

THE WALL STREET JOURNAL.

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What's News

Business & Finance

The unemployment rate in some metro areas stands near or even below 3%, and the tighter labor market is leading firms to raise pay to attract employees. **A1**

◆ Higher minimum wages will take effect in 18 states and almost two dozen municipalities this year. **A2**

◆ Retirement systems that manage money for public workers aren't pulling back on costly market bets. **A1**

◆ Proposed changes to offshore oil-drilling rules are raising questions over the role of safety regulators at the Interior Department. **B3**

◆ France's minister for economy and finance said Paris is looking to China and Russia to act as a counterweight to trade relations with the U.S. and Britain. **A6**

◆ The death of Playboy founder Hefner is ushering in a new era for the adult-entertainment enterprise, including possibly closing the U.S. print edition. **B6**

◆ The parent of Sears and Kmart hasn't run paid national television commercials since late November. **B2**

◆ A federal judge ruled in favor of financier Tilton in a racketeering lawsuit brought by managers of the Zohar investment funds. **B2**

◆ PwC was negligent in connection with one of the biggest bank failures of the financial crisis, a federal judge ruled. **B10**

◆ The price of Ripple, a digital currency, surged 50%, pushing its market valuation to \$85 billion. **B10**

World-Wide

◆ Iran was hit by the biggest wave of protests in almost a decade, and the Trump administration warned against a crackdown on demonstrators. **A1**

◆ North Korean leader Kim said Pyongyang had completed its nuclear-weapons program, and claimed its missiles could reach any point in the continental U.S. **A7**

◆ New state laws taking effect this year around the country will affect undocumented immigrants, gun owners and barbers. **A2**

◆ Chief Justice Roberts said the federal judiciary would assess its policies for addressing sexual harassment involving judges and court employees. **A4**

◆ Veterans advocates are set for a fight over aid for homeless veterans as the Department of Veterans Affairs shifts how it uses its resources. **A3**

◆ NASA's plans for returning astronauts to the moon aren't affordable, according to a study commissioned by the agency. **A2**

◆ Sharp differences have emerged over the next steps in lawmakers' investigations into the Trump 2016 campaign's alleged ties to Russia. **A4**

◆ Vietnam's army will police the internet with a new, 10,000-strong cyber unit to trawl the web for "wrongful opinions" about the communist state's government. **A7**

◆ At least a dozen former Obama aides and policy staff have entered the midterm races, running for office for the first time. **A4**

CONTENTS Markets Data 88 Business & Finance B2 Money & Investing B9 Business News B3-B6 Opinion A13-15 Crossword A10 Sports A12 Heard on Street B11 U.S. News A2-4 Life & Arts A9-11 Weather A10 Markets B10-11 World News A6-7



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TUESDAY, JANUARY 2, 2018 ~ VOL. CCLXXI NO. 1

A Bitter Cold Wave Meets Really Cold Waves as 2018 Dawns



POLAR BEAR PLUNGE: Swimmers took the plunge in New York's Coney Island on Jan. 1 as bone-chilling temperatures gripped much of the U.S.

Sluggish Wages See Uptick

Pay is rising at double the national average in metro areas with low unemployment

BY SHAYNDI RAICE AND ERIC MORATH

MINNEAPOLIS—In U.S. cities with the tightest labor markets, workers are finding something that has long been missing from the broader economic expansion: faster-growing paychecks.

Workers in metro areas with the lowest unemployment

are experiencing among the strongest wage growth in the country. The labor market in places like Minneapolis, Denver and Fort Myers, Fla., where unemployment rates stand near or even below 3%, has now tightened to a point where businesses are raising pay to attract employees, often from competitors.

It's an outcome entirely expected in economic theory, but one that has been largely absent until now in the upturn that began more than eight years ago.

Nationally, wage growth has been stuck in neutral for the

past two years, even as the unemployment rate has declined to the lowest level in 17 years.

During the past year, even Americans who had previously given up looking for work—so-called discouraged workers who aren't counted in the unemployment rate—have come off the sidelines and returned to the labor force. And fewer people are now stuck in part-time jobs when they desire full-time work. That potentially points to improved income gains nationally in 2018, something the Federal Reserve will be monitoring as it looks for signs of nascent inflation.

City-level data "show the relationship between wage growth and a tight labor market still holds," said Adam Kamins, senior economist at Moody's Analytics.

"You're seeing the first movers into full employment and past it, with the uptick in wage growth."

One of those regions is Minneapolis, where the unemployment rate was the lowest among large metro areas in the country, standing at just

Please see LABOR page A2

◆ Minimum wage to rise in 18 states..... A2

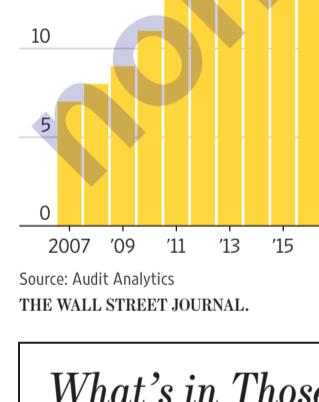
Caterpillar Clashes With IRS

American manufacturing icon pays little on parts sales outside U.S.

Profit Pileup

Caterpillar profits held outside the U.S.

\$20 billion



BY ANDREW TANGEL AND MICHAEL RAPORT

More than a decade before federal agents arrived at Caterpillar Inc. in March with search warrants, an anonymous employee claimed in a letter to its chief executive that something was wrong about how the heavy-machinery maker used a subsidiary in Switzerland to shrink its tax bill.

When customers outside the U.S. need parts for a bulldozer or mining truck, their order often is shipped from a Caterpillar warehouse in Morton, Ill. Nearly all the sales and profits flow through a company subsidiary in Geneva, where the

company has paid an effective tax rate as low as 4%. Caterpillar began the practice in 1999 and has never stopped.

The employee accused Caterpillar of violating U.S. tax law and threatened to tip off the Internal Revenue Service. The company's tax director replied to the CEO and other officials that there was no doubt the strategy was legal.

"The company didn't just make this up," says someone who was a Caterpillar executive at the time.

Two CEOs and at least four investigations later, Caterpillar faces a potential tax bill of \$2 billion from the IRS, which is challenging the

Please see TAXES page A8

Nuclear Bluster on New Year's Day



TOUGH TALK: Kim Jong Un in an annual address said North Korea could reach any point in the continental U.S. with a nuclear weapon and that 'a nuclear button is always on the desk of my office.' **A7**

What's in Those Leftover Holiday Shipping Boxes? Cats

Pileup of cardboard from shopping online inspires craftiness; Todo's fortress

BY LAURA STEVENS

Like most cats, Ricky and Rocky love boxes.

Their owner, Andres Acosta, bought them a \$40 pet house online, but "they ended up sniffing it and never looked at it again."

So as Amazon.com Inc. holiday orders stacked up in Mr. Acosta's Orlando, Fla., home, he used one of the large boxes to craft a turquoise and white fabric-covered "cat castle" with a blanketed roof deck for the pair.

"The cats went nuts," says the 27-year-old student.

A pileup of boxes from a boom in holiday shopping online is inspiring Yuletide craft

iness. Amazon alone was expected to ship more than 1.2 billion packages in the U.S. in 2017, about double what it shipped five years ago, according to estimates by MWPVL International Inc. People are putting the cardboard to work.

Carolyne Krupa, for example, surprised her 3-year-old daughter on her December birthday with a castle whose turrets were made from LG appliance boxes, and windowed walls from packaging. Tyler Feder, an illustrator, says she saves up pieces that are "nice and smooth" and decorates them for her booth at craft fairs.

INSIDE



MARKETS YEAR-END REVIEW

MARKETS & FINANCE, RI-12



EVENTS TO WATCH IN 2018

THE YEAR AHEAD, A16

Pensions Keep Up Costly Market Bets

BY HEATHER GILLERS

The largest U.S. public pension fund debated in December whether to sell more than \$50 billion in stocks as global markets raced higher. In the end, the board of the California Public Employees' Retirement System decided it was fine to hold more.

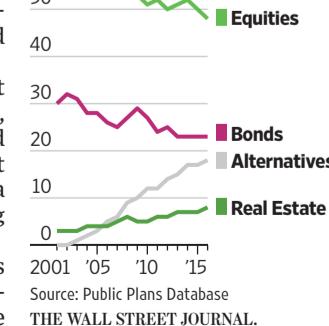
Retirement systems that manage money for firefighters, police officers, teachers and other public workers aren't pulling back on costly bets at a time when markets are rising around the world.

Some public pension funds are adding to traditional allocations of stocks and bonds while both are expensive. Others are loading up on more private-equity or real-estate holdings that are less liquid and sometimes carry high fees.

How much risk to take is a question facing all investors as they enter 2018. "Everything is

RAMPING UP RISK

Median percentage of major pension funds invested in each category



overvalued," said Wilshire Consulting President Andrew Junkin, who advises public pension funds.

Please see PENSION page A2

◆ Warren Buffett's index bet pays off for charity..... B1

Trump Backs Protests In Iran

The biggest wave of protests to hit Iran in almost a decade has backed the country's leaders into a corner, and the Trump administration is increasing the pressure by threatening fresh sanctions if the government forcefully cracks down on the demonstrations.

Iran's President Hassan

By Aresu Ebqali in Tehran, Asa Fitch in Riyadh, Saudi Arabia, and Michael R. Gordon in Washington

Rouhani, who has been a favorite of the country's moderates, now finds himself under fire from a young population eager for change. U.S. President Donald Trump waded into that volatile situation on Monday with a strong statement of support for the protesters.

In an early-morning post on Twitter, Mr. Trump said the Iranian people "have been repressed for many years."

"They are hungry for food & for freedom," Mr. Trump posted. "Along with human rights, the wealth of Iran is being looted. TIME FOR CHANGE!"

In Tehran, a 26-year-old marketing-company employee named Tamana echoed the sentiment as she joined a demonstration Monday. "We are deprived of the simplest things that are given for people in other countries, both in terms of basic welfare and economic security and of course freedom to express opinions and comment."

Please see TEHRAN page A6

◆ U.S. weighs new sanctions on Tehran..... A6

◆ Grievances grew from economy..... A6

U.S. NEWS

Minimum Wage to Rise in 18 States

BY DAVID HARRISON

The new year brings higher minimum wages in 18 states and almost two dozen municipalities, continuing a recent trend of steady pay increases for the lowest-paid workers.

In some cases, the increases represent one of several steps in a multiyear process to slowly raise the minimum wage. Arizona, for instance, saw its pay floor rise 50 cents on Jan. 1, to be followed by another 50 cents in 2019 and \$1 in 2020, part of a four-year process to boost the base salary for workers who don't work for tips to \$12 an hour by 2020. Voters approved a measure in 2016 to raise the minimum wage in four steps.

In Washington state, where

voters also backed a ballot measure in 2016, the minimum wage rose to \$11.50 an hour from \$11, one of several steps to boost it to \$13.50 an hour by 2020.

Other states, such as Florida, Minnesota and Ohio, saw their minimum wage rise simply because it is indexed to inflation.

Two more states, Maryland and Oregon, are set to boost minimum wages on July 1, 2018.

A higher minimum has been churning political debate in state capitols and city halls as advocates and labor unions argue the \$7.25 an hour federal wage is insufficient, while others say higher pay floors will lead to lost jobs. Congress last raised the U.S. minimum wage in 2009 and didn't index it to

inflation, eroding its buying power over time.

Minimum wage increases have been enacted in both Democratic-leaning and Republican-leaning states, in some cases through ballot measures. To advocates, that is a sign of bipartisan popular support for higher minimums. Opponents say the successful ballot measures simply reflect well-funded campaigns by labor unions.

The increases have provoked a backlash in some places, with local officials blocking or slowing the pace of pay raises. In St. Louis, the minimum wage fell by \$2.30 in August after state lawmakers mandated that municipalities abide by the state's minimum-wage standard.

The increases come at a time

when the labor market is exceptionally tight and employers are struggling to find workers. The national unemployment rate, 4.1% in November, is at a 17-year low and employers have slowly started to offer higher pay to entice new workers. Wages have been rising and were up 2.5% in November from a year ago. But that is still slower growth than before the recession.

Some large employers, such as Target Corp. and Wal-Mart Stores Inc., have announced companywide increases in minimum pay in recent years.

Michael Saltsman, managing director of the right-leaning Employment Policies Institute, said underlying economic strength makes a national mini-

mum-wage increase unnecessary. "That dynamic is a positive one and proof of why federal minimum-wage increases are unnecessary because people aren't waiting on the federal government to give them a raise," he said.

David Cooper, senior economic analyst at the left-leaning Economic Policy Institute, said the wage increases that employers are offering haven't been enough to substantially raise the living standards of the country's lowest-paid workers.

"Absent a minimum-wage increase, most workers in the last decade have had trouble seeing their wages rise," he said. "They haven't had another mechanism to boost their wages."

New Year Brings New Laws Across U.S.

BY JACOB GERSHMAN AND REBECCA DAVIS O'BRIEN

The arrival of 2018 brings new laws from statehouses across the country, affecting undocumented immigrants, gun owners, barbers, working parents with babies and college students, among others. Tennessee residents, for example, no longer have to leave their homes to get a haircut under a new law allowing barber house calls. Here are some others:

• Immigration

California hasn't quite outlawed local cooperation with federal immigration authorities, but a new law tries to keep it to a minimum.

The measure prohibits local law enforcement agencies from detaining or questioning people for immigration-enforcement purposes and calls for the drafting of rules to limit assistance with immigration enforcement "to the fullest extent possible" in "safe zones" like public schools, libraries, hospitals and local courthouses. The law excludes violent criminals and other felons.

• Employee Benefits

Some new laws aim to secure more rights for job applicants and workers. In New York, most private workers are now eligible for up to eight weeks of paid family leave, with an increase to 12 weeks set for 2021.

A California law makes it illegal for companies with five or more employees to ask job applicants if they have been convicted of crimes unless there has been a conditional job offer.

• Gun Limits

California is imposing stricter regulations on ammunition purchases by requiring that online sales be processed by a licensed vendor. The state also added hate crimes to the list of misdemeanor offenses that come with 10-year bans on firearm possession.

In Oregon, if a police officer or a family member of a gun owner thinks the person poses an imminent threat to themselves or others, they can ask a judge to impose a temporary weapon ban. At least four other states have similar laws.

• Campus Speech

Tennessee's Campus Free Speech Protection Act seeks to stop school administrations from banning speakers for espousing ideas that are offensive, immoral, conservative or liberal. Its enactment follows new laws in Colorado, Kentucky and Utah abolishing college "free speech zones" that restrict protests to narrow slices of campus.

• Marijuana

Recreational marijuana becomes legal in California. The state, though, has made it unlawful to smoke or eat pot while driving or riding in a car.

Maine, which legalized recreational pot in 2016, has banned companies from firing employees for testing positive unless they can prove the drug damaged job performance. The statute takes effect in February.

—Sara Randazzo contributed to this article.



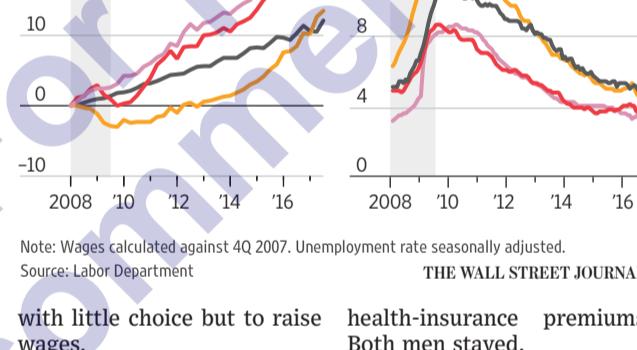
A construction worker in Eagan, Minn., in October. Unemployment in the Minneapolis metro area was the lowest among large metro areas.

Better Pay

Many U.S. cities and metro areas with below-average unemployment rates saw wage growth in recent years.

Change in wages

Ogden, Utah ■ Minneapolis ■ Fort Myers, Fla. ■ U.S.



Note: Wages calculated against 4Q 2007. Unemployment rate seasonally adjusted.

Source: Labor Department

THE WALL STREET JOURNAL

with little choice but to raise wages.

Patrick Grimes, owner of Generations Hardwood Flooring LLC in New Brighton, Minn., said his two lead workers told him last summer they were leaving to start their own company. He offered each a \$10,000 raise, putting their salaries at \$75,000 a year, and started covering 100% of their

health-insurance premiums. Both men stayed.

Fort Myers already had a tight labor market before workers started leaving other fields to go into construction to help with rebuilding after Hurricane Irma hit in September. The unemployment rate in October was 3.3%, and wages are surging.

"If you're a dishwasher with

a pulse, we'd probably hire you," said William Prather, owner of Broadway Palm Dinner Theater in Fort Myers.

In Ogden, Utah, the unemployment rate has been below 4% since 2014. Wage growth accelerated during that time to an almost 4% annual rate.

Ryan Vaughn, head of human resources for Ogden-based food products manufacturing firm Honeyville Inc., said finding workers has gotten harder. "As far as positions we struggle with, it's kind of all of them actually," he said. About nine months ago, forklift drivers were making between \$12 and \$13 an hour. Today, hourly pay can go as high as \$16 an hour.

The tight job market has made Steve Carlsen, president and chief executive of Kurt Manufacturing Co. in Minneapolis, "almost go into a panic mode," he said.

One of the company's machinists, Juste Dabout, said he recently received two phone calls in one week from competitors asking if he's on the job market. The 40-year-old said no, but that he would send over machinists he knows without a job. One problem: He doesn't know any.

considered a higher allocation that would have meant buying about \$30 billion. With their bond holdings, they thought about doubling them as well as holding steady.

In the end, the fund opted to raise its equities target to 50% from 46% as of July 1 and its fixed-income target to 28% from 20%.

The truth will be told in the next bear market on which strategy provides better diversification," said Calpers' Chief Investment Officer Christopher Ailman.

One major Canadian pension fund plans a bigger bet on illiquid assets. The \$202 billion Canadian pension fund Caisse de dépôt et placement du Québec plans to move money into investments such as real estate, private equity, infrastructure and corporate credit, said President and Chief Executive Officer Michael Sabia.

"Today, liquid assets—traditional government bonds and public equities—account for the majority of our investments," Mr. Sabia said in a statement. "A few years down the road, this will no longer be the case."

The biggest public pension in the U.S., known by its abbreviation Calpers, has been backing away from alternative investments as a way of reducing complexity and fees. In December, directors considered a 34% allocation to equities, which would have involved selling more than \$50 billion in stocks based on its holdings at the end of October. They also

PENSION

Continued from Page One

tion funds. "There's no magic option out there."

In the public pension world, the willingness to chase expensive assets is the product of the core challenge most funds face—how to fulfill their mounting obligations to workers and retirees.

Decades of low government contributions, overly optimistic assumptions, overpromises on benefits and two recessions have left them with deep funding holes when retirees are accelerating cash outflows. Estimates of their current combined funding shortfall vary from \$1.6 trillion to \$4 trillion.

The goal of most pension funds is to pay for future benefits by earning 7% to 8% a year. After the 2008 financial crisis, many funds tried to hit those marks by lowering their holdings of bonds as interest rates dropped and by turning to real estate, commodities, hedge funds and private-equity holdings.

These alternative investments rose to 26% of holdings at about 150 of the biggest U.S. funds in 2016, according to the Public Plans Database, compared with 7% more than a decade earlier.

That strategy has its own risks. Venturing deeper into al-

ternative investments diversifies holdings but can also add fees, complexity and the challenge of selling illiquid assets quickly if the fund needs cash. Returns from these investments can be volatile. Only private equity outperformed stocks between 2010 and 2016, according to a study by the Center for Retirement Research at Boston College, while hedge funds' returns barely exceeded 1% and commodities lost money.

Despite the recent embrace of alternative investments, most public pensions are still heavily linked to the ebbs and flows of global markets. Public pension funds had a median 56.69% of their holdings in equities as of Sept. 30, according to Wilshire Trust Universe Comparison Service, compared with 54.37% a year earlier. They also had 23.3% in bonds, down from 25% a year earlier.

The stance paid off during 2017's market rally, as public pensions had one of their best years of the past decade. They earned 12.4% in the 2017 fiscal year ended June 30, according to Wilshire Trust Universe Comparison Service. It was their best annual result since 2014.

Some in the pension world predict it won't last. Over the next decade Wilshire Consulting predicts a 6.25% compound return for U.S. equities and 3.5% return for core bonds. In-

ternational equities have a projected compounded return of 6.45%. Most pensions' return targets remain at 7% to 8%.

Some pensions are trying to confront the challenge by changing the makeup of their investments more frequently. The board of the New York City Employees' Retirement System has asked investment staff to re-examine the fund's asset allocation less than two years after the previous lineup was approved, said Mike Haddad, deputy chief invest-

ment officer for public markets.

The effects of high stock valuations, a U.S. tax overhaul, the Federal Reserve's move away from quantitative easing and a rising rate environment are all new points of discussion. "It's a unique set of market conditions that's very challenging for a long-term pension," Mr. Haddad said.

The California State Teachers Retirement System in 2017 shifted \$10 billion into a mix of bonds and alternatives it said was designed to hedge risk. That money was divided into

ment officer for public markets.

39% long-dated Treasurys and 61% hedge fund-type investments. The second-largest public pension in the U.S. by assets, it rolled back its fixed-income target to 13% from 15% and shaved its equities target to 54% from 55% effective Jan. 1.

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U.S. NEWS

Dispute Looms Over Homeless Veterans

Advocates, lawmakers resist efforts by Trump administration to cut housing subsidies

BY BEN KESLING

WASHINGTON—Veterans advocates and lawmakers have beaten back an effort to trim some veterans programs, but a fresh fight over aid for homeless veterans and other priorities is expected in 2018 as the head of the Department of Veterans Affairs pursues wide-ranging shifts in the way the agency uses its resources.

Last year, the VA drew significant resistance when it tried to overhaul some operations, including a move to reduce funding for a program designed to help disabled veterans who are unable to work. The idea was to shift resources to other priorities, but the department's secretary, David Shulkin, scrapped the cuts after they produced an outcry from veterans groups and lawmakers. Opponents said the VA hadn't done enough to consult with veterans and other constituents before it pursued the changes.

Dr. Shulkin said he remains determined to shift priorities. He has proposed to reallocate as much as 5% of the VA's budget toward initiatives such as suicide prevention and modernization of the department's systems, as well as to give veterans more resources for pursuing care outside the VA health system.

"When you're moving



Alexander Smith III, left, moved off the streets to a transitional housing complex in Washington, D.C., where he is joined by other veterans.

have been given out.

Funding for the VA portion surged to some \$500 million in 2016 from about \$5 million in 2008. The number of homeless veterans dropped 45% between 2009 and 2016, but saw an uptick of 2% last year, the first increase in more than half a decade, according to statistics released by HUD in early December.

There are currently some 40,000 homeless veterans among the estimated 553,000 homeless people in the U.S. While Dr. Shulkin proposed cuts to the program, he said the VA has boosted overall funding to address homelessness.

Alexander Smith III moved off the street into a transitional housing complex in the nation's capital run by U.S. Vets, an advocacy group. He said he hoped to get such a voucher because he has seen what it can do to improve the lives of fellow homeless veterans, who view the vouchers as their first reliable way to break the cycle of homelessness.

The 39-year-old Army veteran said homeless vets believe the vouchers are critical to helping them cope and manage costs associated with moving into a house, things like buying pots and pans, or sheets and towels. "They look at it as a way to start rebuilding," Mr. Smith said.

Dr. Shulkin said: "We've been at the effort to end veteran homelessness for close to six years. We've made a lot of progress."

quickly—and I do feel an urgency and an impatience to fix the VA—I think being reminded of the value of getting input and feedback is absolutely a fair criticism," Dr. Shulkin said in a recent interview. "But to say there couldn't be better ways to make it work, or ways we could use these resources more efficiently, I just don't accept that."

Dr. Shulkin, as he continues to seek changes, is likely to face continued resistance on multiple fronts this year. In

Congress, lawmakers from both parties are questioning any proposed cuts to its popular housing-subsidy program for homeless veterans.

Rep. Phil Roe (R., Tenn.), chairman of the House Committee on Veterans' Affairs, said his committee would hold a hearing on the matter as early as January.

Veteran advocates, including Leon Winston, chief operating officer of Swords to Plowshares, said they are prepared to resist a cut to the subsidy program for homeless

veterans. "It's not time to pull back," Mr. Winston said.

The looming fight over housing subsidies comes as other appointees of President Donald Trump, a Republican, are pursuing deep cuts at other agencies—and often running into criticism as they do so.

At the State Department, Secretary of State Rex Tillerson has tried to pare the department's budget, but has been blocked by Congress. Scott Pruitt, administrator of the Environmental Protection Agency, has been pursuing a

massive downsizing and dismantling of regulations.

The VA's subsidies to homeless veterans have been around for decades but grew rapidly under the administration of Mr. Trump's Democratic predecessor, Barack Obama. Under this program, the VA teams up with the Department of Housing and Urban Development. HUD provides housing vouchers, and the VA provides caseworkers to offer extensive support to veterans. Since its inception, some 85,000 of the vouchers

are

Military Dilemma: Signed Up to Serve but Unwelcome

BY NANCY A. YOUSSEF

Childhood Arrivals —would be phased out by March, and with that, the future of DACA recipients in the military became uncertain.

President Donald Trump also announced in July via Twitter that transgender service members would no longer be allowed to serve "in any capacity," saying they were a burden on the military. Together, these changes created a new class of service member: those who swore an oath to defend the nation, only to discover their presence may no longer be welcome.

Nearly 16,000 people in the military are directly affected by the changes, posing a challenge to military recruitment and creating tension within the ranks. Top commanders have moved to reassure affected service members while trying to channel the presidential orders into a manageable process.

On Monday, the Pentagon began welcoming transgender service members, after the Justice Department withdrew its

appeals Friday of lower-court rulings that transgender people may serve starting Jan. 1. The Justice Department said it would wait for a Pentagon study on the issue in coming weeks before deciding what to do next.

But even if DACA recipients and transgender people ultimately are permitted to keep

serving, the effects of abrupt changes in their eligibility will linger, some military officials fear.

"All this kind of uncertainty has been introduced, and that hurts the military," said Brad Carson, a former acting undersecretary of defense who helped craft the Obama administration policy that ended the

ban on transgender service members. "You need clear personnel policy because you are dealing with millions of people."

There are 6,000 to 15,000 transgender service members, according to various estimates. Many had begun going public with their status, but now fear the consequences of coming out.

"I know people who are on the brink of coming out who didn't," said Megan Winters, petty officer 2nd class, and a 29-year-old female transgender service member. "Those of us who came out have a giant target on our back."

Meantime, members of both parties on Capitol Hill have said they want a legislative solution for DACA recipients.

The Pentagon said last week it would extend by a year the service contracts for members covered by DACA, so as to "permit necessary vetting and enlistment into the military," said U.S. Army Maj. Dave Eastburn, a Pentagon spokesman. "We

continue to work with Department of Homeland Security on behalf of all those who are awaiting enlistment or training."

The Army says some 900 DACA recipients are part of a Pentagon program called Military Accessions Vital to the National Interest or MAVNI, which began in 2009 to allow non-U.S. citizens with critical language or special skills to join the military. In return, those recruits would be given a fast track toward citizenship. The program's suspension in September affected the DACA recipients in the program as well as 4,000 foreign-born service members.

Pvt. Cho was waiting to go to basic training when the rules changed. For now, he is ineligible for citizenship through the military—but he has a contract requiring him to continue serving. So he prepares in ways that are still allowed, such as by repeating the 120-word Soldier's Creed and doing physical training. "It's like this every day, a waiting game," he said.

Kyungmin Cho wants to be a soldier but as an undocumented immigrant brought to the U.S. as a child he is in limbo.

Sasha Maslow for The Wall Street Journal



Major Shifts at NASA Urged

BY ANDY PASZTOR

NASA's current plans for returning astronauts to the moon aren't affordable and likely won't produce sustainable, long-term economic benefits, according to an independent research study commissioned by the agency.

Released in December without publicity, the report advocates using asteroids to produce fuel outside the atmosphere for both robotic and manned missions, in what would be the most extensive public-private cooperation in the history of space exploration.

It concludes that maintaining the agency's existing procedures for funding and acquiring spacecraft will delay manned exploration by many years, versus reliance on emerging commercial alternatives.

The study also projects that by continuing older projects with traditional contracting arrangements—including extensive costs for federal oversight—the National Aeronautics and Space Administration will exceed its anticipated budgets through the next two decades.

The report calls for shifting to commercial practices championed by private space-transportation companies such as Elon Musk's **Space Exploration Technologies** Corp. and **Blue Origin** LLC, run by Amazon.com Inc. founder Jeff Bezos, which are poised to vie with NASA for sending manned



A SpaceX rocket lifted off last month from Cape Canaveral, Fla.

missions beyond low-Earth orbit.

Unless NASA finds a way to break a longstanding "cycle of increasing costs," the study contends, "human exploration, commercialization and colonization of space will likely remain unaffordable."

Faced with such schedule and spending pressures, "NASA must dramatically change the way it works," said Joel Sercel, an industry consultant and fledgling space entrepreneur who led the team that wrote the report.

NASA has routinely faced similar criticism from some lawmakers and advocates of commercial space ventures, but seldom in a report released by the agency itself. The document was peer re-

viewed by experts and posted on the agency's website last month. At the time, a NASA manager wrote to Mr. Sercel that while the agency considered it "a worthy effort" examining "an interesting and timely concept," it stopped short of approving the findings or endorsing the technical details.

The conclusions coincide with White House efforts to finalize 2019 budget proposals, including ways to eventually accelerate the timing of crewed missions to or around the moon. Vice President Mike Pence, who heads a White House space policy council, has said NASA will rely on "expertise and insights from the scientists, innovators and business leaders like never before."

NASA has routinely faced similar criticism from some lawmakers and advocates of commercial space ventures, but seldom in a report released by the agency itself. The document was peer re-

Ten From U.S. Die in Costa Rica Air Crash

Associated Press

SAN JOSE, Costa Rica—Costa Rican investigators said Monday that strong winds or mechanical problems most likely caused a chartered aircraft to crash in woods, killing two crew members and 10 U.S. citizens, including families from New York and Florida.

The families from the New York City suburb of Scarsdale and from Belleair, Florida, accounted for nine of the dead and were part of a tour organized by Berkeley, Calif.-based Backroads. Their American guide was the 10th U.S. victim.

A New York family said five of the dead were relatives on vacation. They identified them as Bruce and Irene Steinberg and their sons Matthew, William and Zachary, all of Scarsdale, N.Y. Bruce Steinberg was a senior employee at Bridgewater Associates, the world's largest hedge fund.

In St. Petersburg, Fla., Rabbi Jacob Luski of Congregation B'nai Israel said that victims' relatives told him that members of his congregation, Mitchell and Leslie Weiss and their children, Hannah and Ari, died in the crash Sunday.

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U.S. NEWS

California Poses a Problem for GOP in 2018

**CAPITAL JOURNAL**
By Gerald F. Seib

California is the nation's most populous state, home to 53 seats in the House of Representatives, reservoir of 55 Electoral College votes—and a growing political problem for Republicans as the 2018 midterm election year dawns.

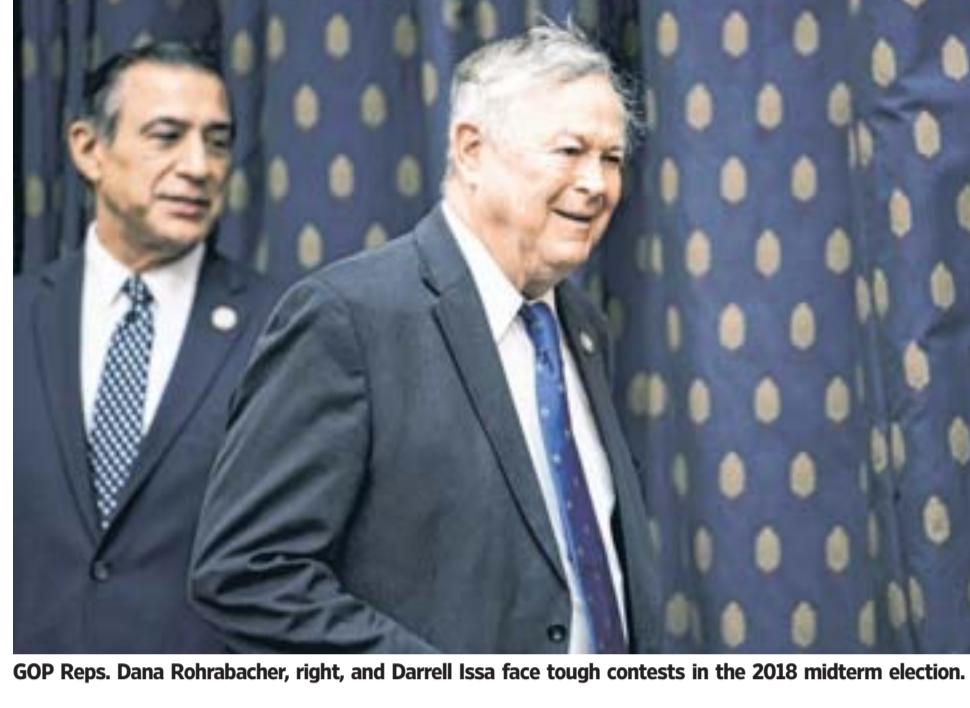
GOP fortunes have been declining for the last two decades in California, a trend that may be accelerating. The recently passed tax-cut bill, with its

limits on deductibility of state and local taxes and mortgage interest, seemed almost designed to strike at high-tax states with pricey real estate such as California.

As a result, two of the 12 GOP House votes against the measure came from California representatives, while some of the state's Republicans who voted for the measure did so with misgivings.

Meanwhile, President Donald Trump's immigration policies are widely unpopular in a state with a large population of Hispanics and Asian-Americans.

Both the state and the city



GOP Reps. Dana Rohrabacher, right, and Darrell Issa face tough contests in the 2018 midterm election.

political consultant who now is a professor at the University of Southern California's Annenberg School of Communication.

He wrote a piece in the Los Angeles Times recently asserting that California Republicans "have been left hanging by their national party leadership, whose focus seems to be squarely on the needs of their colleagues in more conservative parts of the country."

The Los Angeles Lakers, he noted, have more players on their roster than California Republicans have representatives in Congress.

Mr. Schnur thinks the new tax cut, despite provisions that are problematic in California, may prove a marginal benefit to some of the California Republicans, because it will help energize the GOP base and shift the focus of debate toward economic issues and away from the social issues that separate many Californians from the national Republican Party.

Still, he adds, "the biggest challenge for these suburban Republicans is more cultural than it is legislative. They're a lot more uncomfortable with Trump's behavior than they are with his policy agenda." Immigration, he adds, looms as "the biggest challenge for Republican incumbents."

Even if Republicans manage to hold their own in this year's midterm elections, the

state is likely to remain a forbidding land for the GOP in presidential politics.

It's hard to believe now, but California was, not so long ago, a bedrock for Republican presidential ambitions. Its stash of electoral votes "gave Republicans a near lock on the presidency in the 1970s and 1980s," notes the Almanac of American Politics.

That began turning in the 1990s. Among other factors, Gov. Pete Wilson won re-election while supporting Proposition 187, a ballot measure designed to ban state aid to illegal immigrants. Republican fortunes among Hispanics began to decline, and the party's broader fortunes followed suit.

By 2012, then-President Barack Obama carried California with 60% of the vote. In 2016, Mrs. Clinton won 62% of the vote, and 900,000 more raw votes than did Mr. Obama four years earlier.

Four of California's counties switched from Republican to Democratic in 2016, including Orange County, long a bastion of Republican Party conservatives.

Orange County hadn't gone Democratic since the time of Franklin Roosevelt. Now two conservatives who represent the county in Congress, Reps. Dana Rohrabacher and Darrell Issa, are among the House's most imperiled incumbents—and were the two Californians who voted against the just-passed tax bill.

Parties Clash Over Congress's Russia Probes

BY BYRON TAU

WASHINGTON—As Congress is set to return from the holiday break, sharp differences have emerged over the next steps in lawmakers' investigations into the Trump 2016 campaign's ties to Russia, with Democrats pushing for more investigative work and Republicans seeking to bring the probes to an end.

The chairmen of the two GOP-run investigations—conducted by the House and Senate intelligence committees—have expressed confidence in recent interviews that they are in the home stretch of the inquiries. But Democrats on the House panel complain they are being denied the ability to call key witnesses and obtain documents.

The House and Senate probes, looking into whether President Donald Trump or any of his associates colluded with Russia to tilt the 2016 elections, are being conducted for public-accountability purposes. Special counsel Robert Mueller is leading a criminal investigation into the same matters. That probe has returned several indictments and guilty pleas, including one early last month from Mike Flynn, Mr. Trump's former national security adviser.

The pace of the House probe accelerated dramatically, with two and sometimes three interviews scheduled a day in the final weeks of 2017, while Senate investigators have only a few dozen witnesses remaining on their list after conducting more than 100 interviews.

Senate Intelligence Committee Chairman Richard Burr (R., N.C.) said he is expected to be done with interviews in his investigation early in the year.



Senate Intelligence Committee Chairman Richard Burr, right, with Sen. Mark Warner, left, the panel's top Democrat, in November.

After that, Mr. Burr said the panel might try to publish a comprehensive report, or it might release as much of the information that the committee gathered as possible.

"The important aspect is: Can we lay the facts down so the American people can come to their own conclusion?" Mr. Burr said to reporters.

On the House side, Democrats say the pace of the investigation appears to be quickening with the aim of ending it in early 2018.

"It's no way to conduct an investigation—not if you're serious about getting the truth," said Rep. Adam Schiff, the top Democrat on the House panel.

While leaders in both parties publicly say they are committed to writing a final report that has the support of both Republicans and Democrats on the panel, multiple lawmakers and staffers say they are prepared to write separate reports if necessary.

Republicans deny they are prepared to close down the probes for political reasons, saying that it is a common tactic for the party shut out of the White House to use the congressional investigative process to inflict political harm on the president.

"There is a built-in political advantage to dragging things out," said Rep. Trey Gowdy, a

South Carolina Republican who is one of the leaders of the House Intelligence Committee investigation.

The mission of the Senate and House investigations is almost identical: examine the underlying evidence for the intelligence community's January 2017 report that the highest levels of the Russian government were involved in directing electoral interference that was intended to boost Mr. Trump at the expense of his Democratic rival, Hillary Clinton.

Both panels are additionally empowered to determine whether anyone from Mr. Trump's campaign assisted

Russian efforts.

Mr. Trump has long denied any collusion with Russia. Moscow has denied interfering in the election.

The Senate investigation is being conducted almost entirely by committee staff, with the 17 senators that make up the committee largely shut out of interviews, according to multiple people familiar with the investigation.

The House investigation is being driven much more by the 22 members of the intelligence committee—13 Republicans and nine Democrats—who have been intimately involved in questioning witnesses and reviewing documents.

Judiciary To Review Workplace Policies

BY JESS BRAVIN

WASHINGTON—Chief Justice John Roberts said that the federal judiciary would assess its own policies for addressing sexual harassment involving judges and court employees, joining a national reckoning that, after exposing sordid activity by Hollywood titans, superstar journalists and elected officials, claimed the career of a prominent U.S. circuit judge.

"Events in recent months have illuminated the depth of the problem of sexual harassment in the workplace, and events in the past few weeks have made clear that the judicial branch is not immune," the chief justice wrote in his annual report Sunday on the judiciary, a veiled reference to the December retirement of Judge Alex Kozinski from the Ninth U.S. Circuit Court of Appeals following allegations that he ogled and commented explicitly on some female law clerks, showed them pornography and touched them inappropriately.

Judge Kozinski, 67 years old, didn't comment on every allegation but apologized for a "broad sense of humor and a candid way of speaking" that, unknown to him, had made some feel uncomfortable.

Chief Justice Roberts said he had asked James Duff, director of the Administrative Office of the U.S. Courts, to lead the review.

The Supreme Court itself took no known action after Justice Clarence Thomas was publicly accused in 2016 of groping a 23-year-old woman in 1999. In an October 2016 article, the National Law Journal reported the account of Moira Smith, who said she had been seated with Justice Thomas, at the justice's request, at a Falls Church, Va., dinner honoring her and other Truman Scholars.

Ms. Smith said that Justice Thomas touched her buttocks inappropriately several times during the event.

"This claim is preposterous and it never happened," Justice Thomas said in response to the National Law Journal report. At the time and again Sunday, a Supreme Court spokeswoman declined to comment when queried by The Wall Street Journal.

Ms. Smith is vice president and general counsel of a public utility in Anchorage, Alaska, the Enstar Natural Gas unit of AltaGas Ltd., Calgary, Alberta.

Obama Administration Alums Eye '18 Races

BY NATALIE ANDREWS

At least a dozen former aides and policy staff who worked for President Barack Obama have entered the midterm races, running for office for the first time.

The Obama administration alumni are part of a Democratic Party effort to take back control of the House and create a counter to President Donald Trump's efforts to roll back Obama-era policies. In many cases, these new candidates are opposing GOP incumbents who have been identified by House Democrats as potentially vulnerable.

Brian Forde, former White House technology adviser, moved back to the Southern

California district where he was raised and is running against GOP Rep. Mimi Walters. Former Acting Assistant Secretary of Defense Elissa Slotkin is challenging GOP Rep. Mike Bishop while living on her family's farm in Michigan. And two Obama administration alumni are taking on Rules Committee Chairman Pete Sessions—Colin Allred, who worked in the Department of Housing and Urban Development's Office of General Counsel, and Ed Meier, who worked in the State Department focused on military-to-civilian transition in Iraq.

"We're in the middle of a civic reawakening right now and that opportunity means that we need to reopen the

barn doors," Mr. Forde said.

The rise in the number of Democratic candidates is being driven by multiple factors, said David Wasserman of the Cook Political Report. "I'd describe it as a mix of people who feel a

genuine calling to oppose Trump and suddenly out-of-work Democrats looking for jobs," Mr. Wasserman said.

The Cook Political Report

rates 63 GOP-held House seats as competitive to some degree. Democrats will have to play defense too: Cook lists 21 Democratic seats as competitive, including four tossups.

Democrats need to win a net 24 seats to take back the majority.

Back in the Michigan district of Rep. Bishop, Ms. Slotkin is challenging him with decidedly more moderate positions than her Democratic colleagues from safer districts.

Ms. Slotkin said she refrains from criticizing the president and won't say if she supports current House Democratic leadership. Democrats have targeted the seat in the past and lost, making Stu Sandler, Mr. Bishop's spokesman, hope-

ful the congressman can win a third term.

"The DCCC is pushing D.C. insiders into communities like the eighth district," said Mr. Sandler, referring to the Democratic Congressional Campaign Committee. "But the people of the eighth district know Mike Bishop and his dedication to serving and helping families across the eighth district."

On the campaign trail, Ms. Slotkin focuses on raising wages and bringing higher-paying jobs to the district. She is convinced voters backed Mr. Trump because they are struggling economically.

"What I say to people is I don't love the messenger that you picked, but I get the message," she said.



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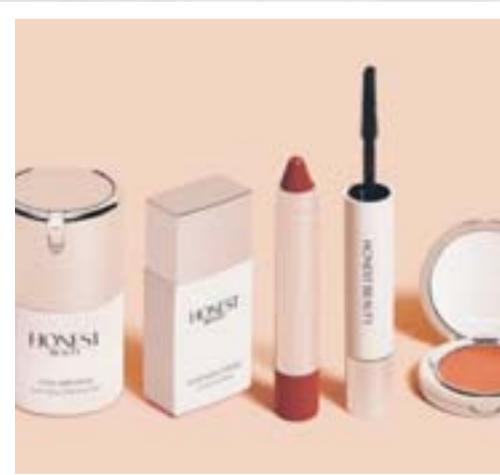
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WORLD NEWS

U.S. Weighs New Sanctions on Iran

Trump officials urge support for protests amid concerns over intensifying crackdown

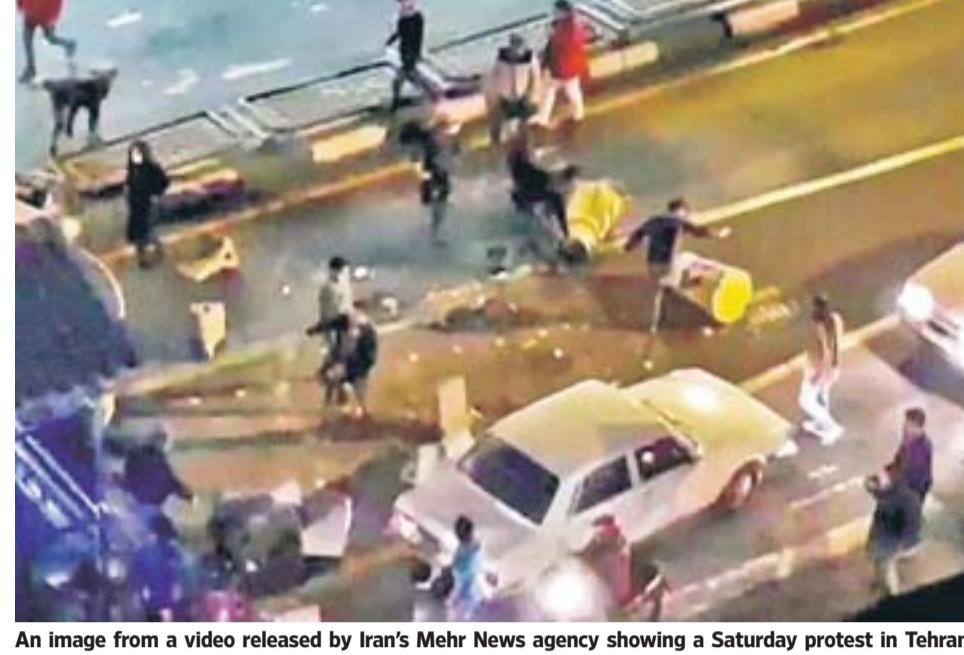
By MICHAEL R. GORDON
AND FELICIA SCHWARTZ

WASHINGTON—The Trump administration is lobbying countries world-wide to support Iranians' right to peaceful protest and is prepared to impose fresh sanctions if Iran's government cracks down forcefully on the demonstrations spreading throughout the country, U.S. officials said.

The new U.S. sanctions would be imposed under existing authority to respond to human-rights violations and could be aimed at the Islamic Revolutionary Guard Corps in a bid to minimize doing economic harm to the Iranians carrying out the protests, the officials added.

The developments add a new and unexpected layer to the complex relationship between the U.S. and Iran, which had been radically shifted by President Donald Trump's complaints about the nuclear accord and Iran's growing influence in the Middle East as of Islamic State declines.

President Donald Trump tweeted "TIME FOR CHANGE!" on Monday in strong support of the Iranian demonstrators. His administration's outspoken stance has ignited a broad debate over how forcefully the U.S. should respond to the protests inside Iran and whether expressions of American support for the demon-



An image from a video released by Iran's Mehr News agency showing a Saturday protest in Tehran.

ment. But Mr. Obama, who was involved in developing a secret diplomatic outreach to Supreme Leader Ayatollah Ali Khamenei, was cautious.

Some experts said the Trump administration was right to speak out about the current protests but said its statements needed to be part of a coordinated strategy.

"What's needed are carefully crafted statements of solidarity with the Iranian people rather than freewheeling tweets from Trump encouraging protesters, which would be counterproductive," said Karim Sadjadpour, an expert on Iran at the Carnegie Endowment for International Peace.

"What the U.S. government does, rather than says, is much more important," Mr. Sadjadpour added. "We should make clear to companies and countries around the world that those complicit in providing Tehran the means and technology to inflict violence and a communications blackout on Iranian society will face censure from the U.S."

Mark Dubowitz, the chief executive officer of the Foundation for Defense of Democracies, a think tank that has been sharply critical of the Iranian government, said the Iranian regime will try to blame the U.S. for the protests regardless of what action Washington takes.

"Western governments should make it clear that the regime will be held responsible and will pay a price for any bloodshed," Mr. Dubowitz said.

—Michael C. Bender
in Palm Beach, Fla.,
contributed to this article.

strators would help or hurt their cause.

"We are encouraging all nations around the world to publicly condemn the government violence and to support the legitimate, basic rights of those protesting," said Brian Hook, the State Department's director of policy planning.

The Obama administration was criticized for being slow to show support for those leading 2009 demonstrations. Veterans of that administration say Mr. Trump's vocal support for the opposition could backfire by enabling the Iranian regime to portray demonstrators as American agents.

"Instead of this being seen in Iran as an issue of the regime ruining the economy and not serving the people

well, it could be framed by the Iranian government as the United States seeking to decide how Iranians should govern their country," said Philip Gordon, who served on President Barack Obama's National Security Council. "That framing is not helpful."

Mr. Hook pushed back on the notion that energetically backing Iranians' right to express their views would give ammunition to the regime.

"It doesn't matter what we do, they will blame us," he said. "For us, this is not a complicated question. We want to take a position with moral clarity and let the protesters know they're not alone."

In an effort to mobilize international support for its stance, Trump administration

officials have been working on a joint statement with the U.K., France, Germany and Italy that would urge Iranian authorities to respect their citizens' rights and not to use violence against the protesters. The Trump administration is also eyeing action at the United Nations in the coming days, officials said.

The question of how to respond to protests in Iran has long been a policy challenge for the U.S. In 2009, the Obama administration was caught off guard when millions of Iranians protested the allegedly fraudulent re-election of President Mahmoud Ahmadinejad.

Some U.S. officials pressed Mr. Obama to publicly back the fledgling Green Move-

Grievances Grew From Economy

BY FARNAZ FASSIHI

Small, scattered protests focused on the economy have been percolating in multiple Iranian cities since September. Crowds there gathered to demonstrate against alleged financial corruption, budget allocations for religious institutions and the bankruptcy of retirement funds.

Iranians had hoped President Hassan Rouhani's administration and a nuclear deal with other world powers would end Iran's isolation and lead to foreign investment, jobs and better purchasing power. While the economy has improved, it hasn't done so fast enough.

On Thursday in the northeast city of Mashhad, people took to the streets to express their anger over inflation and what they said was Mr. Rouhani's failure to deliver on his promises of economic prosperity. Unemployment is officially reported to be around 12.5% and inflation is nearly 10%.

News of the protest spread on social-media apps. Within hours, protests broke out in other cities, such as Kerman-shah, Isfahan and Tehran.

The demonstrations shifted to demands the government halt political oppression as the middle class, student activists and dissidents joined the working class and labor unions on the streets.

By Friday and Saturday, the protests had spread, including to cities such as Qom, the bedrock of Shiite clerical rule.

ical instability. Ebrahim Raisi, the hard-line cleric who lost to Mr. Rouhani in last year's election, posted on Twitter on Friday that the government had to prioritize lifting people's livelihoods, then followed on Saturday with a warning that enemies of the state were trying to take advantage of economic problems.

Mr. Rouhani has attempted to address the unrest with a conciliatory approach. He had earlier said people had the right to protest, but not to vandalize property. On Monday, he acknowledged the protests exposed some national ills.

"What has happened in the last couple of days is on the surface a threat which has to be converted into an opportunity to find out the deep causes of the problems," Mr. Rouhani said, according to Mehr.

As president, Mr. Rouhani has sought to revive Iran's fortunes. He spearheaded 2015's nuclear deal, which removed international sanctions that held back Iran's economy in exchange for curbs on its disputed nuclear program.

But with inflation and unemployment still in double digits, Mr. Rouhani has come under fire. A poll in June by the University of Maryland found that about half of Iranians thought the economy was going in the wrong direction, up from just 31% who had a negative view in early 2016.

—Farnaz Fassihi
and Felicia Schwartz
contributed to this article.

TEHRAN

Continued from Page One
plaints," she said, declining to give her last name. She called Mr. Rouhani's performance on issues relevant to young Iranians "very weak."

Unrest spread on Monday through central Tehran, where security forces used tear gas and shows of force to disperse crowds, and unverified video showed protests in other parts of the country, including Shadegan, Abadan and Kangavar in western Iran and Isfahan in the center.

At least 12 protesters have reportedly died since the demonstrations began, and a policeman was killed in Najafabad on Monday, according to the semi-official Mehr news agency. A member of the Islamic Revolutionary Guard Corps was also killed during clashes near Isfahan by a shotgun blast, Mehr reported Monday, without providing further details.

New U.S. sanctions could target the Revolutionary Guard Corps—a force answerable only to Iran's Supreme Leader Ayatollah Ali Khamenei—in an effort to avoid doing economic harm to the Iranians who are carrying out the protests, U.S. officials said.

The Trump administration is also lobbying nations to support the right of Iranians to carry out peaceful protests, U.S. officials said.

The recent unrest erupted



Iranian President Hassan Rouhani spoke at a cabinet meeting in Tehran on Sunday.

at first in places outside the capital before spreading there over the weekend. The protests also have lacked a clear leadership structure, making their sudden appearance all the more surprising to Tehran.

Police have arrested more than 350 people since the unrest began on Thursday, according to Iranian media. The country's Interior Ministry has warned that violence and vandalism won't be tolerated, but those measures have so far failed to deter protesters. On Monday, an Interior Ministry

official said security forces would be more serious in controlling unrest going forward, according to the semiofficial Iranian Labor News Agency, raising the specter of a more severe crackdown.

Protesters were circulating a call for nationwide strikes on Telegram, a messaging app widely used in Iran, potentially deepening the crisis facing the regime.

The protests—the biggest in Iran since demonstrations that followed presidential elections in 2009—initially centered on

critiques of Mr. Rouhani's economic management, but they have grown increasingly into a rebuke of the wider Islamic governing system. The Iranian system features an elected president and parliament but is dominated by Mr. Khamenei, who has the final say on matters of state.

"The protesters have been against Khamenei more than Rouhani," said Karim Sadjadpour, an expert on Iran at the Carnegie Endowment for International Peace in Washington. "They know if Rouhani

goes and Khamenei stays nothing changes."

While he is loyal to Mr. Khamenei, Mr. Rouhani has long played the role of a pragmatic insider and more palatable option than his hard-line opponents. The prospect of gradual change within Iran's political system helped propel him to a second four-year term as president by a wide margin in presidential elections last year.

Hard-line opponents are renewing their criticism of Mr. Rouhani's leadership, while trying to protect against politi-

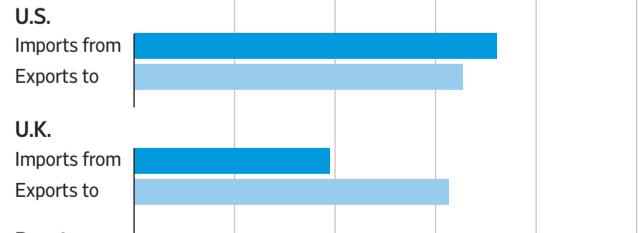
France Pursues Wider Trade Relationship With China and Russia

By WILLIAM HOROBIN

Looking East

France is seeking closer economic ties with Russia and China.

French trade with select countries, 2016



U.S.-Europe Rift Fuels Move to Seek Additional Partners

The Macron government's move to broaden its trade horizons is fueled by a growing rift between Europe and Washington. In December, Economy and Finance Minister Bruno Le Maire and four other European finance ministers wrote to Treasury Secretary Steven Mnuchin to voice concerns that the overhaul of corporate-tax law would give U.S. firms unfair tax advantages and discourage them from investing in Europe.

"The U.S. is a close ally and Europe's principal trading partner, but we can clearly see the difficulties," Mr. Le Maire said.

He also criticized Washington for maintaining the threat of "extraterritorial sanctions"—laws that allow Washington to penalize foreign companies with U.S. operations for doing business in Russia. The sanctions were proposed by Congress but criticized by President Donald Trump.

Such sanctions would turn the U.S. into "the de facto gendarme of global trade," Mr. Le Maire said. "That is contrary to our vision of a multilateral global organization."

—William Horobin

companies are the largest foreign employer, with nearly 170,000 staff. But France's imports from Russia shrank to €5.54 billion in 2016 from €10.23 billion in 2014, the year sanctions were introduced. Exports fell to €4.89 billion from €6.76 billion over the same period.

Mr. Le Maire was in Moscow to attend a meeting of the CEFIC—a Franco-Russian intergovernmental body that promotes economic relations.

During the meeting, the two countries agreed to begin technical cooperation between government experts and French companies including Electricité de France SA and Total SA on renewable energy and energy storage. Mr. Le Maire also invited Russia to cooperate on developing reusable launchers for satellites.

Mr. Le Maire said France and Russia should work within the sanctions to increase economic cooperation and be ready for the day they are lifted.

French President Emmanuel Macron plans to launch this effort when he makes his first visit to China in January and attends the St. Petersburg International Financial Congress—Russia's answer to the World Economic Forum in Da-

vos, Switzerland—in May.

The sheer scale of France's trade with the U.S. and the U.K., however, makes it difficult to replace with partners to the east. Trade with the U.S. and Britain totaled €119.5 billion (\$142.8 billion) in 2016,

compared with a total €79.1 billion with China and Russia.

Since defeating far-right National Front leader Marine Le Pen in May's election, Mr. Macron has increasingly positioned himself as a foil to Mr. Trump on the world stage.

In Moscow, Mr. Le Maire was working to rekindle economic ties that have been strained by sanctions the EU imposed on Russia in the wake of its 2014 annexation of Crimea.

France is the largest foreign investor in Russia, and French



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WORLD WATCH

CHINA

Factory Activity Slips But Expansion Holds

An official gauge of Chinese factory activity fell slightly in December, but remained in expansion territory, reflecting again the resilience of the world's second-largest economy.

The official manufacturing purchasing managers index slipped to 51.6, compared with 51.8 in November, government data showed Sunday.

The index now has stayed above the 50 mark that separates an expansion of activity from a contraction for 17 months.

The December reading matched a median forecast of 51.6 by economists polled by The Wall Street Journal.

The subindex measuring new orders dropped to 53.4 from 53.6 in November, while the production subindex fell to 54.0 from 54.3, the official data showed.

—Grace Zhu

GREECE

Asylum for Turk Thrown Into Doubt

The government moved quickly to block a grant of asylum to one of eight Turkish military officers who fled to Greece after a failed coup attempt in Turkey in July 2016.

The Greek prime minister's office said Saturday it had applied for an invalidation of the asylum service's decision.

Ankara had responded angrily to the original decision to grant

the Turkish officer political asylum, warning it could have "negative impacts" on the two countries' already prickly relations.

"Greece has once again showed that it is a country that protects and embraces coup plotters," Turkey's Foreign Ministry said in a statement.

The government's application to invalidate the asylum offer will be heard by the Administrative Appeals Court and then could be challenged at the Council of State, according to the officers' lawyer, Omilos Zelios.

The eight junior officers landed a military helicopter at an airport in Greece a day after the failed coup attempt in Turkey and applied for asylum, arguing their lives would be in danger were they to return home.

—Nektaria Stamouli

NORTH KOREA

South Seized Ship Over Oil Suspicions

South Korean authorities in December seized a Panama-registered ship suspected of transferring oil to North Korea in violation of United Nations sanctions, three Seoul government officials said, weeks after South Korea seized a Hong Kong-registered ship for similar allegations.

Authorities said they aren't sure if the newly seized ship directly transferred oil to a North Korean ship at sea, but suspect oil "may have eventually gone into" North Korea, said an official at the port of Pyeongtaek, on South Korea's west coast, where the ship is being detained.

—Andrew Jeong

IN DEPTH

TAXES

Continued from Page One
amounts paid on profits from parts sales made through the Swiss unit, called Caterpillar SRL. The raids in March, led by the Commerce Department, were a sign of an intensifying criminal investigation into the company's taxes and exports.

No civil or criminal charges have been filed against Caterpillar or anyone at the company. A company spokeswoman says it "believes its tax position is right" and is "in the process of responding to the government's concerns."

"We're a values-based company," says Caterpillar Chief Executive Jim Umpleby, who moved into the top job at the start of 2017. "We're co-operating, and we're hopeful that that issue will be resolved in an expeditious manner."

The tax troubles clash with Caterpillar's history as an American manufacturing icon. Caterpillar machinery helped build the Hoover Dam, Golden Gate Bridge and U.S. interstate highway system. The company supplied equipment for the Allied effort in World War II and the Apollo 11 moon mission.

They also are a distraction from efforts to boost profit margins following four consecutive years of declining revenue, waves of layoffs and factory closings. Caterpillar was hurt by turmoil in construction and mining markets around the world, many of which are now rebounding.

The outcome could influence how U.S. companies structure their businesses to lower tax bills. The use of tax-avoidance strategies has been widespread since the late 1990s, including shell corporations and so-called tax inversions. American companies are keeping more than \$2 trillion of profits overseas rather



DANIEL ACKER FOR THE WALL STREET JOURNAL

A Caterpillar facility in Morton, Ill. Many foreign parts orders are shipped from Morton, but profits flow through Switzerland.

woman declined to comment, but the company has said the tax changes would help American manufacturers compete in foreign countries and gain more access to cash there.

Caterpillar's own regulatory filings indicate it shaved more than \$1 billion from its taxes from 2012 to 2016, due in large part to the Swiss subsidiary. The total is roughly equal to Caterpillar's net income in the third quarter.

Under federal law, any tax shelter must have "economic substance," or a legitimate business purpose for entering into it, and can't simply be to avoid taxes. Caterpillar has never wavered from its position that the Swiss subsidiary is perfectly legal, even though some employees raised doubts internally.

A senior person in Caterpillar's management in the early 2000s recalls asking colleagues at the time how it planned to bring profits that were piling up in Switzerland back home without paying U.S. taxes on them. He says he didn't get any clear answers.

"It was pretty obviously just a tax initiative," he says. Caterpillar wouldn't comment on his recollections.

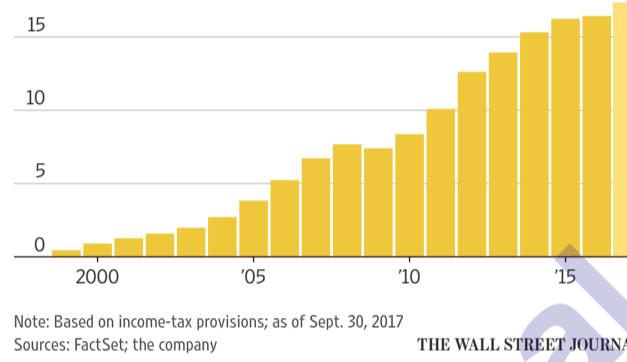
The anonymous letter arrived in May 2004. It was from someone who claimed to work in Caterpillar's tax department. "If there is no independent investigation or if there is any retribution, I will go to the Internal Revenue Service," the writer told James Owens, then Caterpillar's chief executive.

Robin Beran, Caterpillar's director of taxation at the time, responded in a memo to Mr. Owens that the allegations were "simply untrue," adding that the letter writer was "very misinformed."

"The basic operations of Caterpillar SRL are no different than any other valid and legal partnership operating anywhere in the world," Mr. Beran added. "Great care has been taken to ensure Caterpillar's operations are consistent with Switzerland's laws and any applicable U.S.

The Taxman Cometh

Caterpillar has paid more than \$17 billion in income taxes since 1999 but faces a potential \$2 billion tax bill from the IRS.

Cumulative taxes paid since 1999

Note: Based on income-tax provisions; as of Sept. 30, 2017
Sources: FactSet; the company

THE WALL STREET JOURNAL.

have to "do some dancing" to comply with looming IRS rule changes related to U.S. tax exemption.

Steven Williams, a PwC managing director, replied: "What the heck. We'll all be retired when this comes up on audit."

At the hearing, Mr. Quinn told lawmakers he had used a "poor choice of words." Mr. Williams said his reply was an "inappropriate use of words in an attempt at humor." Mr. Williams declined to comment for this article, and Mr. Quinn didn't respond to requests for comment.

The subcommittee's report concluded PwC had a potential conflict of interest as Caterpillar's auditor because PwC was essentially auditing its own tax advice. A PwC spokeswoman says it has "maintained its independence with respect to Caterpillar at all times" and has complied with all applicable auditing rules. PwC still is Caterpillar's auditor.

Senate investigators said Caterpillar had allocated more than \$8 billion in profits from parts sales outside the U.S. to the Swiss subsidiary. Documents released by the subcommittee cite an IRS letter to Caterpillar in 2013 that denounced the use of Caterpillar SRL as an "abusive corporate tax shelter."

Caterpillar was as adamant about its innocence then as it is now. "We pay everything we owe," Julie Lagacy, Caterpillar's vice president for financial services, told lawmakers. She is now the company's chief information officer.

The tax strategy also has been examined by the Securities and Exchange Commission, which sought records about loans and product shipments between the Swiss unit and the parent company, according to documents obtained by The Wall Street Journal through a public-records request. The SEC also sought information about cash repatriation, the documents show.

The SEC accumulated two boxes of documents and 1.9

gigabytes of electronic records but ended its investigation in 2015 without pursuing enforcement action, according to the documents.

The Public Company Accounting Oversight Board has examined whether PwC's dual role as auditor and tax adviser was a conflict of interest. The audit regulator declined to comment on the status or outcome of its inquiry.

Caterpillar also got a subpoena from a federal grand jury in Illinois seeking financial information about its U.S. and foreign subsidiaries, according to securities filings by the company.

On March 2, agents from the Commerce Department's Office of Export Enforcement, the IRS's criminal division and the Federal Deposit Insurance Corp.'s inspector general's office raided Caterpillar's headquarters in Peoria, Ill., its parts warehouse in nearby Morton and a data center. Caterpillar has since moved its headquarters to Deerfield, Ill., a suburb of Chicago.

Federal raid

The searches lasted all night and into the next day. Agents were looking for information related to export data Caterpillar is required to submit to the government when it ships outside the U.S.

People familiar with the matter say investigators identified before the raid numerous instances in which they believe Caterpillar might have failed to file the required data. Search warrants reviewed by the Journal indicate the raid was focused largely on the Swiss unit.

Agents also seized documents from PwC's work site at the former headquarters in Peoria, according to a person familiar with the situation.

"I'm sorry that we had to experience this today," Mr. Umpleby, Caterpillar's chief executive, said in an internal memo to employees. He called Caterpillar an "honorable company."

As part of its investigation, the FDIC's inspector general commissioned a report by Dartmouth College professor Leslie Robinson, who concluded Caterpillar had engaged in tax and accounting fraud, according to a person familiar with the report. It hasn't been publicly released.

The report was based on publicly available financial information and nonpublic wire transfers, and it examined whether Caterpillar restructured Swiss cash into loans between its foreign subsidiaries and U.S. operations to offset a cash-flow deficit in the U.S., the person familiar with the report says.

Caterpillar wouldn't comment on the report but has privately criticized its assumptions and conclusions, according to people familiar with the matter. Caterpillar also has hired Obama administration tax official Stephen Shay and at least one other expert to defend the company's position.

—Richard Rubin
and Aruna Viswanatha
contributed to this article.

'We're a values-based company,' says Jim Umpleby, the CEO of Caterpillar.

than at home, where they would be required to pay 21% under the new tax law signed by President Donald Trump in December.

The new law cuts the U.S. corporate tax rate from 35% and provides companies with a one-time tax cut on earnings and cash held outside the U.S. The aim is to persuade companies to bring back those profits.

Even with those changes, companies still have an incentive to book profits in lower-tax foreign countries and keep the money there, says Elise Bean, who oversaw a Senate subcommittee's investigation of the Swiss subsidiary.

"The tax bill won't cause Caterpillar to close up shop in Switzerland, just the opposite," she says.

The Caterpillar spokes-

BOXES

Continued from Page One
fairs. Peter Luha, a guitarist and singer, posted a do-it-yourself video on how to create a foot drum out of cardboard, which he used in performances.

Even packaging pros have projects on the side. International Paper Co. spokesman Tom Ryan says his wife uses leftover boxes to line their garden as a way to prevent weeds. Sealed Air Corp., maker of Bubble Wrap, maintains an Instagram feed of repurposed material, including children's art of stuffed, smiling clouds raining Bubble Wrap raindrops and a voluminous clear plastic dress.

Amazon says it has been working to reduce packaging but doesn't mind customers coming up with uses for what it can't cut back on. Amazon's Director of Customer Packaging Experience, Kim Houchens, says she frequently hears of creative uses for the company's boxes. "There's far more than just cats," she adds.

But few have benefited more from the cardboard bounty than cats, which frequently shun toys, scratching

**Cole and Marmalade with their cardboard gingerbread house.**

posts and pet houses in favor of empty e-commerce containers. To perfect the art of the cardboard box cat castle, there is a cottage industry of YouTube training videos, library seminars, books and blogs.

Chris Poole, who used to work as a media producer at Big Cat Rescue, a sanctuary for exotic cats in Tampa, Fla.

now works full time on videos and social-media content developed around his cats, Cole and Marmalade.

In December, he and his wife posted a video to YouTube showing their nearly 700,000 followers how to make a giant, multiroom gingerbread house from leftover online shopping boxes and

some heavy-duty cartons from Home Depot. After cutting out doors and windows and hot glue-gunning the structure together, they used paper plates and halves of plastic Easter egg shells to create a candy effect for the roof. They used red and white wrapping paper to decorate cardboard posts and wallpaper the inside.

The gingerbread house, in their living room, replaces the couple's traditional holiday decorations, which the cat destroys by climbing on and eating, says Mr. Poole. "Marmalade is the reason we can't have a Christmas tree anymore," he says.

Mr. Poole says cats like the smell of cardboard in part because it is made from trees. The material is also handy for indoor pets who want to rub and scratch, and curling up in a box can help a cat feel protected and warm.

The feline love for cardboard has scientific backing. A study published in 2014 found that cats arriving at a Dutch animal shelter and given a box were able to better cope with stress and acclimate more quickly, according to the Applied Animal Behaviour Science journal.

Laura Peden says the 3-foot tall, four-room fortress she

built has helped calm down her 1-year-old Bengal, Todo. She and her husband taped together four brown and purple boxes from Chewy.com, left over from their litter, cat food and cat treat orders, and added a big white tube running out the front for Todo to crawl through. Todo climbs, perches and guards her territory—all important qualities for the breed.

"She's high energy, and we were desperate," adds Ms. Peden, describing Todo as "basically a dog and toddler in one."

The Memphis, Tenn., resident also attached string to the walls inside for clawing and taped a sign out front with their cat's name: "Todo's House."

"The only issue is that she wants to pull the tape" holding the structure together, Ms. Peden adds.

Morgan McBride of Charleston, S.C., the owner of a cat named Bear, constructed a two-story castle out of two brown Amazon boxes, complete with pink and yellow paw-printed flags. The top story is cut out like a turret, with Amazon's black and blue tape advertising its Prime membership service marking each peak.

"I like making things pretty," Ms. McBride says. "I think that most cat stuff is really ugly, so the idea of making something cute really appealed to me."

The Spokane Public Library in Spokane, Wash., held "Build Your Cat a Castle" events at two of its branches late last year as a way to whittle down its mountain of book and supply-order boxes. Librarian Cathy Bakken says the idea was "an instant click" when she saw a recently released book titled "Cat Castles: 20 Cardboard Habitats You Can Build Yourself," on the returns cart.

For the classes, Ms. Bakken put together a slide presentation with some of the ideas from the book, accompanied by pictures. One man crafted a "Yellow Submarine," with a porthole opening and a paper-tube periscope. Two youngsters made a cat castle with a working drawbridge. More than 50 people attended the two events, and Ms. Bakken is planning two more for this year.

"People can build these things for their small dogs, but I think there's just this innate love for cats," she says, "even though they don't seem to give us hugs back."

GREATER NEW YORK



Gov. Cuomo is ready to endorse a plan to ease gridlock in Manhattan by charging motorists to enter the borough's central business district.

Lines Drawn Over Congestion Fees

By PAUL BERGER
AND MIKE VILENSKY

With New York's streets clogged by traffic and its subway system struggling with delays, proponents of a so-called congestion charge on vehicles in Manhattan see new momentum for their cause in 2018.

Gov. Andrew Cuomo, during his annual State of the State address on Wednesday, is expected to endorse a plan that would charge motorists to enter Manhattan's central business district.

Details may not be released until later in the year, according to people familiar with the plan's development. Congestion pricing faces significant political hurdles and, even with support, could take years to set up.

The people familiar with the discussions say that establishing a fee for vehicles entering Manhattan's business district south of 60th Street is one of a menu of options Mr. Cuomo is considering as he attempts to raise revenue for the city's beleaguered subway.

Options include a surcharge on app-based services such as Uber and Lyft, increasing a 50-cent surcharge on taxi fares that goes to the Metropolitan Transportation Authority, which runs the subway, and encouraging the city to better enforce traffic regulations.

A spokesman for Mayor Bill de Blasio said the city has already stepped up traffic enforcement as part of a plan launched last year to reduce congestion.

"Ticket numbers are up for both double parking and block-

Despite Traffic Drop, Gridlock Is Worse

congestion was caused by many factors, including increases in employment, tourism and construction.

Mr. Schaller singled out the swift rise of app-based services, such as Uber and Lyft, as a prime contributor to congestion. More than 68,000 app-based vehicles are licensed in the city, dwarfing the 13,600 licensed yellow taxis.

App-based services already pay an 8.875% sales tax on rides. Most of that money is divided between the city and the state. Uber opposes an additional surcharge, though it supports congestion pricing.

"Uber believes a new transit-tax system should fully fund mass transit by setting fees based on how crowded the roads are, not the type of vehicle people are traveling in," said Alix Anfang, an Uber spokeswoman.

ing the box, two of the main offenses that slow down traffic," said the spokesman, Austin Finan.

Proponents of congestion pricing say it would increase average traffic speeds in the city while providing as much as \$1 billion annually for the subway, which carries about 5.7 million passengers on an average weekday.

This summer, following years of declining service and a string of high-profile disruptions, the MTA launched an \$836 million plan to restore and modernize the subway. The plan relies upon the hiring of thousands of subway workers, which will strain the authority's finances for years.

At the time, Mr. Cuomo said that congestion pricing's "time has come." Mr. de Blasio says he favors an income tax on the city's highest earners to fund the MTA.

"In a choice between funding public transit by taxing millionaires or by taxing working and middle-class people from the boroughs, there's no question where the mayor stands," said Freddi Goldstein, a spokeswoman for the mayor. "If the governor comes up with a new plan that isn't regressive, we'd love to review it."

Asked about Mr. de Blasio's latest response to Mr. Cuomo's support for congestion pricing, a spokesman for the governor said: "The mayor's idea isn't

serious and legislative leaders called it dead on arrival. The governor has been clear we need to reduce gridlock, cut emissions and fund mass transit, which is why he empaneled Fix NYC to explore all options that could accomplish these goals."

The panel includes Sam Schwartz, a proponent of Move NY, a congestion-pricing option that rose out of former Mayor Michael Bloomberg's plan for congestion pricing, which died in the state legislature in 2008. Move NY proposes tolls on free East River crossings and reducing by nearly half tolls on crossings such as the Verrazano-Narrows Bridge. It also proposes a surcharge on taxis, black cars and app-based services based on time and distance in Manhattan south of 96th Street.

Mr. Cuomo may have a tough time pushing the congestion pricing plan through the state Legislature, where lawmakers in both parties said they were concerned about the idea.

Assemblyman Daniel O'Donnell, a Democrat, said a plan could push more congestion and pollution into neighborhoods, like his Harlem-area district, that sit just outside a higher-priced zone.

Senate Majority Leader John Flanagan, a Republican from Long Island, said the city should be on the hook for funding subways: "I don't think that's unreasonable," he said.

Sen. Jeff Klein, a Democrat who represents the Bronx, said he is awaiting more information on the plan but added he is "hopeful it doesn't create new tolls."

Lawmakers Brace For Difficult Issues And Thorny Politics

By MIKE VILENSKY

Budget Concerns
Corruption trials. Presidential intrigue. A plan to flip the Senate.

Albany's 2018 legislative session, which starts Wednesday and continues until June, is set to be a messy one, said New York lawmakers, aides and analysts.

"It's going to be like no session I've ever had," said Assemblyman Daniel O'Donnell, a Democrat who has represented Manhattan since 2003.

Raising the stakes, all 213 legislators and Democratic Gov. Andrew Cuomo are up for re-election in 2018. Here are some of the issues set to complicate the next few months at New York's state Capitol.

Senate Control

Warring Democratic factions in the state Senate recently struck a deal to reconcile and form a majority if the party wins a coming special election.

That could hand Democrats full control of the state Legislature midway through the session—they already hold a majority in the Assembly—but lawmakers are hedging their bets after a year of intraparty friction.

"I'm taking it one step at a time," said Sen. Jeff Klein, a Bronx lawmaker who leads a faction of Democrats who are key to the unity deal.

Sen. John Flanagan, the Republican majority leader allied with Mr. Klein's group, dismissed the notion that deal would stick and thus disempower him.

"I'm confident whether it's January 2nd or June 2nd, we will be presiding over the Senate," he said.

#MeToo

A recent lawsuit brought by a state employee charging a former top Cuomo aide with sexual assault has brought the national wave of concerns about sexual misconduct to Albany's doorstep. The former aide has denied assaulting the employee.

Now lawmakers on both sides of the aisle are planning proposals to confront sexual misconduct in government.

Mr. Cuomo has said he plans to address the issue in more detail at his State of the State address, scheduled for Wednesday in Albany.

If there's anything the state should have learned from prior cases it is to take allegations seriously and not be dismissive of them," said Assemblywoman Nily Rozic, a Queens Democrat.

2020 Presidential Vote
With Mr. Cuomo and Democratic New York Sen. Kirsten Gillibrand up for re-election in 2018, speculation is swirling that one or both may run for president in 2020. Both have said their focus is on 2018, but national and local observers will be watching closely for how they fare at the polls and if their messages resonate.



Gov. Cuomo will give his State of the State on Wednesday.

Albany on Trial

Just two weeks after Mr. Cuomo starts the session with his State of the State speech, the trial of his former top aide, Joseph Percoco, is scheduled to begin in Manhattan.

Mr. Percoco, who has pleaded not guilty, is charged with securing state contracts for companies in exchange for bribes. Because Mr. Percoco was so close to Mr. Cuomo—the governor has referred to him as his brother—and the charges center around state programs, lawmakers expect Albany itself to come under examination.

After Mr. Percoco's case, a former Cuomo economic-development adviser goes on trial concerning allegations of bid-rigging state projects. The former leaders of the state Legislature—Sheldon Silver and Dean Skelos—also are set for retrials in 2018 over corruption convictions that cost them their seats but have since been overturned.

Mayor Vows to Champion Working New Yorkers

By LESLIE BRODY

Mayor Bill de Blasio was sworn in for a second term on New Year's Day, in a ceremony that brought Vermont Sen. Bernie Sanders to lower Manhattan to promote their shared promises to fight income inequality.

Mr. Sanders, an Independent, administered the oath of office on the steps of City Hall, praising the Democratic mayor for making New York "one of the most progressive cities" in the U.S.

Puffing white clouds of breath in the 16-degree air, the senator joked that "by Ver-

mont standards, this is a warm and pleasant afternoon."

Mr. Sanders railed against efforts by the Republican-controlled federal government to roll back environmental regulations, health-care coverage and legal protections for young immigrants brought here by parents without documentation. He praised New York City leaders for going in the other direction.

"What Mayor de Blasio and his administration understand is that in this country, in the home of Ellis Island, our job is to bring people together with love and compassion and to end the divisions and the attacks

that are taking place," he said.

Mr. de Blasio, 56 years old, heads into a second four-year term boasting a decline in major crimes and the expansion of free full-day prekindergarten. Critics contend he hasn't done enough to address homelessness, the lack of affordable housing and mounting city spending, among other issues.

Under the first Democratic mayor of New York City in more than two decades, the city has added more than 25,000 employees and spending has increased by nearly 20%, to roughly \$61.3 billion this year, from about \$51.2 billion in fiscal 2014. Mr. de Blasio has said the city's strong economy allows it to help New Yorkers who need it most.

Mr. de Blasio didn't announce new initiatives, but echoed campaign vows to champion an agenda on behalf of working people. "The true owners of this beloved place are not the big landlords and developers, not the titans of Wall Street and the 1%," the mayor said. "The deepest, truest stakeholders of this town are the people who do the work, who every day make this city come to life, but have too often not reaped the rewards."

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GREATER NEW YORK

The Party's Over



CONFETTI CLEANUP: New York City sanitation workers swept up trash from the streets in Midtown Manhattan on Monday after revelers braved frigid temperatures to ring in 2018 in Times Square.

GREATER NEW YORK WATCH

NEW JERSEY

Domestic Shooting Leaves Four Dead

A 16-year-old New Jersey boy armed with a semiautomatic rifle shot and killed his parents, sister and a family friend inside their home, authorities said Monday.

The shooting in the shore town of Long Branch happened less than 20 minutes before midnight on New Year's Eve, said Monmouth County Prosecutor Chris Gramicci.

A motive for the shooting hasn't been disclosed.

The teen's name also hasn't been released, and it wasn't known Monday if he had an attorney.

—Associated Press

CONNECTICUT

Changes Considered For Child Porn Laws

Connecticut officials are drafting proposed changes to the state's child pornography laws that would drop mandatory-minimum prison sentences in some cases involving defendants with mental health or developmental disabilities.

Former State Public Defender Thomas Ullmann says the potential revisions are the result of frustration by judges, prosecutors and defense lawyers with the strictness of current laws. People with autism, for example, might not understand that what they are downloading to their computer is illegal, defense lawyers say.

—Associated Press

HURRICANE TRIP

Connecticut Senators To Visit Puerto Rico

Sens. Richard Blumenthal and Chris Murphy are planning to travel to Puerto Rico to meet with local officials and see firsthand the work that remains to be done to recover from Hurricane Maria.

Mr. Blumenthal and Mr. Murphy say they will spend Tuesday and Wednesday on the island. The Connecticut Democrats plan to use the information to push for additional disaster relief.

The hurricane hit on Sept. 20 with winds of up to 154 mph. Puerto Rico authorities said Friday that nearly half of power customers in the U.S. territory still lack electricity.

—Associated Press

City Ballet Leader Retires After Claims of Misconduct

BY CHARLES PASSY

Just weeks after taking a leave of absence from his post as ballet master-in-chief at the New York City Ballet, Peter Martins announced his retirement on Monday, according to the company.

Mr. Martins, 71 years old, has been in the spotlight this past month as accusations of sexual harassment or physical mistreatment involving him have surfaced. He has been associated with the New York City Ballet for more than 40 years—first as a dancer, then as an artistic leader.

Mr. Martins has also served as artistic director of the

ASSOCIATED PRESS

Peter Martins has been associated with the New York City Ballet for more than 40 years.



School of American Ballet. He is similarly retiring from his role at the school.

In his letter of resignation to the boards of both the company and the school, Mr. Martins said he denies that he "engaged in any such misconduct," but that he wanted to "bring an end to this disruption which has enveloped the

Ballet and the School."

The letter was provided to The Wall Street Journal by a New York City Ballet representative.

Despite Mr. Martins's announcement, New York City Ballet Chairman Charles W. Scharf said an investigation into Mr. Martins's conduct would continue.

"The board takes seriously the allegations that have been made against him and we expect the independent investigation of those allegations to be completed soon," he said in a statement.

The news of Mr. Martins's retirement was first reported by the New York Times.

Test for Newark Public Schools: Boosting Teacher Attendance

BY LESLIE BRODY

Out of Class

Number of days that Newark Public Schools teachers were absent from class in 2016-17



Source: Newark Public Schools

THE WALL STREET JOURNAL.

As Newark gears up to regain control of its schools after more than two decades of state takeover, one of many challenges ahead will be getting more teachers to show up consistently.

District officials say 21% of teachers at Newark's traditional public schools missed at least 20 days in the 2016-2017 school year—roughly one out of every 10 work days. Some were excused for jury duty or other reasons, but in most cases, they called in sick or took personal time allowed by their union contract.

The state board of education decided this fall that Newark, New Jersey's largest school district, had made enough academic progress to get back control of its schools, and a two-year transition plan will kick off Feb. 1.

State-appointed superintendent Chris Cerf, who will step down that day to ease the search for a successor, called

teacher absenteeism a "very significant issue" that hurts student learning and costs more than \$8.5 million yearly in substitutes.

While some Newark schools have strong staff attendance,

Mr. Cerf said that some need a culture change. While it is important to support teachers who need time to recover from illness, he said, "obviously the continuity of the educational experience is very important academically" for the district's 34,200 K-12 students.

Newark Teachers Union President John Abeigón said poor parents who lack child care often send sick children to

school and spread germs to staff. Beyond that, he blamed many absences on low morale due to the district's pay-for-performance system and use of achievement data as part of teacher ratings. Going to work "shouldn't be stressful to the point where it's making you sick between anxiety and paranoia," he said.

District data said 48% of roughly 2,700 Newark teachers missed at least 13 days in the 2016-2017 school year, not including time off under the Family and Medical Leave Act. That puts it on the high end for teacher absenteeism among U.S. cities, according to studies.

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LIFE & ARTS



NANCY STAHL (4)

BONDS | By Elizabeth Bernstein

The Year's Best Relationship Advice

Top suggestions from readers include spoiling your partner, listening and knowing when to chuck it all

I RECEIVE thousands of letters from readers of my Bonds column each year, and many offer hard-earned relationship advice. Much of it is excellent and inspiring. One reader says she is mindful not to compare her life to characters in movies—or to friends on Facebook. Another says he always tries to say something positive instead of negative. A third recommends giving people “a gift” of attention without expecting anything in return.

This year I've decided to share the bounty. Here's the best advice I've heard from people who are not therapists or relationship researchers this year.

Listen, Breathe, Listen

Steve Miksis, a 66-year-old accountant in Santa Rosa, Calif., believes there is no greater gift than genuinely listening to a person, without interrupting or judging or inserting your opinion. And so he works hard at being a better listener.

He employs a technique he learned when he was mountain climbing on Mount Whitney in California. While descending a particularly harrowing passage, he felt panic rising. He thought of an article he'd read about how the Marines train their snipers to “plan, breathe and execute,” because deep breathing dissipates cortisol. Then he plotted out his next step, sucked in a deep breath, and took it.

Now, he reminds himself to “just breathe” when he is listening to someone, especially when he starts to feel defensive, or triggered to react. As he takes deep breaths, he

says, his hearing sharpens, he becomes more attuned to nonverbal cues, and he feels more emotionally open to what he is hearing. “That breath stops time—it gives you a space and it gives the other person a space,” he says.

Assume the Best

Too often, we jump to conclusions and assume the worst about a situation or a person's intentions. (Think of how you feel when someone doesn't return a text or call—Is this person angry? Rude? Dead in a ditch?) Don't do this.

Geoffrey Greif, 68, a professor at the University of Maryland School of Social Work who lives in Baltimore, says he learned this tip through his work, which is focused on finding the strengths in others. If he is not sure what someone thinks about him or what the person means by what he or she said, he tries to assume it is positive. This helps him to feel calm and steady. And it keeps him from entering into the discussion on the defensive, he says.

The tactic comes in handy with colleagues, students and his wife of 43 years, who is also a professor. Dr. Greif says both he and his wife often get absorbed in their work and can sometimes ignore each other. “If we each assume the

lack of responsiveness has nothing to do with our relationship and more to do with a love and commitment to our work, the better off we are,” he says.

Prioritize Your A Team

Everyone's busy. We need to consciously make time for the people we love.

Lo Myrick, 30, a business consultant in Charlotte, N.C., thinks of the people in her life as belonging to teams or squads. Her “A” squad is made up of her closest friends and family, her “B”

squad is “friends and professional network” and her “C” squad is made up of acquaintances. This approach helps her prioritize and make sure she sees the people she is closest with in person often enough.

She also stays in touch with everyone via phone, text or social media.

“It takes a strategy to build relationships and have a happy life, just like it takes a strategy to build a career or business,” Ms. Myrick says.

Mutual Spoilage

Kevin Caron, 57, a sculptor in Phoenix, says he and his wife com-

pete with each other—to see who can be nicer. The couple, who has been married 25 years, calls this “mutual spoilage” and even has a flag with the phrase on it, in Latin.

Here's how the concept works: One spouse spots something that needs to be done—emptying the dishwasher, taking out the trash, doing the laundry—and does it before the other person does. The tasks may be mundane, Mr. Caron says, “but each is a small act of love and respect.”

The only rule: You can't point out what you did. (That would be asking for credit.) “The silence is part of the fun,” Mr. Caron says. “And we all benefit, including the dog and the cat.”

Be Easy to Love

Relationships can be stressful. You need to consider your role in the situation, says Margit Sylvester, 46, a civilian police supervisor in Cary, N.C.

She gives examples: “Boss snubs his/her nose at you upon first greeting of the day? It isn't all about me!” “Left a message for a friend and they haven't responded? Don't jump to conclusions which would

suggest there is something wrong with me or the relationship.”

“Hubby not a naturally romantic guy? Learn to recognize the ways in which he expresses his devotion and tell him out loud how much you appreciate it.”

“Everyone is on a journey that only they can fully recognize,” Ms. Sylvester says. “Don't make the mistake of filling in their gaps with your story.”

F--- it Bucket

Life can be overwhelming. Not everything is worth worrying—or even thinking—about.

To file away “the trash,” 81-year-old Don Nelson, a retired president of a security-systems company in Falmouth, Mass., has created a mental bucket. Then he sorts his information, addressing issues that are important—his wife's decline from Alzheimer's or charity work, for example. Everything else? “F--- it and into the bucket.”

What's in there? Everything political that is harsh and nasty. (“It's a good thing the bucket has no bottom in today's scene.”) News of tragedies that are upsetting but he can't change. And sports. (“The Red Sox blew the game? Into the bucket. They play again tonight.”)

“Give it a try,” says Mr. Nelson. “It's like cleaning your mental closet.”

WHAT'S YOUR WORKOUT? | By Jen Murphy

YOU CAN BE 66 AND STILL LOVE POGO STICKS

WHEN IT'S 1 A.M. and Kim Manwaring can't sleep, he goes outside and jumps on his pogo stick.

The 66-year-old pediatric neurosurgeon says pogoing helps his insomnia. It's also his go-to workout. Dr. Manwaring started exercising on what many consider a children's toy 11 years ago when he was diagnosed with osteopenia, a condition of lower-than-normal bone density. With a 70-hour workweek, he'd been proud of his modest exercise routine of walking, hiking and biking. But he realized that to improve or at least maintain bone density, he needed to add weight-bearing exercises.

His research found that weightlifting, jumping rope, bouncing on a trampoline or pogoing would benefit him most. He first tried jumping rope. “It was portable, intensely aerobic and burned a lot of calories fast,” he says. “But it was also really hard on my knees.” He then started to research

pogo sticks. Jumping on a pogo stick comes with the risk of falling, and he says he realizes it might not be suited to most people with his condition. But Dr. Manwaring says he's always had good coordination.

He discovered a pogo stick called the Vurtego. Unlike the metal, spring-loaded toy version, this adult model is designed with an air piston that can be customized to the user's height and weight. “It has a much softer, trampoline-like feel on contact with the ground, which is easy on the knees,” he says.

The newest Vurtego model can hit heights of 10-plus feet, but Dr. Manwaring keeps his jumps between 2 to 3 feet. “I'm now at retirement age,” he says. “I have no interest in acrobatics. I just go up and down, maybe side to side, and try to avoid falls.”

Tests on his bones have shown a “gratifying” improvement. Please see POGO page A11



Kim Manwaring pogos for five-minute stretches two to five times a day at his home in Phoenix. He also keeps a pogo stick at his homes in Florida and Utah.

LIFE & ARTS

YOUR HEALTH | By Sumathi Reddy

Counting Time, Not Calories

Time-restricted feeding doesn't focus on what foods you can eat, just when you can eat them—ideally over 8 to 12 hours a day

STOP COUNTING CALORIES. It's the clock that counts.

That's the concept behind time-restricted feeding, or TRF, a strategy increasingly being studied by researchers as a tool for weight-loss, diabetes prevention and even longevity.

In TRF, you can eat whatever you want and as much as you want—just not whenever you want. Daily food intake should be limited to a 12-hour window, and ideally cut down to eight to 10 hours. But you can pick the hours you want to eat. (Note: This doesn't mean you should stuff your face with cupcakes. Experts say you should dine as you normally would. Only noncaloric drinks like water and black coffee are allowed during fasting hours.)

Despite a lack of dietary restrictions, most people following TRF end up consuming fewer calories and lose weight, according to studies and experts. Preliminary evidence also shows other health benefits of fasting for 12 hours or more, including lower blood pressure and improved glucose levels, and physiological changes linked to slowing the aging process. Researchers believe that when the body kicks into fasting-mode it more efficiently breaks down food and fat, in particular.

Satchidananda Panda, a professor at Salk Institute for Biological Studies in San Diego, first tracked the effects of time-restricted feeding in mice. In 2015, he expanded his studies to include humans, using a free research app he created, called "MyCircadianClock," to follow 156 people. Dr. Panda found that 50% ate over the course of 15 hours and only 10% restricted meals and snacking to the recommended 12 hours or less.

The findings, published in the journal Cell Metabolism, showed that when eight overweight people who naturally ate for 15-plus hours a day restricted their eating to a 10-hour window for 16 weeks, they lost 4% of their weight. A year later, they reported sticking to the plan, even though they didn't have to, and had kept the weight off.

"All of them said they slept better, and they felt more energetic throughout the day," said Dr. Panda. "They were actually feeling less hungry."

TRF studies of mice—which provide the bulk of research on the strategy—have found that the body, when fasting for half a day or more, has more time to produce the components for cellular repair, break down toxins and coloring agents in food, and repair damaged DNA in the skin and stomach lining, according to Dr. Panda. There is also some evidence that TRF may reduce the risk of breast cancer.

Most of the repair processes peak around 12 hours after fasting



starts, said Dr. Panda.

Julie Shatzel, a family medicine doctor at Mercy Medical Group in Folsom, Calif., said she became a proponent of TRF after coming across Dr. Panda's study in mice from 2012. She started recommending that her overweight patients restrict their eating to 11 to 12 hours a day. Since then, she's recommended TRF for patients who need to lower their blood pressure or blood glucose levels.

"Many patients have gone off of blood-pressure medications," she said. "In some cases, I've seen the reversal of prediabetes."

Dr. Shatzel is now running a weight-loss study with the Salk Institute, tracking patients through Dr. Panda's app for four months.

Vivian Rootness is among them. For the 66-year-old El Dorado, Calif., resident, dinner parties now start at 4 p.m.

"I've just told all my close friends that I have to eat before seven o'clock and they've accommodated," said Ms. Rootness, a hair stylist, artist and biodynamic gardener who had tried countless other diets.

Since restricting eating to 10 to 12 hours a day about five months ago, she has lost around 6 pounds.

Her typical schedule begins with coffee at around 7 a.m. and always ends before 7 p.m. While she tends to eat a healthy diet, Ms. Rootness said she has indulged in dessert more often since starting TRF—and still lost weight.

"I don't have to count calories or think about what I'm eating now," she said. "It's also easier be-

schedules, eating from 8 a.m. to 5 p.m., or from noon until 9 p.m. for one week and then, after a two-week break, eating on the other schedule for another week.

"Both improved their glycemia responses," Dr. Heilbronn said, referring to the effect food has on blood sugar levels. While the men lost weight, she said, it wasn't enough to account for the improved glucose levels. "There's something else going on that's not just driven by weight change," she said.

Courtney Peterson, an assistant professor in nutrition sciences at the University of Alabama, Birmingham, found similar results in a pilot study of eight prediabetic men.

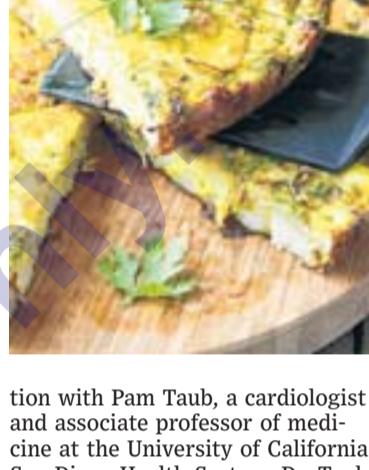
Participants ate six hours a day for five weeks and then ate the exact same foods over 12 hours for five weeks. Dr. Peterson said researchers found no difference in the men's blood-sugar levels, but their insulin sensitivity, or the body's ability to process sugar, and blood pressure both improved. The study is under review for publication.

Dr. Panda, meanwhile, is working on a new, larger clinical TRF trial of 150 firefighters. Funded by the U.S. Department of Homeland Security, the study is a collabora-

How to Eat in Under 12 Hours

Vivian Rootness started following a regular TRF schedule about five months ago, eating during a 10-to-12-hour window each day and occasionally restricting herself to eight hours a day. Here's a sample schedule of her routine:

- 7 a.m.** - Coffee with cream (no sugar)
- 10 a.m.** - ▶ Frittata with cheese and a vegetable like cauliflower
- 1 p.m.** - Salad with apples, chicken and brown rice. Slice of sourdough bread with butter.
- 3 p.m.** - Biscotti and coffee
- 5 p.m.** - 6 oz. piece of steak with roasted broccoli with garlic and gnocchi with butter sage, and a glass of wine
- 6 p.m.** - Chocolate chia pudding with berries



tion with Pam Taub, a cardiologist and associate professor of medicine at the University of California San Diego Health System. Dr. Taub is also conducting a separate study in which UCSD patients with metabolic syndrome restrict eating to 10 hours a day. Preliminary data show weight loss and improved fasting glucose levels.

Konstantin Shevchenko, one of the participants, said he has lost 30 pounds and seen his blood pressure and glucose levels improve since starting TRF in late August.

The 48-year-old animal technical at UCSD now eats between 9 a.m. and 7 p.m., whereas previously he ate as late as 10 p.m. "When you eat by schedule, automatically I started to eat a little bit less," said Mr. Shevchenko.

At the University of Illinois Chicago, associate professor of nutrition Krista Varady tested a strict eight-hour diet among 50 obese people in a 12-week study.

Participants consumed about 300 fewer calories a day and lost on average 7 to 8 pounds, she said. all of the weight loss was due to a decrease in fat mass, not muscle mass, said Dr. Varady. The study is under review for publication.

Despite a lack of dietary restrictions, most people following TRF lose weight.

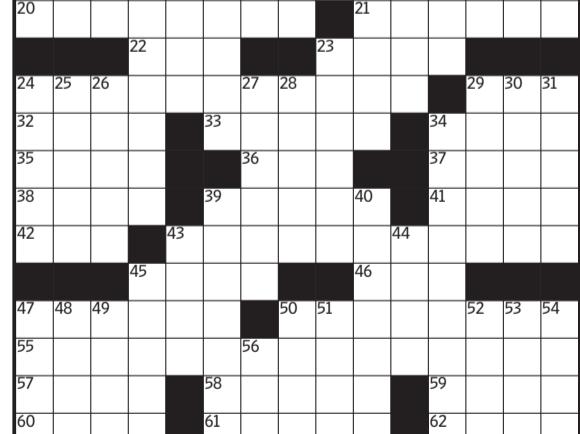
cause you're not depriving yourself of things."

Preliminary findings from one study show that what time participants start eating may be irrelevant, and that health benefits may be independent of weight loss.

Leonie Heilbronn, an associate professor at the University of Adelaide in Australia, is studying the effects of TRF in 16 overweight men at risk of developing type-2 diabetes. The men followed two

participants ate six hours a day for five weeks and then ate the exact same foods over 12 hours for five weeks. Dr. Peterson said researchers found no difference in the men's blood-sugar levels, but their insulin sensitivity, or the body's ability to process sugar, and blood pressure both improved. The study is under review for publication.

Dr. Panda, meanwhile, is working on a new, larger clinical TRF trial of 150 firefighters. Funded by the U.S. Department of Homeland Security, the study is a collabora-

The WSJ Daily Crossword | Edited by Mike Shenk**'18 BEGINS | By Alice Long**

Across	32 Cause of some grimacing	46 Cry from 44-Down
1 Queens team	33 Mount for a moving camera	47 Pack leaders
5 Letter before lambda	50 Leftover bits	55 "18 Poems"
10 Bunch ofbettors	57 Did some sketching	58 Israel's Yitzhak
14 Have ___ in one's bonnet	59 Solitary	59 Solitary
15 Current spot	60 Authenticity indicator	61 Fit for sentry duty
16 Drive	38 One might get a big tip	62 Squeezed (out)
17 18-wheelers	39 Gave an edge	63 Detached DNA
20 Enemy group	41 Arthur Ashe's alma mater	64 "2001" computer
21 Red-ink amounts	42 Banned pesticide	65 "2001" computer
22 One-million connector	43 18 holes	66 "2001" computer
23 Scoop holder	45 Like the Gin in Germany	67 Previous Puzzle's Solution
24 18 years	2 River of northern Spain	ASH GRAMS SELAB ALA RICOH ACUTE ROSE ABOVE COLON PB STY PEA CH FUZZ LAIR HEEF FIESTAWARE AWOL ALFA AMISH TAME KIR SUNSETS NAG IKEA DETRE DINA REE COTTON TAII SEA IDAS SUGAR POP CLYDE OFAIR OUTBACKER BOWLS PLEASE ELLI ASKS SINGH SIC
25 Pop	▶ Solve this puzzle online and discuss it at WSJ.com/Puzzles .	The contest answer is PAGEANT. Each of the starred answers begins with the name of a college football bowl game played in a U.S. city (ROSE in Pasadena, PEACH in Atlanta, FIESTA in Glendale, SUN in El Paso, COTTON in Arlington, SUGAR in New Orleans and OUTBACK in Tampa). The first letters of the cities spell the contest answer.

Weather

Show 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=tstorms; r=rain; sf=snow flurries; sn=snow; l=ice

Today Hi Lo W **Tomorrow** Hi Lo W

City	Hi	Lo	W	Hi	Lo	W
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City	Hi	Lo	W	Hi	Lo	W
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Today Hi Lo W **Tomorrow** Hi Lo W

City	Hi	Lo	W	Hi	Lo	W
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City	Hi	Lo	W	Hi	Lo	W
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International

Today Hi Lo W **Tomorrow** Hi Lo W

City	Hi	Lo	W	Hi	Lo	W
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Today Hi Lo W **Tomorrow** Hi Lo W

City	Hi	Lo	W	Hi	Lo	W
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City	Hi	Lo	W	Hi	Lo	W
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LIFE & ARTS

ART REVIEW

Photography's Shifting Shore

Stephen Shore's career has been marked by frequent changes of direction as well as single-mindedness

BY RICHARD B. WOODWARD

New York

THE MUSEUM of Modern Art may have a longer relationship with Stephen Shore than with any living artist. He was only 14, in 1962, when the photography department bought three prints from him—grainy 35mm black-and-white shots of New York—and became a reliable supporter.

By 1976, when the museum gave him a one-man show that opened on his 29th birthday, the pictures were altogether different. Poker-faced views of America, made on the road with an 8x10 camera, they had a smoothly articulated color that for some was as shocking and inspirational as William Eggleston's, displayed in a more infamous show there the same year.

That MoMA has now devoted 10 of its third-floor galleries to Mr. Shore is therefore entirely justified. Quentin Bajac, chief curator of photography, has arranged more than five decades of work (1961-2015) as more or less a chronology that plots the 70-year-old's frequent changes of direction as well as his single-mindedness.

Mr. Bajac has expanded on a proposal that guided the retrospective organized by Marta Dahó in 2014 at the Fundación Mapfre in Madrid—namely, that Mr. Shore's photographs, and his ideas about photography, bridge the supposed divide between documentary realism and Conceptual art.

Mr. Shore's unique responses to trends in the art world and to updates in photographic technology—a theme of the show—were evident early. As a teenager, he was shooting on the streets of New York with still and movie cameras. One of his short films caught the attention of Andy Warhol, who invited the youngster to capture the goings on at the Factory—the results of which (1965-67) fill the first room here.

Through Warhol and others in the downtown scene, Mr. Shore befriended artists in many fields. The camera became a handy tool for those, labeled Minimalists or Conceptualists, who wanted to deglamorize the world (and the artist's role) by documenting mundane things or repeated actions. Some of Mr. Shore's forays (1969-70) with serial imagery occupy the second room.

His main contribution to this era of experiment was his 1971 installation, "All the Meat You Can Eat," re-created in the third room. Acting primarily as a curator, Mr. Shore hung a crazy mélange of published photographs in a SoHo loft: postcards, tabloid news items, family memorabilia, porn, an Eadweard Muybridge close-up of a tree, glossies of movie stars, and portraits of Mr. Shore himself, shot with a toy camera shaped like Mickey Mouse.

It's hard to call a show groundbreaking that almost no one saw. But more than one "subversive" artist and curator has since, known-

ingly or not, built shows on Mr. Shore's premise that photographs needn't be tasteful to be fascinating as ubiquitous cultural artifacts.

The series "American Surfaces" was just as cheeky and even more prescient. A travel diary (1972-73), edited down to 190 Kodacolor drugstore prints—friends he met, meals he ate, toilets he sat on—the project was largely unknown until expanded and published as a book in 1999. But for the generation that overshares on social media, "American Surfaces" can be cited (or blamed) as a forebear.

Had he died in 1973, Mr. Shore would likely not warrant a MoMA retrospective. It is only after he decided to challenge himself to make coherent pictures of the world's disarray with a 4x5 or an 8x10 camera that his deadpan humor and problem-solving intelligence found the right balance. Introduced about halfway through the show, these American landscapes from the '70s and '80s constitute his finest work. As cavalier and rowdy as his snapshots had been, his large-format color prints often luxuriate in patient observation and silence, whether on the empty streets of a Pennsylvania town or the hills of Montana.

Like Walker Evans, he learned that attention to details of time and place was often its own reward. Lobsters in a brown cardboard box on a green lawn say "Maine in summer" without a need for words. An outdoor phone booth stands beside a saguaro cactus at a garage that is also a bus stop: It could only be the American Southwest circa 1976.

Closing the show are color photographs from travels in Israel (2010-11) and Ukraine (2012), and black-and-white close-ups of archaeological sites. These are less compelling as pictures but, like the examples here of his stereographs, eBooks and Instagram posts, proof of a tirelessly searching mind.

His tool of investigation, from age 9 on, has been the camera. Despite its many divagations, his career as an artist and teacher has always circled around the puzzles



Clockwise from top: '2nd Street, Ashland, Wisconsin, July 9, 1973'; '1:35 a.m., in Chinatown Restaurant, New York, New York 1965-67'; 'U.S. 93, Wikieup, Arizona, December 14, 1976'; 'Breakfast, Trail's End Restaurant, Kanab, Utah, August 10, 1973.'

and pleasures of photography. This retrospective chronicles with unobtrusive authority a bold explorer's unflagging enchantment with his profession.

Stephen Shore
Museum of Modern Art, through May 28, 2018

Mr. Woodward is an arts critic in New York.



POGO

Continued from page A9
ing reversal and stabilization." He calls his pogo workout "a valuable component of maintenance mode," he says. That also includes vitamin D and calcium supplements and medications that enhance bone density.

Dr. Manwaring splits his time between Orlando, Fla., where he practices, and Phoenix and Provo, Utah, where he conducts research. He keeps a pogo stick at each of his residences. "My wife has no interest in it," he says. "But most neighbors who see me immediately ask if they can try. Unlike most exercise, it makes you feel like a kid again."

The Workout

Dr. Manwaring performs two to five five-minute bursts of pogoing throughout the day. "I use it as an intense interval exercise, doing 100 to 200 jumps to get my heart rate up," he says. "It's enough to just break a sweat." He says his pogo breaks offer him a "therapeutic pause" from work and help him refocus. "It requires attention and endurance to stay upright," he says. "If you go too slow, you're going to fall."

He says to pogo continuously requires full-body engagement. His legs take on the heavy lifting of jumping repeatedly, and his core must stay engaged to maintain balance. His shoulders, triceps and biceps get worked from pushing and pulling on the handlebars.



When Dr. Manwaring needed to add weight-bearing exercise to his workout routine, he decided to skip traditional weights in favor of a pogo stick.

Dr. Manwaring usually pogos in his driveway or in the front yard. "It's really quiet, so if I go out in the middle of the night, the neighbors won't be disturbed," he says. He will sometimes hopscotch with forward, backward and side jumps. He occasionally competes against his neighbors or will track his progress against online pogo groups. He likes to set goals for himself and uses apps, such as Accelerometer

and Sensor Kinetics, that count total jumps and allow him to calculate the height of his jumps.

The Diet

Breakfast is Cracklin' Oat Bran topped with whole milk and a glass of orange juice. "I'm picky about my O.J. I only drink Natalie's," he says, referring to a family-run juice company in Florida. He tries to stick to a Mediterranean diet of

Pogo Like a Pro

Jumping on a pogo stick isn't just child's play. Newer models designed for adults deliver a great workout. Biff Hutchinson, who holds the world record for the highest jump on a pogo stick, just over 11 feet, teaches pogo classes in Burley, Idaho.

He says most pogo sticks on the market are designed for children: "An adult would be too heavy for them." He suggests a model with an air spring that allows for weight customization. More air creates a stiffer spring. "It's good to start at one quarter of your weight," he says. "If you weigh 200 pounds, you'd pump the pogo to 50 [pounds per square inch]."

Mr. Hutchinson says it's important to begin on a flat surface with

a bit of grip, like rough asphalt or firm grass. "Put the center of your feet, as opposed to the balls, on the pegs, and keep your shoulders above the handlebars for the best center of gravity," he says. Start by jumping vertically, then advance to hopping side to side, he says. "You want to keep the handlebars as close to the hips as possible for stability," he says. Mr.

Hutchinson says pogoing is also great cross-training for skiing and BMX biking. He suggests wearing a helmet and even ankle braces. "Rolling an ankle is the most common injury," he says. "If you feel like you are going to fall, quickly throw the stick away from your body, so you don't come down on top of it." As with any sport, he says the more you practice, the better you'll get.

skill level and ambition, but still very fun," he says. A Vurtego pump, which helps adjust the power of jumps, costs \$25 to \$40.

He likes to pogo in a sneaker with a thick sole. He wears a light-weight bicycle helmet and mouth guard for protection. "When I first started, I was not so cautious," he says. "My foot slipped and the pogo flew up to hit my chin, resulting in the need for tooth repair."

© STEPHEN SHORE/303 GALLERY/NOMA



FROM LEFT: MARK PETERMAN FOR THE WALL STREET JOURNAL; NICK MCINTOCK

SPORTS

NFL | By Jason Gay

Will the Vikings Host a Super Bowl?

Not trying to jinx it, but Minnesota might have a clear path to the title game. Plus: other NFL playoff scenarios.

 The NFL playoffs are here, and by the Great Snowbound Gods of Lake Erie, look who's finally decided to show up to the party: the Buffalo Bills!

Football's most arid playoff drought is over, as the 9-7 Bills have snuck into the postseason, thanks to a Sunday win and a last-minute Cincinnati wedge of the Baltimore Ravens. Whoohoo! This is Buffalo's first visit to the playoffs since 1999—a dreary wait of 18 seasons. Here's how long ago 1999 was: Nick Saban and his handsome mane were coaching at Michigan State! Cher had the No. 1 single in the country! People actually listened to their voicemails—and called each other back!

Even the Cleveland Browns have been to the playoffs since 1999. (Of course, the 2017 edition of the Browns had as many wins as your junk mail drawer did.)

So congrats to the Bills fans out there, who now get a roadie in the sun with the 10-6 Jacksonville Jaguars, another revived outfit that hasn't hosted a playoff game since...1999. We're starting to sense a late '90s trend here. We're almost starting to get Y2K panic.

Elsewhere, we've got unrest-slash-dread in Philadelphia, where the Eagles locked up home field, but after a December injury to quarterback Carson Wentz, they now seem as reliable as a shopping cart with three broken wheels. Philadelphian Joe Queenan wrote in the Journal the other day that Wentz's injury "ruined" Christmas, and indeed life itself, for everyone in the Delaware Valley," so you can see they're all taking it in stride.

The Eagles get a bye, thanks to their No. 1 seed, and they'll wait on a pair of NFC wild-card games—Carolina at New Orleans and Atlanta at the Los Angeles Rams. I'm not sure I'd want any part of the Rams, who have shockingly ascended from the league's lowest-ranked offense a year ago to its highest-ranked in 2017—thanks to all-universe running back and MVP candidate Todd Gurley, quarterback Jared Goff, and Rams coach Sean McVay, who is so young, he looks like he's skipping a shift at Cold Stone Creamery. McVay turns—wait for it—32 on Jan. 24. Awwwww! When the Bills last made the playoffs, McVay was stacking Lincoln Logs in kindergarten! OK: He was in high school, but you get my point.

Intriguing story lines abound in the NFC—you've got the Rams re-emergence, the imperfect but capable Panthers and Falcons trying to wander back to the Super Bowl after recent losses there, and the



FROM TOP: BRUCE HEMMELGARN/REUTERS; CHARLES KRUPA/ASSOCIATED PRESS

Above, Case Keenum led the Vikings to the NFC's No. 2 seed. Left, Patriots coach Bill Belichick has his team primed for another postseason run.



Saints, where Drew Brees's arm has yielded to a pair of electric runners in Mark Ingram and Alvin Kamara. Kamara gets my vote as the Player Most Likely to Make Your Eyes Pop Out of Your Head and Roll Across the Carpet.

Still, if I had to pick the most fascinating development in the NFC—and probably the playoffs as a whole—I'd go with the Minnesota Vikings.

THE FOLLOWING PARAGRAPH SHOULD NOT BE READ BY SUPERSTITIOUS VIKINGS FANS, WHO WILL BE FURIOUS THAT I AM

JINXING THEIR TEAM AND HOLD ME RESPONSIBLE IF THEY BLOW IT. I really think this could be the year when it actually happens: an NFL team gets to host a home Super Bowl. The Vikings are the two seed; they'll get at least one home playoff game, and with the Eagles so wobbly, there's a solid chance that the league title game will wind up in Minneapolis. The Vikings were 7-1 at home this year, quarterback Case Keenum has gone from journeyman to Lost Son of Fran Tarkenton, and the whole city is watched over by the purple spirit of local

son Prince, whose greatest party anthem is...yep, "1999." I warned the Minneapolis/St. Paul folks back in November, but if you rented your place on Airbnb for Super Bowl week to some rich moron Cowboy fans, you need to think about canceling and giving them their deposit back, because who wants to miss being home for the first home game Super Bowl?

OK SUPERSTITIOUS VIKINGS FANS CAN GO BACK TO READING THIS.

The AFC playoff set-up is a more traditional, and frankly, a little snoozier. Buffalo meets Jacksonville, and then, in the other wild-card game, the Tennessee Titans, who are 9-7 and scare only themselves, face Kansas City. In the following divisional round, No. 2 seed Pittsburgh and No. 1 New England wait ZZZZZZZZZZZZZZZZ. Sorry, what was I saying?

To be clear: It isn't that I don't respect the Steelers, or fail to bow to the Vader-like dominance in New England, but we all know where this movie is likely to go: another frigid playoff game in Foxborough, the opponent running down the tunnel with gusto, determined to knock off those cocky Patriots, until the opening kickoff,

when they go to the sideline and collapse like one of those fainting goats. If it's the Steelers, consider this: They have never beaten the Patriots in a playoff game during the Tom Brady/Bill Belichick era (0-3) and they're 2-11 overall against him as a starter.

That's not promising. Could the Bills do better? Jacksonville? Kansas City? Tennessee? Wait: How is Tennessee in the playoffs?

The Patriots are 13-3 but flawed—Brady's been good, but not great; the receiving corps misses Julian Edelman; and the defense can get lit up by a talented quarterback. But it's hard to win in New England (the Pats are 17-3 there in the playoffs in the Tom/Bill era, 5-1 in AFC title games) and New England just bores down in the cold and finds a way. Last week they signed the former Steelers defensive menace James Harrison. This week they will probably sign Jack Ham. Bill Belichick is America's most famous Grumpy Lobster Boat Captain, and January is his favorite time to collect his traps, until someone goes up to New England with a pair of scissors and tears away his hooded sweatshirt.

Not to be salty, but I have my doubts.

HOCKEY

TEAM USA TURNS TO OLYMPIC VETERAN

BY DAVE CALDWELL

NEW YORK—Brian Gionta was named Monday to his second U.S. Olympic men's hockey team, but he said this time felt much different than the first. He will turn 39 on Jan. 19, and as the oldest member of the squad, will serve as the captain of an American team that includes no one else with Olympic experience.

Twelve years ago, Gionta, a forward from Rochester, N.Y., who was then with the New Jersey Devils, played for a U.S. team comprised solely of NHL players that finished eighth at the 2006 Torino Olympic Games.

"You're able to soak up more of it now," Gionta said at a news conference at Citi Field during the Winter Classic between the New York Rangers and Buffalo Sabres. Gionta said he got chills when hearing talk about wearing Team USA's red, white and blue uniform again.

Gionta, who played the previous three NHL seasons in Buffalo, said it was nice to say hello to several Sabres players who were his teammates last year. While he is a free agent this season, he said he would be interested in joining an NHL team if he plays well in the Olympic tournament next month in Pyeongchang, South Korea.

But his focus for the next two

months will be to help U.S. men's coach, Tony Granato, who is the head coach at the University of Wisconsin, and his new teammates come together quickly. With three pool-round games in four days, they will have to gel quickly.

"I don't know if we could have found a better person or a player for that," Granato said of Gionta. "He played three games for us over in Germany in November and it was like he was in mid-season form."

Expectations for the U.S. team in Pyeongchang are likely to be low after their recent performance in Germany. The Americans were outscored by 12-4 and lost all three games they played in the Deutschland Cup, but they outshot their opponents, 96-60, and held the puck for 62% of play, leaving Granato encouraged. The squad in South Korea will include some of the players who were in Germany.

NHL players represented the U.S. at five Winter Olympics from 1998 to 2014, winning silver medals in Salt Lake City in 2002 and Vancouver in 2010.

Citing travel and a long break, as well as potential for injuries, the NHL announced in April that it wouldn't send players to the Olympics—although it is a showcase for international hockey. As Gionta said Monday, "The world stops to watch the Olympics."



Brian Gionta is the only player on the 2018 U.S. men's Olympic hockey team with previous Olympic experience.

The U.S. plays three games in Pool B: Slovenia on Feb. 14, Slovakia on Feb. 16 and Russia on Feb. 17. If the team advances, it will play in the quarterfinals on Feb. 21, with the semifinals on Feb. 23. The gold-medal game is Feb. 25.

Gionta, who scored 289 goals in 1,006 NHL games, is one of 16 players on the Olympic team with NHL experience. Fifteen U.S. players on the roster are currently playing in Europe.

Granato said two goaltenders will be added to the roster this month, but he said the starter is likely to be Ryan Zapolski, a 31-year-old native of Erie, Pa., who

now plays for Helsinki Jokerit in the Kontinental Hockey League. He has a 1.68 goals-against average this season.

"He's a guy who's had a phenomenal year," Granato said. "He's experienced with international play. He's earned that [the starting position] by his body of work."

There are four collegiate players on the U.S. team: Ryan Donato, a high-scoring forward from Harvard; Will Borgen, a defenseman from St. Cloud State; Jordan Greenway, a 6-foot-6 forward from Boston University, and Troy Terry, a forward from the University of Denver.

"I'm really looking forward to playing with this team," Terry said Monday. "I talked to the coaches, and we want to play a high-paced game. We're going to play fast. I know we have the ability on this team to make plays."

The 20-year-old Terry said he was excited to play with a player like Gionta. "He's had such a great career—just knowing I'm going to be on the same team as him is very cool," Terry said.

As for Gionta, he is hoping 2018 brings a perfect cap to his career. "That's the one thing that's eluded me—an Olympic medal. It would be a great way to end things."

OPINION

Donald Trump's Watergate?

MAIN STREET
By William McGurn

Special Counsel Robert Mueller, Bork's explanation for his firing of Special Prosecutor Archibald Cox in 1973 offers balance the nation could use right about now.

Let us begin by stipulating that when asked by reporters whether he was going to give Mr. Mueller the heave-ho, Mr. Trump answered with no ambiguity: "No, I'm not." In a follow-up interview with the New York Times, the president said of Mr. Mueller, "I think he's going to be fair."

As clear as these statements are, they have done nothing to stanch the flow of warnings from people directing Mr. Trump not to do what he says he has no intention of doing. From Bernie Sanders and Mark Warner in the Senate to MSNBC and MoveOn.org, the chorus goes up: Mr. President, do not fire Mr. Mueller or you will create a constitutional crisis.

There are two broad problems with these admonitions. The first is political. Notwithstanding the drama and foreboding with which these warnings are delivered, Mr. Trump's most embittered foes can't help leaving the impression that sacking Mr. Mueller is

precisely what they most fervently pray he'll do, bringing them closer to the impeachment they hope for.

The bigger problem is definitional. A president exercising his constitutional authority as head of the executive branch to fire someone in that branch may well create a *political* crisis. But it is in no way a constitutional crisis.

Here Bork's ruminations about his experience during Watergate are illuminating. Not unlike Mr. Mueller, whose investigation has come into question because of the way he's stacked his team with Hillary Clinton partisans, Cox's close relationship with the Kennedy family persuaded Nixon (wrongly, Bork wrote) that the prosecution was in fact a persecution led by his political enemies.

Ultimately this led to the so-called Saturday Night Massacre. Cox had demanded the White House tapes when he learned of their existence, and, when he refused the compromise the president offered, Nixon directed Elliot Richardson to fire Cox. The attorney general resigned rather than carry out the order, as did his deputy, William Ruckelshaus. Solicitor General Bork then became acting attorney general. In that capacity he fired Cox but kept the investigation going, with the same team of investigators.

In his book "Saving Justice," published posthumously in 2013, Bork recounts an exchange with a lawyer who told him he too should have refused to fire Cox because it

would have brought Nixon down sooner. Bork responded as follows:

"If a constitutionally inferior officer of the executive branch could topple the president of the United States, then the country would begin to resemble a banana republic. There are constitutionally prescribed methods for ousting an unwanted president: impeachment by the House and conviction on the article of impeachment by the Senate. Anything else is civil disobedience."

Robert Bork's lessons from the Saturday Night Massacre take on new relevance.

In a 1993 article for Commentary, Bork acknowledged that any competent prosecutor would have sought the Nixon tapes as Cox did. But he also argued that once Cox rejected the president's order that he seek no further tapes, "Nixon now had to fire him" because "no President can afford to be faced down in public by a subordinate member of the executive branch."

Just as interesting is Bork's insistence that ordinary Justice Department prosecutors were fully capable of investigating the executive branch: "Though there was no need for a special prosecutor to deal with Watergate," he wrote, "it was politically inevitable that one would be named."

The situation today with Mr. Trump is similar. As president, he could order Mr. Mueller fired, as Nixon did with Cox. And it would not be a "constitutional crisis."

This is not to say that it wouldn't create a political crisis. In his book Bork explained that though he would have preferred to resign after firing Cox, he remained to prevent a wave of destabilizing resignations that threatened to leave Justice nonfunctional.

Firing Mr. Mueller would carry similar risks. For one thing, it would convey to a large segment of the American people that Mr. Trump has something to hide. Moreover, the Saturday Night Massacre led to the abomination of the independent counsel law, and sacking Mr. Mueller would encourage similar, terrible legislative "fixes." The two offered last year by Sens. Lindsey Graham and Thom Tillis would further insulate a special counsel from accountability by introducing the judiciary into an executive branch decision.

Finally, there's sheer political calculation. At a time when the partisanship and unprofessionalism of the special counsel's team is becoming as much a story as the Russian collusion they are investigating, for Mr. Trump to change the channel now would be a particularly brainless move.

In 1973, amid the tumult of Watergate, America benefited from the courage and sober judgment of Robert Bork. We could use it today.

Write to mcgurn@wsj.com.

A Cold War in the Arctic Circle

By Paula J. Dobriansky

The Arctic is a region of tremendous strategic importance for global trade and national security. The High North is also experiencing a massive Russian military buildup, which calls for the U.S. and North Atlantic Treaty Organization to adopt a new strategy.

Vladimir Putin has been hyping the threat posed by U.S. attack submarines deployed in the Arctic Ocean. Meantime, Russia has been using Arctic waters as a sanctuary for its ballistic-missile-carrying submarines—the key component of its strategic nuclear forces—and wants to enhance its regional military infrastructure to protect them. This is driven by Moscow's longstanding view that a nuclear war can be won by a better-prepared side.

With these strategic imperatives in mind, Russia created an Arctic Command, which became operational in 2015. It has also embarked on a costly military buildup—new airfields, ports, air-defense installations and barracks—and heightened the tempo of military exercises and activities.

Moscow's Security Council has designated the Arctic as a "main strategic resource base." The Council on Foreign Relations reported in 2017 that products from the

Arctic account for 20% of Russia's gross domestic product and 22% of its exports. Much of this is energy—95% of Russia's natural gas and 75% of its oil.

Receding ice adds to the region's significance. The Northern Sea Route, a path along Russia's Arctic coast, has become available for ice-free navigation during an entire summer. If current trends continue, it may become

NATO plans a new command to counter Russia's buildup. It should be only a start.

available for ice-free navigation year-round. The Northern Route is shorter by 40% than the Suez Canal or Cape of Good Hope route, so this could lead to major reshuffling of global oceanic transportation. Given uncertainty over whether the Northern Sea Route is in international or Russian territorial waters, its extensive use would give Moscow formidable economic leverage.

Meanwhile, Russia has been pressing ambitious territorial claims that overlap with those advanced by other Arctic nations. Denmark and Russia have asserted ownership of the North Pole and

swaths of Arctic sea bed. Canada is expected to submit a major competing claim this year. The disputed territory amounts to some 200,000 square miles and may hold up to 10 billion tons of hydrocarbon deposits, according to Russian estimates.

To date, Arctic governance has been driven through the Arctic Council, created in 1996 by Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the U.S. The council has grown to include 13 non-Arctic observer countries, including China, India and Japan. While the council has worked well on matters within its jurisdiction—such as health and the environment—it has no power to enforce agreements, making it incapable of dealing with security matters.

There is not a single Western military facility in the Arctic and only a few U.S. Coast Guard assets operate there. A new robust Western response to the Russian military buildup in the Arctic is necessary. At the November Halifax Security Forum, NATO Secretary-General Jens Stoltenberg previewed the alliance's plans to create an Arctic Command covering the Arctic. This initiative has broad support, including from the five Arctic NATO members.

The Trump administration

supports the new NATO command, but it can do more. It should ensure that the new command has a clear mission set addressing the alliance's interests in the Arctic—surveillance and monitoring of Russian intelligence and military activities, coordination of maritime search and rescue operations, and buildup of military infrastructure in the region to counter Russian threats to sea lanes and communications. The mission set should be backed by appropriate resources—ships, submarines and aircraft, including surveillance and maritime patrol platforms—provided by NATO allies, particularly those with Arctic interests.

The U.S. should start building advanced icebreakers and conduct more exercises, patrols and training missions. It would also be wise to host the new command's headquarters on American soil. Strong action to make the robust Arctic Command a reality would counter Russia's military buildup and demonstrate continuing U.S. leadership within NATO and around the world.

Ms. Dobriansky is a senior fellow at Harvard's Belfer Center for Science and International Affairs. She served as an undersecretary of state, 2001-09.

Congress's Gift to Blue-State Taxpayers

By Alfredo Ortiz

The great American migration out of high-tax states like New York and Illinois may be about to accelerate. The tax reform enacted last month caps the deduction for state and local taxes, known as SALT, at \$10,000. This means millions of people will finally feel the full tax burden imposed by state and local politicians. When the SALT shield shrinks, so may people's willingness to put up with these high taxes.

Such states already are losing population, and new Census Bureau data—released the same day tax reform passed the House and Senate—shows the continued migration. Of the seven states that grew the fastest between July 1, 2016, and July 1, 2017, four (Nevada, Washington, Florida and Texas) have no income tax, and the other three (Idaho, Utah and Arizona) have low taxes.

On the flip side, high-tax states like New York, New Jersey, Connecticut, Illinois and

Rhode Island either lost residents or stagnated. Pennsylvania quietly became the fifth-most-populous state in the nation, displacing Illinois.

When people move, they take their money with them. The five high-tax states listed above have lost more than \$200 billion of combined adjusted gross income since 1992,

Limiting the SALT deduction will enforce fiscal discipline.

according to the website How-MoneyWalks.com, which aggregates IRS data. In contrast, Nevada, Washington, Florida and Texas gained roughly the same amount.

If politicians in high-tax states want to prevent this migration from becoming a stampede, they will have to deliver fiscal discipline. At least a few seem to realize this. New Jersey's Gov.-elect Phil Murphy campaigned on a

promise to impose a "millionaires' tax." But the Democratic president of the state Senate, Steve Sweeney, said in November that New Jersey needs to "hit the pause button" because "we can't afford to lose thousands of people." His next words could have come from a Republican: "You know, 1% of the people in the state of New Jersey pay about 42% of its tax base. And you know, they can leave."

New York City Mayor Bill de Blasio may need to rethink his proposed millionaires' tax. George Sweeting, deputy director of the city's Independent Budget Office, told Politico in November that eliminating the SALT deduction would "make it a tougher challenge if the city or the state wanted to raise their taxes." New York state Comptroller Thomas DiNapoli added: "If you lose that deduction, I worry about more middle-class families leaving."

In October, 36 California Democrats in Congress wrote

to GOP leaders: "The elimination of SALT would pressure state and local governments to make cuts and take in less revenue." But this fiscal day of reckoning will be a good thing for the beleaguered residents of high-tax states and cities.

If tax reform was Congress's Christmas present to the American people, the limit on the SALT deduction is a gift that will keep on giving. In the years to come it will spur additional tax cuts and forestall tax increases at the state and local level.

Democrats want to use the SALT limitation as a wedge to pick up House seats in 2018. They should be more concerned about losing control of state capitals and city councils once voters at last feel the full effects of their tax-and-spend agendas. Some residents will vote with their feet, but the rest will just vote.

Mr. Ortiz is president and CEO of the Job Creators Network.

BOOKSHELF | By Tom Nagorski

The Power Of Prudence

When the World Seemed New

By Jeffrey A. Engel

(Houghton Mifflin Harcourt, 596 pages, \$35)

On May 21, 1989, the U.S. ambassador to China sent a chilling report to Washington: Troops were said to be advancing on Beijing; a power struggle was underway at the highest levels of the regime. "A confrontation resulting in bloodshed is probable," came the warning.

White House officials feared full-scale civil war. A few months later, in the city of Leipzig, in East Germany, 100,000 protesters faced armed security forces; hospitals were told to expect casualties. "It is not hard to imagine all that might have occurred had someone pulled a trigger that night," says historian Jeffrey Engel. "Wars had started over less." In Moscow, Mikhail Gorbachev wondered whether the reforms he had set in motion were cascading into a violent breakup of the Soviet Empire. And at every turn, President George H.W. Bush considered his limited options and the dangerous possibilities. Not one but two major global powers appeared to be coming apart at the seams.

Mr. Engel's "When the World Seemed New" is a fine, often stirring account of these times, bracketed roughly by the Eastern-bloc uprisings of 1989 and the death knell of the Soviet Union in 1991, with Tiananmen Square and the Persian Gulf War tucked in between. The book is at once a reminder of how close the world came to conflagration and a compellingly made case that Mr. Bush—an oft-maligned one-term president—was in fact a leader well-suited for those turbulent days.

How turbulent were they? On June 4, 1989, the first free vote in postwar Poland knocked out every Communist Party candidate—a ballot-box revolt—and yet it became a second-tier story because June 4 was also the date of the Tiananmen Square crackdown, when Chinese troops crushed a student-led protest. Five months later, a bungled press conference by the East German Communist Party spokesman led, accidentally, to the breaching of the Berlin Wall. The following year, as the world considered the prospect of a redrawn European map—with a newly united Germany at its heart—geopolitics were scrambled again with Saddam Hussein's invasion of Kuwait. Less than a year later, there was a coup attempt in Moscow and widespread fears that either Mr. Gorbachev or the Russian president, Boris Yeltsin, might be killed.

Into these times came an American president whose guiding principle could be summed up in a single word: prudence. Mr. Bush was a don't-rock-the-boat guy at a time when the boats were rocking wildly. Mr. Engel calls the Bush approach "Hippocratic Diplomacy"—as in, first do no harm. As the Soviet-bloc states unraveled, Mr. Bush didn't want to "put a stick in Gorbachev's eye," and after Tiananmen he worried about backing Deng Xiaoping into a corner.

George H.W. Bush was a don't-rock-the-boat guy when the boats were rocking wildly. He deserves credit for his muted style and steady hand.

Such passivity drew the ire of many who felt that Mr. Bush was missing a seminal moment to champion democracy. And politically "prudence" and "do no harm" got Mr. Bush pilloried. "We have a president who is inadequate to the moment," said Richard Gephardt, the House majority leader. On "Saturday Night Live," Dana Carvey got in the game with his uncanny mimicry and regular punch lines: "Not gonna do it. Wouldn't be prudent."

Mr. Engel would say that the caricature was unfair, that if ever a moment demanded prudence, this was it. And, as Mr. Engel shows, Mr. Bush did more than sit idly by as events galloped on. After Tiananmen, he composed a long and personal letter to Deng saying that he was writing "with a heavy heart" and expressing respect for the man and his nation. Then, the turn: "But I ask you as well to remember the principles upon which my young country was founded." As for Tiananmen Square, the president was direct: "With their own eyes the people of the world saw the turmoil and the bloodshed with which the demonstrations were ended." To Mr. Gorbachev, as talks about a post-Berlin Wall Europe progressed, Mr. Bush pleaded for a chance "to sit down soon and talk to you. . . . I want to do it without thousands of assistants hovering over our shoulders, without the ever-present briefing papers and certainly without the press yelling at us every 5 minutes about 'who's winning.'" Mr. Engel argues that Mr. Bush's understated style yielded results—witness the complex road to German reunification—and likely averted further violence.

The power of events carries Mr. Engel's narrative, which falters only when the drama itself slows—when phone calls and meetings become the focus of attention. The book is at its best when it juxtaposes disparate events: Mr. Bush calibrating the distinctions between a pro-democracy protest in Budapest and another in Beijing; Mr. Gorbachev arriving in Beijing just a month before the crackdown ("the last thing the Chinese leadership needed at that moment"); students in Tiananmen chanting: "Where is our Gorbachev?"

Of course, prudence wasn't always good policy. After Saddam's 1990 invasion of Kuwait, National Security Adviser Brent Scowcroft was fuming, "appalled" that the White House was treating it as merely "the crisis du jour." It fell to aide Richard Haas to draft a paper convincing Mr. Bush that such aggression had to be confronted.

In the end, China kept its authoritarian ways while embracing capitalism; Mr. Gorbachev agreed to a unified Germany within NATO; the U.S. marshaled a coalition to reverse Saddam's invasion. And on Christmas Day 1991, the flag with the hammer and sickle came down over the Kremlin. Many books have recounted these events. The value of "When the World Seemed New" lies in tying them together and giving credit where it's due. Nightmarish outcomes were avoided by things not done: the Leipzig soldier who held his fire; the Soviet troops who refused to storm the Moscow barricades; and the man in the Oval Office who chose the careful, less impulsive response. "The world was lucky," Mr. Engel writes. That would have been another apt title for this absorbing book.

Mr. Nagorski is executive vice president of the Asia Society and author of "Miracles on the Water: The Heroic Survivors of a World War II U-Boat Attack."

OPINION

REVIEW & OUTLOOK

About That Trump ‘Autocracy’

As Donald Trump heads into his second year as President, we’re pleased to report that there hasn’t been a fascist coup in Washington. This must be terribly disappointing to the progressive elites who a year ago predicted an authoritarian America because Mr. Trump posed a unique threat to democratic norms. But it looks like the U.S. will have to settle for James Madison’s boring checks and balances.

“How to stop an autocracy,” said a Feb. 7, 2017 headline on Vox, ruminating on a zillion-word essay in The Atlantic on how Donald Trump might impose authoritarian rule. Academics and pundits mined analogies to Mussolini, Hitler and Vladimir Putin.

Four political scientists even formed something called Bright Line Watch—with the help of foundation money—to “monitor the status of democratic practices and highlight potential threats to American democracy.” Readers won’t be surprised to learn that the only graver threat than Mr. Trump is the Republican Congress that refuses to impeach him.

One of the Bright Line Watch founders, University of Rochester professor Gretchen Helmke, wrote in the Washington Post on April 25, “Could Trump set off a constitutional crisis? Here’s what we can learn from Latin America.”

A year later, where are we on the road to Venezuela?

* * *

Far from rolling over Washington institutions like a tank, Mr. Trump seems as frustrated as other Presidents with the limits of his power. He achieved one major legislative goal in tax reform but failed on health care. His border wall isn’t built and he may have to legalize the “Dreamer” immigrants if he wants Congress to approve money for it.

Mr. Trump’s political appointees still aren’t close to fully staffing the executive branch. He’s making more headway on judges, but that’s partly due to former Democratic leader Harry Reid’s decision in 2013 to eliminate the Senate filibuster for judicial nominees. The press cheered on that partisan, mid-session change of Senate rules to pack the courts.

Mr. Trump’s rhetorical attacks on the media are excessive. But for all of his bluster, we haven’t seen a single case of Trump prosecutors seeking warrants to eavesdrop on journalists to discover their sources. Barack Obama’s Justice Department surreptitiously did that to the Associated Press and James Rosen of Fox News

in violation of Justice guidelines.

As for legal checks and balances, progressive judges in the lower courts have overturned three versions of Mr. Trump’s travel ban. Their legal analysis is dubious given the Constitution’s grant of authority to the political branches on immigration and national security, and our guess is that the Supreme Court will eventually overrule the lower courts. But the point is that judges are hardly deferring to the Trump Administration. Oh, and since when do tyrants deregulate to take power away from the administrative state?

Mr. Trump is also facing a special counsel investigation with essentially unchecked power to investigate him and his family. Robert Mueller is ostensibly charged with looking into ties between Russians and the 2016 Trump campaign, but Deputy Attorney General Rod Rosenstein appears to have given Mr. Mueller carte blanche.

Attorney General Jeff Sessions recused himself from the Russia probe and seems unable to exert any discipline over the FBI. The Justice Department ultimately reports to Mr. Trump. Yet he can’t even get his nominees at the FBI and Justice to tell Congress what they used as evidence to get a FISA warrant against Trump campaign officials in 2016. Who is the unaccountable authority here?

The real story of the past year is that, despite the daily Trumpian melodrama, the U.S. political system is working more or less as usual. Mr. Trump has sometimes broken with familiar presidential decorum, especially in his public statements and attacks on individuals. But he is paying a considerable political price for that excess with an approval rating below 40% less than a year into his term.

Voters rejected his preferred Senate candidates in Alabama twice. Republicans were routed in Virginia’s elections as Democrats came out in droves, and on present trend the GOP will lose its House majority in November. In other words, we are watching the typical back and forth of American democracy.

Democratic institutional norms are worth defending, which is why we called out the Obama IRS for bias against the tea party. We’ll do the same if Mr. Trump exceeds his constitutional power. But the lesson of the past year is that progressives should have more faith in the American system—whether they’re in power or not. Losing an election isn’t the same as losing a democracy.

Trump Gets the U.N. to Cut Spending

Here’s something more miraculous than Congress spending less money—the United Nations doing it. Yet that’s what happened at the end of 2017 as the 193-nation General Assembly agreed to a 5% spending cut in its new biennial budget after American prodding.

The General Assembly agreed by consensus to shrink the U.N. budget by \$286 million, to \$5.4 billion, down 5% from the prior budget. The U.N. will save about \$50 million by trimming hiring and overhead costs, and another \$18 million from cutting the U.N. Department of Management, better known as human resources. The peacekeeping operations budget, which was negotiated separately earlier in 2017, was reduced by \$593 million to \$7.3 billion, a 7.5% cut.

The General Assembly also agreed to spending reforms, including restrictions on construction projects and an audit of the U.N.’s \$60 billion staff pension fund. Starting in 2020, the U.N. will move to annual budgeting, which Secretary-General spokesman Stéphane Dujaric called “one of the most significant shifts in

the programme planning and budgeting process of the Organization since the 1970s,” which says a lot about the U.N.’s accounting systems.

These reductions are hardly draconian. They don’t include cuts to the U.N.’s elevator operators, who cost about \$300,000 per year, or trim the budget of the International Court of Justice’s judges and spouses, who travel first class.

Committee for Programme and Coordination members, a strategic planning group for bureaucrats, holds a five-week meeting every year in New York City, rather than meet in a cheaper location or via teleconference.

Secretary-General António Guterres has supported the reforms. But none of this would have happened without pressure from the United States. President Trump called out the U.N.’s bloated bureaucracy and “mismanagement” in September, and U.S. Ambassador to the U.N. Nikki Haley has pressed the case. The U.S. has leverage at the U.N. because it provides 22% of its budget, but credit the Trump Administration for finally using it.

Tales From the Public School Crypt

Detroit’s public schools are among the nation’s worst, which may explain how far they’ll go to deny students a better choice. Witness how the school district is preventing a charter from expanding into an abandoned elementary school.

Detroit Prep is a public charter school with 80 students from kindergarten to second grade, and it plans to enroll 40 more kindergartners next year and eventually grow to about 500 students through eighth grade. More than 50% are African-American, and some 65% are from low-income families.

The school is currently crammed into a church basement and would like to buy a local elementary school that closed in 2009. The vacant building has more than 20 classrooms but is dilapidated, and the Detroit school district sold it to a developer a few years ago for \$600,000.

So what’s the problem? The property includes “deed restrictions,” and one is that the buyer must pay a percentage fee to the school district. Detroit Prep has offered to pay the surcharge and more. The school district stands to reap \$150,000 from the sale of a property it doesn’t even own. That’s on top of the \$750,000 the school is paying for the building, “which is already 20 percent more than the developer’s purchase price,” as Ben DeGrow of the Mackinac Center for Public Policy has noted.

One more wrinkle. The deed stipulates that the Detroit school district must waive use of a

property that isn’t residential, but Superintendent Nikolai Vitti has refused. This is a blatant violation of the law.

Detroit Prep points to a section of state law that says: “Unless approved by the state board, a school board or intermediate school board shall not impose any deed restriction prohibiting, or otherwise prohibiting, property sold or transferred by the school board or intermediate school board from being used for any lawful public education purpose. Any deed restriction or other prohibition in effect as of the effective date of this subsection is void.”

That seems clear, but this summer the Michigan legislature made this language tougher. And as Ingrid Jacques of the Detroit News points out, the new measure is retroactive, “meaning it applies in this case.”

The Detroit school district doesn’t appear burdened by matters as tedious as the law, so Detroit Prep is suing and awaits a decision from Wayne County Circuit Court. But Detroit Prep needs to fix up the building ahead of the new school year and can’t start construction on a litigation magnet.

The farce is that the Detroit school district is spending money to defend the lawsuit even as it claims to lack the resources for basic education. The courts have an obligation to intercede in this ugly episode to vindicate the law and the interests of Motor City children.

A case study in how far Detroit will go to punish charter-school students.

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Democratic institutional norms are worth defending, which is why we called out the Obama IRS for bias against the tea party. We’ll do the same if Mr. Trump exceeds his constitutional power. But the lesson of the past year is that progressives should have more faith in the American system—whether they’re in power or not. Losing an election isn’t the same as losing a democracy.

LETTERS TO THE EDITOR**The Tax Bill Won’t Hurt Charitable Giving**

Regarding your editorial “The Uncharitable Charities” (Dec. 26): The editorial board’s claim that charities disrespect their donors by assuming that “most donate mainly because of the tax break” appears to contradict the Journal’s long-held tenet that if you want more of something, tax it less. Certainly every charity I give to sells itself on its merit. However, as I consider my net outlays, deductibility of the contemplated donation certainly influences its size. This probable change in behavior is what worries charities.

Your other point—that “Americans will donate more if they have more money”—is much more well-taken. Here’s to the tide that lifts all boats in the coming years.

YISROEL MARKOV
Boston

I guess the media and Democrats believe people should only give money or will give money only when the government subsidizes them. Republicans actually believe they should give to charity whether or not the government helps them.

Since only 30% of taxpayers itemize, is it necessarily true that the 70% who don’t itemize don’t give?

I will not itemize next year but I am planning to raise my charitable contributions because at age 64 I have paid off most of my debt. My mother died at age 91 but she always gave to her church and other charities despite never itemizing and despite an income around \$30,000.

JACK HELLNER
Springfield, Ill.

Charities don’t support complicated taxes, nor have they argued that people give to charities to get tax breaks. We are apolitical, with supporters from the left and the right who want to help communities and people in need.

We weighed-in on tax reform because charities are simply subject to the adage that if you tax something, you get less of it.

All the charitable deduction does is relieve people from tax on income they donate. Under the new tax law, only 5% of people will be able to avail themselves of that relief.

Our advocacy on behalf of private charitable giving is supported by decades of economic and academic studies that demonstrate the link between increased giving and relief from taxes on donations. I don’t know of a single study or think tank that supports the argument that lower taxes will somehow increase giving.

I can’t imagine that the Journal wants less charity and more government programs.

STEVE TAYLOR
Senior VP and Counsel for Public Policy
United Way Worldwide
Alexandria, Va.

I hope you are correct when you assert that “Americans will donate more if they have more money.” The fact is that many nonprofits effectively and efficiently perform needed

It’s reasonable for charities to be anxious about the upcoming increase to the standard deduction. But nearly all givers realize that they’ve been getting only a 25-30 cent tax benefit for every dollar they give—and that is only if they have been itemizing. That’s a nice break, but it can’t be the main motivator for most of us to give. And unlike the deductions for other taxes and expenses, it’s entirely optional.

My family will be among the many thousands for whom 2017 will be the last year to itemize.

And like most families, our charitable contributions won’t change. The only difference next year will be the extra space in our tax receipts folders.

DAVID LOGAN
Oklahoma City, Okla.

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DAVID LOGAN
Oklahoma City, Okla.

Pepper ... And Salt

THE WALL STREET JOURNAL

“Oh, I’m feeling all right. My post holiday elation is cancelling out my seasonal affective disorder.”

ED ZELINKSY
New Haven, Conn.

Letters intended for publication should be addressed to: The Editor, 1211 Avenue of the Americas, New York, NY 10036, or emailed to wsj.ltrs@wsj.com. Please include your city and state. All letters are subject to editing, and unpublished letters can be neither acknowledged nor returned.

OPINION

Iran's Theocracy Is on the Brink

By Mark Dubowitz

And Ray Takeyh

Iran has a peculiar habit of surprising Americans. It has done so again with the protests engulfing its major cities. The demonstrations began over economic grievances and quickly transformed into a rejection of theocracy.

The slogans must have unsettled the mullahs: "Death to Khamenei!" "Death to Rouhani!" "We will die to get our Iran back!" Imperialism has not revived the regime's legitimacy, as the protesting Persians pointedly reject expending their meager resources on Arab wars: "Death to Hezbollah!" "No to Gaza, not Lebanon! Our life only for Iran!"

Every decade the Islamist regime has been in power, an uprising has cost it an element of its legitimacy.

However the events on the streets unfold, their most immediate casualty will be the presidency of Hassan Rouhani and its false claim of pragmatic governance. In the aftermath of the Green Revolution of 2009, which rocked the foundations of the Islamic Republic, a sinister argument gradually pervaded Western salons and chancelleries. The convulsions of that summer, the claim went, were over no more than electoral irregularity. With the election of the so-called moderate Mr. Rouhani in 2013, the

system rebalanced itself. Supreme Leader Ali Khamenei and his allies supposedly learned some hard lessons on the need to yield to popular mandates. Iranians want gradual change, we have been told, and believe that the system's own constitutional provisions and plebiscites can be used to nudge it toward moderation.

Then, last week, Iranians took to the streets.

Every decade of the Islamist regime's rule has seen one of its political factions lose its legitimacy through national uprisings. In the 1980s, the Islamic Republic waged a determined civil war against liberals and secularists who sought to redeem the revolution's pledge of a democratic order. The student riots of 1999 ended the reformist interlude and Mohammad Khatami's presidency, which had promised that the expansion of civil society and elections would harmonize faith and freedom. The reformists lingered as discredited enablers of a repressive regime, but no one believed in their promises of change from within. The hard-liners offered their own national compact, one that privileged economic justice over political emancipation. But the tumultuous presidency of Mahmoud Ahmadinejad produced only corruption and bellicosity.

Then came Mr. Rouhani and his centrist disciples with their pledge to revive the economy, primarily through foreign investment. Mr. Rouhani needed a nuclear agreement to lift debilitating sanctions and stimulate commerce. The Obama administration was happy to deliver, and Iran received tens of billions of dollars in



STR/FEF/REX/SHUTTERSTOCK

A protester at the University of Tehran, Dec. 30.

financial dividends, including \$1.7 billion in paper currency.

Instead of channeling that wealth into productive uses, Ayatollah Khamenei, the clerical establishment and the Islamic Revolutionary Guard Corps consumed much of it on foreign adventurism and corruption. Mr. Rouhani made a crucial mistake: over-promising and under-delivering on both economic and political reforms. His modest experiment in centrist rule has come crashing down, taking with it his injunction that all must trust the system. The regime is at an impasse. It has no more political actors—no establishment saviors—to offer its restless constituents.

As with the Soviet Union in its last days, the Islamic Republic can no longer appeal to its ideals; it relies only on its security services for survival. That is deadly for a theocracy,

by definition an ideological construct. Ideological authoritarian states need a vision of the future by which their enforcers can condone their own violence. The theocracy's vast patronage system will not cure this crisis of legitimacy. In many ways, Mr. Rouhani was the ruling clergy's last gasp, a beguiling mullah who could enchant Westerners while offering Iranians some hope. That hope has vanished.

In the coming weeks, many in the commentariat will advise the Trump administration to remain silent and stay on the sidelines, as the Obama administration did in 2009. They will recommend that it is best to let the Iranian drama play itself out. If American officials weigh in, the argument goes, the regime would brand its detractors as agents of a foreign power.

Such stale prescriptions miss the point that Iranians are looking toward America to support their struggle. Democratic dissidents always do so. In that regard, Iranians are no different from non-Muslim dissidents from the former Soviet Union to communist China, who have struggled against tyranny and ardently welcomed American and European support.

Barack Obama has been rightly castigated for his silence during the Green Revolution. President Trump is right not to follow his predecessor's discredited path. The White House should continue issuing condemnations daily, including through Persian-language media outlets, and follow up with sanctions targeting corruption and human-rights abuses. Congress should rediscover its once-bipartisan determination to hold the regime accountable for its crimes and push America's European allies to overcome their mercantile greed and support Iranians striving to be free from theocracy.

The Islamic Republic is a relic of a century that yielded multiple ideological regimes claiming to have mastered the forces of history. By now most of them are history. Mr. Trump entered office with an understanding of the Islamic Republic's profound threat to American security. The most consequential legacy of his presidency may be a Middle East free of its most powerful unsavory regime.

Mr. Dubowitz is chief executive of the Foundation for Defense of Democracies. Mr. Takeyh is a senior fellow at the Council on Foreign Relations.

what would be the responsible route to take? Would Elizabeth be right under such circumstances to refuse a distasteful proposal, when not only her future but that of her sisters might be at issue? Mrs. Bennet's fixation on marrying her daughters, generally ridiculed by readers, makes sense in the grim context.

Some final lessons derive from this: One can sometimes know what is the right thing to do but not be able to do it. Thus we ought not to judge others harshly when circumstances curtail their ability to act freely. That said, even Jane Austen, writing more than 200 years ago, knew what the right behavior looked like in the face of a harasser. Elizabeth was decisive and clear in rejecting Mr. Collins. Austen represented this in her fictional world; in 2018, we should hope to be able to imitate it in our real one.

Ms. Cohen is a professor of English at Drexel University, where she is dean of the Pennoni Honors College.

Free Trade Has Been a Boon for Energy Independence

By Merrill Matthews

As turbulent as Donald Trump's political career has been thus far, he has always been consistent about two things: First, that the U.S. should aggressively pursue energy independence; second, that the U.S. is getting short shrift on its trade deals, including the North American Free Trade Agreement.

As the administration moves to modernize Nafta, however, it should remember that free trade with Canada and Mexico is vital to securing America's energy independence in the long run.

North America now leads the world in energy production, largely because the U.S. has become the No. 1 producer of crude oil and natural gas. This outcome was by no means obvious when Nafta became law in 1993. But by creating a free-trade zone for energy, the agreement helped all three countries' energy sectors flourish.

In 2016 the three North American economies produced a total of 22

million barrels a day of crude oil, associated liquids and biofuels, according to the Energy Information Administration, with 14.9 million barrels coming from the U.S. Saudi Arabia produced 12.4 million barrels a day and Russia 11.2 million. The fourth-largest producer, China, has less than half of Russia's production.

When it comes to natural gas, the numbers are even more skewed toward the U.S., which produced 27.1 trillion cubic feet in 2015 compared with Russia's 21.1 trillion. Third-ranked Iran extracts one-quarter of what the U.S. produced. Canada comes in fifth, after Qatar. Altogether, North America produced about 33.8 trillion cubic feet of natural gas in 2015.

But these solid figures, dominated by U.S. production, should not obscure an important point: Each of the three North American economies, and its energy sector, depends on the other two.

Canada and Mexico need the U.S. to buy their excess crude oil, and the U.S. needs its neighbors to cover its

own shortfall. According to the EIA, the U.S. consumes about six million more barrels of crude oil and related products a day than it produces. The U.S. imports about three million barrels a day from Canada, its largest energy trading partner. Although total Mexican crude-oil production has been declining, Mexico still exports about 688,000 barrels a day to the U.S. With U.S. technology and investment, Mexican production and exports could be significantly higher—perhaps enough, together with Canada, to close the U.S. gap.

Canada depends heavily on U.S. refineries, especially in the Midwest and on the Gulf Coast, which specialize in processing Canada's heavy crude. Mexico also depends on the U.S. to refine its crude, which Mexico buys back as gasoline and diesel.

Another important result of Nafta is that more natural-gas pipelines are being built so the U.S. can help Mexico turn to cleaner-burning natural gas for its electricity generation. In 2016 the value of U.S. energy imports from Mexico was \$8.7 billion, while U.S. energy exports to Mexico were \$20.2 billion, for a positive energy

trade surplus of \$11.5 billion, according to the EIA. While most economists don't put much stock in international trade balances, the Trump administration cares a lot about them, and under Nafta the U.S. energy sector has a positive trade balance with Mexico.

Nafta delivers a triple win for the U.S., Canadian and Mexican oil and natural-gas industries.

Nafta's elimination of virtually all tariffs on energy-related goods has greatly enhanced North America's energy potential, but there is still room for improvement. A modernized Nafta should include a labor provision that allows workers in the oil and gas industry to travel to any of the three countries, especially in emergencies. Mexico needs U.S. technology and assistance to modernize and expand its energy sector, while the U.S. might need more

workers in oil fields in places like West Texas.

A modernized Nafta should also recognize the threat that could emerge for North America if other major energy exporters tried to punish the U.S. for its foreign policies. Such an agreement might give Nafta countries preference for oil and gas purchases if, say, Iran blocked U.S.-bound tankers from passing through the Strait of Hormuz.

Free trade in energy across North America has transformed the industry, putting the continent on track to self-sufficiency while boosting economic growth for all three countries, especially Mexico. And if Mr. Trump really wants to reduce the flow of illegal aliens to the U.S., a thriving Mexican economy is the best way to do it.

Energy independence for the U.S. alone is still years away. But thanks to free trade, energy independence for North America is within our grasp. A modernized Nafta can help make that goal a reality very soon.

Mr. Matthews is a resident scholar with the Institute for Policy Innovation in Dallas.

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Notable & Quotable: That's Not Funny

From "Saturday Night Live was the emptiest show of 2017" by Todd VanDerWerff, Vox.com, Dec. 29:

It still sticks in my craw, however, that *SNL* has spent a lot of the year being feted as brave and necessary television, when the heights of its satire amount to, "Trump is a weird, gross man, and his occupancy of the White House is weird and gross." I don't really disagree with any part of that assessment, but it treats Trump not as a dark portion of the American psyche that floated to the top, but rather as an aberration. And as the year wears on, and Trump's proposals grow more and more damaging to more

and more people, *SNL*'s Trump administration remains an over-obvious comedy horror show, where Steve Bannon is played by the Grim Reaper (ha ha ha?) and the series can never quite figure out how to handle the complicity of the Trump women.

SNL understands neither what makes Trump alluring nor what makes him dangerous. I don't want to write off the value of poking a leader in the eye by portraying him as a buffoon, but there are no levels to [Alec] Baldwin's performance (or the show's writing for said performance) beyond simpering man-baby. The series' default assumption is that Trump is dangerous not because

he represents a nativist, nationalist ideology that is destroying lives, while leaving thousands more in flux, but because he's a goofy, incompetent boob who might accidentally get us into nuclear war.

Which, yes, but it's a weirdly safe portrayal of Trump, one that seeks to soothe well-meaning, left-leaning folks that everything will just go back to normal if we can simply get rid of Trump, not suggest that what he represents is more dangerous to the future of the country than what he is. . . . It fails to grasp that a big part of what makes Trump *Trump* is that shows like *SNL* underestimate him and his supporters.

THE YEAR AHEAD 2018

From North Korea's nuclear program to sectarian strife in the Middle East, global security worries promise to make headlines in 2018. In the U.S., the White House faces policy challenges and an ongoing probe, while investors confront near-record asset prices. Here are some events to watch.



Congress faces a deadline for funding the government, and the new tax law promises changes in millions of paychecks.

U.S.

REPUBLICANS FACE A MIDTERM CHALLENGE

President Donald Trump and the majority Republicans in Congress are looking to tackle an effort to shore up the nation's infrastructure early in 2018.

In a midterm election year where all House seats and a third of the Senate's are up, the GOP will be playing both offense and defense. House Speaker Paul Ryan (R., Wis.), in a move that would appeal to the party's base, has said he hopes to overhaul federal safety-net programs.

Midterms are generally a challenge for the party controlling the White House in a president's first term. And special counsel Robert Mueller's investigation into Russia's interference in the 2016 elections, and the potential involvement of the Trump campaign, continues to hold peril for the GOP. Democrats during the fall campaigns are expected to cast the new tax law as a boon to the wealthy.

On the economy, the Federal Reserve expects continued improvement. The U.S. faces the prospect of a new era in monetary policy when Janet Yellen steps aside as the bank's top official in February.

- ◆ **Jan. 1** Changes to the nation's tax law take effect
- ◆ **Jan. 3** Senate convenes for second year of 115th Congress. Tina Smith, successor to Minnesota Democratic Sen. Al Franken, is set to be sworn in, as is Doug Jones (D., Ala.) to succeed Republican Luther Strange
- ◆ **Jan. 3** Release of minutes from December FOMC meeting
- ◆ **Jan. 8** House reconvenes
- ◆ **Jan. 19** Legislation keeping the government open expires on this date, requiring Congress to reach an agreement on new funding, or forcing a government shutdown
- ◆ **Jan. 21** Women's March; marches are planned in cities across the U.S. a year after record-setting protests
- ◆ **Jan. 23-28** Negotiators for the U.S., Mexico
- and Canada will gather in Montreal for the next round of Nafta talks
- ◆ **Jan. 30** President Trump delivers his State of the Union address to Congress
- ◆ **Feb. 1** Beginning as early as February, tens of millions of workers could see changes to their paychecks as withholdings will change under the new tax law
- ◆ **Feb. 4** Jerome Powell expected to succeed Janet Yellen as Federal Reserve chief
- ◆ **March 1** The U.S. Treasury hit its debt limit in December and the Bipartisan Policy Center estimates that, without a change to the limit, the Treasury would likely run out of funds as early as March
- ◆ **March 21** Fed policy statement; Mr. Powell's first quarterly news conference
- ◆ **April 1** EPA will determine by April if future stringent vehicle fuel-economy and emissions standards set by the Obama administration remain in place
- ◆ **April 25** The Supreme Court hears final arguments of the 2017-18 term. Opinions in all cases are expected before July
- ◆ **June 13** Fed policy statement; quarterly news conference
- ◆ **Sept. 26** Fed policy statement; quarterly news conference
- ◆ **Oct. 1** The Supreme Court's 2018-19 term begins
- ◆ **Nov. 6** Election Day; 34 Senate seats, 36 governorships, and the House of Representatives will be up for grabs in the midterm elections
- ◆ **Dec 19** Fed policy statement; quarterly news conference

WORLD

RISING THREATS TEST THE WEST

It is shaping up to be a pivotal year for global security. North Korea's race to strengthen its nuclear arsenal is roiling Asia and challenging international efforts to prevent the spread of atomic weapons.

Meanwhile, more assertive governments in China and Russia are seeking to exert their influence abroad and offer a rival approach to a Western-led order amid partisan battles in Washington and political splits in the European Union.

Jihadists fleeing the collapse of Islamic State in Syria and Iraq take up positions in Egypt's Sinai Peninsula and northwest Africa and seek to infiltrate Western Europe. Sectarian tensions mount across the Islamic world as Sunni power Saudi Arabia faces off with predominantly Shiite Iran.

- ◆ **January** Saudi Arabia's King Salman expected to visit the White House to meet President Donald Trump
- ◆ **Jan. 15-22** Pope Francis travels to Chile and Peru
- ◆ **March** Venezuela's President Nicolás Maduro expected to stand for re-election as his country flirts with default and hyperinflation
- ◆ **March** European Union and U.K. due to start talks on post-Brexit trade relations
- ◆ **March 4** Italy holds parliamentary elections. The anti-establishment 5 Star Movement is battling the country's mainstream politicians
- ◆ **March 5** China's legislature opens its annual session. As President Xi Jinping starts a second term firmly in charge, lawmakers will appoint a new cabinet and approve a government budget and economic policies
- ◆ **March 18** Russia goes to the polls in presidential elections that Vladimir Putin is widely expected to win. The leading opposition politician has been barred from competing
- ◆ **April** Egypt is expected to hold presi-



Russian President Vladimir Putin continues to exert his country's influence abroad.

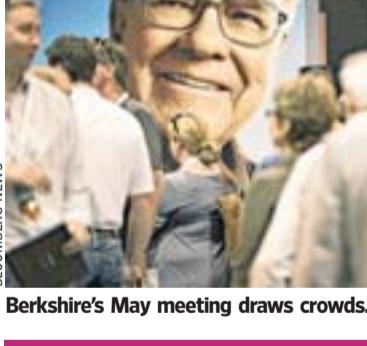
dential elections

- ◆ **April** Cuban president Raúl Castro is expected to step down
- ◆ **April 8** Bank of Japan Gov. Haruhiko Kuroda's five-year term expires
- ◆ **April 20-22** The spring meetings of the International Monetary Fund and World Bank Group, in Washington
- ◆ **July** Mexican voters go to the polls in national elections that will revolve around relations with the U.S. and corruption scandals
- ◆ **July 11-12** NATO leaders meet in Brussels, amid U.S. pressure on European allies to boost military spending
- ◆ **August** Greece could exit the bailout regime it has been under since 2010
- ◆ **October** Diplomats aiming to complete negotiations on Britain's exit from the EU
- ◆ **Oct. 12-14** The annual meetings of the International Monetary Fund and World Bank Group, in Bali, Indonesia
- ◆ **Nov. 30-Dec. 1** The heads of state of the Group of 20 nations gather in Buenos Aires for the annual G-20 summit

BUSINESS & MARKETS



The first bitcoin futures are set to expire.



Berkshire's May meeting draws crowds.

AUTOMATION DRIVES CORPORATE AGENDA

For businesses, 2018 is shaping up as an eventful year. Automation and artificial intelligence, from how people drive to how they communicate, are likely to be big themes—and with them, concerns about privacy and cybersecurity that come from conducting most business and personal affairs online.

Changes atop the Federal Reserve portend possible shifts in monetary policy and bank regulation at a time when markets are keenly attuned to both. The Republican overhaul of U.S. tax law figures to ripple through industries and the economy. Investors also will grapple with the implications of rising corporate profitability and new taxpayer behaviors.

And the year begins with a whole host of assets near record prices. While the global economy is looking healthier than it has in years, some investors are concerned that a sharp 2017 asset-price rally and a long period of unusually placid trading have left financial markets vulnerable to a shock.

- ◆ **Jan. 9-12** CES consumer electronics show, Las Vegas
- ◆ **Jan. 12** JPMorgan Chase and Wells Fargo kick off bank earnings season
- ◆ **Jan. 13-28** North American International Auto Show, Detroit
- ◆ **Jan. 17** Expiration of first bitcoin fu-
- tures listed by Cboe Global Markets Inc.
- ◆ **Jan. 21** InsideETFs conference, Hollywood, Fla.
- ◆ **Jan. 26** Expiration of first bitcoin futures listed by CME Group Inc.
- ◆ **Jan. 31** Bond Buyer Municipal Outlook Conference, New York



The Tetons loom over the Kansas City Fed's annual symposium in Jackson Hole, Wyo. Stress-test results for the U.S.'s biggest banks are due in June.

- \$46 billion takeover of Monsanto Co.
- ◆ **March 5-9** IHS CERAWeek, the oil industry's biggest global event, in Houston
- ◆ **March 8-18** Geneva International Motor Show
- ◆ **March 9-18** South by Southwest music, film and interactive event in Austin, Texas
- ◆ **April 16-20** RSA Conference on cybersecurity in San Francisco
- ◆ **June 1-5** American Society of Clinical Oncology annual meeting, Chicago
- ◆ **June 3-5** International Air Transport Association annual meeting in Sydney, Australia
- ◆ **June 11** Morningstar Investment Conference, Chicago
- ◆ **June 22** OPEC meets in Vienna
- ◆ **July 14-22** Farnborough International Air Show
- ◆ **August** Federal Reserve Bank of Kansas City Economic Policy Symposium, Jackson Hole, Wyo.
- ◆ **Aug. 22** S&P 500 bull market would become longest ever
- ◆ **Oct. 1** Sifma annual conference, Washington

LIFE & ARTS

WINTER OLYMPICS, BEYONCÉ AT COACHELLA, SPIELBERG'S DYSTOPIA

The Oscars test Hollywood's capacity for self-celebration after the harassment scandals. The winter Olympic Games play out against a tense geopolitical backdrop. The FBI director fired by President Donald Trump releases a memoir, and a former president pens a thriller.

Jasper Johns and Alberto Giacometti do battle in exhibits on opposite coasts. The Southwestern sun rises on Taylor Swift. And it wouldn't be a new year without another "Star Wars" movie.

- ARTS AND ENTERTAINMENT**
- ◆ **Jan. 28** The 60th annual Grammy Awards, in New York City
- ◆ **Feb. 10** More than 100 Jasper Johns works are the stars of an exhibit at the Broad in Los Angeles
- ◆ **Feb. 16** "Black Panther" debuts, the first of at least six movies starring Marvel Comics characters in 2018
- ◆ **March 4** The 90th Oscars, emceed by Jimmy Kimmel
- ◆ **March 30** Steven Spielberg releases his dystopian movie about virtual-reality escapism, "Ready Player One"
- ◆ **April 13-15, 20-22** The Coachella Valley Music and Arts Festival, featuring

- Beyoncé
- ◆ **May 1** Former FBI director James Comey's "A Higher Loyalty" hits bookstores
- ◆ **May 8** Taylor Swift's U.S. tour begins, in Arizona
- ◆ **May 25** Arrival of "Solo: A Star Wars Story," a Han Solo prequel featuring a young Chewbacca
- ◆ **June 4** Bill Clinton turns debut novelist with "The President is Missing," coauthored by James Patterson
- ◆ **June 8** More than 175 works by Swiss artist Alberto Giacometti go on view at the Solomon R. Guggenheim Museum in New York
- ◆ **Sept. 17** Emmy Awards air live
- ◆ **SPORTS**
- ◆ **Feb. 4** The National Football League's Super Bowl in Minneapolis
- ◆ **Feb. 9-25** Winter Olympics in Pyeongchang, South Korea
- ◆ **March 29** Baseball's opening day
- ◆ **April 5** The Masters golf tournament begins, Augusta, Georgia
- ◆ **May 31** The National Basketball Association Finals begin
- ◆ **June 14** Soccer's World Cup begins
- ◆ **June 14** Golf's U.S. Open begins in Southampton, N.Y.
- ◆ **July 2** Tennis's Wimbledon begins
- ◆ **July 7** Cycling's Tour de France starts
- ◆ **Oct. 23** Baseball's World Series starts



Beyoncé is a star attraction at Coachella; Pyeongchang prepares for the winter Olympic Games; and the movie 'Black Panther,' with Chadwick Boseman, debuts in February.



Beyoncé is a star attraction at Coachella; Pyeongchang prepares for the winter Olympic Games; and the movie 'Black Panther,' with Chadwick Boseman, debuts in February.

ASSOCIATED PRESS; REUTERS

BUSINESS & FINANCE

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Tuesday, January 2, 2018 | B1

Aging Population Supports Bonds

By DANIEL KRUGER

Close to Home

Individuals buying through funds are playing a bigger role in the U.S. Treasury market.

Purchases at Treasury auctions

Note: 2017 data through Nov. 30

Source: U.S. Treasury

THE WALL STREET JOURNAL.

The latest pillar supporting the U.S. Treasury market: everyday investors.

Ordinary investors are a growing force keeping longer-term bond yields low, even as the Federal Reserve has raised interest rates. They are helping cap borrowing costs for individuals, corporations and state and local governments, while boosting the appeal of riskier assets such as stocks, which have climbed to record after record in recent months.

John Nederhiser exemplifies the current crop of bond buyers. While professional money managers fret about interest-rate increases, growing budget deficits and inflation, the 58-year-old accountant in

Gresham, Ore., said such concerns won't deter him from continuing to add to his fixed-income holdings.

"Pretty much what I'm going to do is stay the course," he said.

An aging population means investors like Mr. Nederhiser are likely to remain a factor, as people typically increase bond holdings as they approach retirement. The population of U.S. residents age 65 or older has grown more than 40% since 2000 to 49.2 million in 2016, according to the Census Bureau, which could signal steady demand for the debt. The median age for investors with fixed-income holdings ranging from mutual funds to individual bonds is 53, according to the Investment Company

Institute's annual mutual-fund shareholder survey, up from 49 in 2007.

After a decade of bond yields holding near their lowest levels in modern U.S. finan-

cuts and generally strong economic data had some analysts talking about the possibility of a sell-off sending the yield on the benchmark Treasury 10-year note, which rises when bond prices fall, to 3%.

Instead, the 10-year yield has defied forecasts, ending 2017 on Friday at 2.409% from 2.446% at the close of the prior year. While analysts say factors keeping bond prices from falling include persistent demand for Treasuries from foreign investors—whose own bond yields have been driven near record lows thanks to easy-money policies from central banks—government data suggest that individuals such as Mr. Nederhiser have been playing an increasingly crucial role

Please see BONDS page B2

Retail investors may be more willing than professionals to stick with bonds.

cial history, many professional investment managers entered the year skittish about the potential for losses should demand for bonds decline. Interest-rate increases from the Federal Reserve, plans for tax

Buffett's Index Bet Pays Off For Charity

By NICOLE FRIEDMAN

The real winner of Warren Buffett's 10-year bet against hedge funds is Girls Inc. of Omaha.

Mr. Buffett bet \$1 million in 2007 that an index fund would outperform a basket of hedge funds over a decade. The proceeds would go to charity, and Mr. Buffett designated his local Girls Inc. affiliate as the recipient if he won. When the closing bell rang at the New York Stock Exchange on Friday, the famed investor locked in his victory.

Mr. Buffett, the chairman of Berkshire Hathaway Inc., has said throughout this year that he is confident he would win. From the start of the bet through the end of 2016, Mr. Buffett's S&P 500 index fund returned 7.1% compounded annually. The competing basket of funds of hedge funds selected by asset manager Protégé Partners returned an average of 2.2%.

And because of a twist in the bet's history, Girls Inc. of Omaha is likely to get much more than \$1 million.

Mr. Buffett and Protégé Partners originally put about \$320,000 each into bonds that would appreciate to \$1 million over the course of their wager. But the bonds appreciated much faster than expected as interest rates fell so the two sides agreed to go for a bigger prize. In late 2012, they agreed to buy 11,200 shares of Berkshire B shares, which cost \$89.70 at the end of 2012. They have climbed 121% since then.

After Friday, the last day of trading in 2017, those 11,200 shares were valued at \$2.22 million.

"I guarantee you it will be put to good use" by Girls Inc., Mr. Buffett said in a December interview.

Following Mr. Buffett's investing advice, Girls Inc. of Omaha plans to invest the donation passively and use the investment proceeds to cover the continuing expenses for a new project: transitional housing for 16 young women who are aging out of foster care, said Executive Director Roberta Wilhelm.

The organization bought a property in 2016 and will renovate it next year, with a goal of welcoming the first residents in 2019, she said.

"That's a really life-changing gift for the girls, and it's certainly a big change for our agency as well," Ms. Wilhelm said.

The Omaha, Neb., affiliate provides after-school and summer programs for girls ages 5 to 18. Its annual budget is about \$2.8 million, she said.

Ms. Wilhelm said she has followed Mr. Buffett's bet with "anticipation and hopefulness" for the past decade.

"Of course I had full confidence that he would win, but I thought, '10 years, it's so long. Who knows?'" she said.



UC Browser's tiny app size adds to its popularity in India and other emerging markets, where users prefer apps that don't take up much space on their phones.

Alibaba's Browser Challenges Google

Chinese giant's mobile software is beating Chrome in untapped markets in India and Indonesia

By NEWLEY PURNELL

JAKARTA, Indonesia—A mobile browser rarely used in the West has outflanked Google's Chrome in some of Asia's fastest-growing markets, giving owner Alibaba Group Holding Ltd. an advantage in the race among technology giants to capture the next generation of internet users.

Hundreds of millions of people in India, Indonesia and other emerging markets getting online for the first time are picking UC Browser, owned by Chinese e-commerce giant Alibaba, over ones made by U.S. rivals. Users say UC Browser works better in countries dominated by low-end smartphones and spotty mobile service.

"It's faster, it takes up less

memory, and it looks better" than Chrome, said Rizky Ari Prasetya, a 20-year-old Jakarta resident who recently ditched Chrome for UC Browser.

India and Indonesia are among the last, great untapped markets for internet users. Just 30% of India's 1.3 billion people are online, and only 25% of Indonesia's 260 million use the web, according to the International Telecommunication Union, a United Nations body.

UC Browser, which has more than 430 million users world-wide, accounted for 51% of India's mobile browser market over the past year, compared with 30% for Chrome, according to web analytics firm StatCounter. In Indonesia, UC Browser led Chrome by 41%

to 32% during the period.

Chrome has more than a billion users world-wide, according to Google, and it has some 47% global market share versus UC Browser's 16%, according to StatCounter. In the U.S., Chrome has 39% market share, behind Apple Inc.'s Safari browser, which has 52%. UC Browser has less than 1% market share in the U.S.

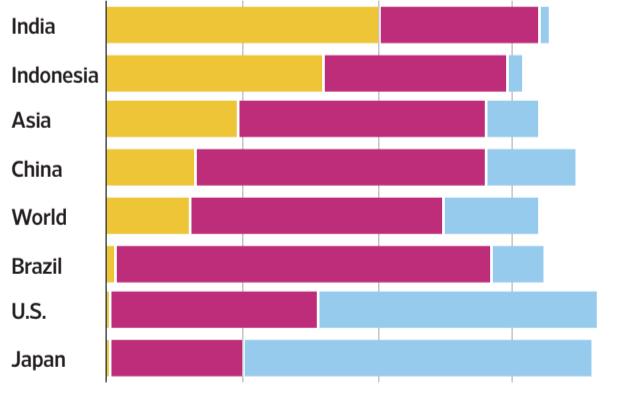
Chrome has a higher market share than UC Browser in some smaller but fast-growing Asian markets, such as the Philippines and Vietnam, according to StatCounter.

UC Browser, known for its orange squirrel logo, launched in 2004, giving it a head start. Google unveiled its Chrome browser for computers in 2008, bringing it to

Please see GOOGLE page B5

Netting the Next Billion

UC Browser is outdueling Chrome for users in two of the world's most populous nations.

Mobile web browser market share, 2017

Source: StatCounter

THE WALL STREET JOURNAL.

INSIDE



STEELMAKERS INVEST IN U.S. AGAIN



PLAYBOY MAY FOLD ITS MAGAZINE

PUBLISHING, B6

KEYWORDS | By Christopher Mims

Even Amazon, a Colossus, Has Its Limits

**Ama-zon.com** Inc. is a colossus. In the near future, it could even surpass

Apple Inc. as the world's largest publicly traded company.

But whether you think it will get there depends on how big you think the market is for the products and services Amazon is best at. One secret to Amazon's amazing scalability is this: Not everything is an Amazon business.

Amazon is the largest online retailer in the U.S. by a huge margin. In cloud-computing services, it is the

world leader by nearly every measure. With the Echo speaker, it was the surprise early leader in voice-based computing, and that business has exploded as well.

Meanwhile, Amazon is leasing planes and buying semitrailers to compete with FedEx and UPS for delivery of its own goods. This year it is on track to spend as much on video content as Netflix did in 2017.

And though no one knows what Amazon will do with Whole Foods, its push into physical retail has rival Wal-Mart scrambling to match Amazon in other ways, such as e-commerce.

All of these moves fit into Amazon's core mission as a data-driven instant-gratification company. Its fanaticism for customer experience is enabled by every technology the company can get its hands on, from data centers to drones. Imagine the data-collecting power of Facebook wedded to the supply-chain empire of Wal-Mart—that's Amazon.

There is one major problem with the idea that Amazon will eat the entire universe, however. Amazon is good at identifying commodity products and making those as cheap and available as possible. "Your margin is

my opportunity" is one of Chief Executive Jeff Bezos's best-known bon mots. But this system isn't very compatible with big-ticket, higher-margin items.

Could Amazon's Lab126—famous for both the successful Echo and the failed Fire phone—ever produce something as premium as an iPhone or an OLED TV? Its success in electronics has come from driving their prices to the very bottom.

The same goes for Amazon's other businesses. For example, could Amazon Studios, which has shown little ability to create hits, ever

Please see MIMS page B5

INDEX TO BUSINESSES

These indexes cite notable references to most parent companies and businesspeople in today's edition. Articles on regional page inserts aren't cited in these indexes.

A	F	A8,B10
Airbnb.....R3	Facebook.....B1,B11,R2	Protégé Partners.....B1
Airbus.....B11	FedEx.....B1	R
Alibaba Group ..B1,R2,R3	G	Rizvi Traverse Management.....B6
Alphabet.....B5,R2	Generations Hardwood Flooring.....A2	S
Alvarez & Marsal.....B2	Google.....B1,B5	Sears Holdings.....B2
Amazon.com.....B1,R2	Greenlight Capital.....R3	Slack.....R3
Andreessen Horowitz	J	Snap.....R3
.....B5	J.C. Penney.....B2	SoftBank Group.....R3
Apollo Global Management.....R3	JPMorgan Chase.....R2	Sony.....B11
Apple	K	Space Exploration Technologies.....A3
Aptoide.com.....B5	Kurt Manufacturing	Spotify.....R3
BA2	T
Baidu.....R2	Macy's.....B2	Tenaris.....B3
Bank of America.....B9,R2	Microsoft.....R2	Tencent Holdings.....R2
Berkshire Hathaway	Morgan Stanley.....B9	Toys "R" Us.....B2
.....B1	N	21st Century Fox.....B4
Big River SteelB3	Nucor.....B3	U
Blue Origin.....A3	Pacific Investment Management.....R3	Uber Technologies.....R3
Boeing	Patriarch Partners.....B2	Ultra Machining.....A2
C	Pinterest	United Parcel Service
Caterpillar.....A1	Playboy EnterprisesB1
Citigroup.....R2	PricewaterhouseCoopers	W
Colgan Air.....B6B6	Wal-Mart Stores.....B1
Comcast.....B4B2	Walt Disney.....B4
D - E	Dropbox.....R3	WeWork.....R3
Equifax.....B9B9	WPP.....B2

BUSINESS & FINANCE



Two Sears employees assisted a customer, left, at a Fairfax, Va., Sears last month. The retailer's losses since 2011 total \$11 billion.

Sears Backs Off TV Ads

Retailer hasn't run national commercials since late November; CEO focuses on digital

BY SUZANNE VRANICA AND SUZANNE KAPNER

The holiday season is typically a time for retailers to blanket the airwaves with commercials. This year, one company was noticeably absent: **Sears Holdings** Corp.

The struggling parent of the Sears and Kmart stores hasn't run paid national television commercials since late November, according to ad research firm iSpot and a person familiar with the situation. The Kmart brand has been absent from national TV networks since Nov. 24, iSpot said, while Sears hasn't run a paid national TV spot since Nov. 25—the Friday and Saturday after Thanksgiving.

That compares with about \$8.4 million the Sears brand spent on national TV ads in December 2016, while the Kmart brand shelled out

roughly \$6.5 million during the period, according to iSpot estimates.

Sears Holdings Chief Executive Edward Lampert has championed the use of digital marketing over traditional TV and print advertising, arguing that digital is more cost-effective and quantifiable, according to people familiar with the situation. And at first, other Sears executives agreed the company needed to rebalance its marketing to focus more on digital, these people said.

But many executives have come to believe the company has gone too far and the retreat from traditional forms of advertising is hurting the business, these people said.

Sears said in a statement that it is always "evaluating the effectiveness" of its marketing channels. "This ongoing evaluation has meant we have made significant shifts over the past few years in where we've allocated our resources, including less traditional print and television, and more digital and social channels," the statement continued. It pointed to recent marketing

efforts including having its Kmart brand integrated into the late-night talk show "Jimmy Kimmel Live."

For a retailer to back off TV ads during the holidays is highly unusual, ad experts said. "Retailers establish their value and relevance with consumers during key shopping times," said Dean Crutchfield, a corporate branding expert.

Indeed, retail rivals such as **Macy's** Inc. and **J.C. Penney** Co. spent tens of millions of dollars during the final month of 2017. Macy's shelled out some \$32 million on national TV ads during the first 29 days of December while Penney spent roughly \$27 million during the period, iSpot estimates indicate.

Struggling **Toys "R" Us** Inc., which filed for chapter 11 bankruptcy protection in September, spent about \$13.3 million on TV ads during the period, according to iSpot.

Sears Holdings, of Hoffman Estates, Ill., has been slashing expenses as it struggles to turn its business around.

Sears losses totaled \$565 million for the nine months

ended Oct. 28, bringing cumulative losses since 2011 to \$11 billion. Revenue in the period fell 23% to \$12.33 billion as the company closed stores and sold less from existing locations. As of the end of October, it operated 1,100 Sears and Kmart stores, down from 1,500 a year earlier.

In December, the retailer extended terms of a \$400 million loan and announced new planned borrowings to cover pension contributions.

As its business has shrunk, Sears has scaled back spending on measured media. Sears spent \$285.1 million on paid advertising in 2016, off from \$664.2 million in 2011, according to estimates from Kantar Media, an ad-tracking company owned by **WPP** PLC; the estimates don't include some forms of digital advertising.

While Sears cut its spending on TV and newspaper ads by roughly two-thirds during the period, it ramped up spending on digital marketing. By 2016, digital had surpassed newspapers and was second only to TV in terms of Sears's spending, according to Kantar.

INDEX TO PEOPLE

A	Haddad, Mike.....A2
Ailman, Christopher....A2	J
Alves, Tiago Costa.....B5	Johnson, Abigail.....R3
Angelle, Scott.....B3	Jong, Kim.....A7
B	Junkin, Andrew.....A1
Barrow, Steven.....R4	K
Bezos, Jeff.....A3,B1	Kaziunens, Juozas....B5
Borruso, John.....B11	Kelley, Ryan.....B11
Bromwich, Michael....B3	Kernaghan, Grant....B10
Buffett, Warren....B1,R1	Kohn, Ben.....B6
C	L
Clayton, Jay.....B9	Lake, Marianne.....R2
Cooney, Jim.....R3	Lampert, Edward.....B2
Crutchfield, Dean.....B2	Le Maire, Bruno.....A6
D	Louney, Christopher....B11
Dharia, Neha.....B5	M
Dimon, James.....R1	Marella, Dominic.....B11
Drake, David.....B11	Mayo, Mike.....R2
Dyson, Tom.....R1	Memani, Krishna....R12
E	Mondrus, David.....B11
Einhorn, David	Murphy, Chris.....B11
G - H	Nofziger, Amy.....B9
Garlinghouse, Brad...B10	Norland, Erik.....R4
Goldberg, Jason.....R2	O
Gross, Bill.....R3	Olsavsky, Brian.....B5
I	Randol, Ben.....R4
Gundlach, Jeffrey....R3	Rocco, Paolo.....B3
Gwinn, Blake.....R12	Xi, Damon.....B5

Judge Rules in Favor of Financier Tilton in Lawsuit

BY ANDREW SCURRIA

A New York federal judge absolved financier Lynn Tilton of a \$1 billion racketeering lawsuit brought by managers of the Zohar investment funds who want her ousted from some troubled companies she has been running.

The Friday ruling by U.S. District Judge William H. Pauley III in New York dispensed with part of a legal campaign

being waged by the Zohar collateralized loan obligation funds and their manager, **Alvarez & Marsal**, against Ms. Tilton, their founder.

The funds, dubbed Zohar I, II and III, accused Ms. Tilton of pillaging money from their investors and the underlying portfolio of distressed companies under her control. The judge's decision found those allegations to be outside the scope of federal racketeering

law, which he said doesn't allow for claims surrounding the purchase or sale of securities.

Ms. Tilton and her New York-based **Patriarch Partners** investment firm used money raised by the Zohar funds to invest in troubled companies, pledging to repay investors when they became successful. But many of those businesses have failed while loan repayments that were supposed to feed the Zohar

funds dried up, sending two of the three funds into default.

A Patriarch Partners spokesman said the lawsuit "was filed for no other purpose than to harass and publicly defame Ms. Tilton" and "had absolutely no basis in fact or law."

A lawyer for the Zohar funds had no immediate comment.

Ms. Tilton stepped down from all three funds in 2016

after a confrontation in bankruptcy court with bond insurer MBIA Insurance Corp. After her departure, Alvarez & Marsal took over managing the loans that backed the Zohar funds while she stayed in charge of the underlying businesses.

Now, Alvarez & Marsal wants her gone from some of the businesses she has been running and recently convinced a Delaware corporate

law judge that she isn't the true owner and rightful manager of some of the assets in her collection. Ownership of those companies is an important point, because warding off a default in the last Zohar fund, which comes due in 2019, likely means selling the businesses or taking other action to refurbish them.

—Tom Corrigan and Peg Brickley contributed to this article.

BONDS

Continued from the prior page
in stabilizing prices in the U.S. bond market.

Treasury Department data on the \$1.87 trillion of new government notes and bonds sold at auction last year through Nov. 30 show U.S. investment funds—mutual funds and similar vehicles that typically represent individual investors—have bought a record \$917 billion, or 49% of the debt, excluding Fed purchases. The percentage has been steadily rising from 20% in 2010, and the figure significantly exceeds the \$316 billion bought by foreign investors through November. Net flows into funds that invest in U.S. government bonds and other taxable debt surged in 2017, exceeding \$16 billion for 10 straight months through October, according to data from EPFR Global.

Conversations with more than a dozen individuals and financial planners suggest many of those retail investors are more willing than professionals to stick with bonds, even if yields climb further.

Some older investors have lived through periods where inflation climbed above 10% and where it cratered below zero, while watching plunges in technology stocks and home prices dent their accumulated wealth.

For some, that has led to a pragmatic appreciation of bonds' steady income and rela-

In Demand

Investors have poured money into U.S. bond funds, helping keep bond yields low.

Net flows into U.S.-domiciled funds



Note: Data are through October.

Source: EPFR Global

law. That is because government debt now makes up more than one-third of the Bloomberg Barclays U.S. Aggregate bond index, a popular reference point that guides how many portfolio managers assemble their holdings.

The amount of Treasurys in the index has risen from roughly one-quarter in 2007, before the financial crisis led to an explosion in government borrowing and a slowdown in issuance from corporate and mortgage borrowers. The proportion of Treasurys may rise further as the Fed pares back its \$4.2 trillion in holdings of government and mortgage debt, which indexes don't count since the Fed's portfolio sits outside of the open market.

It remains to be seen if retail investors will hang on to bonds should yields start to skyrocket. During the 2013 "taper tantrum," which followed then-Fed Chairman Ben Bernanke's statement that the central bank was preparing to stop its bond purchases. Bond funds suffered net outflows for eight consecutive months afterward, while the yield on the 10-year note almost doubled to around 3%.

Mr. Nederhiser, who principally invests in low-fee bond funds, remembers the taper tantrum. Back then, as 10-year Treasury yields soared, Mr. Nederhiser began shifting some of the gains from his stock portfolio into bonds.

"I saw it as the ultimate rebalancing opportunity," he said.

While the pros fretted, Arun

Koparkar dismissed speculation about an increase in yields and kept his cool.

"We've been hearing about this for 10 years and it hasn't happened," said David Folts, a 59-year-old occupational therapist from Girard, Ohio, who invests in a low-cost bond fund. "My approach is my approach, and it's not changing."

The sanguinity of ordinary bondholders contrasts with 2017 statements from some more famous investors such as Bill Gross and Jeff Gundlach, both dubbed "the Bond King" at various times. Mr. Gross and Mr. Gundlach each created a stir last year by intimating a bond sell-off might be approaching.

While the pros fretted, Arun

Koparkar dismissed speculation about an increase in yields and kept his cool.

"I saw it as the ultimate rebalancing opportunity," he said.

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BUSINESS NEWS

Steelmakers' U.S. Business Heats Up

Producers add mills to fill pipe demand from energy industry, battle cheap imports

By BOB TITA

Steelmakers are betting on the U.S. again, building mills they hope will help them compete against cheap imports as demand rises.

Steel companies have complained for years that steel from China, South Korea, Vietnam, Turkey and elsewhere is being sold in the U.S. for less than the cost to make it.

While imports are still increasing, steel prices are also on the rise globally. And demand for U.S. steel is starting to rebound, thanks to rising oil prices and a strengthening manufacturing sector, steel executives say. Still, others see expansion as a risky bet.

Some steel companies say they can capture more customers with new plants that can make more steel at less cost than older plants, and can deliver it faster to customers. They are also counting on additional U.S. tariffs to drive out cheap, foreign-made steel, creating more opportunities for domestic producers. Stiff tariffs imposed over the past



Luxembourg-based Tenaris makes pipe for oil and gas wells at a new \$1.8 billion mill near Houston.

18 months have significantly slowed steel imports from China, according to Commerce Department reports.

Nucor Corp. is building a \$250 million steel mill in Sedalia, Mo. Startup Big River Steel LLC in Osceola, Ark., accelerated production in early 2017 at a new steel sheet mill.

And Tenaris SA started making pipe for oil and gas wells at a new \$1.8 billion mill near Houston in December.

"Our view is the energy sector will continue to expand here for the next 10 to 20 years and justify more manufacturing in the states," said Paolo Rocca, chief executive of

Luxembourg-based Tenaris.

Domestic steel shipments rose 5% in the first 10 months of 2017 compared with a year earlier and were on track to finish the year higher for the first time since 2014, according to the American Iron and Steel Institute. At the same time, imports were up 15% an-

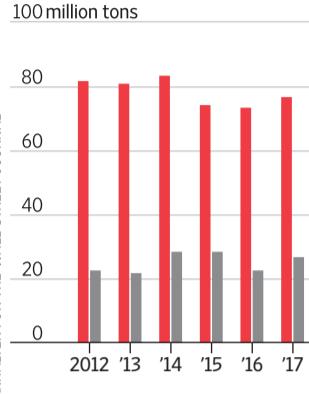
Pipe Dreams?

Domestic shipments of steel are edging higher again, even as steel imports remain elevated.

Shipments of steel-mill products, Jan.-Oct.

■ Domestic steel shipments
■ Imports of finished steel products

100 million tons



Sources: Department of Commerce (imports); American Iron and Steel Institute (domestic shipments)

THE WALL STREET JOURNAL.

nually in the first 10 months of 2017, as imports shifted from China to other low-cost countries. Nucor said Dec. 19 that price pressure from imports has compressed its margins, and it forecast its fourth-quarter earnings per share will be barely above 2016's.

Some industry analysts say

the new U.S. mills could exacerbate that pressure, swamping a fragile domestic market. As Tenaris's new mill in Texas begins production, the company has other nearby plants that remain mostly idle. Mills in the U.S. that supply well-site pipes are operating at 60% of their maximum production, according to market-analytics firm Pipe Logix LLC.

"Building any more production capacity is just questionable," said Seth Rosenfeld, a Jefferies analyst. "These companies' actions don't align with what they've been saying about the state of the steel market."

But Pipe Logix also estimates that the number of oil and gas wells drilled in the U.S. increased 60% in 2017 over 2016, and steel executives expect more growth this year.

Tenaris hopes to benefit from that growth by doubling its U.S. pipe-making capacity to about one million tons annually. Tenaris plans to sell it directly to well drillers, eliminating independent distributors. Without the middlemen's markup, Tenaris says it can beat its domestic rivals on price. It also expects U.S. tariff pressure on foreign competitors to drive down imports that now make up about 70% of the U.S. well-pipe market.

Proposed Oil-Drilling Rules Raise Questions on Agency Role

By TED MANN

The Trump administration's proposed changes to offshore oil-drilling rules are raising questions over whether safety regulators at the Interior Department should also be concerned with promoting oil and gas production.

President Donald Trump's appointees have begun to take steps to ease rules put in place in the years after 2010's Deepwater Horizon disaster, when a blowout on an offshore drilling rig, coupled with the fail-

ure of critical safety equipment, killed 11 workers and triggered the biggest oil spill in U.S. history.

The Bureau of Safety and Environmental Enforcement on Friday published proposed revisions to a production safety rule that was passed after the disaster. The Wall Street Journal has reviewed another proposal from BSEE, not yet made public by the agency, to roll back another Deepwater Horizon-related rule, to yield costs savings of more than \$900 million for

the industry over 10 years.

The proposed changes put the agency in the role of promoting private interests in drilling. The production safety systems rule "moves us forward toward meeting the Administration's goal of achieving energy dominance without sacrificing safety," BSEE director Scott Angelle said in a statement Friday. "By reducing the regulatory burden on industry, we are encouraging increased domestic oil and gas production while maintaining a high bar for safety and envi-

ronmental sustainability."

Oil-industry groups, including the American Petroleum Institute, have backed many of the proposed changes.

Former industry regulators, however, are expressing concerns. When the BSEE was created, as part of reforms to the Interior Department after the 2010 spill, the new agency wasn't intended to promote oil production, these former officials say. The Obama administration split apart BSEE's bureaucratic predecessor, separating the government of-

ficials responsible for ensuring that offshore oil and gas producers operate safely from those who lease offshore oil fields and those who collect proceeds for the Treasury.

"BSEE's mission is not to expand domestic production," said Michael Bromwich, a former federal prosecutor who helped reorganize the BSEE for the Obama administration and served as its first director.

The well-control proposal deletes an existing requirement that the agency confirm that the amount of pressure

drillers propose to use in a new well is "safe." The proposal would also relax requirements to have backup plans in place for so-called blowout preventers, which seal off a well-pipe in the event of an accident.

And the proposal would amend the standard applied to pressure tests on a well—the same test failed by safety equipment in the Deepwater Horizon case—requiring only that a test indicate that equipment could withstand a surge in pressure, not "show" that it could do so.

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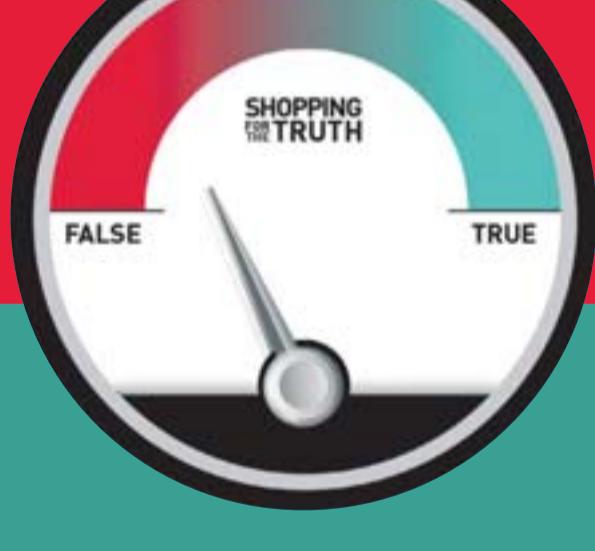
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MEDIA

'Last Jedi' Is 2017's Top-Grossing Film



Online Fees Help China Rebound At the Box Office

China's box office is on the upswing, owing to accounting changes and one blockbuster success.

Ticket sales for 2017 in China, the world's second-largest economy, rose about 22% to 55.31 billion yuan (\$8.5 billion) as of Saturday, according to Beijing-based film-research firm EntGroup. China is expected to announce official figures for 2017 this month.

The numbers suggest a bounceback from 2016, when the country's box-office take grew less than 4% versus an average annual rate of 34% between 2011 and 2015. That growth was fueled by a boom in theater construction, which propelled China's ticket sales to the No. 2 spot behind North America.

But 2017's resurgence has been driven by two factors: the record-setting success of Chinese action film "Wolf Warrior 2" and Chinese media regulators' decision to include fees from online-ticketing services in the box-office figures for the first time. Excluding fees, which have an outsized impact in China as many more moviegoers buy tickets online, the box office was up 15% as of Saturday, according to EntGroup. U.S. figures don't include such fees.

China's media regulator, the State Administration of Press, Publication, Radio, Film and Television, didn't respond to a request to comment. In April, it confirmed to The Wall Street Journal that the country's box-office figures now included the surcharges.

"Wolf Warrior 2" shattered records to become the highest-grossing film in China.

—Wayne Ma
and Erich Schwartzel

'Star Wars: The Last Jedi' has taken in an estimated \$1.04 billion world-wide, and the Walt Disney movie has yet to open in China, the world's No. 2 box-office market.

BY ERICH SCHWARTZEL

"Star Wars: The Last Jedi" became the highest-grossing movie of 2017 over the weekend, giving Walt Disney Co. another banner year at the box office that left rival studios fighting for leftovers.

"The Last Jedi" has collected an estimated \$533 million in the U.S. and Canada so far, and the space-opera sequel will still run in theaters for several more weeks.

After collecting \$68.4 million over the four-day weekend, "The Last Jedi" has already passed the \$532 million domestic gross of 2016's "Rogue One," but is expected ultimately to lag behind 2015's "The Force Awakens," the top-grossing movie in history with \$937 million at the domestic box office.

"The Last Jedi" has grossed \$1.04 billion world-wide and has yet to open in China, the world's No. 2 box-office market.

In another indication of its box-office dominance, Disney has three titles total in the top-five grossing films of 2017, including No. 2 "Beauty and the Beast" (\$504 million) and "Guardians of the Galaxy Vol. 2" in fourth place with \$390 mil-

lion. "Wonder Woman," from Time Warner Inc.'s Warner Bros., was the third-highest grossing movie of the year with a cumulative \$67.5 million. The a cappella comedy was released by Comcast Corp.'s Sony Pictures Entertainment came in fifth with \$334 million.

Overall trends signal the growing importance of foreign markets to Hollywood studios. In a troubling sign for exhibitors, movie attendance declined to levels last seen in the 1990s, leaving it up to higher ticket prices to pick up some of the slack. International grosses rose about 5% to a record \$28.8 billion, but total domestic sales fell about 2.3% to \$11.1 billion in 2017, according to comScore.

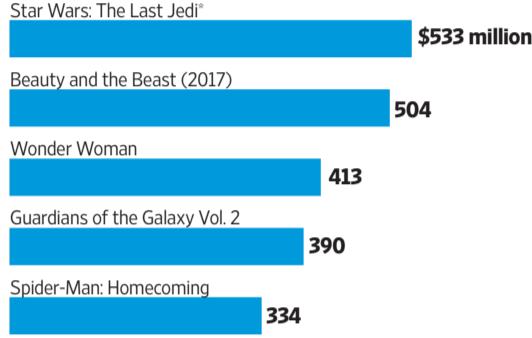
Theater owners had been bullish heading into the year, but several major releases—"Pirates of the Caribbean: Dead Men Tell No Tales," "Transformers: The Last Knight" and "The Mummy" among them—fell short of expectations.

The week between Christmas and New Year's Day boosted grosses for several releases, most notably Sony's "Jumanji: Welcome to the Jungle." The family-oriented board-game adaptation has collected \$185.8 million so far.

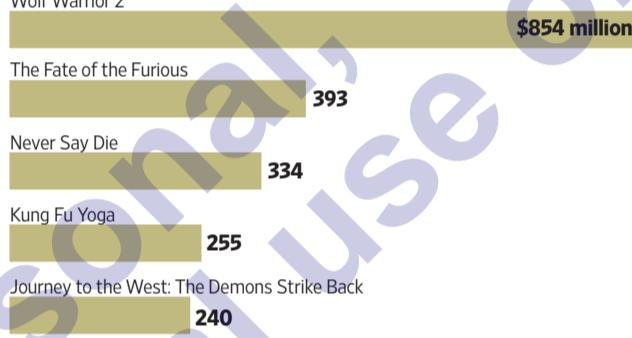
At the Movies

Box-office revenue in 2017

Top five films in the U.S. and Canada



Top five films in China



*Opened Dec. 15, not yet open in China.

Source: Box Office Mojo

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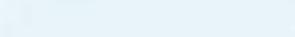
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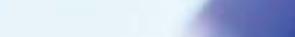
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TECHNOLOGY

MIMS

Continued from page B1
produce a franchise like Marvel's "Avengers" or HBO's "Game of Thrones"?

Amazon increasingly makes money by extracting a percentage from the sales of other sellers on its site. It has become a platform company like Facebook or **Alphabet** Inc.'s **Google**, which serve as marketplaces for businesses with less reach of their own.

There are likely one million active sellers on Amazon's marketplace, according to Euromonitor International, a research firm. Amazon typically takes a 15% margin from other sellers, and can gener-

Selling items widely at low prices is counter to how higher-profit businesses work.

ate extra revenue by warehousing and delivering goods.

Eventually, Amazon could become the ultimate platform for retail, the "retail cloud" upon which countless other online businesses are built, said Juozas Kazlukėnas, founder and chief executive of Marketplace Pulse, a business-intelligence firm focused on e-commerce. "Maybe eventually you can even outsource your manufacturing to Amazon," he added.

Amazon famously adheres to the rule that any new business should be built by a team small enough to be fed with two pizzas. These teams are "a way to scale thousands of product categories," said Benedict Evans, partner at venture-capital firm **Andreessen Horowitz**, because they are nimble and can have independent profit-

and-loss statements.

Ultimately, these smaller businesses must feed the core mission. Amazon's video business isn't just its own potential profit center; it is also a way to keep people in Amazon's world longer, where they spend more money, Amazon Chief Financial Officer Brian Olsavsky said in October.

Amazon may be mastering commodity goods; its own Basics line went from about 250 products in 2013 to over 1,500 today. But making items widely available at low prices runs counter to the way higher-profit businesses work.

Amazon may be a dominant player in touch-screen tablets, for example, but to get to that position it not only undersold nearly every competitor, but it also killed off its own tablet lines that more closely resembled Apple's iPad in quality and price.

Why hasn't the success of Amazon Web Services hurt the revenue or valuation of its chief competitors? Yes, it's partly because the pie has expanded so fast, every competitor is growing. But it's also because Amazon offers a commodity—basic cloud services. Google, Microsoft Corp. and Salesforce.com Inc. offer more specialized services, and Oracle Corp., for one, charges a premium on white-glove treatment for business-essential assets.

Ultimately, the strategies that allow Amazon to continue growing will also be its limitation. "If the platform needs to be one-size-fits-all across many, many different product categories, it becomes difficult to create specific experiences for different kinds of products," Mr. Evans said.

The bulk of goods and services may one day come from Amazon, and everyone from CVS to Uber should watch their backs. Even so, there will be countless competitors that would never dream of branding their products "Basic."



Mobile ad spending in Southeast Asia is set to more than double.

GOOGLE

Continued from page B1
its Android mobile operating system in 2012.

One reason for UC Browser's success is its tiny app size and portal-like approach to showing news, scores from sports like cricket and soccer and other content. New web surfers tend to do more through their browsers, and they prefer apps that don't take up much space on their phones, an insight UC Browser caught onto early.

Many smartphones in Asia's developing markets have just 12 gigabytes of storage, half of the global average and far below the U.S. standard of 32 gigabytes, said Neil Shah, an analyst with research firm Counterpoint.

The UC Browser app takes up 31 megabytes of space, compared with Chrome's 125 megabytes, said Tiago Costa Alves, Asia Pacific vice president at independent Android app store **Aptoide**.

One market UC Browser hasn't conquered is its own. In China, Chrome has 54% of the mobile browser market compared with UC Browser's 17%, according to StatCounter.

UC Browser strives to be "the first window to view the internet" for new web consumers by letting them use fewer clicks and less data, said Damon Xi, the Alibaba executive overseeing UC Browser's expansion in India and Indonesia.

Google appears to be taking notice. Some updates to Chrome include making the app and its data usage smaller and adding icons on the home screen that can be clicked to visit popular websites rather than having to type in addresses, two features UC Browser has offered. Those adjustments may be working, with Chrome's market share in India and Indonesia increasing,

according to StatCounter.

A spokesman for Google, a unit of **Alphabet** Inc., declined to comment.

Any migration away from Google's browser is bad news for the search king. Chrome funnels users to Google's search engine and its advertisements, and Chrome users are more likely to use other Google services like Gmail and cloud-storage platform Google Drive, said Neha Dharia, an analyst at research firm Ovum.

While UC Browser doesn't prohibit users from accessing Google search or services such as YouTube and Google Maps, they tend to use them less than Chrome users, analysts say, because they typically return to the browser. UC Browser also makes money through advertising.

Mobile ad spending in Southeast Asia is set to more than double from about \$860 million in 2017 to \$2.2 billion in 2021, according to research firm eMarketer. Indian mobile ad spending is projected to rise from \$460 million to \$1.73 billion during that time. While that is a small compared with the \$58 billion spent in the U.S. alone in 2017, the browser could give Alibaba an advantage as it taps into Asia's markets.

One potential challenge to UC Browser's popularity involves concerns over how, as a Chinese firm, it handles users' data. Chinese technology titans such as Alibaba speak openly about cooperating with authorities on security and law enforcement, while U.S. firms often resist U.S. government requests for information.

In 2016, Citizen Lab, a Toronto-based human-rights research group, said there were privacy and security issues with how UC Browser transmitted data. Mr. Xi said UC Browser takes "security and privacy issues very seriously."

—Anita Rachman
contributed to this article.

This announcement is neither an offer to purchase nor a solicitation of an offer to sell Shares (as defined below). The Offer (as defined below) is made solely pursuant to the Offer to Purchase, dated January 2, 2018, and the related Letter of Transmittal, and any amendments or supplements to such Offer to Purchase or Letter of Transmittal. Purchaser is not aware of any state where the making of the Offer is prohibited by any administrative or judicial action pursuant to any valid state statute. If Purchaser becomes aware of any valid state statute prohibiting the making of the Offer or the acceptance of the Shares pursuant thereto, Purchaser will make a good faith effort to comply with that state statute or seek to have such statute declared inapplicable to the Offer. If, after a good faith effort, Purchaser cannot do so, Purchaser will not make the Offer to, nor will tenders be accepted from or on behalf of, the holders of Shares in that state. Except as set forth above, the Offer is being made to all holders of Shares. In any jurisdiction where the securities, "blue sky" or other laws require the Offer to be made by a licensed broker or dealer, the Offer will be deemed to be made on behalf of Purchaser by one or more registered brokers or dealers that are licensed under the laws of such jurisdiction.

Notice of Offer to Purchase

All Outstanding Shares of Common Stock

of

Amplify Snack Brands, Inc.

at

\$12.00 Per Share of Common Stock, Net in Cash, Pursuant to the Offer to Purchase dated January 2, 2018

by

Alphabet Merger Sub Inc.

a wholly-owned subsidiary of

The Hershey Company

Alphabet Merger Sub Inc., a Delaware corporation ("Purchaser") and a wholly owned subsidiary of The Hershey Company, a Delaware corporation ("Parent"), is offering to purchase all outstanding shares of common stock, par value \$0.0001 per share (the "Shares"), of Amplify Snack Brands, Inc., a Delaware corporation (the "Company"), at a price per Share of \$12.00 (such price as it may be amended from time to time in accordance with the Merger Agreement (as defined below), the "Offer Price"), net to the seller in cash, without any interest, but subject to and reduced by any required withholding of taxes, upon the terms and subject to the conditions set forth in the Offer to Purchase (together with any amendments or supplements thereto, the "Offer to Purchase") and in the related Letter of Transmittal (together with any amendments or supplements thereto, the "Letter of Transmittal") and, together with the Offer to Purchase, the "Offer"). If your Shares are registered in your name and you tender directly to American Stock Transfer & Trust Co., LLC (the "Depository"), you will not be obligated to pay brokerage fees or commissions or, subject to Instruction 6 of the Letter of Transmittal, transfer taxes on the purchase of Shares by Purchaser. If you hold your Shares through a broker, dealer, commercial bank, trust company or other nominee you should check with such institution as to whether they charge any service fees.

The Offer is being made pursuant to the Agreement and Plan of Merger, dated as of December 17, 2017 (together with any amendments or supplements thereto, the "Merger Agreement"), among Parent, Purchaser and the Company, pursuant to which, after the completion of the Offer and the satisfaction or waiver of certain conditions, Purchaser will be merged with and into the Company, with the Company continuing as the surviving corporation (the "Merger"). The Merger Agreement is more fully described in the Offer to Purchase.

THE OFFER AND WITHDRAWAL RIGHTS WILL EXPIRE AT 12:00 MIDNIGHT, NEW YORK CITY TIME, AT THE END OF JANUARY 30, 2018, UNLESS THE OFFER IS EXTENDED OR EARLIER TERMINATED.

The Offer is not subject to any financing condition. The Offer is, however, subject to the following conditions, among others:

- there being validly tendered and not validly withdrawn Shares that, considered together with all other Shares (if any) beneficially owned by Parent and its controlled affiliates (excluding any Shares tendered pursuant to guaranteed delivery procedures that have not yet been received), represent one more Share than 50% of the sum of (x) the total number of Shares outstanding at the time of the expiration of the Offer, plus (y) the aggregate number of Shares then issuable to optionholders from which the Company has received notices of exercise prior to the expiration of the Offer (and as to which such Shares have not yet been issued to such exercising optionholders) (such condition, the "Minimum Condition");
- the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, including the rules and regulations promulgated thereunder, having expired or been terminated; and
- other customary conditions.

Parent and Purchaser may waive any condition, in whole or in part, except for the Minimum Condition, at any time and from time to time, subject to the terms of the Merger Agreement. A more detailed discussion of the conditions to consummation of the Offer is contained in the Offer to Purchase.

THE BOARD OF DIRECTORS OF THE COMPANY UNANIMOUSLY RECOMMENDS THAT YOU TENDER ALL OF YOUR SHARES INTO THE OFFER.

After careful consideration, the Company's board of directors unanimously (a) approved and declared advisable the Merger Agreement and transactions contemplated thereby, including, without limitation, the Offer and the Merger, (b) determined that the transactions contemplated by the Merger Agreement, including the Offer and the Merger, are in the best interests of the Company and its stockholders, (c) agreed that the Merger Agreement will be effected under Section 251(h) of the General Corporation Law of the State of Delaware (the "DGCL"), and (d) resolved to recommend that the stockholders of the Company accept the Offer and tender their Shares to Purchaser pursuant to the Offer.

The purpose of the Offer and the Merger is for Parent and its affiliates, through Purchaser, to acquire control of, and the entire equity interest in, the Company. Following the consummation of the Offer, subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, Purchaser intends to effect the Merger.

No appraisal rights are available to holders of Shares in connection with the Offer. However, if the Merger takes place, stockholders who have not tendered their Shares in the Offer and who comply with applicable legal requirements will have appraisal rights under the DGCL.

Upon the terms and subject to the conditions of the Merger Agreement, if the Minimum Condition is satisfied and Purchaser accepts Shares for payment pursuant to the Offer, the Merger will be consummated, in accordance with Section 251(h) of the DGCL, as soon as practicable after Purchaser accepts for payment Shares tendered pursuant to the Offer, without a meeting of the stockholders of the Company.

Subject to the terms of the Merger Agreement and to the extent permitted by applicable law, Purchaser expressly reserves the right to waive any conditions to the Offer (provided that the Minimum Condition described above may be waived only with the prior written consent of the Company), or modify the terms of the Offer.

Subject to the provisions of the Merger Agreement and the applicable rules and regulations of the Securities and Exchange Commission, Purchaser reserves the right, and under certain circumstances Purchaser may be required, to extend the Offer, as described in Section 1 of the Offer to Purchase.

Any extension, waiver or amendment of the Offer, or delay in acceptance for payment or payment, or termination of the Offer will be followed, as promptly as practicable, by public announcement thereof, such announcement in the case of an extension to be issued not later than 9:00 a.m., New York City time, on the next business day after the previously scheduled expiration time of the Offer in accordance with the public announcement requirements of Rules 14d-4(d), 14d-6(c) and 14e-1(d) under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

For purposes of the Offer, Purchaser will be deemed to have accepted for payment, and thereby purchased, Shares validly tendered, and not properly withdrawn, prior to the expiration time of the Offer if and when Purchaser gives oral or written notice to the Depository of Purchaser's acceptance for payment of such Shares pursuant to the Offer. Upon the terms and subject to the conditions to the Offer, payment for Shares accepted for payment pursuant to the Offer will be made by deposit of the purchase price therefor with the Depository, which will act as agent for the tendering stockholders for purposes of receiving payments from Purchaser and transmitting such payments to the tendering stockholders. **Under no circumstances will interest be paid on the Offer Price for Shares, regardless of any extension of the Offer or any delay in making payment for Shares.**

In all cases, payment for Shares tendered and accepted for payment pursuant to the Offer will be made only after timely receipt by the Depository of (a) certificates representing such Shares or confirmation of the book-entry transfer of such Shares into the Depository's account at The Depository Trust Company ("DTC") pursuant to the procedures set forth in Section 3 of the Offer to Purchase, (b) a Letter of Transmittal (or facsimile thereof), properly completed and duly executed, with any required signature guarantees (or, in the case of a book-entry transfer, an Agent's Message (as defined in Section 3 of the Offer to Purchase) in lieu of the Letter of Transmittal), and (c) any other documents required by the Letter of Transmittal or any other customary documents required by the Depository.

Shares tendered pursuant to the Offer may be withdrawn at any time prior to the expiration time of the Offer. Further, if Purchaser has not accepted Shares for payment by March 3, 2018, they may be withdrawn at any time prior to the acceptance for payment after that date. For a withdrawal of Shares to be effective, a written or facsimile transmission notice of withdrawal must be timely received by the Depository at one of its addresses set forth on the back cover of the Offer to Purchase. Any notice of withdrawal must specify the name of the person having tendered the Shares to be withdrawn, the number of Shares to be withdrawn and the name of the registered holder of the Shares to be withdrawn, if different from that of the person who tendered such Shares. The signature(s) on the notice of withdrawal must be guaranteed by an Eligible Institution (as defined in the Offer to Purchase), unless such Shares have been tendered for the account of any Eligible Institution. If Shares have been tendered pursuant to the procedures for book-entry transfer as set forth in Section 3 of the Offer to Purchase, any notice of withdrawal must specify the name and number of the account at DTC to be credited with the withdrawn Shares. If certificates representing the Shares have been delivered or otherwise identified to the Depository, the name of the registered owner and the serial numbers shown on such certificates must also be furnished to the Depository prior to the physical release of such certificates.

All questions as to the form and validity (including time of receipt) of any notice of withdrawal will be determined by Purchaser or Parent, in its sole discretion, which determination will be final and binding. No withdrawal of Shares will be deemed to have been properly made until all defects and irregularities have been cured or waived. None of Purchaser, Parent or any of their respective affiliates or assigns, the Depository, the Information Agent (listed below) or any other person will be under any duty to give notification of any defects or irregularities in any notice of withdrawal or incur any liability for failure to give such notification. Withdrawals of tenders of Shares may not be rescinded, and any Shares properly withdrawn will be deemed not to have been validly tendered for purposes of the Offer. However, withdrawn Shares may be tendered by following one of the procedures for tendering Shares described in Section 3 of the Offer to Purchase at any time prior to the expiration time of the Offer.

The information required to be disclosed by paragraph (d)(1) of Rule 14d-6 under the Exchange Act is contained in the Offer to Purchase and is incorporated herein by reference.

The Company has provided Parent with the Company's stockholder list and security position listings for the purpose of disseminating the Offer to holders of Shares. The Offer to Purchase and related Letter of Transmittal will be mailed to record holders of Shares whose names appear on the Company's stockholder list and will be furnished, for subsequent transmittal to beneficial owners of Shares, to brokers, dealers, commercial banks, trust companies and similar persons whose names, or the names of whose nominees, appear on the stockholder list or, if applicable, who are listed as participants in a clearing agency's security position listing.

The receipt of cash for Shares in the Offer or the Merger will be a taxable transaction for United States federal income tax purposes. Stockholders should consult their own tax advisors as to the particular tax consequences of the Offer and the Merger to them. For a more complete description of certain material U.S. federal income tax consequences of the Offer and the Merger, see Section 5 of the Offer to Purchase.

The Offer to Purchase, the related Letter of Transmittal and the Company's Solicitation/Recommendation Statement on Schedule 14D-9 contain important information and should be read carefully and in their entirety before any decision is made with respect to the Offer.

Questions and requests for assistance may be directed to the Information Agent at its address and telephone number set forth below. Requests for copies of the Offer to Purchase and the related Letter of Transmittal may be directed to the Information Agent or to brokers, dealers, commercial banks or trust companies. Such copies will be furnished promptly at Purchaser's expense. Purchaser will not pay any fees or commissions to any broker or dealer or any other person (other than the Information Agent) for soliciting tenders of Shares pursuant to the Offer.

The Information Agent for the Offer is:

Georges

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January 2, 2018

BUSINESS NEWS

Playboy May Turn Page, Drop Magazine

Post-Hefner focus shifts to licensing, lifestyle deals built around iconic brand

BY LUKAS I. ALPERT

The death of Playboy founder Hugh Hefner is ushering in a new era for the adult-entertainment enterprise in more ways than one.

His passing in September at the age of 91 has set in motion a process that will move ownership of the iconic brand out of his family's hands and could soon spell the end of its once pace-setting U.S. print edition after nearly seven decades on newsstands.

Playboy Enterprises Inc.'s controlling shareholder—private-equity firm **Rizvi Traverse**—is in talks to acquire the 35% stake Mr. Hefner left in trust to his heirs, a person familiar with the matter said. At the same time, the company says it is doubling down on efforts to make money from brand partnerships and licensing deals built around the Playboy name, ethos and bunny

logo, with increasingly less focus on its editorial roots.

"We want to focus on what we call the 'World of Playboy' which is so much larger than a small, legacy print publication," said Ben Kohn, a managing partner at Rizvi who took over as Playboy Enterprises' chief executive in May 2016. "We plan to spend 2018 transitioning it from a media business to a brand-management company."

Mr. Hefner's death will hasten that transition. Rizvi, which helped him take Playboy private in 2011 in return for control of nearly two-thirds of the company, had agreed to continue publishing its flagship magazine while he remained alive. The deal also granted Mr. Hefner some ability to approve or block certain deals, people familiar with the arrangement said. Those rights don't pass to his heirs.

As a first step, Playboy will look to raise \$25 million to \$100 million in outside equity in early 2018 to fund future partnership deals and to help buy back the Hefners' shares, a person familiar with the matter said.

Since 2011, Playboy has



swimsuit line in China.

The company also recently moved its "Midsummer Night's Dream" and Halloween parties from Playboy's famed mansion to nightclubs in Las Vegas, where they have become revenue-generating events rather than marketing expenses for the magazine.

Meanwhile, the magazine has lost as much as \$7 million annually in recent years, people familiar with the matter said, and was already scaled back to six issues annually from 10, following a brief experiment in which it ceased printing nude photos. U.S. circulation has slipped to under 500,000 copies an issue from 5.6 million at the peak in 1975.

Although a final decision hasn't been made, the company is seriously considering the future of the print magazine. "Historically, we could justify the [magazine's] losses because of the marketing value, but you also have to be forward thinking," Mr. Kohn said. "I'm not sure that print is necessarily the best way to communicate to our consumer going forward."

The company is forging partnerships around Playboy-themed projects. The Playboy Club in London.

moved to turn itself into more of a lifestyle brand, focusing on licensing deals to produce things like bunny-ear stamped wallets in China, and slap the Playboy name on nightclubs in India and casinos in London. While the company now gets at least half of its revenue an-

nually from such deals, results have been mixed.

For example, a 2014 deal that paid platinum-selling Miami rapper Pitbull \$3 million to put his name on and promote a co-branded line of men's suits under the label "Pitbull After Dark" never came to fruition,

in part due to difficulties getting department stores to carry it. In the end, all Playboy Enterprises got for its investment were a few party appearances and the rapper's picture on Playboy-themed slot machines, according to people familiar with the deal.

Two nightclubs in casino hot spot Macau closed quickly after it proved difficult to secure gambling licenses. Another in the Indian beach resort of Goa never opened after meeting local resistance.

Other licensing deals, like a fragrance line and a lounge on the Sunset Strip in Los Angeles, have been successful. Much of the licensing business has been focused in China, where the magazine doesn't exist and the company is viewed more as a lifestyle brand.

Mr. Kohn said the company will now focus less on pure licensing deals and more on equity partnerships and joint ventures around Playboy-themed projects. Recent deals include developing a Playboy-branded line of spirits, a Playboy Club in New York and a Shanghai music festival, as well as plans for a lingerie and

Controlling shareholder Rizvi is in talks to buy a 35% stake left in trust by Mr. Hefner.

As part of the original arrangement when the company was taken private, Mr. Hefner's death triggered a call option in which Rizvi has exclusive rights to buy the trust's 35% stake. Similarly, his heirs have a put option, allowing them to force Rizvi to acquire their shares, people familiar with the matter said.

Representatives of the trust and Mr. Hefner's four children, including his 26-year-old son Cooper, who took over as chief creative officer of Playboy in 2016, didn't respond to requests to comment.

Airlines Mark Year Free of Jet Fatalities

BY ANDY PASZTOR

The global airline industry achieved a previously unimaginable safety milestone in 2017: Independent accident data doesn't indicate a single airline passenger fatality resulting from a jet crash anywhere in the world.

But for safety geeks, global 2017 results were literally off the charts. Since modern jet propulsion became commonplace some six decades ago, safety experts said they couldn't recall a year without passenger fatalities occurring on jet aircraft.

The Aviation Safety Network released Monday by a Dutch affiliate of the U.S.-based nonprofit Flight Safety Foundation, excludes cargo flights, military transports and accidents caused by intentional acts.

Jet makers, the industry's international trade group and the air-safety arm of the United Nations all compile separate, slightly different annual lists of major commercial accidents and fatalities. The average number of airliner accidents and fatalities has been falling since 1997.

In the U.S., scheduled airlines haven't experienced a fatal crash on any type of equipment

since February 2009, when 50 people died from a **Colgan Air** turboprop plummeting into the ground while approaching the Buffalo, N.Y., airport. In intervening years, the Federal Aviation Administration shows an average of at least nine million flights per year.

But for safety geeks, global 2017 results were literally off the charts. Since modern jet propulsion became commonplace some six decades ago, safety experts said they couldn't recall a year without passenger fatalities occurring on jet aircraft.

The Aviation Safety Network released a comprehensive, world-wide list of 10 fatal airliner accidents in 2017 resulting in 44 onboard deaths, including 12 people killed Sunday when a single-engine Cessna Gran Caravan crashed in Costa Rica. But five of those were cargo operations, and the rest involved propeller-powered planes.

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More Twists Ahead for Fiduciary Rule

As federal regulators review scrutiny, some states step up to bolster requirements

By LISA BEILFUSS

The federal rule meant to protect retirement savers from conflicted advice was dealt a setback in 2017 as its full implementation was delayed. But consumers, state regulators and parts of the advisory industry have embraced its ideal of requiring retirement advice to be in investors' best interest.

The Obama-era regulation known as the fiduciary rule has been unpopular with Republicans and some financial-industry executives who say it harms consumers by reducing choice and access to financial advice. Shortly after his inauguration, President Donald Trump directed the Labor Department to conduct a new economic analysis of the retirement-saving regulation with an eye toward its revision or repeal.

In March, the Labor Department delayed the regulation's effective date to June 9. The agency did, however, delay some parts of the rule until July 2019.

Here are a few things to watch in 2018 as consumer awareness increases, the wealth-management industry adapts and regulators react:

◆ As of June 9, stewards of retirement savings have been required to put clients' interests before their own. But while the best-interest standard went into effect, the delay in some provisions of the rule, including a best-interest contract and certain client disclosures, effectively makes it unenforceable.

"It's the rule of law, but it's very hard for plaintiffs' lawyers to even bring a lawsuit" without those provisions, said Erin Sweeney, an attorney at Miller & Chevalier Chartered.

Even so, many firms have made changes to how they do business to more easily comply with the new rule.

Bank of America Corp.'s Merrill Lynch has embraced the rule, running an ad cam-

paign around the idea of fiduciary advice. **Morgan Stanley** has allowed brokers to continue charging commissions, but it has lowered costs to aid compliance with the regulation's "reasonable compensation" standard. Many firms have rolled out new computer-driven "robo" advisory tools to cater to smaller savers.

The fiduciary rule also has underpinned a trend of traditional brokers leaving Wall Street firms in favor of independent shops that have been held to a fiduciary standard on all assets for decades.

◆ A number of states have moved to bolster regulations governing financial advice. The governors of Nevada and Connecticut signed bills to expand or amplify fiduciary requirements for brokers, while legislators in New York, New Jersey and Massachusetts have introduced similar bills.

Several other states, including California, have indicated interest in exploring such requirements, and a bipartisan group of 13 state treasurers wrote to Labor Department

SEC Appears Likely To Get Involved

Observers say commentary out of the Labor Department and Securities and Exchange Commission suggests an increased likelihood that the SEC participates in crafting a fiduciary rule standard that applies to both retirement and nonretirement assets.

The SEC largely stayed on the sidelines of the issue during the Obama administration. But the SEC, now led by Chairman Jay Clayton, is showing interest.

"I believe an updated assessment of the current regu-

latory framework, the current state of the market for retail investment advice, and market trends is important to the commission's ability to evaluate the range of potential regulatory actions," Mr. Clayton said in June, when the SEC solicited feedback on a potential rule.

Arun Saxena, a partner at consulting firm PricewaterhouseCoopers, said a new Labor Department rule isn't likely to be finalized before 2019 and to "expect more time as opposed to less" if the agency coordinates with the SEC. "Anything from the SEC would be more complex," he said, because it would cover all investment accounts.

could expand the reach of fiduciary obligations to all investment assets and not just tax-advantaged retirement assets.

In October, a representative for the Securities Industry and Financial Markets Association, an industry trade group, expressed concern about a state-

by-state approach to broker regulation and argued that any new fiduciary duties under Nevada's law would violate an act of Congress passed 20 years ago to prevent patchwork regulation in financial markets.

◆ Preston Rutledge, former senior tax and benefits counsel for the Senate Finance Committee, on Dec. 21 received Senate confirmation as assistant secretary of labor for the Employee Benefits Security Administration.

Ms. Sweeney said a take-away from Mr. Rutledge's confirmation hearing is that he would like to see more cooperation between the Labor Department and other agencies when it comes to the fiduciary rule. While a finalized rule may not come before 2019, Ms. Sweeney said a new regulation, which would then be subject to public comment and potential revision, could come by the fourth quarter of 2018.

With Mr. Rutledge now installed, she said, "he'll start to pull all the threads together and get this rolled up."

ucts that are most lucrative for them.

Two resources to check advisers' background: The Financial Industry Regulatory Authority's BrokerCheck database and the Securities and Exchange Commission's Investment Adviser Public Disclosure website.

Stay charitable

The tax overhaul nearly doubles the standard deduction to \$12,000 for single filers and \$24,000 for married couples filing jointly, starting this year. The change may cause 20 million or more taxpayers to no longer itemize taxes, thus losing the value of charitable deductions. Yet with many people still suffering from the aftermath of 2017's wave of natural disasters, in addition to the myriad other causes that rely on donations, there is no shortage of need.

While financial advisers acknowledge it will be harder to claim the charitable-giving deduction starting in 2018, some say donations shouldn't be pegged to what the giver gets in return.

Avoid Last Year's Pitfalls With Fresh Resolve in 2018

By VERONICA DAGHER

With the news of 2017 fresh in investors' minds, financial advisers say now is the time to put in place resolutions to take advantage of the lessons learned on everything from the **Equifax Inc.** data breach to the largely uninterrupted run-up in the stock market to the recently enacted tax overhaul.

Because New Year's resolutions are easy to make but difficult to keep, financial planner Rick Waechter offers a solution. "Pick one financial planning goal in 2018—just one—and act on it in the first week of the new year," says Mr. Waechter, founder of Old Peak Finance in Chapel Hill, N.C.

Here are a few resolutions to consider:

Protect your data

When credit-reporting company Equifax was hacked and about 143 million U.S. consumers' personal data was potentially compromised, some consumers reviewed their credit-card bills to make sure they didn't see



SHAWN THOMAS/SHUTTERSTOCK

Former Equifax CEO Richard Smith. The data breach affected about 143 million U.S. consumers.

any suspicious charges.

While that was a good first step, there's more to do. If you haven't already, go to AnnualCreditReport.com to order a free copy of your credit report, says Amy Nofziger, a fraud specialist with AARP Foundation, the

senior citizen group's affiliated charity. Help family members do this as well, she says.

Going a step further, some security specialists recommend a credit freeze, which would prevent new lines of credit from being issued.

Don't be complacent

With the bull market in its ninth year, volatility near historic lows and U.S. stock indexes notching dozens of records in 2017, many investors are feeling emboldened. Still, financial advisers say, investors should be cautious.

"Don't assume past is prologue," says Paul Winter, president of Five Seasons Financial Planning in Salt Lake City.

Investors should resolve to stay disciplined and stick to their long-term financial plans in regard to their asset allocation and risk profiles of their portfolios, he says. Rebalance your portfolio to realign with your initial investment target. If possible, sell stocks in nontaxable accounts such as 401(k)s so that rebalancing doesn't result in a tax bill, Mr. Winter says.

Be a better consumer

The Labor Department's fiduciary rule took partial effect in 2017 and has served to raise consumers' awareness surrounding the advice they get, what they pay for and the differences among financial advisers and brokers and their duty to clients.

The onus is therefore on consumers to query financial professionals to determine whether they act in clients' best interest or pitch prod-

Closed-End Funds | WSJ.com/funds

Continued from Page B8

Fund (SYM)	NAV Close	Prem Ttl Ret	52 wk	Fund (SYM)	NAV Close	Prem Disc	Ttl Ret	52 wk	Fund (SYM)	NAV Close	Prem Disc	Ttl Ret	52 wk	Fund (SYM)	NAV Close	Prem Disc	Ttl Ret		
AdvtClymFd AVK	17.50	15.88	-9.3	17.3	Morgan-Stanley Asia-Pac APF	21.01	18.40	-12.4	37.4	WstAssetClymInflLink Sec WIA	NA	11.79	NA	3.4	Barings Glob Short Dur HY BGH	20.95	19.38	-7.5	9.5
AllianzGI Conv & Incm NCV	6.67	7.03	+5.4	23.8	Apollo Sr Fltg Rate Fd AFT	28.14	23.38	-16.9	44.9	BlackRock Corp Hyc Fd HYT	12.17	10.94	-10.1	8.1	BlackRock Corp Hyc Fd BLW	16.94	15.89	-6.2	7.8
AllianzGI Conv & Incm NCZ	5.98	6.21	+3.8	22.0	MS Emerging Fund MSF	20.39	17.89	-12.3	36.2	Brookfield Real Assets RA	NA	23.37	NA	NS	Deutsche Mbc Income Tr KTF	12.62	11.90	-5.7	5.6
AllianzGI Div Incm ACV	22.77	21.84	-4.1	27.9	BlackRock FR Incm Strat FRA	14.87	13.79	-7.3	5.8	Credit Suisse High Yld DHY	2.77	2.84	+2.5	9.6	Dreyfus Mun Bd Infr D DM	14.31	13.00	-9.2	4.9
AllianzGI Equity & Conv ZF	37.32	31.35	-11.2	49.7	BlackRock GSO Strt Cred BGS	NA	15.71	NA	8.5	DoubleLine Incm Solutions DLS	NA	20.19	NA	8.9	Dreyfus Mun Bd Infr D DM	8.33	8.55	+2.6	5.9
New Germany Fund GFN	21.49	19.44	-9.5	54.4	Blackstone GSO Strt Cred BSL	NA	18.00	NA	6.7	Dreyfus H Yd Strat D DFH	3.52	3.34	-5.1	9.1	Dreyfus Strategic Munis LEO	8.55	8.64	+1.1	5.9
Swiss-Helveta Fund SWZ	14.10	12.76	-9.5	26.2	Eagle Point Credit ECC	NA	18.81	NA	8.6	Eaton Vance Incm Ops Fund IVH	16.02	15.12	-5.6	10.0	Eaton Vance Mun Income EVN	13.40	12.40	-7.5	5.4
Templeton Dragon TDF	21.51	NA	42.2		Eaton Vance Sr Incm Tr EFT	NA	14.33	NA	5.8	Eaton Vance Mun Incm Opp EOT	21.81	22.53	+3.3	4.4	Eaton Vance Mun Incm Opp EOT	21.81	22.53	+3.3	4.4
Templeton Emerging EMF	16.41	14.94	-14.5	42.5	Virtus Total Return Fund ZF	12.90	NA	25.1		Evesco Adm Mun Incm Fd VIKI	12.13	11.58	-6.2	5.2	Evesco Adm Mun Incm Fd VIKI	12.13	11.58	-6.2	5.2
Virtus Total Return Fund ZF	11.05	11.19	+1.3	21.8	Wells Fargo GI Div Opp EOD	6.43	5.93	-7.8	20.5	Evesco Incm Opp Fd OIA	7.61	8.00	+8.1	5.1	Evesco Incm Opp Fd OIA	7.61	8.00	+8.1	5.1
Calamos CHI	11.05	11.19	+1.3	21.8	Wells Fargo Infr Indls & Mats IDE	16.63	16.85	+1.3	39.6	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1
Calamos CHI	11.05	11.19	+1.3	21.8	Wells Fargo Infr Indls & Mats IDE	16.63	16.85	+1.3	39.6	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1
First Trust Dynamic Eq FDEU	19.87	18.83	-5.5	31.5	Wells Fargo Infr Indls & Mats IDE	16.63	16.85	+1.3	39.6	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1
First Trust Dynamic Eq FDEU	19.87	18.83	-5.5	31.5	Wells Fargo Infr Indls & Mats IDE	16.63	16.85	+1.3	39.6	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1
First Trust Dynamic Eq FDEU	19.87	18.83	-5.5	31.5	Wells Fargo Infr Indls & Mats IDE	16.63	16.85	+1.3	39.6	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1
First Trust Dynamic Eq FDEU	19.87	18.83	-5.5	31.5	Wells Fargo Infr Indls & Mats IDE	16.63	16.85	+1.3	39.6	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1
First Trust Dynamic Eq FDEU	19.87	18.83	-5.5	31.5	Wells Fargo Infr Indls & Mats IDE	16.63	16.85	+1.3	39.6	Evesco Incm Opp Fd VIKI	13.51	12.40	-8.2	6.1</td					

MARKETS

12

The number of months in 2017 in which the S&P 500 had positive monthly returns, the first time since at least 1970 that happened

Stocks' Epic Win Streak

The S&P 500 climbed 19% in 2017, shrugging off concerns about rising interest rates, political feuding in Washington and the threat of violence with North Korea. Even as investors complained that stocks were

MONEYBEAT

trading at high prices relative to expected earnings, they continued to buy. And when stocks dipped, they bought some more.

All in all, the S&P 500 had positive returns in each month of 2017. It is the first time that has happened since at least 1970, according to The Wall Street Journal's Market Data Group.

The benchmark stock index rose in every month of the year except March. It dipped slightly that month, but still provided positive returns when including dividends.

Many investors are bracing for what they say is some long-overdue volatility in 2018.

With investors turning more optimistic at a time when stocks are already highly valued relative to history, many say the market could be heading for a reversal, or even a correction, defined as a drop of 10% or more.

Still, when adding in the gains in November and December of 2016, there have been 14 straight months of positive returns for the S&P 500.

With such a steady run higher, it is tough not to get used to such smooth sailing.

—Ben Eisen

ONLINE



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Nafta Risk Dogs Canadian Deals

BY VIPAL MONGA

TORONTO—Despite uncertainty around the North American Free Trade Agreement, mergers and acquisitions involving Canadian companies were strong in 2017, though deal activity could cool in 2018, bankers and companies say.

The fate of the free-trade agreement, likely to be decided in the first several months of the new year, is the biggest question overhanging the Canadian economy, according to Canadian bankers and executives.

The U.S. tax overhaul also is clouding the 2018 outlook, these people say.

In terms of trade, exports to the U.S. represent roughly one-fifth of the country's gross domestic product, according to the U.S. Embassy in Canada, and the country's manufacturing and technology sectors have expanded because international investors view Canada as an attractive gateway to the larger U.S. market.

But President Donald Trump has called Nafta the "worst trade deal ever made" and forced a renegotiation after his inauguration in January 2017. Since then, Canadian and U.S. policy makers have become increasingly pessimistic about the future of an agreement that has underpinned Canada's economic relationship with its southern neighbor since 1994.

"I think that regulatory uncertainty in general, including Nafta, will create headwinds for M&A markets," said Jason Rowe, chief executive of Goldman Sachs Canada.

Donald Walker, chief executive at Aurora, Ontario-based auto-parts maker Magna International Inc., one of the country's largest manufacturers, predicts large investments in Canada will either pause or flow south until the Nafta question is resolved.

"I think anybody that is contemplating any big investments over the long term is probably either waiting, or they're going to be biased to invest more in the U.S. until there's an outcome here," said Mr. Walker in a November call with analysts. "I think we're just waiting to see what's going to happen."

Canada's deal-making activ-

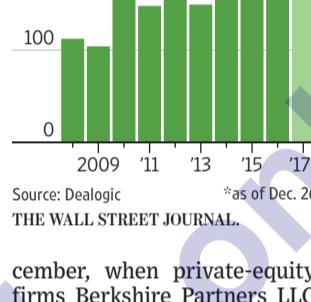


President Donald Trump and Canadian Prime Minister Justin Trudeau at the White House last fall.

North of the Border

Canadian mergers and acquisitions topped \$200 billion in 2017.

\$300 billion



Source: Dealogic *as of Dec. 26

THE WALL STREET JOURNAL.

to expand their technology capability, while Canada's big banks could remain on the hunt internationally.

Citigroup advised Banco Bilbao Vizcaya Argentaria SA on its \$2.2 billion sale of its Chilean subsidiary to Bank of Nova Scotia in November.

It is likely that a larger share of deal flow will start streaming out of Canada, as multinationals eye the impact of a U.S. tax overhaul that lowered corporate rates to 21%, lower than Canada's 26.5% rate. That could exaggerate a trend of growing Canadian companies looking outside the country as they seek to expand further, said Peter Buzzi, head of M&A in Canada for RBC Capital Markets.

The bank advised construction company SNC-Lavalin Group Inc. in its \$2.7 billion purchase of U.K.-based WS Atkins PLC in April.

While there has been a lot of talk of Canada's growing technology sector, the country is still a resources-heavy economy, and M&A will reflect those fundamentals, said Jeremy Fraiberg, head of M&A of Canadian law firm Osler, Hoskin & Harcourt LLP.

"As resources go, so does the Canadian deal-making economy," Mr. Fraiberg said.

PwC Found Negligent In Collapse of Bank

BY MICHAEL RAPOORT

PricewaterhouseCoopers

LLP was negligent in connection with one of the biggest bank failures of the financial crisis, a federal judge has ruled, opening up the Big Four accounting firm to the potential of hundreds of millions of dollars in damages.

PwC violated auditing rules and didn't take steps that could have detected a \$2 billion fraud scheme that contributed to the 2009 failure of Alabama's Colonial Bank, the judge ruled. The ruling Thursday came in a lawsuit brought against PwC by the Federal Deposit Insurance Corp.

The firm didn't take steps that could have detected a \$2 billion fraud, the judge said.

U.S. District Judge Barbara Jacobs Rothstein will now consider separately whether damages should be imposed on PwC and how much. She dismissed other FDIC allegations against PwC, as well as accusations of negligence that Colonial's bankruptcy trustee brought against the accounting firm.

A PwC spokeswoman said the firm "looks forward to the damages phase where the FDIC will bear the burden of proof on what remains of their inflated damages claim." She said the firm was pleased that the judge rejected the other claims.

A spokesman for the FDIC declined to comment on the ruling.

The lawsuit concerns a fraud scheme centering on

Taylor Bean & Whitaker Mortgage Corp., once one of the nation's biggest mortgage companies.

Taylor Bean was a major customer of Colonial's, and authorities have said Taylor Bean overdrew its Colonial account for years to cover its own cash shortfalls. The mortgage firm covered that up by, among other things, selling Colonial thousands of mortgages it had already sold to other investors, according to authorities.

After the fraud was discovered, Taylor Bean filed for bankruptcy in August 2009, and Colonial failed soon after, costing the FDIC's deposit insurance fund billions of dollars.

At least eight people, including Taylor Bean Chairman Lee Farkas and two Colonial employees, were convicted or pleaded guilty to participating in the scheme.

PwC was the outside auditor for Colonial's bank holding company and gave Colonial clean audits that blessed its financial statements for years. The FDIC and the Colonial trustee had alleged PwC was negligent in not detecting the fraud scheme, and they sued the firm in 2012 and 2011, respectively.

Judge Rothstein agreed, saying PwC failed to design its audits to detect fraud, violating auditing standards. She also said PwC could have uncovered the fraud simply by inspecting some of the underlying documents for the mortgages at issue, but it didn't.

But Colonial can't recover damages because its hands aren't clean, the judge said. Its own employees were involved in the fraud, and the bank itself was negligent and its employees interfered with PwC's audits, she said.

Currencies

U.S.-dollar foreign-exchange rates in late New York trading

Country/currency	Fri in US\$	YTD chg (%)	US\$ vs. Country/currency	Fri in US\$	YTD chg (%)
Europe					
Argentina peso	.0538	18.6035	17.2	.04699	21.279 -17.2
Brazil real	.3019	3.3123	1.8	.1612	6.2050 -12.2
Canada dollar	.7954	1.2573	-6.5	.1203	.8332 -12.4
Chile peso	.001625	61.50	-8.1	.003861	258.99 -12.0
Ecuador US dollar	1	1 unch	Iceland krona	.009658	103.54 -8.3
Mexico peso	.0508	19.6704	-5.1	.1219	8.2068 -5.1
Uruguay peso	.03472	28.8000	-1.9	.2875	3.4788 -16.9
Venezuela b. fuerte	.096694	10.3419	3.5	.01734	57.678 -5.9
Asia-Pacific					
Australian dollar	.7809	1.2806	-7.8	.1222	8.1858 -10.1
China yuan	.1538	6.5030	-6.4	.10263	.9744 -4.4
Hong Kong dollar	.1280	7.8132	0.7	.2635	3.7947 7.7
India rupee	.01566	63.871	-6.0	.0355	28.1445 3.9
Indonesia rupiah	.0000742	13.484	-0.3	.13513	.7400 -8.6
Japan yen	.008873	112.70	-3.7	2.6518	.3771 -0.02
Kazakhstan tenge	.03006	332.68	-0.3	.0563	17.7715 -2.0
Macau pataca	.1243	8.0459	1.6	.2874	3.4795 -9.6
Malaysia ringgit	.2462	4.0614	-9.5	3.3174	.3014 -1.4
New Zealand dollar	.7093	1.4098	-2.4	2.5977	.3850 ...
Pakistan rupee	.00904	110.650	6.0	.2741	3.649 0.2
Philippines peso	.0200	49.964	0.7	.2666	3.7504 -0.01
Singapore dollar	.7478	1.3372	-7.6	.0809	12.3611 -9.7
South Korea won	.0009371	106.16	-11.7	Close Net Chg % Chg YTD Chg	
Sri Lanka rupee	.0065151	153.49	3.4	85.98	-0.26 -0.30 -7.49
Taiwan dollar	.03371	29.667	-8.6		
Thailand baht	.03068	32.590	-9.0		
Vietnam dong	.00004403	22710	-0.3		

Sources: Tullett Prebon, WSJ Market Data Group

Digital Currency Ripple Rises 50% in Day

BY PAUL VIGNA

The price of the digital currency XRP, also called Ripple, surged 50% on Friday, pushing its market valuation to a record \$85 billion, second only to Ethereum's \$72 billion valuation, and is second to only bitcoin, currently at \$244 billion.

That puts XRP's year-to-date gains at more than 30,000%; it began the year trading at less than a penny. Most of the gains have come in the past three weeks. On Dec. 11, XRP was trading at 25 cents. By comparison, bitcoin is up about 1,400% and Ethereum is up 9,300%.

For XRP, the gains come after the latest signs that the

market value of XRP tokens totals around \$84 billion, according to research site coinmarketcap.com. Friday's move puts it ahead of Ethereum's \$72 billion valuation, and is second to only bitcoin, currently at \$244 billion.

That puts XRP's year-to-date gains at more than 30,000%; it began the year trading at less than a penny. Most of the gains have come in the past three weeks. On Dec. 11, XRP was trading at 25 cents. By comparison, bitcoin is up about 1,400% and Ethereum is up 9,300%.

For XRP, the gains come after the latest signs that the

company behind the currency, also called Ripple, has shown more progress in signing up banks to its closed-loop network, called RippleNet.

Last month the currency got a boost after a consortium of Japanese banks signed up to test its network. The company has more than 100 banks, mostly outside the U.S., signed onto its platform. It hasn't disclosed amounts, but has said that some of those banks have been using it in a live environment to move money, rather than just testing it as a concept.

XRP is different from other digital currencies in that its

development is being guided and controlled by a single for-profit company.

Ripple, the company, launched its currency in 2012 as part of a plan to use the concepts behind bitcoin to build a cross-border, interbank payments and settlement network.

To Ripple CEO Brad Garlinghouse, the gains are a reflection of the fact that the company's product is further along than competitors. "We have real customers, really in production using this," he said, "not science experiments. Science experiments are not a business model."

THE TICKER | Market events coming this week



Tuesday	No
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MARKETS

Natural-Gas Rout Has Investors on Edge

Last year's dive took market by surprise; now some say prices have fallen too far

By ALISON SIDER

Investors wagered on a natural-gas rally last year but it never came. Instead, prices plunged 21% for the worst year since 2014.

Heading into 2017, some investors thought natural gas could extend the gains from 2016, betting that new gas-fired power plants and record exports would burn off the excess supplies that fracking had unleashed. But gas prices ended the year at \$2.953 a million British thermal units, compared with \$3.724 at the end of 2016.

Temperate weather was partly to blame. Last winter was mild for a second year in a row—cutting into demand for home heating fuel—and temperatures didn't rise high enough in the summer to spur high levels of air conditioning use. Adding to challenges was an onslaught of new production, dashing investor hopes that the U.S. would export itself out of a glut.

In early December, short bets on natural gas by money managers, hedge funds and other speculative investors outnumbered long ones—indicating investors were expecting natural-gas prices to drop further. That is a sharp reversal from the beginning of 2017, when bullish wagers outnumbered bearish ones by more than two to one.

"It just didn't pay for them to be long," said Tom Saal, a broker at INTL FCStone.

Gas also had more competition as a fuel for electricity generation in 2017. Coal use is still on the decline, but it was more cost competitive last year, analysts said. At the

same time, rising use of renewables squeezed gas-fired power, as the end of a drought in the Western U.S. spurred more hydroelectric power generation.

Some analysts say prices

have fallen too far. They point to how the amount of gas in storage is relatively low for this time of year, with plenty of time left in winter.

"The market hasn't really absorbed the fact that we're at

or below longer-term average storage levels," said Christopher Louney, a commodity strategist at RBC Capital Markets. Stockpiles of natural gas being held in storage stand at 3.332 trillion cubic feet—1.8%

Exports have climbed...

U.S. natural-gas exports

280 billion cubic feet



Sending prices lower.

Front-month natural-gas price

\$4.00 a million btu



Mexico are up 13% from 2016. Exports of superchilled liquefied natural gas rose to 2.2 billion cubic feet of gas a day—more than three times as much as in 2016, when cargoes began to depart from the Gulf Coast, according to S&P Global Platts Analytics.

Still, any potential price increase from cold weather going forward has been diminished by the sharp rise in U.S. natural-gas production, analysts at Goldman Sachs wrote recently. By late December, U.S. production had climbed to more than 77 billion cubic feet a day—more than 8% above the same time in the prior year, according to Platts.

Some of it came from oil fields, like the Permian in Texas, where gas bubbles to the surface along with crude. That production is likely to keep flowing no matter how low prices get.

New pipelines in the Northeast have also unleashed output that had been locked in the mammoth Marcellus and Utica shale formations. Production in those regions has jumped by 17% from the prior year, according to Platts.

John Borruso, director of natural-gas trading at Con Edison Energy, said he expects producers will be able to bring enough gas production online to meet rising demand from the power sector and to satisfy export markets.

That will likely keep gas prices tightly locked between \$2.50 and \$3.50 a million British thermal units, potentially for a few years. "We're going to sit there," he said.

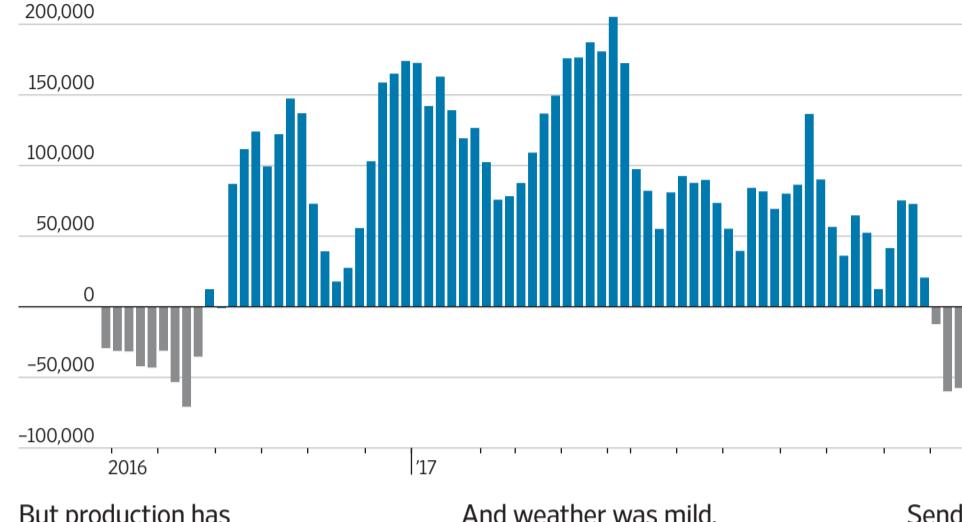
That outlook suits some just fine. Ryan Kelley, portfolio manager of the Hennessy Gas Utility fund, says lower prices benefit utilities and gas distribution companies.

"We like long-term low and stable natural-gas prices," he said. Last year was "a good example of that."

Investors turned bearish on natural gas at the end of last year.

Speculative net position in U.S. natural gas

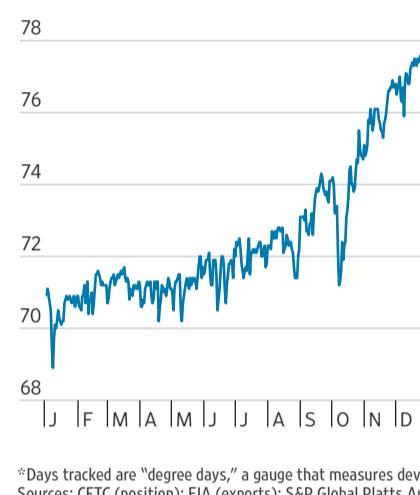
250,000 contracts of 10,000 MMBTUs



But production has continued to surge...

U.S. gas production

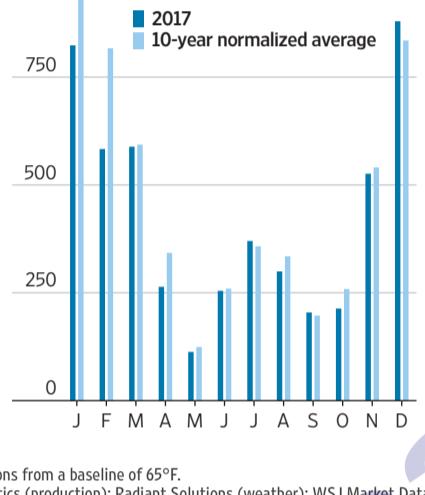
80 billion cubic feet per day



And weather was mild, cutting into demand...

Harsh weather days that would generate heating or cooling demand*

1,000 days



*Days tracked are "degree days," a gauge that measures deviations from a baseline of 65°. Sources: CFTC (position); EIA (exports); S&P Global Platts Analytics (production); Radiant Solutions (weather); WSJ Market Data Group (price)

have fallen too far. They point to how the amount of gas in storage is relatively low for this time of year, with plenty of time left in winter.

"The market hasn't really absorbed the fact that we're at

or below longer-term average storage levels," said Christopher Louney, a commodity strategist at RBC Capital Markets.

Stockpiles of natural gas being held in storage stand at 3.332 trillion cubic feet—1.8%

below 2016 and 2.5% below the five-year average.

Prices staged a comeback in the final days of 2017, rising 12% from Wednesday through Friday as an Arctic chill set in.

Natural-gas shipments to

HEARD ON THE STREET

FINANCIAL ANALYSIS & COMMENTARY

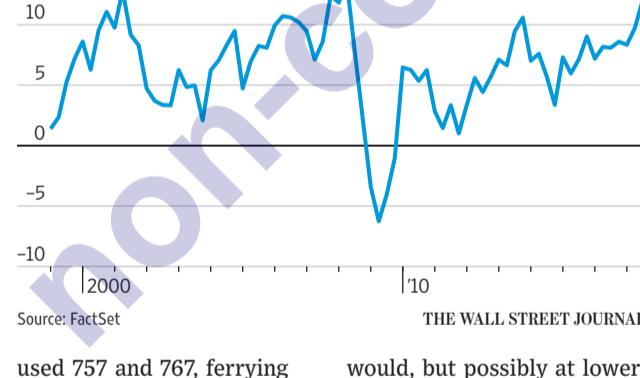
WSJ.com/Heard

Email: heard@wsj.com

Boeing Investors, Buckle Up

Flying High

Boeing free cash flow as a percentage of revenue



Source: FactSet

THE WALL STREET JOURNAL.

used 757 and 767, ferrying 200 to 280 passengers up to about 5,000 nautical miles.

The market for such a plane isn't obvious today. The last 757 came off the line in 2004, and while airlines might like a replacement, it hasn't been a major priority.

Airbus has a ready response. It can stretch its popular single-aisle A321 to cover some of the same market Boeing's new plane

would, but possibly at lower cost and lower execution risk.

That doesn't mean pursuing the 797 is the wrong decision. Boeing's cash flows are strong, and aircraft makers have to take risks and bring the newest technology to market. While demand for this plane isn't clear, the desire by airlines to link mid-size cities, especially in Asia, could make the plane ideal in 10 to 15 years.

Boeing's shares were the best performer in the Dow Jones Industrial Average for 2017, up 90%. Free cash flow is the best in years.

And what it learns on the 797 might be invaluable for a much bigger and more important task down the road: replacing its best-selling 737 family.

Do nothing and Boeing could end up ceding the mid-size jet market completely to Airbus. If Airbus accumulated insurmountable market share, it would be able to negotiate lower rates from suppliers and sell planes for less than Boeing.

Despite the best intentions, the history of new aircraft programs is littered with tears. The good news is any pain from a botched 797 would be some time down the road. Problems tend not to crop up for several years after a project's launch.

Boeing's shares were the best performer in the Dow Jones Industrial Average for 2017, up 90%. Free cash flow is the best in years.

This has no doubt attracted new investors who may need to be reminded: Building planes isn't a risk-free business.

—Alex Frangos

OVERHEARD

Only one thing is growing faster than the value of cryptocurrencies like bitcoin: the number of people who say they are bitcoin experts.

There is **Chris Murphy**, a former Facebook executive "on a mission to bring blockchain to the masses," according to an email pitching his expertise to reporters.

Then there's **Dominic Marella**, who is "available to talk about the potential for bitcoin futures to become a millennial's safe haven from geopolitical volatility."

Of course, a real expert needs to live their mission, not just study it.

David Mondrus, also available for interviews, says in his biography that he and his wife were the first couple to get married on the blockchain.

In such a sea of expertise, it's hard to stand out from the crowd.

Perhaps **David Drake** has the right idea: The subject of his emailed pitch to media outlets reads, "True Crypto source not a phony."

VR Makers Will Need To Cut Cord

Virtual reality hasn't caught on with consumers because no one has come up with the right combination of hardware and content necessary to make it a must-have product. But companies behind VR aren't giving up.

For consumers, VR comes in two imperfect forms. There are powerful systems that can deliver high-quality experiences, but they cost several hundred dollars and require the user to be tethered to a computer or video-game console.

Then there are cheaper systems that work with mobile phones, such as Samsung Electronics' Gear VR and Google's Daydream, which often cost less than \$100 but lack the power to deliver experiences like high-end videogames.

IDC estimates that about 3.4 million tethered VR headsets shipped in 2017, which was the first full year on the market for headsets from Sony, HTC and Facebook's Oculus. The "screenless" VR devices that work with mobile phones shipped about 5.7 million units.

The companies behind VR are taking steps in the right direction. Prices are coming down, and new designs are in the works, such as a tether-free VR headset called Oculus Go that Facebook expects to launch this year. Eliminating the tether will also be key for a close cousin of VR known as augmented reality. IDC projects that stand-alone headsets will account for 48% of total VR and AR shipments by 2020, compared with 5% for 2017.

But improving the gear has its limits. Both VR and AR still lack a "killer app" that consumers can't live without. Until that comes, cutting the cord will take the technology only so far.

—Dan Gallagher

The Secret Ingredient in China's Cure for Debt Addiction

In the dark winter of late 2015, Beijing's reputation for being going so well for Boeing shareholders: The company hasn't tried to build a new type of plane lately.

That looks about to change. This year, Boeing is likely to decide whether to start developing its first new airliner in 15 years.

Investors would be right to worry. New planes are hugely risky, in terms of cost and design and predictions of market demand years in advance. Boeing's last big bet was the 787, which launched in 2003, cost \$30 billion and began turning a profit on each plane only in 2016.

The next new Boeing, known as the "new midsize airplane," "middle of the market" and unofficially, the 797, would likely be a double-aisle jet intended for delivery around 2025. The goal is to meet airlines' needs for a plane bigger than the single-aisle 737, and smaller and with less range than the 787 Dreamliner. The new plane would overlap with the discontinued but still widely

popular and limit borrowing.

But there's another, less optimistic explanation as well: China's debt-to-GDP ratio tends to rise when exports are weak and fall when they rebound strongly, as they have over the past year. That means that China's success or failure in heading off a debt crisis in the years ahead may depend as much on global growth as on domestic policy.

The debt-exports relationship makes sense intuitively. Beijing's obsession with growth targets means it tends to pump up investment, and debt, when external demand weakens, most obviously with its gargantuan stimulus

in 2009. It also holds up empirically. Year-over-year changes in China's debt ratio have had a strong negative correlation with a moving average of export growth since the early part of the last decade, even excluding the stimulus-laden period right after the financial crisis.

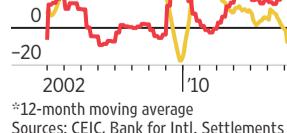
Exports have become less important to Chinese growth over the past 10 years, but they still make a big difference. From the first quarter of 2016 to the third quarter of 2017, roughly the period of deleveraging, net exports moved from a drag of 0.8 percentage point on growth to a boost of 0.2 percentage point, a net

Dangerous Rhythm

Change from a year earlier

Chinese exports*

Debt as % of GDP (pct. points)



*12-month moving average

Sources: CEIC, Bank for Int'l. Settlements

THE WALL STREET JOURNAL.

making the drive to contain debt more painful.

The open question is whether this time is really different. President Xi Jinping's administration has de-emphasized official growth targets, but that is easy when the world economy is booming and the housing market is still in the early stages of a slowdown.

Sometime in late 2018 or

early 2019 it seems likely

that this happy confluence of circumstances will reach a denouement. When that happens, investors will learn whether Mr. Xi's

administration is really

committed to a different sort of growth model—or not.

—Nathaniel Taplin

An Open Letter to Employers on Financial Wellness

LET'S RESOLVE TO BUILD NEW PATHS TO PROSPERITY.

As we embrace new goals on this first workday of a new year, let us remind each other that America's prosperity cannot be taken for granted; it is the legacy of generations who came before us, pursuing the promise that hard work can create a better life.

But how do we keep that promise within reach, when innovation and structural shifts are transforming work faster than the nation's policies and safety nets can keep pace?

Workers today bear increasing responsibility for their own financial lives. Yet too many lack access to resources and tools to help them manage.

These are daunting challenges. But when leaders from all sectors, private, public and not-for-profit, collaborate on finding ways to reconnect work and wealth, these are challenges we can meet.

Nearly
6 out of 10
workers are stressed about
their financial situation.*

Let's build new pathways to prosperity by promoting financial wellness right here in the workplace. Let's advocate on behalf of tens of millions who lack 401(k) plans and other workplace benefit protections.

So that living paycheck to paycheck becomes a thing of the past. Families can move forward when life sets them back. Workers can retire on time with the income to pursue what they love.

And underserved communities gain access to the resources to build better futures.

Prudential believes in a society where financial opportunity is within reach of all.

We invite you to join us as we work in partnership with organizations like the Aspen Institute, a nonpartisan forum for values-based public policy leadership, to advance solutions that help increase economic opportunity for workers.

As we have seen repeatedly, America is at its best when we lift each other up. In that spirit, let's make 2018 the year we join together to bring financial wellness within reach of every worker.

When we do, the impact will be felt everywhere.

prudential.com/workers



*Prudential, 2017 Financial Wellness Study.

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MARKETS & FINANCE

YEAR-END REVIEW & OUTLOOK

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THE WALL STREET JOURNAL.

Tuesday, January 2, 2018 | R1

U.S. Stocks Wrap Up Strong 2017



1 Donald Trump sworn in as 45th U.S. president, promising tax cuts and deregulation.

2 British Prime Minister Theresa May calls for June elections in bid to speed Brexit talks.

3 Trump fires FBI Director James Comey, intensifying furor over Russia probe.

4 Republican efforts to repeal Affordable Care Act founder.

5 Equifax says personal information of more than 140 million U.S. consumers exposed in hack.

6 Dow hits 23,000 as postelection U.S. stocks rally exceeds 25%.

7 North Korea missile test shows capability of hitting U.S. East Coast.

8 Republicans pass sweeping tax overhaul as Dow approaches 25,000.

The S&P 500's run to fresh highs surprised many analysts and increased enthusiasm among investors about the potential for future gains.

Source: WSJ Market Data Group

Jan. Feb. March April May June July Aug. Sept. Oct. Nov. Dec. 2200
1. RON SACHS/CNP VIA ZUMA WIRE; 2. CHRISTOPHER FURLONG/GETTY IMAGES; 3. BRENDAN SMIALOWSKI/GETTY IMAGES; 4. ALBIN LOHR-JONES/GETTY IMAGES; 5. BRENDAN MCDERMID/REUTERS; 6. STEPHEN MATUREN/WSJ; 7. TORU HANAI /REUTERS; 8. SCOTT APPLEWHITE/ASSOCIATED PRESS

Neither geopolitical tensions nor Washington intrigue stopped shares from hitting a string of records last year, but can the momentum continue?

By BEN EISEN

U.S. stocks' headlong advance in 2017 is stoking bullish sentiment going into 2018 but has some market watchers questioning how much further the rally can go.

The S&P 500 surged 19% in 2017, more than triple some Wall Street projections from the start of the year. The Dow Jones Industrial Average was up an even larger 25%. Survey data show that individual investors believe the market will deliver more strong gains in the coming year.

A University of Michigan survey in October showed that consumers saw a nearly 65% chance on average that the stock market would rise in the next 12 months, the highest share on record. That measure remained near record levels in the following months. Separately, consumers who expected stocks to rise outpaced those who expected stocks to decline by near the most since 2004 in recent months, according to a Conference Board survey.

After eight years of solid returns, investors have be-

come accustomed to buying stocks after even small pullbacks, gaining confidence that the market will rebound and continue its run higher. Corporate profits have been strengthening and the Republican tax overhaul is expected to further boost earnings at many firms.

More broadly, economists say growth across the U.S. and globally is hitting its stride after years of a fits-and-starts recovery.

"If 2017 was the year of optimism, then maybe 2018 could be the year optimism

turns into euphoria," said Bank of America Merrill Lynch equity strategist Jill Carey Hall.

Optimism has become widespread among a broad group of market watchers. Nearly two-thirds of investment newsletter writers were bullish on stocks in mid-December, nearly a three-decade high, according to a weekly survey conducted by Investors Intelligence.

There are signs investors are putting more cash into the stock market as sentiment shifts. TD Ameritrade, the on-

line brokerage, said its clients were net buyers of stocks for the 10th consecutive month in November. Its index measuring investors' exposure to the stock market had its biggest ever single-month jump.

Meanwhile, a Bank of America Merrill Lynch survey found that a net of nearly half of fund managers had a higher allocation to equities than their benchmarks. That measure is above the long-term average.

"Nothing I see says that we're heading into a recession," said Alex Cabot, 37

years old, a financial adviser in Phoenixville, Pa. Mr. Cabot has used 2017's relatively small pullbacks to buy stocks, which he plans to hold long term.

At the same time, the expansion of bullish sentiment is raising concerns among contrarians, who say a red-hot

Please see STOCKS page R2

Next Week

The Investing in Funds & ETFs quarterly report will publish on Monday, Jan. 8.

For Bitcoin, a Year Like No Other

By PAUL VIGNA

In 2017, bitcoin became one of the market's greatest speculative crazes. It remains to be seen whether it can live up to the hype.

Even bitcoin's supporters were surprised by how far the cryptocurrency rose. Starting the year at about \$970, it rose to nearly \$20,000 by December, a gain of about 2,000%. That was punctuated by five sell-offs of at least 30%, including a fierce selloff in December that drove prices down 45% before the currency recovered by Friday to \$14,292, according to CoinDesk, up 1,375% on the year.

Bitcoin's bold promise was always that of a globe-changing technology. A software program released as an open-source project in 2009, bitcoin operates across a network of linked but independent computers, and allows two people anywhere on the planet to exchange value directly without any other middleman, like a bank or government.

The belief in that vision was intense, but generally shared among only a small circle of users. What changed in 2017 was that the vision of digital, borderless currencies jumped out to a wider market of investors flush with cash.

"The world has never seen a more perfect speculative asset than bitcoin," said Tom Dyson, the founder of Palm Beach Research Group, which focuses

New Money

The virtual currency bitcoin soared in 2017, leaving other investments in the dust.

April 1 New Japan rules promote bitcoin use.

July 24 CFTC approves bitcoin options.

Dec. 10 Bitcoin futures launch in the U.S. as volatility soars.



in new capital during the year.

The bitcoin industry's bitter years-long split over how to expand network capacity also came to a head this past year.

'The world has never seen a more perfect speculative asset than bitcoin.'

One side wanted cheap, fast transactions, the other wanted fewer transactions and higher security. The latter camp won, but that led to the launch in the summer of a spinoff cur-

Shares of U.S. Banks Extend Their Climb

By RACHEL LOUISE ENSIGN

Washington extended a helping hand to banks in 2017, pushing stocks in the sector higher for a second year in a row.

President Donald Trump's election in late 2016 prompted a surge in bank stocks on hopes that a tax overhaul and deregulation would help profits. Now, the tax and regulatory changes are finally happening, and they are proving a potent antidote to persistently low long-term interest rates, subdued trading activity and slowing loan growth.

Investors have grown increasingly confident banks' bottom lines will be huge beneficiaries of a lower tax rate. The KBW Nasdaq Bank Index rose 16% in 2017. Although shy of the 19% gain for the S&P 500, the advance puts the bank index's total increase since the 2016 presidential election at 42%. Nearly all of the 2017 bank gains occurred in the last four months of the year when new tax legislation gained steam.

"Investors were first concerned, and then got enthused over rates, revenues and regulations."

Please see BANKS page R2

INSIDE



OIL PRICES HAVE A ROCKY PATH HIGHER

ENERGY, R3



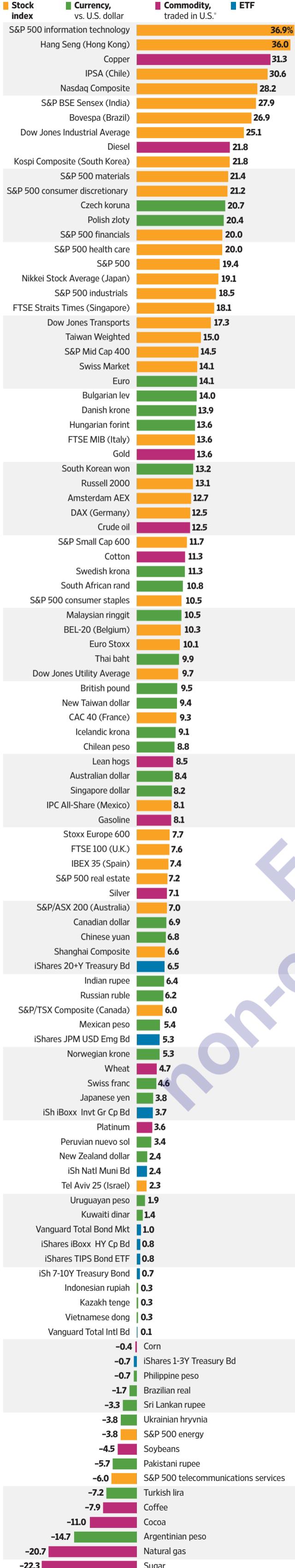
A STORM IS BREWING FOR CROPS

COMMODITIES, R4

YEAR-END REVIEW & OUTLOOK | MARKETS & FINANCE

The Year in Markets

Stocks around the world surged, powered by signs of global growth and soaring technology shares. Orange juice, coffee, cocoa and sugar underperformed as supplies rose.



*Continuous front-month contracts

Sources: SIX Financial (ETFs, indexes, commodities); Tullett Prebon (currencies)

YEAR-END REVIEW & OUTLOOK | MARKETS & FINANCE



Global Market Cap Adds Trillions

By CHRIS DIETERICH

Soaring stock prices across the globe added more than \$9 trillion in market value to equity markets in 2017, the biggest one-year swell since the financial crisis.

Almost every major yardstick for global stock prices ended the year with double-digit-percentage gains as improving economic growth and sturdy corporate profits coaxed investors to buy. At the same time, central bankers across the globe mostly kept their economic stimulus measures in place.

These efforts have pinned down borrowing rates and diminished the payout available for relatively safe government bonds, encouraging investors to own stocks even as equity valuations tick higher.

The S&P Global Broad Market Index, which includes most stocks from 48 countries, climbed 22% in 2017, minting \$9.6 trillion in market value through Thursday, according to S&P Dow Jones Indices. That surpasses the \$8.1 trillion created in 2009, as global markets rebounded from the worst of the financial crisis.

In the U.S., the S&P 500 ended 2017 up 19%, an advance that added roughly \$3.9 trillion to the index's market value through Thursday, according to Thomson Reuters. About one-quarter of the market-value creation came from the five largest U.S. companies by market value: Apple Inc., Alphabet Inc., Amazon.com Inc., Facebook Inc. and Microsoft Corp.

Investors have rallied around the technology and internet giants' rapidly growing businesses and bright prospects, carrying each stock in the group at least 30% higher

BANKS

Continued from the prior page
lation," said Mike Mayo, a bank analyst at Wells Fargo & Co.

For much of 2017, bank shares struggled to build on their postelection gains. The passage of tax-code changes seemed questionable after health-care legislation efforts failed and stubbornly low long-term interest rates continued to weigh on profits. But investors became more optimistic when tax-overhaul efforts started to seem more likely in the fall.

Banks in the U.S. tend to pay relatively high tax rates, so they are expected to benefit from the planned cut in the corporate rate. Goldman Sachs Group Inc. analysts estimated in December that the measures, which include a 21% corporate tax rate, would boost large bank earnings by about 13% in 2018.

Bank executives said they expect additional benefits from the plan. The tax changes will be "good for the economy, good for job creation and wage growth and all good things will come from that," **JPMorgan Chase & Co.** Chief Financial Officer Marianne Lake said in December. Many big banks, however, will first have to take a one-time hit to earnings from the changes.

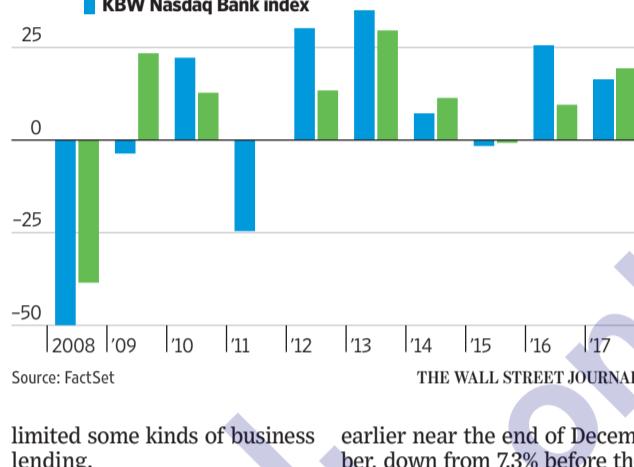
Also boosting banks is the arrival of new Trump administration appointees in Washington. Bankers were eager for an end to the tough regulatory scrutiny of the Obama era, which led to higher compliance costs and major fines.

In recent months, regulators have started to grant banks a number of the changes they have long sought, opening the door to giving more details of annual Federal Reserve stress tests in advance and revising guidelines that

On the Trail

Bank stocks rose again in 2017 but not as much as the S&P 500 did.

Change from a year earlier



Source: FactSet

limited some kinds of business lending.

Federal Reserve rate increases, which continued in mid-December, also helped profits by enabling banks to earn more on loans.

Bank of America Corp., the second largest in the U.S. by assets, in the third quarter posted its highest quarterly profit in six years. Analysts predict the bank will post annual profit records in 2018 and 2019.

Now, the question is whether bank stocks can sustain gains for a third year in a row and regain the record level they set before the financial crisis.

Since a slight decline in 2015, the KBW Nasdaq Bank Index has rallied to within 12% of its record from February 2007. But challenging trading, lending and interest-rate conditions could stop the index from reclaiming that level in 2018.

Bank of America, **Citigroup** Inc. and **JPMorgan** all have said they expect trading revenue to log a decline in the fourth quarter due to low volatility. Another difficulty is the slowing pace of loan growth. Loans grew 4.1% from a year

earlier near the end of December, down from 7.3% before the election, according to the Federal Reserve. Growth for business loans has been particularly weak, despite the stronger economy.

And although banks have benefited from the Fed's tightening, which involves a key short-term interest rate, longer-term rates have remained low, threatening future profits. The difference, or spread, between 10-year and two-year U.S. Treasury debt, a rough proxy for bank profitability, stood at about 0.5 percentage point at the end of December, near its lowest level in a decade.

This "flattening" yield curve will become a bigger issue if banks feel more pressure to pay customers a higher rate on their deposits. If loan balances aren't growing briskly and the interest-rate spread is narrow, it is far tougher for banks to increase lending profits.

Barclays analyst Jason Goldberg projects that lending profit margins will rise in 2018, but not as much as they did in 2017.

The flatter yield curve, he says, "will matter at some point."

Optimism Abounds

Consumers see a high probability that the stock market will rise in 2018, according to a University of Michigan sentiment survey.

Average expected probability of higher stock prices one year out



Source: Gluskin Sheff

STOCKS

Continued from the prior page
market will exhaust itself in 2018. U.S. stocks already trade at historically high levels; they recently hit 18.5 times their next 12 months' projected earnings, the highest in more than 15 years, according to FactSet.

Historically, investors have rushed into stocks with the most fervor near the end of a bull market, ignoring economic and financial metrics that might otherwise urge caution, for example a rise in short-term Treasury yields relative to long-term ones. That signal, known as a flattening yield curve, often indicates a slowing economy.

"When people are not as

prepared for the bear, they start putting themselves in vulnerable positions for the bear," said Jim Paulsen, chief investment strategist at Leuthold Group in Minneapolis. "More people get involved in the highflying parts of the stock market. People do a lot of other things like borrow money and take down their savings. Corporations start to expand. In other words, players get out over their skis."

To be sure, few measures of sentiment show euphoria among investors. A recent survey of big professional money managers has shown they are bearish, with nearly seven in 10 saying stocks are overvalued.

Because many investors use margin debt to add exposure to the market, it is often seen as a gauge of investor confidence. When it rises at a faster pace than the stock market, it can signal investors are growing complacent, but that hasn't happened this time.

That has left investors cautiously optimistic that the gains will keep going, but on guard for a reversal.

"I don't know if we are at the seventh-inning stretch or if we're at the bottom of the ninth, but we are somewhere between those two points," said David Rosenberg, chief economist and strategist at Gluskin Sheff + Associates Inc., a Toronto investment firm.

The Managers and Executives to Watch

Active investing held its own in 2017, but the new year holds new risks and opportunities for these leaders in the sector

Hedge funds and other active managers had a much better 2017 than many anticipated a year ago.

Hedge funds held their own and even posted their best relative performance in a rising equity market in almost a decade. There is still a lot of pressure on the business, especially when it comes to its historically high fees, but only a few large shops closed their doors in 2017.

As for other active managers, rising markets helped mitigate the pain of continued outflows from stock funds and some managers posted comebacks against their benchmarks. Broadly, however, nothing in the past 12 months has stopped the rise of passive investing.

As 2018 starts, here are the money managers and executives to watch:

Abigail Johnson

One of the most senior women in asset management, Fidelity Investments' Chief Executive Abigail Johnson is leading the money-management and brokerage giant as both industries confront unprecedented cost pressures from the rise of low-cost index-tracking funds.

Under Ms. Johnson's leadership, the Boston-based firm has pushed further into exchange-traded funds, a type of product executives at the firm have long viewed as less important than traditional actively managed mutual funds. Fidelity also cut trading commissions in its brokerage business in early 2017 in a bid to capture more client assets flowing into ETFs. These are both passive plays.

Ms. Johnson has rarely made public speeches since succeeding her father as chief executive in 2014 and chairman in 2016, but over the past year she has stepped into the spotlight to discuss emerging technology in financial markets. In one 2017 speech she championed the prospects of bitcoin and other alternative currencies,



Abigail Johnson is leading Fidelity Investments into ETFs.



Jeffrey Gundlach warns of a corporate-bond 'disaster' if rates rise.



Hedge-fund manager David Einhorn is looking to rebound in 2018.



Qi Wang didn't waste any time making her mark at Pimco.

Abigail Johnson

As bond investors prepare for a more challenging envi-

ronment, all eyes are on how Jeffrey Gundlach will handle the new market.

Mr. Gundlach's DoubleLine Total Return Bond Fund grew to \$62 billion over its first six years, thanks to years of outsize performance, gaining Mr. Gundlach widespread recognition as "the new bond king." But after peaking in September 2016, the fund dropped to nearly \$54 billion by the end of November 2017, even after adding nearly \$500 million over the past two months, according to Morningstar Direct. Mr. Gundlach says his firm "had a record year" in inflows and performance for investors.

The DoubleLine fund

gained 3.5% for the year through Dec. 26, compared with 3.38% for the average fund in the category, putting it in the 44th percentile for the year, Morningstar says.

Amid growing indications that the Federal Reserve will continue to raise interest rates, short-term Treasuries came under pressure in 2017, with the yield on two-year notes climbing to 1.87% from 1.19%. But yields on 10-year Treasuries barely moved, trading at 2.49% this week, raising questions about whether this "flattening" of the yield curve suggests an economic downturn is around the bend.

Mr. Gundlach, who didn't reply to a request for com-

ment, has told investors he and his team don't see a recession in the offing, and on Twitter he warned of a possible "disaster" for corporate bonds when interest rates rise.

—Gregory Zuckerman

David Einhorn

Hedge-fund manager David Einhorn has fallen on tough times.

The stock picker has lost more than 10% since 2014, compared with a 38% total return in the S&P 500. His **Greenlight Capital Inc.** rose 2% in 2017, while the S&P 500 climbed 25%.

Greenlight paid out more than \$400 million to clients

who chose to cash out mid-year, helping shrink the firm to \$7 billion in assets under management. More money was expected to flow out at year-end, said people familiar with the matter.

The 49-year-old Mr. Einhorn is far from the only fundamentally oriented investor who has lost his footing in recent years, raising questions about whether the rise of algorithmic trading and passive investing have changed their prospects.

—Juliet Chung

Qi Wang

When Qi Wang arrived at **Pacific Investment Management Co.**, she inherited one of the toughest seats at the firm—in more ways than one.

Pimco hired Ms. Wang in 2010 to co-manage its hedge fund that places bets based on sweeping views on economic policy and geopolitics—an investment strategy blunted by low interest rates and serene markets. What's more, her desk at the California bond manager sat next to Bill Gross, the famously hard-charging investment chief whose 2014 exit sent shock waves through Wall Street.

The 44-year-old manager appears to have succeeded: She now oversees some \$7.5 billion in hedge-fund investments at Pimco.

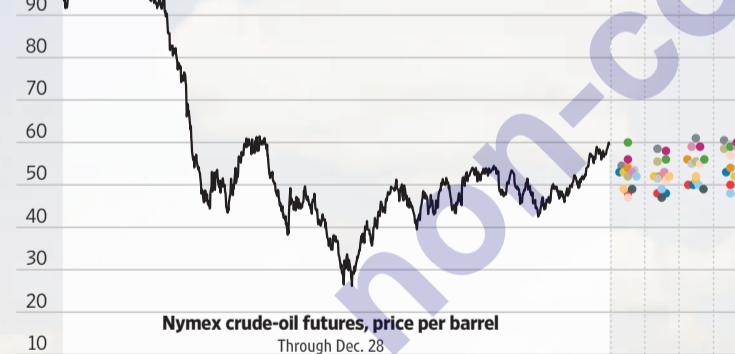
Ms. Wang, who spent 12 years at hedge-fund firm HBK Capital Management before joining Pimco, has fared better. One of her funds was up 3.5% through October, according to a recent HSBC hedge-fund performance report, in part because she bet on Emmanuel Macron's victory in the French presidential election this past May.

"I don't consider myself an old-style macro investor," she said. "The toughest challenge for an investor, but especially a traditional macro investor, is to have the intellectual flexibility to understand the landscape has changed. You have to adjust."

—Justin Baer

Looking Ahead

Where investment banks in December's survey see the price of U.S. crude-oil futures in the next few quarters



Sources: WSJ Market Data Group (oil price); the companies (forecasts); Bloomberg (photo)



THE WALL STREET JOURNAL.

Rocky Path Higher for Oil Prices

By GEORGI KANTCHEV
AND SARAH MCFARLANE

Expect a bumpy ride in the oil market.

Oil prices are likely to continue climbing in 2018 on the back of OPEC-led production cuts and a growing global economy, industry executives and analysts say. But any gains are expected to be kept in check by booming supplies from the U.S.

That means prices for oil probably won't soar to the \$100-a-barrel level seen in 2014, but they also won't plunge below \$30 a barrel like early 2016. Instead, traders expect prices to be volatile but in a tight range—much like 2017, when crude traded between roughly \$45 and \$67 a barrel.

A survey of 15 investment banks by The Wall Street Journal estimates that Brent crude, the international oil price gauge, will average \$58 a barrel in 2018, up from an average of \$54 in 2017.

The banks expect West

Texas Intermediate, the U.S. oil gauge, to average \$54 a barrel in 2018, up from \$51 in 2017.

The predictions reflect an oil market in recovery mode after an oil-price rout that cost hundreds of thousands of jobs, strained the budgets of producers and led to delays or cancellation for dozens of multibillion-dollar projects.

In 2017 the market prices stabilized and more recently began to climb, due largely to major exporters' production cuts, synchronized global economic growth, rising geopolitical tensions in the Middle East and worsening prospects for the economy of big producer Venezuela.

Brent crude prices finished Friday at \$66.87 a barrel, up 18% for 2017 and 49% above its 52-week low in June, following a series of supply disruptions. WTI prices, meanwhile, gained 12% to end at \$60.42 in 2017.

Now, oil traders are contemplating the end of a global glut of crude in 2018—a long

awaited rebalancing of supply and demand.

In the most bullish scenario for 2018, in which demand grows at around 1.6 million barrels a day, the oil market "should be balanced within the year," said Giovanni Serio, head of research at Vitol Group, the world's largest independent oil trader.

The production cuts led by the Organization of the Petroleum Exporting Countries have already helped drain tanks recently brimming with crude around the globe.

Strong demand for crude, driven by a rare spurt of synchronized global growth, also has been underpinning the market rebalancing. All 45 countries monitored by the OECD were recently on track to grow in 2017.

Demand for oil "is a lot higher than what we are used to, even the low end of [the expected] range is maybe nearly twice as big as what we used to see before the 2014 price decline," Vitol's Mr. Serio said.

Few Big IPOs Seen in 2018

BY MAUREEN FARRELL
AND CORRIE DRIEBUSCH

The market for U.S. initial public offerings bounced back in 2017, but many bankers and investors remained discouraged as top-tier companies remain on the sidelines.

That is unlikely to change in 2018. The number of companies raising money in U.S. markets is expected to pick up, but many of the highest-valued, big-name private companies, including **Airbnb Inc.**, **Uber Technologies Inc.** and **WeWork Cos.**, are expected to hold off on going public for at least another year.

"After a very lackluster 2016, we definitely saw a return to normalcy but without a lot of the marquee deals investors were expecting," said Jim Cooney, head of Americas equity capital markets at Bank of America Corp.

Investors largely lost money in the one high-profile deal that came to market in 2017: **Snap Inc.** made its debut in March 2017 and while its stock initially rose, it spent much of the year trading below its \$17 IPO price, leaving many investors with paper losses and greater wariness.

Even with a lift in IPO fundraising, some of the largest capital raises came from the private markets. For example, while Snap was the largest tech IPO since **Alibaba Group Holding Ltd.** made its debut in 2014, the \$3.9 billion it raised is less than the \$4.4 billion that **SoftBank Group Corp.** and its technology-focused Vision Fund privately invested in **WeWork**.

A host of other companies that might have ordinarily tapped the public markets for funding, including **Slack Technologies Inc.** and **Pinterest Inc.**, raised capital from private sources in 2017.

"The private markets continue to be an escape valve for the IPO," said Colin Stewart, vice chairman of global capital markets and head of technol-

ogy equity capital markets at Morgan Stanley.

U.S. IPOs raised \$49.33 billion through 189 offerings in 2017, more than double 2016's levels, when \$24.2 billion was raised through 111 offerings, according to Dealogic data. The data also show 2016 was the worst year for IPO volume since 2003.

Tech IPOs—a cornerstone of the IPO market—raised \$12.46 billion in 37 deals in 2017, nearly triple the volume from the previous year.

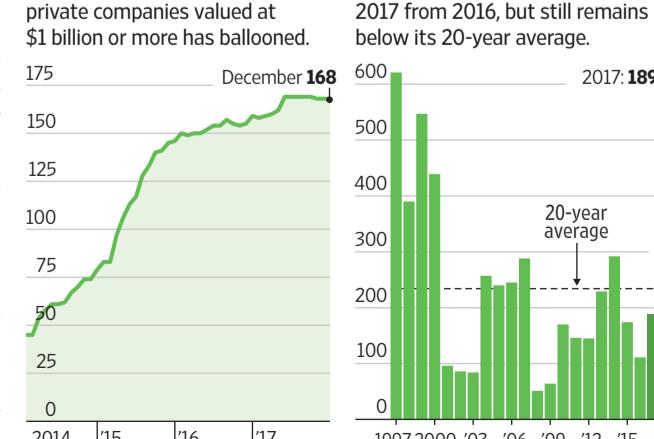
Mr. Stewart said companies and board members are aware that the public markets are open, but "they're just gauging whether it's the right time for them and that they have enough of a handle on their business," he said. "They realize that the public investor scrutiny is high."

Although many behemoths are holding off, some notable names will test the market in 2018. Music-streaming company **Spotify AB** is one of the most well-known firms expected to go public—but it is unlikely to raise any money when it debuts on the New York Stock Exchange.

Spotify is seeking to go public in March or April

Bounce Back

The number of venture-backed private companies valued at \$1 billion or more has ballooned.



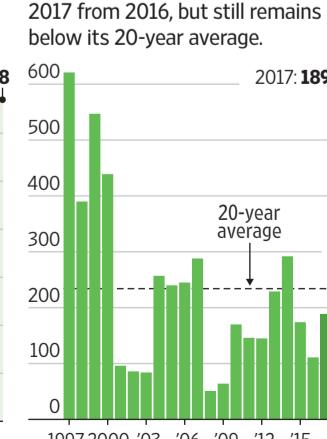
Sources: Dow Jones VentureSource (venture-backed private companies); Dealogic (IPOs)

through a so-called direct listing in which it wouldn't raise funds or use underwriters to sell the stock, according to people familiar with the process. The listing is being used as a way for Spotify to give existing investors the chance to cash out but not to raise additional funds. New investors will be able to buy shares once they start trading.

Meanwhile, **Dropbox Inc.**, which was valued at \$10 billion when it last raised capital in 2014, is preparing for a listing that could come in either March or April and is expected to value the company roughly around or possibly above its latest round of private financing, according to people familiar with the offering. ADT, the home-security company owned by private-equity firm **Apollo Global Management LLC**, also is seeking to debut in that time period and could be valued at over \$15 billion, people familiar with the deal said.

While Uber isn't expected to go public before 2019, many bankers and industry watchers say they expect its main competitor, **Lyft Inc.**, to do so in late 2018. "We will go public when it's right for us," a spokeswoman for Lyft said.

The number of U.S. IPOs rose in 2017 from 2016, but still remains below its 20-year average.



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The last time a severe La Niña weather pattern struck, in 2012, corn prices reached \$8 a bushel. Corn is harvested in Kansas.

La Niña Stands to Shake Up Crops

BY DAVID HODARI

A weather phenomenon that has wreaked havoc on commodity prices in the past could return in 2018.

Indicators suggest a 75% probability of a La Niña in the coming months, according to Stefan Vogel, head of Rabobank's agricultural commodity markets research team. The weather pattern could inject volatility into markets like grains, soybeans and palm oil this year.

La Niña is characterized by cooler-than-normal waters in tropical Pacific Ocean regions, which results in more precipitation in Southeast Asia and eastern Australia, according to Kyle Tapley, a senior agricultural meteorologist at MDA Weather Services.

The same conditions also lead to drier weather in southern Brazil, eastern Argentina and the southern U.S., he said.

These areas set for dryness also happen to be critical to the global supply chain of grains and oilseeds.

If La Niña materializes, investors of such markets could be jolted, analysts say.

Prices for agricultural commodities have been nearly static in 2017 even as markets for other commodities and stocks have boomed. Investors may have been lulled into a false sense of security by the heavy supplies of grains and oilseeds seen in 2017, which tend to damp price volatility, said CME Group's Erik Norland.

If the temperature in the relevant part of the Pacific falls by more than one degree Celsius, "volatility explodes to 1½ times its normal level," Mr. Norland said.

While the effects of previous La Niñas on futures markets have been inconsistent, investor bets on corn, wheat,

and soybean options are near historic lows. Proprietary data from CME Group show that La Niña raises price volatility across those sectors.

The last severe La Niña was in 2012 and caused a record-breaking heat wave and drought across the U.S. Midwest, Mr. Vogel said in a note. It eventually drove prices up to \$18 a bushel for soybeans and \$8 a bushel for corn, he said. A return to those levels would constitute an 87% gain for soybeans and a 130% jump for corn.

La Niña conditions already have arrived, though they need to persist for a month before the weather pattern can be confirmed. South American farmers are seeing the effects, with climate shifts in Argentina and a drier outlook emerging in southern Brazil, Ms. Allen said.

For instance, soybean meal has reacted significantly to La

Niña as Argentina is one of the world's largest exporters, according to Rabobank's Mr. Vogel.

After a few fairly calm months, soybean-meal prices jumped almost 11% in the month between mid-October and mid-November. They have surrendered almost all of those gains since then.

A more exaggerated price move could be seen in the market for palm oil. Two years ago, palm-oil-growing regions were hit by an El Niño—the opposite of La Niña—and prices jumped more than 30% between September 2015 and September 2016.

With yields "only just recovering" from that weather system, according to Mr. Vogel, palm-oil supply could be stymied if La Niña dumps rain on Southeast Asia and causes disruptive flooding. That would be bullish for prices, he added.

Dollar Could Get Lift From Tax Plan

BY IRA IOSEBASHVILI

Some investors are betting the dollar's nearly seven-year bull market is due for one last hurrah in 2018.

The view hinges on a sweeping tax overhaul Congress passed in December. Dollar bulls believe the tax plan could juice an already-growing economy, push the Federal Reserve to raise rates at a faster pace and encourage corporations to repatriate some of the estimated \$1 trillion they hold abroad in cash—all outcomes that could fuel a dollar rally.

At the same time, many of these investors are convinced that any lift to the dollar won't last long, as central banks around the world gear up to roll back postcrisis stimulus programs as growth in their economies accelerates. With more economies joining the U.S. on the path to tighten monetary policy, the dollar will likely lose some appeal to some investors, who for years had piled into U.S. assets because they offered higher yields than the rest of the developed world.

In 2018, however, the tax overhaul "could cause a one-off surge" in the U.S. currency, said Steven Barrow, head of G-10 strategy at Standard Bank.

A tax cut can raise U.S. growth by as much as 0.4 percentage point a year for the next two years, according to analysts at Bank of America Merrill Lynch. That boost may be just what the economy needs to overcome anemic inflation, which has puzzled analysts by remaining low even as gross domestic product has accelerated and unemployment has fallen.

Another boost to the dollar could come from corporations, bringing home overseas cash. Bank of America Merrill Lynch estimates that more favorable tax conditions will prompt companies to repatriate be-

tween \$200 billion and \$400 billion of funds held in foreign currencies, a move that would entail selling foreign assets and buying dollars.

"If that comes into the U.S. over a short period of time, that will surely impact the foreign-exchange market," said Ben Randol, senior analyst of G-10 FX Strategy at Bank of America Merrill Lynch.

Bank of America Merrill Lynch predicts the euro-dollar exchange rate will fall to \$1.10 in the first quarter of 2018, from around \$1.20, reflecting a stronger U.S. currency. BNP Paribas sees the euro at \$1.13 by midyear. But both expect the dollar to weaken again by year-end.

The main threat to a dollar rally comes from Europe, where the eurozone economy is on track to notch its highest growth rate in a decade. Despite that run, many investors believe Europe still has much more room to expand than the U.S., which was the first major economy to emerge from the financial crisis.

That growth helped lift the euro 14% against the dollar in 2017, its largest gain since 2003.

Downtrend

WSJ Dollar Index

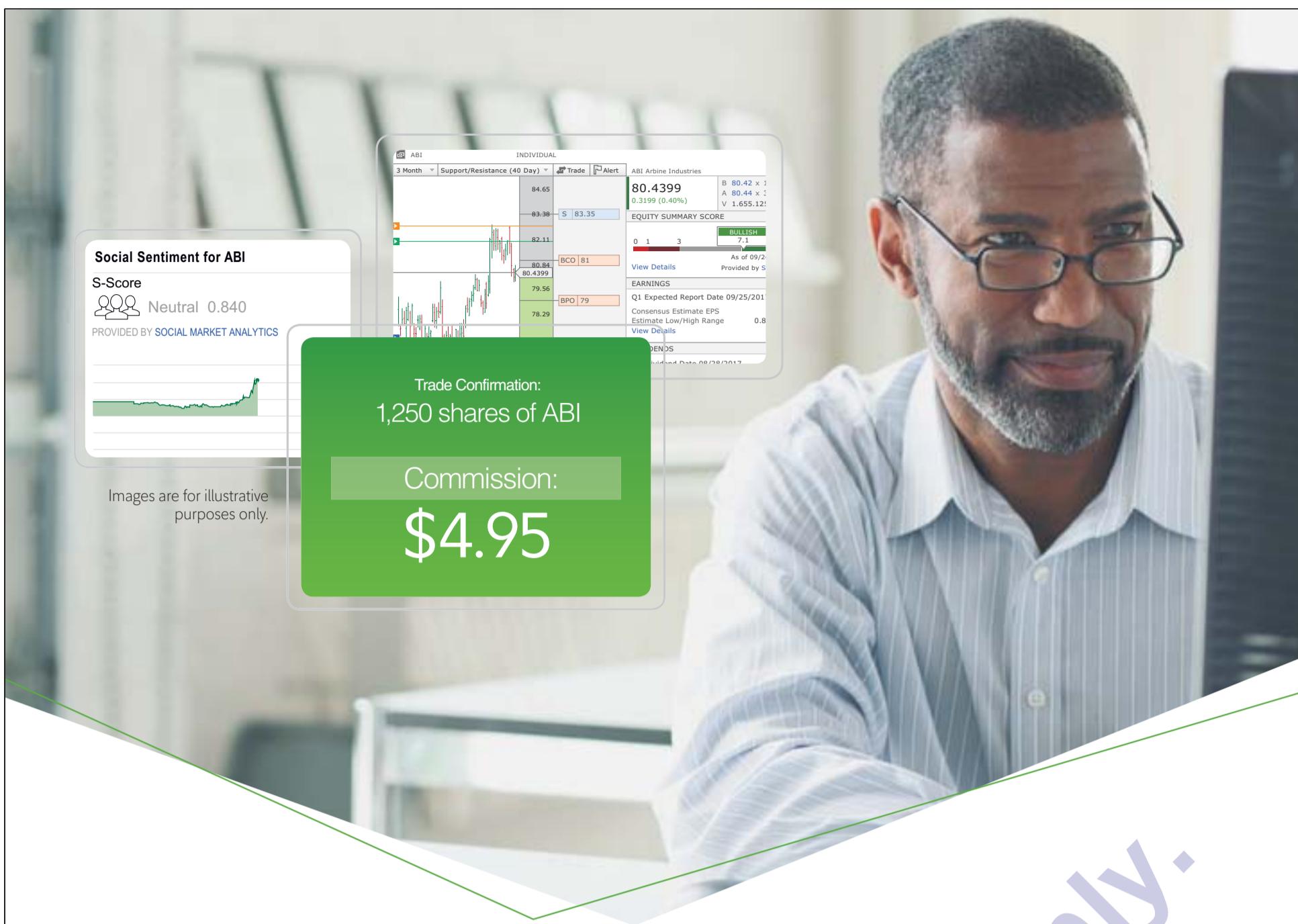
Source: WSJ Market Data Group
THE WALL STREET JOURNAL.

NEW YORK STOCK EXCHANGE 2017 TRADING SUMMARY

Dow Jones Industrial Average



Stock	Sym	PE	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	PE	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	PE	Hi	Lo	Last	Net Chg	Pct Chg
AAC	AAC	dd	13.06	5.99	9.00	1.76	.243	AEP	AEP	19	78.07	61.82	73.70	10.61	.169	Archrock	AROC	dd	16.40	8.30	10.50	-2.70	-.205
AAR	AIR	59	44.04	31.20	59.39	6.24	.189	ArmerExpress	ARM	19	100.53	74.74	99.31	25.23	.341	Arconic	ARCN	dd	30.69	18.64	27.25	8.71	.470
ABB	ABB	25	26.94	21.11	26.82	5.75	.273	AmericaFin	AFG	14	109.41	85.57	108.54	20.42	.232	ArcosDorados	ARCO	27	10.80	5.45	10.35	4.95	.917
ABMIndustries	ABM	cc	45.12	36.61	37.72	-.32	-.76	AmericaHomes4Rent	AMH	23	23.98	20.09	21.84	0.86	.41	Ardagh	ARD	cc	24.54	19.55	21.10	-.18	-.151
ACCOBrands	ACCO	21	14.75	10.35	12.20	-.08	-.65	AIG	AIG	dd	67.47	57.85	59.58	-.57	-.88	ArdmoreShipping	ARDM	dd	9.05	6.60	8.00	0.60	.81
AECOM	ACM	17	39.50	30.15	37.15	0.79	.22	AIGW	AIGW	dd	25.26	16.33	18.12	-.53	-.228	AresManagement	ARES	36	22.96	17.55	21.75	2.00	.041
AES	AES	dd	12.06	10.00	10.82	-.07	-.68	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	AresManagmnt	ARES	36	22.96	17.55	21.75	2.00	.041
Aflac	AFL	13	89.81	66.50	87.88	18.18	.261	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	Argan	AGX	dd	8.76	7.67	9.50	-.85	-.362
AGCO	AGCO	28	75.95	57.76	71.42	13.57	.235	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	Argus	AGX	dd	8.76	7.67	9.50	-.85	-.362
AG Mortgage	MITT	7	19.95	17.05	19.01	.190	.111	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArizaNetworks	ANET	49	19.70	10.93	11.78	-.30	-.304
AH BeloA	AHD	dd	6.65	4.35	4.80	-.155	-.244	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
AK Steel	AKS	40	11.28	4.00	5.66	-.455	-.446	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
AMC Ent	AMC	34	39.40	10.80	15.10	-.1855	-.551	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
AMN Healthcare	AMN	21	51.75	33.61	49.25	10.80	.281	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
ARCDocumentSols	ARC	5.55	23.20	2.55	25.5	-.253	-.498	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
AT&T	T	19	43.03	32.55	38.88	-.365	-.86	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
A10 Networks	ATEN	8	9.94	6.02	7.72	-.059	-.71	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
AUOOptronics	AUO	6	4.95	3.60	4.16	0.62	.175	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
AVX	AVX	21	20.22	15.28	17.30	1.67	.107	Airways	AIGW	dd	25.26	16.33	18.12	-.53	-.228	ArmadaHoffleffer	AROC	dd	16.40	8.30	10.50	-.270	-.205
AXIS Capital	AXS	dd	7.01	4.94</td																			



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NEW YORK STOCK EXCHANGE 2017 TRADING SUMMARY

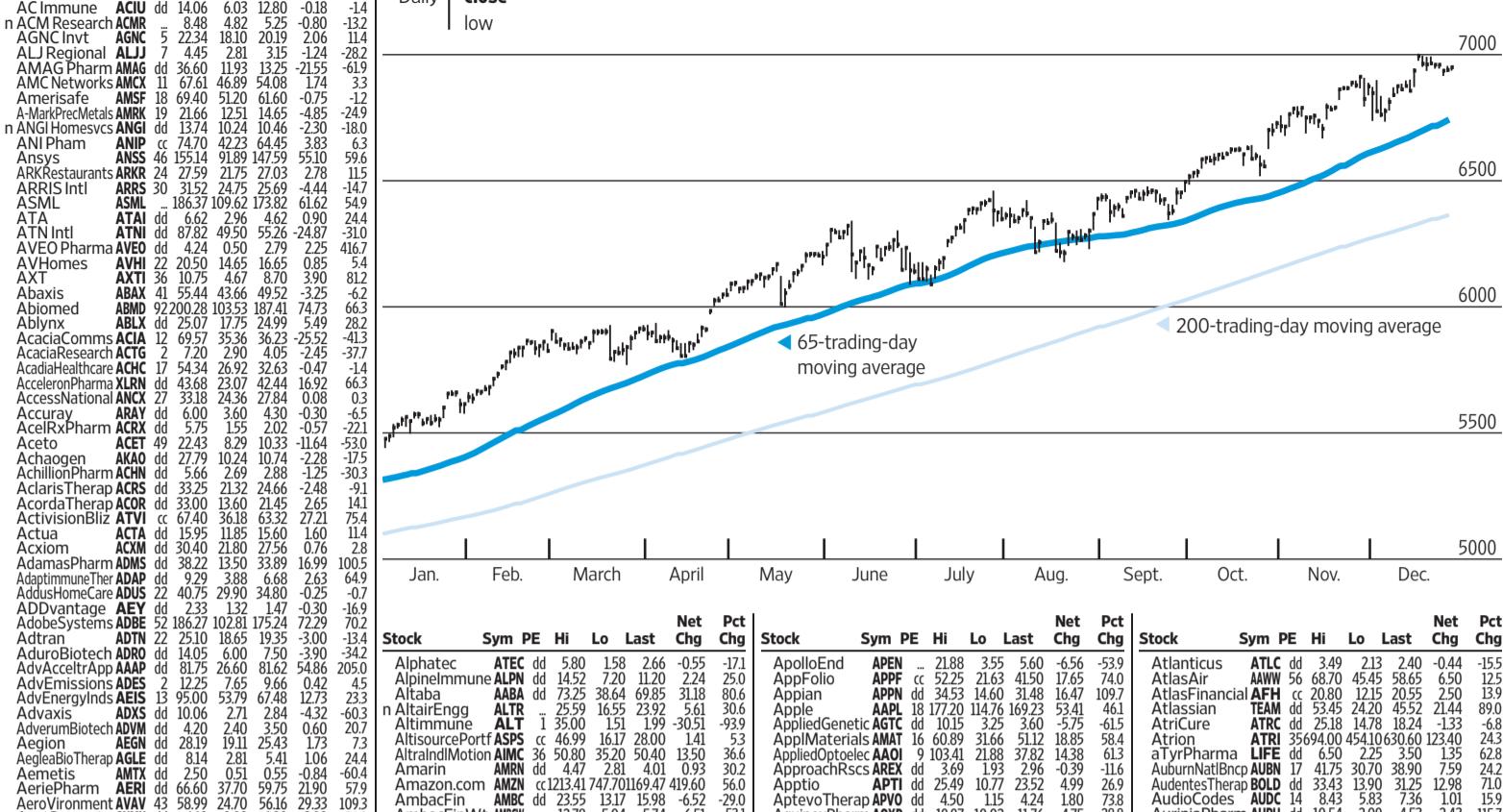
Continued From Page R4

Stock	Sym	PE	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	PE	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	PE	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	PE	Hi	Lo	Last	Net Chg	Pct Chg			
Cameco	CCJ	dd	1336	768	923	-124	-14	DolbyLab	DLB	32	6334	4513	6200	1681	372	-118	GTT Comm	GTT	dd	2255	2295	4695	1810	633	JEC	JEC	6935	4931	6596	986	856	-117		
CampbellSoup	CPB	17	6423	4499	4811	-1236	-204	DollarGeneral	DG	21	96.60	67.93	93.01	1894	256	-	Gafisa	GFA	dd	23.01	5.92	12.62	-23%	-157	Moody's	MCO	53	153.86	93.51	147.61	534	534	-566	
CampingWorld	CWH	23	47.26	26.20	4473	124	-373	DominionEner	DCD	14	54.16	48.10	51.66	106	21	-	Gallagher	AJC	25	67.32	61.34	63.28	1132	218	JamesHardie	JHX	30	17.69	13.55	17.61	171	101	-85	
CanadaGoose	GOOS	31	9.195	15.20	31.56	15.48	-963	DominionEnerM	DCD	22	34.85	25.25	31.90	5.15	193	-	Gannett	GCI	30	12.38	7.36	11.59	184	194	JanusHedgeFnd	JHG	38	38.81	30.24	37.76	766	250	-289	
CIBC	CM	11	97.75	77.20	97.41	15.81	-184	Domino's	DPZ	36	221.58	156.26	188.96	272	187	-	GAP	GPS	16	35.24	21.02	34.06	1162	518	JerniganCapital	JCP	13	24.89	18.45	19.01	-204	-242		
CanNIRIwy	CNI	23	84.48	67.08	82.50	15.10	-224	Donaldson	DCI	28	50.10	41.28	45.95	6.87	269	-	Gartner	IT	dd	34.02	19.91	33.93	1283	608	JanusHedgeFnd	JHG	48	30.50	13.70	24.05	82	579	-229	
CanNaturalGas	CNIQ	21	16.25	12.35	35.72	3.94	-324	DonnelleyFin	DFIN	20	27.08	18.06	19.49	-3.49	-152	-	GasLog	GLO	64	22.49	12.75	22.75	615	382	JinkoSolar	JPS	80	30.50	13.70	24.05	82	579	-229	
CanPacRwy	CPI	19	183.82	141.22	182.27	39.99	-280	DorianLPG	LPG	dd	125.0	6.20	8.22	0.01	-01	-	Gazit-Globe	GZT	4	10.82	8.93	10.53	189	219	JonesEnergy	JNE	40	4.78	0.73	11.0	-305	-761		
Canna	CNN	8	18.90	16.16	17.02	-1.36	-74	DouglasDynamics	FLOW	28	42.60	28.55	37.80	415	123	-	GenComShipping	GNK	14	19.99	7.24	13.32	594	805	JonesLangLang	JLN	20	15.25	9.70	14.93	789	320	-113	
Canon	CAJ	20	39.15	28.15	37.40	9.26	-329	Dover	DOV	23	102.06	75.42	100.99	26.66	348	-	GenerMaritime	GRM	66	3.64	1.91	6.62	214	478	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
CentelMedical	CMD	57	108.00	69.21	102.87	24.12	-303	DoverDowns	DDE	dd	118	9.02	1.02	-0.01	-10	-	GeneralCable	BGC	26	53.79	33.77	49.52	878	216	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
CapitalOneWt	CWF	59	52.5	35.50	57.98	12.79	-283	DoverMotors	DWD	47	73.85	60.41	71.22	4.04	60	-	GeneralDynamics	GD	20	214.81	173.2	204.35	207	178	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
CapitalOne	CFO	14	101.43	76.05	99.58	12.44	-131	DowDuPont	DWP	47	24.05	18.01	19.95	-0.35	-152	-	GeneralElec	GE	22	31.84	17.25	17.45	-141	-448	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
CapitalOneLiving	CSD	17	16.66	11.40	12.49	-2.56	-104	Dreyfuss	DYR	37	46.95	28.83	37.76	1.72	-170	-	GeneralMills	GMO	9	46	3.73	9.99	-2.48	-40	-	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216
CapitolInnVt	CIC	10	10.10	9.60	9.68	-0.12	-12	Dreyfuss	DYR	37	46.95	28.83	37.76	1.72	-170	-	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216									
CapitolInnVtVt	CIVS	13	105	110	-0.18	-014	-	Dreyfuss	DYR	66	47.95	35.00	55.25	17.3	-181	-	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216									
CapsteadMtg	CMO	14	11.41	8.52	8.65	-1.54	-151	Dri-KilQuip	DS	66	6.49	5.55	5.33	1.77	-41	-	Dunhill	DUN	24	35.58	24.23	28.85	4.89	113	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
CardinalHealth	CAH	84	84.88	54.66	81.22	-10.70	-149	Ducommun	DCO	24	35.58	24.23	28.85	4.89	113	-	Dunhill	DUN	24	35.58	24.23	28.85	4.89	113	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
Caron	CRM	40	28.88	18.05	44.94	9.47	-105	DukeEnergy	DKE	29	18.08	16.74	21.14	-5.65	-141	-	Dunhill	DUN	24	35.58	24.23	28.85	4.89	113	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
Carlisle	CSL	22	115.63	92.09	112.65	3.36	-30	DukeEnergy	DKE	37	30.14	23.93	27.21	0.65	-24	-	Dunhill	DUN	24	35.58	24.23	28.85	4.89	113	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
CarMax	KMX	17	77.64	54.29	61.63	-0.26	-04	DyncomInds	DYN	22	125.56	100.46	118.41	-2.91	-24	-	Dunhill	DUN	24	35.58	24.23	28.85	4.89	113	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
Carnival	CCL	18	69.59	57.14	62.74	13.71	-25	DynexAGLSNG	DNG	18	10.73	8.80	10.54	-1.83	-102	-	Dunhill	DUN	24	35.58	24.23	28.85	4.89	113	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
CarnivalTech	CRTS	31	53.61	32.44	50.98	14.24	-410	DynexAGLSNG	DNG	18	10.73	8.80	10.54	-1.83	-102	-	Dunhill	DUN	24	35.58	24.23	28.85	4.89	113	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
CarriageSvcs	CSV	25	28.96	23.15	25.71	-2.93	-102	DynexAGLSNG	DNG	18	10.73	8.80	10.54	-1.83	-102	-	Dunhill	DUN	24	35.58	24.23	28.85	4.89	113	JPMorganChase	JPM	15	58.73	33.77	49.52	878	216	-216	
Cars.com	CARS	17	30.30	19.90	28.84	4.16	-36	DynexAGLSNG	DNG	18	10.73	8.80	10.54	-1.																				

NASDAQ 2017 TRADING SUMMARY

Nasdaq Composite Index

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Jan. Feb. March April May June July Aug. Sept. Oct. Nov. Dec.

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EXCHANGE-TRADED PORTFOLIOS 2017 TRADING SUMMARY

Stock	Sym	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	Hi	Lo	Last	Net Chg	Pct Chg								
AAMSPeMHDInv EEMI	26.15	24.66	26.15	114	4.6	+4.6%	CurrShAUD	FXA	8.00	7.18	7.85	0.05	.81	+8.1%	ETRACSAlerianMLP AMUB	21.38	16.41	21.30	-2.60	-1.31	-13.1%	FTLC US Equity	RNLK	21.95	19.67	21.78	189	.95	GlbX ChinaMaths CHIM	22.75	13.76	20.86	724	.532	
AAMSP500HdInv SPDV	26.27	25.00	26.15	0.85	-1.4	-5.1%	CurrShGBP	TZB	13.26	11.78	13.20	10.94	.1	+3.6%	ETRACSAlerianMLPInfr	MLPB	30.20	23.23	23.23	-4.61	-16.6%	-16.6%	FTLC Value	FTA	55.17	46.89	54.63	7.76	.16	GlbX ConsciousCos COPX	19.83	15.95	19.42	3.35	.215
n ALPSDorseyMoW AIEO	26.20	24.03	25.89	0.66	-1.2	-4.4%	CurrShCAD	FXC	81.49	71.70	78.50	4.93	.67	+6.7%	ETRACSMthPay2xLev	ETFL	18.90	16.44	18.12	1.37	.82	+8.2%	FTLCatMAlphaDEX	FLN	23.27	17.73	20.42	181	.81	GlbX CominCoMiners COPX	27.67	18.49	27.35	7.35	.368
ALPS CohenStrs SWIN	30.06	24.48	29.76	4.69	-18.7	-54.4%	CurrShCNY	FXCH	75.79	70.18	74.96	3.65	.51	+5.1%	ETRACSMthPay2xLev	DVHL	25.95	19.51	20.21	-1.45	-6.7%	-6.7%	FTLCatMAlpha	TRST	19.70	12.75	19.20	4.77	.13	GlbX FTSENorReg GAFX	18.68	18.27	19.00	4.77	.13
ALPSmedDivDogs EDOG	25.57	21.84	25.42	3.66	-1.6	-3.4%	CurrShJPY	FXY	89.29	83.88	85.14	2.62	.32	+3.2%	ETRACSMortgageREIT	MORL	15.90	14.72	17.65	2.07	.133	+13.3%	FTLCatMReg RegA	LMSB	52.39	51.58	51.64	-0.54	-1.0%	GlbX FTSESENorReg GAFX	21.68	17.18	20.70	4.21	.329
ALPSedSecWgh EQL	70.21	60.22	69.54	9.56	-15.9	-22.2%	CurrShSGD	FXSG	74.03	68.14	73.33	5.55	.79	+7.9%	S&P2xDivRtSto	SDYL	87.49	64.20	85.49	1.77	.257	+25.7%	FTLCatMReg RegA	TMDF	53.28	49.50	51.34	8.01	.224	GlbX FertilizersPot SOIL	54.43	50.91	53.23	4.46	.173
ALPSIntDivDogs IDOG	28.86	23.70	28.65	5.02	-1.5	-5.0%	CurrShSEK	FXS	12.07	10.05	11.68	9.84	.93	+9.3%	ETRACSS2xLeverShD	SDYL	87.49	29.11	32.91	0.66	.21	+21.0%	FTLCatMReg RegA	TMDF	54.43	50.91	53.23	4.46	.173	GlbX FdrRunCos BOSS	17.82	14.77	17.32	2.18	.144
ALPSMedBreak SBDI	33.45	22.12	32.79	9.87	-4.31	-12.3%	Cushing30ETN	FXF	100.46	92.37	96.83	3.10	.33	+3.3%	ETRACSS2xLevEn	MLPL	16.88	11.61	15.74	4.28	.374	+37.4%	FTLCatMReg RegA	TMDF	54.43	50.91	53.23	4.46	.173	GlbX GoldExplorers GOEX	27.29	20.24	23.31	2.61	.126
ALPSSectorDivDogs SDOG	46.54	41.31	45.80	3.73	-3.4	-7.3%	DBAgriDoubleLev	DAG	4.18	2.60	2.86	-0.62	-.178	-17.8%	ETRACSS2xLevEn	MLPL	30.20	23.23	23.23	-4.61	-16.6%	-16.6%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX Gurulndex GURU	29.96	24.10	29.70	5.67	.236
ARKGenomicRev ARKJ	27.17	17.18	24.49	7.56	-44.7	-64.7%	DBAgriDoubleLev	DTB	25.95	23.00	26.90	1.90	.67	+6.7%	ETRACSS2xLevEn	MLPL	30.20	23.23	23.23	-4.61	-16.6%	-16.6%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX HealthWell BFT	17.02	14.80	16.66	2.12	.146
ARKIndlInno Inv ARKX	35.28	19.28	32.94	10.98	-50.8	-58.7%	DBAgriDoubleLev	DTG	31.50	22.00	26.90	1.90	.67	+6.7%	ETRACSS2xLevEn	MLPL	30.20	23.23	23.23	-4.61	-16.6%	-16.6%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
n ARK ArkInnov Inv IZRJ	21.33	19.76	20.40	0.34	-1.7	-1.7%	DBAgriDoubleLev	DTM	17.31	10.73	18.00	-1.64	-.141	-14.1%	ETRACSS2xLevEn	MLPL	30.20	23.23	23.23	-4.61	-16.6%	-16.6%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
ARKWebxETP ARKW	50.50	25.33	46.07	20.98	-8.36	-16.7%	DBBaseMtDoubLe	BDD	11.11	6.16	10.53	4.14	.68	+6.8%	ETRACSS2xLevEn	MLPL	30.20	23.23	23.23	-4.61	-16.6%	-16.6%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
ActiveAltsCont SOZZ	26.00	23.30	25.50	0.38	-1.5	-1.5%	DBBaseMtDoubLe	BOM	2.70	1.75	2.04	-0.29	-.172	-17.2%	ETRACSS2xLevEn	MLPL	62.03	31.30	31.79	0.69	.21	+21.0%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
AdvsChCorneSC SCAR	36.44	29.73	35.00	4.97	-16.5	-46.5%	DBBaseMtDoubLe	BOS	24.60	16.09	19.80	-2.55	-.114	-11.4%	ETRACSS2xLevEn	MLPL	63.33	35.30	42.87	-1.39	-24.5%	-24.5%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
AdvsDhOrseyMoW AADP	52.95	49.08	58.85	18.67	-46.5	-46.5%	DBCommodityBln	DY	4.77	2.08	3.08	-0.08	-.04	-4.0%	ETRACSS2xLevEn	MLPL	63.33	35.30	42.87	-1.39	-24.5%	-24.5%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
AdvsShFocusedEq CWS	31.56	20.69	31.32	5.04	-20.6	-20.6%	DBCommodityBln	DYB	24.42	18.00	21.85	1.95	.07	+0.7%	ETRACSS2xLevEn	MLPL	63.33	35.30	42.87	-1.39	-24.5%	-24.5%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
AdvsShKmKorea KOR	32.69	23.39	31.00	7.89	-34.1	-34.1%	DBCommodityBln	DYH	57.02	58.00	44.51	-1.95	-.17	-17.0%	ETRACSS2xLevEn	MLPL	63.33	35.30	42.87	-1.39	-24.5%	-24.5%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
n AdvsShNewTech FNG	24.13	19.78	21.47	0.91	-4.4	-4.4%	DBCommodityBln	DTH	17.31	8.85	88.75	-16.22	-.155	-15.5%	ETRACSS2xLevEn	MLPL	63.33	35.30	42.87	-1.39	-24.5%	-24.5%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08
AdvsShNewfleet MINC	48.99	48.83	48.77	-0.24	-3.6	-3.6%	DBCommodityBln	DTH	34.02	24.00	26.28	0.04	.24	+2.4%	ETRACSS2xLevEn	MLPL	63.33	35.30	42.87	-1.39	-24.5%	-24.5%	FTLCatMReg RegA	TRST	55.17	46.89	54.63	7.76	.16	GlbX InternetNetS LOGO	15.87	14.79	15.83	1.54	.08

EXCHANGE-TRADED PORTFOLIOS 2017 TRADING SUMMARY

Continued From Page R8

Stock	Sym	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Sym	Hi	Lo	Last	Net Chg	Pct Chg
Hartford MultiDvXUS RDM	RDM	30.17	23.92	29.20	5.32	-22	iSharesMultiCapS CFSF	CFSF	26.60	24.18	26.47	2.18	9.0	iSharesRussellMktGrowth TWP	TWP	121.70	97.49	120.64	23.29	23.9	PwrShkBWHDiv KBWD	KBWD	24.94	22.76	23.61	0.62	2.7%
Hartford MultiMuni ROAM	ROAM	25.94	20.72	31.57	5.19	-25.2	iSharesMsciMultiP ACWF	ACWF	34.07	24.33	30.66	6.57	27.2	iSharesBrokerDealers IAI	IAI	63.87	48.95	62.77	13.29	26.9	PwrShkBWPret KBWP	KBWP	39.30	34.70	35.41	-23.5	-5.9%
Hartford MultiGlbCS ROGS	ROGS	31.69	26.04	35.77	5.61	-24.8	iSharesMultiHlthCr HCRF	HCRF	32.40	25.12	31.62	6.54	26.1	iSharesCredItBdtDF TD	TD	122.93	108.03	112.03	2.81	2.6	PwrShkBWProp&Cas KBWP	KBWP	61.03	52.71	59.40	37.8	6.8%
n HartfordLowVolU S LVIN	LVIN	28.13	25.51	28.13	2.49	-9.7	iSharesMsciMidCap INDF	INDF	30.20	28.00	31.89	3.89	13.9	iSharesDiv&Buyback DIVB	DIVB	26.48	24.76	26.36	1.39	5.6	PwrShkBWRegBk KBWP	KBWP	58.95	47.64	56.00	5.09	0.2%
n HartfordLowVolU S LVUS	LVUS	20.56	24.65	25.05	0.18	-0.7	iSharesMsciMidCap INTF	INTF	29.14	23.22	28.85	5.62	24.2	iSharesTreasuryBd DFTV	DFTV	25.60	24.73	25.08	0.15	0.6	PwrShbModConserv PMSB	PMSB	12.38	12.46	13.21	0.71	5.7%
HartfordMultiREIT RER	RER	16.26	14.34	15.49	0.55	-3.6	iSharesMsciMidCap ISCF	ISCF	32.60	24.07	32.45	8.46	35.3	iSharesOptimizedBd BYLD	BYLD	26.66	24.48	25.00	0.35	1.4	PwrShbMultiStratL ALT	ALT	23.21	19.26	21.25	-13.0	-5.8%
HartfordMultiU S ROUS	ROUS	31.60	25.24	31.20	5.39	-20.8	iSharesMsciMidCap MATF	MATF	34.66	27.91	34.20	6.29	22.5	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HartfordMultiOpps HMOP	HMOP	44.17	39.94	40.17	0.02	-0.3	iSharesMsciMidTech LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HartfordQualibd HQBQ	HQBQ	50.99	50.29	50.44	-0.15	-0.3	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HartfordTRBTF HTRB	HTRB	40.25	39.66	40.06	0.02	-0.1	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HealthCareSelSet XLV	XLV	84.31	68.75	82.68	13.74	-19.9	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HighlandSelLoan SMLN	SMLN	18.79	18.13	18.19	-0.56	-3.0	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HoriZDAXGermany DAX	DAX	31.94	26.51	31.59	0.08	-0.7	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HorizonHedge Fund ZGQ	ZGQ	24.98	22.31	25.45	2.18	9.8	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HrizNSGP00Covall HSPK	HSPK	52.16	45.55	50.31	4.80	-10.5	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
HullTacticals HTU	HTU	29.30	21.74	21.39	1.54	-52.2	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ AustraliaS C KROO	KROO	20.11	15.76	19.55	3.98	-25.6	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ CanadaSC L CNDCA	CNDCA	19.24	15.60	18.98	2.38	-13.0	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ ChinaUniv S CLRG	CLRG	25.50	24.88	25.29	0.29	-1.2	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ Chinkin US SC SWSM	SWSM	28.69	23.81	28.05	2.87	-14.1	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ EnhCoreBd AGGE	AGGE	19.88	19.17	20.57	0.04	-0.2	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ EnhCorePlusBd AGGE	AGGE	21.05	19.95	19.95	0.24	-0.2	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ50%HdgTEt EHTF	EHTF	20.45	17.20	20.34	3.12	-18.1	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ50%HdgTEt EHTF	EHTF	22.21	20.80	21.65	3.52	-19.4	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ50%HdgTEt EHTF	EHTF	22.87	18.50	22.57	3.57	-23.5	iSharesMsciMultiP LRGF	LRGF	32.31	26.74	31.79	5.07	19.0	iSharesOHYCorpBd SHY	SHY	48.07	46.72	47.13	-0.21	-0.4	PwrShbNasInternet PON	PON	17.98	8.39	11.71	33.07	40.0%
iQ50%HdgTEt EHTF	EHTF	22.87	18.50																								

PREFERRED STOCK LISTINGS 2017 TRADING SUMMARY

Stock	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Hi	Lo	Last	Net Chg	Pct Chg	Stock	Hi	Lo	Last	Net Chg	Pct Chg
A						ChimeralnVPrfD	26.74	24.80	25.22	0.80	.32	GladstoneCommPfa	27.25	25.11	26.42	0.93	.36	NavientNts2018	27.86	24.68	25.00	-0.25	.18
AG Mortgage Pfd	25.65	23.64	25.33	151	.63	ChimeraxiFtPfd	26.47	24.41	25.80	0.97	.39	GladstonePfd	26.35	25.20	25.60	0.30	.12	SeaspanPfdH	24.96	19.16	23.65	4.18	.215
AG Mortgage Pfd	25.82	24.26	25.35	0.95		CinnBellPfd	52.37	48.50	51.00	2.09	.43	GladstonePfd	26.98	25.20	25.45	0.09	.04	SeaspanPfdG	25.20	19.49	24.30	4.36	.19
AGNC InvPfdC	26.79	24.70	25.72	0.87	.35	CitigrpCapXIIIPf	27.81	25.74	27.48	1.66	.64	GladstonePfd	26.15	25.16	25.33	-0.48	-.19	SeaspanPfdM	19.99	7.34	16.20	8.66	.119
AGNCInvPfdB	26.87	24.95	25.84	0.74	.24	CitigrpPfdAA	27.40	25.29	26.93	1.63	.64	GladstoneLandPfd	26.94	25.40	25.86	0.42	.17	SeaspanPfdS	25.18	20.90	23.95	5.48	.21
n AT&T Nts2016	26.72	25.16	26.09	0.84	.33	CitigrpPfdS	31.60	27.71	28.53	1.18	.43	GlobalblndentityNts	26.24	24.70	25.88	1.06	.43	SeniorHousingNts	27.42	24.45	26.86	2.39	.98
AXIS CapPfdM	25.85	21.70	25.17	351	162	CitigrpPfd	30.45	27.66	28.85	0.87	.31	CitigrpPfd	25.82	24.65	25.32	0.60	.24	SeniorHousingNts	25.95	22.80	25.27	1.96	.84
AXIS CapPfdM	25.98	22.76	25.23	252	111	CitigrpPfd	28.27	26.18	26.56	0.38	.15	CitigrpPfd	25.70	21.75	26.67	0.92	.37	SeaspanPfdA	24.70	24.00	24.30	-0.25	-.10
AegeonCapSecAEB	25.44	22.09	24.19	166	.64	CitigrpPfdC	26.16	24.83	25.46	0.65	.26	CitigrpPfd	26.47	22.80	25.18	2.38	.104	SeaspanPfdD	25.49	19.75	24.82	4.36	.21
AegeonCapSecAEH	26.22	25.05	25.82	0.78	.31	CivistaBcshrsPfb	27.56	25.63	27.93	12.65	.206	CitigrpPfd	26.20	25.25	26.03	0.23	.09	SeaspanPfdG	25.18	19.11	24.63	4.28	.21
AegeonCapSecAED	26.47	25.16	25.95	0.79	.18	ColonyNorthPfd	25.71	24.71	25.03	0.23	.09	CitigrpPfd	27.41	25.29	25.88	1.05	.42	SeaspanPfdM	25.83	23.80	24.59	1.28	.54
n AlabamaPwrPfdA	27.05	24.90	26.54	161	80	ColonyNorthPfd	26.00	23.75	25.01	0.01	-.09	ColonyNorthPfd	25.94	24.83	25.18	0.23	.09	SeaspanPfdS	25.83	23.80	24.59	1.28	.54
AlexandriaPfd	37.59	33.73	37.00	274	151	ColonyNorthPfd	27.25	24.15	25.15	-0.10	-.04	ColonyNorthPfd	27.46	25.29	25.66	0.38	.15	SeaspanPfdT	27.98	24.74	25.45	1.66	.84
AlleganPfdA	907.69	575.00	586.25	1761	232	ColonyNorthPfd	27.56	24.95	25.42	0.27	.11	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdA	25.76	24.90	25.35	0.30	.12
AlliedCap Nts	26.24	25.16	25.48	0.25	.10	ColonyNorthPfd	27.56	24.95	25.42	0.27	.11	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdC	25.76	24.90	25.35	0.30	.12
AllstateBd	28.29	24.51	26.24	107	.43	ColonyNorthPfd	27.56	25.10	25.56	0.05	.02	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdG	25.76	24.90	25.35	0.30	.12
AllstatePfd	27.74	25.81	26.25	0.38	.37	Comcast DECS	60.00	44.50	63.24	17.94	.36	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdM	25.76	24.90	25.35	0.30	.12
AllstatePfd	27.92	25.02	26.60	0.95	.37	CommerceCscPfd	28.66	25.22	26.35	0.91	.24	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdS	25.76	24.90	25.35	0.30	.12
AllstatePfd	27.74	25.75	26.02	0.24	.04	CorporationPfd	105.95	101.00	103.96	1.06	.10	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdT	25.76	24.90	25.35	0.30	.12
AllstatePfd	26.43	24.74	25.60	0.85	.34	CorporationPfd	27.55	24.30	25.46	0.01	-.01	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdA	25.76	24.90	25.35	0.30	.12
AllstatePfd	27.98	25.74	26.39	0.52	.22	ConsumersEnerP	105.95	101.00	103.96	1.06	.10	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdC	25.76	24.90	25.35	0.30	.12
AllstatePfd	28.40	25.00	26.22	0.27	.49	CorporationPfd	26.93	24.18	25.74	1.13	.46	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdG	25.76	24.90	25.35	0.30	.12
AllFinDeb2055	24.00	21.00	22.00	1.00	.00	CorporationPfd	26.93	24.18	25.74	1.13	.46	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdM	25.76	24.90	25.35	0.30	.12
AllFinDeb2055	25.73	24.84	25.22	1.19	.48	CorporationPfd	26.93	24.18	25.74	1.13	.46	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdS	25.76	24.90	25.35	0.30	.12
AllFinDeb2055	26.38	24.04	25.17	0.19	.08	CorporationPfd	26.93	24.18	25.74	1.13	.46	ColonyNorthPfd	27.56	24.95	25.22	0.05	-.02	SeaspanPfdT	25.76	24.90	25.35	0.30	.12
AllFinDeb2055	26.27	24.07	25.56	-0.29	-.11	CortsJPenJBS	18.08	9.92	12.57	-5.23	-.94	CorporationPfd	26.93	24.18	25.74	1.13	.46	SeaspanPfdA	25.76	24.90	25.35	0.30	.12
AllFinDeb2055	27.53	24.89	25.79	2.22	.28	CortsJKT	22.19	11.06	14.27	-6.57	-.215	CortsPECO KTH	27.59	24.29	25.64	0.22	.25	SeaspanPfdC	25.76	24.90	25.35	0.30	.12
AllFinDeb2055	27.73	24.16	25.83	2.28	.28	CortsPECO KTH	34.27	29.91	32.34	0.68	.22	CortsPECO KTH	27.59	24.29	25.64	0.22	.25	SeaspanPfdG	25.76	24.90	25.35	0.30	.12
AllFinDeb2055	29.50	24.03	25.93	2.28	.28	CostamarePfd	27.43	20.30	25.03	4.73	.23	CortsPECO KTH	27.59	24.29	25.64	0.22	.25	SeaspanPfdM	25.76</td				

