other writers have taken notice. Publishers have given me exclusive rights to disclose a few examples of novels in this genre that we can impatiently look forward to:

If Nero can be rehabilitated, how about Genghis Khan?

NISHANT CHOKSI

"You Don't Know Jack" sees the teen Jack the Ripper through the eyes of his chums in London's malignant East End. Small and sickly, with poor vision, eczema and severe allergies, young Jack could never get any dates. Did that affect his attitude toward the ladies? Of course it did, as his mates from the mean streets of Whitechapel recall.

"But none of it would have happened if his mother hadn't been so hard on him," recalls one of his closest friends, the Artful Giant. "When Jack didn't do his chores on time, she'd knock his teeth down his throat. Then, when he didn't get into Cambridge and had to intern with a local costermonger, pushing a cart of rotten apples, Jack never heard the end of it. One thing I guarantee you, though: he didn't murder 11 prostitutes. Not with those allergies. It was three at the most."

From there, readers will be able to pick up **"Whip Smart"** with the Marquis de Sade as a 16-year-old student in a prestigious Versailles prep school.

"He was raised by an aunt who used to smack that kid six ways from Sunday," recalls his roommate Guy the Guy. "If you want to know why Marquis Mark ended up with such a sick attitude, look no further than Aunt Sadie. Her nickname was Auntie Maim."

Plunging further into the past, **"Those That Khan, Do"** whitewashes Genghis Khan as a misunderstood teen. "He was enslaved as a kid, his girlfriend Chaka ditched him for the president of the senior class, and he grew up in one of the sketchiest neighborhoods in Ulaanbaatar," recalls his best friend Mongo the Hoarder. "Yes, he laid waste to central Asia and slaughtered millions, but he only did it to impress his mom. Mom used to call him her steppe child, just to needle him. What a Tartar!"

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EXHIBIT

PORTABLE PORTRAITS

▲ King Louis XII and Anne of Brittany, 1499. This heavy bronze medal, with a portrait of the couple on either side, was made to commemorate their marriage.

PORTRAIT MEDALS might look like coins, but they're an art form of their own. A new exhibit titled "The Pursuit of Immortality," at New York's Frick Collection from May 9 to Sept. 10, showcases some 130 intricately made medals depicting royalty, nobility and other well-to-do people. The craft, which originated during the Renaissance, was often used to commemorate particular events. The medals could be given as gifts or awards, and people also exchanged them with friends and associates. A common format was for one side to depict the patron or honoree, while the other shows some aspect of the individual's identity, perhaps their interests or family. "In some ways they're little puzzles for modern scholars," says curator Aimee Ng.

—Alexandra Wolfe

▶ King George I, 1727. This medal, made after the death of the king, depicts a woman holding a medallion of George I's son, George II, on the reverse.

▲ Josephine Bonaparte, 1832. This posthumous portrait of Napoleon's first wife, measuring about 7 inches, is decorated just on one side, so it could be hung on a wall like a painting.

▼ Johann Friedrich I, 1535. Cast by one of the most celebrated German medalists of the time, this item shows how intricate the art form could be. (Note the sword popping out of the frame.)

▲ Ferrante Loffredo, mid-16th century. This rare surviving Renaissance wax model depicts the Marquess of Trevico. Artists used wax models to make molds for casting the final medals.

▶ Skull, 1580. Death was a common theme. (On the reverse of this one is a portrait of a little-known man.) 'It wasn't always morbid,' says Ms. Ng. 'Sometimes, partly, it was to remind themselves that life is short and one should live life to the fullest.'

PHOTOS BY MICHAEL BODYCOMB

PLAYLIST: PAULA POUNDSTONE

Stand-Up at the Salad Bar

Despite mystifying lyrics, 'Chuck E's in Love' cheered a budding comedian busing tables

Paula Poundstone, 57, is a comedian and actress. She is the author of "The Totally Unscientific Study of the Search for Human Happiness" (Algonquin). She spoke with Marc Myers.

At 18, I was on my own and busing tables in 1979 at a salad-bar restaurant in Boston. The concept of making your own salad was just catching on then. That's where I first heard Rickie Lee Jones's **"CHUCK E'S IN LOVE."**

The best part about my restaurant job was Mary, the manager. She had this great work ethic and a motivating sense of humor. She made everyone laugh, and everyone worked hard for her.

A cassette stereo system provided the restaurant's music. One morning, when I was setting up tables, I heard "Chuck E's in Love" on the radio. I went out and bought the album on tape so we could hear the song every day before the restaurant opened.

"Chuck E's in Love" is a happy song. It opens with a strong beat and a slinky, twangy acoustic guitar. Then Rickie Lee Jones's raspy voice comes in and sings the song's lyric, something about Chuck E being in love. I loved Rickie Lee Jones's quirky articulation. It was both rural and street and hard to pin down. But it was tough to sing along with her. I could never figure out what she was saying.

Even when I read the lyrics, they didn't make much sense. Lines like, "And how come he turn off the TV / And he hang that sign on the door?" But when it was time to sing the chorus, "Chuck E's in Love," I'd wail away, usually just before she did.

Eventually, Mary and many of my work friends moved on. I was heartbroken. Clearing salad-strewn tables had lost its charm. By then, I had tried stand-up at open-mic nights in Boston and was hooked.

With barely enough money for two consecutive months of unlimited travel tickets and a bag of Oreos, I boarded a Greyhound bus.

Company for long rides on Greyhound buses.

Once I got where I was going, I'd work a comedy club and then take the bus on long trips so I could sleep. It was cheaper than a hotel. During those lonely nights, I longed for my restaurant friends.

The Sony Walkman hadn't come out yet, so late at night on the bus, to avoid disturbing anyone, I'd press my ear against the tiny speaker of my small cassette player so I could hear "Chuck E's in Love." The challenge was to avoid singing along or crying too loud.

WARING ABBOTT/GETTY IMAGES

RICKIE LEE JONES performing in 1979.

HISTORICALLY SPEAKING: AMANDA FOREMAN

The Mystery of Genius

"GENIUS," a new National Geographic miniseries on Albert Einstein starring Geoffrey Rush, tries to peel back the great physicist's eccentric public persona and examine the human being underneath, warts and all. But even if we could discover everything about Einstein's life and character, would that tell us anything about the nature of genius?

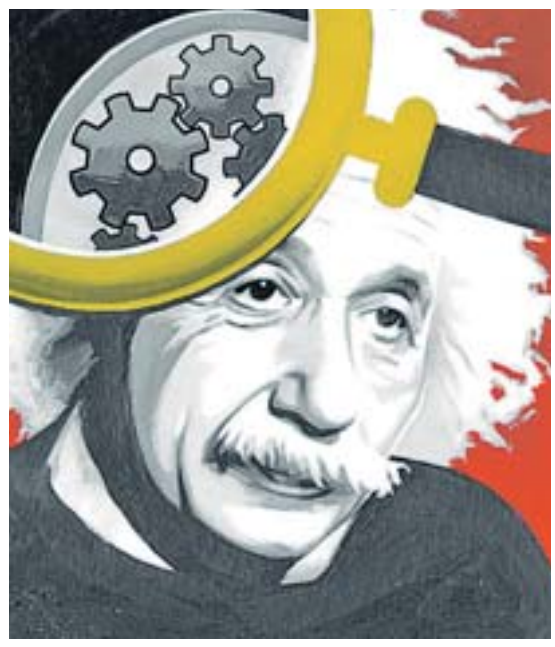
People have been puzzling over the concept for more than 2,000 years, as Darrin M. McMahon points out in his comprehensive history of genius, "Divine Fury." In classical antiquity, genius wasn't considered a talent or the result of effort but a divine spirit. The ancient Greeks believed that every individual was born with a *daimon*, an innate spiritual power bestowed by the gods that guided a person's actions and ultimately decided his fate. The Romans shared this basic belief in a heavenly spirit that resides in us.

But the classical world also saw a dark side in this divine inspiration, especially in the case of extraordinary individuals. In "On Peace of Mind," the philosopher Seneca the Younger (4 B.C.-A.D. 65), echoing Greek thought, said that "no great genius has existed without a touch of madness."

The classical conception of genius survived to the end of the Renaissance. Shakespeare still used the word genius in the sense of guiding spirit, as in his play "Troilus and Cressida," where the warrior Troilus grimly bids farewell to his lover, whom he may never see again: 'Hark! You are call'd: some say the Genius so cries 'come' to him that instantly must die."

The Enlightenment tried to sweep away supernatural or mystical explanations for genius but remained fascinated by its deeper mysteries. The poet John Dryden (1631-1700) wrote, "How to improve [genius], many books can teach us; how to obtain it, none; that nothing can be done without it all agree...." A century later, the philosopher Immanuel Kant, in "The Critique of Judgment," was no closer to an answer than Dryden, but nevertheless argued that genius had to be subject to the same laws of causality as everything else.

During the 19th century the idea of genius as a form of madness became fashionable again. Among the Romantic poets, cool reflection about the nature of genius was replaced by frenzy, rapture and acting out, preferably in some tragic or self-destructive way. Lord Byron's widely rumored affair with his half-sister and Samuel Taylor Coleridge's addiction to opium only encouraged such behavior.



THOMAS FUCHS

Unfortunately, the Victorian glamorization of genius gave way to an obsession with cultivating it. Francis Galton (1822-1911), a cousin of Charles Darwin, wrote 'Hereditary Genius: An Inquiry Into Its Laws and Consequences," in which he argued that genius could be "bred" into the human race. The work helped inspire the eugenics movement, the idea of using controlled breeding to improve humanity. In turn, the Nazis seized on eugenics for their project to create and spread a master race.

Today we are still no closer to understanding genius. In the 20th century, people thought that IQ tests would identify the gift. But a long-term study of more than 1,500 children with "genius" IQs, started in 1921 by the educational psychologist Lewis M. Terman, revealed something surprising: While most participants ended up successful, none of them were hailed as geniuses in their fields.

What can be agreed, after so many rival notions of genius across the ages, is that it always falls outside the norm. As the philosopher Arthur Schopenhauer (1788-1860) said: "Talent is like the marksman who hits a target which others cannot reach; genius is like the marksman who hits a target...others cannot even see."

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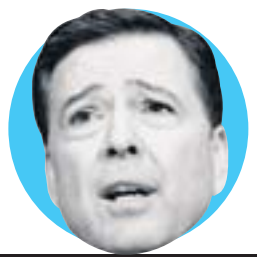
PLAY

NEWS QUIZ: Daniel Akst

From this week's Wall Street Journal

1. According to FBI chief James Comey, how does it make him feel to think the bureau might have had an impact on the presidential election?

- A. "Mildly nauseous"
- B. "Thoroughly disgusted"
- C. "Utterly jubilant"
- D. "Seriously remorseful"



2. What's catching on big-time in craft beer?

- A. Garlic
- B. Juniper
- C. Bacon
- D. Cans

3. A renowned rock band objects to what it views as trademark infringement—by whom (and which band)?

- A. Boeing (the B-52s)
- B. Jann Wenner (The Rolling Stones)
- C. Hotel California (The Eagles)
- D. Smith & Wesson (The Sex Pistols)

4. With Puerto Rico and its agencies owing $73 billion, the commonwealth went bust in the largest-ever U.S. municipal bankruptcy. Whose was the previous largest?

- A. Detroit
- B. Orange County, Calif.
- C. Jefferson County, Ala.
- D. New York City

5. Which member of Britain's royal family will retire this year?

- A. Prince Philip
- B. Prince Charles
- C. Princess Margaret
- D. Edward the cat, Chief Mouser of Buckingham Palace

6. The House adopted a GOP bill to overhaul the Affordable Care Act. What does the Congressional Budget Office say would be the financial impact if it became law?

- A. A saving of $150 billion over 10 years
- B. A spending increase of $150 billion over 10 years
- C. The cost would be about the same as the current law.
- D. Nobody knows; the CBO hasn't completed an analysis of this version.

7. Which country, itself the survivor of a massive cyberattack, hosted NATO's recent "Locked Shields" cyberwarfare exercises?

- A. Russia
- B. Latvia
- C. Lithuania
- D. Estonia

8. Advocates of eating snakehead—an invasive fish lately proliferating in Maryland, pictured below—want a more appealing name for it. Before rebranding, what was orange roughy called?

- A. Nigerian devilfish
- B. Patagonian toothfish
- C. Great white shark
- D. Slimehead

FROM TOP: EUROPEAN PRESSPHOTO AGENCY; ISTOCK

To see answers, please turn to page C4.

VARSITY MATH

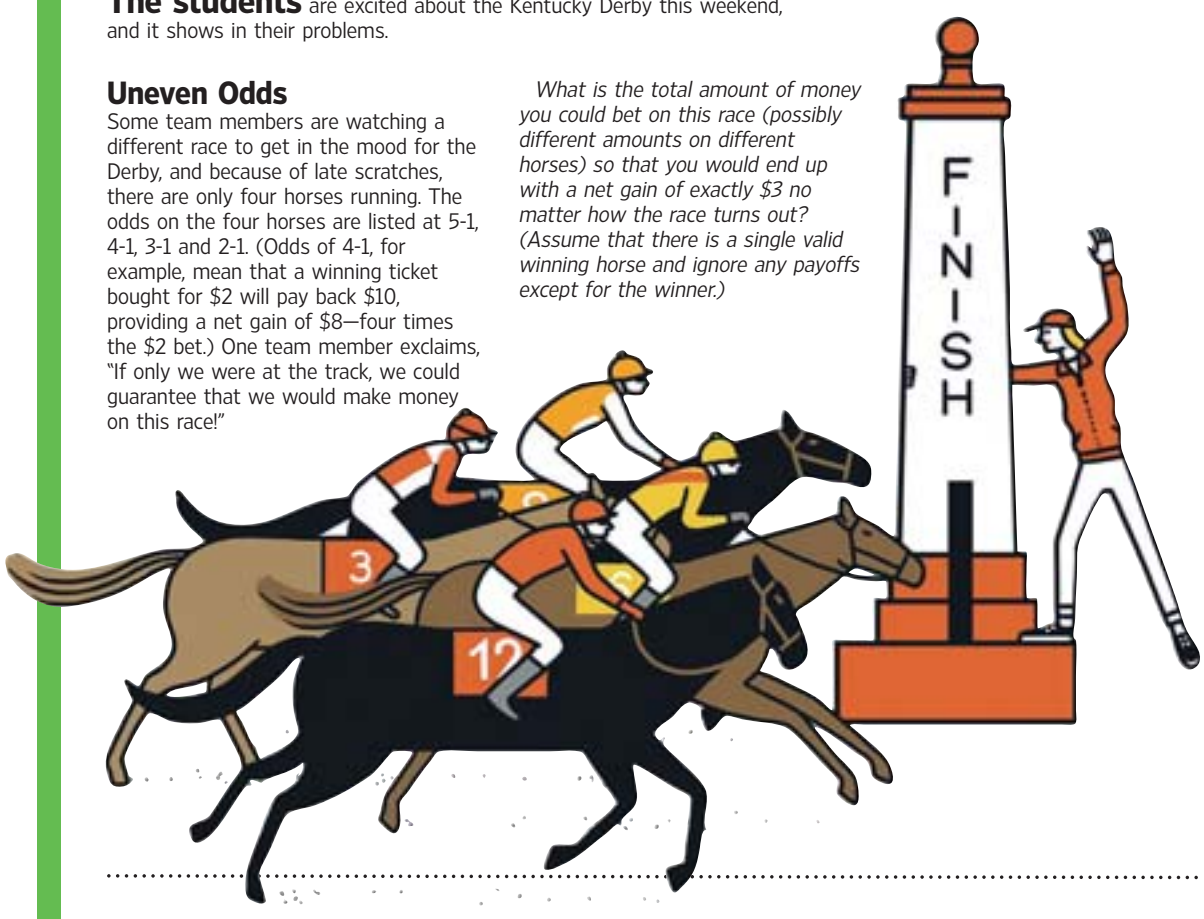
Provided by the **National Museum of Mathematics**

The students are excited about the Kentucky Derby this weekend, and it shows in their problems.

Uneven Odds

Some team members are watching a different race to get in the mood for the Derby, and because of late scratches, there are only four horses running. The odds on the four horses are listed at 5-1, 4-1, 3-1 and 2-1. (Odds of 4-1, for example, mean that a winning ticket bought for $2 will pay back $10, providing a net gain of $8—four times the $2 bet.) One team member exclaims, "If only we were at the track, we could guarantee that we would make money on this race!"

What is the total amount of money you could bet on this race (possibly different amounts on different horses) so that you would end up with a net gain of exactly $3 no matter how the race turns out? (Assume that there is a single valid winning horse and ignore any payoffs except for the winner.)



Stable Selection

A stable has 16 horses and wants to select the three fastest. There's only room on the practice track to race four horses at a time, and the track has no timer, so the only information from each race is the order in which the horses finish. (Assume for simplicity that each horse runs the track in exactly the same amount of time in each race, and that no two horses run the course in exactly the same amount of time.)

What is the smallest number of races the stable can run on the practice track to determine the three fastest horses?

ILLUSTRATION BY LUCI GUTIÉRREZ

Learn more about the National Museum of Mathematics (MoMath) at **momath.org**

SOLUTIONS TO LAST WEEK'S PUZZLES

Varsity Math

There are only two "perimetric" right triangles for last week's **Peri-area?**, namely 6-8-10 and 5-12-13. The fourth segment of the hypotenuse in **Hypotenuse Partition** has a length of 135.

For previous weeks' puzzles, and to discuss strategies with other solvers, go to WSJ.com/puzzle

Weather Update

M	E	S	H	U	G	A		R	O	N	A	L	D	
E	L	E	A	N	O	R		C	O	O	L	I	O	
S	A	N	T	I	A	G	O	C	H	I	L	L	Y	
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R	A	F	T	E	D			A	N	O		S	T	Y
O	N	L	O	A	N	T	O		U	R	S	A		R
P	G	A		R	A	I	N	O	F	T	E	R	R	O
E	E	K				G	A	P			D	C	I	
A	L	E		T	O	E		U	S	D	A		C	I
D	E	N		H	U	R	T	S	L	I	K	E	H	A
O	N	E	H	O	R	S	E		I	M	A	X		M
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C	H	A	N	G	E	F	O	R	T	H	E	B	I	T
C	A	R	G	O		F	E	A	R			O	N	O
U	N	P	I	N	S		S	N	O	W	E	N	D	I
S	K	I	N	N	Y		O	T	O	O	L	E		L
E	S	T	E	E	M		K	O	P	E	K	S		S

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A	D	E	X	E	C									
A	D	V	I	S	E									
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L	E	S	S	E	T	T	L	E						
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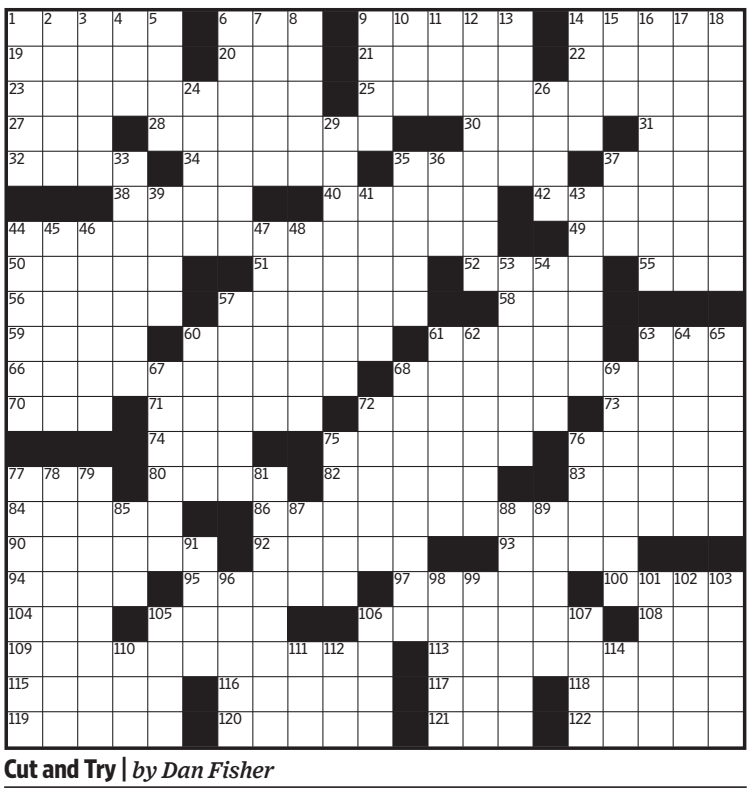
R	O	S	E											
N	I	G	H	T										
L	E	V	E	L	E	R								
S	C	U	S	E	M	E								

Labyrinth

P	L	A	C	E	M	A	T	S	U	D	S
M	A	N	T	L	E	D	E	F	E	A	T
R	E	S	E	L	L	E	R	R	A	Y	S
D	A	T	A	T	A	P	I	N	G	U	P
V	E	T	O	E	S	L	A	B	A	T	T
A	S	H	R	A	M	W	E	L	L	E	R
H	I	N	G	E	M	I	N	E	R	V	A
A	M	I	D	D	U	C	K	C	A	L	L
G	A	L	U	M	P	H	A	P	H	I	D
R	E	P	L	A	N	T	H	E	L	M	A
A	R	S	E	N	I	C	G	I	N	N	Y
P	E	T	R	I	D	A	Y	T	O	N	A
P	R	I	M	D	I	R	T	B	I	K	E
S	U	N	S	E	T	O	R	E	L	S	E

THE JOURNAL WEEKEND PUZZLES Edited by Mike Shenk



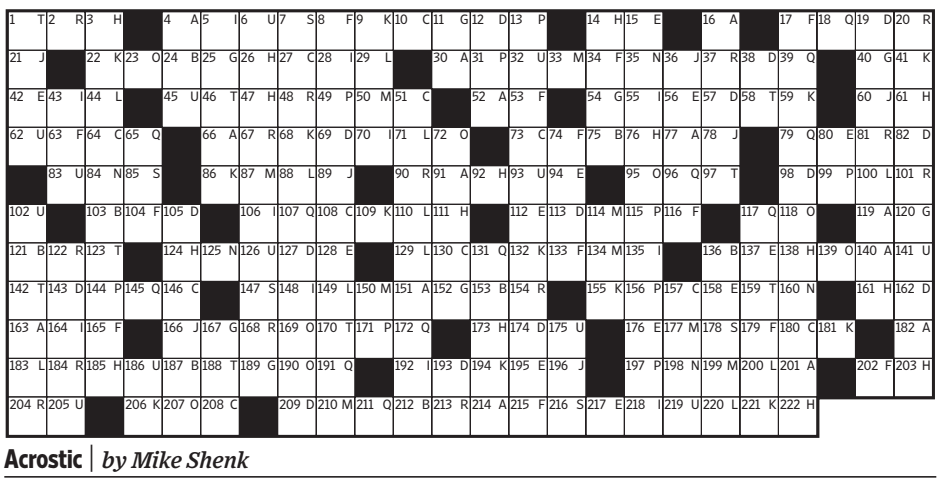
Cut and Try | *by Dan Fisher*

Across

1 Gave a boost to
6 Rub the wrong way
9 Pulls in
14 Round-the-world trip
19 Sarandon's co-star in "Lorenzo's Oil"
20 Pilot lic. issuer
21 Newly weaned pig
22 Country south of Sicily
23 Site of many drug dens?
25 Waterbird that delivers Amazon orders?
27 With 56-Across, "Full speed ahead!"
28 Right at the start
30 Rays slugger Longoria
31 Oscar winner Mahershala
32 Noted two-person home
34 1953 AL MVP Al
35 Encumbered
37 MIT courses
38 NYU Stern course
40 Beautiful people
42 The Big Apple
44 Subject of a seat belt tryout?
49 Aardwolf's cousin
50 Couldn't not
51 Francesco Rinaldi rival
52 "My stars!"
55 Oxford VIP
56 See 27-Across
57 Origami creations
58 Tony winner Hagen
59 Berkshire boarding school
60 Big Easy team
61 New grandparent, typically
63 Spot
66 Specialist in fixing escalators?
68 Formalwear designed to look good at the table?
70 Unlikely to change
71 Unconventional
72 Name in a Big Apple borough
73 Continue with intensity
74 Bad cholesterol letters
75 Rubbed the wrong way
76 Country club worker
77 Trucker's surroundings
80 Batiking supply
82 Laurey Williams's aunt
83 Cat-___-tails
84 NPR's Hansen
86 Product that works in every copier?
90 Hearts, e.g.
92 Bring about
93 Highlander, e.g.
94 Priority Mail org.
95 Time and again
97 Breaks, say
100 Invites
104 Printer spec no.
105 Chase away
106 Ludicrous
108 Wee worker
109 The Congressional Record?
113 Last remaining bit of a gingerbread man?
115 Northeast Corridor speedster
116 Purity measure
117 Screw up
118 Missionary's handout
119 Effervescent
120 Winter Olympics racers
121 Blue, on the Amer. map
122 Bosox rivals

Down

1 Spy org. of 1960s TV
2 Labored (over)
3 Catching spot
4 List-shortening letters
5 Hockey player's feint
6 "Personally..."
7 Silky singer Lou
8 Guest on Drake's song "Pop Style"
9 "Baseball Tonight" carrier
10 Puzzler's cry
11 Fabled flyer
12 Minimalist stargazing tool
13 Barrel piece
14 Eclipse, once
15 Chinese zodiac animal
16 Turned white
17 Lingua di Livorno
18 Charm
24 Collection of wands, swords, cups and pentacles
26 Work crew
29 Agent's cut, perhaps
33 Avian activity
35 They may stop at the red carpet
36 Site for a scammer's skimmer
37 Oinker enclosure
39 Feature of rough seas
41 Winter Olympics racers
43 "Doggone it!"
44 Arrowhead Stadium team
45 Baby shower gift
46 Skilled
47 More active
48 Electronic music genre
53 Readied for renovation
54 Eschewed the restaurant
57 Stock characters?
60 Clue room with a secret passage to the kitchen
61 Phone user, once
62 A group of them is called a romp
63 Khrushchev's predecessor
64 It's about 100 miles south of Portland
65 Cathedral site of southwest England
67 "Stalag 17" Oscar winner
68 Switchblade ancestor
69 Crunchy snack
72 Work out
75 Wear the crown
76 Do one's civic duty
77 Weather formation over a mountain
78 Zone that may be restricted
79 Player in plaid
81 Pretax line on a receipt
85 "Cherry Wine" rapper
87 Maiden name label
88 Developmental point of reference
89 It can help you look better
91 TriBeCa neighbor
96 Ordinary people
98 Was affected by gravity, in a way
99 "A Visit from St. Nicholas" poet
101 Father of Lies
102 Seek an opening?
103 Leaves in
105 Canine command
106 2015 World Series losers
107 Map dot
110 Sort
111 Mined find
112 Rubbed the wrong way
114 Ace's stat



Acrostic | *by Mike Shenk*

To solve, write the answers to the clues on the numbered dashes. Then transfer each letter to the correspondingly numbered square in the grid to spell a quotation reading from left to right. Black squares separate words in the quotation. Work back and forth between the word list and the grid to complete the puzzle. When you're finished, the initial letters of the answers in the word list will spell the author's name and the source of the quotation.

A. All together (3 wds.) — 151 182 119 66 140 201 30 16 / 52 163 214 4 77 91

B. How some costly purchases are made (2 wds.) — 75 153 24 187 121 136 212 103

C. Shining brilliantly — 130 157 146 73 180 27 10 51 / 208 64 108

D. Song commemorated by a 51-foot-long sculpture outside a Liverpool airport (2 wds.) — 82 127 38 209 193 69 98 57 / 162 19 113 12 143 174 105

E. Rome landmark that connects the Piazza di Spagna and Piazza Trinità dei Monti (2 wds.) — 15 112 217 195 42 176 80 128 / 56 137 158 94

F. Basic briefs, informally (Hyph.) — 165 133 215 104 34 53 179 17 / 63 202 8 74 116

G. Capital whose name translates as "father of the gazelle" (2 wds.) — 54 189 25 167 120 11 40 152

H. America's highest-paid commercial artist in the 1920s (2 wds.) — 26 173 185 138 14 3 124 47 / 76 161 111 92 61 222 203

I. Person who serves as an object of abuse by another (2 wds.) — 218 164 43 55 148 5 28 192 / 106 70 135

J. Host and winner of the 1966 World Cup — 78 21 196 60 166 36 89

K. Branding character who first appeared in a 1926 ad for Alabama Power Company (2 wds.) — 221 41 155 22 181 68 194 59 / 9 86 206 132 109

L. North American shrub whose leaves yield a pungent oil used as a flavoring — 129 149 200 29 220 88 44 71 / 100 110 183

M. Much of Mitch Hedberg and Steven Wright's repertoires (Hyph.) — 87 150 50 177 199 134 210 114 33

N. Qatari currency — 84 125 160 35 198

O. Jon Snow's Ghost on "Game of Thrones," e.g. — 72 139 207 169 95 23 190 118

P. Cartoon character whose boyfriend was a chubby dog named Bimbo (2 wds.) — 171 156 115 49 13 197 31 144 99

Q. Top 10 hit of early 1976 for Hot Chocolate (3 wds.) — 39 117 18 172 107 211 191 79 / 96 131 145 65

R. Energetically; to an extreme degree (3 wds.) — 67 122 37 2 20 168 184 101 / 154 204 48 90 213 81

S. Animal whose den is called a holt — 178 147 7 85 216

T. Sgt. Sam Troy's command in a 1960s ABC war drama (2 wds.) — 123 188 1 46 58 142 170 97 159

U. Actor whose portrayal of an FBI agent earned him a Golden Globe for Best Actor in a Drama Series (2 wds.) — 93 83 62 141 102 175 45 6 / 219 186 126 32 205

▶ **Get the solutions** to this week's Journal Weekend Puzzles in next Saturday's Wall Street Journal. Solve crosswords and acrostics online, get pointers on solving cryptic puzzles and discuss all of the puzzles online at **WSJ.com/Puzzles.**

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ICONS

FROM TOP: GEMEENTEMUSEUM DEN HAAG/THE REMBRANDT SOCIETY; GEMEENTEMUSEUM DEN HAAG

'COMPOSITION With Red, Yellow, Black, Blue and Gray' (1921); below, 'Mill; the Red Mill' (1911).

Mondrian's Road to the Grid

A career retrospective covers decades of transformation; fascinated by 'Snow White'

BY J.S. MARCUS

How did Piet Mondrian become an artist defined by his famed grids of primary colors? A new exhibition in the artist's native Netherlands will tell the whole story, from the ordinary art student and established landscape painter to the experimenter who went to Paris, tweaked his own name and settled into decades of epoch-making abstract work.

"The Discovery of Mondrian," which opens June 3 at The Hague's Gemeentemuseum, the main repository of the artist's works, presents a Mondrian very different from his reputation. "He was considered to live as a monk," says the museum's chief curator, Hans Janssen, who co-curated the new show. "But that's untrue—he was out dancing every night."

Mr. Janssen adds that the artist had a soft spot for Fred Astaire and Ginger Rogers and the 1937 Walt Disney animated film "Snow White and the Seven Dwarfs," which he saw several times. Mondrian often listened to jazz while he painted.

The museum in The Hague, about 40 miles southwest of Amsterdam, will display for the first time its entire Mondrian cache of some 300 paintings and drawings to trace the artist's career in roughly chronological order. The first painting on view dates to 1891, when he was studying to be a drawing teacher.

Can we connect a plainly ordinary 1890s oil sketch, "Farm with Haystack," with frankly abstract works like "Composition with Red, Yellow, Black, Blue and Gray" from 1921? Yes, suggests Benno Tempel, the Gemeentemuseum's director and the show's co-curator. Mondrian's grids emerged, it would seem, from a longstanding eye for vertical and horizontal lines, like the four erect poles of the haystack sketch, or the tree trunks of his many forest scenes. Visitors "will have the impression of a very logical development," adds Mr. Tempel.

When Mondrian was about 40, he made his bid for the big time. He trimmed the double "a" in his original surname of Mondriaan (mainly to render it less odd-looking in French, says Mr. Janssen) and made his way to Paris in 1912. The cubist revolution was in full swing, prompting Mondrian to start breaking down parts of his landscapes into grid-like patterns. The exhibition includes prime examples of transitional paintings leading up to the Paris gamble, like a 1910 purple dune landscape and a giant red windmill from 1911. "Composition of Trees 2" (1912-13), a near monochromatic work done in Paris, suggests both a forest snapshot and a blurry grid.

A move to Paris and a change in name and style.

During World War I, Mondrian became the mentor to a Dutch art movement called "de Stijl," or the Style, after an avant-garde journal launched in 1917. As for Mondrian's own work, his mature approach to abstraction banned everything from diagonal lines to pastel colors. His studio in the Parisian neighborhood of Montparnasse, featuring a single narrow bed and geometric blocks of color, suggested (misleadlingly) a life devoted to art and nothing else.

Mondrian left Paris on the eve of World War II, eventually making his way to New York City. There, his final paintings shed their trademark black lines in favor of blocks of pure color. He was still perfecting his last work, "Victory Boogie Woogie," at the time of his death at age 71 in 1944. In The Hague, the painting "will be installed as the culmination" of the show, says Mr. Janssen.

Since his death, Mondrian has held on to his formidable position in art history—and in art sales. In 2015, his "Composition No. III, with Red, Blue, Yellow and Black" (1929) sold for $50.6 million at Christie's in New York, setting the artist's record at auction. The Hague exhibition includes a key work from that period, 1933's "Composition with Yellow Lines."

Some of the art in the exhibition hasn't been seen in decades, like his oversize 1906 drawing "Field With Group of Trees at Dusk." The rolled-up drawing came into the museum's possession in the 1970s. At the time, the museum was loath to unroll it. "If you keep paper rolled for decades, it becomes brittle, and if you touch it, it breaks," says Mr. Janssen, who says the work was finally unrolled with the "gradual addition of moisture" and "soft pressure."

While the Gemeentemuseum is presenting its Mondrian show, it is also celebrating the centenary of the de Stijl movement—as is much of the Netherlands.

About 40 miles east of The Hague, Utrecht's Centraal Museum is featuring an exhibition on de Stijl architect and designer Gerrit Rietveld (1888-1964) through June 11. Utrecht and the nearby city of Amersfoort have installed giant versions of Rietveld's signature geometric "Red and Blue Chair" (1917). Special bicycle tours show off Rietveld's Utrecht buildings. The Hague has decorated its city hall with what it calls the world's largest Mondrian—a replica made from plastic sheets stuck on the sides of the building. The art market will get into the act next October, when Sotheby's New York holds a de Stijl-themed exhibition and private sale.

But for a complete view of de Stijl's central figure, it will be hard to beat The Hague exhibition, which closes Sept. 24. The show gets up close and personal with the artist's letters to his brother, Carel. In line with his affinity for "Snow White," Mondrian liked to call Carel "Sneezy" to his own "Sleepy."

MASTERPIECE: 'DOGE ANDREA GRITTI' (1546/48), BY TITIAN

STORMY MOOD, TEMPESTUOUS BRUSHSTROKES

BY BRUCE COLE

King Charles I of England had deep pockets and a discerning eye, allowing him to assemble an art collection that included masterpieces by Raphael, Mantegna, Correggio and Caravaggio. In 1626, his agents in Italy acquired a portrait of the Venetian Doge Andrea Gritti (1546/48). Its creator was Titian, an artist whose works Giorgio Vasari, the taste-making biographer of the Renaissance, called "worthy of infinite praise, which will last as long as illustrious men are remembered."

The painting, an important example of Titian's famous "late style," powerfully depicts a haughty, self-confident leader—doges were the chief magistrates and rulers of the republic of Venice. Gritti is imposingly garbed in his official costume of golden robes and *corno ducale* (peaked velvet crown).

One of the first celebrity artists, Tiziano Vecellio (c.1488-1576), better known as Titian, was pursued by kings and emperors for likenesses that endowed them with a grace, command and natural nobility that, in reality, many of them lacked—though not Gritti. So it's no surprise that an imperious portrait of an important ruler by the premier painter of the Venetian Renaissance appealed to a monarch who insisted on the divine right of kings.

After Charles's execution in 1649 the painting was sold, passing through various owners until it entered Washington's National Gallery in 1961.

Titian's path to the Gritti portrait led first through the art-rich court of Mantua. There, in 1536, Federico Gonzaga, duke of Mantua, commissioned him to paint portraits (now destroyed, but known through engravings) of Julius Caesar and the first 10 Roman emperors. Inspired by Suetonius' dramatic, often scandalous and gossipy "Lives of the Twelve Caesars" (A.D. 121), the Caesars are, like the Doge, seen in three-quarter length. Each was painted with an energy, gesture and insight that creates a new feeling of character and mood, presaging a change from Titian's earlier, more static portraits to a bolder, more dynamic and monumental portrayal, seen in his likeness of Gritti.

A significant figure of the Serenissima, Gritti (1455-1538) was a businessman, military leader, spy and diplomat. A longtime resident of Istanbul (where he fathered four sons out of wedlock), he used his position as a grain merchant to spy on Venice's enemies, the Turks. Imprisoned for espionage in 1499, he was freed in 1502 after the Venetians paid to obtain his release. He then returned to Venice, where in 1523 he was elected the 77th doge, ruling for 15 years.

Some areas are painted so loosely they look almost impressionistic.

Admired for his diplomatic and military skills, Gritti cut a large figure in Venetian society. A contemporary commented on his "authority" and "majesty." Another said that he had "every good quality," was "handsome, generous, well spoken," and "his worth is more pleasing because it appears in a handsome body." But if he "had reason to be angry with someone, he assumed a severe and terrible aspect."

Titian paints Gritti in one such stormy mood. He gathers his robes, begins to turn his mountainous, nearly life-size body (it's already moved beyond the frame) to exit rightward. But his scowling face swivels in the opposite direction, as though something, or someone, has suddenly seized his attention. This arrested twist animates the picture, giving it a psychological and physical spark. Here, as in Titian's other great portraits, we glimpse a sentient living, breathing presence, dramatically different from so many of the traditional icon-like pictures of earlier doges.

The Gritti portrait is in almost the same condition as the day it left the artist's studio, making it a benchmark for understanding Titian's working methods. Unlike other works by him, the painting has escaped relining, a process in which a layer of canvas is glued and then pressed onto the back of a damaged canvas to preserve its surface. This often destroys the topography of the pigment, making the paint surface flat.

Not here. The gold cape, its huge buttons, Gritti's silky beard, the large, grasping hand (perhaps derived from Michelangelo's "Moses") and the *corno ducale* are created with a brush that flicks and darts rapidly across the surface, sometimes loaded with pigment (errant drops of paint still dot the surface) and sometimes nearly dry, allowing the fine weave of the canvas to become part of the image. Some passages are painted so loosely that they look almost impressionistic. As in late works by Rembrandt (an artist who owed much to Titian), objects such as the cape's fur hem, or its brocade, take shape as much in the imagination as in the eye.

Surprisingly, the Gritti portrait is almost certainly posthumous. The style and technique do not appear in Titian's work until the mid-1540s, or about seven years after doge's death. X-rays of the canvas reveal that, except for changing the direction of the eyes (they originally looked straight ahead), adjusting the height of a shoulder, and enlarging the buttons, the artist, uncharacteristically, made very few modifications as he painted, strongly suggesting that he relied on an earlier painting or drawing, perhaps by his own hand, to create the likeness.

If true, Titian's vivifying brush summons Gritti back to life in an astonishing act of resurrection in paint and canvas.

Mr. Cole, a former chairman of the National Endowment for the Humanities, is a senior scholar at the Ethics and Public Policy Center.

IMAGE COURTESY NATIONAL GALLERY OF ART

AMAZINGLY, it is in almost the same condition as the day it left Titian's studio.

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For Mom: Literally feel-good gifts she'll want to get her hands on **D3**

OFF DUTY

How the host of 'Good Morning America' gets a great night's sleep **D10**

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* * * * THE WALL STREET JOURNAL. Saturday/Sunday, May 6 - 7, 2017 | D1

The Graze Awakening

We love the notion that a happy cow yields great meat. Finally, the flavor of grass-fed beef is living up to the hype

BY PERVAIZ SHALLWANI

UNTIL RECENTLY, I was a skeptic when it came to grass-fed beef. I knew I was *supposed* to like it. Isn't a happy ruminant, grazing freely as nature intended, believed to be better for the environment and, ultimately, for me than one fed grain to speed the fattening process?

It's just that, over the years, I'd found the grass-fed option rarely tasted as good as its grain-finished counterpart. Grass-fed was a hard choice to justify at the checkout counter, too; this beef came at a premium and yet too often cooked up tough and chewy and nothing like what any meat-loving American would call a steak.

My mind changed at Whitfield restaurant inside Ace Hotel Pittsburgh. There, butcher-restaurateur Brent Young, a native Pittsburgher who'd made a name for himself at the Meat Hook in Brooklyn, had come home to build the steak program of the future. And it's all about grass-fed.

Shortly after my wife and I checked into the hotel, we sat down to a medium-rare tenderloin—typically a rather bland cut. But this one, prepared by Whitfield's executive chef, Bethany Zozula, was full of flavor—minerally, with a hint of earthy funk—and marbled with buttery fat. The

Please turn to page D6

COW ILLUSTRATION BY BEN GILES; BEER CANS BY THE ELLAPHANT IN THE ROOM

[INSIDE]

SUITABLE ATTIRE
The unlikely candidate for spring's most versatile look? A white suit **D3**

WE'LL TAKE BROOKLYN
An insider's travel guide to the post-hip borough **D8**

A COOLER CAN
How craft brewers are elevating canned beer's low-brow reputation **D5**

THIS OLD THING?
A 19th-century apartment with subtly modernizing décor **D9**

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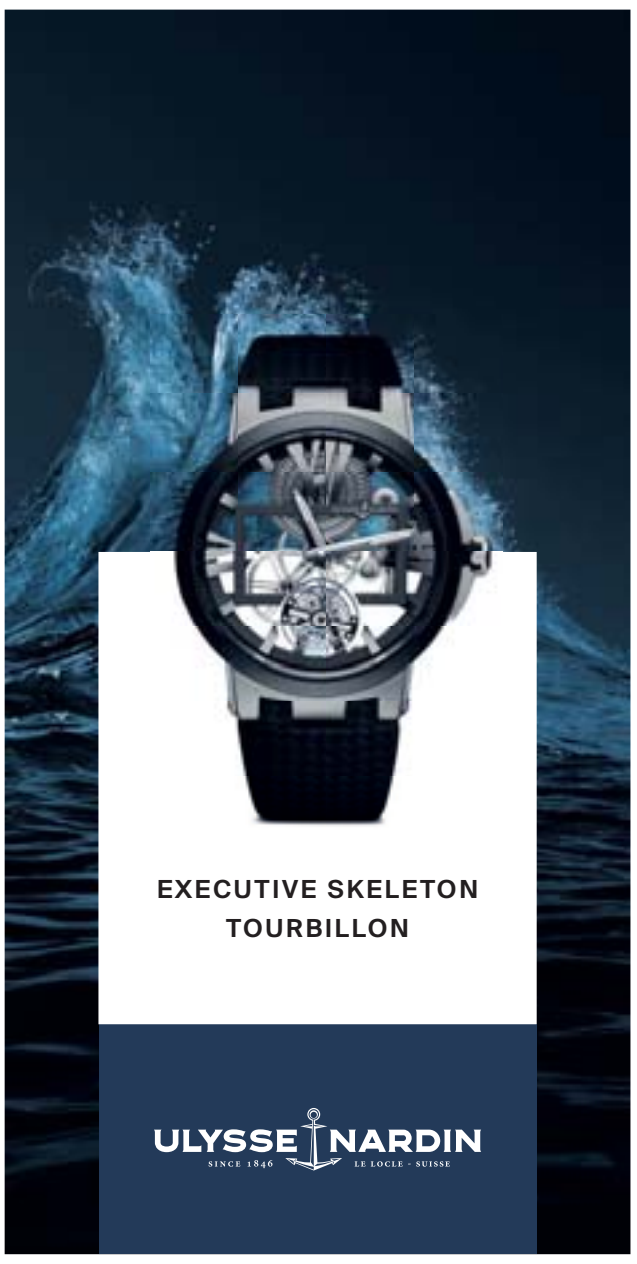

STYLE & FASHION

DA VINCI MODE Louis Vuitton created a pop-up shop on Madison Avenue in New York for its 'Masters' handbags.

PAUL WARCHOL (TOP); BILLY FARRELL AGENCY (GUESTS)

FÊTE ACCOMPLI A GOOD-LOOKS GUIDE TO RECENT EVENTS

Masterpiece Theater

IT'S DIFFICULT to get excited about a fashion collaboration, dime-a-dozen as they are these days. But the latest from Louis Vuitton, called "Masters," is eliciting more than yawns. Made in partnership with artist Jeff Koons, the provocative collection of bags, scarfs and small leather goods riffs on his "Gazing Ball" series of canvases, large-scale replicas of old-master paintings on which he depicted a blue reflective ball. For the new accessory collection, Mr. Koons reproduced da Vinci's "Mona Lisa," Fragonard's "Girl with Dog" and van Gogh's "A Wheatfield with Cypresses," among others, on classic Vuitton items (see bag, right), adding both the artist's name in shiny hardware, the LV logo and a similar logo based on his initials.

The New York party celebrating the collaboration's debut and the opening of a dedicated pop-up shop, open through July, certainly generated buzz. It seemed, however, to be mostly coming from the cash registers where dedicated clients were in a feeding frenzy. Sales associates reported that the van Gogh "Wheatfield" items were the most popular.

Guests at the party, held a few days ahead of the Met Gala's style extravaganza, mostly restricted themselves to low-key fashion statements. Discreetly chic but no-nonsense navy-and-black looks were the norm, though one partygoer—Indré Rockefeller, co-founder of luggage brand Paravel—did opt for a nearly floor-length vintage floral embroidered coat.

The meta quality of Mr. Koons's marriage of art and commerce left Ms. Rockefeller in a reflective mood. "The use of each artist's name in large letters across each bag is interesting as it dwarfs both Koons's and the brand's logos," she said. "I think he's asking us to connect with these works on a more intimate level." Indeed, what could be more intimate than the inside of a woman's handbag? —*Taylor Harris*

Speedy 30, *$2,800, Louis Vuitton, 212-758-8877*

F. MARTIN RAMIN/THE WALL STREET JOURNAL, STYLING BY ANNE CARDENAS

BLACK-TIE CAT // CARTIER'S PARTY-READY PANTHÈRE IS BACK

THE EVENING WATCH gets short shrift. Jewelry makes a bigger statement and a watch, unlike an iPhone, can't take selfies. And yet a delicate timepiece is always an elegant addition to a cocktail dress or a gown. With its revival of the Panthère de Cartier, the storied French brand Cartier is again positing the evening watch as an alternative to jewelry. First introduced in 1983, the Panthère embodies the glitz of that decade, without the gaucheness. The collection includes nine styles (from plain steel to white-gold covered with brilliant-cut diamonds), all in two sizes, 22mm and 27mm. One particularly dazzling version features black-lacquer panther spots. The collection is available on June 1 but, if you can't wait, Net-a-Porter has a pre-release selection currently for sale. —*Meenal Mistry*

From left: Panthère de Cartier Medium Watch, *$21,200*, and Small Watch, *$23,300, Cartier, 800-227-8437*

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TEST DRIVE

All the White Moves

Three smart ways to wear the of-the-moment but tricky white suit

WORKDAY Above: Let the suit's sharp tailoring do its job, and opt for a less buttoned-up underpinning. Blazer, *$795*, and Pants, *$550 (throughout), 31philliplim.com;* Shirt, *$498, dvf.com*; Mizuki Earrings, Long, *$395*, and Short, *$315, Stone & Strand, 855-775-3935*
WEEKEND Above left: Flat sandals and casual layers de-stuffify the suit's formality. Raen Sunglasses, *$150, anthropologie.com;* T-shirt, *$75, vince.com;* Top, *$690, The Row, 212-755-2017;* Necklace, *$2,295, Dolce & Gabbana, 212-879-9653;* Chain, *$1,100,* and Charm, *$550, jenniferfisherjewelry.com;* Bag, *$10,900, Hermès, 800-441-4488,* Sandals, *$242, kjacques.fr*

EVENING An ultracool option for a night out. Beaded shawl/vest optional. Dries Van Noten Vest, *$1,665, barneys.com*; Tank, *$210, helmutlang.com*; Clutch, *$8,000, Dior, 212-931-2950*; Sandals, *$815, Gianvito Rossi, 646-869-0201*; Earrings, *$2,100, larkspurandhawk.com*

BY CHRISTINE LENNON

THE WHITE SUIT: Few wardrobe choices project more power, poise, confidence and bold disregard of potential ballpoint-pen stains. Hillary Clinton reached for a Ralph Lauren version before the third debate, earning points for appearing presidential. Bianca Jagger slinked around in hers at Studio 54, chicer than the sequined crowd. Morgan Freeman wears one whenever he's asked to play God. It always does the trick.

In concept, it's easy to understand the white suit's appeal. There's a weight for every season: sturdy wool, light linen or cotton, even silk. A variety of silhouettes work for women of almost any age and aesthetic—it can look, against all odds, as sensibly stylish on 24-year-old model/actress Cara Delevingne as on 70-something Diane Keaton. Thanks to the Clinton-inspired #pantsuitnation craze, what was formerly a staple of daring female bank managers has become a symbol of feminist solidarity. What's more: Its color calls back to our suffragette sisters.

The white suit ticks so many boxes on the list of desirable style statements that, as a menswear lover, I'm surprised I've never given one a spin. I can think of a few semi-valid defenses. The first is that I live in Los Angeles, an aggressively casual place where people wear white suits only if they've joined a cult or are over 50 and navigating a red carpet. Neither of those scenarios apply to me, yet. It also seems an unwise choice for a notorious spiller of red wine (and, once at the Chateau Marmont, an entire steak au poivre). A white suit is weighted, too, with pop-cultural baggage from my youth. It was a clownish go-to for Steve Martin, the clingy signature of "Saturday Night Fever"-era John Travolta, the uniform of Tom Wolfe.

The most memorable argument against the white suit, however, was made for me back in 2000, when my old friend Sara Blakely visited my office at Harper's Bazaar with a prototype of Spanx tucked into her backpack. She said that the idea for the neo-girdle came to her when she realized how bad even her slim backside looked in white pants, which revealed every bulge and the subtlest of panty seams. She went on to build a billion-dollar business, so she couldn't have been that wrong. And her observation was enough to turn me off the idea, until now.

Cut to the recent spring shows, and the succession of crisp and elegant white suits shown at 3.1 Phillip Lim, Chloé and Lanvin. Some were leavened by long flowing underpinnings, blouses left untucked, with tails of colorful silk peeking out below the jacket. Some, like those from American label Theory, resurrected the minimalism of the late 1990s. "There's been so much color and novelty in fashion, I like the idea of going in a more discreet direction," said Lisa Kulson, creative director of womenswear.

Inspired by it all, I decided to try out Theory's white suit. First, I'm pleased to report that no Spanx were necessary. The fabric was a surprisingly versatile and flattering white crepe. I made my pale debut at a local school event, a writers' panel with two other authors, both clad in chic and serious black. I wore my suit with a pair of Marni platform sandals and a simple maize-colored tank. I layered on three necklaces, a look I can rarely pull off, due to my tendency to wear so many patterns that accessories get lost in the jumble. At the event, admirers told me I looked "elegant," which may have been code for overdressed but I was too jazzed about my natty new suit to care. We sat in director's chairs and talked about the fate of libraries in the digital world. The only thing that kept me from feeling as dusty and outdated as a stack of unwanted books was the freshness of my ensemble.

The second outing was an evening birthday party. I wore the suit with an elaborately beaded white Dries van Noten shawl on loan. (You can see it worn with a 3.1 Phillip Lim suit, top right). In the runway photo I'd seen, this exquisite shawl suggested an ancient military vest from the Forbidden City, as reimagined by an angel. When I put it on, its long, dangling ties reminded me of the tzitziyot worn by some of the Orthodox Jewish men who walk down La Brea to temple. Mid-party, my husband made a couple of Sgt. Pepper jokes and I folded the shawl gently and put it in my bag, deciding I wasn't prepared to explain my motives all night. If I actually owned this shawl, I would wear it over a flowy dress. Without the bib, my suit—styled with black sandals, a close-fitting ivory top and an extra napkin on my lap during dinner—was simple perfection.

> In L.A., people only wear white suits if they've joined a cult or are navigating a red carpet.

My final challenge was to wear my white suit on a workday, which, for me, is typically spent at NeueHouse in Hollywood, an extremely creative, hipster-ridden, communal office space. I love it there, even if I sometimes feel like the den mother who thinks the kids actually like having her around.

I decided that the suit would project a kind of authority—and I need to own that. Still, I wore the pristine two-piece with Nikes and a graphic Clare V T-shirt, evidence that I haven't given up trying to fit in. No one seemed to care that I was wearing a suit. But it somehow made me believe I'm beaming out a not-so-subtle message: I'm in charge of my domain; I'm experienced; I'm powerful; I'm undaunted by ballpoint pens.

ANDRES OYUELA FOR THE WALL STREET JOURNAL, STYLING BY REBECCA MALINSKY, HAIR BY PETER MATTELIANO, MAKEUP BY VICTOR NOBLE, MODEL: LOIS SCHINDELER/WILHELMINA

MOTHER'S DAY GIFT GUIDE

TOUCHING GESTURES

10 literally feel-good gift ideas for mom—from the softest robe to a bristly and invigorating workout for her hair

1. C'mere Cashmere Knitwear brand Naadam's new monogrammed robe is as light as dandelion fluff and nearly as soft. Just add croissants, served in bed, and gossip. Robe, *$155, naadamcashmere.com*

2. Grit and Glory Using tiny fragments of walnut shell, this considerately abrasive scrub leaves skin smooth and fresh. A spa in a jar. Body Scrub, *$55, jomalone.com*

3. Strike It Ostrich The wispy feather fringe of Prada's chic spring skirt tickles the knees divertingly. Skirt, *$2,480, Prada, 212-334-8888*

4. Rough and Tender Exquisitely nubby—and never too hot—a loosely hand-woven alpaca blanket has her summer naps covered. RH, Restoration Hardware Throw, *$429, rh.com*

5. Stimulation Package There's no pulling or yanking with this expensive-but-worth-it hairbrush. The finest incidental scalp massage she will ever enjoy. Mason Pearson Hair Brush, *$120, bigelowchemists.com*

6. Gleam Squad The lustrously creamy texture of pearls can be best appreciated when worn right against the skin, as with this ring's quartet. Ring, *$2,100, natafjoaillerie.com*

7. Downy With Love Just the thing to slip into at home: velvety crisscross, rabbit-fur slides that are stylish enough to entertain in or just binge-watch "Anne with an E." Slides, *$950, alumnae.nyc*

8. Growth Potential Forget cactuses. The pleasantly rubbery texture of a prickle-free succulent is ideal for plant petting. Bonus: They're black-thumb-proof. Remember to pot stylishly. From left: Fluted Jade and Ezra Planter, *$32;* Jade and Calvert Planter, *$34*; Haworthia and Jules Planter, *$40, thesill.com*

9. Carry On Caressing Softly structured and silky, the Row's satin bag is essentially a grown-up's stuffed toy. Bag, *$990, The Row, 212-755-2017*

10. Vase in the Crowd The finely pocked, matte surface of this single-stem vessel is curiously compelling. Wax Resist Vase, *$116, heathceramics.com*

F. MARTIN RAMIN/THE WALL STREET JOURNAL, STYLING BY JILL TELESNICKI

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Mature Moto I've got a classic Belstaff motorcycle jacket that's perfectly beat up. It was beat up when I bought it, and I've done my best to continue to beat it up. I got it at Portobello Market in London. A guy had it lying on the ground. Vintage Belstaff Jacket (a similar style), *$1,250, whatgoesaroundnyc.com*

Quality Time I want to have a very limited number of watches. I stick to ones like a Rolex Submariner or Daytona, watches that were built to time things, or be worn in the water. Vintage Rolex, *$7,500, analogshift.com*

It's a Wash I'm a nut about care so I wash my shirts myself. Persil detergent is the absolute best. It used to be fiendishly complicated to get because it wasn't being imported to the U.S. Now you can just buy it on Amazon. Persil, *$8, amazon.com*

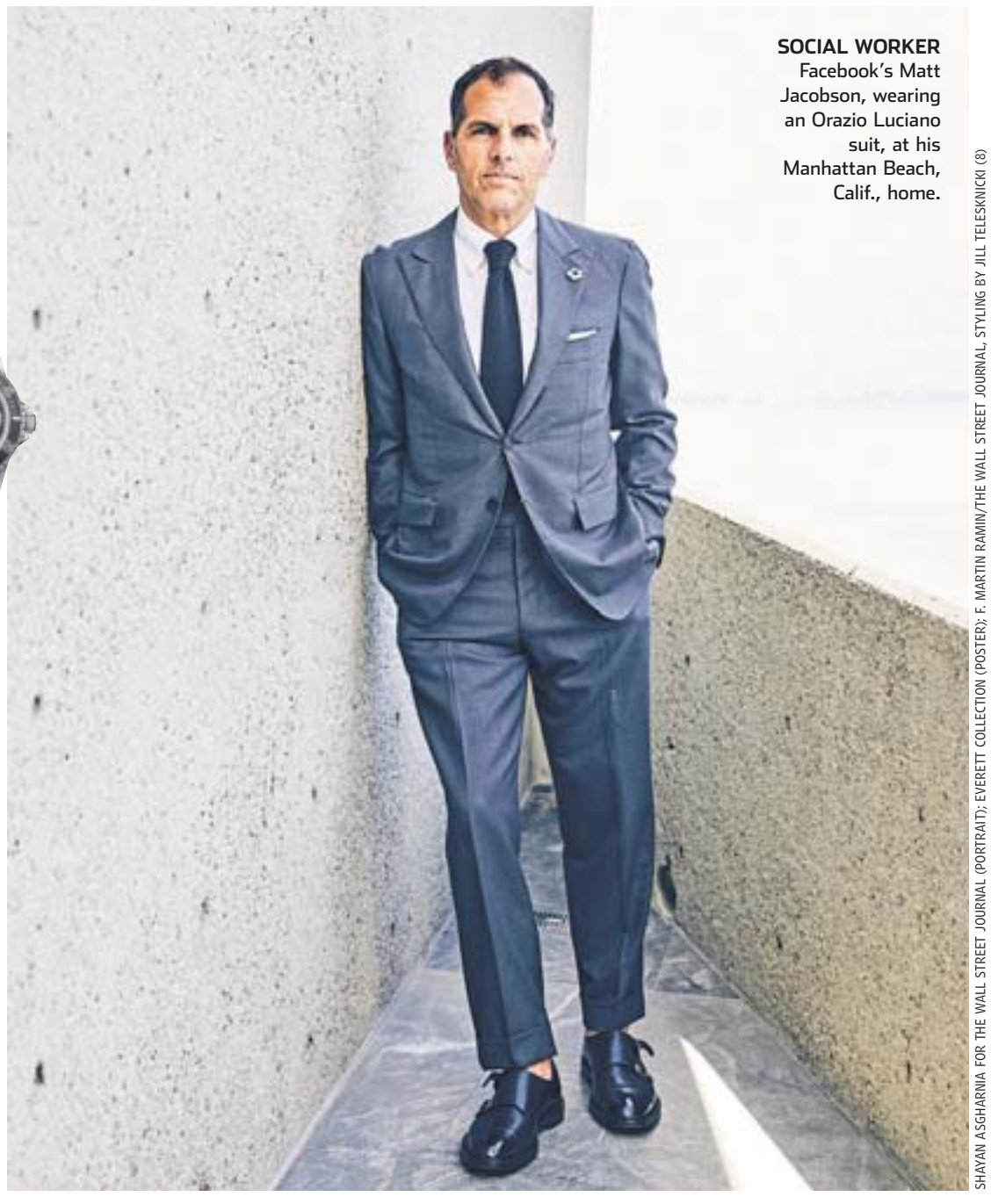
Bottom Line Thom Browne makes really good chinos. I wear all my pants really short. It's a homage to my dad who always wore his pants short with red socks. Trousers, *$790, thombrowne.com*

Boardwalk Bespoke The Sandal Man in Newport Beach, Calif. has been making custom flip-flops since the '70s. I had a spare piece of shell cordovan leather so I had them make me a pair from it. Sandals, *$70, thesandalman.com*

STYLE ROLE MODEL

The Exacting Tech Exec

Matt Jacobson proves Silicon Valley style isn't an oxymoron. Here, the Facebook bigwig on the carefully chosen elements of his uniform



SOCIAL WORKER Facebook's Matt Jacobson, wearing an Orazio Luciano suit, at his Manhattan Beach, Calif., home.

SHAYAN ASGHARNIA FOR THE WALL STREET JOURNAL (PORTRAIT); EVERETT COLLECTION (POSTER); F. MARTIN RAMIN/THE WALL STREET JOURNAL, STYLING BY JILL TELESKNICKI (8)

BY JACOB GALLAGHER

AT FACEBOOK, Matt Jacobson sticks out like an errant line of code. "You won't see anybody else with a tie," said Mr. Jacobson, the company's head of market development. In the middle of Silicon Valley's sea of notoriously dressed-down coders, he's the man in the three-button Kiton suit and Alden monk straps. "When I joined the company almost 12 years ago, I just made a decision that I'm too old to wear ironic T-shirts," said Mr. Jacobson, 56, of his typically tailored uniform.

Having earned his corporate stripes at Fox and Disney, the Southern California native copes easily with buttoned-up office style. However, his fastidious fashion sense actually derives from his natty father, who worked as the director of low-cost housing for Los Angeles County. "My dad grew up on the beach," said Mr. Jacobson, "but he was always a Brooks-Brothers-sack-suit kind of guy."

Mr. Jacobson frequents Facebook's Menlo Park and New York offices, but lives with his wife Kristopher Dukes in a Manhattan Beach, Calif. bungalow, since part of his job calls for building relationships with Hollywood.

His off-duty style skews more typically Californian—to a degree. His chinos are Thom Browne. His flip-flops, a bespoke Horween cordovan pair, outclass most dress shoes. A few years ago, Mr. Jacobson, dismayed by the generally subpar swimwear for men, revived Birdwell Beach Britches, an American label from the '60s, with skateboard legend Natas Kaupas.

Mr. Jacobson says he runs his closet like a tight ship: "I have a strict one-in, one-out rule for everything, from ties to T-shirts to shoes." Though this rigid, quality-over-quantity mandate might seem to limit his style choices, it has its upside. "No one would ever say 'Oh, I saw you wearing that yesterday' because that's pretty much every day," said Mr. Jacobson. "[That's] the nice thing about having a uniform."

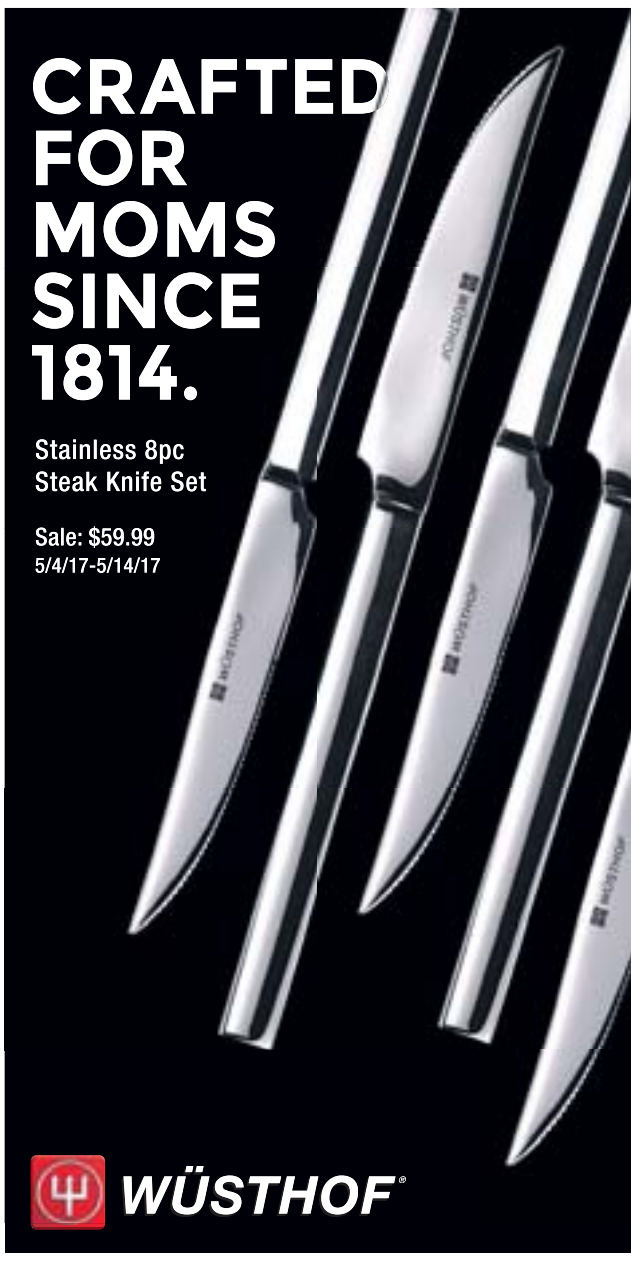
Paper Boy For years I carried a little Hermès notepad. It was beautiful but the refills became impossible to find. I recently found a guy in Los Angeles, with a company called One Star Leather Goods, making a version of it in shell cordovan. I think it's going to be the perfect replacement. Notebook Wallet, *$235, onestarleathergoods.com*

Digital Version I think this brand Injinji was the first to make athletic socks that were five-toed. I believe that, from a stability standpoint, if you're running or working out, it makes a difference to have articulated toes. Socks, *$12, injinji.com*

Strong Suit I keep it really simple: I wear navy and gray Kiton or Orazio Luciano suits, and I wear white shirts. My sport coats are three-button, unstructured ones with open patch-pockets. They remind me of the Brooks Brothers suits that my dad used to wear.

Purl of Wisdom I wear a black J. Press knit tie pretty much every day. Of all the silk knit neckwear, it just ties up great. It's part of the whole look; think of Cary Grant in "North by Northwest."

Jumper Shot I got to know Sergio Loro Piana before he died, and he gave me a few baby cashmere sweaters. I love V-necks because of Steve McQueen. There are great pictures of him wearing a cashmere V-neck and off-white Levi's. Sweater, *$1,150, loropiana.com*



FRESH PICK

A CUT BELOW

An online-only company wants to disrupt the luxury market and slice high-end prices

LUXE FOR LESS From left: Leather Weekend Bag, *$1,295*, Cashmere Sweater, *$214*, and Vicuña Scarf, *$575, all at archibaldlondon.com*

F. MARTIN RAMIN/THE WALL STREET JOURNAL, STYLING BY JILL TELESNICKI

TALK OF MARKUPS and wholesale margins isn't sexy. But direct-to-consumer brands like Warby Parker (eyewear) and Everlane (fashion basics), which eliminate both, have let men without a kingly budget score uncompromised style. Long story short: They sell well-made merchandise for less than you'd normally pay.

Now London entrepreneur Rohan Dhir, 28, wants to push the direct-to-cheapskate model into the high end with his company Archibald London. His pitch is ultimate luxury at less boggling prices. That means a cloud-soft vicuña muffler costs $575, instead of the $3,000-plus a scarf of the same rare fiber sets you back at Loro Piana. His Italian leather duffel is $1,295 versus the upward of $2,500 you'd spend on a brand with more overhead. Mr. Dhir is building on the success of his eyewear, launched in 2014; his $225 frames, handmade in Japan, are a third the price of similar frames.

The company will add Japanese knives and selvage jeans, and Spanish brogues in the months to come. The only obstacle to expansion is finding old-school craftsmen who will work with him. "That's what takes time," said Mr. Dhir, "convincing them to sell online like this." —*Scott Christian*

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EATING & DRINKING

Crack A Cool One

Don't turn up your nose: Beer in cans is better than ever. Pop the tops on these barbecue-friendly craft brews

BY WILLIAM BOSTWICK

ALUMINUM CHIC // CANNED BEERS WITH CACHET

1. Maui Coco Hiwa Porter
6.0% ABV
(Kihei, Hawaii)
A porter in summer? Yes, if it comes from Maui. Sweet and creamy with a rasp of roasty grit. Like coconut chips a tad overtoasted, the burnt bits are the best.

2. Ballast Point Bonito Blonde
4.5% ABV
(San Diego, Calif.)
While SoCal's barrels famously overflow with bitter hop monsters, Bonito comes on subtly sweet and retreats with a dry-grass finish—as soft as sand between the toes.

3. Rhinegeist Peach Dodo
4.0% ABV
(Cincinnati, Ohio)
Other sours overpower, but Dodo sneaks up on you, tart and tingling at first taste, softening as it goes. A ripening nectarine, each sip sweeter than the last.

4. Upslope Imperial IPA
10.0% ABV
(Boulder, Colo.)
From the place that brought us the Silver Bullet can comes Coors Light's absolute antithesis, a bold barrage of sweetly citrusy hops, like mandarin oranges in syrup.

5. Oskar Blues Dale's Pale Ale
6.5% ABV
(Lyons, Colo.)
The can that cracked the dam, metal-clad yet quintessentially craft. Mountain mint and crushed pine needles set ablaze with boozy heat. After Dale's, the deluge.

6. Left Hand Milk Stout
6.0% ABV
(Longmont, Colo.)
Long a draft-only unicorn, now nitrogen-infused in the can to accentuate its rich and frothy chocolate chew, Milk Stout has jumped the bartop to find its way home to you.

F. MARTIN RAMIN/THE WALL STREET JOURNAL, STYLING BY ANNE CARDENAS (BEER); ILLUSTRATIONS BY THE ELLAPHANT IN THE ROOM

PORTRAIT of a beer aficionado: Goblet in hand, softly illuminated by Edison bulbs, he twirls his waxed mustache and ponders which ultra-rare IPA he'll try next. This is what craft beer looks like in the popular imagination—pretentious, persnickety—everything Joe Sixpack, tending his cooler of run-of-the-mill canned lager, is not.

But the old divisions are breaking down. Hipster bars serve Pabst Blue Ribbon, supermarkets fill growlers and our beer nerd's next pour might well come from a can.

Once an emblem of mass-market beer, aluminum cans are now reshaping craft brewing. Mobile canning units let even the smallest breweries package minuscule runs of rare brews. The Crowler, a behind-the-bar instant canning machine, provides beer to go, minus the heft of a glass growler. Craft breweries nationwide are installing canning lines.

Beer has been canned since the early 1930s, but it took decades for craft brewers to catch on. When Cask Brewing Systems debuted its small-scale canning line at a 2002 craft-beer trade show, the reception was chilly. Company founder Peter Love recalled, "Someone told me, 'That's the dumbest idea I've ever heard. What respectable craft brewer would put his beer in cans?' "

Craft beer came in bottles; only mass-made swill was canned. But why? Bottling was initially a necessity. "In the '80s when the craft movement started, brewers operated out of garages, hand-bottling everything," said Dale Katechis, founder of Colorado's Oskar Blues, one of the first craft breweries to can its beer. Canning machines were expensive, and can manufacturers didn't sell small quantities. Imports—craft brews' primary competition—were glass-clad, but in green bottles that didn't protect against flavor-zapping UV rays. (The clear bottles used by big domestics such as Miller provided still less protection.) Craft brewers thought, " 'We'll one-up the imports,' " said Mr. Katechis. " 'We'll put it in a brown bottle, and it'll be fresher beer.' And so the brainwashing began."

Brown-bottled beer does stay fresher than beer in green (or clear) bottles, but cans keep the contents fresher still. Think of a can as a mini keg, light-sealed and impervious to the oxygen that can enter bottles under the cap over time and turn brews stale. "It's everything you love about draft beer," Mr. Katechis said—if only drinkers could get past the look.

Canned beer not only tastes better, it makes environmental and economic sense too: aluminum cans are easier to recycle, lighter and cheaper to ship. A pallet of glass bottles, some 70 cases, tips the scales at over 3,000 pounds; a pallet of cans holds 100 cases and weighs 1,000 pounds less.

Canned craft six-pack sales increased 62% over the last five years, according to the Brewers Association. In 2013, cans made up less than 5% of packaged sales for breweries in the 50,000-barrel range; now it's almost a quarter. In beer- and eco-conscious Colorado, almost half of all craft sales are in cans.

Cans can also help make an exotic style friendlier. Chicago's Whiner Beer knew its wild-fermented ales, including barrel-aged Le Tub, would be a hard sell for the uninitiated, so they clad them in aluminum. "We want to create approachable wild ales," said Whiner co-founder Brian Taylor. "Cans are a less intimidating package."

As cans' image improves, so does their design. Boston Beer spent a million dollars creating a can with a wider mouth to better aerate its beer and accentuate the grassy hop flavor in Samuel Adams Boston Lager. Colorado's Left Hand Milk Stout, long a draft-only find, now pours silky smooth from a can with a nitrogen-gas-infusing widget produced with canning company Ball—one of the first of its kind in the U.S. (Guinness's nitro cans use a free-floating gas diffuser, a proprietary design owned by parent company Diageo.)

The cans' graphic design is looking better, too. Back when craft brewers adopted as their emblem the stubby brown bottle, they also espoused a defiantly handmade aesthetic, all hand-drawn hop vines and inside-jokey names. Today's labels look sleeker, brighter—in a word, professional—and cans provide a bigger canvas, with imagery running all the way around. Heat-shrink and stick-on labels let breweries get creative with branding even on small runs. Check out OhBeautifulBeer.com, a website devoted to beer-label graphic design, and a high proportion of what you'll see will be cans.

So is this what craft beer looks like? For now. What matters is what it tastes like. Above, a selection of the best brews sold in cans, plus, at left, a few other beverages that now come outfitted in aluminum.

BEYOND BEER // OTHER CANNED BEVERAGES FOR YOUR COOLER

High Brew Coffee Double Espresso A bold can o' Joe with low acid for smooth sipping.

Hochstadter's Slow and Low Rock and Rye To enjoy a rock-and-rye cocktail, you can measure, muddle and mix—or pop this tab.

Uncle John's Apple Cider Orchard-fresh and whip-crack dry, like autumn in a can.

Novo Fogo Caipirinha What they'd stock in paradise's soda machines—a sweet, sour, sublime take on Brazil's national drink.

Man Can Red Serve this rich red wine—an ideal pairing for burgers—at your next barbecue.

SLOW FOOD FAST SATISFYING AND SEASONAL FOOD IN ABOUT 30 MINUTES

Whole-Wheat Spaghetti With Tomatoes and Scapes

The Chef
Spike Gjerde

His Restaurants
Woodberry Kitchen, Parts & Labor, Bird in Hand, Grand Cru and Artifact Coffee, all in Baltimore; A Rake's Progress, soon to open in Washington, D.C.

What He's Known For
Obsessively researching and championing Mid-Atlantic farmers and foodways. Unpretentious cooking rooted in superb ingredients.

TOMATO SEASON can seem all too short in the Mid-Atlantic region. But, thanks to an ambitious canning operation that supplies all of his Baltimore restaurants, chef Spike Gjerde can rely on a year-round stockpile. "We preserve over 60,000 pounds of produce a year in-house," he said. He's even parlayed his preserving into a side business with the launch of Spike's Maryland Tomatoes.

This recipe, Mr. Gjerde's second Slow Food Fast contribution, is a tribute to the everyday magic a few pantry staples can make. The sauce consists of little more than a can of tomatoes, a few anchovies, shallots, capers and a good glug of red wine. Since we're coming into the season when garlic scapes begin to sprout—you'll find them in markets through June—he slices and sautés a few of the long, curly stalks to add their fresh flavor to the sauce. Just be sure to mind the cooking time: Mr. Gjerde warns that scapes can turn bitter and lose their bite if stewed too long. For the spaghetti, he likes whole-wheat's full, nutty flavor. Boil the noodles while the sauce cooks, toss everything together, and that's dinner, on the table in 20 minutes.

"I make this a lot at home," Mr. Gjerde said. "But I might leave out the scapes for my kids." You can swap in scallions, ramps or sliced garlic cloves, or simply count on the tomatoes to provide the flavor. Good ones, canned at peak ripeness, are all you really need. —*Kitty Greenwald*

TOTAL TIME: 20 minutes SERVES: 4

Kosher salt
3 tablespoons olive oil
⅓ cup sliced garlic scapes
1 shallot, minced
1 teaspoon dried oregano
3 anchovy fillets
1 cup red wine
1 (28-ounce) can crushed tomatoes
1 bay leaf
3 tablespoons capers, rinsed and roughly chopped
1 pinch of sugar, as needed
1 pound whole-wheat spaghetti
Freshly grated Parmesan, for serving (optional)

1. Bring a medium pot of salted water to a rolling boil over high heat. Meanwhile, heat oil in a large sauté pan over medium heat. Once hot, stir in scapes, shallots, oregano and anchovy fillets to pan. Gently fry, stirring and smashing fillets, until scapes soften slightly and anchovies begin to melt, about 2 minutes.
2. Increase heat to medium-high, add wine and bring to a boil. Boil until wine reduces by half, 2 minutes. Stir in crushed tomatoes, bay leaf and capers. Bring sauce to a simmer, about 2 minutes. Taste, adjust seasoning and add a pinch of sugar if tomatoes lack sweetness. Continue gently simmering until flavors meld, 10 minutes more.
3. While sauce simmers, add pasta to boiling water and cook until al dente. Drain spaghetti and add it to sauce. Toss to thoroughly combine and adjust seasoning as needed. Top with grated Parmesan, if using.

OH SHOOTS Scapes, the twisty stalks that sprout from garlic bulbs, have a fleeting season. Use them to add punch to this tomato sauce.

ALPHA SMOOT FOR THE WALL STREET JOURNAL, FOOD STYLING BY HEATHER MELDROM, PROP STYLING BY REBECCA DONNELLY; ILLUSTRATION BY MICHAEL HOEWELER

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A STEAK LOVER'S GUIDE TO GRASS-FED

CUTTING EDGE Grass-fed tenderloin at Whitfield at Ace Hotel Pittsburgh. **Clockwise from below:** Steven Beachy prepares steaks at Whitfield; cows at Jubilee Hilltop Ranch in western Pennsylvania; porterhouse steak at Whitfield.

Continued from page D1

next night we shared an outstanding burger. For breakfast the following day, we couldn't resist one last fix and split the butcher's steak, an 8-ounce hanger cut. American grass-fed beef had clearly turned a corner, and I wanted to know more about it.

"When we started [at the Meat Hook], grass-fed was only really available at farmers' markets, and it had a bad-quality connotation," Mr. Young said. "We wanted to be very cautious about preaching ethics, and there weren't enough good farmers out there. Things have changed. Now people are pleasantly surprised with what they purchased when they hear it's 100% grass-fed."

> The older grass-fed cows develop the fat marbling and rich color that make for a tasty steak.

The sub-par grass-fed beef I tried in the past likely came from inexperienced farmers. "I think some of the early stabs at finishing cattle on all grass didn't go so well," said Dan Barber, the chef and sustainable-agriculture crusader behind Blue Hill restaurant in Manhattan and Blue Hill at Stone Barns outside the city. "With the right movement, the right genetics and the right slaughter, [grass-fed beef] is as tender as any grain-fed steak."

Health- and eco-conscious consumers have led the way, growing grass-fed sales by more than 100% annually for the past five years, compared to 7% for conventional beef. Still, this segment accounts for a small fraction of overall beef consumption and the majority of America's grass-fed beef comes from overseas, predominantly Australia, New Zealand and Uruguay, all of which have longstanding pastoral traditions.

In the U.S., nearly all cattle spend their first months consuming predominantly grass and mother's milk. It's during what's known as finishing that grain-fed and grass-fed cattle part ways. About 97% of our beef cattle consume at least some grain to speed weight gain, allowing them to be slaughtered at 18-20 months. The remaining, grass-fed 3% graze throughout their lives and are typically slaughtered at 20-28 months, and sometimes older.

Those few extra months of age make a big difference when it comes to flavor. American farmers are learning that the older grass-fed cattle develop the fat marbling and rich color that make for a top-notch, tasty steak—very different from the lean, tough meat I once associated with grass-fed. "For great taste, it has to be mature," said Bill Niman, a pioneer in the sustainable meat movement who recently sold BN Ranch, his all-grass-fed operation, to meal-delivery business Blue Apron.

Raising the right breeds matters too—Black Angus cattle, for example, were originally bred to flourish on grass alone. "Those particular breeds have been selected for one particular thing their entire life, how well they eat," said Mr. Niman. And it's important to allow herds free movement, the sort grass-fed cattle enjoy throughout their lives. A well-exercised muscle makes flavorful meat.

While pastures in warm climates provide ample grazing year-round, ranchers in colder regions must either resign themselves to grass-fed beef as a strictly seasonal product or get innovative. The steaks at Whitfield come from Jubilee Hilltop Ranch, a farm about two hours southeast of Pittsburgh. There, Neal Salyards, a livestock nutritionist who's spent years helping farmers get the most from their animals, lets his mostly Angus herd roam free over miles of rolling hills, woods and hollows. To make sure the cattle continue eating well year-round, he supplements their grazing with "extremely digestible" grasses grown hydroponically in a building on his property.

Mr. Salyards believes the ample, continuous greenery, combined with freedom of movement, fresh air and sunlight, produces the best beef. "With what I knew about nutrition, I knew I could grow a better animal—I just didn't know how much better," he said.

Anya Fernald of Belcampo in California raises grass-fed beef prized for its deep color and flavor and its buttery fat with a yellow hue said to indicate a high vitamin content. "I wasn't fully committed to grass-fed and -finished when I started Belcampo," she said. "Most of it tastes terrible." But as Ms. Fernald and her partners tested different types of feed, including barley and other grains, they found pure grass-fed cattle had a denser "knitting"—the beautiful, lacy lines of fat distributed throughout a superior cut of meat. "The driver for us is that it tastes great," she said.

The high-quality meat from producers like BN Ranch, Jubilee and Belcampo remains the exception rather than the norm, however. And with the price 70% higher on average for grass-fed over conventional, some producers are putting dubious spins on the grass-fed label. "Pasture-raised" cattle, for example, are allowed to roam free but also eat grains. "Grass fed, grain finished" has even less meaning, because nearly all cattle start off eating grass, before being finished on corn and other grains.

The best way to make sure you're getting genuine—and tasty—grass-fed beef is to buy from a reputable butcher who can provide all the information you want on how the cattle was raised and recommend a cut that's right for you. (See "Here's the Beef," below.) After talking to experts and cooking many pounds of meat, I learned that the tastiest grass-fed beef comes from cattle allowed to graze for 28 months or longer. The beef should have a good marbling of fat, a rich color and a slight smell of the grass on which it's grazed.

I cooked mature grass-fed steaks with these characteristics in much the same way I would well-marbled conventional ones, while leaner, younger steaks tended to cook faster. It mattered little if the meat was fresh or previously frozen, as long as certain steps were followed: Bring the steak to room temperature and pat it dry before cooking. This way the pan won't cool on contact—and it needs to be screaming hot to ensure the hard sear that keeps the juices inside. Once the steak comes out of the pan, it needs to rest at least 5 minutes and up to 10 so the juices have a chance to redistribute. Following this method, I got results as tender and juicy as any steak I've cooked, with the rich flavor that sets good grass-fed beef apart from the rest.

I love a no-frills recipe of Ms. Fernald's (above), which calls for cooking without oil or butter in the pan. As the steak hits the heat, its fat begins to melt, coating meat and pan. The only flourish: sea salt, sprinkled on to each diner's taste. When the beef has this much flavor, it's the only seasoning you need.

How to Cook a Grass-Fed Steak

This elegantly simple recipe works for any well-marbled steak, and particularly well for a grass-fed cut because it allows the flavor of the meat to shine through without interference from extraneous ingredients. Be sure your cooking area is well ventilated: On most home stoves, the vent is not strong enough to take care of all the smoke that will rise from the pan as you cook, so open a few windows and turn on a ceiling fan if you have one. The instructions below are for a medium-rare steak; if you prefer your steak well-done, double all the times.

ACTIVE TIME: 25 minutes.
TOTAL TIME: 1 hour SERVES: 2

1 dry-aged, bone-in rib eye steak, T-bone, New York strip, porterhouse or sirloin tip, about 1½ inches thick, with strip of fat intact
1 tablespoon of butter (optional)
Large crystal salt, kosher or sea salt for serving

1. Remove steak from refrigerator 30 minutes-1 hour before cooking.
2. Set a cast-iron pan big enough to cook steak without crowding over high heat and let it sit on heat until very hot and smoke is quickly rising off pan, 3-5 minutes.
3. Pat steak dry with a paper towel. Add steak to pan, gently pressing down with fingers or a spatula. Sear 1 minute, then flip and sear opposite side 1 minute.
4. Use tongs to gently hold steak upright and spend about 2 minutes searing edges all around, as well as the fat cap, bone and any red exposed flesh on sides.
5. Turn off heat and let steak rest in pan, 2 minutes on each side.
6. Transfer steak to a cutting board, invert cast-iron pan over meat and let rest 10 minutes. A well-marbled steak doesn't need much of a garnish, though a pat of butter is a nice touch. Add butter after you transfer meat to cutting board so it has time to melt and mix with meat's juices.
7. Just before serving, slice steak against the grain. Serve with salt, for seasoning to taste at the table.

—Adapted from "Home Cooked" by Anya Fernald and Jessica Battilana

HERE'S THE BEEF // WHERE TO BUY TOP-QUALITY GRASS-FED STEAKS

WHILE YOU'LL FIND steaks labeled "grass-fed" anywhere from Costco to Wal-Mart to Whole Foods, quality varies, and it can be hard to tell where and how the cattle were raised. To be sure of exactly what you're getting—and buy the best cuts available—visit a good local butcher offering grass-fed beef. Ask about the farm, how the cattle are fed and the age at which they're slaughtered. Inquire about dry-aging, too, as this process enhances both flavor and tenderness. Your butcher will no doubt have tips for cooking, as well.

If you're in the New York area, the **Meat Hook** (*397 Graham Ave., Brooklyn; the-meat-hook.com*) is a good source for grass-fed cuts, particularly lesser-known ones. When Brent Young and his partners opened this shop back in 2009, they were part of a new wave of butchers encouraging customers to understand where their meat comes from and how it was raised, and to use every part of the animal. One thing they didn't promote openly at first was the fact that all their beef came from cattle raised entirely on grass; they knew that to some customers, grass-fed meant tough and not tasty. Eight years later, customers come looking for the grass-fed label, and the Meat Hook's butchers proudly promote their beef as "100% grass-fed and grass-finished, raised in New York state."

In California, **Belcampo** (*belcampo.com*) operates several Butcher Shop & Restaurant locations in the Bay Area and Los Angeles, and sells its meat through Amazon Fresh in those metro areas.

In Chicago, the on-site whole-animal butcher shop at the cafe **Publican Quality Meats** (*825 W. Fulton Market St., Chicago; publicanqualitymeats.com*) stocks grass-fed as well as corn-fed beef raised on small local farms.

If you haven't yet settled on a go-to local butcher, or that's not an option where you are, **Zingerman's Mail Order** (*zingermans.com*), based in Ann Arbor, Mich., delivers a range of cuts sourced from BN Ranch, Oregon's Carman Ranch and other producers of top-quality grass-fed beef, right to your kitchen. The meat ships frozen—which does not compromise the quality at all—anywhere in the country. *—P.S.*

MEAL PLAN Publican Quality Meats in Chicago offers dining as well as a butcher shop.

ROSS MANTLE FOR THE WALL STREET JOURNAL (WHITFIELD, 4); ABIGAIL SALYARDS (JUBILEE CATTLE); JOHN PHILIP (PUBLICAN QUALITY MEATS)

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Still Quiet on The Western Front

Armed with a digital paper trail, descendents of a Great War soldier relive the horrific past in the hushed countryside of northern France

SABINE MIRLESSE FOR THE WALL STREET JOURNAL

SOMME DAY Clockwise from top left: Australian war memorial in Villers-Bretonneaux; the Somme river in Amiens; fields near Amiens; kangaroos and koalas at a school in Villers-Bretonneaux.

BY LAURENCE FLETCHER

A **DISTINCTLY** un-gallic mural greets visitors entering the small French town of Villers-Bretonneux. Driving into the tree-lined main square you can spot a wall drawing of a young boy gently resting on top of a kangaroo, while next to it a girl cuddles another kangaroo. Nearby, a signpost directs you to the town's Franco-Australian museum. These are some of the many indications that, 100 years ago, this quiet corner of the northern French countryside emerged front and center in a global conflict that united some unlikely allies.

We (that's me, my Australian wife, mother-in-law and son) were in the area around the Somme River, two hours' drive north of Paris, on the trail of my wife's great-grandfather. Robert Miller, a sergeant in the Australian Imperial Force, fought through most of World War I, taking part in some of its most famous battles, including ones in this part of France.

Like hundreds of thousands of visitors from the U.K., U.S., Canada and elsewhere who are descending on this area to mark the war's centenary (2014-2018), we were turning family hearsay about a relative's war record into a personal-history tour in the very fields where he fought. Americans head to monuments such as Chateau-Thierry or Belleau Wood to commemorate their approximately 110,000 countrymen who died in the war, while Canadians mourn at Vimy-Ridge or Beaumont-Hamel. Australians flock to Villers-Bretonneux, the site of a huge memorial. "The ties go back to the battle on 25 April 1918," said Lorraine Elyaboure, who works at the town's museum. She told us that Australian troops liberated the town from the Germans and later helped rebuild it. Outside, we noticed children at a local school playing under a huge sign that read "Do not forget Australia."

In the Somme area, patches of dense woodland and quiet villages sit amid open, undulating fields. The river itself, with its swans and water lilies, winds its way lazily west toward Amiens. We drove along narrow, sunken roads and raised causeways between fields, marveling at the region's surprising beauty.

For this personal pilgrimage, we based ourselves in an Airbnb rental a short drive east of the battlefields in the hamlet of Montecourt. Our hosts, Serge and Florence Demeulemeester-Lefol, have spent the past five years converting a derelict barn into a two-story cottage for guests. In our bedroom hung a photograph of Indian soldiers on horseback who took part in World War I. Outside, the garden and orchard run down to a small tributary of the Somme River.

Northern France, the setting for heavy fighting in both world wars, is today often unfairly associated with flat, industrial wastelands. But it's surely one of the most-overlooked and underrated places in Europe, even if it's not always visitor-friendly. Driving around the Somme area on a Monday we found most shops closed. Where a brasserie is open, woe betide you if you want to eat outside normal mealtime hours. But there's plenty to do. Before we visited the sites where Robert fought, we took some time to scout out the environs. In the pretty port town of Honfleur, about an hour and 45 minutes west of the Somme, we spent a day wandering among the town's brightly painted houses, as street musicians played folk and jazz to celebrate Honfleur's "Festival of Shrimps." We ordered oysters and Belgian beers at Café L'Albatross on the bustling quayside.

> This is history you can walk on, touch and relive.

Reims, the center of the Champagne-growing region, lies little more than an hour's drive away from the Somme. Its stupendous gothic cathedral was the coronation site for the kings of France. I stood on the spot commemorating the baptism around AD 500 of Clovis, king of the Franks, a key moment in establishing Catholic Christianity in Western Europe.

We took a tour of the cellars of Champagne house Taittinger, followed by a tasting. The warren of tunnels, holding some 3 million bottles of bubbly, was once part of a Benedictine monastery's cellar. But even here the traces of war aren't far away. A heart carved on the cellar wall, containing a flower and the initials R.F., is dated 1914, when the city's residents sheltered there from the war above ground.

Back in the Somme region, we picked up fresh croissants and a pain aux raisins at a boulangerie a short drive from our Airbnb. They went perfectly with Florence's homemade rhubarb jam and fortified us for the day ahead.

Thanks to a simple online search of Australian Red Cross, conducted a few weeks before our trip, we uncovered an account of the day in August 1918 when Robert was shot and wounded during an attack on German positions. I also found incredible detail in his official war records, including the army oath he signed to "truly serve our Sovereign Lord the King."

The digital trail led us to Pozieres, a village where Robert fought in July 1916 before being injured and evacuated to the U.K. A German bunker captured by Australian forces lay partially intact, opposite a memorial to Robert's division. "Sorry it's taken us 100 years. However, we have never forgotten you," reads a handwritten dedication to one Aussie soldier. This isn't history in glass cases or cordoned off by ropes. It's history you can walk on, touch and relive.

At nearby Mametz Wood, for instance, we paused to stand on the ridge from which Welsh soldiers began a July 7, 1916 attack on German positions. I crossed the same "no-man's-land"—around 100 yards of bare earth where many Welsh troops were cut down by machine gun fire—into the wood itself. Suddenly the rush of the wind was replaced by the hum of insects and the tap of a woodpecker. I was immediately disorientated among the towering trees, just as the Welsh soldiers must have been.

Trailing our relative then took us south of the Somme River. After a hospitalization in England, Robert returned to France, taking part in the Allied offensive of the summer of 1918 that brought about the war's end (in November). On August 23, he was wounded once again. Red Cross accounts, combined with military history, show his battalion was based between the villages of Proyart and Chuignolles, and was preparing to attack German positions to the east. The troops went "over the top" between 4:30 a.m. and 5:15 a.m., and Robert was hit several hours later, just before reaching the battalion's final objective.

It's strange to think the sleepy villages we passed through are the same ones Robert would have seen a century ago, under very different circumstances. As we drove we tried to imagine his battalion advancing, either along the roads or across the flowering fields.

One final stop remained. Robert Miller died shortly afterward from the wounds sustained in that August attack. Had he survived another month he would likely have outlasted the war, as his unit was soon withdrawn for recuperation. One comrade, Corporal V. Woodhouse, described him in accounts as "one of his best cobbers" (Australian slang for friend).

By dusk we reached his grave, in an immaculately kept cemetery just south of where he was shot. Tracing the footsteps of a man we never met moved us all far more than we expected—and ensured that at least one more soldier's story is no longer forgotten.

SHORE LEAVE On the harbor in Honfleur, a lively town about an hour and 45 minutes west of the Somme.

ROOT AROUND // 3 AMERICAN RESOURCES TO HELP YOU PLAN YOUR OWN PILGRIMAGE

Americans looking to trace ancestors killed in World War I can search on the **American Battle Monuments Commission's** website, which lists the locations of cemeteries and of individual graves *(abmc.gov)*. **Family Search** lets you view free digitized images of the cards your ancestor filled in when registering for military service, detailing information such as his trade, place of work, physical description and marital status *(familysearch.org)*. The **National Archives** also has images of draft cards for the likes of Louis Armstrong, Fred Astaire and Al Capone (which anyone can view). Many military records were destroyed in a 1973 fire at the National Personnel Records Center in St. Louis. However, you can request a copy of the records, if they still survive, in writing or make the request online if you are a next-of-kin of a deceased veteran *(archives.gov)*.

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1. The rooftop at 1 Hotel Brooklyn Bridge

JOURNAL CONCIERGE
An Insider's Guide

Brooklyn

No longer merely hip, the once-insular borough now draws discerning tourists, including Manhattanites

THESE DAYS, BROOKLYN isn't just the "It" borough, it's hegemonic. Envious restaurateurs in other cities around the world rip off its much-loved, much-mocked food scene. Its cultural institutions like BAM have international reach. The creative class, priced out of Manhattan, has converted factories, repurposed office space and transformed forsaken neighborhoods. These bright young things now work, eat, play, pursue the principles of hygge and sleep in the borough, much as Manhattan's painfully hip once rarely left the area below 14th Street. Nowadays, plenty of sophisticated tourists—French, Chinese, Scandinavian—bypass Manhattan altogether. And there's a hotel boom to prove it. The William Vale sits on a 15,000-square-foot elevated promenade, its star chef Andrew Carmellini largely responsible for its buzz. The high-design Williamsburg Hotel accessorizes its 150 rooms with Chrysler Building views. And the 1 Hotel Brooklyn Bridge offers bike valet, Tesla recharging and a yoga mat in all of its rooms, outfitted (of course) with reclaimed barn-wood. We asked five worthy locals for their favorite newfangled and old-school spots. —*Christian L. Wright*

6. The Long Island Bar

2. Narnia

5. Sahadi's on Atlantic Avenue.

4. Home shop Collyer's Mansion

3. Birds of a Feather

WHITNEY TRESSEL FOR THE WALL STREET JOURNAL; MAP: FREEVECTORMAPS.COM

THE WRITER
Kurt Andersen
Novelist and host of public radio's Studio 360

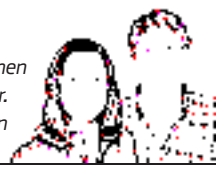
CLASSIC JOE // D'Amico Coffee Roasters. There's nothing strenuously hip about this neighborhood joint. When we visit friends, we bring coffee from here. It's rich, dark, classic and perfect. *309 Court St., damicocoffeeroasters.com*

SMALL WORLD // Dennet Place. It's a hidden world in Carroll Gardens, nicknamed Cat's Alley. The houses are all tiny with basement doors that are half-size. It's like walking into another era. *West of Smith St., between Luquer and Nelson Sts.*

TRUE GRIT // Red Hook. Brooklyn is still an urban work in progress, with a sense of creative activity. Like Gowanus, Red Hook is a strange, gritty, industrial place. The first time you go there, you see New York in a way you haven't before.

ART APART // Brooklyn Museum. The new director, Anne Pasternak, has a great sense of what a quasi-encyclopedic art museum should be in the 2010s. It's not an outer-borough poor man's Met but a museum with its own confident identity. *200 Eastern Parkway, brooklynmuseum.org*

THE RESTAURATEURS
James Murphy and Christina Topsøe
Partners in the Four Horsemen wine bar and restaurant (Mr. Murphy is also the frontman for LCD Soundsystem)



GREEN GRAPES // UVA Wine and Spirits. Ground zero for natural wines, it's where Justin Chearno, our wine director, got us all into wines in the 2000s. [Before then] we were people who drank bourbon. *199 Bedford Ave., uvawines.com*

DIFFERENT BEATS // National Sawdust. It's a place to hear new, contemporary works of music. It's reminiscent of the old Kitchen [a nonprofit performing arts space founded in 1971], with forward-thinking events. And they have programs for kids. *80 North 6th St., nationalsawdust.org*

TRADE SECRET // Narnia. [2] A secret vintage store for women only, it's more like an apartment with a nice backyard. I [Christina] buy a lot of my things here. *672 Driggs Ave., narniavintagenyc.com*

NEW CHOW // Birds Of A Feather. [3] This new Sichuan restaurant is large, and loud as hell, but it's light and airy. Some of our favorite dishes are the wonton in chili oil and the tofu and preserved egg. *191 Grand St., birdsofafeatherny.com*

THE SHOPKEEPER
Jennifer Mankins
Owner and founder of Bird boutiques

RICE AND SHINE // Okonomi. This tiny Japanese restaurant in Williamsburg serves a traditional Japanese breakfast set menu and it is one of my very favorite ways to start the day. *150 Ainslie St., okonomibk.com*

HOME ECONOMICAL // Collyer's Mansion. [4] It has a tightly curated mix of housewares and a rotating roster of artists and affordable art. Every time I go, there's a piece I want to buy, under $1,000. *179 Atlantic Ave., shopthemansion.com*

RAISE THE BAR // The Long Island Bar. [6] Joel Tompkins and Toby Cecchini restored an old longshoreman's bar and kept a lot of the original details. It has the best vibe. I get a Long Island gimlet, a classic gin gimlet with a little ginger. *110 Atlantic Ave., thelongislandbar.com*

FIELD DAY // Msgr. McGolrick Park. Prospect Park is the heart and soul of Brooklyn. But this park in Greenpoint is so sweet, with row houses on Monitor Street. It feels cut out of another time. *nycgovparks.org*

THE FASHION DESIGNER
Maria Cornejo
Founder and creative director of Zero + Maria Cornejo

STREET CRED // Atlantic Avenue. It has great antique furniture andcontemporary home stores. My favorites are Holler & Squall for good antiques *(119 Atlantic Ave., hollerandsquall.com)* and Primary Essentials for gifts *(372 Atlantic Ave., theprimaryessentials.com.)* At Sahadi's **[5]** *(187 Atlantic Ave., sahadis.com)*, I'll grab hummus and pita for a snack in a nearby park.

GO WITH THE PHO // Nightingale Nine. It's Vietnamese food, and their take on it is so fresh and light. I order the shredded duck salad and a pho soup. *329 Smith St., nightingalenine.com*

URBAN GARDEN // Frankies 457 Spuntino. The [Italian] food is so good. They have a great, private party room and they also have a garden. I love a garden. *457 Court St., frankies457.com*

BRIDGE OF STRIDES // The Brooklyn Bridge. If I feel like talking a walk, I go from my home [in Brooklyn] to my office [in downtown Manhattan] across the Brooklyn Bridge. You get amazing, postcard views.

Plus, Don't Miss Iona Bar. In an old candy store, this Scottish pub opens early for fans of European football, projected on flatscreens, and offers a revolving roster of events, like Scottish folk music on Mondays. *180 Grand St., ionabrooklyn.com* // **Blue Bottle Coffee**. The company's original New York cafe doubles as a training lab, roasting facility and occasional tasting room (on Fridays at 12:30 p.m.). *160 Berry St., bluebottlecoffee.com* // **Tom's Brooklyn.** This classic greasy spoon, established in 1936 in Prospect Heights, serves half-a-dozen kinds of pancakes. Cash only. *782 Washington Ave.*, tomsbrooklyn.com // **1 Hotel Brooklyn Bridge**. **[1]** Built of 54% reclaimed materials, this new parent- and pet-friendly property in Brooklyn Heights commands prize views of the Manhattan skyline. *From $350 a night, 1hotels.com.*

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DESIGN & DECORATING

HOUSE TOUR

Only as Old as It Feels

Clever décor both honors, and subverts, a 19th-century rental apartment in New York

BY JEN RENZI

YOU'D BE FORGIVEN for assuming the inhabitants of this New York pied-à-terre are devout traditionalists. The rental apartment, encompassing the top two floors of a 19th-century townhouse, features painstakingly restored period details: tin ceilings, plaster medallions, even a prim plate ledge lined with grandmotherly floral-print china. And consider the décor, a studied assemblage of Oriental carpets, densely patterned wallpaper, and velvet seating that seems plucked from the Victorian era.

You'd be wrong. As it turns out, the residents, a financial advisor and his flight-attendant husband, more typically favor modern milieux. The couple's previous Manhattan crash pad occupied a slick high-rise; their primary residence, a mid-century Palm Springs abode, is all sleek lines and glass walls. But after falling hard for this townhouse, on a cobblestone street in the Meatpacking District, the pair embraced its old-world character. "This space is such a departure for my clients," interior designer Kati Curtis explained. "They were so open to taking chances and going against the grain of their usual style." It stretched their boundaries, admitted one of the clients, adding that they ultimately love warm, livable spaces.

While many of her furnishing choices respect the historic context, Ms. Curtis wove in quietly modern touches. An edgy moth motif shakes up a wallpaper. An au courant slab of petrified wood tops the dining table. Clean-lined, dark-stained dining chairs lend architectural rigor. "The black finish and neutral upholstery was very intentional...to balance out all the florals," Ms. Curtis explained. "You might think, 'Oh, she just went crazy with color and pattern.' But it's carefully coordinated, with a consistent palette and somewhat cheeky sensibility." How contemporary.

ERIC PIASECKI/OTTO

Décor You Can Undo
In the dining room of a West Village rental apartment, New York designer Kati Curtis covered walls in a hand-blocked botanical, called Bloomsbury Garden, from quirky British brand Timorous Beasties. "The bones of the space were wonderful, but I felt the white walls were begging for wallpaper," Ms. Curtis said. "A more layered décor befits a 19th-century townhouse." She cautioned that wallpaper is not always ideal for renters, given how tricky it is to peel off when the lease expires. "We had this backed with muslin, which makes it easily removable."

A Considered Coffee Table
Ms. Curtis styled every horizontal surface—including the living-room coffee table, a hand-painted antique with a custom glass top. To keep her arrangement of *objets* looking "curated, not cluttered," she used a tortoiseshell tray and stacked books as visual anchors to frame smaller pieces and bracket a Murano-glass bowl. The Oriental carpets were a tenant-friendly splurge. "Invest in versatile items that you can take with you: Those rugs are artworks that can work in any style interior," Ms. Curtis said. Although typically purchased to fit the scale of a particular room, a rug can be repurposed in a larger space simply by layering it over sisal.

Closed-Door Policy
In the master bedroom, door and fireplace placement dictated where pieces could—or couldn't—fit, so accommodating a king-size bed and the requisite pair of nightstands and dressers proved a Chinese puzzle. "Having multiple doorways in a room makes for a very challenging layout," Ms. Curtis said. She gained room for a nightstand at the far side of the bed by closing off a door to the connecting room and using it as a decorative backdrop. "The door trim acts like a frame around it."

Tradition Tweaked
The living room's armchair, by the Cisco Brothers, is tightly upholstered (without loose cushions) in a Timorous Beasties linen. "The [Beasties] prints look like traditional English country designs from afar, but when you look up close there's always some surprise: squirrels, skulls, bird patterns," Ms. Curtis said. "The fabric captures the home's Victorian feel but in a modern way." The framed artwork over the marble fireplace is *verre églomisé*, a type of back-painted glass, purchased from an antiques dealer in High Point, North Carolina. Although the medium is fairly traditional, the imagery makes the piece read a bit wink-wink in this context—just like the fabric. "I was like, 'Is a rooster too cliché for you guys?' But they loved it," Ms. Curtis recalled.

Quick-Change Kitchen
Original elements in the kitchen include pine cabinets, some fitted with leaded glass, and restored brickwork. The white stone countertops and stainless-steel appliances are new—a must for the couple, who cook and entertain a lot. "In a rental, you don't want to tackle a kitchen renovation," Ms. Curtis said. "Rugs, linens and café curtains are my favorite ways to add no-commitment personality. Here, I only added a few accessories, like the dish towel." The designer and her clients agreed that the kitchen worked well as is, with its clean lines and lack of ornamentation. "This space demonstrates how you can maintain a historical character in an older kitchen by pairing period elements with modern conveniences," Ms. Curtis said. "In a traditionally appointed home, the kitchen is the one room where you can get away with being resolutely contemporary."

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GEAR & GADGETS

Set Your Vinyl Free

The old-school record player gets a Bluetooth upgrade—and loses those pesky audio cables

BY JESSE WILL

AAD GOUDAPPEL

THE VINYL comeback is going strong—which will come as no surprise to anyone who's recently ventured into an Urban Outfitters or Whole Foods, where crates of LPs by artists from Thelonious Monk to Twenty One Pilots are for sale.

But if you're looking to jump on the vinyl bandwagon, simply blowing the heavy layer of dust off the record player that's been languishing in your basement may not be your best move. In the digital era, turntables have learned a lot of new tricks. High-tech wireless upgrades automatically broadcast an audio signal into every room in your house and eliminate one of the biggest hurdles of bringing a long-forgotten player back into your life: the need to wire it to either a hulking A/V receiver or powered speakers. The compact units shown below use Bluetooth to beam music directly to your wireless headphones, speakers or even the soundbar under the TV in your living room.

> Simply blowing the dust off the record player that's been languishing in your basement may not be your best move.

Granted, these players don't dispense entirely with cords (few "wireless" products do). You still have to plug them into a power outlet. But they do let you add a record player to a kitchen, den or guest bedroom without losing the space a full sound system requires.

Hardcore audiophiles, we should point out, will find the very idea of a Bluetooth turntable blasphemous, since these players end up compressing their beloved analog signals into digital ones. The long-held argument for collecting vinyl has been the format's warm analog sound—a soft contrast to the cold precision of digital formats like CDs and the compressed signals of most audio streaming services.

But considering that many vinyl LPs sold today (including reissues) are pressed from digital masters, going conveniently wire-free doesn't necessarily involve a sacrifice of analog purity. And even a digital player will deliver the charming pop and crackle brought on by a stray speck of dust or the inevitable physical imperfection in the record.

The fact is, a wireless turntable still offers one of the greatest pleasures of vinyl: the opportunity to pull a record from a 12-inch sleeve and ponder its artwork at length. (We still haven't entirely figured out what's motivating the little rock-climbing nudists on the cover of Led Zeppelin's "Houses of the Holy.") This small ritual lets you focus on the music rather than whatever alert happens to have popped up on your phone's screen.

SPINNERS WITH SMARTS // THREE WIRELESS TURNTABLES FOR UNTETHERED AUDIO ENJOYMENT

Audio Technica LP60BK-BT

This super affordable player is based on an entry-level turntable from Audio Technica. It may not wow any audiophiles, but it does sound much better than the flood of toylike non-Bluetooth turntables that have littered the market. Its ability to recall its pairing settings with up to eight audio devices means you can easily switch playback from a pair of speakers to your wireless headphones once the children have gone to bed. And should you want to connect the LP60BK-BT to your vintage receiver, it has an analog output, too. *$179, audio-technica.com*

Pro-Ject VT BT R

Much of vinyl's appeal lies in watching a record spin. Too bad many old players hide that magic under a dust-cover darker than your Ray-Bans. The Pro-Ject VT BT R, however, transforms itself into an altar of analog cool by orienting itself vertically: It stands up on a pair of adjustable feet rather than laying flat, spinning records in full view. (A screw-in clamp prevents your records from crashing to the floor as they play.) Or mount this turntable on the wall at eye level; its Bluetooth prowess means you'll only have a single power cable to contend with. *$499, pro-jectusa.com*

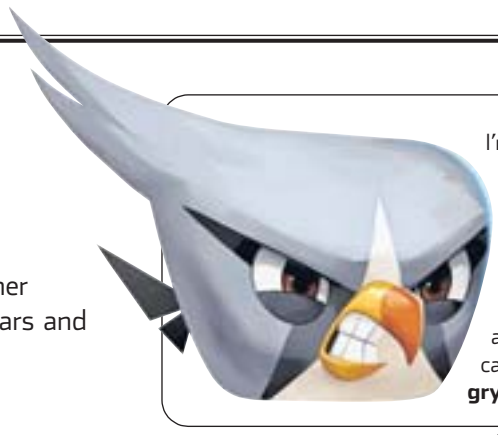
TRNTBL by VNYL

The soon-to-be-released TRNTBL features a sleek frosted acrylic platter and a curved tonearm with an Audio Technica phono cartridge. A tiny onboard computer can send audio not only to Bluetooth devices but also to Apple Airplay-connected speakers and a Sonos wireless audio system. We connected a prerelease TRNTBL unit using beta versions of the Sonos and TRNTBL apps and were listening to the Ramones throughout the house in minutes. This player is available for preorder now and is slated to go on sale later this month. *$499; trntbl.co*

TECH ESSENTIALS

ROBIN ROBERTS

The 'Good Morning America' anchor on her 'Angry Birds' addiction, no-B.S. protein bars and a surefire way to get some shut eye



I'm still an Angry Birds person. I drive Amber [Laign, Ms. Roberts's partner] crazy because when I'm in the lead, our weekend is dictated by me saying, "We can go out, but in three hours I'm playing again." I am hooked. I don't care what else is out there, **Angry Birds 2** is my game.

As someone who's very athletic and always on-the-go, one of my pet peeves is socks that fall down. It drives me crazy. My **Bombas Women's Originals Ankle Socks** don't roll. They have all these crazy cool colors. I love these socks. Now I sound like Oprah: I love these socks!

When you work on a morning show and get up at 3:15, your sleep pattern is always out of whack. Whether I'm traveling or at home, I have to have my **Young Living's Dewdrop Diffuser** and lavender essential oil or I will not sleep.

Even though I came out on Facebook, I was resistant to social media at first. But I have learned to embrace it. In general, **Facebook** and **Instagram** are the two big ones for me. Somebody said this to me recently and it's so true: "I look at Facebook as the arena and Instagram as the locker room, going behind the scenes." I thought that was really well put. And that's how I'm treating it.

It doesn't matter where I am, when I wake up, I do my 20 minutes of meditation using the **Meditation Timer** app on my iPhone. I've been meditating for going on two years now. George Stephanopoulos was the one who got me into it. It helps to have that time to myself to set a tone, because my job is very intense.

I always have **RXBars** on hand because my eating pattern also gets out of whack, especially when I'm traveling. I love how what's in them is right there [on the label]: three egg whites, four almonds, six cashews, two dates. No B.S. My favorites are the Mint Chocolate and Chocolate Sea Salt.

I have a black **1995 Mercedes-Benz 500SL**. It was my first major purchase. I drive some other cars, but that's my baby. It's funny, because I only have 29,000 miles on it. Every time I bring it in for service, the guys are begging me, begging me, going like: "Come on, you want to sell this sucker." *—Edited from an interview by Chris Kornelis*

F. MARTIN RAMIN/THE WALL STREET JOURNAL (RXBARS); MERCEDES-BENZ (CAR)

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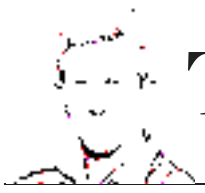
WORKAHOLIC With a near-6,000-pound curb weight, the 2017 Toyota Land Cruiser can pull an 8,100-pound trailer.

TOYOTA

RUMBLE SEAT DAN NEIL



Toyota Land Cruiser: An SUV From Days of Yore

I WORRIED THAT calling the Toyota Land Cruiser a "behemoth" might sound catty, so I looked it up. The word comes to us from the Hebrew for "hippopotamus," and—in the actual presence of Toyota's cultic, revered luxury SUV—I have to say, that's pretty spot on. Both appear equally aerodynamic, for example. The proportions are similar, too, with massive bodies poised over itty-bitty feet. If anything, it's the hippos that should take umbrage.

If not behemothic, pachydermic: The Land Cruiser as help-elephant of the American raj, perhaps, gently bearing up to eight of the royal family, knocking down the occasional tree. Sorry about the droppings.

In truth, the Land Cruiser is a dinosaur—heavy-boned, placid and semiaquatic (wading depth of 27.5 inches)—with anatomy un-evolved since the Late Hasselhoff Epoch: a full-size, body-on-frame 4x4 with a solid rear axle, steel and more steel, a big-displacement V8 up front and no remorse at the tailpipe. They don't build them like this anymore, because if they did, all SUVs would weigh three tons and get 13 miles to the gallon.

This sauropod was once the most advanced species of SUV, with premium construction and cabin appointments, atop the unstoppable, fully agro chassis and four-wheel-drive system. Everything built with Toyota's silver hammer. But as stylish, capable luxury SUVs have multiplied like rats in rhinestone collars (Audi, Bentley, Maserati, Mercedes-Maybach), I have wondered what rare and powerful charm the Land Cruiser still holds for the approximately 4,000 Americans a year who buy them.

My guess: mass. Or density, if you like, the sense of concentrated heft, the avoirdupois of quality. The Land Cruiser is heavy, and moreover, it feels heavy, every inch of it gratifyingly solid and substantial, like a fine watch, or the bank safe that falls on your boss. While other auto makers are whittling and fiddling to save grams, Toyota offers the epicurean delight of unrestrained curb weight.

> It's a dinosaur—with anatomy largely un-evolved since the Late Hasselhoff Epoch.

It's a rude kind of Veblenism, the notion that the heavier things are, the more valuable, but it's fairly ingrained in our consumer responses. Give a pull on the Sasquatch-size driver's door handle. Feel the gathering momentum of the huge door pivoting on its oiled hinges. It's not easy to halt. When did they start making the doors out of bronze?

Press the Start button and the big V8 stirs, but the Land Cruiser's steely mass absorbs nearly all the vibration and noise. Turn the JBL sound system up, the huge subwoofer thumping a beat that would shiver the timbers of other cars. The Toyota's cabin is still. More mass means more mass-damping.

As a point of comparison, the Range Rover, standard wheelbase, weighs about 1,000 pounds less than the Land Cruiser. Further, its V6 engine has higher specific power (340 hp out of 3 liters displacement) than the Toyota's; and it gets about 20% better fuel economy (19 mpg, combined). Meanwhile, the Range Rover's highway manners make the Land Cruiser feel like Jeb's old pickup. But then the Range Rover doesn't feel like Her Majesty's trusty anvil.

The Toyota is beautifully made, of course. The silk-smooth 5.7-liter DOHC V8 rouses 401 pound-feet of torque at 3,600 rpm and dispatches it through a (new for 2016 model year) eight-speed automatic. But it's got its work cut out for it. In instances of extreme throttle cruelty, you can accelerate to 60 mph in the mid-7 seconds, the Land Cruiser making outraged sounds and performing an epically graceless squat. Yeah, no. Driven in the real world, the big machine moves off the starting line with the crispness of Noah's Ark.

This year marks the 60th anniversary of Land Cruiser sales in the U.S., Toyota's PR department helpfully reminded me. But the formative years were certainly the 1990s, with the remarkable J80 series. In 1996, a pair of J80s took first and second place in the unmodified-production class of the Dakar Rally. That'll do, pig.

Then and now, the Land Cruiser puts iron on the off-road target, with a beyond stout four-wheel-drive system based on a fully automatic, limited-slip/locking center differential; a two-speed (low-gear) transfer case; and a solid rear axle suitably sized for farm equipment. At the four corners are 285/60R18 mud-and-snow tires, though under the visual bulk of the body they look like casters.

All of that—and the balloon-y tires and the long-legged suspension—deliver stupendous, world-famous chops, off road. But on road, the same equipment makes the vehicle feel floaty, sometimes alarmingly so, gently swaying like a blimp at its moorings. Toyota's chassis engineers have tried to address the compromises. A switch in the console allows drivers to limber up the front and rear stabilizer bars, the anti-roll bars, allowing increased wheel articulation off road. To which I exclaim: It has anti-roll bars?

Another system is designed to help the SUV negotiate extra-tight turns on off-road trails, actually dragging a rear wheel to pivot the vehicle. It also works in parking decks.

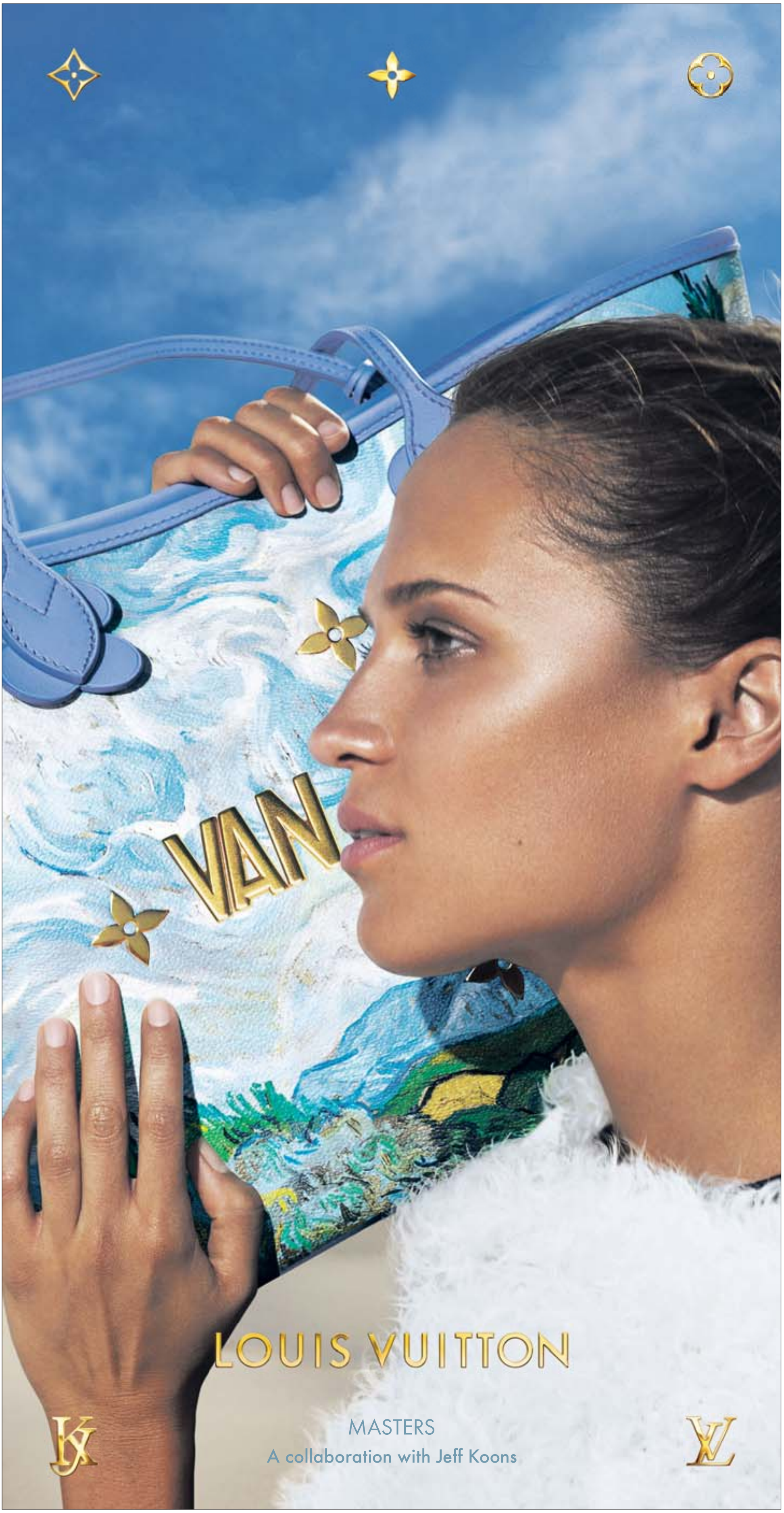
I gather from the general frumpiness of the exterior that the few loyalists out there are not aesthetes. Why does Toyota's most capable off-road vehicle look like it's wearing a housecoat? The important thing is preserving the command seating, the high perches looking down at the world through Amtrak-sized windows.

Toyota's designers were left to improve the front end, mercilessly. With the most recent face-lift, the Land Cruiser got that big chrome nose, upturned a bit snottily, and extraneous "power domes" stamped into the hood. You wonder who in Toyota Design has a secret Dodge in his garage?

The Land Cruiser has other currency. Toyota loads these things up with every available convenience, aid and comfort in its larder, for one price ($85,950, delivered). That includes all Toyota's latest driver-assist technologies, featuring emergency-braking assist and pedestrian detection.

That seems especially prudent. You wouldn't want to be the jaywalker who steps in the path of this speeding brontosaur.

2017 TOYOTA LAND CRUISER

Base price $85,950, with delivery
Price, as tested $86,303
Powertrain Naturally aspirated 5.7-liter DOHC V8 with variable valve timing; eight-speed automatic transmission; two-speed transfer case; full-time four-wheel drive (40/60 static torque split, front/rear) with limited-slip/locking center differential, limited-slip front and rear differential.
Power/torque 381 hp at 5,600 rpm/401 lb-ft at 3,600 rpm
Length/weight 194.9/5,815 pounds
Wheelbase 112.2 inches
0-60 mph 7.5 seconds (est)
Maximum trailering capacity 8,100 pounds
EPA fuel economy 13/18/15 mpg, city/highway/combined
Cargo capacity 16.1/43.0 cubic feet (third row up/folded)

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