THE WALL STREET JOURNAL.

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Last week: DJIA 25295.87 ▲ 576.65 2.3% NASDAQ 7136.56 ▲ 3.4% STOXX 600 397.35 ▲ 2.1% 10-YR. TREASURY ▼ 19/32, yield 2.476% OIL $61.44 ▲ $1.02 EURO $1.2032 YEN 113.05

What's News

Business & Finance

An activist investor and a pension fund are launching a campaign against Apple, saying it needs to respond to youth phone addiction. **A1**

◆ **The 10-year** inflation break-even rate settled at 2.027%, its highest level in months, highlighting investors' renewed economic enthusiasm. **B1**

◆ **Pfizer said** it would stop trying to discover new drugs for Alzheimer's and Parkinson's. **B1**

◆ **Celgene agreed** to buy cancer biotechnology concern Impact Biomedicines for as much as $7 billion. **B3**

◆ **Previously absent** tech giants are planning to attend the CES tech show, seeking partners for voice-operated platforms. **B4**

◆ **Secondhand-car** sales are surging in China, up 20% from 2016, putting pressure on auto makers. **B4**

◆ **Small investors** are betting that bitcoin's price will rise, while many hedge funds bet it will fall. **B10**

◆ **U.S.-stock mutual** funds and ETFs had an average total return of 18.3% in 2017, while international-stock funds rose 26.8%. **R2**

◆ **"Star Wars:** The Last Jedi" opened to $28.7 million in China, less than the prior two series installments. **B5**

World-Wide

◆ **Bannon** expressed regret for his role in a new book critical of the Trump administration. **A1**

◆ **The U.S.** is facing an IV bag shortage, forcing hospitals to use more time-consuming ways to administer drugs. **A1**

◆ **The Iran** nuclear agreement faces a potentially fateful week, with deadlines awaiting Trump as Tehran reacts to antigovernment protests. **A6**

◆ **The U.S.** admitted about 5,000 refugees in the first three months of the fiscal year, far below similar periods in recent years. **A4**

◆ **Saudi authorities** arrested 11 princes for criticizing the government, as rulers move to stamp out internal dissent. **A7**

◆ **Merkel began** a last-ditch effort to form a government by beginning talks with the Social Democrats. **A9**

◆ **Malaysia's Mahathir** will head an opposition coalition in national elections later this year. **A18**

◆ **Airlines are** struggling to clean up after the winter storm in the Northeast caused canceled flights. **A3**

◆ **An Iranian** oil tanker leaked fuel into the East China Sea after colliding with a Chinese cargo ship. **A7**

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Frozen, Frustrated and Frazzled as Air-Travel Troubles Rise

ANDREW KELLY/REUTERS

BREAKING POINT: Crowds tried to make their way through the departures area of Terminal 4 at New York's Kennedy Airport on Sunday, following a series of delayed and canceled flights due to weather and a water-main break that flooded the international arrivals section. **A3**

Supply Shortage Tests Hospitals

By Stephanie Armour And Thomas M. Burton

U.S. hospitals face a nationwide shortage of intravenous bags just as flu cases accelerate, forcing many to use more time-consuming ways to administer drugs and to weigh a halt on elective procedures and clinical trials.

Some hospital officials said they have only a day or two supply of saline IV bags and worry whether they could handle an influx of patients as the influenza season ramps up. Forty-six states are seeing widespread flu activity, according to the Centers for Disease Control and Prevention, putting this year on par with 2014-15, the most severe flu season in recent years.

The availability of IV bags has plummeted because a major maker of them, Baxter International Inc., was affected after a hurricane slammed its plants in Puerto Rico last fall, while production problems hit another key manufacturer of the bags this year. The Food and Drug Administration said Thursday that production at Puerto Rico plants remains fragile.

"It might as well be a Third World country," said Erin Fox, senior director of drug information services at the University of Utah, which tracks nationwide drug shortages. Hospitals, she said, are administering medica-

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Bannon Works to Mend Rift Over Book

Ex-Trump strategist tones down some of his comments as fallout reverberates

By Rebecca Ballhaus And Harriet Torry

Former Trump strategist Steve Bannon on Sunday sought to mend fences with the White House after nearly a week of bitter exchanges over comments he made in a new book about the president and his closest advisers.

The retreat by Mr. Bannon came as the Republican Party sought to unite around key legislative priorities ahead of the midterm campaign season.

In a statement, Mr. Bannon, who was ousted from his White House role over the summer but has continued to occasionally advise President Donald Trump, said his support for the president is "unwavering." The statement followed last week's release of scathing comments by Mr. Bannon about some top presidential advisers, including family members, in Michael Wolff's, "Fire and Fury: Inside the Trump White House."

The quotes attributed to Mr.

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◆ Refugee admissions to the U.S. slow........................... A4

◆ Trump faces decisions on Iran sanctions......................... A6

Inflation Signal Tips Upward

Inflation expectations over the next 10 years leapt above 2% for the first time since March. Chart shows 10-year yield difference between Treasury Inflation-Protected Securities and conventional U.S. notes. **B1**

Sources: Thomson Reuters

French President's Style Invokes Sun King for Some

Emmanuel Macron is transforming country, but will his ideas stick?

By Stacy Meichtry And William Horobin

PARIS—Weeks before President Emmanuel Macron took office, a business leader confronted him about his plans to sidestep Parliament and pass a sweeping overhaul of the country's labor system by decree. Even in the middle of World War I, the business leader said, French presidents had sought the approval of Parliament.

Mr. Macron brushed him off. "He believes what people want are results, not debates," the businessman said.

Eight months into his term, Mr. Macron has placed the exercise of unfettered executive power at the center of his presidency. From Jacques Chirac to François Hollande, presidents have long played the role of referee in French democracy. They have governed by consensus—settling disputes among factions in Parliament, shuffling their cabinets to forge or renew political alliances, and weighing in to calm tumultuous street protests.

Mr. Macron doesn't negotiate with his op-

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◆ Merkel makes last-ditch coalition push........... A9

Investors Prod Apple On Child iPhone Use

By David Benoit

The iPhone has made Apple Inc. and Wall Street hundreds of billions of dollars. Now some big shareholders are asking at what cost, in an unusual campaign to make the company more socially responsible.

A leading activist investor and a pension fund are saying the smartphone maker needs to respond to what some see as a growing public-health crisis of youth phone addiction.

Jana Partners LLC and the California State Teachers' Retirement System, or Calstrs, which control about $2 billion of Apple shares, sent a letter to Apple on Saturday urging it to develop new software tools that would help parents control and limit phone use more easily and to study the impact of overuse on mental health.

The Apple push is a preamble to a new several-billion-dollar fund Jana is seeking to raise this year to target companies it believes can be better corporate citizens. It is the first instance of a big Wall Street activist seeking to profit from the kind of social-responsibility campaign typically associated with a small fringe of investors.

Adding splash, rock star Sting and his wife, Trudie Styler, will be on an advisory board along with Sister Patricia A. Daly, a nun who successfully fought Exxon Mobil Corp. over environmental disclosures, and Robert Eccles, an expert on sustainable investing.

The Apple campaign would be unusual for an activist like Jana, which normally urges

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◆ Christopher Mims: Facebook's Mr. Fix-It confronts dilemma... B1

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REUTERS

TOP AT GOLDEN GLOBES: 'THREE BILLBOARDS'

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TAKE THE LONG VIEW ON FUND RETURNS

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Things Go Better With Coke, Laxative Edition

* * *

Japan warms to colas with ingredients the government certifies as healthful

By Suryatapa Bhattacharya

TOKYO—In a country where grilled fish is a breakfast food and many think the stinkiest soybeans are the tastiest, it stands to reason Coke is now a health drink.

Once a month, Hideaki Iwaya sits at the dinner table for pizza night with his wife and two teenage daughters. They recently revised their routine to add Coca-Cola Plus, which features a government-approved laxative ingredient, hoping it would help their bodies absorb less fat from the slices.

"It's a paradox: a cola that is healthy but my wife likes it, my daughters prefer it," says Mr. Iwaya, 52, an automobile-insurance sales manager in Yokohama. "When I brought it home, I thought no one would drink it. I was mistaken."

It isn't just Coca-Cola Co. touting the healthful side of its Japan-only Plus drink. The Japanese government has given it a gold label certifying its benefits.

Japan's life expectancy—87 years for women, 81 for men—is several years ahead of America's, thanks in part to low obesity. Japanese ideas

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U.S. NEWS

THE OUTLOOK | By Ben Leubsdorf

Long-Term Slowing Seen Despite Spurt

U.S. economic growth picked up last year and that could continue into 2018 if tax cuts enacted into law last month spur business investment and consumer spending, as many forecasters expect.

But economists who study the long-run outlook—many of whom were gathered this weekend for the annual meeting of the American Economic Association—aren't budging much from their projections that output growth will remain far slower than its historical average in the years ahead.

The economy grew at a 3.1% annual pace in the second quarter and a 3.2% annual rate in the third quarter, according to the Commerce Department. That was well above the postrecession pace of near 2%.

The government will release official numbers for the fourth quarter on Jan. 26. Most see the economy again outperforming the expansion average, but perhaps not as much as in earlier months. The Federal Reserve Bank of Atlanta estimates a 2.7% growth rate in the final three months of 2017, while forecasters at Macroeconomic Advisers project a 2.3% pace.

"This is not enough to establish a new trend, by any means," Harvard University economist Dale Jorgenson said.

It wouldn't be the first time in recent years that growth accelerated for a time before easing again; output grew at impressive annual rates of 4.6% and 5.2% in back-to-back quarters during 2014 before settling back into a subdued pace.

The tax-code changes enacted by Congress in December could boost growth for the next couple of years, Mr. Jorgenson said. That leaves the longer-term outlook "maybe a bit more optimistic than you were before we got two good quarters and the tax cut, but not in the range of 3%," Mr. Jorgenson said.

Taxes and the outlook were hot topics in icy Philadelphia this weekend and during the AEA annual conference.

Kevin Hassett, chairman of the White House Council of Economic Advisers, noted that professional forecasters have been revising up estimates for near-term U.S. growth, consistent with an improving outlook tied to lower taxes.

Other economists were skeptical the tax cuts will produce a meaningful boost.

Historically, "tax cuts aimed at the top of the income distribution have had very little stimulus effect," said University of Chicago economist Austan Goolsbee, who had Mr. Hassett's job in the Obama administration.

Glenn Hubbard, dean of the Columbia Business School and former top White House economist under President George W. Bush, said the legislation isn't as worrisome as critics suggest, nor as positive as advocates claim. "It's not going to raise us off to 4% GDP growth," Mr. Hubbard said. "But it's not going to kill 10,000 people a year."

In the long run, economists believe the economy's maximum sustainable growth rate is determined by how many people are working, and how productive they are.

Annual growth in inflation-adjusted potential output averaged 3.2% between 1950 and 2016, according to estimates from the nonpartisan Congressional Budget Office. But many forecasters think those days are gone.

Demographics are set to hold down workforce participation as baby boomers retire. Meanwhile, productivity growth in the U.S. has sagged since an information-technology-fueled surge in the late 1990s and early 2000s. Tax cuts could spur productivity by incentivizing business investment in new equipment, but the effects are uncertain.

The CBO last summer estimated potential gross domestic product growth would average 1.8% over the ensuing decade. Estimates by Fed officials in December for longer-run GDP growth ranged from 1.7% to 2.2%, with a median projection of 1.8%.

To be sure, economists have been wrong about the shifting long-run outlook before. They largely failed to predict the productivity pickup in the 1990s and the subsequent slowdown last decade.

Massachusetts Institute of Technology economist Erik Brynjolfsson said the current consensus about growth is too pessimistic, but not because of anything happening in Washington. Instead, he expects technology adoption to boost productivity, much as the adoption of electricity did.

Northwestern University economist Robert Gordon said the U.S. is due for a pickup of productivity growth that will help the economy maintain growth around 3% a year—but only for a year and a half, perhaps two years.

With the jobless rate at 4.1% in December, his thinking goes, the economy can't sustain above-trend growth indefinitely. "That potential growth ceiling on growth will eventually start to bite as we run out of workers," he said.

◆ Bond inflation needle moves up........ B1

Growth Breakdown

The two key drivers of economic growth—expansion of the labor force and productivity gains—have been on a downtrend for years.

Potential GDP

Note: 2017-2027 is projected
Source: Congressional Budget Office
THE WALL STREET JOURNAL.

ECONOMIC CALENDAR

WEDNESDAY: Two inflation readings come out of China (release time is Tuesday evening in the U.S.): The **consumer-price index** is expected to have climbed 1.9% in December, compared with 1.7% year-to-year growth in November. The **producer-price index** likely rose 4.8% in December, compared with 5.8%.

THURSDAY: Federal Reserve Bank of New York President William Dudley speaks on the U.S. economic outlook for 2018, in which he could offer thoughts on the connection between inflation and employment. Mr. Dudley in a November speech said he still expects that a strong labor market will help boost inflation over time.

The European Central Bank releases minutes of its Dec. 13-14 policy meeting, when it left interest rates unchanged even as it projected strong growth for the eurozone through 2020.

FRIDAY: The U.S. Labor Department releases December **consumer-price index** data, the latest look at inflation, which has persistently undershot the Federal Reserve's target. The price index increased 0.4% in November from the prior month. Core prices, which exclude the volatile categories of food and energy, rose a more sluggish 0.1%. Economists expect the December consumer-price index gained 0.1%.

The U.S. Commerce Department releases data on December **retail sales**. Economists expect retail sales increased 0.4% in December from a month earlier.

Back in the Water After a Break From the Cold

COURTNEY SACCO/CORPUS CHRISTI CALLER-TIMES/ASSOCIATED PRESS

FREE SHELLY: Nearly 400 sea turtles found stunned by recent frigid weather along the Texas coast were released Sunday into the Gulf of Mexico at Padre Island National Seashore in Corpus Christi. Above, volunteer Jose Untalan with a rehabilitated reptile.

U.S. WATCH

NASA

Astronaut John Young Dies at 87

Astronaut John Young, who walked on the moon and later commanded the first space-shuttle flight, has died, the National Aeronautics and Space Administration said. He was 87 years old.

The space agency said Mr. Young died Friday night at home in Houston following complications from pneumonia.

NASA called Mr. Young one of its pioneers—the only agency astronaut to go into space as part of the Gemini, Apollo and space-shuttle programs. He was the ninth man to walk on the moon and the first person to rocket away from Earth six times.

"Astronaut John Young's storied career spanned three generations of spaceflight," NASA administrator Robert Lightfoot said.

His NASA career lasted 42 years, longer than any other astronaut's, and he was revered among his peers for his dedication to keeping crews safe.

Born Sept. 24, 1930, he served in Korea as a gunnery officer and eventually became a Navy pilot. He was in NASA's second astronaut class, chosen in 1962 along with the likes of Neil Armstrong, Pete Conrad and James Lovell.

—Associated Press

CALIFORNIA

Burn Areas Brace For Rain, Mudslides

Forecasters say a storm expected to bring heavy rain to California could drop several inches in recent burn areas, raising the risk of mudslides on hillsides made bare by flames.

The National Weather Service said up to six inches of rain could fall starting Monday in parts of Santa Barbara and Ventura counties, where the Thomas fire has burned for more than a month, scorching more than 440 square miles of trees and brush.

About an inch is forecast for downtown Los Angeles, the most in nearly a year.

Snow is expected as low as 4,000 feet, which could make for treacherous driving conditions in mountain areas early Tuesday.

Residents along California's central valley and central coast are warned about possible 60-mile-an-hour wind gusts.

—Associated Press

SALINE

Continued from Page One

tions using syringes instead of IV bags because of the shortage.

Those methods have more side effects, Ms. Fox said.

Baxter said its two IV plants in Puerto Rico are now hooked up to the electrical grid but power is "intermittent" and the plants have backup diesel generators in place.

A Baxter spokesman added there isn't normally enough industry capacity to ramp up the supply of small IV solution bags for hospitals to quickly make up for a major disruption like a hurricane.

Intravenous bags vary in size and are filled with saline solution, or salt water.

A large hospital can go through hundreds or thousands of IV bags a day, depending on patient volume.

The bags vary in size and are filled with saline solution, or salt water. Smaller-volume bags are often used to deliver medications that must be diluted before they go into a patient's bloodstream via the IV.

There have been shortages in the IV market even before the hurricane. In August, B. Braun Medical Inc. told customers about "unplanned production interruptions" and advised them to seek alternative sources of IV products.

Three months earlier, the FDA warned B. Braun about customer complaints of "visible particulate matter and leaking intravenous bags" and noted good-manufacturing violations the agency identified over several years.

Another factor may be at play. A Baxter filing last May with the Securities and Exchange Commission suggested the U.S. Justice Department is investigating possible collusion among makers of intravenous solutions, and any effects that communications among companies had on pricing and shortages. Baxter has said it looked forward to explaining to the DOJ "the background and history of these issues."

Market-research firm IBISWorld estimates Baxter holds 44% of the U.S. IV solutions market, followed by Hospira Inc., part of ICU Medical Inc., with 31%, and B. Braun at 10%.

Massachusetts General Hospital in Boston has nurses spending as long as 35 minutes delivering medications using IV syringes, known as an IV push. The hospital is so concerned it is looking at using glass bottles for patients instead of IV bags.

"If the influenza virus or catastrophic event breaks out, that would stress us more," said O'Neil Britton, Mass General's chief medical officer.

Officials at Catholic Health Initiatives, which offers care in 100 hospitals, said they may have to delay elective procedures until the shortage abates.

"It's hard to overstate the public-health crisis," said Craig Frost, vice president of clinical pharmacy services at Catholic Health Initiatives.

The FDA has worked with producers to bolster the supply. FDA Commissioner Scott Gottlieb said shortages at mainland U.S. hospitals "will improve over the next two months."

Some hospital officials said they had hoped the shortage would be lessened by now, after Hurricane Maria raked Puerto Rico and crippled plants owned by Baxter.

Many hospitals, however, say they aren't seeing any uptick in supplies and the shortages are so acute the problem can't be abated soon, particularly with small bags used to deliver drugs to patients in such short supply.

Health leaders are pressing federal regulators and Congress to adopt new measures aimed at ensuring a steady supply of critical treatment products.

Congress has taken little action so far. The House Energy and Commerce Committee's Oversight and Investigations Subcommittee held a hearing in October focused on public health preparedness in the wake of Hurricanes Harvey, Irma, and Maria, and the subcommittee continues to examine the issue of shortages.

BRENDAN SMIALOWSKI/AGENCE FRANCE-PRESSE/GETTY IMAGES

A large U.S. hospital can go through hundreds or thousands of intravenous bags a day.

CORRECTIONS & AMPLIFICATIONS

The Ritz-Carlton Residences Miami Beach is set to open in early 2018. A Mansion article on Dec. 29 about charitable giving incorrectly said it would open in early 2017.

AlliedSignal Inc. acquired Honeywell Inc. in 1999 and kept the Honeywell name, becoming **Honeywell International** Inc. A Dow 25000 article on Friday about the blue-chip stock index's industrial-sector components incorrectly said that Honeywell acquired AlliedSignal. In addition, AlliedSignal's name was incorrectly given as Allied Signal.

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

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Farmers Seek a Tempered Nafta Stance

Agriculture industry sees Trump's silence on pact as progress in effort to preserve deal

By William Mauldin

GENE BLYTHE/ASSOCIATED PRESS

Farmers hope to preserve Nafta, which has opened Mexican and Canadian markets to duty-free exports of U.S. products.

WASHINGTON—When President Donald Trump addresses the U.S. agricultural community Monday, farmers will be looking for signs that a recent push to lobby him in support of the North American Free Trade Agreement has been successful.

That effort, which has included Republican senators from farm states offering charts and graphs illustrating the benefits of the trade deal, has left some hopeful that the administration has softened an earlier tough stance on Nafta. Fueling those hopes has been the president's refraining from harsh anti-Nafta rhetoric since his last tweet regarding the pact in August.

"We're doing everything we can to have our voices heard," said Sen. Deb Fischer (R., Neb.), a rancher and one of several lawmakers who attended a steak lunch with Mr. Trump in December. Sen. Joni Ernst (R., Iowa) brought a chart showing a negative impact of Mr. Trump's anti-Nafta messages on hog futures. Last week, Senate Agriculture Committee Chairman Pat Roberts (R., Kan.) led another group to the White House to reinforce the message.

White House officials say Mr. Trump has continued to meet with "stakeholders on all sides" on the issue. One official familiar with the strategy said that in staying relatively quiet on Nafta, the president is giving U.S. negotiators maximum leverage in the talks.

Farm-state lawmakers say that in their sessions with him, Mr. Trump has been reassuring about Nafta, which has opened Mexican and Canadian markets to duty-free exports of billions of dollars in U.S. products.

On Monday Mr. Trump is scheduled to lay out his agriculture policies in an address to the American Farm Bureau Federation's annual convention in Nashville, Tenn. The address and the release of an accompanying government task force report on rural prosperity, administration officials say, will cover a range of challenges facing small communities, including broadband connectivity, health care, and legislation to reauthorize farm programs that expire this year.

But trade, and Nafta in particular, is foremost on the farm community's mind. The U.S. in 2016 sent $16.4 billion in agricultural and food products to Mexico and $23.4 billion to Canada, according to government figures. Farmers worry that without Nafta, the two U.S. neighbors would have the right to put tariffs on products from the U.S. and could turn to other countries for supplies of soybeans, corn and other farm products.

A senior administration official on Friday said the task force report, which will make recommendations to the president, will recognize the need to be "sure that rural American agriculture is very fairly treated and has access to global markets."

How that will factor into the Nafta talks, which resume in Montreal on Jan. 23, is unclear. The negotiations haven't yet produced any major breakthroughs, and the gap between the U.S. and its North American partners at the negotiating table continues to worry business and farm groups that back Nafta.

"While the president is increasingly listening to the dire concerns of farmers and ag state lawmakers, nobody has a sense of whether he'll heed their warnings," said former Democratic Sen. Max Baucus, co-chairman of Farmers for Free Trade, which seeks to preserve agreements that lower tariffs on agricultural exports.

The U.S. chief negotiator, trade representative Robert Lighthizer, has complained that Canada and Mexico aren't working hard enough to reach an agreement with the U.S. He has proposed gutting Nafta's dispute-resolution systems, requiring high U.S. content in cars traded duty-free and inserting a "sunset clause" that would allow Nafta to expire if all three countries don't renew it every five years, according to people familiar with the positions.

Labor unions and left-leaning consumer groups have supported the tough stance. But business and farm lobbies have continued to lobby the administration by pointing to the benefits Nafta has brought over the last quarter century.

The farm-state lawmakers say they think they have made a difference.

"He said quite bluntly he had thought everyone wanted to get rid of Nafta, and that's not right," Ms. Ernst said in an interview. "I can't speak to what the president intends to do going forward, but I think his perspective has changed a little bit."

Flood at JFK Adds to Travel Misery

By Paul Berger and Susan Carey

ANDREW KELLY/REUTERS

Flooding at New York's John F. Kennedy International Airport disrupted air travel in the U.S. Sunday.

Cleanup after the winter storm that battered the Northeast continued to be slow for airlines over the weekend, hampered by more problems at New York's John F. Kennedy International Airport, as a water-main break shut down arrivals at an international terminal.

Flight-tracking service FlightAware.com said nearly 550 flights were canceled in the U.S. as of late Sunday afternoon, and nearly 3,400 were delayed, meaning more than 15 minutes late. At JFK alone, 96 flights were canceled.

Around 2 p.m. Sunday Eastern Time, a water-main break flooded the international-arrivals section of Terminal 4, covering two-thirds of the floor with up to three inches of water. The flooding knocked out heat and power to most of the arrivals area. International arrivals were halted, according to the airport's owner, the Port Authority of New York and New Jersey.

The flooding exacerbated several days of disruption at the airport where terminals struggled to cope with the number of aircraft arriving from around the world.

Port Authority Executive Director Rick Cotton said Sunday evening: "The primary breakdown, and it was pretty complete, was in the coordination between the private terminal operators and the international airlines to assure that gates would be available for arriving aircraft."

Mr. Cotton said the Port Authority would investigate the breakdown in communication as well as the cause of the burst water pipe.

He said that about 21 arrivals were affected by the burst pipe and that the Port Authority expected arrivals to resume at Terminal 4 on Sunday night.

Some JFK arrivals were being slowed down by the Federal Aviation Administration, according to its website. The agency wasn't immediately available for comment.

Air India, China Airlines of Taiwan, El Al Israel Airlines, Delta Air Lines Inc., Singapore Airlines and Virgin Atlantic Airways Ltd., are among the airlines that use that terminal.

Some international flights bound for JFK were being diverted to other U.S. airports that have customs and immigration facilities, one airline executive said. FlightAware said 13 flights were diverted from JFK to other airports.

Traveler David O'Brien flew in from Mexico City at about 2:30 p.m. and was stuck on a plane for about 90 minutes. When he reached the baggage claim area, he saw about 200 people who couldn't find their luggage. "It is a zoo," he said.

Nationwide, aside from regional airlines that fly on behalf of the major carriers, JetBlue Airways Corp., which is based at JFK, and Southwest Airlines Co. showed the most cancellations, according to FlightAware. Top affected airports included JFK, Toronto, Dallas/Fort Worth International, and Chicago's O'Hare International Airport.

Even before the Sunday flood, much of the nationwide snarl seemed to arise from problems at JFK. A surge in flights there after the runways reopened to air traffic Friday led to a shortage of gates available to aircraft and disabled equipment, according to the Port Authority.

—Jennifer Levitz contributed to this article.

Flawed Decisions Cited in Dam Crisis

By Jim Carlton

SAN FRANCISCO—A "long-term systemic failure" in oversight by the California Department of Water Resources led to the near rupture of the state's giant Oroville Dam last winter, and some of its actions during the emergency made the situation worse, according to the final report from a team of forensic experts.

The report released Friday concluded inherent flaws in the design of a concrete main spillway that broke apart after heavy rains filled Lake Oroville failed to be detected by the state agency, despite numerous repairs over several decades that failed to halt a problem of cracks, erosion and corrosion in the structure.

Moreover, agency officials during the February 2017 crisis put into operation for the first time since the nation's tallest dam was completed in 1968 an emergency spillway—against the advice of other experts who warned the bedrock was too weak, the report said.

They did so to reduce flooding in an electrical powerhouse downstream. But the earth supporting the emergency spillway also began to erode in a situation that threatened to unleash a torrent of water, the report said. The near failure of that spillway prompted the evacuation of 200,000 people.

"The decisions were made with the best of intentions, but against the advice of civil engineering and geological personnel," said the report, which was prepared by a six-person team commissioned by the Department of Water Resources under direction of federal regulators.

Near failure of Oroville Dam last year led to evacuation of 200,000 people.

The report praised California's dam-safety program as among the best in the nation, but warned the shortcomings that led to the Oroville emergency should serve as a wake-up call to other dam operators around the nation.

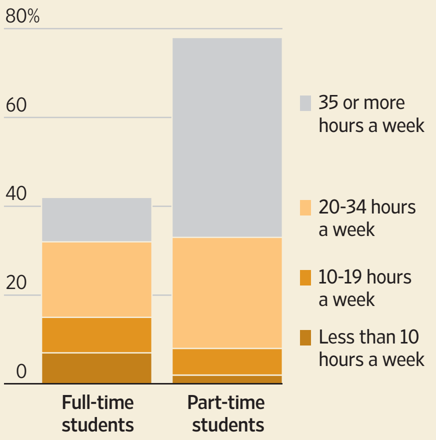
Officials of the agency said they were still reviewing the 584-page report, but planned to incorporate the findings into improving their dam-safety work going forward.

The agency said it began rebuilding the two spillways last year, and has factored in previously announced technical findings by the forensics team.

College Students Not Who You Think

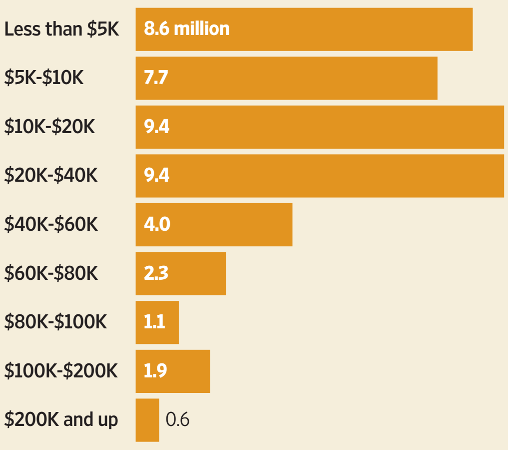
Work

Percentage of undergraduate students who were employed in 2015:



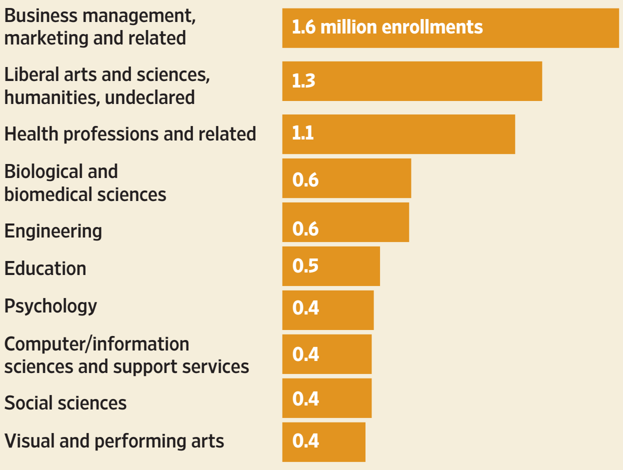
Borrow

Most student-loan borrowers have outstanding balances below $20,000. Federal student loans, by number of borrowers, fourth quarter of 2017:



Study

Top 10 majors for undergraduates enrolled at four-year institutions for fall 2017:



Sources: Commerce Dept., Census Bureau, Current Population Survey/Digest of Education Statistics 2016 (work); Department of Education Office of Federal Student Aid (debt); National Student Clearinghouse Research Center (study)

Education Secretary Betsy DeVos and Republicans on Capitol Hill are advocating a fundamental rethinking of higher education, pushing for more vocational programs and shorter pathways to credentials. In the process, they have helped fuel a national discussion over who should be on the path to a college degree—and who is there now.

Today's college students aren't just 18-year-olds living in cramped dorm rooms on ivy-covered campuses.

Rather, 40% of the nation's roughly 17.5 million undergraduates attend two-year colleges, and nearly one-third of college students attend part-time. The typical student is getting older, and while sticker prices for tuition have soared in recent decades, the actual amount families pay hasn't increased at nearly the same pace.

SCHOOL WORK

Plenty of freshly minted high-school graduates go off to college straight away. But many college students are old enough to be those teens' parents, seeking to retool and start new careers while still holding down jobs and taking care of families.

Those not returning to school midcareer are still working, picking up jobs at local shops and restaurants and anywhere else they can earn a paycheck to offset living expenses and tuition bills.

Ten percent of students have at least 35 hours of full-time work a week, while nearly half of part-time students hold full-time jobs.

COSTS

College is expensive, and getting more so. But few students pay full freight: 85% of students at private, nonprofit undergraduate programs can expect to receive need- or merit-based aid from their schools.

Those on the hook for a significant share of their education expenses take out loans, though such debt burdens vary widely by school and state and are concentrated at relatively low levels.

MAJORS

Liberal arts and humanities programs remain popular, but even more students pursue professionally-focused degrees in business. Health-related programs round out the top three.

Those fields of study are paying off. College graduates earned 56.6% more than their counterparts with just a high-school diploma in 2016, even when controlling for gender, race and experience. That is the highest wage gap recorded since at least 1973, according to an analysis by the nonprofit Economic Policy Institute.

—Melissa Korn and Kathryn Tam

Refugee Admissions to the U.S. Decline

Fewer entries in the first three months of the fiscal year reflects tighter Trump policies

BY LAURA MECKLER

WASHINGTON—The U.S. admitted about 5,000 refugees in the first three months of fiscal year 2018, far below similar periods in recent years, as the Trump administration implemented tougher screening and all but halted admissions from parts of the world.

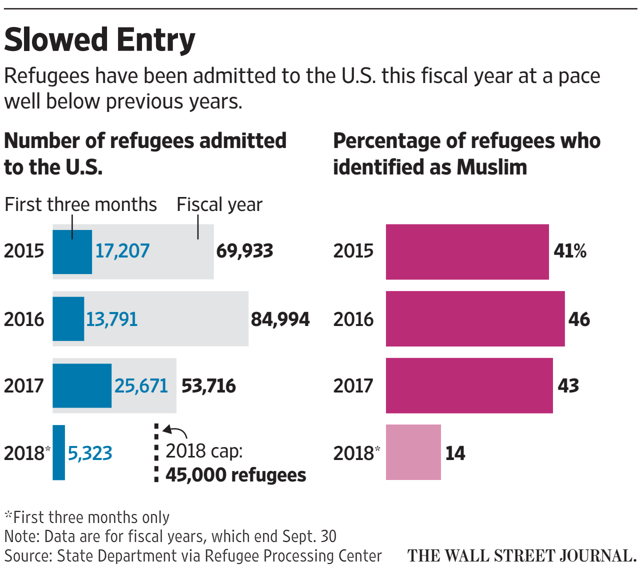
Unless the pace of admissions picks up, the number of refugees allowed into the U.S. for the year will fall below the ceiling of 45,000 that President Donald Trump set last fall for 2018. That ceiling is the lowest since the refugee program began in its current incarnation in 1980.

The lower numbers recorded in October, November and December, the first quarter of the fiscal year, reflect a range of Trump administration policies, including a near-total suspension of admissions from 11 countries including Iran, Iraq, Somalia and Syria. For most of this period, the administration only allowed people from those countries who could show their arrival was in the U.S. "national interest."

"Our job is to balance the need to protect legitimate refugees with the need to protect our security," said Jennifer Higgins, associate director for refugee, asylum and international operations at the U.S. Citizenship and Immigration Services agency, part of the Department of Homeland Security.

With admissions from the targeted countries slowed to a trickle in the first quarter, Bhutan, a tiny Asian country, bumped to the top of the list with the most refugees accepted. In the opening months of this fiscal year, which began Oct. 1, the U.S. took in 1,535 refugees from Bhutan, enough to represent 29% of the total, according to a Wall Street Journal review of State Department data.

Refugee advocates say the number of admissions is evidence that the administration is failing to uphold what they see as traditional U.S. leadership in aiding some of the world's most desperate people.



"It's enormously discouraging and dispiriting, and it is another reflection of this administration's march away from the principle of humanity," said Eric Schwartz, president of Refugees International, who ran the refugee program at the State Department during the Obama administration.

The changes are producing a shift in the religious makeup of arriving refugees. In recent years, those who identify themselves as Muslims have made up more than 40% of all refugees. Muslims comprised 14% of the total in the first three months of this fiscal year.

Critics say those figures bolster their argument that Mr. Trump's aim is to ban entry to foreign Muslims, a promise he made when running for president. That argument has been at the core of a series of lawsuits challenging both the refugee policies and a ban on travel to the U.S. by citizens of targeted nations, several of which are still being litigated. The White House denies that policies are driven by religious affiliation.

Last month, a federal district judge issued a nationwide injunction directing the administration to allow refugees from the 11 countries if they have bona fide relationships with people or entities in the U.S., including resettlement agencies. It also ordered the administration to resume family reunification admissions, which had been suspended. The administration is appealing the ruling.

Officials cautioned that the early months may not reflect admissions over a full year. In 2015, the first quarter accounted for 24% of the year's admissions, but in 2016, 16% of refugees came in the first three months.

A State Department spokesperson said refugee admissions rarely proceed at a steady pace throughout the year and it is premature to predict the number who will ultimately be admitted in 2018.

But administration officials also acknowledged that policy changes have affected admission rates. Tougher vetting standards announced in October have required officials to rescreen refugee applicants who already had been through the process, slowing things down, said Ms. Higgins.

In addition, for a 90-day period, the administration blocked admission for most refugees from 11 countries. Iran, Iraq, Somalia and Syria account for the bulk of refugees in this group, but Egypt, Libya, Mali, North Korea, South Sudan, Sudan and Yemen also were on the list. Together, those 11 countries have accounted for 40% or more of refugee admissions in recent years.

During the first three months of this fiscal year, people from these countries made up 5% of the 5,323 people admitted to the U.S. as refugees.

Immigrants From El Salvador Await Status Decision

BY ALICIA A. CALDWELL

LOS ANGELES—The Trump administration has until Monday to decide whether some 200,000 Salvadoran immigrants allowed to live and work in the U.S. since 2001 may stay in the country under protections that were meant to be temporary.

Many are already looking for ways to circumvent a potential end to those protections and plan to remain here no matter what the government decides.

"I'm not going to go back," Dina Paredes, a 50-year-old housekeeper in Los Angeles, said in a recent interview. "We have the right to fight back. We aren't a burden to the government. We aren't criminals."

Ms. Paredes said she has two children, both U.S. citizens, and their future is here. Ms. Paredes arrived in the U.S. from El Salvador in 1996; she and her husband eventually were both granted Temporary Protected Status.

In Los Angeles, home to one of the largest communities of Salvadorans shielded from deportation under the program, advocacy organizations are encouraging immigrants to apply for permission to stay through other legal avenues.

In 2001, the U.S. allowed Salvadorans already here to remain after a series of earthquakes devastated parts of their home country. That Temporary Protected Status was also granted to nationals of other countries whose homelands suffered severe natural disasters, war or disease.

Only immigrants already living in the U.S. at the time of a disaster back home and who didn't have a criminal record were eligible to stay.

The protections were extended over the years, allowing some immigrants to work and build lives in the U.S. under the program for almost two decades. If the program is ended for Salvadorans, the immigrants could face deportation.


LUIS ALONSO LUGO/ASSOCIATED PRESS

Critics of Temporary Protected Status that lets many Salvadorans stay in the U.S. say it wasn't meant to offer permanent residency.

According to the Center for American Progress, Salvadorans here under the program are parents to more than 192,000 U.S.-born children, and their departure from the country would mean a loss of more than $109 billion to the economy over 10 years.

Opponents of TPS have argued that the program was never intended to offer foreigners permanent residency. Immigrants and their advocates anticipate an end to the program because the Trump administration has opted to remove the protections for other nations in recent months.

Late last year, then-acting Department of Homeland Security Secretary Elaine Duke ended protections for Haitians and Nicaraguans but gave each group more than a year to make plans to leave. Ms. Duke didn't make a decision about the estimated 86,000 Hondurans in the U.S. under TPS, a move that automatically renewed the protections for another six months.

Salvadorans are the largest group of foreigners protected by the TPS program.

TRUMP

Continued from Page One

Bannon in the book, which he didn't dispute, spurred four days of attacks by the president, who said his ex-adviser—whom he dubbed "Sloppy Steve"—had "lost his mind" and "cried when he got fired."

The simmering feud came as Mr. Trump gathered with GOP legislative leaders at Camp David Friday and Saturday to discuss how to push the party's agenda in Congress in the short window before campaigning begins for November. They focused on issues including national security, immigration, infrastructure and health care, according to a White House official.

A news conference Saturday at the end of the retreat put on display the tensions between Republican lawmakers' desire to focus on the legislative agenda and the president's attention on the controversy. In brief remarks, Senate Majority Leader Mitch McConnell (R., Ky.) expressed hope for "a year of more bipartisan cooperation." House Speaker Paul Ryan (R., Wis.) said Republicans had a "very bold agenda for 2018." Lawmakers also have a pressing deadline: The government's funding expires at 12:01 a.m. on Jan. 20.

When Mr. Trump stepped up to answer questions, his focus turned again to the book, in which other advisers are said to be concerned about Mr. Trump's mental stability, citing his frequent "alarming repetitions."

Mr. Trump called the Wolff book a "disgrace" and lamented what he called the nation's "weak" libel laws that allowed it to be published. He also defended his academic credentials, saying he "went to the best colleges, or college." In tweets earlier that day, he described himself as a "very stable genius," adding, "throughout my life, my two greatest assets have been mental stability and being, like, really smart."


President Trump with cabinet members and GOP congressional leadership at Camp David Saturday.

On Sunday, Mr. Trump said on Twitter the Camp David policy talks had gone well but again assailed the book.

Mr. Wolff, who has said Mr. Trump personally granted him access to the White House, which Mr. Trump disputes, defended the book on Sunday. "If I left out anything, it's probably stuff that was even more damning," Mr. Wolff said on NBC's "Meet the Press."

Veterans of past administrations and political consultants said Mr. Trump's continued focus on the book threatens to complicate the GOP agenda.


The Trump feud has threatened Steve Bannon's leadership at Breitbart News.

"You need more discipline, not less discipline, and you seem to have little discipline still," said Craig Fuller, who served as assistant to former President Ronald Reagan for cabinet affairs.

Mr. Bannon's comments were his first since the publication of the book. In his statement, Mr. Bannon praised Donald Trump Jr.—the president's eldest son whose June 2016 meeting with a Russian lawyer he had described as "treasonous" and "unpatriotic" in the book—as "both a patriot and a good man." He said his comments in the book were "aimed" at former Trump campaign chairman Paul Manafort.

The meeting has become a focus of special counsel Robert Mueller's investigation into Russian meddling in 2016 and whether Trump aides worked with the Kremlin. Mr. Trump has said his campaign didn't collude with Russia, and Moscow has denied interfering in the U.S. election. The White House didn't respond to a request for comment on Mr. Bannon's statement.

Mr. Wolff quotes Mr. Bannon as speculating whether the younger Mr. Trump may have introduced his father to those who attended the June 2016 Trump Tower meeting. "The chance that Don Jr did not walk these jumos up to his father's office on the twenty-sixth floor is zero," the book quoted Mr. Bannon as saying. The president has said he wasn't aware of the meeting during the campaign.

Donald Trump Jr. has said he did nothing wrong in agreeing to the meeting at Trump Tower. Mr. Bannon in the book also sharply criticized Ivanka Trump, the president's daughter, and her husband, Jared Kushner.

The president's focus on the book has also ensnared members of his administration and other advisers. White House adviser Stephen Miller, Central Intelligence Agency Director Mike Pompeo and U.S. ambassador to the United Nations Nikki Haley were among the administration officials who were asked in television interviews Sunday about Mr. Trump's mental health.

Democrats were also asked about concerns the book raised about the president's capacity to do the job.

"I don't think there's anyone in Congress frankly of either party who does not concur at least privately with those observations and concerns," Rep. Adam Schiff of California, the top Democrat on the House Intelligence Committee, said on CNN's "State of the Union."

The feud with Mr. Trump has threatened Mr. Bannon's leadership at the conservative website Breitbart News.

A Bannon spokeswoman didn't respond to a question about whether he would stay in his role at Breitbart.

—Kristina Peterson contributed to this article.

FROM TOP: CHRIS KLEPONIS/PRESS POOL; JONATHAN BACHMAN/REUTERS

SEC Looks Into Kushner Cos.' Use Of Visa Program

The Securities and Exchange Commission is investigating the real-estate company run by the family of President Donald Trump's senior adviser and son-in-law Jared Kushner for its use of a federal investment-for-visa program known as EB-5, according to people familiar with the matter.

In May 2017, Kushner Cos. received a subpoena from the SEC requesting information about its use of the program, one of these people said. As The Wall Street Journal reported last year, that month the company received a separate subpoena from New York federal prosecutors asking for information about development projects financed in part by the EB-5 program.

The SEC probe is being conducted out of the commission's Texas office and in collaboration with federal prosecutors from the Brooklyn U.S. attorney's office, according to another person familiar with it.

Spokesmen for the SEC and the Brooklyn U.S. attorney's office declined to comment.

A spokeswoman for Kushner Cos. referred to a previous comment provided by the company's general counsel, Emily Wolf, who said of the Brooklyn-based inquiry that "Kushner Cos. utilized the program, fully complied with its rules and regulations, and did nothing improper. We are cooperating with legal requests for information."

—Erica Orden

Happy New Year everyone!

Last year, we achieved great results in increasing American food exports by 9 percent after years of decline.

At our roundtable on New Year's Day, there was a strong consensus that the Trump administration's historic tax cuts and ongoing deregulation will unlock billions of dollars of food industry investment to create new American jobs and make this year even better than last year.

May I take this opportunity to wish all farmers and food processors the best for 2018, as we continue the conversation at our quarterly roundtables about doubling American food production to $1.7 trillion.

EXPORT FOOD, NOT JOBS!

Sincerely,

Anthony Pratt
Executive Chairman, Pratt Industries

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Trump Faces Decisions on Iran Sanctions

To stay in the nuclear deal, the president must periodically agree to waive penalties

By Felicia Schwartz

OMID VAHABZADEH/FARS NEWS AGENCY/AP

In October, President Donald Trump threatened to pull out of the 2015 nuclear deal unless Congress and European allies agreed on ways to address Iran's ballistic missile program, among other things. Iran test-fired a ballistic missile in March 2016, above.

WASHINGTON—The 2015 Iran nuclear agreement faces a potentially fateful week, with a series of deadlines awaiting President Donald Trump as Tehran reacts to recent anti-government protests.

Mr. Trump is expected to again notify Congress he doesn't believe the Iran deal is in the best interest of the U.S., restating a well-known position. More important, Mr. Trump will have several opportunities starting Wednesday to refuse to extend U.S. sanctions relief to Iran under the deal, which would put Washington in breach of its terms.

To stay in the deal, Mr. Trump must periodically agree to waive penalties imposed under a variety of U.S. statutes. In exchange for sanctions relief from the U.S., the United Nations and other countries, Iran agreed to curb its nuclear program.

The recent protests in Iran have added to the uncertainty, as Mr. Trump has backed protesters while denouncing the economic benefits he says the nuclear agreement has provided to Iran's government.

While Mr. Trump could seize on the protests as a basis for rejecting the sanctions waivers, he could also sign the waivers while taking other steps to punish Iran.

Many of Mr. Trump's advisers are critical of the nuclear deal but have urged Mr. Trump to remain a party to it while looking for additional ways to confront Iran's destabilizing behavior in the Middle East. Secretary of State Rex Tillerson and Defense Secretary Jim Mattis are among advisers who have publicly taken that position.

Mr. Mattis declined on Friday to tell reporters at the Pentagon whether his advice had changed, but said, "I just don't think the protests will have any influence over my advice to the president one way or another."

Mr. Trump is likely to introduce additional sanctions unrelated to the nuclear accord next week as these deadlines come up, Mr. Tillerson said Friday. "They will be coming," he said in an interview on CNN.

Other advisers said Mr. Trump appears on track to extend the sanctions relief, but cautioned that they don't know what he is likely to do.

In October, Mr. Trump threatened to pull out of the accord unless Congress and European allies agreed on ways to address Iran's ballistic missile program and to ensure restrictions on Iran's nuclear activities continue after provisions of the deal expire in future years.

Since then, the Trump administration has consulted with lawmakers and European officials on an amendment to a 2015 U.S. law that gives Congress oversight of the nuclear deal.

People familiar with the discussions said the goal would be for advisers to present Mr. Trump with legislation that will allow him to make good on a pledge to fix the deal.

The discussions have touched on ways to allow for U.S. sanctions on Iran's ballistic missile program and reduce the frequency with which the president must certify Iran's compliance with the deal from quarterly to perhaps once or twice a year, along with other areas of concern.

Officials are also debating when and how sanctions could be reimposed if Tehran undertakes certain nuclear activities.

Several drafts of the legislation have circulated, but there is no final bill yet, the people familiar with the discussions said. Negotiations aren't expected to wrap up before Mr. Trump must decide whether to extend sanctions waivers, officials said.

Key players in the negotiations include Sen. Bob Corker (R., Tenn.), the chairman of the Senate Foreign Relations Committee; Sen. Ben Cardin (D., Md.), the top Democrat on the committee; and Sen. Tom Cotton (R., Ark.), a close congressional adviser to Mr. Trump on foreign policy.

A Capitol Hill aide familiar with Mr. Cotton's thinking said the legislation has a long way to go before he would sign on.

Mr. Corker and Mr. Cardin met with Lt. Gen. H.R. McMaster, the White House national security adviser, on Thursday to discuss the amended legislation.

Mr. Corker told reporters on Wednesday that it is important for Mr. Trump to know progress is being made on the legislation as he is weighing what to do about the deal.

European officials have said that they would continue to abide by the accord and stick with it, whether or not the U.S. continues to do so.

Yet any move by the U.S. to reimpose sanctions would mean European companies could face penalties for doing business in Iran.

"The real issue isn't what diplomats in Paris, Berlin, Rome or Brussels do, it's what would French, German, Italian or Belgian companies do in response to these moves," said Mark Dubowitz, chief executive of the Foundation for Defense of Democracies and a critic of the Iran deal who has advised the administration.

—Nancy A. Youssef contributed to this article.

Deadlines Approach On Relief for Tehran

President Donald Trump faces several coming deadlines to decide whether to continue granting sanctions relief to Iran from U.S. legislative penalties that have been imposed over the years. The decisions facing Mr. Trump come under laws dating back more than 20 years:

◆ Iran Threat Reduction and Syria Human Rights Act of 2012 (Deadline to decide: Jan. 10)

◆ Iran Freedom and Counter Proliferation Act 2012 (Deadline to decide: Jan. 10)

◆ Section 1245 of the Fiscal Year 2012 National Defense Authorization Act, also known as the Kirk-Menendez amendment (Deadline to decide: Jan. 11)

◆ Iran Sanctions Act of 1996 (Deadline to decide: Jan. 17)

—Felicia Schwartz

ABEDIN TAHERKENAREH/EPA/SHUTTERSTOCK

A child holds a portrait of Supreme Leader Ayatollah Ali Khamenei at a pro-government rally in Tehran.

Online Protests Flicker On Amid Bids to Douse Them

By Asa Fitch And Isabel Coles

Iran's Islamic Revolutionary Guard Corps declared that the country's unrest of recent days has been quelled. But even as the force made the declaration, there remained signs of protest on social media.

Dozens of videos of the burning of government documents have shown up online in recent days, although they couldn't be independently verified. The video footage showed what purported to be identification cards, or in some cases a utility bill from a state-owned company, being set aflame.

In one of the videos shared on the messaging app Telegram, women are seen burning identification cards for the Basij, a volunteer militia under the IRGC, the powerful military arm that has been training and funding fighters in foreign conflicts such as Syria and Iraq. In another, a person burns a certificate with the IRGC logo over a metal plate outside.

Another photo showed a man's hand holding water and electricity bills as they burned. "We do not pay any bills," read a caption underneath the photo on a popular antigovernment Telegram channel. "This corrupt system is doomed to end."

Some of the documents burned, including Basij identification cards, are relatively easy to obtain.

The IRGC, a force answerable only to Supreme Leader Ayatollah Ali Khamenei, on Sunday said the recent wave of dissent has been subdued, according to a statement reported on its official news website. The IRGC thanked the police, intelligence ministry and the Basij for ending the unrest, and blamed the U.S., Saudi Arabia, Israel and Iranian dissidents for causing it. The IRGC has deployed forces to at least three provinces, its commander said last week.

The Guard Corps says the unrest has been quelled, even as more angry videos emerge.

Calls went out on social media for additional street protests on Sunday, but the intensity of the demonstrations, which began late last month, appears to have ebbed in recent days. State media reported demonstrations in support of the leadership across Iran on Sunday, the latest in a string of such gatherings—at least some of which state employees have been ordered to attend, according to unverified documents shared on social media.

It has been difficult to gauge the extent of the unrest. Authorities have placed restrictions on internet use and blocked the widely used Telegram, forcing protest organizers to find ways around the restrictions.

The protests in Iran began on Dec. 28, first in the northeastern city of Mashhad and later spreading to dozens of cities across the country.

While the upheaval initially focused on high inflation and unemployment—both are in the double digits in Iran—it evolved into a broader critique of the Islamic governing system and of Mr. Khamenei, who has final say in matters of state. "Death to the dictator!" has been a common chant at the antigovernment rallies.

More than 20 people have died and hundreds have been arrested in the unrest.

A police spokesman on Sunday said most of the "duped" people detained for their involvement in the protests had been released, but that some of the ringleaders remained in custody, the official Islamic Republic News Agency reported.

Eleven Saudi Princes Held

Saudi authorities arrested 11 princes for criticizing the government, the latest indication that the country's rulers are moving to stamp out traces of internal dissent as they push through an economic transition.

By Margherita Stancati, Summer Said and Benoit Faucon

FAYEZ NURELDINE/AFP/GETTY IMAGES

Crown Prince Mohammed bin Salman, shown in November, has instituted an economic overhaul.

Saudi Arabia's attorney general said the princes were arrested after staging a sit-in outside a royal palace in Riyadh to protest the government's decision to stop paying electricity and water bills for members of the extended royal family. He said they were also asking for compensation for the execution of a relative who was sentenced to death for murder last year.

"Despite being informed that their demands are not lawful, the 11 princes refused to leave the area, disrupting public peace and order," Sheikh Saud al Mojeb, the attorney general, said on Saturday.

But people briefed on the event said the princes, who belong to a distant branch of the royal family, were also detained because they complained about the concentration of power in the hands of Crown Prince Mohammed bin Salman, and intended to present those grievances to his father, King Salman. They said the men were rounded up during a gathering they held in Riyadh in response to the arrest of a close relative. The princes were taken to the high-security prison of al-Ha'ir, said the attorney general.

King Salman and his son, Prince Mohammed, have moved to consolidate their authority as they push through economic reforms aimed at reducing Saudi Arabia's dependence on oil revenues.

But as the kingdom's government carries out a plan to overhaul the economy, it is also mindful of public criticism, particularly as mass protests triggered by economic frustrations continue in rival Iran. As a result, it is trying to cushion the pain felt among ordinary Saudis.

In a royal decree issued late Friday, the monarch ordered a one-time 1,000-riyal ($267) bonus payment for all state employees and soldiers to ease the pressure of the rising cost of living after the government increased the prices of gasoline and electricity and introduced a 5% value-added-tax on Jan. 1. He also ordered a 5,000-riyal bonus payment for soldiers fighting in Saudi Arabia's war in Yemen, among other perks.

In a statement, the government said the handouts were intended to "soften the impact of economic reforms on Saudi households."

The government, under the leadership of Crown Prince Mohammed, is also taking steps to reel in the royal family.

Several senior princes were among the 200 people detained in November as part of a far-reaching crackdown on corruption. Around two dozen detainees were freed after paying cash settlements. Others, including billionaire Prince al-Waleed bin Talal, remain at Riyadh's Ritz-Carlton Hotel, which in effect has become a five-star prison.

This past week's detention mostly targeted members of the Saud al Kabeer branch of

> *The arrests followed a sit-in outside a royal palace in Riyadh, the capital.*

the royal family, who are far removed from the center of power, according to the people familiar with the matter. They had gathered following the arrest of one of their relatives, Prince Bander bin Abdullah, after he wrote a message on Twitter critical of the monarchy on Jan. 2

The economic reforms, he said in the message, were partly intended to "restructure the House of Saud by the crown prince."

Among the other grievances discussed by the princes who were rounded up was the government's decision to stop paying utility bills for royals.

"They met because they wanted to protest to the king about what MBS is doing," said a person close to the royal family. "They wanted to tell the king: 'Now we are considered outsiders. MBS is stripping us of perks and privileges.' "

Opening the economy to outside investors, a goal of the economic reforms, threatens the interests of royals who have long benefited from a business climate that values personal connections.

The government is also considering reducing—or abolishing—the monthly stipends that are paid to thousands of members of the House of Saud. That sum is smaller for distant royals than it is for the direct descendants of King Abdulaziz Ibn Saud, the founder of modern Saudi Arabia. Only his male descendants are eligible to assume the throne.

Iran Tanker Leaks Off China's Coast

By Costas Paris

A massive Iranian oil tanker was ablaze and leaking fuel in the East China Sea on Sunday after colliding with a large Chinese cargo ship, Iranian and Chinese officials said.

China's state broadcaster CCTV showed the Sanchi tanker, which was carrying around one million barrels of light crude, engulfed in thick, black smoke. Maritime officials feared a large spill since the tanker was carrying nearly as much oil as the Exxon Valdez, which spilled 260,000 barrels into Prince William Sound off Alaska in 1989.

"The Sanchi is floating and burning," China's Ministry of Transportation said. "There is an oil slick and we are pushing forward with rescue efforts."

The tanker, operated by National Iranian Tanker Co., or NITC, a state-controlled shipping firm, collided late Saturday with the Hong Kong-registered CF Crystal, according to the firm and the ministry. The collision occurred about 184 miles off the Shanghai coast.

The Sanchi is 274 meters (899 feet) long. It had a crew of 30 Iranians and two Bangladeshis, who were missing, according to Iranian and Chinese officials. It was on its way from Iran's Kharg Island to Daesan in South Korea.

The Crystal's 21 Chinese crew members were rescued and the vessel sustained "noncritical damage," according to the Chinese ministry. It had a cargo of 64,000 metric tons of grain from the U.S. headed for Guangdong, in southern China.

"The rescue efforts are hampered by bad weather," Mohammad Rastad, head of Iran's Ports and Maritime Organization, told Iranian state television.

"There is a wide perimeter of flames around the ship because of the spill and search and rescue efforts are being carried out with difficulty. Unfortunately, there is no news of the crew," Mr. Rastad said.

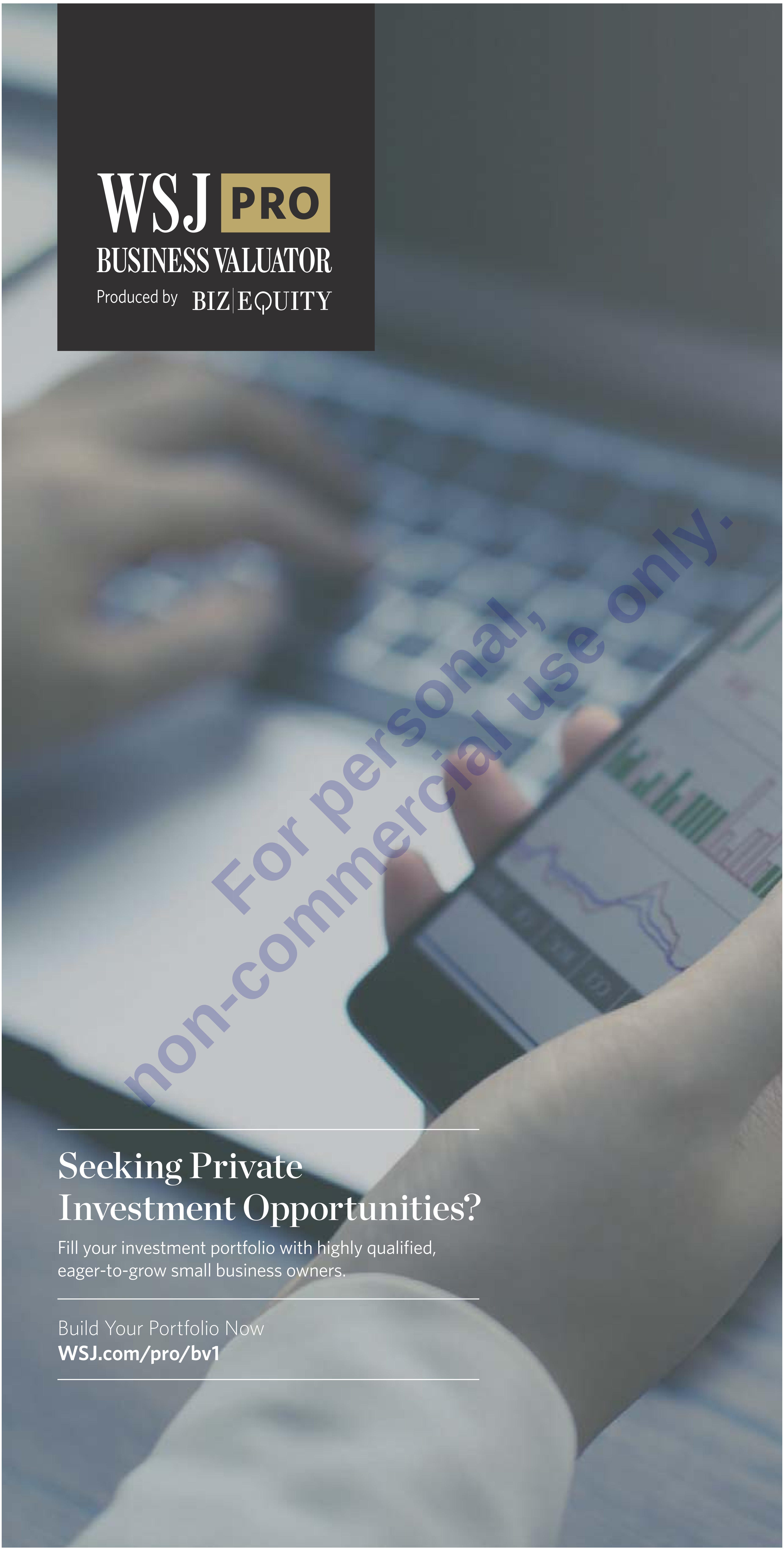
Iranian officials said the tanker was leased by South Korea's Hanwha Total Petrochemical Co. Ltd., which sells petroleum products. The company couldn't immediately be reached to comment.

China's Ministry of Transportation said it had sent four rescue ships and three special vessels to contain the spill. South Korea sent a coast guard vessel and a helicopter to help the relief effort.

It was the first major maritime accident involving an Iranian vessel since the lifting of United Nations sanctions against Tehran in 2016.

KOREA COAST GUARD/AGENCE FRANCE-PRESSE/GETTY IMAGES

An Iranian oil tanker on fire off the coast of China on Sunday.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Merkel Makes Last-Ditch Coalition Push

German chancellor seeks to govern with former partner Social Democrats

BY ZEKE TURNER

BERLIN—Germany's hope of breaking a streak of more than 100 days without a government is now riding on repairing a broken political marriage.

On Sunday, German Chancellor Angela Merkel began a last-ditch effort to form a government by beginning five days of talks with her former governing partner, the Social Democrats. The center-left party had previously vowed not to work with Ms. Merkel's conservative bloc this time around in another so-called grand coalition of Germany's two centrist parties.

BERND VON JUTRCZENKA/AGENCE FRANCE-PRESSE/GETTY IMAGES

Christian Democratic Union leader Angela Merkel met with Martin Schulz, leader of the Social Democrats, on Sunday in Berlin.

But after Ms. Merkel's first attempt at forming a government with two smaller parties failed, Germany is short on options.

Before talks began at the Social Democrats' headquarters in Berlin, the party's leader Martin Schulz said "We don't have any red lines, but instead we want to make sure we push through as many red policies in Germany as possible," referring to his party's colors. "Germans demand that we act fast," he said.

In the September elections, Mr. Schulz's Social Democrats, or SPD, suffered their worst result since 1933, and a far-right party, the Alternative for Germany, entered Germany's parliament for the first time since World War II—two results the SPD blamed on years of playing wingman for Ms. Merkel's policies. A group called "NoGroKo," or "No Grand Coalition" has formed within the party's ranks.

The standoff between the two parties, which had governed together since 2013, and the failure of Ms. Merkel's first attempt to form a government with the Greens and Germany's liberals, has left Germany in one of the worst political crises of its postwar period.

Germany's President Frank-Walter Steinmeier, himself a member of the SPD, urged his party to the table with Ms. Merkel after her first attempt broke down.

Now hopes are riding again on the grand coalition, which has been viewed as a government of last resort given the risks of marrying the country's two main parties. Backing among voters has dropped off in recent weeks, according to a recent poll.

Among German voters, 45% see a grand coalition positively, down 16% since December 2017, according to an Infratest Dimap poll for broadcaster ARD published last week. It is ranked by 52% of voters as less favorable or bad.

The poll also showed that 67% of Germans think Ms. Merkel's best days as chancellor are behind her.

The new talks were planned to continue Monday morning at Ms. Merkel's party's headquarters in Berlin and to wrap up by Thursday.

The preliminary policies drafted in the talks will have to face a vote among party members at the SPD's party congress on Jan. 21.

Experts expect that if the partnership passes these hurdles and moves toward official coalition talks, it could enter power by April.

"I believe [the talks] can be a success," Ms. Merkel said.

If they aren't, Ms. Merkel will have to rule Germany with the first minority government in its postwar history, or ask voters to return for a second ballot.

"We have an exciting five days ahead of us," said Horst Seehofer, the leader of the Bavarian wing of Ms. Merkel's conservative alliance, before the talks on Sunday. He added, "We have to agree."

APPLE

Continued from Page One

companies to make financial changes. But the investors believe that Apple's highflying stock could be hurt in coming decades if it faces a backlash and that proactive moves could generate goodwill and keep consumers loyal to Apple brands.

"Apple can play a defining role in signaling to the industry that paying special attention to the health and development of the next generation is both good business and the right thing to do," the shareholders wrote in the letter, a copy of which was reviewed by The Wall Street Journal. "There is a developing consensus around the world including Silicon Valley that the potential long-term consequences of new technologies need to be factored in at the outset, and no company can outsource that responsibility."

Obsessive teenage smartphone usage has sparked a debate among academics, parents and even the people who helped create the iPhone.

Some have raised concerns about increased rates in teen depression and suicide and worry that phones are replacing old-fashioned human interaction. It is part of a broader re-evaluation of the effects on society of technology companies such as Google and Amazon.com Inc. and social-media companies like Facebook Inc. and Snapchat owner Snap Inc., which are facing questions about their reach into everyday life.

Apple hasn't offered any public guidance to parents on how to manage children's smartphone use or taken a position on at what age they should begin using iPhones.

Apple and its rivals point to features that give parents some measure of control. Apple, for instance, gives parents the ability to choose which apps, content and services their children can access.

The basic idea behind socially responsible investing is that good corporate citizenship can also be good business.

The investors believe Apple's stock could be hurt in the future by a backlash on issue.

Big investors and banks, including TPG, UBS Group AG and Goldman Sachs Group Inc. are making bets on socially responsible companies, boosting what they see as good actors and avoiding bad ones.

Big-name activists increasingly view bad environmental, social or governance policies as red flags. Jana plans to go further, putting its typical tools to work to drive change that may not immediately pay off.

Apple is an ambitious first target: The combined Jana-Calstrs stake is relatively small given Apple's nearly $900 billion market value. Still, in recent years Apple has twice faced activists demanding it pare its cash holdings, and both times the company ceded some ground.

Chief Executive Tim Cook has led Apple's efforts to be a more socially responsible company, for instance on environmental and immigration issues, and said in an interview with the New York Times last year that Apple has a "moral responsibility" to help the U.S. economy.

Apple has shown willingness to use software to address potentially negative consequences of phone usage. Amid rising concerns about distracted driving, the company last year updated its software with a "do not disturb while driving" feature, which enables the iPhone to detect when someone is behind the wheel and automatically silence notifications.

The iPhone is the backbone of a business that generated $48.35 billion in profit in fiscal 2017. It helped turn Apple into the world's largest publicly listed company by market value, and anticipation of strong sales of its latest model, the iPhone X, helped its stock rise 50% in the past year. Apple phones made up 43% of U.S. smartphones in use in 2016, according to comScore, and an estimated 86 million Americans over age 13 own an iPhone.

Jana and Calstrs are working with Jean M. Twenge of San Diego State University, who chronicled the problem of what she has dubbed the "iGen" in a book that was previewed in a widely discussed article in the Atlantic magazine last fall, and with Michael Rich of Harvard Medical School and Boston Children's Hospital, known as "the mediatrician" for his work on the impact of media on children.

The investors believe both the content and the amount of time spent on phones need to be tailored to youths, and they are raising concern about the public-health effects of failing to act. They point to research from Ms. Twenge and others about a "growing body of evidence" of "unintentional negative side effects," including studies showing concerns from teachers. That is one reason Calstrs was eager to support the campaign, according to the letter.

The group wants Apple to help find solutions to questions like what is optimal usage and to be at the forefront of the industry's response—before regulators or consumers potentially force it to act.

The investors say Apple should make it easier and more intuitive for parents to set up usage limits, which could head off any future moves to proscribe smartphones.

The question is "How can we apply the same kind of public-health science to this that we do to, say, nutrition?" Dr. Rich said in an interview. "We aren't going to tell you never go to Mickey D's, but we are going to tell you what a Big Mac will do and what broccoli will do."

—Tripp Mickle and Betsy Morris contributed to this article.

DREW ANGERER/GETTY IMAGES

Teenage phone use has sparked a debate among academics, parents and the iPhone creators.

Jana and Sting Join To Police Companies

A big activist investor is enlisting help from social activists and rock star Sting to raise billions of dollars and target companies they think should be better corporate citizens, in a convergence of Wall Street's roughest fighters and its do-gooders.

Jana Partners LLC plans to launch a fund this year dubbed Jana Impact Capital to invest in companies the hedge fund believes are good bets but could do better for the world. The fund's board of advisers includes Sting and others.

Socially responsible investing, long the territory of smaller gadflies, has grown in popularity. The presence of Jana, boosted by Sting, is expected to lend more legitimacy to the idea. Jana has chosen an eye-catching first endeavor—the world's biggest stock, Apple Inc. Jana is partnering with union giant California Teachers' Retirement System, or Calstrs, to push Apple to address concerns about teenage iPhone addiction.

Jana believes, with the help of other investors, it can catalyze socially conscious changes in companies to create value for stockholders. Still, it won't seek to charge the kind of high fees the hedge-fund industry is known for.

"We still plan on finding good investments, but they will also be companies that can enhance and protect long-term value by focusing on the well-being of the public, our economy and our society, all of which are inextricably linked with long-term returns," said Charles Penner, a Jana partner involved with the new fund.

IN DEPTH

MACRON

Continued from Page One

ponents. He disarms them.

The biggest opposition party, the center-right Républicains, is in disarray because Mr. Macron poached its rising stars and gave them senior posts in his government.

His own party, the centrist République En Marche, moves in lockstep with the young president because he handpicked the candidates who became its members of Parliament. And he has tamed the most feared force in French politics—the waves of mass protests and strikes known as *la grève*—by sowing division among the unions that organize demonstrations.

These tactics have enabled Mr. Macron to launch an unprecedented blitz of economic measures, from laws that make it easier to fire and hire to the elimination of wealth taxes.

The goal: to reshape France in his own image, transforming a land deeply suspicious of free-market economics into one that fosters go-getters like the former investment banker who is now president. A workforce of upwardly mobile risk-takers, Mr. Macron says, is better suited to survive in an era of economic disruption than one defined by unionized labor that fosters class warfare.

"For our society to improve, we need people to succeed. We mustn't be jealous of them," Mr. Macron said recently.

In advancing his agenda, however, Mr. Macron has steamrolled opponents he may one day need to put his overhauls into practice and make them stick. He has kept the national media at arm's length, granting few interviews. A top general who was critical of cuts to defense spending was publicly dressed down by the president in front of military brass, leading to his resignation.

"Passing a law is at best only half of the work," Labor Minister Muriel Pénicaud said in an interview. "What matters afterward is how the stakeholders—the business leaders, the unions, the employees—take advantage of it."

An aide to Mr. Macron said the president is confident the overhauls will endure. Mr. Macron ran on a pledge to shake up the system, the aide said, and voters gave him a mandate for the changes by electing him.

Despite the confrontational approach—or because of it—Mr. Macron has managed to bend the curve of public opinion back in his favor, a rare feat in French politics. Having fallen as low as 40% in August, Mr. Macron's approval rating rebounded to 52% in December. The economy also is picking up, with the government estimating gross domestic product growth near 2% for 2017 after years of around half that pace.

Still, many French see Mr. Macron's changes as a betrayal of the country's socioeconomic model, which is based on the protection of workers and welfare benefits, not the accumulation of wealth. French media have branded him the "president of the rich," and Mr. Macron has done little to dispel the label. For his 40th birthday, he threw a private party on the grounds of the Château

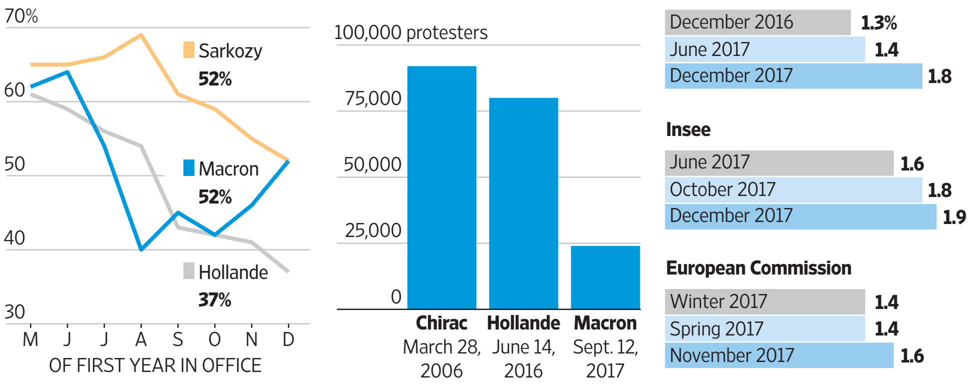
FROM LEFT: YORGOS KARAHALIS/BLOOMBERG NEWS; PHILIPPE WOJAZER/AGENCE FRANCE-PRESSE/GETTY IMAGES

Macron's First Months

French President Emmanuel Macron is having an atypical rebound in the polls compared to his predecessors...

...his labor overhaul drew fewer protesters than earlier attempts by his predecessors...

...and 2017 GDP growth forecasts have been repeatedly revised up.



Sources: Ifop polls, most recent conducted online and by phone from Dec. 8-16 of 1,942 French adults; Police Prefecture (protesters); Bank of France, Insee, European Commission (GDP)

THE WALL STREET JOURNAL.

French President Emmanuel Macron, above, has placed the exercise of unfettered executive power at the center of his presidency. He is co-opting opposition political parties and dividing union leaders; Mr. Macron signed a decree changing labor law on Sept. 22 at Elysee Palace, with Labor Minister Muriel Pénicaud to his right.

de Chambord, a castle completed under the reign of Louis XIV, the Sun King.

The clash of worldviews was underlined in October when Mr. Macron visited a job training center in southwestern France. Inside, the new president discussed a local foundry's challenge in finding skilled workers; outside, employees from an equipment-maker facing liquidation gathered to protest his visit.

"Instead of making a racket, some people would do well to see if they could get a job over there," Mr. Macron said, referring to the foundry.

Alain Rousset, a local Socialist official along for the visit, told the president to empathize with the protesters who were facing deep shifts in workplace culture. "You can't force a solution to the problem," Mr. Rousset said.

Mr. Macron wields an unusual degree of power because of his grip on Parliament. He garnered less than a quarter of the vote in the first round of the presidential election on April 23, but it was enough to put him in a run-off with far-right politician Marine Le Pen. Before the final vote, he secretly recruited top talent from mainstream parties to join his newly formed political party and run for parliamentary seats in June.

One person targeted was Bruno Le Maire, who had been agriculture minister under President Nicolas Sarkozy. Mr. Le Maire had a large following among centrist Républicains who had wanted him to be their presidential nominee instead of François Fillon.

Mr. Macron reached out to Mr. Le Maire with an appealing offer: to become economy and finance minister in a Macron government.

"The right and the left have failed," Mr. Macron said, according to Mr. Le Maire.

Mr. Le Maire accepted. The Républicains, he said in a recent interview, would struggle to mount an effective opposition because Mr. Macron had co-opted the party's free-market message. "There is no angle of attack," he said.

Days after his approach to Mr. Le Maire, Mr. Macron defeated Ms. Le Pen by a landslide, as voters who had backed mainstream parties in the first round rallied behind him.

Shortly after, the Républicains learned of Mr. Le Maire's defection, rocking the party.

Laure de La Raudière, a Républicains lawmaker close to Mr. Le Maire who was running for re-election to Parliament in June, said she faced immediate questions from colleagues about whether she, too, was going to "betray" the party and join Mr. Macron.

"That was really violent for me," Ms. de la Raudière said. "Bruno seemed the brightest of his generation."

She and many other Républicains lawmakers stuck with their party, but they ended up running on a platform of supporting many of the new Macron government's policies.

That hobbled the Républicains. The party and its allies won only 137 of the 577 seats at the National Assembly in the June election. Dozens of those lawmakers, including Ms. de la Raudière, later broke away into a separate parliamentary group promising to work "constructively" with Mr. Macron's majority.

About two months after his victory, Mr. Macron asked Parliament for the power to overhaul the country's labor regulations by decree. Most Républicains backed his party to vote in favor, handing him an overwhelming mandate to write the new laws and adopt them without the customary oversight of Parliament.

At that point, almost the only remaining check on Mr. Macron's influence over the labor market was the French street and the unions that mobilize it.

Mr. Macron has managed to bend the curve of public opinion in his favor.

Mr. Macron threw out his predecessors' playbook of getting union bosses and business leaders around the table to negotiate an agreement. Such talks often led to recriminations as unions played for time, closing ranks and mobilizing protesters. Large protests had scuttled attempts by earlier presidents to shake up the sclerotic labor system.

Instead, Mr. Macron summoned each union boss to an individual meeting at the Elysée Palace. Union leaders who accepted the invitations represented a spectrum of workers with competing interests, from high-paid white-collar employees to factory workers. The format, union officials said, created a prisoner's dilemma, in which each boss hoped to cut a deal with Mr. Macron, without knowing what he was discussing with the others.

Union bosses also had no way to know how seriously Mr. Macron was taking their demands because the government was keeping the draft of the decree under wraps.

Mr. Macron invited television cameras to film the union leaders as they went in and out of his office, drawing attention to their involvement.

Mr. Macron "wanted to make people believe it was a dialogue," said Fabrice Angei, a senior negotiator at the left-wing CGT. "It was a communications operation with the aim of dividing the unions."

"There was a real willingness to listen," said the aide to Mr. Macron, adding that the government had "hundreds of hours of discussions" with union officials and lawmakers.

Ms. Pénicaud, the labor minister, continued the talks in a similar format over the summer—always meeting the unions individually. She praised the tactic as a trademark move the government planned to keep using.

The CGT broke ranks in the middle of the discussions, calling for strikes and protests. Other unions declined to follow, waiting for the government to show them the decree.

"Some are predicting the worst. We must never give in to those Cassandras," Mr. Macron told a cabinet meeting on Aug. 28.

Two days later, the government corralled union leaders inside the prime minister's office to review the decree just hours before its public release. Mr. Macron wasn't there.

Reading the text for the first time, union leaders realized Mr. Macron hadn't respected their "red lines." The overhaul would cap the amount courts can fine companies for firing an employee, making it easier for firms to do layoffs. It also would permit small companies to negotiate working hours and pay with their own employees instead of adhering to nationwide agreements that are collectively bargained.

"We feel like we were listened to, but not heard," Laurent Berger, head of the moderate CFDT union, told the room.

In public, unions muted their criticism. Mr. Berger said the CFDT, France's biggest private-sector union, wouldn't organize strikes or protests against the decree. Other unions said the same.

In private, the union leaders stewed. On Sept. 5, they finally met, but the closed-door session devolved into finger-pointing, according to Mr. Berger. The union leader says he accused the CGT of having divided their ranks by unilaterally calling a strike.

On Sept. 22, Mr. Macron signed the decree. Weeks later, he began inviting union bosses back to his office for another round of tête-à-tête meetings. This time he wanted to discuss his plan to overhaul unemployment benefits.

Entering the Elysée Palace's gilded interiors, François Hommeril, chief of the CFE-CGC union for white-collar workers, immediately noticed TV cameras were there to film the opening minutes of his meeting.

Once the cameras were gone, Mr. Macron grilled the union boss on why he had publicly criticized the government's labor decree and its negotiating tactics.

Mr. Hommeril told the president he felt cornered. "There's been a lot of talk about negotiations, but this is no negotiation," Mr. Hommeril said to Mr. Macron. "We feel betrayed."

ETIENNE LAURENT/EPA/SHUTTERSTOCK

Bruno Le Maire became the minister of economy and finance.

COLA

Continued from Page One

about good diet, such as green tea and fermented foods, have become mainstays in the West.

Now, the government thinks it can add to the dietary wisdom by certifying Coca-Cola Plus and other products as Foods for Specified Health Uses, or Foshu. The products, which have grown into a market of $6 billion in annual sales, according to Japan Health and Nutrition Food Association, contain compounds the government deems to have a particular benefit, such as lowering cholesterol or preventing osteoporosis.

Zero-calorie Coca-Cola Plus features a substance called indigestible dextrin. It joins two other designated "healthy" colas in Japan—Pepsi Special, made by Suntory Beverage and Food Ltd. under a licensing deal with PepsiCo, and Kirin Mets Cola from Kirin Beverage Co.

Michiko Kamiyama, a lawyer with a group called Food Safety Citizens' Watch that monitors food safety issues on behalf of consumers, wonders whether the government should be endorsing Coke and Pepsi as healthful. A vigorous 77, Ms. Kamiyama says she didn't get that way downing lots of carbonated drinks.

"If you have a well-balanced diet and do an appropriate amount of exercise then you don't need them," says Ms. Kamiyama of the certified foods and drinks. "I personally think it is totally ineffective."

Khalil Younes, an executive vice president at Coca-Cola Japan, says scientists spent a decade trying to preserve the taste of Coca-Cola while including ingredients that could win the government's gold seal. "We were quite ballsy in how we approached the launch," he says, "because we were supremely confident based on our data that we had a winner, both on the functionality and also on the taste."

Tominaga Ozawa, a retired investor, says he shares doubts about health benefits but figures there is nothing to lose by adding some fibrous fizziness to his diet. Mr. Ozawa, 70, says he took to drinking Coca-Cola Plus almost immediately after it went on sale in Japan in March.

At least once a week, he plays 18 holes of golf. After nine holes, he returns to the clubhouse and buys a Coca-Cola Plus before sitting down to lunch. "I think it's good," he says. He prefers his cola time in solitude because "in Japan, your image can suffer if you say you drink cola."

Miho Katori, 33, a Tokyo restaurant worker, stocks her fridge with at least two 470-milliliter bottles of Coca-Cola Plus at about $1.50 each. The government's gold seal prompted her to switch from a diet cola, she says, in hopes the fat-absorption properties of the dextrin would help her stay slim. She found she liked the drink. "I don't know if it's effective or not," she says, "but it looks like it is good for my health because it has a Foshu stamp."

Among the drink's detractors is Seiji Miyata, 54, an art director at a Tokyo printing agency. He turned to artificially sweetened drinks after he discovered he had diabetes and found himself yearning for sweets. "As soon as I was diagnosed," he says, "I started to love whisky, chocolate, everything that's sweet."

Craving a sweet cola one weekend morning, he pulled into a convenience store and found the new white-coated Coca-Cola Plus bottle. The drink tasted healthful—and, he thought, awful. He wanted to dump it right away, but "we're Japanese," so he found a public ash bin into which he discreetly drained the liquid.

Others who tried Coca-Cola Plus without studying the label have been surprised by the extent of its laxative effect. Online commenters and some people interviewed in Tokyo said they ended up with upset stomachs or worse.

"There is no danger to the human body," Coke's Mr. Younes says. "We would never launch something that is harmful to anybody." Regarding side effects, he refers to the labeling: "The only caveat we have is that if you drink too much—it is in there, that you may have loose bowels from overconsumption. It depends on your condition, but what we are trying to avoid is people over-consuming in the belief that the more they drink, the more it will help."

On the flip side, Hideo Eguchi, a 79-year-old who works as a hair stylist, says, "I like the feeling of the burps you get from drinking this."

Coca-Cola declines to give sales figures for Plus but says it is a success. It says low-sugar or sugarless drinks—many of them teas, coffees and other noncolas—account for 62% of Coke's sales in Japan. In Japan's beverage market, companies have been known to introduce as many as 100 new drinks a year.

Coke ads show people drinking Plus with grilled beef—the result, he says, of careful market research.

Coke paired with sushi would be "a bridge too far," he says. "I know that I would be crucified by my Japanese friends if they saw me do that."

—Chieko Tsuneoka contributed to this article.

SURYATAPA BHATTACHARYA/THE WALL STREET JOURNAL

A Tokyo vending machine sells Coca-Cola Plus.

GREATER NEW YORK

Arctic Chill on Its Last Legs


GETTY IMAGES

UNCLE: Joggers in Hoboken zipped along the partially frozen Hudson River on Sunday, on what was expected to be the final day of a brutal cold snap in the region. Temperatures in New York City were forecast to hit the mid-30s Monday, though snow is possible.

Cuomo Seeks Relief From New Law

By Mike Vilensky And Richard Rubin

Gov. Andrew Cuomo is expected to lay out a plan early this year to overhaul New York's tax code in response to the new federal tax law.

Mr. Cuomo, a Democrat, has lambasted the Republican-backed federal law for capping federal tax deductions in ways that disproportionately affect high-tax blue states such as New York, New Jersey and California. The governor has pledged to put that issue at the center of his 2018 legislative agenda, and his aides are exploring various workarounds to the new law.

"You have to look at each wrinkle and then try to iron that one out and then try to fix that one," said Cuomo budget director Robert Mujica.

Congressional Republicans have defended the tax law as giving a break to people in most brackets and said the state and local deductions benefited more higher-income residents than middle-income filers.

New York's Democratic Assembly Speaker Carl Heastie said he is open to the changes. A spokesman for New York's Republican Senate Majority Leader John Flanagan said the conference is waiting to hear the governor's proposal—expected as soon as Jan. 16.

Replacing Income Taxes with Payroll Taxes

New York effectively could replace part of its income tax on individuals by making up the revenue with an equivalent payroll tax on employers, Mr. Mujica said.

The governor's aides are exploring various workarounds to the new U.S. tax law.

Under the new law, businesses can deduct payroll taxes from their federal income taxes, so this idea offers a way to preserve the benefits of deductibility by shifting the deduction from individuals to their employers. Individuals who didn't itemize their federal deductions under the former laws could newly benefit from this shift.

There are challenges if Mr. Cuomo advances such a measure. Most notably, the new payroll tax likely would come out of workers' paychecks.

"There are a lot of reasons you can't simply adjust peoples' wages with the wave of a hand," said Jared Walczak, an analyst for the conservative nonprofit the Tax Foundation. "Many individuals may not understand why their salary is going down, even if they are better off under the proposal."

Expanding Charitable Contributions

New York could incentivize charitable contributions to local and state governments or to affiliated public projects and set up funds that allow individuals to donate to such funds rather than pay their full income taxes.

Because charitable contributions aren't limited under the tax law the same way state and local tax deductions are, expanding them could preserve a benefit that charitable donors get in the form of a federal tax break.

New State Deductions

New York's Independent Democratic Conference—a group of state Democrats who work in a bipartisan coalition with the Senate Republican majority—have proposed letting taxpayers deduct state and local taxes that exceed the new federal cap from their state income taxes if they make less than a certain amount.

Corporate Tax Changes

Unlike individuals, corporations can still deduct state income taxes from their federal taxes. Combined with the cut in the federal corporate tax rate—to 21% from 35%—that rule is leading some businesses to consider becoming corporations so they could get the full benefit of that deduction. Mr. Mujica said New York is looking at ideas to accommodate that shift.

Kathy Wylde, president of the Partnership for New York City, a business-advocacy group, said many of the proposals would be complicated but "there was general enthusiasm from my members that the governor is taking a hard look at what could be done."

Lawmaker Pushes Plan to Ease Pain Of N.J. Taxpayers

By Kate King And Richard Rubin

FAIR LAWN, N.J.—As residents in high-tax states brace for bigger tax bills under the federal tax overhaul, a New Jersey congressman is pushing local governments to adopt a strategy that could save homeowners thousands of dollars.

Rep. Josh Gottheimer, a Democrat who represents parts of Bergen County, said his plan would help homeowners hurt by the new law's provision capping state and local tax deductions at $10,000 a year. Under the proposal, towns and cities would establish charitable funds, which homeowners could contribute to in exchange for tax credits applied toward their property-tax bills. Charitable contributions remain fully deductible under the new law.

"Yes, it may seem too good to be true, but this is exactly the kind of tax planning we need in the face of this assault on New Jersey," Mr. Gottheimer said, referring to the tax law.

The Republican tax law, signed by President Donald Trump in December, lowers tax rates on individuals and businesses, while limiting some tax breaks. Officials in high-tax states such as New Jersey, New York, Connecticut and California are scrambling to minimize the impact of the new tax law, which took effect at the start of the year. It is far from clear whether these creative strategies will become law or will fly with federal tax authorities.

New Jersey Gov.-elect Phil Murphy, a Democrat, pledged his support for Mr. Gottheimer's proposal. Mayors from three towns in Bergen County, where state records show the average residential property-tax bill topped $11,000 in 2016, said they would move to establish charitable funds.

Mr. Murphy said he would look into minimizing the new tax bill's impact statewide after he takes office later this month. But the charitable-fund proposal represents a time-tested tactic that quickly could be put into effect, he said.

"This one we believe has real legs and real precedent," Mr. Murphy said. "We are all in on this."

E. Martin Davidoff, a certified public accountant and tax attorney based in Dayton, N.J., said he didn't think the proposal would pass legal muster because charitable deductions typically are allowed only for contributions that were made without receiving any benefit in return. Someone at a charity auction who spends $15,000 to purchase a painting that is valued at $10,000, for example, can only deduct $5,000 on their tax return, he noted.

"It's not going to work," Mr. Davidoff said about Mr. Gottheimer's proposal. "If it does work, it will be plugged up so fast that your head will spin, within a year or two the federal government will shut it down."

That could happen through formal guidance from the Internal Revenue Service, a new law from Congress or a more drawn-out court process in which the IRS challenges the claimed charitable contribution in an audit and a taxpayer fights it.

Mr. Gottheimer said he believed the use of charitable funds would be legal. Similar programs exist in more than 20 other states, he added.

How the Strategy Might Pan Out

Here's an example of how Rep. Josh Gottheimer's proposal could work.

A taxpayer who owes $15,000 in property taxes could contribute the same amount to their town's charitable fund. The community would then give the taxpayer a credit of up to $15,000, which only could be applied toward the resident's property-tax bill.

Under the new law, the taxpayer could only deduct $10,000 in local and state taxes from their federal liability. But under Mr. Gottheimer's proposal, the taxpayer could deduct the $15,000 the resident contributed to the local charitable fund. Individual towns and cities would determine the amount of credit they would offer to taxpayers.


KEVIN HAGEN FOR THE WALL STREET JOURNAL

The new $10,000 annual limit on state and local tax deductions affects many New Jersey taxpayers. Above, homes Montclair.

Morale Issues Await Next Head of NJ Transit

By Paul Berger

Staff morale doesn't figure in NJ Transit's budgets or on-time performance charts, but the agency's next leader will need to focus on it to turn things around.

That is according to people familiar with NJ Transit, as the agency looks ahead following Executive Director Steven Santoro's announcement that he is stepping down.

Mr. Santoro, an agency veteran who has served as chief executive for 15 months, said he would leave NJ Transit in April. Mr. Santoro's decision came as little surprise. New Jersey Gov.-elect Phil Murphy, who takes office this month, recently called NJ Transit "a national disgrace."

The rail and bus agency, which carries more than 300,000 passengers each weekday, has struggled with funding issues, spotty service and a crash in 2016 when a train jumped onto a concourse at Hoboken Terminal, killing a 34-year-old mother.

Current and former employees say the agency has suffered from an exodus of managers and operating personnel, many of whom have gone to other transit agencies or to the private sector. NJ Transit has a workforce of about 11,000.

Richard Andreski, a former NJ Transit official who left the agency in 2015 after serving for almost two decades, said workers were demoralized by a succession of setbacks, including the elimination of a final salary pension scheme, the cancellation of a project to dig a new rail tunnel under the Hudson River and a wage freeze that lasted almost a decade.

"It was the accumulation of all these different events that began to undermine morale and started to drive lots of career professionals away," Mr. Andreski said.

Nancy Snyder, a spokeswoman for NJ Transit, didn't respond to questions about reports of low staff morale.

Stephen Burkert, general chairman of SMART-TD Local 60, a union representing some NJ Transit workers, said morale is the lowest it has been in decades. Staffing shortages added to the sense of frustration, Mr. Burkert said. He said NJ Transit is so short on conductors and ticket collectors that about half of all trains run with fewer crew members than is necessary, endangering passengers and employees.

Ms. Snyder said the agency found Mr. Burkert's desire to maximize crew members "rather ironic in light of the 190 of his crew members who called out [Friday] with unscheduled absences."

She pointed out that rail union members recently received a wage increase paid retroactively to the expiration of their last contract, and that nonunion employees received a 1.9% raise retroactive to Jan. 1, 2017.


BYRON SMITH FOR THE WALL STREET JOURNAL

Salad-centric places like Chopt, above at 51st Street in Manhattan, are seeing a January sales boost.

Salad Spots Savor Their Moment

By Charles Passy

These are the true salad days for some New York City restaurateurs.

Fast-casual dining spots that specialize in the green stuff say they are seeing a sizable uptick in sales since the start of the new year. It is a post-holiday cycle that practically has become baked—or tossed—into their business model.

"January is gangbusters. I think everyone's resolution includes something about eating better," said Nick Marsh, chief executive officer of Chopt, a salad-centric chain with more than 20 locations throughout the city and suburbs. Mr. Marsh said the first month of the year typically sees a "solid 15%" increase over December's sales.

At fresh&co, a chain with 15 locations in the city, the salad sales boost is even higher—as much as 50%, according to co-founder George Tenedios.

New Yorkers have more places to turn to satisfy their lettuce cravings. As recently as a decade ago, salad specialists were few and far between, and customers often turned to their local diner for a bowl of greens. An episode of "Seinfeld" even immortalized the "big salad" served at the neighborhood coffee shop.

Today, there are several chains in New York City that concentrate largely on salad, reflecting a healthy-eating consciousness that extends year-round. And most of these operators are in growth mode.

Sweetgreen, a California-based chain that opened its first restaurant in the city four years ago, now has 20 New York locations, including five that launched last year. In response to the demand, more stores are slated for 2018, according to chain co-founder Nicolas Jammet.

"The plan is just to keep growing," Mr. Jammet said.

Of course, when salad sales are strong, other dining categories may be weaker. Magnolia Bakery, which is celebrated for its cupcakes, banana pudding and other sweet treats, sees its January sales drop about 10% to 15%, according to Bobbie Lloyd, the company's executive vice president.

Old Players Did Biggest Lease Deals in 2017

By Keiko Morris

PROPERTY

Fast growth at technology advertising and media companies made tenants in those industries the darling of Manhattan's office market in recent years, but in 2017 the spotlight shifted back to tenants that traditionally have been the bread and butter of the city's office landlords.

Tenants in the financial-services, insurance and real-estate industries—a category known as FIRE among real-estate professionals—dominated the leasing scene with 13 relocation or expansion deals over 100,000 square feet in 2017, the most in a decade, according to real-estate services firm **CBRE Group** Inc.

The sector notched a total of 3 million square feet of deals in excess of 100,000 square feet, almost three times the 1.1 million square feet recorded in 2016.

Companies had been reluctant in recent years to make the big investments required of large office relocations. That gave way last year as financial firms added jobs, stock market indexes set records and new or like-new buildings offered large blocks of amenity-filled office space designed to accommodate more people in less space, brokers and real-estate executives said.

"For the first time in a really long time, there was a variety of choices, of buildings that were brand new or made to be like brand new," said Mary Ann Tighe, chief executive of CBRE's New York tri-state region. "We had people who had been reluctant to spend, but when they decided to spend they were going to put their money in a place that was going to support technology and their workforce."

Money manager **BlackRock** Inc. boosted the leasing tally in the financial services, insurance and real-estate category last year when it signed a lease for about 850,000 square feet at 50 Hudson Yards, a tower expected to open in 2022 on the far West Side of Midtown.

RAPHAEL VIÑOLY ARCHITECTS

Aetna is moving its headquarters from Hartford to 61 Ninth Ave. in Manhattan. The building, seen here in a rendering, is under construction.

Health insurer **Aetna** Inc. signed a lease to relocate its headquarters from Hartford, Conn., taking all of a new West Chelsea building. Mastercard Inc. signed a lease for 150 Fifth Ave. in the Flatiron District with plans to almost triple the size of its current Manhattan technology hub now located at 114 Fifth Ave. and create more than 470 jobs by 2024.

While Manhattan's new office construction was robust in the decades between 1950 and 1990, it is only in the past several years that Manhattan office development has ramped up again, said David Falk, president of the New York Tri-State region for real-estate services firm Newmark Knight Frank.

Between 2010 and 2020, more than 23 million square feet of office space is expected to be constructed, according to Newmark.

12,700

Manhattan financial-services jobs added last year through November.

Now, there is demand for new construction and the more efficient layout, design and infrastructure support that comes with it, Mr. Falk said. And companies are confident enough to spend the money to relocate, often a minimum of $200 a square foot, he said.

"They are not haphazardly spending it but investing to recruit, retain and keep expanding," Mr. Falk said. "A lot of times a company will use a relocation to reimagine themselves."

While job growth among the city's technology, advertising, media and information companies has outpaced the financial, insurance and real-estate tenants during this recovery period, analysts said, the healthy increase in positions, particularly in the financial-services sector in 2017, has helped in its leasing resurgence.

In November, jobs in Manhattan's financial-services sector reached 476,700, a seasonally adjusted figure that is well below the sector's 1990 count of about 530,000, said Ken McCarthy, principal economist for real-estate services firm Cushman & Wakefield.

Nevertheless, the sector had a strong showing in 2017, adding about 12,700 jobs through November. State and city figures for December are expected to be reported on Jan. 18.

Job creation in the FIRE category was evident in expansions and relocations for large and small companies, said Andrew Mathias, president of real-estate investment trust **SL Green Realty** Corp.

In 2017, the company attracted a number of midsize office tenants in this sector to its properties, including the 1.7 million-square-foot tower One Vanderbilt, under construction next to Grand Central Terminal and 280 Park Ave., where it has made significant investments in upgrades.

"For the most part, these businesses were doing well and expanded and therefore needed more space," Mr. Mathias said.

GREATER NEW YORK WATCH

TRENTON

Full Agenda on Tap As Session Nears End

Billions of dollars in tax credits to attract Amazon.com Inc.'s second headquarters to New Jersey and legislation to bail out nuclear power plants could take center stage at the state Legislature's final meeting before new lawmakers are sworn in and Republican Gov. Chris Christie leaves office.

The Democratic-led Assembly and Senate on Monday will hold what is expected to be the final voting session of the current legislative session, which expires Tuesday. Lawmakers also are considering dozens of other bills.

—Associated Press

YALE UNIVERSITY

Auctions Planned Amid Renovations

Yale University will hold two online auctions to sell off furniture, kitchen equipment and other items as part of a major renovation of its historic Commons Hall and Memorial Hall.

The school is turning the connected halls into a campus center after getting a $150 million donation from an alumnus. The first auction will end Jan. 11, and the second runs through Jan. 18.

—Associated Press

OPIOIDS

Push for Equipment To Detect Fentanyl

New York Sen. Chuck Schumer is urging President Donald Trump to sign legislation that would allow U.S. Customs and Border Protection to buy portable-screening equipment to detect the powerful opioid fentanyl before it enters the country.

Mr. Schumer said Sunday that he wants John F. Kennedy International Airport to be among the first locations to get the new high-tech drug scanners because it is a major U.S. port of entry.

—Associated Press

GO NAKAMURA FOR THE WALL STREET JOURNAL

The Dead Rabbit bar, which opened in 2013 in Manhattan, can have wait times of up to two hours.

Dead Rabbit's Space to Multiply

By Charles Passy

One of New York City's most popular bars is about to get a lot bigger.

The Dead Rabbit, a lower Manhattan drinking spot that sees wait times of two hours on busy nights, has signed a lease on a two-floor space adjacent to its Water Street site. The bar plans to combine the two locations, nearly doubling its total size to 5,500 square feet.

Dead Rabbit co-founders Jack McGarry and Sean Muldoon wouldn't provide financial details about the lease on the adjoining space, which previously was home to a sandwich shop. But they said the term is for 17 years.

Messrs. McGarry and Muldoon said the cost for design and construction of the project would run at least $750,000, with the expanded bar expected to launch in April. Meanwhile, the existing Dead Rabbit space will remain open.

For the Dead Rabbit, the opportunity to expand is a fortuitous one. The Irish-themed bar has become a hot spot since its 2013 opening, celebrated for its adventurous approach to mixology and vast selection of Irish whiskey. In 2016, it was named the world's best bar in an annual global survey.

The lower Manhattan watering hole will nearly double its size to 5,500 square feet.

"They're the poster child of success," said Art Sutley, publisher of Bar Business Magazine, a trade journal.

The more popular the Dead Rabbit has become, the more challenging it has been for the bar to deliver a quality experience, as evidenced by the long wait times. "It goes against the grain of what an Irish bar should be," Mr. McGarry said.

The bar, which draws a number of tourists, has seen an 11% increase in sales in 2017 alone, according to Messrs. McGarry and Muldoon. The co-founders declined to provide revenue figures.

Messrs. McGarry and Muldoon said they have turned down offers to grow their concept by opening other Dead Rabbit locations, noting that the bar is partly inspired by lower Manhattan's history. The Dead Rabbits was a 19th-century street gang that called the area home.

Thus, expanding next door became the only option—provided one became available. "We thought it would happen if we were patient enough," Mr. Muldoon said.

The Dead Rabbit team already has expanded in another way, however, by creating an altogether different concept. In 2016, Messrs. McGarry and Muldoon opened BlackTail, a Cuban-themed bar in lower Manhattan's Pier A Harbor House.

The pair said they are looking into opening another bar in the Pier A space as well, with the theme still to be determined.

CORRECTIONS & AMPLIFICATIONS

New York City recorded 2,245 murders in 1990. An article Dec. 28 about the city's dropping murder rate in 2017 incorrectly said there were 2,262 murders in 1990.

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

LIFE & ARTS

ENTERTAINMENT

Causes Outshine Celebrities At Golden Globes

Women's rights take center stage at awards ceremony after sexual-harassment allegations engulf Hollywood

BY ERICH SCHWARTZEL

Los Angeles

Meryl Streep brought a workers'-rights activist as her guest. Actresses such as Sarah Jessica Parker and Viola Davis traded the usual red-carpet plumage for black dresses, the uniform of the evening. Host Seth Meyers opened the ceremony with: "Good evening, ladies and remaining gentlemen."

At the 75th Golden Globe Awards on Sunday night, the entertainment industry's reckoning over sexual harassment across Hollywood upstaged every category and celebrity.

If the Golden Globes were any indication, the 2018 Oscar race will be defined by allegations against many directors, producers and actors that overshadow Hollywood's annual flurry of self-congratulatory celebration.

Pre-show hosts tried to keep the red-carpet banter light, asking celebrities where they keep their Oscars and whether they'd be eating McDonald's after the ceremony. But the stars, many of whom have banded together in the past week to form a gender-equity organization called Time's Up, repeatedly brought the focus back to women's rights.

"Big Little Lies" winner Laura Dern invited Monica Ramirez, from the National Farmworker Women's Alliance, as her guest. Ms. Streep, nominated for portraying newspaper publisher Katharine Graham in Steven Spielberg's "The Post," had Ai-jen Poo, director of the National Domestic Workers Alliance, as her plus one. Emma Stone, nominated for playing tennis pioneer Billie Jean King in "Battle of the Sexes," walked in with the actual Ms. King.

When she won for her work on HBO's "Big Little Lies," Ms. Dern celebrated a year that unmasked multiple sexual harassers.

"I urge all of us to not only support survivors and bystanders who are brave enough to tell their truth, but to promote restorative justice," she said. "May we teach our children that speaking out without fear of retribution is our new North Star."

In recent months, allegations of sexual harassment and assault emerged against previous Golden Globe winners such as Harvey Weinstein and Kevin Spacey. Others came forward and accused men in the industry of similar misbehavior or crimes. Mr. Meyers said to the men in the room on Sunday: "This is the first time in three months it won't be terrifying to hear your name read out loud."

As for Mr. Weinstein: "He'll be back in twenty years," said Mr. Meyers. "When he becomes the first person ever booed during an 'in memoriam.'"

A theme of women's rights was echoed in nearly every acceptance speech. Elisabeth Moss, winning for her role in "The Handmaid's Tale," dedicated her award to "Handmaid's" author Margaret Atwood and all women "who were brave enough to speak out against intolerance and injustice."

Oprah Winfrey, receiving the Cecil B. DeMille award for career achievement, received a standing ovation when she called it a new day in America.

"For too long women have not been heard or believed if they dared to speak their truth to the power of those men," she said. "But their time is up!"

Oprah Winfrey received a standing ovation Sunday evening.

Of course, in between acknowledgments of the change engulfing Hollywood, awards were handed out. "Three Billboards Outside Ebbing, Missouri," was a big winner, claiming best picture and best actress, Frances McDormand. Martin McDonagh, a playwright known for "The Pillowman" and "The Lieutenant of Inishmore," won best screenplay for "Three Billboards," about a woman who launches a lonely campaign against a town sheriff after her daughter is murdered. Sam Rockwell won best supporting actor for his role as a racist police officer in the movie.

Guillermo del Toro won best director for his science-fiction fable "The Shape of Water." James Franco won best actor in a comedy for playing cult filmmaker Tommy Wiseau in "The Disaster Artist."

Allison Janney won best supporting actress for her role in "I, Tonya" as Olympian Tonya Harding's mother; her path to an Oscar remains a race between her and Laurie Metcalf of "Lady Bird."

In yet another sign of the unprecedented year that Hollywood has had, Christopher Plummer got a supporting-actor nomination—for a role he didn't have two months ago. Mr. Plummer replaced Kevin Spacey in "All the Money in the World" after Mr. Spacey was accused of sexual misconduct in late October; director Ridley Scott rushed the reshoots with days to spare.

Among the newly minted winners was "The Marvelous Mrs. Maisel," a new Amazon show about a 1950s stand-up comic played by Rachel Brosnahan, who won best actress in a comedy for the role.

Winners for 'Three Billboards Outside Ebbing, Missouri' were, at top from left, Martin McDonagh, Sam Rockwell and Frances McDormand; Saoirse Ronan, center photo, won for 'Lady Bird'; James Franco, onstage with his brother Dave Franco, right, and cult filmmaker Tommy Wiseau, won for 'The Disaster Artist.'

Among the winners of Golden Globe awards Sunday night were, from the top, best actor Gary Oldman, who portrayed Winston Churchill in 'Darkest Hour'; best supporting actress Allison Janney for 'I, Tonya'; and Rachel Brosnahan for playing the title role in the Amazon series 'The Marvelous Mrs. Maisel.'

PAUL DRINKWATER/NBC (5); KEVIN WINTER/GETTY (1); FREDERIC J. BROWN/AFP/GETTY (1)

WHAT'S YOUR WORKOUT? | By Jen Murphy

HE STAYS FIT WITH A FAT BIKE

JAMIE EMMER credits his smartphone and his bike for allowing him to ski 80 to 90 days a year. His phone allows him to manage Lumber Marketing Services, his Hope, Idaho-based business, from a chair lift. His bike helps keep his knees healthy enough to handle moguls and steep and deep runs at his local ski resort, Schweitzer Mountain Resort in nearby Sandpoint.

Mr. Emmer, 62, used to run, but started to struggle with knee pain. He began spinning and road biking 20 years ago. "It was the closest I could get to a runner's high," he says.

While skiing 10 years ago he saw a fat bike, which has oversize tires designed for low ground pressure to allow for riding in soft, unstable terrain like snow and sand. "I always thought biking ended with winter," he says. "I had to try it and was hooked immediately."

Mr. Emmer says fat bikes are more cumbersome than mountain bikes. "They're nowhere near as nimble or reactive, so they require a bit more body control."

During the winter, Mr. Emmer and his wife, Wendy, live at their second home on Schweitzer Mountain. "It really allows me to take advantage of winter," he says. His skiing and biking throughout the season acts as preparation for the Leadman, a triathlon that takes place each April at Silver Mountain Resort in Kellogg, Idaho. The race consists of a 1-mile ski, 7 to 11 miles of downhill mountain biking, and a 4-to-5-mile run. "You start at the top of the mountain and end at the bottom," he says. "By April, it's always pretty muddy, so you finish unrecognizable."

Mr. Emmer says he's tried training on stationary bikes and treadmills, but no matter the temperature, he'd rather be outside. "Breathing deep and hard in the outdoors and experiencing the changing scenery is something I find spiritual," he says. "It's also pretty hard not to feel like you're

Please see FAT BIKE page A12

RAJAH BOSE FOR THE WALL STREET JOURNAL

Jamie Emmer says riding his fat bike on the trails at Schweitzer Mountain Resort in Sandpoint, Idaho, complements his ski racing by keeping his knees loose and core strong.

NETFLIX (3)

In 'The End of the F***ing World' Alyssa (played by Jessica Barden) and James (Alex Lawther) are outsiders who use each other to test the identities they've invented for themselves.

TELEVISION

Teen TV Goes to a Darker Place

BY JOHN JURGENSEN

THE NEXT ROMANTIC teen comedy with hit potential has a modified F-bomb in its title and two unconventional 17-year-old characters at its heart. He's a self-diagnosed psychopath looking for his first murder victim. She's his unwitting target with a destructive agenda of her own.

"The End of the F***ing World," a TV series that premiered Friday on Netflix, joins a growing number of shows exploring the fringes of adolescent tumult. Among them: "Riverdale" (The CW), which plunged the gang from Archie Comics into a noir murder mystery; "Runaways" (Hulu), in which a group of high schoolers balance everyday angst with a friend's death and burgeoning superpowers; and "13 Reasons Why" (Netflix), a teen suicide drama that made waves last year in schools and families.

Even "Stranger Things," Netflix's sci-fi series set in the 1980s, tapped into the trend by pitting a group of prepubescent children against a horror from another realm.

Maybe it's due to an evolution of teen storytelling tropes, a reflection of uncertainty and anxiety in the real world, or an effort by producers to match the mind-set of young viewers who have already seen it all on the internet—but the genre is processing harsher stuff than the high-school crushes and crises that typified "Sixteen Candles" and other hormone-steeped classics of past generations.

"There's more of an appetite to go to darker places," says Charlie Covell, who wrote the "End of the F***ing World" TV series. She says teens are grappling with many of the same issues they always have—alienation, confusion, familial discord. Now, though, there's an "open forum" for exploring them thanks to an explosion of content and a blurring of lines among genres.

"The End of the F***ing World" is based on a graphic novel published in 2013 by an American author and artist, Charles Forsman. Executive producer and director Jonathan Entwistle developed it as a TV series for Netflix and the U.K. network Channel 4, which aired it last fall. Its eight episodes come in binge-able installments of about 20 minutes each.

The TV series starts in a bland British suburb, where Alyssa (played by Jessica Barden) and James (Alex Lawther) are outsiders who use each other to test the identities they've invented for themselves. She acts the part of a promiscuous rebel. He considers himself coldblooded, a serial killer in the making.

The show shifts perspectives between the two characters, using their inner monologues to highlight the disconnect between what they say and what they think. As Alyssa and James go from odd couple to runaways to fugitives from the police, the story turns into a modern Bonnie-and-Clyde tale. Songs by Hank Williams, rockabilly singer Wanda Jackson and others bring echoes of past eras.

If the show's title doesn't immediately weed out squeamish viewers, the opening scenes could, as James describes a childhood of numbness and killing animals.

But the tone is more cartoonish than grim, with breezy narration and whimsical montages that seem to reference Wes Anderson films like "Rushmore" and "The Royal Tenenbaums."

"It's not a laugh," Ms. Covell says, "but it's a wry moment that let's you say, 'OK, this is a comedy.'"

It's not the first black comedy to mix teen emotion with homicidal urges. "Heathers," a 1989 film starring Winona Ryder and Christian Slater as star-crossed sweethearts who bump off high-school classmates, has been remade as a TV series that will appear on the Paramount Network in March.

Ms. Covell, 33 years old, says it wasn't difficult to get back into the adolescent mind-set as she wrote.

"As a rule, everybody struggles as a teen, so the inner monologue is fairly indelible," she says. "It doesn't take much to tap into those old insecurities and paranoias."

FAT BIKE

Continued from page A11

a kid again when you're out on your bike, even in your 60s."

The Workout

Mr. Emmer rides before sunrise in the winter and uses headlights on his bike to see. "I don't drink coffee, so this acts as my morning jolt," he says. "I keep it short and quick to get my heart racing and my blood flowing," he says. He rides up Schweitzer Mountain, which takes him about 15 minutes, and then "bombs" back down.

He usually alpine skis later in the morning, then clicks into his Nordic skis to hit the 20 miles of Nordic trails at Schweitzer. After skiing, he tries to pedal on the stationary bike in his condo complex.

"I'll check emails as I ride," he says. "Pedaling for 10 to 15 minutes prevents my knees from stiffening up later in the day." Mr. Emmer got into ski racing at 45 and trains and competes with the Schweitzer Alpine Racing School masters program. Every Friday night in February he competes in the Schweitzer Mountain Starlight Race Series.

On weekends, he'll go on two-to-three-hour fat bike rides. "It's a great stress relief and always puts a smile on my face," he says. He used to ride with his wife but says she felt she was holding him back. After a few years of not riding together, he recently got her an electric fat bike. "Now she's at the top of the mountain waiting for me," he says.

Mr. Emmer rides on the Schweitzer Mountain trails.

The Diet

Mr. Emmer says he eats mostly paleo, focusing his diet around vegetables and protein. He avoids bread and sweets. He used to start his mornings with granola, but now cooks eggs. "My splurge is adding a few strips of bacon," he says. Lunch is usually fish and a salad and dinner is elk or grouse and vegetables. "My wife and I try to eat fresh, organic produce," he says.

The Gear & Cost

His Minnesota 3.0 model fat bike from Framed Bikes cost just under $1,000. He uses his Nordic season pass at Schweitzer Mountain ($129-$169) when he bikes the trails. A season alpine pass there ranges between $649 and $999, depending on when it's purchased.

The Playlist

"I like everything from country western and classical to heavy rock," he says. "It really depends on my mood." His playlist includes "The Funeral" by Band of Horses, "Refugee" by Tom Petty and the Heartbreakers, and "Rockin' in the Free World" by Neil Young.

RAJAH BOSE FOR THE WALL STREET JOURNAL

Bigger Wheels With Big Health Benefits

When the snow falls, you no longer have to swap your bike for the spin studio. Fat bikes have tires between 4 and 5 inches wide, which allow bikers to ride with lower tire pressure. "This affords them a much higher level of traction, which makes it easier to ride on snow," says Leigh Bowe, a Frisco, Colo.-based coach for VIDA MTB Series, a women's bike clinic.

Ms. Bowe says riding a fat bike requires you to engage your core more than with a normal bike. "Your abdominal muscles help you to maintain balance on the slippery, snowy trails," she says.

Kristin Schwarck, a Breckenridge, Colo.-based physical therapist and cyclist says a strong core also helps make smoother, more efficient turns. The quads, hamstrings and glutes also come into play. "Slipping and spinning out occurs more frequently with snow and ice," she says. "Hip mobility, glute and core strength will help recover. Keeping a slower pedal cadence, as well as centering your body on the bike, will help decrease spinning out."

The slipping and sliding also engages small muscle groups used for balance, says Uriell Carlson, a mountain bike coach in Breckenridge. She says beginners should try to look one to two bike lengths ahead to where they want to go and maintain even pedal strokes so they don't lose traction in the snow.

Attributed to Munekazu, Myochin, Articulated 'Jizai' figurine of a Dragon (tatsu), 1850-1900, left, and Unno Shomin, Dove Okimono (c. 1900), above; below from left: Hirayama Kantei, Vase (1900-16) and Myochin Ki (no) Munechika, Acorn-shaped Kabuto (1855)

EXHIBITION REVIEW

Creativity Forged Anew in Japan

Celebrating the metalworking mastery achieved in the Edo period and the creative resilience that followed in the Meiji Restoration

BY LEE LAWRENCE

Worcester, Mass.

FOURTEEN OBJECTS fill a wall in the Asian galleries of the Worcester Art Museum in a display titled "Last Defense: The Genius of Japanese Meiji Metalwork." It is a simple installation in three clusters that bears beautiful witness to the mastery achieved in the Edo period (1603-1868) and the creative resilience that followed in the Meiji Restoration (1868-1912).

A handful of Edo pieces exemplify the range of techniques and designs workshops perfected as they filled commissions from samurai and supplied objects for Buddhist temples and home worship. Three works in particular illustrate the range. As bold as it is elegant, a helmet made in 1618 by the Nagasone school emulates the spiraling shape of a conch shell with spur-like projections. An 1855 helmet by the equally famous Myochin family sports on its brim an exquisite relief of curling waves. And in an incense burner made around 1850, another Myochin shaped the lid in the form of a miniaturized helmet topped by the sculpted figure of a dragon flying through flames. The censer reminds us that, as peace wore on and the economy thrived, metalworking studios also created accessories for samurai with sophisticated tastes as well as a growing merchant class with deep pockets.

Then the ground shifted beneath them all after the military shogunate fell in 1868 and the Meiji Restoration began. Within a few years, samurai lost their class privileges as well as the right to carry swords; the new imperial ruler declared Shinto the state religion, marginalizing Buddhism; and a push to modernize the country and conquer European and American markets took hold.

WORCESTER ART MUSEUM (4)

Metalworkers were among the hardest hit. Buddhist temples stopped commissioning works. Samurai had no need for arms or armor. And, unlike potters, whose vessels Dutch merchants had been importing to Europe, metalworkers like the Myochin had to learn to cater to foreign tastes while cultivating and expanding their local clientele. The closest this display comes to the extravagant tours de force, sometimes up to six feet tall, that dazzled visitors at international expositions are the eye-popping reliefs on a pair of silver vases. Made by Hirayama Kantei between 1900 and 1916, they depict bantam chickens, every feather, talon and ridge of their combs rendered in detail with different alloys and gold.

Mostly, however, this display showcases the astute reuse of popular forms. The decorations on a three-tiered box by Takase Kozan, for example, are recycled sword guards, while his articulated figurine of a lobster (made around 1900) carries forward a prized specialty of the Myochin family—witness the impressively detailed dragon figurine next to it. It is easy to imagine how such works appealed not only to Japanese buyers eager to connect to the past, but to Western audiences excited by the exotic and admiring of skillfully handcrafted works in an age of increasingly industrial manufacture.

Last Defense: The Genius of Japanese Meiji Metalwork
Worcester Art Museum,
through Sept. 2

Ms. Lawrence writes about Asian and Islamic art for the Journal.

BURNING QUESTION

DOES LISTENING TO MUSIC HELP YOU FALL ASLEEP?

BY HEIDI MITCHELL

FALLING INTO a dream state can be anxiety-inducing for the around 25% of Americans who say they have difficulty sleeping most nights. Some turn to music, hoping gentle sounds will guide them to the land of Nod.

Though few studies have looked at the impact of music on sleep, one expert, Mathias Basner, an associate professor of Sleep and Chronobiology in Psychiatry at the University of Pennsylvania Perelman School of Medicine, explains how sounds can affect sleep and why rituals are the key to a restful night.

GREG CLARKE

Music and the Brain

The auditory system serves as a watchman, says Dr. Basner, who has studied the effects of ambient noise on sleep. "It never shuts down, constantly monitoring the environment looking for potential risks or dangers," he says.

The brain not only evaluates sound levels, but also content: In a 1960 study, names were played to research subjects as they slept. If the subject's name or that of a close relative was spoken, he was more likely to awaken than on the name of a stranger. "So it likely matters what sounds are being played while you're trying to fall or stay asleep," Dr. Basner says.

In a recent meta-analysis of 20 studies, 95% of 1339 insomnia patients, mostly in Asia, self-reported that listening to music was the best intervention to help them fall asleep. "But it is not clear whether the music was played while they were trying to fall asleep, or before sleep," Dr. Basner notes. Also unclear was what type of music that was most effective.

The Bedtime Ritual

Experts have standard rules on what is known as sleep hygiene: The room should be cold but not too cold; it should be dark and quiet; and you should follow rituals that signal it is time for bed. Brushing one's teeth, putting on pajamas and turning off the lights can be signals to the body that it's time to secrete melatonin, the hormone that helps humans feel sleepy.

Listening to music could also be a trigger for many people. "If you always play a James Taylor album to fall asleep, that could be part of your bedtime ritual, and it will help," Dr. Basner says. But he doesn't know of any studies that prove music will help you stay asleep, give you a more restful sleep, or if it has any effect on melatonin.

In laboratory and field studies on ambient noise—though not specifically music—the professor has documented dream sleep arriving later when people are exposed to external sounds, but he didn't find hard evidence that falling asleep is affected.

Sound Advice

The professor knows of one study that showed students who regularly listened to music to fall asleep dozed off faster in a lab with music than without. But as there were only around 12 participants, he doesn't believe the evidence is sufficient to recommend music to everyone. "One of the rules of sleep rituals is, 'whatever works for you,' and that might outweigh the results of this study," he says.

Still, if you want to listen to music to help you sleep, Dr. Basner suggests following a few guidelines. Because people typically fall asleep between five and 30 minutes after hitting the pillow, he recommends you set music to a half-hour timer. "That way you get the benefits from the ritual of falling asleep without the intrusion into your sleep state," he says.

One of the most important sleep stages happens during the first half of the night, he says, when critical neurological processes that aid in memory consolidation take place. At that point, the room should be silent.

Dr. Basner also suggests you choose music that is soothing: "If the music is of someone singing with real content and crescendos and decrescendos, that may well wake you up."

As for Dr. Basner himself? He prefers falling asleep to the sound of silence.

SPORTS

FIGURE SKATING

U.S. TEAM IS SET FOR GAMES

BY LOUISE RADNOFSKY

SAN JOSE, Calif.—Nathan Chen will head to the 2018 Winter Olympics as the great American figure skating hope, flanked by veteran skater Adam Rippon and another talented teenager, Vincent Zhou.

Chen has been undefeated in national and international competition this year. But he has also had few opportunities to go head-to-head with his chief international rivals, Japan's Yuzuru Hanyu and Shoma Uno and Spain's Javier Fernandez, when those competitors have been at their strongest.

The 18-year-old Chen said he had held back on a difficult, and riskier quadruple lutz jump at the U.S. championships this weekend because he wasn't feeling like he could perform it solidly, but said he expected to be able to offer hardier performances during next month's Olympic competition.

"Mistakes like that are costly," he said. "There will be some edits, I think, to the long program depending on how training goes, depending on how my body goes. I have this plan for myself and I think it's a strong one."

Rippon was named to the Olympic team based on his recent international performances.

Bradie Tennell, Mirai Nagasu and Karen Chen were selected on Saturday for the U.S. women's squad in Pyeongchang.

The relatively untested 19-year-old Tennell scrambled months of expectations by seizing the national title on Friday night.

Nagasu, who was passed over in a controversial selection decision in 2014, laid her claim to a berth to the Pyeongchang Games with a commanding free skate. Nagasu included completed, if imperfectly landed, triple-axel jumps in both her short and long programs, a difficult maneuver that no other female competitors in the world are expected to attempt at the Olympics.

EZRA SHAW/GETTY IMAGES

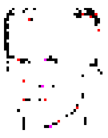
Nathan Chen leads the men's squad.

Alabama head coach Nick Saban looks on during a practice on Saturday.

ASSOCIATED PRESS

COLLEGE FOOTBALL | By Jason Gay

Cult of Saban Worshipers



I want to confirm the rumors: I'm officially pursuing Nick Saban...to coach my son's T-ball team this spring.

I can't offer a lot of money. It will be a pay cut from the $11 million or so Saban is making to coach football at the University of Alabama. I think I can pay him...well, I've got 32 bucks here in my pocket.

He can have all of it.

The kids? Saban's going to love them. They're some of the most adorable 4-to-6 year olds you've ever seen. They run around the bases backward. They make fart noises on the bench. They sob when the ice cream truck drives away.

I know it's just kiddie T-ball, but I think Nick Saban can mold them into champions.

Everybody thinks Saban can do this with their club. On Monday night, the 66-year-old West Virginia native takes his Crimson Tide into yet another national championship contest, this one versus SEC rival Georgia. Alabama has appeared in five of the last eight college football title games, winning four of them.

A few plays here and there, and they could have had more.

It's a good of a run as anyone's had in modern college football, and it's why, in an era of frequent over-superlatives, the skeptics among us don't laugh when Saban is described as the Greatest of All Time.

Saban's done it his own, sui generis, disciplined, grim-faced way. I don't need to tell you that the Alabama coach is not a charisma bomb. He isn't out to charm the universe with folksiness. When he cracks the door to his inner self, the revelations are not terribly eccentric. Saban enjoys listening to classic rock. He has two cups of coffee in the morning (and also famously enjoys Little Debbies). He is vexed by the usual things people from his generation are vexed by; for instance, he doesn't understand why kids today wear designer blue jeans that are faded with intentionally-cut holes.

> Rather than believing his own headlines, Nick Saban appears to live for the grind.

"I just remember when I was a kid...I was ashamed to go to school because my jeans were [worn out]," he said earlier this season. "Now they buy them that way. I just can't figure out: How did we get here?"

Wonderment like that make him sound his age, but Saban's currency in college football is as great as ever. Alabama remains absurdly dominant. They lost last year's championship to Clemson, and partly owe their place in this game to the favor of the playoff committee—Alabama missed the SEC title game because of a late loss to Auburn, and their selection over Big Ten champ Ohio State was contentious. And yet now they're 12-1 after thumping top-seeded Clemson, and a mild favorite against Georgia, and here's the list of people will be shocked if they get another trophy on Monday night:

[Cricket noises.]

They're a stunning model of consistency. I get queasy at all the coach worshiping that happens in college sports—the gushing gets fairly barf-tastic, especially on TV, and the salaries are nutso—but Saban's impact is undeniable. The names routinely change around him, but the Tide are in the title mix year after year; rather than believing his own headlines, the man in charge appears to live for the grind. The only football coach in his airspace is his friend, Bill Belichick, whose no-fools-suffered title-hoarding in New England is almost, well, Saban-like.

There's a belief among Saban obsessives that the coach has softened somewhat in recent years; he'll still unleash the occasional fury on the sidelines, or dead-eye a media question he deems annoying, but there are (small) signals of a mellowing. You get Saban doing the Electric Slide at his daughter's wedding. You get him cannonballing off his boat house fully clothed, with Tim Tebow and the ESPN analyst Marty Smith. You getting him holding forth at a news conference the other day about the meditations on stoicism of Marcus Aurelius, which help drive Saban's own personal philosophy, dubbed "The Process."

"It's basically about [learning] how to control the things you can control, and not get too upset about the things that you can't control, so that at least what you can control, you have a chance to make better."

Marcus A. would be proud: Saban appears in harmony with his universe. Continuity has probably helped. He has now been at Alabama more than twice as long as any of his prior coaching stops. Rumblings of his departure will never truly cease—he'll always be at the top of the dream list when a big job opening happens—but the image of Nick the Itinerant has faded into the rear view.

On Monday, with a crowd that will include the President of the United States, Saban faces one of his former assistants in Georgia's coach, Kirby Smart. There's a wild stat out there that Saban is 11-0 coaching against his apprentices. He brushes this off this by saying if his assistants had a team like the century Crimson Tide, that record would not look like it does. That's charitable, because it ignores the reason the Tide are what they are:

Him.

He's one of a kind. And I haven't even mentioned his fantastic hair.

This is why we need Nick Saban, up here, when spring T-ball season starts. We are mostly potty-trained, and we can pay attention for nearly 90 seconds, but we need some tough love if we're ever going to win it all.

I think I can get the salary up to 33 bucks a year.

Nick, call me.

Weather

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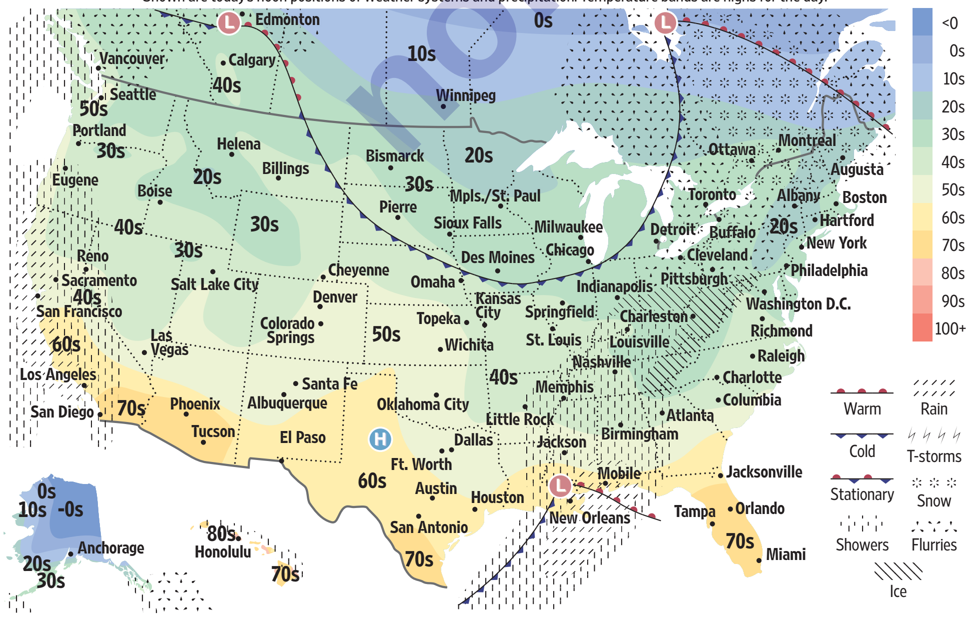
Shown are today's noon positions of weather systems and precipitation. Temperature bands are highs for the day.



U.S. Forecasts

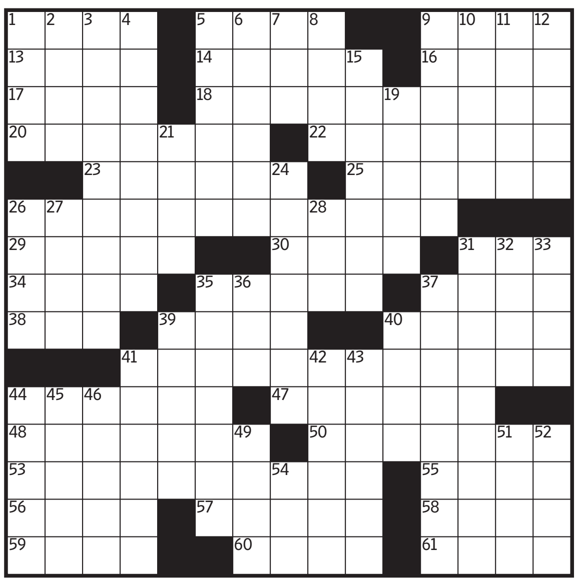
s...sunny; pc... partly cloudy; c...cloudy; sh...showers; t...t'storms; r...rain; sf...snow flurries; sn...snow; i...ice

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Anchorage	16	4	s	10	3	s
Atlanta	45	38	r	56	48	c
Austin	65	36	s	61	41	s
Baltimore	33	28	i	45	23	pc
Boise	44	35	c	44	31	r
Boston	34	29	sn	38	19	pc
Burlington	30	28	sn	32	10	c
Charlotte	40	33	c	57	37	pc
Chicago	36	17	c	38	30	s
Cleveland	36	23	sn	35	25	pc
Dallas	58	36	s	57	46	s
Denver	58	35	pc	64	36	pc
Detroit	38	21	sn	33	23	pc
Honolulu	82	70	pc	83	69	pc
Houston	60	47	s	62	50	pc
Indianapolis	39	21	sn	38	32	pc
Kansas City	45	27	pc	47	36	pc
Las Vegas	57	49	c	58	44	r
Little Rock	48	39	r	47	44	pc
Los Angeles	66	55	r	58	48	r
Miami	77	68	sh	77	67	t
Milwaukee	37	20	pc	35	29	s
Minneapolis	31	17	s	37	32	pc
Nashville	42	37	r	50	43	c
New Orleans	67	54	r	66	55	c
New York City	31	29	sn	40	21	pc
Oklahoma City	52	30	s	57	41	s
Omaha	41	26	s	44	31	pc
Orlando	72	58	pc	76	62	sh
Philadelphia	33	29	sn	41	21	pc
Phoenix	76	58	c	75	48	r
Pittsburgh	36	28	sn	38	23	pc
Portland, Maine	29	21	sn	36	11	pc
Portland, Ore.	46	40	c	46	38	r
Sacramento	57	50	r	58	46	sh
St. Louis	43	26	c	43	37	pc
Salt Lake City	44	37	c	51	35	r
San Francisco	59	52	r	58	48	sh
Santa Fe	53	30	pc	58	34	s
Seattle	51	42	c	48	40	c
Sioux Falls	34	22	s	40	25	pc
Wash., D.C.	37	31	i	47	28	pc

International

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Amsterdam	38	32	pc	41	39	c
Athens	61	51	pc	60	49	pc
Baghdad	70	42	s	67	42	s
Bangkok	91	77	t	91	76	pc
Beijing	36	22	pc	36	14	s
Berlin	34	28	pc	41	36	sh
Brussels	42	36	pc	45	42	c
Buenos Aires	92	67	s	90	69	s
Dubai	73	61	pc	73	61	s
Dublin	41	38	pc	47	36	r
Edinburgh	37	32	pc	41	33	c
Frankfurt	46	41	c	47	39	c
Geneva	50	41	c	48	38	r
Havana	81	60	pc	77	58	sh
Hong Kong	68	47	r	55	53	r
Istanbul	57	49	pc	56	48	c
Jakarta	90	77	sh	88	76	sh
Jerusalem	58	40	s	59	41	s
Johannesburg	93	60	pc	80	57	t
London	43	37	c	45	42	c
Madrid	47	24	pc	41	36	r
Manila	88	75	pc	89	76	c
Melbourne	74	57	c	70	56	pc
Mexico City	70	39	pc	72	41	pc
Milan	53	48	r	53	38	r
Moscow	32	22	sn	27	20	pc
Mumbai	83	69	pc	85	71	pc
Paris	47	36	pc	47	41	c
Rio de Janeiro	85	74	sh	88	74	t
Riyadh	65	41	s	65	39	s
Rome	66	53	pc	60	45	t
San Juan	84	75	pc	84	74	pc
Seoul	38	23	c	31	17	c
Shanghai	41	27	r	41	27	s
Singapore	84	77	c	85	75	t
Sydney	91	74	c	89	69	t
Taipei	71	50	r	55	51	r
Tokyo	57	53	r	63	40	pc
Toronto	37	24	sn	32	17	c
Vancouver	45	36	r	43	33	c
Warsaw	33	23	pc	36	31	pc
Zurich	47	35	pc	47	34	c

The WSJ Daily Crossword | Edited by Mike Shenk



PACK OF WORDS | By Martin Leechman

Across

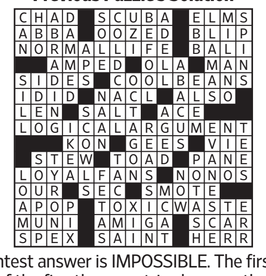
1 Tosses in
5 Brouhaha
9 Croft of the Tomb Raider games
13 Wrongdoer, in cop lingo
14 Neighborhoods
16 "Oh, sure!"
17 Prophet
18 It's the equivalent of eight chops
20 Letter after delta
22 Russia's setting
23 Chaotic mix-ups
25 Polite detail
26 One of the one-eyed face cards
29 People put on pedestals
30 Building annexes
31 Halloween mo.
34 Fill with cargo
35 Godliness
37 Chase away
38 Caustic solution
39 Not spicy
40 Enjoyed 55-Across
41 Remote spot
44 Vancouver hockey player
47 Leafy lunches
48 Admitted to an embarrassing error
50 Assign a new name to
53 1527 act committed by Emperor Charles V's army
55 Colorado resort
56 Sommer of movies
57 Like some scofflaws
58 Sicilian smoker
59 Take it easy
60 Salts
61 Projectionist's unit

Down

1 Church section
2 Like the Marianas Trench
3 It may forbid offensive T-shirts
4 Light rain
5 Remote
6 Remote planet
7 Jiffy
8 Benefit
9 Fragrant flowers
10 Bring low
11 Send, as payment
12 Cornered
15 One way to be defeated
19 Happy Meal component
21 Cambodia neighbor
24 Some swimsuits
26 She came tumbling after
27 The Beatles' "___ in the Life"
28 PC key next to the space bar
31 Home of the Buckeyes
32 Ethan or Joel of "Fargo" fame
33 "Meet the Press" host Chuck
35 Catch between bases
36 Variety
37 Down-to-earth sort?
39 Computing shortcut
40 Board membership
41 Moviegoer's popcorn buy
42 Expert in the field, literally
43 Is in need of a tourniquet
44 Burglar's advance man
45 "___ of Two Cities"
46 Bottle parts
49 Subpoena, for one
51 Checkout annoyance
52 Israeli carrier
54 Words with tear or tangent

▶ Solve this puzzle online and discuss it at **WSJ.com/Puzzles.**

Previous Puzzle's Solution



The contest answer is IMPOSSIBLE. The first words of the five theme entries become their opposites by adding a prefix: (AB)NORMAL, (UN)COOL, (IL)LOGICAL, (DIS)LOYAL and (NON)-TOXIC. Remove each of those prefixes' letters from the answer to one of the five clues with parenthetical numbers and arrange the leftover letters in the order indicated by the numbers to spell the contest answer.

OPINION

Unicorns Need IPOs

INSIDE VIEW
By Andy Kessler

Get ready for the Unicorn Jailbreak. Tech stocks have taken off this year like a bat out of hell. But several hundred startups valued at over $1 billion, so-called unicorns, are watching with envy. Sure, 57 startups became unicorns in 2017, according to Recode. Their valuations are rising with venture-capital money, but what's the fun in that? Liquidity is where it's at.

This market is dominated by investors suffering from split personality disorder, rotating between risk-on and risk-off modes. Risk off means uncertainty and caution—and investors avoid risk like they're retiring next week. Today the market is definitely risk on. Heck, the Cboe Volatility Index, or "fear gauge," briefly hit an all-time low last week.

It's time for the whole blessing of unicorns—look it up—to break out, hit the public markets and trade every day like real companies. Spotify has done a confidential filing for a direct listing on the New York Stock Exchange. It's a great start, but others will need a bigger splash.

I've rarely seen a frothier market. Fed-driven low interest rates mean investors are begging for things to buy. They're chasing mirages like cryptocurrencies and initial coin offerings. Calpers just raised its equity allocation, more as a magic wand to stave off municipalities actually kicking in more dough. But no matter, they need stock. As they say on Wall Street, when the ducks are quacking, feed them.

Where are all the IPOs? One problem is that SoftBank's $93 billion Vision Fund is bagging unicorns like Teddy Roosevelt shooting wild buffalo from his train. It put $4.4 billion into office-space provider WeWork, $2.5 billion into the Indian online retailer Flipkart, and $1 billion into Fanatics, which sells football jerseys. And don't forget the $7 billion it just invested in Uber, shrinking the ride-sharing giant's valuation to $45 billion from $68 billion at the previous round. Only public markets can judge whether these valuations are right. For now, it's shoot and wish.

Some worry about recent initial public offerings. Snap is still below its opening price. Meal-prep company Blue Apron stayed in the oven too long and its stock burned to $4. On the other hand, newly public companies Stitch Fix and Roku are well up over their offering price. Time to make the doughnuts.

There are so many great new companies and, be warned, plenty of duds. How can you tell them apart? Let the market sort it out. Slack is almost the standard for in-company chats. Uber's highly reported problems show up everywhere but its growth rate. Airbnb booked three million guests on New Year's Eve, up from 1,400 in 2009.

The more companies are publicly traded, the faster information gets into the market.

Bring the new batch on: Robinhood, Peloton, Dropbox, Xiaomi, Pinterest, Houzz, Compass, GitHub. Even Reddit, valued at $1.8 billion this past summer, should go public. Then there's Leonardo DiCaprio-backed Rubicon Global, which automates trash collection and recycling. IPO Leo! The market could absorb a deal a day.

For all I know, since financials are annoyingly hard to come by, all these companies are in the red. Uber certainly is, losing almost $1.5 billion in the third quarter of 2017. But in a risk-on phase, investors don't care if you're losing money—for now! Just show what the company will look like in five years.

I hear all the time that companies are not ready or are too nervous to go public. They should get a grip. If a company is afraid to go public—with all the transparency and responsibility that entails—it shouldn't be in business. Being public provides cheap capital, compensation to attract talent, and a currency for acquisitions. Ask Facebook. If I were an investment banker, I'd be shaking the trees for deals. If managements and boards of directors don't take companies public in this forgiving market, they're guilty of malfeasance and shirking their fiduciary duty.

The economy needs this. The more companies are publicly traded, the more information quickly gets into the market. This is especially important in innovative industries. And for several years now, venture capitalists have been putting more into startups than they have been taking out in exits. That can't last forever. Capitalism can't perform at its highest potential with large opaque companies.

But if there is a Unicorn Jailbreak, don't buy with your eyes closed. Study management teams and competition. Not many unicorns will turn into the next Facebook or Amazon. Or even be around in a decade. There is no guarantee this ends well. Companies are racing Fed rate increases, the ultimate IPO party pooper. The risk-off time will come soon enough. Until then, party like it's 1999.

The Reinvention of Mexico's López Obrador

AMERICAS
By Mary Anastasia O'Grady

This will be a big year for Mexico, with a presidential election in July. Legendary leftist Andrés Manuel López Obrador is running as the anti-corruption candidate. It's the 64-year-old's third run for president, and this time he's framing himself as a crusader against what he calls a rigged system.

Mexico is an increasingly urban nation with a rising middle class that has widely benefited from economic modernization over the past three decades. Mr. López Obrador has spent a political lifetime fighting this change. From deregulation to constitutional reforms in energy, banking and telecommunications to trade, he has consistently been on the wrong side of history.

Mr. López Obrador does not seem to have given up on his dream to revive Mexican corporatism, in which government intervenes heavily in the economy. But he does recognize that his economic instincts are a liability in a national election. So he's playing them down and marketing himself as a moderate who will defeat crony capitalism and champion social justice.

The promise to fight corruption strikes a chord with Mexicans, and Mr. López Obrador leads with a plurality in early polling in a race that is likely to feature more than three candidates. But he has two important vulnerabilities. First, there are major contradictions between his economic agenda and the aspirations of the young nation. Second, he is not always viewed by Mexicans as the squeaky-clean messiah he makes himself out to be.

Mr. López Obrador began his political career in Tabasco state as a member of the corporatist Institutional Revolutionary Party, known by the Spanish acronym PRI. He left the PRI in 1989, but not because his politics changed. Rather it was because the PRI had begun to swing toward economic liberalism under the guidance of U.S.-educated technocrats. Mr. López Obrador was among the party stalwarts who bolted to form the socialist Revolutionary Democratic Party, or PRD.

Over the years he has earned a reputation as a populist demagogue who uses the streets when democratic institutions block his path to power. After narrowly losing the presidential race in 2006 to Felipe Calderón, he organized roadblocks and set up camp in Mexico City for months to protest. When he lost in 2012 to Enrique Peña Nieto, he again claimed fraud. In 2014 he launched a new socialist party called the National Regeneration Movement, or Morena.

Mr. López Obrador's platform promises fiscal and economic stability while redirecting more government resources to infrastructure and spending on health care, pensions and education to foster economic growth. That sounds tame enough. But there is little empirical evidence that countries create wealth via government spending and transfer payments.

This time the left-wing populist is running as a moderate. Will voters buy it?

There is also reason to doubt Mr. López Obrador's pledge of moderation. Morena's "declaration of principles," posted on its website, asserts that the liberalization of the economy is part of a "regime of oppression, corruption and privileges." And that it is the work of "a true Mafioso state built by a minority of concentrated political and economic power in Mexico." If that's what Mr. López Obrador believes, fixing it would seem to require more of a socialist revolution than he proposes.

Mr. López Obrador's attempt at branding himself as a paragon of rectitude isn't selling everywhere. In the town of Iguala, in the southern state of Guerrero, the locals are particularly suspicious, according to a report in the U.S. newspaper La Opinión.

It was in Iguala that 43 college students were arrested by the municipal police in 2014 and never seen again. Investigators now believe the students were handed over to a drug-trafficking gang that is allegedly in control of a faction of the local police.

Residents of Iguala told La Opinión that the gang moved into the town only after José Luis Abarca became its mayor with Mr. López Obrador's backing. One local told La Opinión that Mr. López Obrador ignored warnings from townspeople that Mr. Abarca had ties to the cartel.

Mr. Abarca is now in jail on charges that he masterminded the disappearance. He has stated that it was "something that I didn't have anything to do with." Mr. López Obrador has accused the army, and by extension the federal government, of complicity in the disappearances. He says that if he wins the election he will form a commission to investigate what happened, and "give protection" to those who have been arrested, because "there are many doubts." He has denied knowing Mr. Abarca, though photos of the two have surfaced. He says he is often photographed with strangers.

In December Mr. López Obrador shocked the nation by proposing amnesty for drug kingpins in exchange for peace with the cartels. In a country that needs to strengthen the rule of law, that raises even more questions about the self-styled the anticorruption candidate.

Write to O'Grady@wsj.com.

Raise Wages via Growth, Not Mandates

By Andy Puzder

The formula is simple: When the economy accelerates, employers compete for employees and wages increase. I experienced this during my 17 years as CEO of a national quick-service restaurant chain. The stronger the economy, the harder it was to get good employees. Conversely, when growth is weak, as it was during most of the Obama presidency, employees compete for jobs and wages stagnate.

President Trump's regulatory rollback is driving an economic surge few anticipated. Tax reform promises to accelerate that growth by encouraging business investment and eliminating the perverse incentives that drive companies, jobs and investments to other countries. The true test for these pro-growth policies is whether they result in a more participatory economy, in which workers' incomes meaningfully increase over the long run. The early results are promising.

The left's proposed solution to wage stagnation has been for government to mandate increased wages by more than doubling the minimum wage from $7.25 to $15 an hour. That causes employers to eliminate jobs and reduce hours to offset their increased costs. To increase wages without these unintended consequences, you need economic growth.

American workers are already benefiting from tax reform.

Democrats once understood that. President Kennedy referred to economic growth as the "tide that lifts all boats." Yet no Democrats voted for tax reform in December. House Minority Leader Nancy Pelosi warned of "Armageddon." Sen. Bernie Sanders called it "a disaster." Sen. Elizabeth Warren claimed Republicans were "just delivering one gut punch after another to hardworking people."

That "gut punch" turned out to be bigger paychecks. After the GOP passed its tax bill, major U.S. employers including AT&T, Bank of America, Boeing, Wells Fargo, Fifth Third Bank, Comcast NBC Universal and Sinclair Broadcasting immediately committed to investing billions in growth, special bonuses or higher wages. Wells Fargo and Fifth Third are *voluntarily* increasing their base wages to $15 an hour.

Democrats criticized these commitments as publicity stunts designed to get favorable treatment from the Trump administration. But they miss the economywide significance of this investment. Businesses compete for the best employees. If you want the best, you pay the going rate. With regulatory relief, tax cuts and the increased business that comes from economic growth, employers now have the resources to bid up wages. Competition will spread those increases without the unintended consequences of a dramatic minimum-wage increase.

That competition kicked in almost immediately as more than 100 diverse businesses, including Wisconsin-based Associated Bank, North Carolina-based BB&T Corporation, Pennsylvania-based PNC Financial Services Group, New Jersey-based OceanFirst Financial Corp., Georgia-based Sun Trust Banks, Minnesota-based US Bank, the Bank of Hawaii, and South Carolina-based Nephron Pharmaceuticals announced pay hikes for workers within two weeks of the tax bill's passage.

Both the competition for employees and the associated wage increases will continue—if government stays out of the way. Wage growth doesn't come from government mandates. It comes from policies that get the economy moving. It's just unfortunate that it took so long for us to elect political leaders who understand that.

Mr. Puzder is a former CEO of CKE Restaurants.

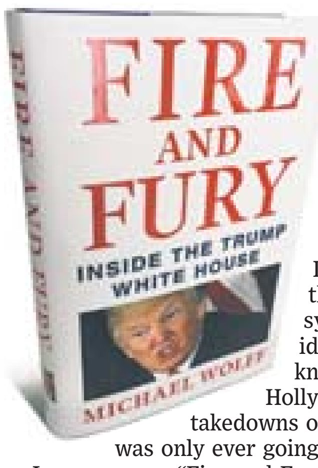
BOOKSHELF | By Barton Swaim

The Hour Of the Wolff

Fire and Fury

By Michael Wolff
(Holt, 321 pages, $30)

Michael Wolff has done what the rest of us chump writers can only dream of: He has gotten himself and his book denounced by a sitting U.S. president on live television. That, together with a cease-and-desist letter sent from the president's attorneys to the publisher, will ensure not only that the book makes Mr. Wolff a truckload of money but also that it gets talked about for a generation. "Fire and Fury: Inside the Trump White House" is thus in a class with Salman Rushdie's "Satanic Verses"—by itself a forgettable book, certainly not Mr. Rushdie's best, but remembered forever as having provoked a death sentence from Iran's Ayatollah Khomeini.



Mr. Wolff was allowed to lurk around the White House for something like six months, presumably because someone in the first days of Donald Trump's administration thought he would write a sympathetic account. It was an idiotic decision. Mr. Wolff is known in New York and Hollywood for his withering takedowns of popular public figures; he was only ever going to write one kind of book.

In one sense, "Fire and Fury" is a typical piece of "access journalism," as it's known, like many titles by Bob Woodward or, on the more gossipy side, like the "Game Change" books by Mark Halperin and John Heilemann. Mr. Wolff takes the genre to another level, and perhaps a lower level. If he has employed objective criteria for deciding what to include or exclude, it's not clear what those criteria are. By the looks of it, he included any story, so long as it was juicy. We're told, for instance, of Mr. Trump's supposed method of bedding other men's wives in his pre-presidential days; of Mr. Trump's promise to his wife, who had no interest in being first lady, that everything was OK because he wasn't going to win anyway; of the president's scolding of the White House cleaning staff for picking up his shirt from the floor ("If my shirt is on the floor, it's because I want it on the floor"); and many other such weird tales.

Former chief political strategist Steve Bannon was evidently the source of the book's most staggering revelations—if "revelations" is the right word for the sort of titillating office gossip that Mr. Wolff reports as fact. A typical story: Mr. Bannon, in a heated argument with the president's daughter Ivanka, called her a "liar"—with a choice modifier to go with it. This took place in front of the president. The father's response: "I told you this is a tough town, baby."

The author writes as if he were the omniscient narrator of a novel, offering up assertions that are provocative but often conjectural.

Perhaps the book's most important passage appears in the Author's Note ahead of the narrative itself. There Mr. Wolff explains how he assembled what he learned from his interviews. "Many of the accounts of what has happened in the Trump White House," Mr. Wolff writes, "are in conflict with one another; many, in Trumpian fashion, are baldly untrue. Those conflicts, and that looseness with the truth, if not with reality itself, are an elemental thread of the book. Sometimes I have let the players offer their versions, in turn allowing the reader to judge them. In other instances I have, through a consistency in accounts and through sources I have come to trust, settled on a version of events I believe to be true."

Thus has Mr. Wolff encountered the most commonplace problem of reporting: what to do when two sources make contradictory claims. A responsible reporter, or one more scrupulous than Mr. Wolff, would seek out corroborating evidence or do more research. Mr. Wolff simply "settles" on his preferred version.

But maybe Mr. Wolff's approach isn't so unconventional. Much of his writing is sheer pronouncement—not the reporting of facts or the weighing of evidence but merely the stringing together of unverifiable assertions. These assertions are sometimes idiosyncratic, more often conventional; but almost always they are conjectural, no more provable or valuable than the crotchets of a barroom political junkie.

Mr. Wolff often writes as if he were the omniscient narrator of a novel. One example, taken more or less at random from a passage on Attorney General Jeff Sessions's decision to recuse himself from the Russia investigation: "Sessions was certainly not going to risk his job over the silly Russia business, with its growing collection of slapstick Trump figures. God knows what those characters were up to—nothing good, everybody assumed. Best to have nothing to do with it." This and many similar claims may be true or false, but they are highly interpretive and resistant to empirical verification. It seems unlikely that Mr. Wolff interviewed Mr. Sessions, and unlikelier still that the attorney general told him any such thing about his own thoughts on recusal. How does Mr. Wolff know then?

Mr. Wolff has been hotly criticized by prominent members of the news media for his slipshod reporting, but in this regard his manner isn't so different from much of today's political journalism—not just books of access journalism like this one but the day-to-day reporting issuing from our most prestigious news outlets. Reporters, especially though not exclusively political reporters, are more interested in the meaning of facts than in the facts themselves. They're concerned with interpretation rather than accuracy, with "narrative" rather than detail, with explaining rather than disclosing, with who's happy or angry about a story rather than whether it's true, with what's likely to happen next week or next year rather than with what happened yesterday.

If Mr. Wolff had considered it his job to tell us what happened, and not merely to offer up his own clever interpretation of what happened, he might not have felt emboldened to repeat every unseemly tidbit he could extract from murmuring White House staffers. But then he wouldn't have gotten rich.

Mr. Swaim, the author of "The Speechwriter: A Brief Education in Politics," writes a column on political books for the Weekend Journal.

OPINION

REVIEW & OUTLOOK

Trump's ObamaCare Lifeboat

The Trump Administration is on a mission to rescue health-care markets and consumers from ObamaCare's shrinking choices and higher prices. Witness the Labor Department's proposal to allow small businesses to band together to provide insurance on equal footing with corporations and unions.

New rules could make association health plans a realistic alternative.

The share of workers at small businesses with employer-sponsored health benefits has dropped by a quarter since 2010 as insurance costs have ballooned in part due to government mandates. About 11 million workers employed by small businesses are uninsured. Some businesses have dropped their workers onto state insurance exchanges where premiums are subsidized by taxpayers.

Enter President Trump, who last fall directed Labor Secretary Alexander Acosta to consider "expanding the conditions that satisfy the commonality-of-interest requirements" for association health plans under the Employee Retirement Income Security Act, or Erisa.

Large-group plans that are self-insured—i.e., funded by unions or employers—are covered by Erisa. These plans are exempt from ObamaCare's essential benefits requirements, though they must comply with rules on annual and lifetime limits and pre-existing conditions as well as state solvency regulations.

Mom-and-pop businesses and sole proprietors aren't so lucky. Most purchase coverage from insurers in the small group or individual marketplaces, which are subject to ObamaCare's coverage mandates and controls on premium prices. The Obama Administration precluded small employers from forming association plans that are exempt from Erisa by narrowly interpreting the "commonality of interest" membership requirements.

But on Thursday Mr. Acosta proposed a new rule-making that would broadly define "commonality of interest" among employers to include geographical area—say, a metropolitan area or state—as well as an industry, trade or profession. Local chambers of commerce and national industry groups could thus sponsor plans. The rule would also treat sole proprietors as both employers and employees, which would allow independent contractors—e.g., Uber drivers or freelance journalists—to form or join association plans.

Liberals are howling that President Trump is trying to destroy ObamaCare exchanges. But millions of small business workers and proprietors are uninsured because they can't afford coverage on the exchanges. Many sole proprietors who earn too much to qualify for subsidies have been squeezed by soaring premiums.

Association plans could reduce costs by spreading administrative burdens and actuarial risks over more workers. The exemption from ObamaCare's benefit mandates would also give groups more flexibility to design plans to meet worker needs. Young restaurant workers might be able to purchase less expensive plans. Small businesses would also have more leverage to negotiate lower prices with drug companies and providers.

Workers couldn't be denied coverage or charged more because of their health status, which will limit the flexibility and potential costs reductions in association plans. Such plans would also still have to comply with state regulations, which might limit their growth. But states could facilitate their expansion with reciprocity agreements that would allow, say, Wisconsin to recognize any association plan approved by Michigan or Indiana.

As new alternatives develop, the state exchanges may evolve into high-risk pools for the individuals hardest to insure. These might be less expensive for taxpayers to subsidize than the status quo that raises premiums for everyone. Workers in counties where only one or two insurers offer plans on the exchanges would have more options. Insurance companies would face more competition, which could reduce costs.

The Trump Administration can't fix all of ObamaCare's problems with deregulation, but it can at least provide some struggling Americans with lifeboats such as association health plans.

A Jesuit School Gets Dogmatic

Marquette is a Jesuit university in Milwaukee. Which is appropriate, because jesuitical is the word that fits its explanation for firing a tenured political science professor who defended a student who was badly treated by an intolerant graduate instructor.

Is Marquette's promise of academic freedom worth anything?

The sacked professor is John McAdams, who in 2014 wrote a blog post criticizing by name Cheryl Abbate, who taught a course on ethics. Ms. Abbate had told a student he could not express his disagreement with same-sex marriage in her ethics class because it was "homophobic" and on that issue there could be no debate.

In his post on the incident, Mr. McAdams made no judgment on same-sex marriage. But he noted that liberals are inclined to deem views they disagree with as offensive and then use that to shut down debate. The story went national.

Marquette officials took action—against Mr. McAdams. He was blamed for the hate mail that Ms. Abbate received after he named her, even though there's no evidence he was part of any of it. Marquette President Michael Lovell gave him an ultimatum: apologize or be suspended without pay indefinitely. Mr. McAdams refused to apologize and has been effectively fired.

He's also suing, and last May a Wisconsin trial court backed the university's dismissal. But Mr. McAdams has appealed and wants to go straight to the state Supreme Court. The Wisconsin Institute for Liberty and Law, which has taken his case, says the firing violates Mr. McAdams's contract with Marquette, which promises freedom from threats of dismissal over constitutional rights such as free speech.

As a private institution, Marquette has the right to set its own employment standards and it needn't abide by the First Amendment. But it is hard to square Mr. McAdams's dismissal with any reasonable understanding of Marquette's contract guaranteeing him academic freedom.

We wish these issues weren't left for courts. But when institutions such as Marquette are unable to handle what should be the normal give and take of debate, they invite that intervention. How much better we'd all be if Marquette would acknowledge its mistake and give the professor his job back.

Book Banning Bunkum

One reason many Americans don't trust the media is because they treat every Donald Trump outburst as a Defcon 1 level threat to the survival of the republic. The latest example is the panic over Mr. Trump's legal threat to the publisher of Michael Wolff's book and his lament that libel laws are too weak.

Trump's feckless bluster isn't a threat to the First Amendment.

Mr. Trump had his lawyer send a letter on Thursday to Henry Holt demanding that it "cease and desist" publication of Mr. Wolff's book. This is a longstanding Trump tactic designed to underscore his claims that a book or article is false. Invariably the threat vanishes as the controversy does.

Mr. Trump tried this with us when we criticized one of his debate performances during the presidential campaign. His lawyer sent a letter threatening the Journal and the editor of these columns, in his personal and professional capacity, with a defamation suit if we didn't apologize and retract the editorial. We ignored the letter, repeated the criticism, and Mr. Trump dropped the subject.

Mr. Wolff's book may be partly imagined, as his work often is, but that is no reason to block its publication. Unless an author has violated national security, or some contractual agreement with an agency like the CIA, no court is going to ban a book in advance of publication. The Supreme Court declared such "prior restraint" on free speech unconstitutional in the landmark *Near v. Minnesota* case in 1931. Henry Holt knows this and responded to Mr. Trump's letter by moving up the publication date.

Mr. Trump's libel lament is also familiar and feckless bluster. "Libel laws are very weak in this country. If they were strong it would be very helpful," Mr. Trump said on Saturday at a press event, joining the queue of politicians who wish they could sue journalists.

In February 2016 as a candidate, Mr. Trump declared: "One of the things I'm going to do if I win, and I hope we do and we're certainly leading. I'm going to open up our libel laws so when they write purposely negative and horrible and false articles, we can sue them and win lots of money." The difference now is that he's not even claiming he can change the libel laws; he's merely griping about them.

Our media friends won't admit this, but Hillary Clinton posed a far more dangerous threat to free speech when she made rewriting the First Amendment part of her 2016 platform. Like most Democrats, Mrs. Clinton wants a constitutional amendment to overturn the Supreme Court's 2010 *Citizens United* decision on campaign contributions and free speech.

Readers may recall that *Citizens United* involved an attempt to bar the broadcast of an anti-Hillary movie. During oral arguments Deputy Solicitor General Malcolm Stewart admitted that under the law at the time the government could ban the publication of a book critical of a candidate. "We could prohibit the publication of the book using the corporate treasury funds," Mr. Stewart said. *Citizens United* ruled otherwise, but Mrs. Clinton's attempt to overturn it poses a far more tangible threat than Mr. Trump's cease-and-desist letter.

All the more so because a Democratic Congress would likely try to rewrite the First Amendment, and states run by Democrats would ratify it. Republicans have shown little interest in changing state libel laws. When Mr. Trump poses a real threat to press freedom, we'll let you know. And we won't cry wolf.

LETTERS TO THE EDITOR

Trump Is Not Turning U.S. Into an Autocracy

Regarding your editorial "About That Trump 'Autocracy'" (Jan. 2): It is good New Year's news that U.S. constitutional speed bumps and barriers remain in place, but the not-so-good news is that other vital institutional checks and balances have disintegrated.

As you note, Mr. Trump's agenda mostly subtracts power and resources from Washington, not exactly the typical authoritarian path to absolute state power. In fact, it is President Trump's threat to statism that energized the progressive social-justice resistance and turned traditional institutional checks and balances into partisan enemies of the White House. One wonders what happens when the political worm turns again and all-in progressive institutions give free rein to a future progressive administration. Can the U.S. constitutional foundation bear the weight of fully partisan institutional forces on college campuses and in newsrooms, Hollywood and federal bureaucracies?

When America's democracy was in its infancy, Alexis de Tocqueville warned of a risk that citizens would surrender their freedom without a struggle when a subtle version of despotism surfaced to foresee and supply necessities, manage personal concerns, direct industry and divide inheritances: "Why should it not entirely relieve them from the trouble of thinking and all the cares of living?" Today's antifascist resistance in prominent institutions that previously served as checks and balances on political power may be too heavy a load for the U.S. constitutional system of governance. A rogue president with alleged evil designs on authoritarian power and plans to weaken the state has met fierce resistance from institutions that were, or pretended to be, nonpartisan. A subsequent progressive leader with righteous social-justice designs on authoritarian power may encounter little institutional resistance that used to augment constitutional checks and balances.

JOHN FINLEY
Hampton, Va.

We should remember that symbols and words matter. We might be grateful that President Trump hasn't yet moved to shut down the mainstream "fake news" media, for example, but the notion should never even be floated by a responsible president. As history sadly reminds us, the action behind such words often is only one emergency—real or manufactured—away.

PROF. DAVID W. OPDERBECK
Seton Hall University School of Law
Newark, N.J.

While political factors have limited Mr. Trump's power, he has voluntarily greatly reduced the chance for any "autocracy" in the U.S. His deregulatory policies in all dimensions have made it much more difficult for any potential autocrat to gain excessive power. For just one example, eliminating "net neutrality" has made it much more difficult for any government to regulate communications, a sine qua non of autocracy. As Friedrich Hayek's "The Road to Serfdom" has shown us, the creeping power of government makes dictatorship possible, and Mr. Trump has assiduously worked hard to reduce this power.

PROF. PAUL H. RUBIN
Emory University
Atlanta

Germans Socialize Their Kinder Differently

My two younger children attend a kindergarten that loosely fits the description of German kindergartens described in "Let the Children Fight It Out" (Review, Dec. 30), but there is much more involved than a hands-off approach of letting the kids fight. German kindergartens and elementary schools teach accountability and responsibility at a young age, and they expect the kids to toe the line. This is evident in how my older children are treated in the *Grundschule* (elementary school). Teachers do single out children when they misbehave and display their names on the board, colored behavior chart or otherwise, for everyone else to see. They do single out the kids who don't complete their homework. Everyone knows the smart kids in class as well as those pupils who need more help on their homework.

Before first grade, students are evaluated by a doctor to see whether they are able to start school. If they are deemed unfit, they go into a "pre-first grade" or *Vorklasse*. Again, in the fifth grade, children are individually evaluated and are set on the track that will eventually determine their future careers. In other words, the teachers and administration will label a 10-year-old child as a future doctor or a future bus driver. There are ways of switching career paths, but it is difficult. If children don't perform in school or have behavioral problems, they are held back. This starts in the first grade. Parents don't have much say.

Kids are given much more freedom of choice and are expected to pull their weight at a young age.

TIFFANY ELLIS
Niedernhausen, Germany

Don't Count Out the Theocrats of Tehran

Mark Dubowitz and Ray Takeyh claim that the recent "uprising" inside Iran adds to the mounting political delegitimization of the regime in the eyes of the people ("Iran's Theocracy Is on the Brink," op-ed, Jan. 2).

In 2009, they also claimed that the postelection unrest had forever delegitimized the Islamic Republic in the eyes of Iranians who would never vote again in its "sham elections." And, yet, in both 2013 and 2017, 73% of Iranians enthusiastically took part in lively presidential contests. It is worth noting that the silent majority of the people, consisting of the 40 million who voted for Hassan Rouhani and Ebrahim Raisi last May, greatly outnumber the unrepresentative number of 10,000 or so demonstrators across the country today, some of whom have a distinctly violent agenda and have chanted aggressive slogans in support of past dictators and against Arabs (hardly the stuff of liberals). The only definite outcome of these "protests" is that Ayatollah Ali Khamenei's call for a "resistance economy" is now more urgent.

REZA ESFANDIARI
Manchester, U.K.

Who Says Health-Care Competition Is Bad?

In his op-ed "Republicans Can't Avoid ObamaCare in 2018" (Jan. 3), Avik Roy advises Republicans to continue to focus on various mechanisms to pay for health-care services such as more competition in the insurance markets but offers no advice to reduce the cost of health care at the provider level. Mr. Roy thus contributes to the confusion over the cause of increasing costs, and it is precisely this confusion that Republicans, supposedly the experts on free markets, illogically perpetuate. The sources of this pervasive smoke-screen are the providers themselves and their lobbyists who have been very effective in misleading all of us into believing that free-market economics cannot apply to health care. Is this true?

It was once thought that the airline industry required regulation, and the seniors among us well remember the absence of price competition in the alleged interest of broader service. In Ohio we once accepted utility prices as immutable until we established Energy Choice Ohio by which customers can easily shop rates and terms among numerous providers online. Someone on the Republican side of Congress should think about the way price transparency and other well-established attributes of the free market can be introduced to the health-care-provider market because assumptions never examined are inconsistent with rationality.

RICHARD D. ROGOVIN
Blacklick, Ohio

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Pepper ... And Salt

THE WALL STREET JOURNAL

"He raised intimidation to a high art."

Trump Courts Economic Mayhem

By Robert B. Zoellick

President Trump's new National Security Strategy argues that the U.S. must compete in a hostile world. Yet the White House also wants to retreat behind trade barriers. The Trump administration has stacked up a pile of trade cases that will come tumbling down early in 2018. More important than any specific case is the signal of a strategy of economic defeatism.

The U.S. is ready to block steel and aluminum imports through a rarely used "national security" rationalization. As an alternative, Commerce Secretary Wilbur Ross had tried negotiating capacity cuts in Chinese production, but Mr. Trump waved him off with a demand for tariffs. Because most of China's metal exports already face U.S. tariffs of more than 80%, Mr. Trump's tactic will likely trigger retaliation from other countries.

This year we'll find out how serious he is about protectionism. So far the signs aren't good.

Next up are "safeguards" to block imports of solar panels and washing machines. Imposing "safeguards" doesn't even require a claim of unfairness. On top of this, last year (through Sept. 20) the Commerce Department conducted 65 investigations of alleged low-cost or subsidized imports. That figure is a 16-year high, up 50% from the year before.

But these amount to an overture to the big show: likely withdrawal from the North American Free Trade Agreement, the U.S.-Korea Free Trade Agreement or both. The continuing negotiations to "fix" Nafta are doomed. Mexico and Canada would probably agree on eliminating barriers and setting new rules for the digital age. But Mr. Trump's real aim is to dictate market outcomes. The administration wants to start with the goal of eliminating the U.S. trade deficit with Mexico and then manipulate rules to that end. It wants the U.S. to be excused from keeping its side of the Nafta bargain. It wants a five-year sunset clause.

DAVID KLEIN

Mr. Trump's National Security Strategy covered every region except North America, our home continent and base for projecting power. The administration gives the bilateral trade deficit with Mexico precedence over areas where our interests align: Asian competition, border security and energy security. Moreover, trade deals cannot change the economic fundamentals that determine the balance. Mexico and Canada cannot agree to managed trade or any deal that lets Washington ignore the rules when it chooses.

The president is trying to placate his political base, which will be enraged if he accepts a deal on "Dreamer" immigrants and fails to build his promised border wall. He relies on the support of economic isolationists who find it easier to blame others than to make America more competitive. Killing Nafta would fit the bill.

Mr. Trump does not know how to use bilateral trade negotiations to create pressure for stronger multilateral rules. The U.S. has historically used bilateral deals not only to eliminate tariffs and trade barriers but also to set higher standards for services, agricultural products, intellectual-property protection and more. Such deals have added environmental and labor protections, while boosting anticorruption and transparency rules.

The U.S. has used trade to expand the circle of like-minded nations. The Trans-Pacific Partnership included six countries with which the U.S. already had a free-trade agreement, and added five more. That offered leverage with China, but Mr. Trump abandoned the deal.

No country wants to do a bilateral deal with Mr. Trump now because he demands managed trade, not fair competition. He wants excuses to raise barriers, not rules to boost trade. That's why Mr. Trump will use his indictment of China's intellectual-property practices to justify more protectionism, not solve the problems. During the president's recent trip to China, when Beijing proposed opening some of its financial markets to U.S. companies, the Trump team dismissed this as the old way of doing business. The new way is to block Chinese exports.

Some in Congress, with Mr. Trump's backing, want to establish a new technology-control regime under the rubric of screening foreign investment. But government reviews of "covered transactions" could apply to countless business deals with foreigners—licensing, joint development, hiring—far beyond those involving China. The U.S. already has the authority to block investments and regulate the transfer of technology. The Committee on Foreign Investment in the U.S. reviews 200 or so deals a year. Expanding that to many thousands would harm America's competitiveness.

These are all signs of an America in withdrawal, not one confidently pressing the world to adopt new rules of fair competition and technology security. Farmers and ranchers are fretting that the retaliation triggered by a Fortress America trade policy will leave them behind a closed door. Companies that rely on sophisticated supply chains, such as auto makers, will pay a high price.

The U.S. is abandoning the challenge of setting new trade standards, whether for data, e-commerce or transnational services. America once attracted the world's talent, but Mr. Trump's hostility is driving people away. If he pulls the U.S. out of Nafta, even financial markets might recognize that his economic isolationism poses a risk to growth.

True competitors honestly assess their weaknesses, adapt and then grow stronger. Those are the qualities that made America great. This will be the year that trade policy could define Trump's fearful America.

Mr. Zoellick is a former World Bank president, U.S. trade representative and deputy secretary of state.

Why Do Federal Judges Need Clerks, Anyway?

By Glenn Harlan Reynolds

Chief Justice John Roberts wants to do something about sexual harassment by federal judges. In his 2017 Report on the Federal Judiciary, the chief justice announced a plan to evaluate whether current standards and procedures "are adequate to ensure an exemplary workplace."

He mentioned no names, but the report came out less than two weeks after Judge Alex Kozinski retired from the Ninth U.S. Circuit Court of Appeals after former clerks accused him of inappropriate behavior.

The chief justice is right to think the problem goes beyond the chambers of a single judge. It's inherent in the system. Judges have inordinate power over their clerks—and the best solution is to abolish clerkships.

True, anyone who qualifies as a federal judge's law clerk is likely to be able to find an excellent job with a top firm. But for those who wish to enter legal academia, an appellate clerkship is almost required. A Supreme Court clerkship is a big boost to a career in academia or appellate litigation, and the justices now recruit clerks almost entirely from the federal circuit courts. The clerkship—and a strong recommendation from the judge—is vital, and therefore so is pleasing the judge.

Abolishing clerkships would strike a blow against sexual harassment—and inequality to boot.

Judges, with life tenure and a daily routine that involves extensive deference from almost everyone they encounter, operate like miniature kings. So complaining about one is likely to be career-damaging, if not career-ending. That's especially true of a "feeder judge," such as Judge Kozinski, who sends a disproportionate number of clerks to the Supreme Court. A judge's chambers are an insular little world consisting of a few clerks and a secretary or two. No one else much notices what goes on there.

Getting rid of law clerks would eliminate the harassment problem and get judges doing their own work. Justice Louis Brandeis, who served from 1916-39, is said to have observed that the high court's members "are almost the only people in Washington who do their own work."

That's not true anymore. The Supreme Court decided 160 cases in 1945, when each justice had a single clerk. Nowadays it decides about half as many cases with four clerks per justice. Law clerks were unknown for roughly the first century of the American judiciary, and the courts seemed to do fine. As my law students often comment, the older opinions are shorter and more intelligible than the newer ones.

So I propose eliminating law clerks for the lower federal courts. If the workload is too burdensome, we can always add more federal judges, as some are already suggesting. The federal courts already have excellent librarians to help with research, and staff attorneys to deal with frivolous petitions.

The Supreme Court has the additional burden of wading through thousands of certiorari petitions and deciding which cases to hear. That's probably too much for justices to do on their own, but I'd limit the justices to one clerk each, as in 1945. That would ensure that justices do their own work again—and encourage those who aren't up to the task to take retirement instead of grimly hanging on while their clerks do all the writing.

As an added advantage, for those concerned with inequality in America, this would break up a chummy system in which elites in academia trade favors with elites in the judiciary for the benefit of select elite graduates.

Mr. Reynolds is a law professor at the University of Tennessee and author of "The Judiciary's Class War," forthcoming from Encounter.

Don't Melt Down Over Vulnerable Computer Chips

By Brian E. Finch

The first cybersecurity crisis of 2018 landed with a stinging blow late last week. Word got out that security researchers had discovered significant security flaws in the microchips, made by several manufacturers, that power virtually every modern device. Hackers could theoretically use those vulnerabilities, affixed with the ominous monikers "Meltdown" and "Spectre," to suck vital information out of devices ranging from gigantic business servers to the phone in your pocket.

Naturally, panic has ensued. Some dire warnings suggest that the necessary security fixes will slow down machines to speeds not seen since the days of the dial-up modem. Others think the flaws are built so deeply into their devices that the only solution is to rip out and replace the affected ones, at a cost of hundreds of billions.

Stop. Take a deep breath.

These flaws, while newly discovered, are anything but new. Discovering and addressing such problems is a normal part of the technology life cycle.

The "Meltdown" and "Spectre" story is actually good news inasmuch as it reflects an increasing consciousness of cybersecurity. The industry has increasingly robust processes to minimize the chaos hackers can sow using such flaws—and last week's news shows they're working.

To understand this silver lining, start by realizing every technology has some flaw or vulnerability. Even after extensive time and money is spent "debugging" devices or software before release, computing experts have calculated that up to 1% of the underpinning code will contain errors.

The knowledge that these flaws exist has created a race between security researchers and hackers. The challenge is that while the rate of vulnerabilities has remained stable or even dropped over the past 20 years, their absolute number has grown dramatically as devices have become inexorably more complex.

In the 1970s, engineers had to write some 400,000 lines of code to make the space shuttle fly. At a 1% error rate, that's 4,000 possible security holes. Today's typical smartphone is powered by 10 *million* lines of code, and the average motor vehicle by 100 million. Hackers know this well, which is why they spend hours combing through the code to find some of those 100,000 or one million errors. Once they find a flaw they can use to steal information or money, they launch a computer virus to do it.

Recognizing what hackers are up to, security researchers also are constantly looking for flaws. That is one of the positive aspects of the "Meltdown" and "Spectre" story that has been significantly—and unfortunately—played down: The good guys figured this one out before the criminals did.

Security experts world-wide have been working for at least six months to fix these flaws and protect vulnerable components. Many critical systems already have had their defenses adjusted to minimize the chance of a successful attack. The Department of Homeland Security played its part too by quickly leaning in and asking the private sector what it needed as well as providing a central repository of information on how to mitigate this threat. Much work remains to be done, but we appear to be a few steps ahead of the hackers.

How the chip problems will ultimately be addressed will take some time to hash out. The fixes will surely take many forms, ranging from patching software to layering in more cyberdefenses. Bad ideas, such as proposed laws to tighten cybersecurity requirements or punish hacking victims if they failed to fix the flaws "reasonably," will surely also bubble up. Thankfully, at least at the federal level, these ideas probably will be swatted down quickly.

Most important is maintaining the constant state of alert and responsiveness that brought "Meltdown" and "Spectre" to attention. Should we fail to keep our virtual guards up, then we may unfortunately learn about the next major cyber weakness from the bad guys.

Mr. Finch is a partner at Pillsbury Winthrop Shaw Pittman in Washington. He advised President Trump's Homeland Security transition team on cybersecurity issues.

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Scholars Get The Real Scoop on 'Fake News'

By Allysia Finley

This just in—"fake news" didn't elect Donald Trump. Democrats have argued that Trump voters were duped by fringe websites that traffic in misinformation, and that if those voters were better informed, Hillary Clinton would be president today. A new study by three political scientists—from Princeton, Dartmouth and the University of Exeter—debunks the theory. While fake news is a real problem, the most dangerous distortions are shrouded in a patina of credibility.

The researchers collected tracking data from computers of 2,525 Americans (with their consent) between Oct. 7 and Nov. 14, 2016, and analyzed their news consumption vis-à-vis their political support and knowledge. They sorted "fake" from "hard" news sites, defining the former by the propensity to publish intentionally fabricated stories such as "FBI agent suspected in Hillary email leaks found dead in apparent murder-suicide"—but not unintentional reporting mistakes, false statements by politicians or slanted or misleading reports that were not categorically false.

It turns out the people likeliest to read false stories are the ones who read lots of hard news too.

The researchers extrapolated that roughly 1 in 4 American adults visited a fake-news site around the time of the election. But stories on these sites accounted for only about 2.6% of all the news they consumed.

Trump supporters were likelier than Clinton backers to visit fake-news sites, and the most ardent conservatives were the most voracious consumers. The 10% of Americans with the most conservative online information diets accounted for 60% of visits to fake news websites. That would seem to support the theory that Trump partisans consumed fake news to reinforce their political attitudes.

But the study also finds that "fake news consumption seems to be a complement to, rather than a substitute for, hard news—visits to fake news websites are highest among people who consume the most hard news." The more time you spend perusing news online or using social media, the more likely you'll stumble upon and click on provocative, misleading headlines. But reading information from a variety of sources ought to provide some inoculation against fabricated stories.

The researchers also report that fake-news consumption does "not measurably decrease among the most politically knowledgeable individuals." In fact, the most knowledgeable Trump supporters—as measured by a test on civics and current events—were the likeliest to visit fake-news sites.

Conservative distrust of the mainstream media might have helped fuel the fake news phenomenon. It's possible that conservatives who were exposed to a barrage of anti-Trump commentary were seeking alternative views, or stories the mainstream media were ignoring. Liberals may have evinced less interest in fake news given that the media that they consumed reported heavily on Mr. Trump's personal and political foibles, often playing down unflattering news about Mrs. Clinton.

The study highlights the challenge of even defining fake news. Mr. Trump has used the epithet to denounce stories he dislikes. But as the researchers note, "Some content is deeply misleading or fabricated, while other articles instead selectively amplify political events in an over-the-top style that flatters the prejudices of a candidate's supporters."

Egregiously false statements are easy to discredit and unlikely to sway the public. More insidious are widely disseminated intimations with little factual basis, such as those suggesting Mr. Trump colluded with the Russians. Ditto tendentious claims backed up by distorted data. Take this Washington Post headline from September: "9 ways Trump's tax plan is a gift to the rich, including himself." Or this November CNN headline about a Congressional Budget Office report: "Poor Americans would lose billions under Senate GOP tax bill."

Conjecture and commentary increasingly color even hard news. The biggest threat to an informed electorate isn't so-called fake news websites, but supposedly trustworthy media organizations that present their political opinions as fact.

Ms. Finley is a member of the Journal's editorial board.

Old Face in Malaysia Race

Ex-premier Mahathir to head opposition group seeking to oust ruling party he dominated

By Yantoultra Ngui


MOHD RASFAN/AGENCE FRANCE-PRESSE/GETTY IMAGES

Malaysia's opposition picked Mahathir Mohamad, above, to challenge Premier Najib Razak, below.

KUALA LUMPUR, Malaysia—Long-retired leader Mahathir Mohamad will head an opposition coalition in national elections this year, challenging the ruling party he dominated as Malaysia's prime minister for 22 years.

The 92-year-old Dr. Mahathir was selected by opposition coalition parties at a convention on Sunday to lead a campaign against Prime Minister Najib Razak, who has been embroiled in scandals surrounding a state investment fund, **1Malaysia Development** Bhd.

Mr. Najib is expected to call parliamentary elections in the first half of the year. He leads the United Malays National Organization, which has formed every Malaysian government since 1957.

Dr. Mahathir said in a speech that he had long fought for the success of "my party UMNO, but now today I am fighting to take it down....It is not easy for me to destroy the party that I loved for 60 years."

The longtime leader helped transform Malaysia into one of Southeast Asia's most prosperous economies during his rule from 1981 to 2003, and he remains an influential figure. He is a harsh critic of Mr. Najib. Both men have accused the other of corruption and abuse of power—accusations they deny.

Dr. Mahathir quit the party last year, citing dissatisfaction with its support for Mr. Najib, who served in many of his cabinets and became prime minister in 2009. Mr. Najib has silenced or sidelined critics within the party over the 1MDB scandals.

Mr. Najib established 1MDB in 2009 to spur Malaysia's economy, but it is now being investigated by authorities in several countries, including the U.S., on allegations including money-laundering and misappropriation of funds involving billions of dollars. Both 1MDB and Mr. Najib have denied wrongdoing and said they would cooperate with any lawful international investigation.

The election will be an uphill battle for the opposition. The large Pan-Malaysia Islamic Party isn't part of the coalition and its presence as a separate opposition contender in the potentially decisive ethnic Malay Muslim heartland districts could help UMNO.

The coalition will be led by an unlikely pair—Dr. Mahathir and Wan Azizah Wan Ismail, wife of imprisoned opposition leader Anwar Ibrahim. Mr. Anwar was Dr. Mahathir's deputy premier in the late 1990s before relations frayed in a dispute over the Asian financial crisis.

Mr. Anwar was arrested after leading street protests in 1998 in what was seen as a rebellion against his mentor. He was subsequently imprisoned on a conviction of sodomy.

Upon release in 2004, Mr. Anwar spent years welding a disparate group of opposition parties into a coalition and dealt Mr. Najib and UMNO their worst electoral showing yet in 2013. Mr. Anwar was convicted of sodomy again in 2014. In both convictions, he has claimed to be the victim of politically motivated attacks.

Under the opposition agreement, Dr. Mahathir is to lead the coalition through the elections and become prime minister if it wins. A royal pardon would be sought for Mr. Anwar and, if successful, he would take over the premiership from Dr. Mahathir.


VINCENT THIAN/ASSOCIATED PRESS

Private Company To Seek Wreckage

KUALA LUMPUR, Malaysia—The government said it approved a new attempt by a private company to find the wreckage of Malaysia Airlines Flight 370, nearly four years after its disappearance sparked one of aviation's biggest mysteries.

Houston-based **Ocean Infinity** dispatched a search vessel to look in the southern Indian Ocean for debris from the plane, which disappeared March 8, 2014, on a flight to Beijing from Kuala Lumpur with 227 passengers and 12 crew members.

The governments of Malaysia, China and Australia called off the nearly three-year official search in January 2017. The Australian Transport Safety Bureau's final report on the search conceded that authorities were no closer to knowing the reasons for the Boeing 777's disappearance, or its exact location.

Malaysian Transport Minister Liow Tiong Lai on Saturday said payment would be made only if the company finds the wreckage. However, he said, "I don't want to give too much hope...to the [next of kin]."

Ocean Infinity said the search vessel Seabed Constructor was taking advantage of favorable weather to move toward "the vicinity of the possible search zone."

—Associated Press

WORLD WATCH

SAUDI ARABIA

Fighter Jet Crashes In Yemen Operation

Saudi Arabia's Royal Air Force said two of its pilots whose fighter jet crashed during an operation in Yemen on Sunday have been rescued. The pilots were evacuated to Saudi Arabia by ground and air forces, the Saudi-led coalition fighting in Yemen said. The coalition didn't say where the crash occurred. A statement blamed the crash on a "technical failure."

However, Yemeni rebel-run al-Masirah television said the British-made Tornado fighter jet was hit while flying in Yemeni airspace over the northern province of Saada, which borders Saudi Arabia, and then crashed on Saudi soil.

In the nearly three years since the kingdom launched a war against the rebels, the fighting has killed at least 10,000 Yemeni civilians. Despite coalition's airstrikes, the rebels continue to control the Yemeni capital, San'a, and much of the country's north.

—Associated Press

SYRIA

Car Bomb in Idlib Kills at Least 23

At least 23 people have been killed in a car bomb blast in Syria's largest rebel-held city, Idlib, according to Syrian activists and a war-monitoring group.

The bomb was detonated Sunday evening in Idlib, capital of the province with the same name, the U.K.-based Syrian Observatory for Human Rights said.

No group immediately claimed responsibility.

The city and province are controlled by several rebel factions and insurgents vying for dominance.

—Associated Press

SWEDEN

Stockholm Explosion Leaves One Dead

A man picked up a suspected hand grenade from the ground in Stockholm and it detonated in his hand on Sunday, killing him and injuring his companion, Swedish police said.

The blast took place about 11 a.m. outside the Varby Gard subway station in Huddinge, a residential district in greater Stockholm, regional police spokesman Sven-Erik Olsson said.

The man, in his 60s, was rushed to a hospital but later died while the woman received minor wounds to her face and both legs, Mr. Olsson said. The couple had been cycling past the device when the man stopped to investigate it.

Police checked in and around the subway station after the blast to make sure there were no additional explosive devices.

—Associated Press


ZEIN AL RIFAI/AGENCE FRANCE-PRESSE/GETTY IMAGES

A car bomb hit the Syrian city of Idlib on Sunday, above.

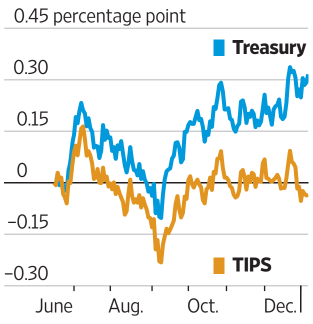
TECHNOLOGY: AMAZON AND GOOGLE FIND CES COOL AGAIN B4

Last Week: **S&P** 2743.15 ▲2.60% **S&P FIN** ▲1.72% **S&P IT** ▲4.22% **DJ TRANS** ▲2.82% **WSJ $ IDX** ▼0.34% **LIBOR 3M** 1.704 **NIKKEI** 23714.53 ▲4.17% **See more at WSJMarkets.com**

Bond Inflation Needle Moves Up

TIP Blip

Percentage point change in 10-year Treasury and TIPS yields since the June 2017 Fed meeting



Sources: Ryan ALM (Treasury); Thomson Reuters (TIPS)
THE WALL STREET JOURNAL.

By Daniel Kruger And Sam Goldfarb

A measure of the bond market's expectations for inflation crossed a key threshold in the past week, highlighting investors' renewed economic enthusiasm.

The 10-year inflation break-even rate, which reflects the yield premium on the 10-year U.S. Treasury note over the comparable Treasury inflation-protected security, topped 2% on Tuesday for the first time in more than nine months, according to Thomson Reuters. It settled Friday at 2.027%, its highest level since March 16.

Two-percent is an important level for the break-even rate because it matches the Federal Reserve's annual target for inflation, which has puzzled economists by remaining soft in recent months despite improvement in other aspects of the economy.

The break-even rate hovered around 1.8% in November before gathering momentum as energy prices rose and as Congress moved forward with a plan to cut corporate taxes, which is expected to boost growth around 0.5% in 2018, according to BNP Paribas.

With many investors expecting the economy to continue expanding at or near the 3.2% pace it recorded in the third quarter, and with the unemployment rate having held at 4.1% for a third consecutive month in December, investors are increasingly focusing on the potential for prices to rise. One channel they are scrutinizing is wages, which some expect to pick up substantially as the labor market tightens further.

A key signal has risen as investors buy Treasury inflation-protected securities.

The break-even rate has climbed in recent weeks as investors bought Treasury-inflation protected securities, or TIPS, and sold regular Treasurys, a typical strategy when they see a risk of rising inflation. Investors in TIPS receive a small yield as well as an increase to their principal equal to the annual change in the consumer-price index.

"TIPS have certainly had a nice run," said Donald Ellenberger, head of multisector strategies at Federated Investors. Mr. Ellenberger increased TIPS holdings to 5% of multi-

Please see TIPS page B2

Why Uber Can Find You—but 911 Can't

Better technology for emergency response could save lives, but progress has been slow

By Ryan Knutson

Software on Apple Inc.'s iPhones and Google's Android smartphones is helping mobile apps like Uber and Facebook to pinpoint a user's location, making it possible to order a car, check in at a local restaurant or receive targeted advertising.

But 911, with a far more pressing purpose, is stuck in the past hot spot.

U.S. regulators estimate as many as 10,000 lives could be saved each year if the 911 emergency dispatching system were able to get to callers one minute faster. Better technology would be especially helpful, regulators say, when a caller can't speak or identify his or her location.

After years of pressure, wireless carriers and Silicon Valley companies are finally starting to work together to solve the problem. But progress has been slow.

Roughly 80% of the 240 million calls to 911 each year are made using cellphones, according to a trade group that represents first responders. For landlines, the system shows a telephone's exact address. But it can register only an estimated location, sometimes hundreds of yards wide, from a cellphone call.

"It is really frustrating to know that my kids can order pizza and they know exactly where they are, and I call for Uber and they know exactly where I am," said Christy Williams, who runs a 911 system in the counties that surround Dallas, "but that it can't be used for lifesaving methods."

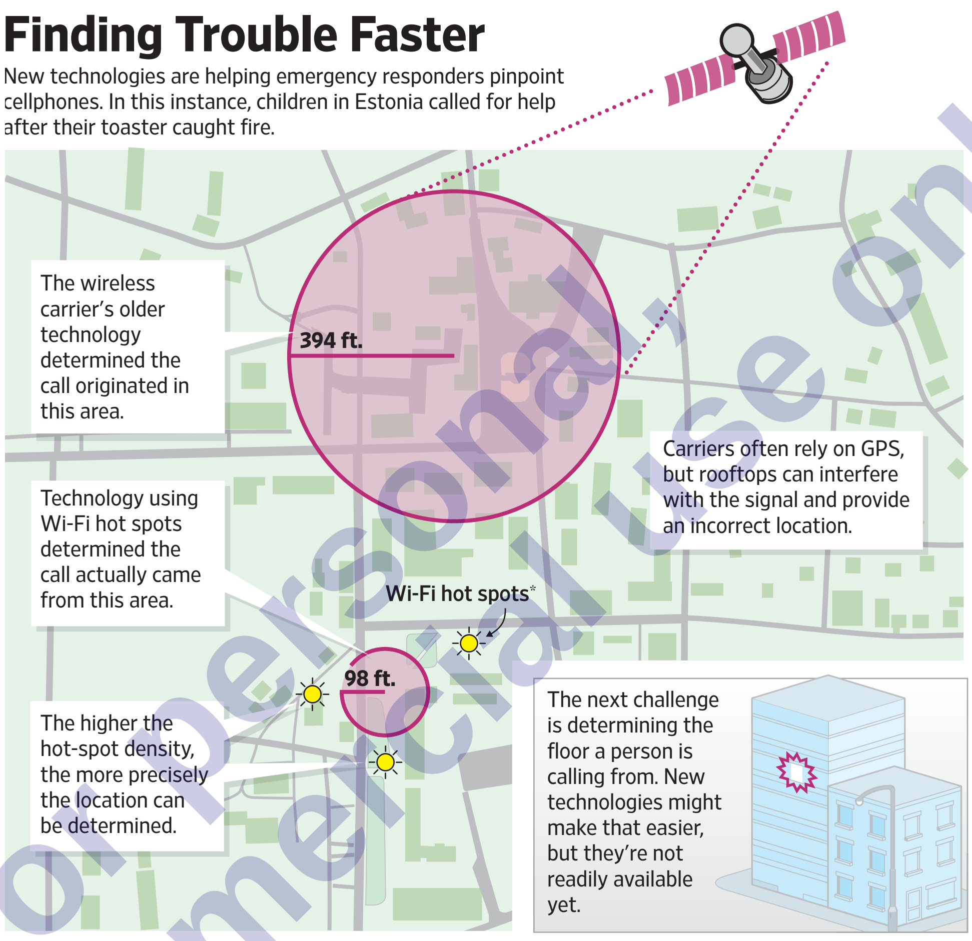
That frustration is now a frequent source of tension during 911 calls, said Colleen Eyman, who oversees 911 services in Arvada, Colo., just outside Denver. "The moment you pick up that call, you have to start interviewing: 'Where are you?'" Ms. Eyman said. "All they want is to just get some help. They don't understand why you're asking all these questions. And it creates an angst and a lack of confidence."

U.S. regulations require wireless carriers to deliver cellphone location data to 911. In the 1990s, some carriers relied on triangulation among

Please see 911 page B2

Finding Trouble Faster

New technologies are helping emergency responders pinpoint cellphones. In this instance, children in Estonia called for help after their toaster caught fire.



*Illustrations don't represent the actual locations. Source: WSJ reporting
THE WALL STREET JOURNAL.

Pfizer Drops Alzheimer Research

By Jonathan D. Rockoff

Pfizer Inc. said it would stop trying to discover new drugs for Alzheimer's disease and Parkinson's disease, abandoning costly but futile efforts to find effective treatments for the disorders.

The cutback will result in layoffs of 300 employees in Cambridge and Andover in Massachusetts and in Groton, Conn., over several months, according to a company statement on Saturday.

The restructuring won't affect later-stage drug development for pain treatments Lyrica and tanezumab, or research into drugs for rare neurological diseases, Pfizer said.

The company plans to use the savings to fund drug R&D in other areas. "This was an exercise to reallocate [spending] across our portfolio, to focus on those areas where our pipeline, and our scientific expertise, is strongest," it said.

Pfizer also said it plans to establish a corporate venture fund to invest in promising neuroscience projects outside the company.

Like several peers, Pfizer has invested heavily in developing treatments for Alzheimer's and Parkinson's because of the huge need. About 5.5 million Americans have Alzheimer's, and the numbers are expected to rise as the population ages. Analysts say successful treatments for the memory-robbing disease could have multibillion-dollar sales potential.

But promising compounds have repeatedly failed to work during testing.

Notably, in 2012, Pfizer and partner **Johnson & Johnson** halted development of an Alzheimer's drug called bapineuzumab after it failed to slow memory loss in test subjects.

The most recent disappointment took place last year, when a closely watched study of a treatment from **Axovant Sciences** Inc. called intepirdine failed to improve memory and learning in Alzheimer's patients.

Advances in understanding the biology and chemistry of the brain, as well as imaging it, give many researchers confidence that treatments will come.

Some big drugmakers, such as **AstraZeneca** PLC, **Biogen** Inc. and **Eli Lilly** & Co., keep pursuing Alzheimer's treatments despite setbacks, though analysts consider the projects very risky.

INSIDE

FIGHT OVER WIND TURBINES GOES TO COURT

THE WEEK AHEAD, B2

KEYWORDS | By Christopher Mims

Facebook's Mr. Fix-It Confronts Dilemma

When scientists started linking cigarettes to cancer, the tobacco industry silenced them—only acknowledging the extent of the truth decades later, under legal duress.

Imagine if, instead, they had given these researchers license to publish papers, or even taken the information to heart and crippled their own moneymaking machines for the good of their addicted users.

No one has accused **Facebook** of causing cancer, but Mark Zuckerberg now stands at a similar crossroads.

In the face of pressure brought by a growing roster of Facebook investors and former executives, many of whom have publicly stated that Facebook is both psychologically addictive and harmful to democracy, the Facebook founder and chief executive has pledged to "fix" Facebook by doing several things, including "making sure that time spent on Facebook is time well spent."

Mr. Zuckerberg has also told investors he wants his company "to encourage meaningful social interactions," adding that "time spent is not a goal by itself."

So here's the multibillion-dollar question: Is he willing to sacrifice revenue for the well being of Facebook's two-billion-plus users?

Mr. Zuckerberg has already said the company will hire so many content moderators to deal with fake news and Russian interference that it will hurt profit, but whether he will go further and change the basic fabric of Facebook's algorithms in the name of users' mental health, he has yet to say.

Clearly, Facebook, a company Mr. Zuckerberg started when he was in college, has changed so much that even its creator is playing catch-

Please see MIMS page B4

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.

INDEX TO PEOPLE

BUSINESS & FINANCE

IMAGINECHINA/ZUMA PRESS

Wind turbines in China. China-based Sinovel is accused of stealing wind-turbine technology from American Superconductor.

Wind Fight Goes to Court

Turbines trial will be test case as the U.S. and China battle over intellectual property

By Erin Ailworth

THE WEEK AHEAD

A dispute over the alleged theft of wind-turbine technology is scheduled to go to trial in Wisconsin on Monday in a test case for intellectual-property battles between the U.S. and China.

Federal prosecutors accuse Chinese wind-turbine maker **Sinovel Wind Group** Co. of stealing the source code for software that controls wind turbines from **American Superconductor** Corp., a Massachusetts-based engineering company that once counted Sinovel as its biggest customer.

The trial in U.S. District Court for the Western District of Wisconsin could result in billions of dollars in fines for Sinovel, which has previously denied wrongdoing.

Prosecutors in 2013 indicted the company, along with two of its executives and an American Superconductor employee, on criminal charges of stealing trade secrets.

John W. Vaudreuil, then U.S. attorney for the Western District of Wisconsin, called it "nothing short of attempted corporate homicide."

James Pooley, a former president of the American Intellectual Property Law Association, said the case is likely to garner political attention, given that it comes just months after the Trump administration moved to take a harder line on intellectual-property theft by China.

"They are going to want to treat it as a very important exemplar in the process of demonstrating what they believe to be China's lack of adherence to the rules," Mr. Pooley said.

A 2017 report by the nonprofit National Bureau of Asian Research estimates intellectual-property theft could cost the American economy as much as $600 billion a year, with China the biggest culprit.

The Sinovel indictment alleges that the theft cost American Superconductor more than $800 million. If found guilty, Sinovel could be fined a multiple of that loss, up to $4.8 billion.

A win in the U.S. for AMSC, as American Superconductor is now known, could bolster its chances of winning several civil complaints it has filed in China under which the company is seeking $1.2 billion in damages.

AMSC declined to comment ahead of the trial in Wisconsin, but speaking to investors in late 2016 Chief Executive Dan McGahn said the evidence against Sinovel "is overwhelming."

Neither Sinovel's media representative in China nor its lawyers in the U.S. responded to requests for comment.

The case stems back to March 2011, when Sinovel suddenly stopped accepting deliveries of electrical-control systems for its turbines from AMSC, saying the technology didn't comply with new Chinese power-grid requirements. The loss of business caused AMSC's stock to plunge more than 40% overnight and led to hundreds of layoffs.

AMSC began to suspect Sinovel of theft a few months later, after a field team in China found an imperfect replica of AMSC's software in a Sinovel turbine.

Investigations led to an AMSC employee based in Austria who, according to internet chat transcripts and emails later submitted as evidence, allegedly conspired with Sinovel executives to steal and recreate AMSC's technology in exchange for a total of $1.7 million. The AMSC employee, Dejan Karabasevic, pleaded guilty before an Austrian court in late 2011 and served time in prison.

Then in 2012, FBI agents discovered four Sinovel turbines in Massachusetts operating with what an analysis showed to be modified versions of the software taken from AMSC—evidence that helped lead to Sinovel's 2013 indictment.

AMSC was worth just over $200 million by that time, a fraction of its $1.5 billion market value in early 2011. Today, it is worth about $80 million, with less than half the employees it had in early 2011.

911

Continued from the prior page

nearby cell towers. They later pushed phone manufacturers to install GPS chips for more accurate location estimates.

GPS relies on satellites and can take up to 30 seconds or more to establish a position, so it doesn't work well indoors, where rooftops interfere with the signal. That has become a problem as most Americans ditch landlines and use cellphones only. That estimate of location that 911 responders receive is in contrast with the blue dot users see on Google Maps, which often shows a smartphone's location down to about 50 feet.

When smartphones came around in the late 2000s, Google and then Apple enhanced mapping technologies by corroborating the GPS location with data from inside the phone, such as proximity to Wi-Fi hot spots and cell towers, and the barometric pressure, which indicates altitude.

Smartphone sensors continually monitor this information and occasionally relay it back to Google or Apple. As a result, the tech firms' ability to determine a smartphone's location quickly surpassed that of wireless carriers. But carriers and the tech giants didn't immediately work to ensure that enhanced data was available to 911.

"I think there is an institutional reluctance by Big Tech to not want to formally enter into the public safety world," said retired Rear Adm. David Simpson, who oversaw emergency management and cybersecurity at the Federal Communications Commission during the Obama administration.

IAN C. BATES FOR THE WALL STREET JOURNAL

U.S. regulators estimate that as many as 10,000 lives could be saved each year if the 911 emergency dispatching system were able to get to callers one minute faster.

Representatives of Google and Apple said they were committed to helping public safety.

In 2014, after talking about the 911 problem over lunch, a group of Google engineers on the Android location team decided to look into it. One engineer, Akshay Kannan, decided to dedicate his "20% time," which is the free time Google allots employees to experiment, to find a way to provide the more precise location data to 911 operators. The project was code-named Thunderbird.

Mr. Kannan started by attending a 911 conference in Denver. "The first thing we heard everyone say was: 'Before we'll even ask, '911, what's your emergency,' now the standard is to ask, 'what's your location,''" he said. "It was extremely clear this was a huge problem."

Officials at BT Group PLC, which manages the U.K.'s emergency response system, were already tackling the problem and quickly agreed to work with Google. In mid-2016, they jointly launched a technology that improved location accuracy of emergency calls down to a radius of just a few yards. It is now in use in at least 10 countries, including the U.K., Austria and Estonia.

Apple, meanwhile, developed a technology that also made its rich device-location information available to wireless carriers, under a program called HELO, for Hybridized Emergency Location.

U.S. wireless carriers, however, moved much more slowly, partly because regulators weren't spurring them along. Historically, U.S. regulations only applied to outdoor location accuracy, where GPS works better.

AT&T Inc. and T-Mobile US Inc. recently started using Apple's technology, meaning calling 911 on an iPhone on one of those networks could deliver more accurate location information. All four major U.S. carriers—AT&T, T-Mobile, Verizon Communications Inc. and Sprint—are testing Google's technology, and T-Mobile says it plans to activate it soon.

"The commercial location solutions...are built for a different-use case than 911," said Matthew Gerst, an assistant vice president of regulatory affairs for CTIA, the wireless industry trade group. The smartphone data is still just an estimate, so it doesn't deliver an exact street address like many in the 911 community want, he added.

Instead, wireless carriers have focused on building from scratch their own joint database of physical addresses where Wi-Fi hot spots are located. The system, called the National Emergency Address Database, or NEAD, will be similar to the Wi-Fi databases Google and Apple use.

TIPS

Continued from the prior page

sector funds from 3% in November. "It's been a winner for us."

U.S. mutual funds and exchange-traded funds targeting TIPS drew a net $625 million in the week ended Wednesday, according to Wells Fargo Securities.

Investors are betting on TIPS even as inflation remains below the Fed's target and as the central bank has embarked on a course of rate increases intended to prevent higher prices from taking root in the economy.

The CPI increased 2.2% in November from a year earlier. However, the Fed's preferred inflation gauge, the price index for personal-consumption expenditures, rose just 1.8% on a headline basis and 1.5% when excluding volatile food and energy costs. The Fed measure tends to run about 0.3 percentage point below the CPI, according to Barclays PLC.

Fed officials have signaled their intention to raise rates three times in 2018. Some economists, including those at JPMorgan Chase & Co., have said they expect the central bank to be even more aggressive in damping price pressures, predicting four increases this year.

While some investors may not be convinced that inflation is going to rise, buying TIPS can still be an appealing hedge. Because bond yields have been near historic lows for so long, investors are obtaining very little income from interest payments, which means rising prices would have "a really detrimental impact on a bond portfolio," Mr. Ellenberger said.

Signs investors are concerned about higher inflation aren't confined to the bond market. Commodities such as oil, copper and aluminum—which are key industrial materials and often serve as bellwethers for the direction of consumer prices—are also rallying. So is gold, which has historically served as a store of value in times when inflation has been a concern.

Still, some investors are hesitant to ride the current trend, noting that inflation expectations have climbed before in recent years, only to fall back down again.

Celgene to Make $7 Billion Acquisition

Celgene Corp. agreed to buy blood-disease biotechnology company **Impact Biomedicines** for as much as $7 billion.

By Jonathan D. Rockoff, Dana Cimilluca and Ben Dummett

Celgene will make an upfront payment of $1.1 billion for the privately held San Diego company, the companies said in a statement Sunday.

Assuming Impact hits regulatory-approval milestones, another payment of as much as $1.4 billion could be forthcoming, the companies said. Should global net sales surpass $5 billion, there could be another payment of as much as $4.5 billion.

Celgene, based in Summit, N.J., is one of the biggest U.S. biotech companies. It is known for its cancer-drug portfolio but has been trying to diversify beyond its top-selling product, multiple myeloma drug Revlimid, and move into immune disorders such as the skin condition psoriasis.

Rivals have been seeking to sell generic versions of Revlimid, which accounted for $4 billion of Celgene's $9.5 billion in net product sales during the first nine months of 2017.

In Impact, Celgene would be paying to acquire a startup established less than two years ago to revive a blood-disease drug known as fedratinib, whose development had been halted by Sanofi SA in 2013 because of serious side effects.

Impact's founders had developed and sold fedratinib to Sanofi, and then bought the rights back. Last year, the Food and Drug Administration agreed to let Impact resume testing of the drug despite the concerns about the side effects—confusion and other neurological issues that result from a vitamin deficiency causing swelling in the brain.

Impact has been developing fedratinib to treat bone-marrow disorders known as myelofibrosis and polycythemia vera that affect blood-cell production in tens of thousands of patients.

$1.1B

Upfront payment Celgene will make for Impact Biomedicines.

If approved, fedratinib would challenge a blood-disease drug from Incyte Corp. called Jakafi. Both drugs try to stop an enzyme that plays a key role in producing blood cells and driving the diseases.

Celgene has been under pressure from investors to do deals because new products such as psoriasis drug Otezla haven't boosted sales as much as Wall Street expected. That has forced the company to lower its financial outlook, and its highflying stock recently retreated sharply.

Celgene still has a market value of more than $80 billion.

Credit Suisse advised Celgene, while PJT Partners advised Impact.

Sanofi Problems Threaten Global Dengue Vaccine Effort

Sanofi SA's recent disclosure of safety problems with the world's only approved vaccine against the viral infection dengue has complicated efforts to contain a growing global epidemic and could delay potential new vaccines, public-health experts said.

By Betsy McKay in Atlanta, Preetika Rana in Hong Kong and Noemie Bisserbe in Paris


DONDI TAWATAO/GETTY IMAGES

Lawmakers in the Philippines want stricter drug reviews, and the government has launched an inquiry into its immunization program.

Late last year, the French pharmaceutical company said its Dengvaxia product, first approved for sale in 2015, could in some cases worsen rather than prevent symptoms of the debilitating tropical disease. It was a frightening finding and a setback for scientists who have spent decades and hundreds of millions of dollars trying to develop an immunization against dengue, a mosquito-borne virus that each year infects an estimated 390 million people in tropical regions world-wide.

Now, international health officials say Sanofi's troubles could fuel public distrust of vaccination and lead to regulatory or political hurdles that developers of new dengue vaccines such as **Takeda Pharmaceutical** Co., Merck & Co., and **GlaxoSmithKline** PLC must overcome, even though their vaccine candidates differ substantially from Sanofi's.

"There will be greater scrutiny now," said Joachim Hombach, executive secretary of the Strategic Advisory Group of Experts on Immunization, or SAGE, which advises the World Health Organization. Regulators, Dr. Hombach said, may require several additional years' worth of data on a vaccine's performance before allowing companies to market their dengue vaccines.

Lawmakers in the Philippines, where more than 800,000 children were vaccinated in a government-led immunization drive, have called for stricter reviews of drugs intended for mass use.

Future vaccine candidates will have to be tested carefully, Sanofi said. "Regarding the impact on other research efforts, we cannot know for sure," a company spokesman said.

Of the people infected each year with dengue, about 96 million develop a flulike illness, sometimes called breakbone fever for the excruciating muscle and joint pain it can produce. About two million cases of dengue a year are severe, with internal bleeding or shock, and about 20,000 people die. Nearly four billion people—more than half of the world's population—are at risk of dengue infection.

The fallout from Dengvaxia "does impact, overall, the dengue field and the perception of dengue vaccines," said Rajeev Venkayya, who heads the vaccines business unit of Takeda, whose dengue vaccine is in a late-stage clinical trial involving more than 20,000 participants.

"We do not think this is going to be a showstopper in any way or form," said Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases. He cautioned, however, that Sanofi's problems mean "clearly there's going to be not as smooth a trip." NIAID's dengue vaccine candidate is in a late-stage clinical trial involving 17,000 participants in Brazil.

"We should not give up on a dengue vaccine," Dr. Fauci said. "It's too important a disease." The NIAID vaccine has been licensed to several companies, including Merck, which said it plans to start its own trial this year.

Amazon, Google to Duke It Out in Vegas

Showdown looms in voice-operated world over domination of smart-home market

By Katherine Bindley

If the annual CES technology show in Las Vegas were a high school dance, **Amazon.com** Inc. and **Alphabet** Inc.'s **Google** usually would be the ones who stayed away, preferring to throw their own parties. Only this year, the tech giants are getting all dressed up and looking for dates.

They are seeking and supporting partners for their voice-operated platforms, Amazon Alexa and Google Assistant. In the grand tradition of such classic battles as Android versus iOS and Mac versus PC, there is a showdown in the voice-operated world over who is going to be in charge of your home.

STEVE MARCUS/REUTERS

The tech giants are taking new interest in the CES show as they seek partners for their platforms.

Despite CES's role as an international meeting place for digital giants and startups alike, the titans of tech—not just Google and Amazon, but **Apple** Inc., **Facebook** Inc. and **Microsoft** Corp.—have been largely absent in recent years. They might have sent staff, but they didn't set up big tents or booths, or buy big ads that cover Vegas buildings. Microsoft once dominated the tech show, but pulled back its public-facing activities after 2012.

"Both Google and Amazon kind of thought it was cool not to go to CES," said Patrick Moorhead, chief analyst with Moor Insights & Strategy. "But it's a required thing because of this new plane of competition in home automation and digital assistants."

CES will be the ideal battleground this week, with 3,900 exhibitors, many showcasing home products with voice-operated capabilities—not just speakers but entire entertainment systems, kitchen appliances and security platforms. But since making and supporting a reliable voice assistant can cost billions of dollars, even well-heeled companies with broad product lines are pairing with the industry leaders.

Amazon and Google aren't just interested in new areas to embed their voice assistants. They also need to expand their ever-growing arsenals of voice-activated apps—what Amazon calls "skills" and Google calls "actions."

Amazon needs to have a presence at CES if it wants to join with the best, said J.P. Gownder, an analyst with market-research firm Forrester, while Google needs to show it is serious about the smart-home market to make up for lost time.

"Amazon has a bit of a head start here. They have more partnerships. They have more skills than Google has actions," he said. "But Google is not taking it lying down."

"Everything going forward is about partnership. No company can be successful by itself," said Gary Shapiro, chief executive of the Consumer Technology Association, which produces CES, formerly known as the Consumer Electronics Show.

Alexa was all over CES last year. This week, it will be able to turn up the volume on a Hisense Smart TV, operate a Whirlpool microwave, and even draw a bath and dim the lights from within Kohler's $1,600 bathroom mirror.

Amazon is sending executives to the show, including David Limp, senior vice president of devices and services.

Google will also have executives at the show, but its technology will be found in many booths: LG will be showcasing with a built-in Google Assistant, while Cauldryn, maker of heated water bottles, is joining with Google to integrate voice-activated controls.

MIMS

Continued from page B1

up to the reality of its globe-spanning power.

In June, he changed the company's mission from "connecting" the world to bringing the world closer together. He said he used to think giving people a voice would make the world better on its own, "but our society is still divided. Now I believe we have a responsibility to do even more."

In December, Facebook researchers surveyed the scientific literature and their own work and publicly acknowledged that while direct communication and sharing between individuals and small groups on Facebook can have positive effects, merely lurking and scrolling through others' status updates makes people unhappy.

Social networks can make us miserable by convincing us that whenever we're away from our friends, we're missing out on social bonding occurring among them, says Jacqueline Rifkin, a Ph.D. candidate at Duke University who collaborated on a study of the fear of missing out, or FOMO.

Ms. Rifkin's work indicates that FOMO isn't about envy but something far more primal: If our kith and kin are bonding without us, we might soon find ourselves left out of the tribe.

Studies suggest that how much you use social media is at least as significant as how you use it. This has been true of everything humans consume for all of history, so it is hardly a surprise.

"Let's pretend that one of the findings that comes out of this research is that the best thing for people would be to batch their Facebook use and only look at it once a week," says Robert Kraut, a professor at Carnegie Mellon University who has studied online communities for more than 20 years and has collaborated with researchers at Facebook, publishing work derived from Facebook's own data. "What would be the business consequence if the research came to that conclusion?"

We might soon find out. Facebook likely has the power to push us away from harmful ways of using the service—if it wants to. Facebook already uses some of the most sophisticated artificial intelligence known to humanity to stimulate us to "engage" with its product and advertisements. Facebook's public statements indicate it thinks it can use those same tools to keep users from overindulging.

Facebook already is taking steps to change parts of its service—primarily the News Feed, the beating heart of Facebook's success since its introduction in 2006. As outlined in a recent blog post by the company's chief researcher, those steps include things that Facebook itself believes will reduce engagement on the service, including hiding clickbait and fake news and promoting posts from friends.

Conveniently, Facebook is now pushing the aspects of its services that it and others argue are better for our mental health. As users continue to share less of their own lives on Facebook, the social network is pushing them to its Groups function. The company is also showing more ads in its Messenger app,

> *Facebook indicates it can use some of its tools to keep users from overindulging.*

one of the places where the person-to-person communication it suddenly favors takes place.

Facebook is built on the idea of bringing the world closer together, as its mission statement so boldly pronounces. The irony that Mr. Zuckerberg must confront is that the very means of that connection—what the company euphemistically calls engagement, but which a growing chorus of experts say is more accurately described as addiction—appears to be detrimental to the humans whose thriving he seems earnestly to want to promote. Unlike CEOs who in the past were confronted with the harms of their products, Mr. Zuckerberg seems more ready to acknowledge them.

Facebook might well live up to Mr. Zuckerberg's stated goals. Or, it could bow to economic logic: In the first nine months of 2017, the company's "engaging" News Feed algorithm helped drive revenue up 47%.

BUSINESS NEWS

Chinese Buyers Warming Up To a New Option: Used Vehicles

By Trefor Moss

NINGBO, China—Secondhand-car sales are surging in China, putting pressure on auto makers after a year of sputtering growth in the new-vehicle market.

TREFOR MOSS/THE WALL STREET JOURNAL

Sales of secondhand cars rose more than 20% in China last year.

New passenger-car sales rose just 1.9% in the first 11 months of 2017, down sharply from 2016 and below the projected 2.7% growth globally. Some auto makers in China went into reverse: **Ford Motor** Co.'s sales in China, for example, fell 6% in 2017.

Some of the blame rests with booming secondhand sales, which rose more than 20% last year over 2016 levels, said Xu Haidong of the China Association of Automobile Manufacturers.

Until recently, car ownership was a novelty for China's new middle class, but today "cars have been demystified," said Li Jian, chief executive of online auto-trading platform Renrenche. Chinese motorists are still image conscious, but now they seek out bargains as an affordable way to trade up.

Foreign auto makers acknowledge that China's secondhand market has become too valuable to ignore, and say they are expanding their preowned offerings. A **General Motors** Co. spokeswoman said all 1,600 of its Buick, Cadillac and Chevrolet dealerships in China now sell used cars, and that its preowned sales rose 30% in 2017.

A Ford spokesman said that 80% of its roughly 800 Chinese dealerships serve as outlets for certified preowned vehicles.

In the U.S., sales of preowned cars outnumber brand-new sales more than two to one. But in China, this situation is reversed: Used-car sales are expected to hit 12.5 million this year, the China Automobile Dealers Association forecasts, compared with around 24.9 million new-vehicle sales.

That ratio is shifting as the country's auto market matures, and used-car sales should overtake new sales by 2020, the association says. Millions of people who entered the market as first-time buyers a few years ago have grown more knowledgeable and want to upgrade affordably, according to Mr. Li. Recent policy changes designed to boost the preowned market also have made it easier to move vehicles between cities.

In the Zhejiang province city of Ningbo, more used cars change hands than anywhere else in China, according to the dealers association. Ningbo is close to Shanghai and Hangzhou, two of China's biggest and wealthiest cities, ensuring an abundant supply of high-end, nearly new vehicles.

Chinese buyers have figured out that "nobody on the street would ever know the car was bought secondhand," as long as they buy a recent model in good condition, said Lu Mengzheng, a showroom manager at the Yichetang used-car center in Ningbo. Yichetang blazed a trail for used premium cars in Ningbo when it opened 12 years ago, but recently rivals have mushroomed as demand heats up, Mr. Lu said.

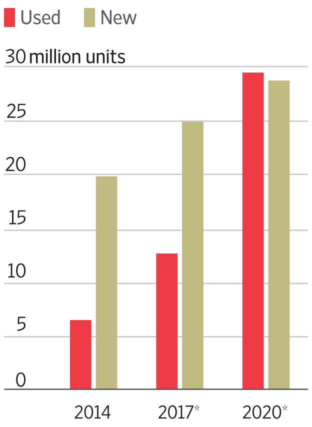
His showroom featured BMW, Maserati and Mercedes-Benz cars, as well as a limited-edition stretch Lincoln Navigator, on sale here for $256,000, but originally worth $830,000, said Mr. Lu.

At another showroom nearby, Xu Danhong and her husband were eyeing a sporty Audi RS3 that was three years old and cost $45,500. The couple already owned a brand-new Jaguar XJ, but Ms. Xu—a 25-year-old bank employee—wanted a smaller, second car and felt that buying preowned made financial sense. "It's a better deal," said Ms. Xu. "Cars are no longer a luxury. It's just a means of transport."

—Zhang Chunying in Shanghai and Lin Zhu in Beijing contributed to this article.

Second Gear

In China, used passenger-car sales are set to outpace new-car sales.



*Estimate

Sources: China Automobile Dealers Association (used-car sales); China Association of Automobile Manufacturers (new-car sales); Bernstein Research (2020 new-car sales)

THE WALL STREET JOURNAL.

BUSINESS NEWS

FRANK MASI/ASSOCIATED PRESS

'Jumanji: Welcome to the Jungle' was the weekend's top movie.

'The Last Jedi' Makes Weak Debut in China

BY BEN FRITZ

The Force is weak in China.

"Star Wars: The Last Jedi" opened to a soft $28.7 million in China this weekend, less than the prior two installments in the series. That signals that **Walt Disney** Co. hasn't succeeded in its efforts to gain momentum for a prized franchise in the world's second-largest movie market, where it previously wasn't well known.

"Star Wars: The Force Awakens" opened to $52.5 million over two days in 2016 and last year's spinoff "Rogue One" took in $32.4 million on its first three-day weekend.

After the first six "Star Wars" movies went virtually unseen in the previously closed-off Chinese market, Disney pulled out all the stops to try to generate interest in droids, light sabers and the force, hosting splashy premieres and publicity stunts.

Few expected it would be an instant smash, but the fact that "The Last Jedi" underperformed even last year's "Rogue One," which is beating in most of the rest of the world, indicates Chinese audiences still aren't taking to the Skywalker saga.

Disney didn't respond to a request for comment.

World-wide, "The Last Jedi" has now grossed just over $1.2 billion, making it the 13th-highest-grossing film of all time and another massive success for Disney.

The No. 1 movie in theaters this weekend was the family comedy "Jumanji: Welcome to the Jungle," which has had a remarkable run since opening the Wednesday before Christmas. Its ticket sales dropped only 28% from last weekend, compared with 55% for "The Last Jedi," as it grossed $36 million. The restart of a franchise last seen in 1995, with new stars Dwayne Johnson and Kevin Hart, has been a hit for **Sony Pictures Entertainment** and has now grossed $514 million world-wide.

Estimated Box-Office Figures, Through Sunday

	FILM	DISTRIBUTOR	SALES, IN MILLIONS: WEEKEND*	CUMULATIVE	% CHANGE
1.	Jumanji: Welcome To The Jungle	Sony	$36	$244.4	-28
2.	Insidious: The Last Key	Universal	$29.3	$29.3	--
3.	Star Wars: The Last Jedi	Disney	$23.55	$572.5	-55
4.	The Greatest Showman	Fox	$13.8	$76.9	-11
5.	Pitch Perfect 3	Universal	$10.2	$85.98	-39

*Friday, Saturday and Sunday Source: comScore

BUSINESS WATCH

TOYOTA MOTOR

Former President Tatsuro Toyoda Dies

Tatsuro Toyoda, the former **Toyota Motor** Corp. president who led the company's climb to become one of the world's top auto makers, has died. He was 88.

Mr. Toyoda, a son of the company's founder, died Dec. 30 of pneumonia, the Japanese auto maker said Saturday.

Mr. Toyoda, the auto maker's seventh president, stepped down as president in 1995, while continuing in other posts such as adviser, a title he held until his death. He was instrumental in setting up the California joint venture with U.S. rival General Motors called NUMMI, or New United Motor Manufacturing Inc., which began production in 1984.

Mr. Toyoda's father, Kiichiro Toyoda, founded the company. Tatsuro's brother, Shoichiro Toyoda, whom he succeeded as president, is current President Akio Toyoda's father.

—Associated Press

DUNKIN BRANDS GROUP

Chain to Reduce Menu Offerings

Dunkin' Donuts is cutting back on its food and drink offerings by about 10% nationwide in mid-March.

The **Dunkin Brands Group** Inc. unit is expected to roll out a new, simplified menu in its New England locations starting Monday, the Boston Herald reported.

The Canton, Mass., company said the reduction is meant to streamline service.

Among the items being dropped are those that are less popular or are time-consuming to make, such as smoothies, afternoon sandwiches and certain breakfast sandwiches.

—Associated Press

LOVISA

Sales Climb 7.4% At Costume Jeweler

Investors perhaps shouldn't bet on costume jewelry retailer **Lovisa** maintaining strong sales growth in the second half, cautions Canaccord.

That is because a 7.4% uplift in first-half like-for-like sales, reported on Friday, may reflect the success of additional ranges specific to the Christmas season or higher "gifting" sales, the financial services firm said.

Still, Lovisa looks set to beat its 3%-to-5% like-for-like sales target for the fourth year in a row, and that's notable "given the numerous tailwinds (competitor closures, price increases, very successful ranges in FY17) that have supported sales growth in prior years," the brokerage house said.

—David Winning

PATRICK T. FALLON/BLOOMBERG NEWS

The Dunkin' Donuts chain will cut back on less-popular items.

MARKETS DIGEST

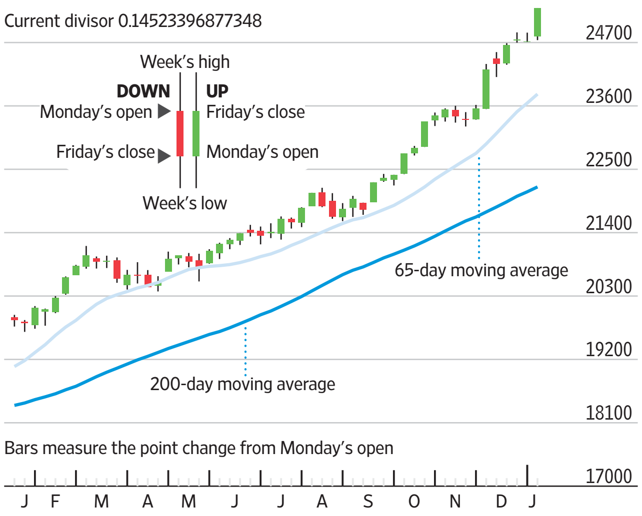
Dow Jones Industrial Average

25295.87 ▲576.65, or 2.33% last week

High, low, open and close for each of the past 52 weeks

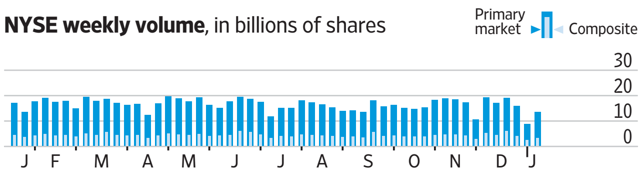
	Last	Year ago
Trailing P/E ratio	22.28	21.77
P/E estimate *	20.04	18.68
Dividend yield	2.07	2.41
All-time high	25295.87, 01/05/18	

Current divisor 0.14523396877348



Bars measure the point change from Monday's open

NYSE weekly volume, in billions of shares



Weekly P/E data based on as-reported earnings from Birinyi Associates Inc.

S&P 500 Index

2743.15 ▲69.54, or 2.60% last week

High, low, open and close for each of the past 52 weeks

	Last	Year ago
Trailing P/E ratio	22.09	25.02
P/E estimate *	19.25	17.65
Dividend yield	1.86	2.06
All-time high:	2743.15, 01/05/18	

Financial Flashback

The Wall Street Journal, January 8, 1985

Occidental Petroleum and Diamond Shamrock canceled their planned $3.2 billion merger hours after announcing their managements had agreed in principle to the deal.

Major U.S. Stock-Market Indexes

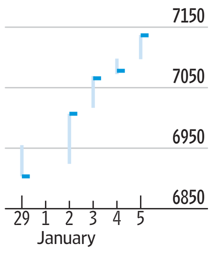
	Latest Week High	Low	Close	Net chg	% chg	52-Week Low	Close (●)	High	% chg	% chg YTD	3-yr. ann.
Dow Jones											
Industrial Average	25299.79	24741.70	**25295.87**	576.65	2.33	19732.40	●	25295.87	26.7	2.3	13.1
Transportation Avg	10986.83	10653.29	**10911.74**	299.45	2.82	8783.74	●	10911.74	19.9	2.8	7.2
Utility Average	723.53	696.74	**700.74**	-22.63	-3.13	651.14	●	774.47	5.9	-3.1	4.5
Total Stock Market	28351.56	27757.86	**28349.31**	676.12	2.44	23526.88	●	28349.31	19.8	2.4	10.5
Barron's 400	728.07	713.56	**728.00**	17.07	2.40	600.24	●	728	20.1	2.4	11.2
Nasdaq Stock Market											
Nasdaq Composite	7137.04	6924.08	**7136.56**	233.17	3.38	5521.06	●	7136.56	29.3	3.4	15.3
Nasdaq 100	6654.98	6417.75	**6653.29**	256.87	4.02	5007.08	●	6653.29	32.9	4.0	16.9
S&P											
500 Index	2743.45	2682.36	**2743.15**	69.54	2.60	2263.69	●	2743.15	20.5	2.6	10.7
MidCap 400	1936.82	1904.10	**1936.27**	35.70	1.88	1667.44	●	1936.27	15.1	1.9	10.7
SmallCap 600	949.20	938.38	**949.18**	12.92	1.38	815.62	●	949.18	13.0	1.4	11.8
Other Indexes											
Russell 2000	1560.84	1536.12	**1560.01**	24.50	1.60	1345.24	●	1560.01	14.1	1.6	9.7
NYSE Composite	13104.52	12842.27	**13103.23**	294.39	2.30	11148.85	●	13103.23	16.6	2.3	7.3
Value Line	573.16	562.31	**573.16**	10.85	1.93	503.24	●	573.16	11.7	1.9	5.3
NYSE Arca Biotech	4394.57	4215.27	**4333.74**	111.53	2.64	3134.03	●	4374.04	31.9	2.6	7.7
NYSE Arca Pharma	559.21	547.18	**559.01**	14.08	2.58	469.13	●	560.52	13.7	2.6	1.8
KBW Bank	109.60	106.54	**108.90**	2.19	2.05	88.02	●	108.9	17.4	2.1	14.9
PHLX§ Gold/Silver	88.26	85.91	**87.39**	2.12	2.48	76.42	●	96.72	2.4	2.5	6.8
PHLX§ Oil Service	157.49	146.82	**157.11**	7.56	5.06	117.79	●	192.66	-18.5	5.1	-8.1
PHLX§ Semiconductor	1330.31	1258.77	**1325.71**	72.66	5.80	908.65	●	1341.69	45.9	5.8	25.3
CBOE Volatility	11.07	8.92	**9.22**	-1.82	-16.49	9.14	●	16.04	-18.6	-16.5	-22.6

§Nasdaq PHLX

Sources: SIX Financial Information; WSJ Market Data Group

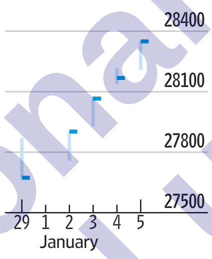
Nasdaq Composite

▲ 233.17, or 3.38% last week



DJ US TSM

▲ 676.12, or 2.44% last week



International Stock Indexes

Region/Country	Index	Latest Week Close	% chg	52-Week Range Low	Close	High	YTD % chg
World	**The Global Dow**	3175.51	2.89	2572.15	●	3175.51	2.9
	DJ Global Index	407.52	2.59	330.84	●	407.52	2.6
	DJ Global ex U.S.	273.90	2.68	217.34	●	273.90	2.7
Americas	**DJ Americas**	658.58	2.54	547.18	●	658.58	2.5
Brazil	**Sao Paulo Bovespa**	79071.47	3.49	60761.74	●	79071.47	3.5
Canada	**S&P/TSX Comp**	16349.44	0.87	14951.88	●	16412.94	0.9
Mexico	**S&P/BMV IPC**	49887.74	1.08	45553.51	●	51713.38	1.1
Chile	**Santiago IPSA**	4309.04	2.33	3228.42	●	4309.04	2.3
EMEA	**Stoxx Europe 600**	397.35	2.10	360.12	●	397.35	2.1
	Stoxx Europe 50	3232.09	1.71	2979.48	●	3276.11	1.7
Eurozone	**Euro Stoxx**	397.37	3.08	346.53	●	400.44	3.1
	Euro Stoxx 50	3607.63	2.96	3230.68	●	3697.40	3.0
Austria	**ATX**	3550.88	3.82	2655.60	●	3555.04	3.8
Belgium	**Bel-20**	4097.04	3.00	3542.27	●	4118.51	3.0
France	**CAC 40**	5470.75	2.98	4748.90	●	5517.97	3.0
Germany	**DAX**	13319.64	3.11	11509.84	●	13478.86	3.1
Greece	**Athex Composite**	829.72	3.41	608.79	●	858.08	3.4
Israel	**Tel Aviv**	1535.89	1.55	1363.50	●	1535.89	1.7
Italy	**FTSE MIB**	22762.29	4.16	18591	●	23046	4.2
Netherlands	**AEX**	558.16	2.49	476.71	●	558.16	2.5
Portugal	**PSI 20**	5615.63	4.22	4467.94	●	5622.72	4.2
Russia	**RTS Index**	1219.89	5.67	973.33	●	1219.89	5.7
South Africa	**FTSE/JSE All-Share**	59717.20	0.36	50831.89	●	61211.52	0.4
Spain	**IBEX 35**	10411.40	3.66	9304.8	●	11135.4	3.7
Sweden	**SX All Share**	583.05	2.51	531.09	●	600.20	2.5
Switzerland	**Swiss Market**	9556.98	1.866	8229.01	●	9556.98	1.9
U.K.	**FTSE 100**	7724.22	0.47	7099.15	●	7724.22	0.5
Asia-Pacific							
Australia	**S&P/ASX 200**	6122.30	0.94	5611.0	●	6122.3	0.9
China	**Shanghai Composite**	3391.75	2.56	3052.79	●	3447.84	2.6
Hong Kong	**Hang Seng**	30814.64	2.99	22503.01	●	30814.64	3.0
India	**S&P BSE Sensex**	34153.85	0.28	26726.55	●	34153.85	0.3
Japan	**Nikkei Stock Avg**	23714.53	4.17	18335.63	●	23714.53	4.2
Malaysia	**FTSE Bursa Malaysia KLCI**	1817.97	1.18	1658.84	●	1817.97	1.2
Singapore	**Straits Times**	3489.45	2.54	2962.63	●	3501.16	2.5
South Korea	**Kospi**	2497.52	1.22	2045.12	●	2557.97	1.2
Taiwan	**Weighted**	10879.80	2.23	9292.33	●	10879.80	2.2

Source: SIX Financial Information; WSJ Market Data Group

Commodities and Currencies

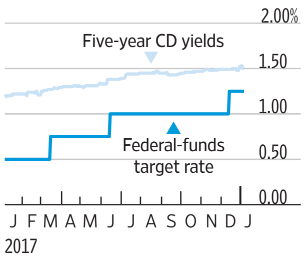
	Last Week Close	Net chg	% Chg	YTD % chg
DJ Commodity	624.14	-1.23	-0.20	-0.20
TR/CC CRB Index	193.45	-0.42	-0.22	-0.22
Crude oil, $ per barrel	61.44	1.02	1.69	1.69
Natural gas, $/MMBtu	2.795	-0.158	-5.35	-5.35
Gold, $ per troy oz.	1320.30	14.00	1.07	1.07
U.S. Dollar Index	92.02	-0.11	-0.12	-0.12
WSJ Dollar Index	85.68	-0.29	-0.34	-0.34
Euro, per dollar	0.8312	-0.0020	-0.24	-0.24
Yen, per dollar	113.05	0.34	0.30	0.30
U.K. pound, in dollars	1.36	0.0056	0.41	0.41

	52-Week Low	Close (●)	High	% Chg
DJ Commodity	532.01	●	629.45	10.27
TR/CC CRB Index	166.50	●	195.37	-0.05
Crude oil, $ per barrel	42.53	●	62.01	13.80
Natural gas, $/MMBtu	2.56	●	3.42	-14.92
Gold, $ per troy oz.	1171.90	●	1346.00	12.66
U.S. Dollar Index	91.35	●	102.22	-9.98
WSJ Dollar Index	84.49	●	92.81	-7.68
Euro, per dollar	0.83	●	0.95	-12.46
Yen, per dollar	107.84	●	116.99	-3.37
U.K. pound, in dollars	1.20	●	1.36	10.45

Consumer Rates and Returns to Investor

U.S. consumer rates

A consumer rate against its benchmark over the past year



Selected rates

5-year CDs

Bankrate.com avg†:	1.50%
First Internet Bank of Indiana	2.43%
Indianapolis, IN	888-873-3424
Capital One 360	2.45%
Glen Allen, VA	800-289-1992
EverBank	2.45%
Jacksonville, FL	855-228-6755
Goldman Sachs Bank USA	2.50%
New York, NY	855-730-7283
M.Y. Safra Bank, FSB	2.50%
New York, NY	212-652-7200

Interest rate	Yield/Rate (%) Last (●)	Week ago	52-Week Range (%) Low	High	3-yr chg (pct pts)
Federal-funds rate target	1.25-1.50	1.25-1.50	0.50	1.50	1.25
Prime rate*	4.50	4.50	3.75	4.50	1.25
Libor, 3-month	1.70	1.69	1.01	1.70	1.45
Money market, annual yield	0.30	0.33	0.26	0.36	-0.14
Five-year CD, annual yield	1.50	1.48	1.19	1.53	-0.03
30-year mortgage, fixed†	3.92	3.92	3.73	4.33	-0.09
15-year mortgage, fixed†	3.37	3.37	2.99	3.47	0.07
Jumbo mortgages, $424,100-plus†	4.32	4.32	4.21	4.87	-0.09
Five-year adj mortgage (ARM)†	4.07	4.06	3.20	4.07	0.73
New-car loan, 48-month	3.23	3.29	2.85	3.36	0.24

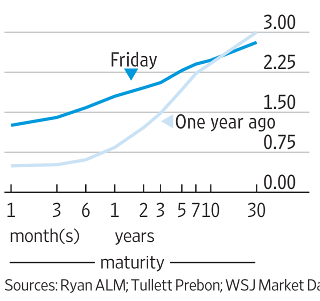
Bankrate.com rates based on survey of over 4,800 online banks. *Base rate posted by 70% of the nation's largest banks. † Excludes closing costs.

Sources: SIX Financial Information; WSJ Market Data Group; Bankrate.com

Benchmark Yields and Rates

Treasury yield curve

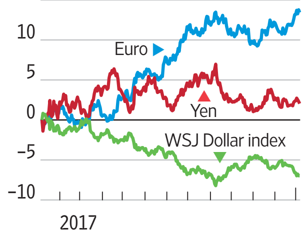
Yield to maturity of current bills, notes and bonds



Sources: Ryan ALM; Tullett Prebon; WSJ Market Data Group

Forex Race

Yen, euro vs. dollar; dollar vs. major U.S. trading partners



Corporate Borrowing Rates and Yields

Bond total return index	Yield (%) Last	Wk ago	Spread +/- Treasurys, in basis pts, 52-wk Range Last	Low	High	Total Return 52-wk	3-yr
10-yr Treasury, Ryan ALM	2.476	2.409				1.64	0.58
DJ Corporate	3.194	3.116				5.13	3.35
Aggregate, Barclays Capital	2.770	2.710	n.a.	35	45	2.75	1.94
High Yield 100, Merrill Lynch	5.422	5.583	315	307	394	6.485	4.998
Fixed-Rate MBS, Barclays	2.930	2.910	n.a.	18	34	2.08	1.70
Muni Master, Merrill	2.179	2.177	16	5	18	4.239	2.373
EMBI Global, J.P. Morgan	5.507	5.540	300	300	363	8.331	7.284

Sources: J.P. Morgan; Ryan ALM; S&P Dow Jones Indices; Barclays Capital; Merrill Lynch

New to the Market

Public Offerings of Stock

IPOs in the U.S. Market

Initial public offerings of stock expected this week; might include some offerings, U.S. and foreign, open to institutional investors only via the Rule 144a market; deal amounts are for the U.S. market only

Expected pricing date	Filed	Issuer/business	Symbol/primary exchange	Shares (mil.)	Pricing Range($) Low/High	Bookrunner(s)
1/11	2/14 2017	Liberty Oilfield Services Oilfield service company.	LBRT N	10.7	14.00/ 16.00	MS, GS, WFS, Citi, JPM, Evercore

Lockup Expirations

None expected this week

IPO Scorecard

Performance of IPOs, most-recent listed first

Company SYMBOL IPO date/Offer price	Friday's close ($)	% Chg From Offer price	1st-day close	Company SYMBOL IPO date/Offer price	Friday's close ($)	% Chg From Offer price	1st-day close
Cue Biopharma **CUE** Jan. 2/$7.50	15.00	100.0	29.0	Newmark Grp **NMRK** Dec. 15/$14.00	15.55	11.1	11.5
iClick Interactive Asia Grp **ICLK** Dec. 22/$8.00	9.60	20.0	6.7	Denali Thera **DNLI** Dec. 8/$18.00	16.80	–6.7	–21.7
LexinFintech Hldgs **LX** Dec. 21/$9.00	14.64	62.7	36.8	GigCapital **GIG.U** Dec. 8/$10.00	10.05	0.5	0.5
Dogness **DOGZ** Dec. 20/$5.00	4.81	–3.8	–19.8	Luther Burbank **LBC** Dec. 8/$10.75	11.99	11.5	2.0
Casa Sys **CASA** Dec. 15/$13.00	18.80	44.6	30.6	CURO Grp Hldgs **CURO** Dec. 7/$14.00	14.49	3.5	2.0

Sources: WSJ Market Data Group; FactSet Research Systems

Other Stock Offerings

Secondaries and follow-ons expected this week in the U.S. market

None expected this week

Off the Shelf

"Shelf registrations" allow a company to prepare a stock or bond for sale, without selling the whole issue at once. Corporations sell as conditions become favorable. Here are the shelf sales, or takedowns, over the last week:

Issuer/Industry	Takedown date/ Registration date	Deal value ($ mil.)	Registration (mil.)	Bookrunner(s)
Sempra Energy Utility & Energy	Jan. 4 Aug. 30,'17	$2,500.0	...	MS, RBC Cptl Mkts, Barclays
Sempra Energy Utility & Energy	Jan. 4 Aug. 30,'17	$1,500.0	...	MS, RBC Cptl Mkts, Barclays
Crispr Therapeutics Healthcare	Jan. 4 Nov. 9,'17	$113.8	$300.0	GS, Piper Jaffray, Barclays
Atara Biotherapeutics Healthcare	Jan. 3 Nov. 9,'15	$127.8	$335.0	JPM, Cowen & Co
Howard Hughes Real Estate/Property	Jan. 2 Oct. 17,'12	$322.5	$968.0	JPM, BofA ML, Jefferies

Public and Private Borrowing

Treasurys

Monday, January 8
Auction of 13 week bill;
announced on January 4; settles on January 11
Auction of 26 week bill;
announced on January 4; settles on January 11

Tuesday, January 9
Auction of 4 week bill;
announced on January 8; settles on January 11
Auction of 3 year note;
announced on January 4; settles on January 16

Wednesday, January 10
Auction of 10 year note;
announced on January 4; settles on January 16

Thursday, January 11
Auction of 30 year bond;
announced on January 4; settles on January 16

Public and Municipal Finance

Deals of $ 150 million or more expected this week

Sale	Final maturity	Issuer	Total ($mil.)	Rating Fitch	Moody's	S&P	Bookrunner/ Bond Counsel(s)
Jan. 8	prelim.	New Jersey Economic Dev Auth	381.2	N.R.	N.R.	N.R.	RBC Cptl Mkt/—
Jan. 9	Oct. 1, 2037	Fairfax Co-Virginia	227.8	N.R.	N.R.	N.R.	Preliminary/ Norton Rose Fulbright
Jan. 9	Jan. 1, 2032	Massa-chusetts	600.0	N.R.	N.R.	N.R.	Preliminary/ Mintz Levin Cohn Ferris
Jan. 10	prelim.	Colorado	375.0	N.R.	N.R.	N.R.	Preliminary/ Kutak Rock
Jan. 12	prelim.	Illinois Finance Authority	218.7	N.R.	N.R.	N.R.	J P Morgan Securities LLC/—

Source: Thomson Reuters/Ipreo

Closed-End Funds | WSJ.com/funds

Listed are the 300 largest closed-end funds as measured by assets. Closed-end funds sell a limited number of shares and invest the proceeds in securities. Unlike open-end funds, closed-ends generally do not buy their shares back from investors who wish to cash in their holdings. Instead, fund shares trade on a stock exchange. **NA** signifies that the information is not available or not applicable. **NS** signifies fund not in existence of entire period. 12 month yield is computed by dividing income dividends paid (during the previous twelve months for periods ending at month-end or during the previous fifty-two weeks for periods ending at any time other than month-end) by the latest month-end market price adjusted for capital gains distributions.

Source: Lipper

Friday, January 5, 2018

Fund (SYM)	NAV	Close	Prem /Disc	52 wk Ttl Ret
General Equity Funds				
Adams Divers Equity Fd **ADX**	18.03	15.38	-14.7	30.1
Boulder Growth & Income **BIF**	13.22	11.18	-15.4	29.2
Central Securities **CET**	33.57	27.74	-17.4	31.2
CohSteer Opprtnty Fd **FOF**	14.23	13.38	-6.0	21.6
Cornerstone Strategic **CLM**	13.91	15.95	+14.7	28.5
Cornerstone TR Fd **CRF**	13.55	15.76	+16.3	27.9
EtnVnc TaxAdvDiv **EVT**	24.21	23.47	-3.1	19.4
Gabelli Dividend & Incm **GDV**	25.78	23.82	-7.6	23.9
Gabelli Equity Trust **GAB**	6.63	6.32	-4.7	23.6
Genl American Investors **GAM**	41.52	34.78	-16.2	21.4
Guggenheim Enh Fd **GPM**	9.18	9.11	-0.8	27.6
HnckJohn TxAdv **HTD**	24.87	23.81	-4.3	7.4
Liberty All-Star Equity **USA**	7.06	6.44	-8.8	32.7
Royce Micro-Cap **RMT**	10.70	9.56	-10.7	24.7
Royce Value Trust **RVT**	17.86	16.49	-7.7	31.4
Source Capital **SOR**	46.06	41.33	-10.3	16.7
Tri-Continental **TY**	30.46	27.19	-10.7	27.5
Specialized Equity Funds				
Adams Natural Rscs Fd **PEO**	24.13	20.41	-15.4	5.7
AllnzGI NFJ Div Interest **NFJ**	15.01	13.23	-11.9	11.2
AlpnGlblPrProp **AWP**	7.55	6.82	-9.7	43.0
BlkRk Enh Cap Inco **CII**	17.47	16.55	-5.3	27.8
BlkRk Engy Res Tr **BGR**	16.22	14.95	-7.8	8.5
BlackRock Enh Eq Div Tr **BDJ**	10.08	9.32	-7.5	20.9
BlackRock Enh Gl Div Tr **BOE**	13.33	12.91	-3.2	29.2
BlkRk Intl Grwth&Inco **BGY**	7.16	6.68	-6.7	28.4
BlkRk Health Sci **BME**	36.40	36.50	+0.3	19.1
BlackRck Rscs Comm Str Tr **BCX**	10.91	10.08	-7.6	26.9
BlackRock Science & Tech **BST**	28.79	28.32	-1.6	60.7
BlackRock Utilities Infr **BUI**	21.04	21.26	+1.0	21.0
CBREClarionGlblRlEstIncm **IGR**	8.98	7.94	-11.6	13.2
Central Fund of Canada **CEF**	13.84	13.52	-2.3	14.3
ClearBridge Amer Engy **CBA**		8.90	NA	2.8
ClearBridge Engy MLP Fd **CEM**		16.44	NA	11.6
Clearbridge Engy MLP Opp **EMO**		12.55	NA	2.4
Clearbridge Engy MLP TR **CTR**		12.38	NA	4.2
Cohen & Steers Infr Fd **UTF**	25.69	24.31	-5.4	32.9
C&S MLP Incm & Engy Opp **MIE**	11.27	10.81	-4.1	4.7
Cohen & Steers Qual Inc **RQI**	13.26	12.43	-6.3	5.5
CohnStrsPfdInco **RNP**	22.48	21.03	-6.5	15.5
Cohen & Steers TR **RFI**	13.17	12.68	-3.7	8.4
CLSeligmn Prem Tech Gr Fd **STK**	21.87	23.25	+6.3	42.5
Duff & Phelps **DNP**	9.56	10.70	+11.9	11.2
Duff&PhelpsGblUtilIncFd **DPG**	17.85	15.96	-10.6	8.4
Eaton Vance Eqty Inco Fd **EOI**	15.38	14.68	-4.6	26.0
Eaton Vance Eqty Inco II **EOS**	16.27	15.55	-4.4	27.4
EtnVncRskMngd **ETJ**	10.16	9.76	-3.9	17.5
Etn Vnc Tax Mgd Buy-Write **ETB**	16.50	16.75	+1.5	8.4
Eaton Vance BuyWrite Opp **ETV**	15.15	15.45	+2.0	11.5
Eaton Vance Tax-Mng Div **ETY**	12.51	12.24	-2.2	27.9
Eaton Vance Tax-Mngd Opp **ETW**	11.78	12.15	+3.1	28.5
EtnVncTxMngGlDvEqInc **EXG**	9.67	9.60	-0.7	29.8
Fiduciary/Clymr Opp Fd **FMO**	13.97	14.10	+0.9	2.7
FT Energy Inc & Growth Fd **FEN**	26.24	26.69	+1.7	7.1
FstTrEnhEqtIncFd **FFA**	16.76	16.16	-3.6	27.6
First Tr Engy Infr Fd **FIF**	18.95	18.36	-3.1	7.1
First Tr MLP & Engy Incm **FEI**	14.92	15.88	+6.4	5.4
Gabelli Hlthcr & Well **GRX**	12.04	10.50	-12.8	13.8
Gabelli Utility Tr **GUT**	5.29	7.10	+34.2	22.7
GAMCOGlblGoldNatRscs&Inc **GGN**	5.50	5.37	-2.4	17.8
Goldman Sachs MLP Inc Opp **GMZ**		9.50	NA	0.1
Goldman Sachs MLP Energy **GER**		6.68	NA	-4.2
John Hancock Finl Opps Fd **BTO**	37.47	38.89	+3.8	10.8
Macquarie Glbl Infrstrctr **MGU**	28.38	26.14	-7.9	37.9
Neuberger Berman MLP Incm **NML**	10.14	9.85	-2.9	5.8
Neubrgr Brm Rl Est Sec Fd **NRO**	5.61	5.48	-2.3	9.6
Nuveen Dow 30 Dynamic **DIAX**	19.30	18.75	-2.8	31.2
Nuveen Core Eq Alpha **JCE**	15.09	14.76	-2.2	30.5
Nuveen Diversified Div **JDD**	12.80	12.52	-2.2	21.8
Nuveen Engy MLP Fd **JMF**	12.29	12.45	+1.3	-3.9
Nuv NASDAQ 100 Dyn Over **QQQX**	23.39	24.92	+6.5	39.5
Nuveen Real Est Incm Fd **JRS**	11.10	10.95	-1.4	8.4
Nuveen Real Asset Income **JRI**	19.73	18.10	-8.3	20.6
Nuv S&P 500 Dyn Overwrite **SPXX**		17.77	NA	31.8
Nuveen S&P 500 Buy-Write **BXMX**	14.44	14.25	-1.3	18.0
Reaves Utility Fund **UTG**	33.31	30.78	-7.6	1.1
Tekla Hlthcr Investors **HQH**	24.93	23.22	-6.9	10.6
Tekla Healthcare Opps Fd **THQ**	19.85	17.88	-9.9	16.9
Tekla Life Sciences **HQL**	20.61	20.02	-2.9	21.1
Tekla World Hlthcr Fd **THW**	15.22	14.08	-7.5	11.3
Tortoise Energy **TYG**	29.50	30.62	+3.8	4.7
Tortoise MLP Fund **NTG**	18.86	18.77	-0.5	4.8
Voya Gl Equity Div **IGD**	8.38	7.90	-5.7	24.9
Income Preferred Stock Funds				
Calamos Strat Fd **CSQ**	13.34	12.28	-7.9	24.2
Cohen & Steers Dur Pfd **LDP**	27.29	26.43	-3.1	16.5
Cohen & Strs Sel Prf Inco **PSF**	27.88	28.50	+2.2	15.7
FT Interm Duration Pfd **FPF**	24.97	24.22	-3.0	14.5
Flaherty & Crumrine Dyn **DFP**	26.27	26.61	+1.3	20.2
Flaherty & Crumrine Pfd **FFC**	20.27	20.14	-0.6	12.9
John Hancock Pfd Income **HPI**	21.52	21.49	-0.1	11.8
John Hancock Pfd II **HPF**	21.27	21.35	+0.4	12.4
John Hancock Pfd Inc III **HPS**	18.96	18.78	-0.9	12.2
JHancock Pr Div **PDT**	15.11	16.68	+10.4	19.1
LMP Cap & Inco Fd **SCD**		14.14	NA	13.4
Nuveen Pfd & Incm Opps Fd **JPC**	10.77	10.25	-4.8	12.8
Nuveen Pfd & Incm Secs Fd **JPS**	10.40	10.16	-2.3	17.9
Nuveen Preferred & Incm **JPI**	26.05	24.81	-4.8	12.9
Nuv Tax-Adv Div Gr **JTD**	18.47	17.71	-4.1	35.1
TCW Strategic Income Fund **TSI**		5.57	NA	10.9
Virtus Global Dividend **ZTR**	12.88	13.40	+4.0	32.3
Convertible Sec's. Funds				
AdvntClymrFd **AVK**	17.95	16.18	-9.9	14.7
AllianzGI Conv & Incm **NCV**	6.74	7.14	+5.9	21.9
AllianzGI Conv & Incm II **NCZ**	6.05	6.31	+4.3	19.8
AllianzGI Equity & Conv **NIE**	23.85	21.67	-9.1	23.9
Calamos Conv Hi Inco Fd **CHY**	11.88	12.01	+1.1	21.9
Calamos **CHI**	11.26	11.21	-0.4	17.6
World Equity Funds				
Alpine Tot Dyn Div **AOD**	10.52	9.62	-8.6	32.8
Calamos Glbl Dyn Inc **CHW**	9.49	9.40	-0.9	43.4
Cdn Genl Inv **CGI**	33.77	23.84	-29.4	27.2
China Fund **CHN**	24.48	22.42	-8.4	49.8
Clough Global Opp Fd **GLO**		11.18	NA	34.8
EtnVncTxAdvGblDiv **ETG**	19.08	17.65	-7.5	30.2
EatonVance TxAdv Opport **ETO**	25.59	25.90	+1.2	32.8
First Trust Dynamic Eur **FDEU**	20.19	19.31	-4.4	29.7
Gabelli Glbl Multimedia **GGT**	9.64	9.36	-2.9	38.8
GDL Fund **GDL**	11.71	9.91	-15.4	6.4
India Fund **IFN**	29.86	26.73	-10.5	40.4
Japan Sml Cap **JOF**	13.67	12.43	-9.1	44.1
Korea Fund **KF**	47.89	43.05	-10.1	45.6
Mexico Fund **MXF**	18.69	16.26	-13.0	21.6
Morgan-Stanley Asia-Pac **APF**	21.70	18.96	-12.6	38.1
MS China a Shr Fd **CAF**	28.69	25.41	-11.4	53.6
MS Emerging Fund **MSF**	21.23	18.63	-12.2	38.0
MS India Invest **IIF**	37.92	34.09	-10.1	50.4
New Germany Fund **GF**	22.28	20.33	-8.8	59.1
Swiss Helvetia Fund **SWZ**	14.32	13.05	-8.9	26.0
Templeton Dragon **TDF**		22.43	NA	44.8
Templeton Emerging **EMF**		17.42	NA	48.8
Virtus Total Return Fund **ZF**	13.08	12.65	-3.3	23.7
Voya Infr Indls & Matls **IDE**	17.04	17.24	+1.2	40.7
Wells Fargo Gl Div Opp **EOD**		5.99	NA	18.6
U.S. Mortgage Bond Funds				

Continued on Page B8

More Lenders Take Hit From Tax Overhaul

By Michael Rapoport

Two more big banks said Friday they expect to take significant charges against fourth-quarter earnings because of the impact of the new U.S. tax-overhaul law.

Morgan Stanley said it expects to take a fourth-quarter charge of $1.25 billion. **Deutsche Bank** AG said it anticipates a charge of about €1.5 billion ($1.81 billion).

Morgan Stanley said provisions of the new tax law will cost it $1.4 billion, primarily from a reduction in the value of its deferred-tax assets. The bank said this charge will be offset in part by a $160 million benefit from remeasuring reserves and interest related to Internal Revenue Service examinations of its tax returns.

Deutsche Bank said its charge also relates to deferred-tax assets and is expected to lead the German bank to record a small full-year loss for 2017.

Deferred-tax assets are past credits and deductions that companies can hold on to and use to defray future tax bills. Some banks have large quantities of them, generated by the losses they suffered during the financial crisis. The new law's reduction in the U.S. corporate tax rate to 21% from 35% means many of those credits and deductions will become less valuable and must be written down.

The announcements follow similar recent disclosures from other banks, including **Citigroup** Inc., **Bank of America** Corp. and **Goldman Sachs Group** Inc., that expect fourth-quarter charges because of the new tax law. In addition to reductions in the value of deferred-tax assets, some banks also must pay a one-time tax imposed by the new law on overseas earnings. The reduction in the corporate tax rate means the new law is expected to benefit many banks in the long term, though neither Morgan Stanley nor Deutsche Bank mentioned that Friday.

—Allison Prang and Nathan Allen contributed to this article.

Banks Woo Europe Schools

Brexit has lenders scrambling to secure placement for children of their relocated staff

For months the Frankfurt International School has been fielding phone calls from some of the world's biggest banks trying to enroll the children of their top earners.

The lenders—under pressure to relocate staff to Frankfurt in the wake of the U.K.'s vote to leave the European

By Noemie Bisserbe in Paris And Patricia Kowsmann in Frankfurt

Union—are counting on the English-language day school to expand its roughly 1,800-student enrollment, but headmaster Paul Fochtman is playing hardball.

"We will not get distracted by Brexit," he said. "We are happy with our current size."

Banks are still in the early stages of selecting staff to relocate to the Continent as Brexit negotiations lumber toward a March 2019 deadline. But their hunt for elite private schools already has begun.

Admission for the 2018-2019 academic year is under way, and the finance industry wants the finest education money can buy in Europe. Bankers also want it in their lingua franca, English.

Goldman Sachs Group Inc. has paid extra fees to secure 80 seats for the children of staff at schools across Frankfurt, according to a person familiar with the matter. **HSBC Holdings** PLC is angling for first-mover advantage in Paris, where the British bank is in talks with several top schools, according to people familiar with the matter.

School administrators say some banks are paying full tuition upfront, before staff and their families have even decided to move.

That doesn't mean schools in cities like Frankfurt, the German financial capital drawing the bulk of the Brexit exodus, are rolling out the welcome mat. Schools across Europe are reluctant to bend admissions rules to accommodate bankers' children. Many don't want to invest in enlarging enrollment, citing uncertainty over the outcome of Brexit negotiations.

"If banks aren't in contact with our school right now, they are going to experience difficulties for fall 2018 entrance," Mr. Fochtman said.

The risk of a schooling shortage has banks in a bind. The U.K. could lose 30,000 finance sector jobs as a result of Brexit to cities such as Frankfurt and Amsterdam, according to Brussels-based think tank Bruegel. Those midsize cities, however, lack the array of schooling options that many bankers have come to expect from London.

Deutsche Bank AG Chief Executive John Cryan told a conference in Frankfurt in September that the bank's hometown was lagging behind London in its offering of schools and other services. The Frankfurt-based lender has about 8,000 employees in the U.K.

"This is where Germany needs to catch up if it wants to take over a large share of the business performed in London," Mr. Cryan said at a conference in the German city.

Eric Menges, head of FrankfurtRheinMain GmbH, a government-backed agency that promotes Frankfurt, said the city's private schools will build extra capacity if they get assurances the inflow of Brexit-related children is significant. Right now, he said, the city's international schools have enough room to accommodate the early arrivals.

Frankfurt International's Mr. Fochtman said lenders approaching the school now about Brexit-related students are already tardy. Every year, the school sets aside 10% of its 350 to 500 available seats for companies that pay a special "partnership" fee to the school. But vacancies under that program already have been filled for the next academic year, he said.

Seven miles south, the Metropolitan School Frankfurt, a modern, bright yellow building in a quiet, middle-class district, has blocked seats for banks that have agreed to pay tuition of up to 14,300 euros ($16,854) for the academic year, said Peter Ferres, a former investment banker who founded the school in 2007.

The International School of Amsterdam also has received many inquiries from financial institutions, said school director Edward Greene. But Mr. Greene isn't keen on partnering with companies.

"We're not convinced it's the right way forward," said Mr. Greene. "If we offer 45 seats, they aren't available to others," he said.

In Paris, which boasts a wide selection of international schools, HSBC has fanned out, entering talks with several schools, according to people familiar with the matter.

One is the exclusive International School of Paris. The school, which has 700 students from kindergarten to high school, plans to open a third campus next year to accommodate another 300 children.

But Brexit-related students aren't getting special treatment. They need to submit school records, recommendation letters and a €900 nonrefundable application fee. Then there is tuition of up to €31,600 a year, depending on the child's age, as well as a €9,000 entry fee. "We will have capacity to meet higher demand," said headmaster Simon Murray. "But they will still need to go through our admission process," he said.

—Max Colchester and Margot Patrick in London contributed to this article.

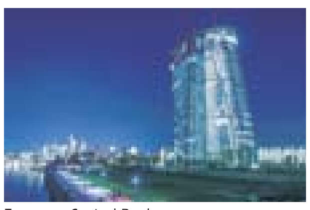
School Crunch

As Europe's financial centers battle for London bankers' expected Brexodus, which city is best equipped to educate their kids?

Greater Paris
Population: 10.6 million

Arc de Triomphe and La Defense financial district

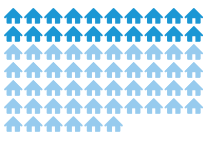
Frankfurt
Population: 733,000



European Central Bank

INTERNATIONAL SCHOOLS

English bilingual junior and senior high schools that offer international diplomas. Some include elementary schools.



Greater Paris: 20 private; 46 state*

Frankfurt: 10 private; 3 state

NUMBER OF BANKERS EXPECTED TO MOVE =1,000

10,000 (estimated)

10,000 (estimated)

BANKS MOVING STAFF

HSBC, BNP Paribas, Société Générale, Crédit Agricole, Goldman Sachs

Goldman Sachs, Sumitomo Mitsui Financial, Nomura, Daiwa Securities Group

*Have international sections

Sources: local French authorities, state of Hessen (school counts); Paris Europlace (Paris jobs); Frankfurt Main Finance (Frankfurt jobs); the companies (banks moving)

THE WALL STREET JOURNAL.

Currencies

U.S.-dollar foreign-exchange rates in late New York trading

Country/currency	Fri in US$	Fri per US$	US$ vs, YTD chg (%)
Americas			
Argentina peso	.0530	18.8790	1.5
Brazil real	.3097	3.2292	-2.5
Canada dollar	.8057	1.2412	-1.3
Chile peso	.001652	605.20	-1.7
Ecuador US dollar	1	1	unch
Mexico peso	.0522	19.1752	-2.5
Uruguay peso	.03487	28.6800	-0.4
Venezuela b. fuerte	.100009	9.9992	-3.3
Asia-Pacific			
Australian dollar	.7860	1.2723	-0.6
China yuan	.1541	6.4891	-0.2
Hong Kong dollar	.1279	7.8188	0.1
India rupee	.01580	63.275	-0.9
Indonesia rupiah	.0000745	13418	-0.5
Japan yen	.008846	113.05	0.3
Kazakhstan tenge	.003009	332.38	-0.1
Macau pataca	.1241	8.0579	0.1
Malaysia ringgit	.2502	3.9975	-1.6
New Zealand dollar	.7169	1.3949	-1.1
Pakistan rupee	.00903	110.750	0.1
Philippines peso	.0201	49.807	-0.3
Singapore dollar	.7557	1.3232	-1.0
South Korea won	.0009413	1062.33	-0.5
Sri Lanka rupee	.0065130	153.54	0.03
Taiwan dollar	.03392	29.485	-0.6
Thailand baht	.03108	32.180	-1.3
Vietnam dong	.00004403	22710	...
Europe			
Czech Rep. koruna	.04711	21.227	-0.2
Denmark krone	.1615	6.1907	-0.2
Euro area euro	1.2032	.8312	-0.2
Hungary forint	.003899	256.45	-1.0
Iceland krona	.009648	103.65	0.1
Norway krone	.1242	8.0505	-1.9
Poland zloty	.2897	3.4520	-0.8
Russia ruble	.01758	56.871	-1.4
Sweden krona	.1226	8.1549	-0.4
Switzerland franc	1.0261	.9746	0.02
Turkey lira	.2677	3.7355	-1.6
Ukraine hryvnia	.0358	27.9676	-0.6
UK pound	1.3569	.7370	-0.4
Middle East/Africa			
Bahrain dinar	2.6524	.3770	-0.02
Egypt pound	.0565	17.7085	-0.4
Israel shekel	.2913	3.4327	-1.3
Kuwait dinar	3.3181	.3014	-0.02
Oman sul rial	2.5976	.3850	0.01
Qatar rial	.2747	3.640	-0.2
Saudi Arabia riyal	.2666	3.7504	unch
South Africa rand	.0812	12.3086	-0.4

	Close	Net Chg	% Chg	YTD % Chg
WSJ Dollar Index	85.68	0.05	0.06	-0.34

Sources: Tullett Prebon, WSJ Market Data Group

Closed-End Funds | WSJ.com/funds

Continued from Page B7

Fund (SYM)	NAV	Close	Prem /Disc	12 Mo Yld
BlackRock Income Trust **BKT**	6.56	6.11	-6.9	5.1
Nuveen Mtg Opp Term Fd **JLS**	24.77	24.31	-1.9	7.4
Investment Grade Bond Funds				
Blackrock Core Bond Tr **BHK**	14.85	14.03	-5.5	5.5
BlkRk Credit Alloc Incm **BTZ**	14.76	13.28	-10.0	6.2
John Hancock Income Secs **JHS**	15.36	14.90	-3.0	5.4
MFS Inc Tr **MIN**	4.38	4.15	-5.3	9.3
WstAstClymr InflLnkd Fd **WIW**	NA	11.57	NA	3.7
WstAssetClymr InflLnk Sec **WIA**	NA	12.03	NA	3.4
Loan Participation Funds				
Apollo Sr Fltg Rate Fd **AFT**	17.92	16.32	-8.9	6.6
BlkRk Debt Strat Fd **DSU**	12.70	11.70	-7.9	6.9
BlackRock FR Incm Strat **FRA**	14.90	14.03	-5.8	5.3
Blkrk FltRt InTr **BGT**	14.39	14.04	-2.4	5.0
BlackstoneGSO Strat Cred **BGB**	NA	15.84	NA	8.0
Blackstone GSO Sr Float **BSL**	NA	17.73	NA	6.4
Eagle Point Credit **ECC**	NA	19.22	NA	5.3
Eaton Vance FR Incm Tr **EFT**	15.50	14.35	-7.4	5.7
EatonVnc SrFltRate **EFR**	15.17	14.34	-5.5	5.9
Eaton Vance Sr Incm Tr **EVF**	7.16	6.51	-9.1	5.5
First Trust Sr FR Fd II **FCT**	14.04	12.89	-8.2	6.1
FT Sr Floating Rate 2022 **FIV**	9.72	9.26	-4.7	5.0
Highland FR Opps Fd **HFRO**	15.23	NA	NA	NA
Invesco Credit Opps Fund **VTA**	13.17	11.87	-9.9	7.1
Invesco Senior Income Tr **VVR**	4.89	4.44	-9.2	5.9
Nuveen Credit Strt Inc Fd **JQC**	9.10	8.28	-9.0	7.4
NuvFloatRteInco Fd **JFR**	11.56	11.21	-3.0	7.2
Nuv Float Rte Opp Fd **JRO**	11.47	11.28	-1.7	7.4
Nuveen Senior Income Fund **NSL**	6.85	6.49	-5.3	7.2
Pioneer Floating Rate Tr **PHD**	12.37	11.47	-7.3	6.3
Voya Prime Rate Trust **PPR**	5.65	5.11	-9.6	5.8
High Yield Bond Funds				
AllianceBernstein Glbl **AWF**	13.97	12.77	-8.6	6.0
Barings Glbl Short Dur HY **BGH**	20.94	19.43	-7.2	9.5
BlackRock Corp Hi Yd Fd **HYT**	12.29	11.04	-10.2	7.6
BlackRockDurInco Tr **BLW**	17.03	16.05	-5.8	6.2
Brookfield Real Assets **RA**	25.36	23.81	-6.1	10.2
Credit Suisse High Yld **DHY**	2.80	2.83	+1.1	9.4
DoubleLine Incm Solutions **DSL**	NA	20.69	NA	8.9
Dreyfus Hi Yd Strat Fd **DHF**	3.56	3.36	-5.6	8.9
Fst Tr Hi Inc Lg/Shrt Fd **FSD**	18.06	16.63	-7.9	8.2
Guggenheim Strat Opps Fd **GOF**	19.78	21.60	+9.2	10.1
Ivy High Income Opps Fund **IVH**	16.25	14.74	-9.3	9.5
Neuberger Berman HYS **NHS**	NA	11.81	NA	7.5
NexPoint Credit Strat Fd **NHF**	NA	25.26	NA	9.4
Nuveen Credit Opps 2022 **JCO**	10.00	9.67	-3.3	NS
Nuveen Gl Hi Incm Fd **JGH**	18.78	17.13	-8.8	8.5
Nuveen High Incm Dec18 **JHA**	10.05	9.90	-1.5	4.9
Nuveen High Incm Dec19 **JHD**	10.22	9.99	-2.3	5.7
Nuveen Hi Incm Nov 2021 **JHB**	10.19	9.95	-2.4	6.0
Pioneer High Income Trust **PHT**	10.83	9.82	-9.3	8.7
Prud Gl Shrt Dur Hi Yd **GHY**	16.35	14.54	-11.1	7.7
Prudentl Sh Dur Hi Yd Fd **ISD**	16.52	14.98	-9.3	7.7
Wells Fargo Incm Opps Fd **EAD**	NA	8.45	NA	8.5
Wstrn Asset Glbl Hi Inco **EHI**	NA	10.27	NA	8.3
Wstrn Asset High Inco II **HIX**	NA	7.03	NA	8.7
Wstrn Asset Opp Fd **HIO**	NA	5.06	NA	7.0
West Asst HY Def Opp Fd **HYI**	NA	15.26	NA	7.8
Other Domestic Taxable Bond Funds				
Ares Dynamic Credit Alloc **ARDC**	NA	16.56	NA	6.9
Barings Corp Investors **MCI**	NA	15.48	NA	5.9
BlackRock Multi-Sector IT **BIT**	19.82	18.27	-7.8	8.4
BlackRock Taxable Mun Bd **BBN**	23.72	23.27	-1.9	6.8
Doubleline Oppor Credit **DBL**	21.50	22.19	+3.2	9.0
Duff & Phelps Utl & Cp Bd **DUC**	9.60	8.83	-8.0	6.7
EtnVncLtdFd **EVV**	15.08	13.62	-9.7	7.2
Franklin Ltd Duration IT **FTF**	NA	11.87	NA	12.7
Guggenheim Taxable Muni **GBAB**	23.28	22.90	-1.6	6.6
Invesco High Incm 2023 **IHIT**	10.10	9.93	-1.7	6.1
KKR Income Opps Fund **KIO**	NA	16.10	NA	9.6
MFS Charter **MCR**	9.26	8.54	-7.8	8.8
MFS Multimkt **MMT**	6.62	6.10	-7.9	8.8
Nuveen Build Am Bd Fd **NBB**	22.44	22.02	-1.9	5.6
PIMCO Corporate & Incm **PTY**	NA	16.80	NA	9.4
PIMCO Corporate & Incm **PCN**	NA	17.49	NA	7.8
PIMCO HiInco **PHK**	NA	7.73	NA	13.2
PIMCO Inco Str Fd **PFL**	NA	11.74	NA	9.2
PIMCO Incm Strategy Fd II **PFN**	NA	10.44	NA	9.2
Putnam Mas Inco **PIM**	5.05	4.84	-4.2	6.5
Putnam Premier Income Tr **PPT**	5.62	5.32	-5.3	5.8
Wells Fargo Multi-Sector **ERC**	NA	13.10	NA	9.6
World Income Funds				
Abeerden Asia-Pacific **FAX**	5.53	4.96	-10.3	8.6
Brandywine Global Incm **BWG**	NA	13.13	NA	8.3
Etn Vnc Short Dur Fd **EVG**	15.31	14.23	-7.1	6.6
MS EmMktDomDebt **EDD**	9.11	7.94	-12.8	8.1
PIMCO Dynamic Credit **PCI**	NA	22.59	NA	8.7
PIMCO Dynamic Income Fund **PDI**	NA	30.16	NA	8.8
PIMCO Income Opportunity **PKO**	NA	26.37	NA	8.8
PIMCO Strat Income Fund **RCS**	7.76	9.43	+21.5	9.5
Templeton Emerging **TEI**	NA	11.43	NA	5.5
Templeton Global **GIM**	NA	6.41	NA	6.9
Wstrn Asset Emerg Mkts **EMD**	NA	15.81	NA	7.7
Wstrn Asset Gl Def Opp Fd **GDO**	NA	18.06	NA	7.5
National Muni Bond Funds				
AllianceBrnstn NtlMun **AFB**	14.88	13.42	-9.8	4.7
Blackrock Invest **BKN**	15.89	14.94	-6.0	5.0
BlackRock Mun 2030 Target **BTT**	24.34	22.48	-7.6	4.0
BlackRock Municipal Trust **BFK**	14.47	14.24	-1.6	5.6
BlackRockMuni **BLE**	15.04	14.42	-4.1	5.9
BlackRockMuni Tr **BYM**	15.26	14.18	-7.1	5.3
BlkRk MuniAssets Fd **MUA**	14.21	14.92	+5.0	4.6
BlkRk Munienhanced **MEN**	11.97	11.57	-3.3	5.7
BlkRk MuniHldgs Inv **MFL**	14.69	14.83	+1.0	5.8
BlkRk MuniHldgs Qlty II **MUE**	14.03	13.92	-0.8	5.5
BlkRk MuniVest **MVF**	9.66	9.75	+0.9	5.8
BlkRk MuniVest II **MVT**	15.23	15.64	+2.7	5.7
BlkRk MuniYield **MYD**	14.88	14.69	-1.3	5.8
BlkRk MuniYld Quality **MQY**	15.90	15.26	-4.0	5.6
BlkRk MuniYld Qlty II **MQT**	13.95	13.08	-6.2	5.5
BlRkMunyldQltyIII **MYI**	14.49	13.79	-4.8	5.8
Deutsche Mun Income Tr **KTF**	12.62	11.95	-5.3	6.3
Dreyfus Mun Bd Infr Fd **DMB**	14.32	13.02	-9.1	4.8
Dreyfus Strat Muni Bond **DSM**	8.34	8.53	+2.2	5.8
Dreyfus Strategic Munis **LEO**	8.56	8.71	+1.8	5.9
Eaton Vance Mun Bd Fd **EIM**	13.65	12.55	-8.1	5.0
Eaton Vance Mun Income **EVN**	13.40	12.43	-7.2	5.3
EV National Municipal Opp **EOT**	21.82	22.86	+4.8	4.5
Invesco Adv Mun Incm II **VKI**	12.14	11.37	-6.3	5.7
Invesco Mun Incm Opps Tr **OIA**	7.62	8.21	+7.7	5.1
Invesco Mun Opportunity **VMO**	13.52	12.46	-7.8	5.9
Invesco Municipal Trust **VKQ**	13.51	12.62	-6.6	5.7
Invesco Qlty Mun Inco **IQI**	13.62	12.52	-8.1	5.3
Invesco Inv Grade Muni **VGM**	14.00	13.23	-5.5	5.7
Invesco Value Mun Incm Tr **IIM**	16.29	14.94	-8.3	4.9
MainStay DefinedTerm **MMD**	20.23	19.90	-1.6	5.4
MFS Munl Inco **MFM**	7.37	6.90	-6.4	5.6
Nuveen AMT-Free Mun Value **NUW**	16.84	17.34	+3.0	4.1
Nuveen AMT-Free Quality **NEA**	15.18	13.84	-8.8	5.2
Nuveen AMT-Free Mun **NVG**	16.58	15.60	-5.9	5.6
Nuveen Mun Credit Incm Fd **NZF**	16.14	15.30	-5.2	5.8
Nuveen Enhncd Mun Val Fd **NEV**	15.03	14.33	-4.7	5.7
Nuveen Intermed Dur Mun **NID**	13.79	13.11	-4.9	4.9
NuveenMuniIncoOpp Fd **NMZ**	13.63	13.80	+1.2	5.8
Nuveen Muni Value Fund **NUV**	10.31	10.21	-1.0	3.8
Nuveen Qual Mun Incm Fd **NAD**	15.51	14.01	-9.7	5.3
Nuveen Sel TF **NXQ**	14.84	14.13	-4.8	3.6
PIMCO MuniFd **PMF**	12.87	13.32	+3.5	5.6
Pimco Muni Inc II **PML**	12.13	13.34	+10.0	5.9
PIMCO Muni Inc III **PMX**	11.06	11.75	+6.2	5.8
Pioneer Mun Hi Inc Adv Tr **MAV**	11.91	11.45	-3.9	5.2
Pioneer Mun Hi Incm Tr **MHI**	12.88	11.96	-7.1	5.0
Putnam Tr **PMM**	7.99	7.43	-7.0	5.3
Putnam Muni Opportunities **PMO**	13.35	12.48	-6.5	5.2
Wstrn Asset Mngd Muni **MMU**	NA	14.16	NA	5.3
Western Asset Mun Tr Fund **MTT**	NA	21.12	NA	4.8
Single State Muni Bond				
BlackRock CA Municipal Tr **BFZ**	15.24	13.87	-9.0	5.2
BlkRk MuniHldgs CA Qlty **MUC**	15.50	14.35	-7.4	5.1
Blkrck MunHI NJ Qlty **MUJ**	15.70	14.55	-7.3	5.5
BlRk MuHldg NY Qlty **MHN**	14.83	13.50	-9.0	5.1
BlkRk MuniYld CA Fd **MYC**	15.51	14.93	-3.7	5.1
BlkRk MuniYld CA Quality **MCA**	15.73	14.69	-6.6	5.1
BlkRk MuniYld MI Qlty **MIY**	15.48	13.93	-10.0	5.4
BlRk Muyld NY Qlty **MYN**	14.21	12.93	-9.0	4.9
Eaton Vance CA Mun Bd **EVM**	12.29	11.65	-5.2	5.0
Invesco CA Value Mun Incm **VCV**	13.40	12.68	-5.4	5.1
Invesco PA Value Mun Incm **VPV**	14.06	12.24	-12.9	5.1
Invesco Inv Grade NY Muni **VTN**	14.55	13.80	-5.2	5.0
Nuveen CA AMT-Free Qual **NKX**	15.89	15.39	-3.1	5.0
Nuveen CA Muni Value **NCA**	10.47	10.26	-2.0	4.0
Nuveen CA Quality Muni **NAC**	15.67	14.38	-8.2	5.5
Nuveen MD Qual Muni **NMY**	14.63	12.67	-13.4	4.9
Nuveen MI Qual Muni **NUM**	15.41	13.33	-13.5	4.8
Nuveen NJ Qual Muni **NXJ**	15.91	13.71	-13.8	5.1
Nuveen NY AMT-Free **NRK**	14.42	13.00	-9.8	4.8
Nuveen NY Qual Muni **NAN**	15.05	13.83	-8.1	5.1
Nuveen OH Qual Muni **NUO**	16.65	14.80	-11.1	4.9
Nuveen PA Qual Muni **NQP**	15.28	13.23	-13.4	5.3
Nuveen VA Qual Muni **NPV**	14.50	12.92	-10.9	4.3
PIMCO California Muni **PCQ**	14.18	17.39	+22.6	5.3
PIMCO California Mun II **PCK**	8.67	NA	NA	5.5

Fund (SYM)	NAV	Close	Prem /Disc	52 wk Ttl Ret
General Equity Funds				
Specialized Equity Funds				
Griffin Inst Access RE:A	26.71	NA	NA	5.7
Griffin Inst Access RE:C	26.25	NA	NA	4.9
Griffin Inst Access RE:I	26.88	NA	NA	6.0
Griffin Inst Access RE:L	26.68	NA	NA	NS
Griffin Inst Access RE:M	26.56	NA	NA	5.1
NorthStar RE Cap Inc:Adv	NA	NA	NA	NS
Resource RE Div Inc:A	10.07	NA	NA	4.9
Resource RE Div Inc:C	10.06	NA	NA	4.0
Resource RE Div Inc:D	10.22	NA	NA	4.3
Resource RE Div Inc:I	10.49	NA	NA	4.7
Resource RE Div Inc:L	10.07	NA	NA	NS
Resource RE Div Inc:T	10.04	NA	NA	4.0
Resource RE Div Inc:U	10.07	NA	NA	4.8
Resource RE Div Inc:W	10.22	NA	NA	4.8
SharesPost 100;A	26.88	NA	NA	0.3
SharesPost 100:I	26.89	NA	NA	NS
Tot Inc+ RE:A	29.40	NA	NA	6.7
Tot Inc+ RE:C	28.60	NA	NA	5.9
Tot Inc+ RE:I	29.74	NA	NA	7.0
Tot Inc+ RE:L	29.35	NA	NA	NS
USQ Core Real Estate:I **USQIX**	25.09	NA	NA	NS
USQ Core Real Estate:IS **USQSX**	25.09	NA	NA	NS
Versus Cap MMgr RE Inc:F	27.74	NA	NA	5.2
Versus Cap MMgr RE Inc:I	27.82	NA	NA	5.5
Versus Capital Real Asst **VCRRX**	25.23	NA	NA	NS
Wildermuth Endwmnt Str	13.04	NA	NA	13.0
Wildermuth Endwmnt S:C	12.85	NA	NA	12.1
Wildermuth Endwmnt S:I	13.10	NA	NA	NS
Income Preferred Stock Funds				
MultiStrat Gro & Inc:A	15.08	NA	NA	2.2
MultiStrat Gro & Inc:C	14.74	NA	NA	1.4
MultiStrat Gro & Inc:I	15.28	NA	NA	2.5
MultiStrat Gro & Inc:L	14.85	NA	NA	1.6
The Relative Value:CIA **VFLEX**	25.71	NA	NA	NS
Convertible Sec's. Funds				
Calmos Dyn Conv and Inc **CCD**	20.98	20.45	-2.5	15.5
World Equity Funds				
BMO LGM Front ME	11.20	NA	NA	25.4
CalamosGlbTotRet **CGO**	13.96	15.14	+8.5	24.8

Fund (SYM)	NAV	Close	Prem /Disc	12 Mo Yld
U.S. Mortgage Bond Funds				
Vertical Capital Income	12.38	NA	NA	3.2
Loan Participation Funds				
504 Fund	9.71	NA	NA	3.9
FedProj&TrFinanceTender	10.01	NA	NA	NS
Invesco Sr Loan A	6.69	NA	NA	4.1
Invesco Sr Loan B	6.69	NA	NA	4.1
Invesco Sr Loan C	6.71	NA	NA	3.4
Invesco Sr Loan IB	6.70	NA	NA	4.4
Invesco Sr Loan IC	6.70	NA	NA	4.2
Invesco Sr Loan Y	6.70	NA	NA	4.4
RiverNorth MP Lending **RMPLX**	24.27	NA	NA	9.2
Sierra Total Return:T **SRNTX**	24.95	NA	NA	NS
Voya Senior Income:A	12.54	NA	NA	5.2
Voya Senior Income:C	12.51	NA	NA	4.7
Voya Senior Income:I	12.50	NA	NA	5.5
Voya Senior Income:W	12.55	NA	NA	5.4
High Yield Bond Funds				
Griffin Inst Access Cd:A	NA	NA	NA	NS
Griffin Inst Access Cd:C	NA	NA	NA	NS
Griffin Inst Access Cd:F	NA	NA	NA	NS
Griffin Inst Access Cd:I	NA	NA	NA	NS
Griffin Inst Access Cd:L	NA	NA	NA	NS
PIMCO Flexible Cr I;Inst	NA	NA	NA	NS
PionrILSInterval	9.40	NA	NA	1.4
WA Middle Mkt Dbt	NA	NA	NA	10.9
WA Middle Mkt Inc **WMF**	NA	NA	NA	10.9
Other Domestic Taxable Bond Funds				
Capstone Church Capital	11.66	NA	NA	3.4
CION Ares Dvsfd Crdt;A	NA	NA	NA	NS
CION Ares Dvsfd Crdt;C	NA	NA	NA	NS
CION Ares Dvsfd Crdt;I	NA	NA	NA	NS
CNR Select Strategies	9.60	NA	NA	NS
GL Beyond Income	3.73	NA	NA	NE
Palmer Square Opp Income	19.49	NA	NA	4.8
Resource Credit Inc:A	NA	NA	NA	6.5
Resource Credit Inc:C	NA	NA	NA	5.7
Resource Credit Inc:I	NA	NA	NA	6.7
Resource Credit Inc:L	NA	NA	NA	NS
Resource Credit Inc:W	NA	NA	NA	6.5

A Week in the Life of the DJIA

A look at how the Dow Jones Industrial Average component stocks did in the past week and how much each moved the index. The DJIA gained 576.65 points, or 2.33%, on the week. A $1 change in the price of any DJIA stock = 6.89-point change in the average. To date, a $1,000 investment on Dec. 31 in each current DJIA stock component would have returned $38,544, or a gain of 28.48%, on the $30,000 investment, including reinvested dividends.

The Week's Action: Pct chg (%)	Stock price change	Point chg in average*	Company	Symbol	Close	$1,000 Invested (year-end '17)
6.25	1.09	7.51	**General Electric**	GE	$18.54	$606
5.91	9.07	62.45	**IBM**	IBM	162.49	1,017
5.90	4.20	28.92	**DowDuPont**	DWDP	75.42	1,354
4.72	13.93	95.91	**Boeing**	BA	308.84	2,040
4.24	4.84	33.33	**Visa**	V	118.86	1,534
3.82	4.11	28.30	**Walt Disney**	DIS	111.62	1,088
3.75	8.27	56.94	**UnitedHealth Group**	UNH	228.73	1,451
3.72	3.11	21.41	**Exxon Mobil**	XOM	86.75	998
3.41	5.77	39.73	**Apple**	AAPL	175.00	1,535
3.21	1.23	8.47	**Cisco Systems**	CSCO	39.53	1,365
3.14	4.00	27.54	**United Technologies**	UTX	131.57	1,228
3.10	2.65	18.25	**Microsoft**	MSFT	88.19	1,451
2.78	4.38	30.16	**Caterpillar**	CAT	161.96	1,799
2.29	1.43	9.85	**Nike**	NKE	63.98	1,276
2.21	5.20	35.80	**3M**	MMM	240.57	1,379
2.16	2.71	18.66	**Chevron**	CVX	127.90	1,130
1.78	1.77	12.19	**American Express**	AXP	101.08	1,391
1.77	0.64	4.41	**Pfizer**	PFE	36.86	1,179
1.57	2.97	20.45	**Home Depot**	HD	192.50	1,469
1.42	1.99	13.70	**Johnson & Johnson**	JNJ	141.71	1,262
1.40	1.38	9.50	**Wal-Mart Stores**	WMT	100.13	1,486
1.31	1.40	9.64	**J.P. Morgan Chase**	JPM	108.34	1,291
1.28	0.72	4.96	**Merck**	MRK	56.99	998
1.12	1.93	13.29	**McDonald's**	MCD	174.05	1,466
0.41	0.19	1.31	**Coca-Cola**	KO	46.07	1,148
0.30	0.76	5.23	**Goldman Sachs**	GS	255.52	1,081
-0.70	-0.64	-4.41	**Procter & Gamble**	PG	91.24	1,119
-0.85	-0.45	-3.10	**Verizon**	VZ	52.48	1,031
-2.57	-3.48	-23.96	**Travelers**	TRV	132.16	1,105
-3.08	-1.42	-9.78	**Intel**	INTC	44.74	1,268

*Based on Composite price. DJIA is calculated on primary-market price.
Source: WSJ Market Data Group; FactSet.

Borrowing Benchmarks | WSJ.com/bonds

Money Rates

January 5, 2018

Key annual interest rates paid to borrow or lend money in U.S. and international markets. Rates below are a guide to general levels but don't always represent actual transactions.

Inflation

	Nov. index level	Chg From (%) Oct. '17	Nov. '16
U.S. consumer price index			
All items	246.669	0.002	2.2
Core	253.492	−0.06	1.7

International rates

	Latest	Week ago	52-Week High	52-Week Low
Prime rates				
U.S.	4.50	4.50	4.50	3.75
Canada	3.20	3.20	3.20	2.70
Japan	1.475	1.475	1.475	1.475
Policy Rates				
Euro zone	0.00	0.00	0.00	0.00
Switzerland	0.50	0.50	0.50	0.50
Britain	0.50	0.50	0.50	0.25
Australia	1.50	1.50	1.50	1.50
Overnight repurchase				
U.S.	1.43	1.46	1.62	0.48

U.S. government rates

	Latest	Week ago	52-Week High	52-Week Low
Discount				
	2.00	2.00	2.00	1.25
Federal funds				
Effective rate	1.4200	1.3700	1.4400	0.6000
High	1.5625	1.5625	1.6125	0.8125
Low	1.2100	1.3000	1.3900	0.4500
Bid	1.4100	1.3100	1.4100	0.5600
Offer	1.4200	1.3200	1.4400	0.5800
Treasury bill auction				
4 weeks	1.270	1.245	1.300	0.400
13 weeks	1.435	1.445	1.445	0.505
26 weeks	1.575	1.530	1.575	0.590

Secondary market

	Latest	Week ago	52-Week High	52-Week Low
Fannie Mae				
30-year mortgage yields				
30 days	3.506	3.506	3.865	3.253
60 days	3.542	3.538	3.899	3.281

Other short-term rates

	Latest	Week ago	52-Week high	52-Week low
Call money				
	3.25	3.25	3.25	2.50
Commercial paper (AA financial)				
90 days	1.66	1.62	1.68	0.72
Libor				
One month	1.55250	1.56425	1.56900	0.76333
Three month	1.70393	1.69428	1.70393	1.01011
Six month	1.86507	1.83707	1.86507	1.32433
One year	2.14953	2.10697	2.14953	1.68456
Euro Libor				
One month	-0.408	-0.411	-0.379	-0.420
Three month	-0.381	-0.385	-0.341	-0.387
Six month	-0.324	-0.324	-0.237	-0.325
One year	-0.250	-0.244	-0.091	-0.261
Euro interbank offered rate (Euribor)				
One month	-0.369	-0.368	-0.366	-0.375
Three month	-0.329	-0.329	-0.321	-0.332
Six month	-0.271	-0.271	-0.229	-0.276
One year	-0.187	-0.186	-0.087	-0.194

	Latest	Value Traded	52-Week High	52-Week Low
DTCC GCF Repo Index				
Treasury	1.445	20.200	1.836	0.489
MBS	1.468	99.300	1.852	0.496

	Settle	Change	Open Interest	Implied Rate
DTCC GCF Repo Index Futures				
Treasury Jan	98.535	-0.005	2618	1.465
Treasury Feb	98.545	0.005	982	1.455
Treasury Mar	98.450	-0.005	308	1.550

Notes on data:

U.S. prime rate is the base rate on corporate loans posted by at least 70% of the 10 largest U.S. banks, and is effective December 14, 2017. **Other prime rates** aren't directly comparable; lending practices vary widely by location; **Discount rate** is effective December 14, 2017. **DTCC GCF Repo Index** is Depository Trust & Clearing Corp.'s weighted average for overnight trades in applicable CUSIPs. Value traded is in billions of U.S. dollars. **Federal-funds rates** are Tullett Prebon rates as of 5:30 p.m. ET. **Futures on the DTCC GCF Repo Index** are traded on NYSE Liffe US.

Sources: Federal Reserve; Bureau of Labor Statistics; DTCC; SIX Financial Information; Tullett Prebon Information, Ltd.

PETER PEREIRA/ASSOCIATED PRESS

Natural-gas prices had been on an upswing as temperatures plunged at the end of December, spurring record demand for heating fuel.

Warmer Forecasts Sink Gas Price

BY ALISON SIDER

COMMODITIES

Investors in the natural-gas market looked past the extreme cold across half of the U.S., anticipating warmer temperatures ahead.

Natural-gas prices continued to retreat Friday, as futures for February delivery fell for a third day, losing 8.5 cents, or 2.95%, to end at $2.795 a million British thermal units on the New York Mercantile Exchange. Prices ended the week down 5.35%, snapping a two-week streak of gains.

Prices had been on an upswing as temperatures plunged at the end of December, spurring record demand for natural gas as heating fuel, particularly in the eastern half of the U.S. Some analysts anticipate that data to be released this coming week will show a record withdrawal from storage.

But the prospect of a return of more normal or even above-normal temperatures in the coming weeks is weighing on the market.

Prices fell nearly 5.8% Wednesday and Thursday, tumbling from over $3.05 a million British thermal units.

"Warmth into next week continues to trend a bit stronger as well as we see nothing close to the cold risks that will be present over the next 48 hours," analysts at Bespoke Weather Services wrote Friday. "The result will be sizable heating demand losses over the next few weeks that are likely to pressure the natural gas market further."

The return of warmer temperatures also could resuscitate natural-gas production, which had paused due to the freezing cold, analysts said.

Also contributing to the pressure, the U.S. Energy Information Administration reported Thursday that natural-gas stockpiles fell by 206 billion cubic feet in the week ended Dec. 29.

Traders and analysts surveyed by The Wall Street Journal on average had expected inventories to decline by 221.5 bcf.

Still, spot prices have remained elevated in the East and Midwest, even as futures markets have moved on.

Stocks in Asia Rise In Early Trading

BY KENAN MACHADO

EQUITIES

Asian equities moved broadly higher early Monday, extending last week's global stock rally, even as some local markets underwent a bout of morning weakness.

The same happened Friday before markets in the region were almost uniformly able to end the week with solid gains.

Indexes in Hong Kong, China and Taiwan were down modestly after the start of trading, while others in the region rose further.

Taiwan's Taiex by midday was at 28-year highs and the Shanghai Composite ended morning trading up 0.35%, having risen for six straight sessions.

Weighing on Greater China stocks initially were steps by China's banking regulator announced Friday. They "sent one clear message" that fundamentals and transparency "will be the key regulatory guidance for China's commercial banks to contain financial risk," said Tommy Xie, an economist at OCBC Bank in Singapore.

Major Chinese banks pared early weakness by midday in Hong Kong, with **Bank of China** and **China Construction Bank** each down about 0.5%.

Holding up the city's Hang Seng Index again were Chinese property developers. The overall index was little changed.

Broadly in the region, "there are no signs of a pullback yet," said Margaret Yang, a market analyst at CMC. She added Asian equities should maintain a positive outlook as major markets appear set to keep building on recent gains.

The best performer early Monday was South Korea, where the Kospi rose 0.7% as

Taiwan's Taiex index had risen for six straight sessions before Monday.

the won fell 1% versus the dollar during a 10-minute stretch of midmorning trading. Central-bank intervention was the suspected cause, traders said, as the won has been at its strongest levels versus the greenback since 2014.

A number of Asia Pacific stock indexes set multiyear or record highs to start 2018 amid the global rally which welcomed the new year. Australia's S&P/ASX 200 hit another one in rising 0.1%, aided further by the country's big banks.

Japanese markets were closed Monday for a holiday.

75%

How often the S&P 500 has notched a yearly rise when it has gained during the first five days

Stocks Off to Good Start

The stock market had a blowout start to the year. In just four days, the S&P 500 rose 2.6%, its best week since the end of 2016.

That is a good omen for the rest of 2018.

MONEYBEAT

When the benchmark has been up during its first five sessions, it has been green for that full year three-quarters of the time. In the past 10 years in which the S&P 500 has gained in the first five days, the index has risen in eight of those years, according to The Wall Street Journal's Market Data Group. Across all the years since the index's creation, it has risen 65% of the time.

With one day to go in this year's first five-session stretch, the S&P 500 is poised to stay in positive territory. To erase the gains accrued over the first four sessions, it would take a period of volatility last seen right after the British voted to leave the European Union in mid-2016.

The rise for stocks at the beginning of the year, which adds to the S&P's 19% rise last year, has pushed all three major indexes to fresh milestones. The S&P 500 crossed 2700 for the first time, the Dow Jones Industrial Average rose past 25000 and the Nasdaq Composite topped 7000.

The rapid gains of 2017 left many investors nervous that stocks could be in for a reversal, or at least a period of tempered enthusiasm. While some strategists predict volatility will emerge at some point in 2018, there is no sign of it yet.

—Ben Eisen

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FINANCE WATCH

CHINA

Foreign-Exchange Reserves Rise Again

China's foreign-exchange reserves grew for the 11th straight month in December, hitting the highest level since end of September 2016, official data showed.

The reserves increased by $20.67 billion from the previous month to $3.140 trillion at the end of December, following a gain of $10.06 billion in November, the People's Bank of China said. Economists polled by The Wall Street Journal had expected a rise of $5 billion.

Beijing tightened rules on moving money out of the country in 2017, which helped limit capital outflows. Renewed firmness in the yuan against other currencies, including the U.S. dollar, has also reduced the need for the central bank to burn through reserves to prop up the Chinese currency.

In December, the yuan rose more than 1% against dollar, bringing its gains against the U.S. currency in 2017 to more than 6%.

—Liyan Qi

NEW YORK FED

Official Weighs In On Money-Like Assets

A top Federal Reserve Bank of New York staffer said Saturday the U.S. central bank has a role providing "money-like assets" even outside of times of financial stress.

In a speech in Philadelphia before the American Economic Association, New York Fed executive vice president Simon Potter sought to take stock of the central bank's role in providing assets that aren't cash but are effectively seen as a substitute by financial market participants.

Mr. Potter said provision of these money-like assets is a Fed job when it is doing emergency lending during times of financial sector crisis. But that may not be the only time for the Fed to be active on that front.

"Central banks are uniquely able to produce money-like assets that are viewed as safe during nonnormal times," Mr. Potter said. "In more normal times, regulation and supervision are the best tools to mitigate risks from the private creation of money-like assets, but there is a role for the central bank to use its balance sheet to smooth fluctuations in the supply and demand for money-like assets."

—Michael S. Derby

Berkshire's $300,000 Stock Can Buy You 126,402 Shirts

BY NICOLE FRIEDMAN AND ERIK HOLM

Berkshire Hathaway Inc.'s class A shares, the world's most expensive stock, closed above $300,000 for the first time Thursday. They rose 0.3% more on Friday to $301,525 apiece.

Berkshire Chairman Warren Buffett has expanded his business over more than 50 years by acquiring cash-generating businesses such as insurer Geico and investing in blue-chip stocks. Berkshire is now the sixth-biggest U.S. company by market capitalization, and it employed 367,671 people at the end of 2016 at more than 60 operating units that operate power plants and railroads, sell ice cream and encyclopedias, and make everything from batteries to bricks.

Some lucky shareholders who invested in Berkshire decades ago are multimillionaires today.

The eye-popping price of $300,000 a share might be hard to conceptualize. Here

NATI HARNIK/ASSOCIATED PRESS

Chairman Warren Buffett

are some items you can buy from Berkshire businesses for the price of one A share:

◆ **126,402 tapered crew T-shirts from Fruit of the Loom**

The 100% cotton shirts are tag free. The price doesn't include taxes but does include shipping, as it easily exceeds Fruit of the Loom's $50 threshold for free shipping.

◆ **14,634 1-pound boxes of assorted chocolates from See's Candies**

Be warned: No matter how much you buy, See's won't supply a map telling you what is inside the candies. It is said to be part of the charm.

◆ **3,000 pairs of Launch 5 shoes from Brooks Sports**

The 3,000 entry fees for Berkshire's annual 5K race in Omaha, Neb., are extra.

◆ **1,282 print subscriptions to the Buffalo News**

The newspaper has won the Pulitzer Prize four times and offers wall-to-wall coverage of that time several Buffalo Bills players helped people get their cars out of the snow.

◆ **Two white-gold diamond bracelets from Borsheims**

One for each wrist, presumably.

◆ **One three-bedroom house in Omaha via Berkshire Hathaway HomeServices**

Currently on the market near that price is a 2,293 square-foot single-family house in Mr. Buffett's hometown built in 2002.

THE TICKER | Market events coming this week

Monday

Consumer credit

Oct., prev.	up $20.52 bil.
Nov., exp.	up $17.9 bil.

Tuesday

Short-selling reports

Ratio, days of trading volume of current position, at Dec. 15

NYSE	4.5
Nasdaq	4

Earnings expected*

	Estimate/Year Ago($)
Acuity Brands	**2.05**/2.00
Synnex	**2.68**/2.57

Wednesday

Mort. bankers indexes

Purch., previous	up 1%
Refinan., prev.	down 7%

EIA status report

Previous change in stocks in millions of barrels

Crude oil	down 7.4
Gasoline	up 4.8
Distillates	up 8.9

Import price index

Nov., previous	up 0.7%
Dec., expected	up 0.5%

Wholesale inventories

Oct., previous	down 0.5%
Nov., expected	up 0.7%

Earnings expected*

	Estimate/Year Ago($)
Lennar	**1.47**/1.32

Thursday

Initial jobless claims

Previous	250,000
Expected	245,000

EIA report: natural gas

Previous change in stocks in billions of cubic feet

down 206

Producer-price index

All items, Nov.	up 0.4%
Dec., expected	up 0.2%
Core, Nov.	up 0.3%
Dec., expected	up 0.2%

Treasury budget

Dec. 2017	$27.52 bil. deficit
Dec. 2018, exp.	n.a.

BAYNE STANLEY/ZUMA PRESS

Delta Air Lines reports quarterly results Thursday. It is expected to report a profit increase to 91 cents a share.

Earnings expected*

	Estimate/Year Ago($)
Delta Air Lines	**0.91**/0.82

Friday

Business inventories

Oct., previous	down 0.1%
Nov., expected	up 0.4%

Consumer-price index

All items, Nov.	up 0.4%
Dec., expected	up 0.1%
Core, Nov.	up 0.1%
Dec., expected	up 0.2%

Retail sales

Nov., previous	up 0.8%
Dec., expected	up 0.4%

Retail sales, ex. autos

Nov., previous	up 1.0%
Dec., expected	up 0.4%

Earnings expected*

	Estimate/Year Ago($)
BlackRock	**5.98**/5.14
JPMorgan Chase	**1.61**/1.71
PNC Financial	**2.20**/1.97
Wells Fargo	**1.16**/0.96

* FACTSET ESTIMATES EARNINGS-PER-SHARE ESTIMATES DON'T INCLUDE EXTRAORDINARY ITEMS (LOSSES IN PARENTHESES) ◆ ADJUSTED FOR STOCK SPLIT

NOTE: FORECASTS ARE FROM DOW JONES WEEKLY SURVEY OF ECONOMISTS

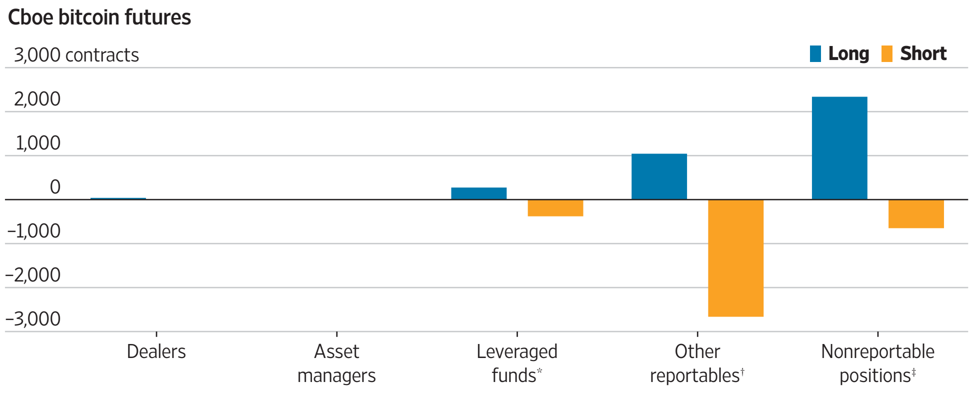
MARKETS

Bitcoin Futures Split Big, Little Traders

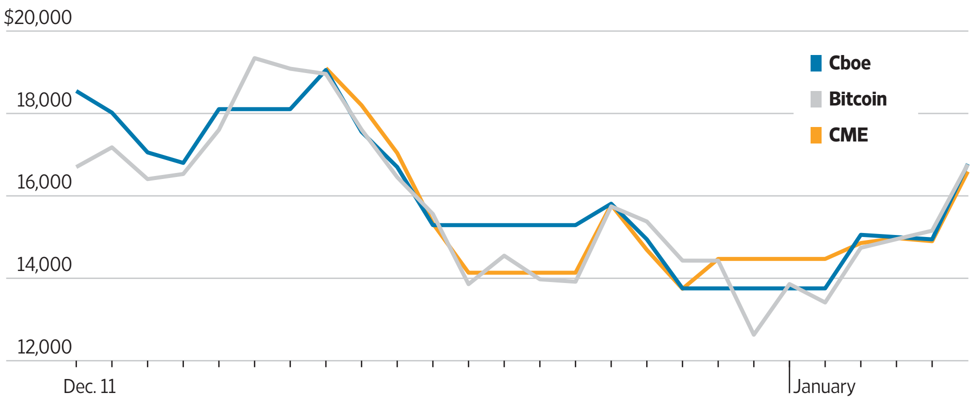
Small investors tend to be bullish while large ones are bearish, market data indicate

By Alexander Osipovich

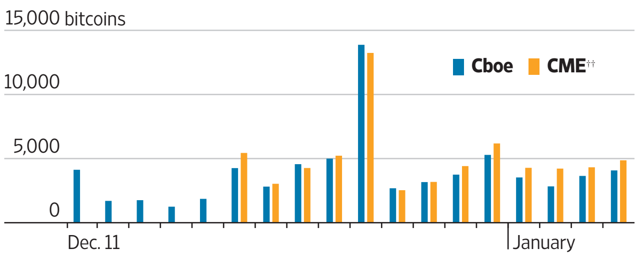
CFTC data show smaller traders are heavily 'long' Cboe's bitcoin futures, meaning they are betting on a price increase. Big institutional traders tend to be short.



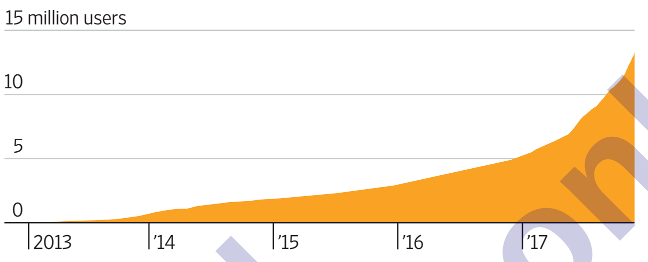
Both Cboe's and CME's futures now track the price of bitcoin closely, though Cboe's contract initially traded at a hefty premium.**



Trading volumes at both Cboe and CME have yet to take off. Both exchanges had record activity in bitcoin futures on Dec. 22, the day of a sharp selloff in bitcoin.



Retail investors' interest in bitcoin surged last year. Coinbase, operator of the largest U.S. bitcoin exchange, now boasts over 10 million users.



*Hedge funds and money managers †Large traders that don't manage outside investors' money ‡Traders with positions of less than 25 contracts **Futures prices are for January contract. Cboe and CME don't trade on weekends and holidays. ††CME volumes are adjusted by a factor of five to reflect the larger size of CME's contract.

Small investors are betting that bitcoin's price will rise, while hedge funds and other large traders are betting it will fall.

That is the pattern rapidly emerging after four weeks of trading in the first U.S. bitcoin futures market, launched last month by **Cboe Global Markets** Inc. Futures are a type of contract that enables traders to wager whether the future price of an underlying asset will rise or fall.

For traders who hold fewer than 25 of Cboe's bitcoin futures contracts—a category that likely encompasses many retail investors—bullish bets are 3.6 times more common than bearish ones, according to the latest Commodity Futures Trading Commission data that cover trading through last Tuesday.

At Cboe, the big players in bitcoin futures tend to be short, betting the future price will be lower.

For instance, among "other reportables"—large trading firms that don't necessarily manage money for outside investors—short bets outweighed bullish "long" bets by a factor of 2.6 last week.

The CFTC has yet to begin publishing similar data on a competing bitcoin futures contract listed on the Chicago Mercantile Exchange, owned by Cboe's larger rival, **CME Group** Inc.

The early futures-trading activity seemed to align with the perception of how big and small traders view bitcoin itself.

Frenzied buying by retail investors world-wide helped power bitcoin's extraordinary rally last year. The digital currency surged around 1,330% in 2017 and was trading at $16,764.99 late Friday afternoon, according to CoinDesk.

Many skeptics on Wall Street have called bitcoin a bubble and would be more apt to bet on its decline. In a sign of how more conservative firms are keeping their distance, the CFTC data show near-zero trading in Cboe's bitcoin futures by banks and asset managers.

"There is probably more optimism in the retail segment than there is in the institutional segment," said Steven Sanders, an executive vice president at Interactive Brokers Group Inc., an electronic brokerage firm that offers its customers access to bitcoin futures.

Hedge funds and other money managers had placed almost 40% more short bets than long bets last week, according to the CFTC data. That represented a less bearish outlook than they had in late December, when such funds had more than four times as many short bets as long bets.

These numbers don't include bets made as part of what the CFTC calls "spreading" strategies, in which a firm is both long and short at the same time.

Shorting bitcoin futures doesn't necessarily mean a trader expects bitcoin to crash. For instance, a cryptocurrency trading firm with significant holdings of bitcoin might go short to hedge those inventories against a price fall.

Going short could also be part of certain sophisticated trading strategies, such as betting that rival cryptocurrencies will outperform bitcoin.

With the CFTC data, "you're not seeing the full picture," said James Koutoulas, chief executive of hedge-fund firm Typhon Capital Management, which trades futures in bitcoin as well as commodities. Typhon has swung back and forth, being long and short bitcoin futures at various times, Mr. Koutoulas said.

Analysts say Cboe's bitcoin contract is geared more toward small retail investors because CME futures require more cash upfront to trade.

Activity in both Cboe and CME's futures has been muted, especially compared with the booming market for bitcoin itself.

The combined size of the nascent bitcoin-futures markets at the two exchanges was roughly $150 million on Friday, measured in terms of the value of outstanding contracts, while the total value of all bitcoins in existence was around $290 billion, according to coinmarketcap.com.

At both Cboe and CME, the average number of bitcoin contracts traded each day has been below the level set on each exchange's first full day of trading on Dec. 11 and Dec. 18, respectively.

One factor behind the slow volume growth may be the reluctance of many Wall Street banks to touch bitcoin futures. Firms such as **JPMorgan Chase** & Co. and Bank of America Merrill Lynch haven't offered their clients access to bitcoin futures.

HEARD ON THE STREET

FINANCIAL ANALYSIS & COMMENTARY

Email: heard@wsj.com WSJ.com/Heard

Italy Faces a Reckoning on Debt

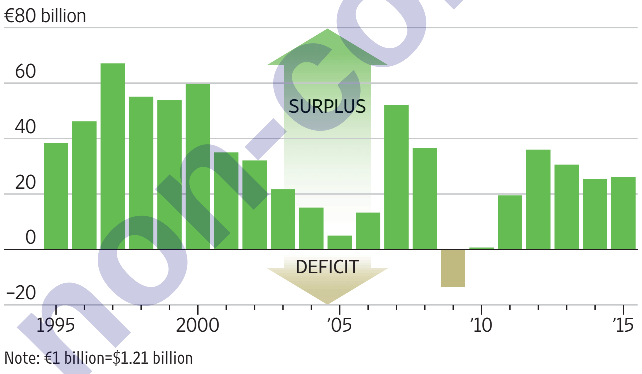
Italy, Europe's most indebted large economy, is at a crossroads again. Growth has picked up finally, and the country's bank cleanup is in progress. But the national election due in early March is putting Italy's debt of close to 135% of gross domestic product under the global spotlight again. The irony is the debt burden may finally be about to fall.

Superlow and negative rates engineered by the European Central Bank and a brighter outlook have created the conditions for Europe to heal. This includes Italy. The country's credit rating even received a rare upgrade from Standard & Poor's last year, to triple-B.

Italy's problem of late hasn't been overborrowing, but nonexistent growth. The country has run a primary surplus in nearly every year since the early 1990s, notes Oxford Economics, meaning it hasn't been meaningfully adding to its debt load. But recent surpluses have fallen short of the target, while stagnant growth and low inflation have held back the nominal GDP denominator. Italy's debt burden has remained as heavy as ever.

Track Record

Italy's budget balance before interest payments



Note: €1 billion=$1.21 billion

Source: Istat

THE WALL STREET JOURNAL.

With Italian growth picking up in 2017 to 1.5% on the European Commission's forecast, the debt level has stabilized and appears to be about to fall. The International Monetary Fund thinks it could reach 126% of GDP by 2020.

The ECB's aggressive easing has also bought Italy time and space. In the past three years the yield of newly issued Italian government securities has averaged just 0.64%, according to data from the Italian Treasury. Italian two-year yields are below zero. And the country has taken advantage of bond-market conditions to raise the average maturity of debt to close to seven years.

That means investors shouldn't take fright if Italian bonds prove volatile in the coming months. The 10-year Italian yield spread versus Germany has risen to 1.6 percentage points from a December low of 1.3 points, but that isn't an unusual move. In the run-up to the French elections in 2017, which raised fears of an antieuro government in Paris, Italy's spread over Germany topped two points.

The risk is that the election represents either further gridlock or a squandered opportunity. The IMF warns that a higher primary surplus—north of 3% of GDP—is still needed to put debt on a clear downward path; higher growth would help, too. That will require political will. But the current consensus is that fractured Italian politics may not deliver a coherent government.

Italy's debt problem is chronic rather than acute. The ECB and current economic conditions offer an opportunity to address it. But it is far from clear that politics will allow Italy to take it.

—Richard Barley

OVERHEARD

Smart speakers are such a hot business that no one involved wants to say how hot.

Amazon.com will only say it sold "tens of millions" of devices enabled with its Alexa voice-powered personal assistant over the holiday season.

Another vague clue: The company said the total was "millions more" than the previous year's holiday season, which Amazon didn't disclose, either.

So give the folks at Google a smidgen of credit for clarity—or what passes for clarity in this business.

On Friday, the company said it sold "tens of millions" of all its devices designed for the home in 2017. But it added that it sold more than one unit of its Google Home speaker line every second since its Mini version started shipping in mid-October.

That suggests at least 6.394 million units sold over the holidays up to the end of the year.

The folks at Google are nothing if not precise.

The Mystery Of Risk-Free Greek Bonds

If you thought markets were insane when the yield on European junk bonds fell below that of the 10-year Treasury last year, look away now: The two-year Greek yield has recently fallen below the two-year U.S. yield.

Once again, the comparison is flawed. U.S. and Greek bonds are denominated in different currencies with very different monetary policies. The U.S. two-year Treasury yield, now 1.96%, has been steadily rising as the Federal Reserve has been raising rates. The European Central Bank is still printing money and its key deposit rate is negative.

Markets don't think Greece is less risky than the U.S. The relevant risk-free comparison for Greece's two-year yield of 1.68% is Germany, where it is minus-0.61%. The Greek two-year yield is still above Germany's 30-year yield of 1.25%.

The hunt for yield is still going on, and in the eurozone, Greece is the final frontier. The enormous drop in Greek bond yields might be reason to be cautious. But Greece may finally exit its bailout program in 2018. A convergence between Greek and eurozone yields is a necessary part of that process.

The bigger consideration is the extraordinary monetary-policy gap that has opened up between the U.S. and the eurozone. Although the debate around the ECB is about how and when it removes stimulus, it is still far from raising rates and will be years behind the Fed when it starts doing so. That German two-year yields are negative and more than 2.5 percentage points below U.S. yields is the real oddity for markets.

—Richard Barley

Retail's Tax Windfall Gives Ammunition Against Amazon

In its early stages, the Republican tax plan didn't bode well for retailers. Speaker of the House Paul Ryan wanted to include a border-adjusted tax on imports that would have been disastrous for an industry that sources much of its merchandise overseas.

That didn't make it into the final plan. Instead of coal for Christmas, retailers got a war chest. Their corporate tax rate of 35% will drop to 21%, handing them a free cash flow boost as they fight for survival in the **Amazon** era.

"It's like manna from heaven," said Anthony Chukumba, a retail analyst at Loop Capital. "It couldn't have come at a better time."

Retail stocks have rallied since passage of the plan, and analysts calculate an average 15% earnings-per-share lift across the industry. Yet the benefits will vary by company. Domestically focused retailers like **Nordstrom** and **Ross Stores** will fare better than those that have already taken advantage of loopholes associated with foreign business—for instance, **Nike**. Retailers that cater to high-income consumers also will benefit since the plan's tax savings will accrue overwhelmingly to them. Research by Loop Capital points to **Williams-Sonoma**, **Best Buy** and **Ulta Beauty** as those likely to reap such rewards.

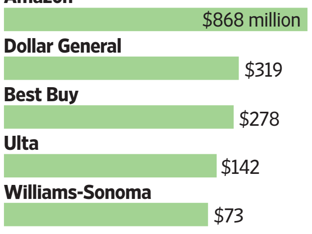
Meanwhile, deep-discount retailers have less to celebrate. Paltry tax breaks for low-income consumers will leave them with little extra to spend. Indeed, potential changes in entitlement programs to offset low corporate income tax means they could be worse off.

For those retailers flush with savings, the question is how to use them. Some will reward shareholders. Others are more likely to reinvest savings in store remodelings, customer service and e-commerce capabilities.

A report by Nomura Securities, analyzing which companies have historically preferred invest-to-grow strategies, suggests that Amazon, Nordstrom and **Urban Outfitters** are among those likely to reinvest.

Flush

Fiscal 2018 Incremental free cash flow from tax cuts



Source: Loop Capital Markets

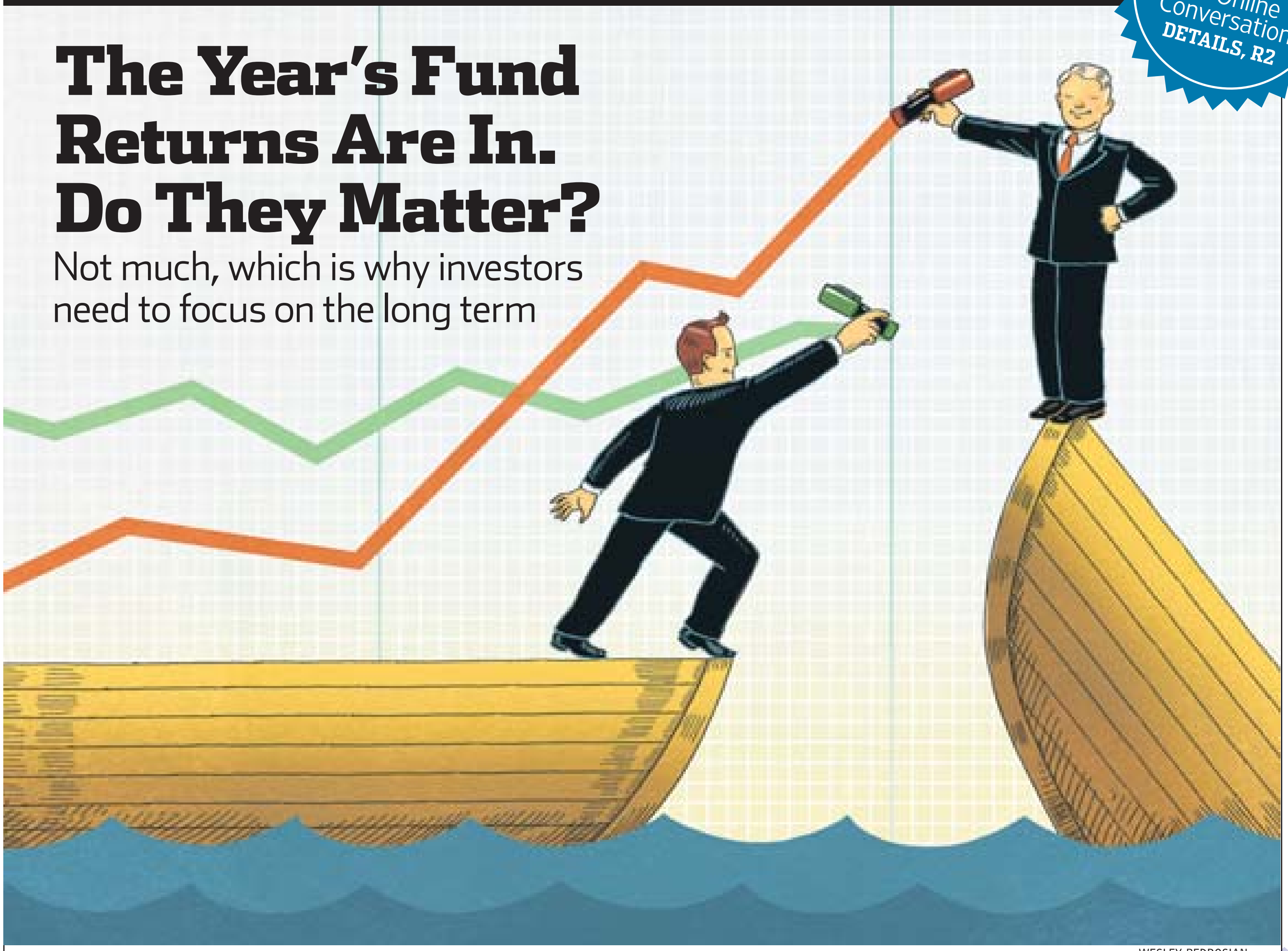
Michael Kors and Ross, by contrast, have tended to let savings flow to the bottom line.

Fourth-quarter guidance will indicate just how favorable the changes are and how much companies plan to reinvest. Many will see a one-time fourth-quarter hit due to a mandatory repatriation tax on foreign earnings, but the amount is actually payable over several years.

In the long term, though, retailers can look forward to battling Amazon with renewed resources. Will it be money well spent, or just expensive life-support for a dying industry?

—Elizabeth Winkler

THE WALL STREET JOURNAL. Monday, January 8, 2018 | R1



The Year's Fund Returns Are In. Do They Matter?

Not much, which is why investors need to focus on the long term

WESLEY BEDROSIAN

BY MARK HULBERT

IT'S JANUARY, which means it's time for all those performance scoreboards, highlighting the top-performing financial advisers, investment-newsletter editors or mutual funds of the previous year.

These scorecards can provide some worthwhile information. But beware: They also can be hazardous to your wealth.

That is because sooner or later, but probably sooner, these investing kingpins will incur losses so large as to make it almost impossible to ever recover. A far better approach is to focus on those strategies with market-beating records over the long term.

Consider the performance of a hypothetical portfolio that each January invested in the recommendations of the investment newsletter at the top of the previous calendar year's performance rankings. According to a study by my company, this portfolio created from each year's winners has lost almost everything—incurring an 18.0% annualized loss since 1991. So, $100,000 invested in this portfolio back then would today be worth just $471 today.

This suggests that the appropriate response to the one-year performance sweepstakes is to run, not walk, the other way.

You might think that the cause of this is a statistical tendency known as "regression to the mean." That is the name given to what happens when extreme readings in one period become less extreme in the next—and therefore closer to the average or mean. But that can't explain what is going on with advisers' one-year rankings, since a given calendar year's bottommost performers are also a terrible bet in the subsequent year.

In fact, our research found even worse performance, if possible, of a second hypothetical portfolio that each year followed the strategy at the bottom of the previous year's ranking.

The real reason it is such a bad idea to invest with the previous year's top performers: Many investment-newsletter editors pursue wildly risky strategies. Though on average they will lose, occasionally only one of them will hit the jackpot and rise to the top of the annual rankings. By choosing that lucky adviser, investors who invest with the previous year's top performer are in effect betting that lightning will strike twice. They inevitably get sabotaged by their advisers' sky-high risk.

The same fate awaits a calendar year's bottom performers, which invariably also are hyper-risky advisers. The advisers who are the best bets for long-term performance—those whose portfolios are the least likely to crash and burn, in other words—are hardly ever at the top or bottom of the calendar-year rankings. Slow and steady really does win the race.

This advice about the one-year-performance sweepstakes applies to mutual funds, as well. Such statistics can be entertaining, and newsworthy as far as showing what sectors and strategies have lately been successful (which is the focus of The Wall Street Journal's own Winners' Circle quarterly survey, published today, of the top-performing stock-fund managers of the previous 12 months). The calendar-

Please turn to the next page

Mr. Hulbert is the founder of the Hulbert Financial Digest and a senior columnist for MarketWatch. He can be reached at reports@wsj.com.

INSIDE

SCOREBOARD

Full-year 2017 fund performance, total return by fund type. More on R2.

U.S. stocks*	Intl. stocks*	Bonds (intmd.)
18.3%	26.8%	3.6%

*Diversified funds only, excluding sector and regional/country funds

Source: Lipper

Currency Craze: What Now for Bitcoin Funds?

BY ROB CURRAN

AFTER ALL the tumult and rapid growth in bitcoin markets recently, you might wonder what is going on with the investment funds that own the digital currency.

Turns out there is even more tumult and growth in the funds than in bitcoin itself.

There has been a blizzard of cryptocurrency hedge-fund launches. The Securities and Exchange Commission has a pile of bitcoin ETF applications. And like children outside a Fingerlings store, institutional investors are lining up to get into the funds.

The largest is **Bitcoin Investment Trust**, a de facto exchange-traded fund managed by **Grayscale Investments**, a unit of Barry Silbert's Digital Currency Group. The fund, which has traded over the counter since 2015, is the only bitcoin investment that people can make in most retirement or brokerage accounts. Thanks to an unusual structure, the fund has seen bigger price swings than bitcoin itself recently. Amid the turbulence, Merrill Lynch has banned its roughly 17,000 advisers from executing client requests to trade it.

"We look forward to speaking with Merrill Lynch and addressing any questions or concerns they have about the Bitcoin Investment Trust," Mr. Silbert said in an email.

Here is a quick update on the wild ride of these bitcoin funds.

What is a bitcoin fund, and how does it operate?

Firms that have filed for bitcoin ETFs, including ProShares, VanEck and others, seek to provide investors with a familiar way to invest in the cryptocurrency. Rather than going to unregulated exchanges such as Coinbase that deal in bitcoin directly, investors buy shares in a fund, leaving the fund managers to purchase bitcoin or bitcoin derivatives.

Those funds are intended to work like traditional stock or commodity ETFs. To date, the SEC hasn't approved any bitcoin ETFs, leaving a few alternatives. Investors can buy secondary shares of the Bitcoin Investment Trust, which trade over the counter and are supposed to track the price of the cryptocurrency. Wealthy, or accredited investors, can buy primary shares of the Bitcoin Investment Trust, which more accurately reflect the price of bitcoin. Wealthy individuals and institutional investors can also buy into specialist hedge funds that trade bitcoin. There also are a handful of bitcoin-tracking funds that trade on overseas exchanges.

What are the pros and cons of buying into a bitcoin fund rather than the digital currency itself?

There certainly are more dangerous ways to gamble on bitcoin, but Bitcoin Investment Trust may be one of the most expensive ways.

The ravenous demand of investors for anything bitcoin-related has resulted in the OTC shares trading at a hefty premium to the fund's bitcoin holdings. The premium, which has sometimes meant that shares of the fund cost double the price of bitcoin, is what led short seller Andrew Left to bet against the price of the fund.

But as Mr. Silbert sees it: "The premium is just evidence that there is a tremendous institutional and retail demand for access to products that enable investors to buy bitcoin."

How have bitcoin's price swings affected Bitcoin Investment Trust?

The fund saw an explosion in trading volumes, assets under management and volatility last year.

When they first raised the concept of a bitcoin ETF a half-decade ago, developers such as the Winklevoss twins, Cameron and Tyler, and their rival, Mr. Silbert, predicted that such funds could one day be as popular as the mighty **SPDR Gold Shares** ETF. That seemed like a stretch, considering that most fund investors hadn't heard of bitcoin.

But Bitcoin Investment Trust briefly surpassed the gold fund on some recent days by one key measure of popularity—daily dollar volume.

At roughly $3.21 billion at last count, Bitcoin Investment Trust's assets under management—counted as holders of the primary, restricted shares—are far shy of the gold fund's $35 billion. Still, the bitcoin fund started 2017 with roughly $164 million in assets.

The fund's stock chart, meanwhile, looks like it traces the path of a bungee jump. After starting 2017 at around $100 a share, the fund peaked at over $3,400 in early December, dipped to around $1,700 and is now trading around $2,300.

What is the status of the other proposed bitcoin funds?

ETF providers were among those most excited about the launch of bitcoin futures by **Cboe Global Markets** and **CME Group** in December. The market Grinches at the SEC had refused the first wave of bitcoin ETF applications from the Winklevoss twins, Mr. Silbert and SolidX, citing the lack of regulation on digital-currency exchanges. So the sense was that the SEC, which has endorsed funds tracking commodities futures in the past, would be more comfortable with a fund tracking futures on these major exchanges.

Almost as soon as the first futures traded on Cboe, the New York Stock Exchange filed for SEC approval for two ETFs based on bitcoin futures—one long and one short—to be managed by ProShares. Similarly, Cboe has applied for approval for funds managed by fund families REX, First Trust and GraniteShares.

Critics, including Joe Saluzzi, co-founder of agency brokerage Themis Trading, say that such an ETF would be "a recipe for a disaster." An SEC approval for a futures-based ETF would be viewed as a "housekeeping seal of approval" even though the underlying bitcoin remained unregulated, Mr. Saluzzi says.

How have the futures on bitcoin started out?

Volumes on both Cboe and CME platforms are relatively muted, with trading in the millions of dollars a day compared with the billions of dollars traded on Asian spot bitcoin markets. That's one reason Mr. Silbert says futures-tracking ETFs could be problematic.

"From a practical perspective, the size of the futures market as it exists today is not large enough to accommodate the demand that exists for an ETF," says Mr. Silbert.

What are hedge funds doing?

According to **Morgan Stanley**, hedge funds invested about $2 billion in bitcoin and other cryptocurrencies in 2017. As many as 84 cryptocurrency hedge funds started over the same period. Reports that one of the largest, a bitcoin hedge fund operated by Pantera Capital, was counting its returns in tens of thousands of percentage points hardly hurt their popularity.

Joining the fray is Apex Token Fund, a "fund of funds" that plans to sell investors digital tokens that represent its interest in a group of other crypto funds.

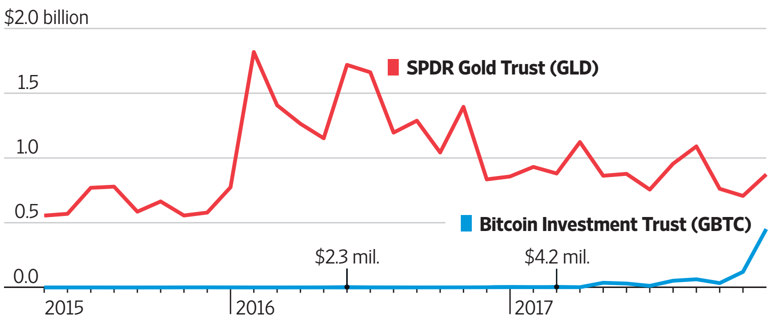
Mr. Curran, a writer in Denton, Texas, is a regular contributor to Dow Jones Newswires and The Wall Street Journal. Email him at rob.curran@dowjones.com.

ISTOCKPHOTO/GETTY IMAGES

Bitcoin's price moves have caused an explosion in trading, assets and volatility for the ETF-like Bitcoin Investment Trust.

Out of Nowhere

Dollar volume* of Bitcoin Investment Trust (GBTC), once negligible, has surpassed even mighty SPDR Gold Trust on some days lately. Average monthly volume:



*average of closing prices multiplied by that day's volume

Source: FactSet

THE WALL STREET JOURNAL.

WINNERS' CIRCLE

Growth-Stock Funds Dominated the 2017 Charts

Eight of the top 10 stock funds had 'growth' in their name

BY SUZANNE MCGEE

GROWTH, growth, growth.

In 2017, that's all that a mutual-fund manager needed to pursue to reap a healthy return for investors.

The year was "one of the few times that we have seen synchronized global growth, while interest rates remain near their historic lows," says Andrew Peck, manager of Baron Asset Fund, which posted a 26% gain in 2017. Indeed, as John Bilton, a global strategist overseeing multiasset-class solutions for J.P. Morgan Asset & Wealth Management, pointed out in a report, it was "the best period of coordinated, above-trend global growth in almost a decade."

When risk-taking is richly rewarded and investors feel confident that little will rock their world, growth takes the lead. That helps to explain the big gap between large-cap growth funds, which gained 29.6% for the year, and large-cap value funds, which were up a mere 15.9%, according to Lipper data. Gains in big growth stocks pushed S&P 500 index funds to a 21.5% gain for the year.

All but two of the top 10 performers in our fourth-quarter Winners' Circle competition, a quarterly contest that identifies the best-performing U.S.-stock fund managers for the preceding 12 months, have the word "growth" in their name. Among the top 10 were two other Baron Asset Management funds—**Baron Fifth Avenue Growth Fund** (BFTHX) and **Baron Opportunity Fund** (BIOPX).

Kinetics wins it

The winner, with a 56.9% gain, was **Kinetics Internet Fund** (WWWFX), which has as its largest holding a stake in **Bitcoin Investment Trust**. Even if its managers describe themselves as "benchmark agnostic," it couldn't really be mistaken for anything but a growth fund. After all, any fund that invests more than 12% of its holdings in alternative currencies, while hunting for other disruptive business models to back, may be pursuing a radically different form of growth investing, but it's still chasing growth. (More on the Kinetics fund's win in accompanying article.)

The question, of course, is whether investors should keep betting on growth, or whether it's time to shift toward nearly forgotten "value" stocks, which tend to trade at a lower price relative to their fundamentals. How much of the good news to come—the heart of any growth stock—is already captured in market valuations?

According to data from Howard Silverblatt, senior index analyst at S&P Dow Jones Indices, stocks in the S&P 500 currently trade at about 23.31 times estimated 2017 earnings, or 19.67 times forecast 2018 earnings. That compares with an average of 17.13 since 1936. What's more, he noted, the stocks of a handful of big-name growth companies—Apple Inc., Microsoft Corp., Amazon.com Inc. Facebook and Google parent Alphabet Inc.—accounted for about 23.7% of last year's gains in the S&P 500, with Apple alone generating 7.44% of the index's returns. Information technology as a sector? Although it accounts for just north of 22.5% of the total S&P 500 by capitalization, it accounted for 38.1% of its total return.

That's a lot of good news, and many are wondering how much is priced in already.

Some believe that growth and value may wrestle for the limelight in the short term. "Over the last month or so, growth has underperformed value, since the tax-reform package is a short-term catalyst that could drive profits" higher, says Dan Suzuki, senior investment strategist at Bank of America Merrill Lynch in New York. But lower tax rates are a one-time boost to slower-growth stocks, and that could mean value quickly returns to the back seat.

Certainly, the data suggest that growth has an edge. Some of the same classic growth companies in the technology arena that propelled certain funds to the top of the heap in the past 12 months are expected to contribute most to S&P 500 earnings in the fourth quarter of 2017. Indeed, analysts already are predicting that technology companies will post a 28% year-over-year jump and set a record for corporate profits when they report their results for the fourth quarter of 2017, according to Mr. Silverblatt.

At the same time, there is solid research backing the hackneyed suggestion that it's unwise to put all your financial eggs into a single basket. Fidelity Investments recently published data demonstrating that the longer the time horizon, from one-year periods to three-year and then 10-year rolling periods, the more likely it is that value-investing strategies outperform growth.

Michael Hartnett, chief investment strategist at Bank of America Merrill Lynch, reported similar findings in a study published in the summer of 2016. Looking at the 90-year timespan from 1926 to 2016, he found the average annual price return of value stocks to be 17%, while that of growth was 12.8%.

Value in 'value'?

So is it different this time? "Over the long term, valuation rules everything," says Mr. Suzuki. "If you have a long time horizon, a strategy of simply buying the cheapest stocks has provided the greatest alpha and return. But it's a terrible short-term indicator."

Some other pundits are saying it's time for fund investors with a long time horizon to begin allocating some of their assets toward value.

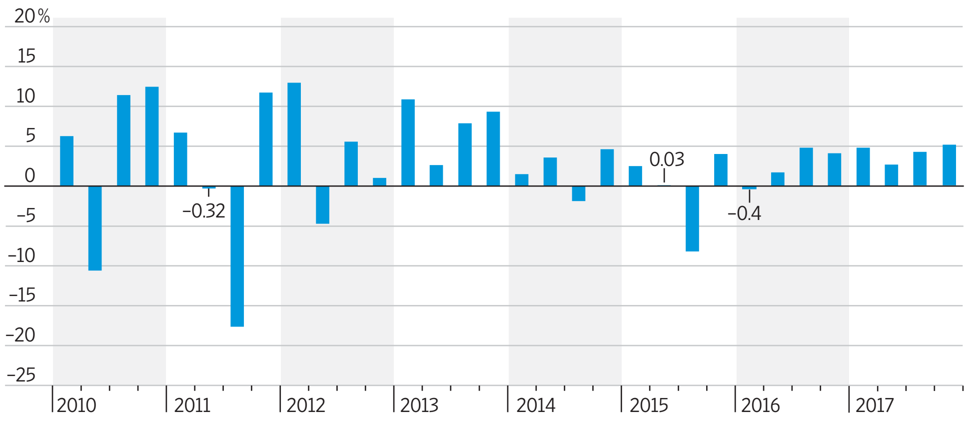
"I would slightly overweight value relative to growth, and in our 2018 outlook, that's what we recommend," says John Lynch, chief strategist at LPL Financial.

"It's not about writing off growth; it's about prudence."

Ms. McGee is a writer in New England. She can be reached at ***reports@wsj.com.***

The Score at the Quarter

U.S.-stock funds rose 5.1% in the fourth quarter, the seventh straight positive quarter, and were up 18.3% for the full year. Average total return (U.S. diversified funds).



Source: Lipper

THE WALL STREET JOURNAL.

Kinetics Internet Was No. 1, Up 56.9%, Boosted by Bitcoin

"I would take my salary in bitcoin rather than in U.S. dollars right now," says Peter Doyle, co-founder and portfolio manager of **Kinetics Internet Fund** (WWWFX).

That's a stunning declaration, given the roller-coaster performance of the digital currency, which started 2017 worth less than $1,000, briefly soared to $20,000, and then in the final weeks of the year tumbled to $10,000. But Mr. Doyle simply is displaying his confidence in the disruptive possibilities of this and other alternative payment methods, and his fund's largest single holding: a position of more than 12% in **Bitcoin Investment Trust**, which buys and holds bitcoin. Regardless of what happened in the last weeks of 2017, that position was enough—especially in combination with other holdings—to ensure the Kinetics fund captured first place in our quarterly Winners' Circle competition. The fund's 56.9% return over 12 months beat its nearest rival, **Morgan Stanley Multi Cap Growth** (CPOBX), by more than 11 percentage points, one of the widest such gaps in recent Winners' Circle history.

"Internet" is a bit of a misnomer for the Kinetics fund, which like all of the contenders in our competition is a diversified U.S.-stock fund with at least $50 million in assets and boasting a track record of at least three years.

While it owns a handful of classic internet companies (Google parent **Alphabet** Inc., **LendingTree** Inc. and **eBay** Inc.), its holdings also include companies like **Visa** Inc. and **Mastercard** Inc., entertainment firms such as **Lions Gate Entertainment** Corp. and **Dish Network** Corp., and entities affiliated with broadcasting mogul John Malone, like **Liberty Sirius XM Group**.

CHRIS RATCLIFFE/BLOOMBERG NEWS

Kinetics' token of appreciation

There is a theme to these investments: disruption. Mr. Doyle believes that it's going to be increasingly hard to get "satisfactory" returns from traditional investing, so they adopt a benchmark-agnostic, style-agnostic approach.

Morgan Stanley Multi Cap Growth, meanwhile, posted top-tier returns for 2017 by investing in a list of more-straightforward growth companies. The fund ended the year with a 45.2% gain, thanks to outsize performance by stocks like **Intuitive Surgical** Inc., which gained more than 70% last year. **Workday** Inc. was another winner for the fund. "We saw its selloff in 2016 as an opportunity to take a larger position," notes Dennis Lynch, head of growth investing at Morgan Stanley Investment Management.

—Suzanne McGee

Do One-Year Returns Matter?

Continued from the prior page

year rankings also point to which mutual funds are most likely to receive an influx of new cash in January as naive investors chase after the past year's top performers.

But consider the Persistence Scorecard that is periodically updated by S&P Dow Jones Indices. It measures the odds that a mutual fund will remain an above-average performer for several years in a row. Over the many years that S&P Dow Jones Indices has been keeping this scorecard, those odds consistently have been below what you would expect if you flipped a coin.

Perhaps investors who are seduced by one-year returns should take a clue from Ulysses of Greek myth.

Take the U.S.-stock mutual funds that two years ago were in the top half for performance over the previous 12 months. If being an above-average performer was merely a matter of luck, you'd expect 25% of them to be above-average performers in both of the subsequent two years. In fact, however, this percentage was just 16%.

S&P Dow Jones Indices found that "an inverse relationship generally exists between the measurement time horizon and the ability of top-performing funds to maintain their status." In other words, as you focus on shorter and shorter time periods, there is a higher and higher chance that the top performer in one period will be a bottom performer in the next.

The clear implication: You improve your chances of picking a winning adviser by focusing on performance over periods far longer than one year.

How long? Our analysis of investment newsletters suggests that even 10 years isn't enough. Only when performance was measured over at least 15 years were there better-than-50% odds that a top performer would be able to repeat.

Never a crown

Note carefully that, when following a top performer over the previous 15 years, you are unlikely to be at the top of the rankings in any given calendar year. In fact, the top investment newsletter in our latest 15-year rankings was never in first place in any calendar year along the way. Furthermore, its average yearly performance rank for those 15 calendar years was at the 59th percentile.

That is a shortcoming only if you're a thrill seeker who finds it intolerably boring to be merely above average year in and year out—even if that does lead to being at the top of the rankings for very long-term performance.

Otherwise, assuming you are seriously focused on building up wealth over the long term, you should be more than willing to give up the hope of ever being at the top of the calendar-year rankings.

A good analogy for how to react to the one-year-performance rankings comes from Greek myth: Ulysses, you may recall, tied himself to the mast to avoid being tempted by the Sirens' song, which he knew would be irresistibly beautiful and lead to his certain death. We need to figure out the financial equivalent of tying ourselves to a mast that keeps us focused on the long term. Only in that event should you feel free to browse the one-year rankings to your heart's content.

QUARTERLY MONITOR | WILLIAM POWER

U.S.-Stock Funds Rose 18.3% in 2017, but Investors Kept Swimming in Foreign Waters

When is an 18%-plus gain in the average stock fund not something to boast too much about?

Answer: When the rest of the world has done better.

In 2017, the average diversified U.S.-stock fund registered a total return of 18.3%, according to Thomson Reuters Lipper data. Strong, yes, but international-stock funds rose 26.8%.

"I was afraid investors had abandoned international stocks because they'd underperformed for years," says Brent Schutte, chief investment strategist at Northwestern Mutual Wealth Management, in Milwaukee. Instead, investors saw cheaper valuations overseas and piled in. Investors in 2017 pulled a net $38.8 billion from long-term mutual funds and ETFs focused on U.S. stocks, while adding $233.9 billion to international stocks and $379.4 billion to bond funds, based on Investment Company Institute estimates.

Such figures could be a good sign for the stock rally, says Jim McDonald, chief investment strategist for asset manager Northern Trust. "We finally started to see some flows into equities over the last year, but they've still been outweighed by flows into fixed-income funds," he says. "To me, that is one way to measure that investors haven't completely bought this bull market." In the 1999 and 2007 rallies, flows were overwhelmingly into stocks.

Bonds also had a positive year, as investors were satisfied with the Fed's pace at raising interest rates. Funds focused on intermediate-maturity, investment-grade debt rose 3.6%.

Mr. Schutte sees commodities as the asset worth sticking with now—as an inflation hedge. "I think the story for 2018 is that inflation will return."

FOLLOW THE MONEY

2017 flow of investor cash by fund type, in billions*

U.S. stocks	Intl. stocks	Bonds
–$38.8	$233.9	$379.4

*estimated mutual-fund/ETF flows through 12/27
Source: Investment Company Institute

Replay Needed! Super Bowl Market Predictor Falls to 40-11

For the second year in a row, the Super Bowl stock-market predictor fumbled in 2017. Before this, the quirky indicator had worked for seven straight years. As popularized by analyst Robert H. Stovall, the Dow tends to rise for the year after an original NFL team wins the game, and to fall otherwise.

Last year's win by New England, which came from the old AFL, incorrectly predicted a 2017 market drop. The predictor nonetheless has worked after 40 of the 51 Super Bowls—still an All-Pro 78% completion rate.

Mr. Power is a Wall Street Journal news editor in South Brunswick, N.J. Email him at ***william.power@wsj.com.***

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◆ The 5 Top Wealth-Management Experts Posts of 2017, including "Six Questions to Help Determine Your Financial Health," by Annamaria Lusardi of the George Washington University School of Business, and "How Much Should You Save for Retirement? Why the 10% Rule Could Work," by Derek Tharp of Conscious Capital and Kitces.com.

The Journal Report welcomes your comments—by mail, fax or email. Letters should be addressed to Lawrence Rout, The Wall Street Journal, 4300 Route 1 North, South Brunswick, N.J. 08852. The fax number is 609-520-7256, and the email address is reports@wsj.com.

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How to Find College Aid—by Yourself or With Help

Many grants and scholarships are available; a lot can be done on your own, or you can also hire a pro

BY CHERYL WINOKUR MUNK

STUDENTS SEEKING to lower their college tuition bill may be eligible for "free money," but tracking it down requires some homework.

Many people don't realize the extent to which grants and scholarships are available—and not just for students who are the smartest or most athletic. These awards have varying requirements, and unlike loans they usually don't have to be paid back.

Experts say students and their families can do the digging themselves, or pay a specialist to help them—much like the choice between using an online "robo adviser" or paying a financial adviser for more-personalized expertise. The good news for those who want to do their own legwork is that there are plenty of free resources available.

"With the amount of information available [online], there is very little you can't find out on your own," says Mike Loparo, a remodeling consultant in Cleveland, whose 19-year-old daughter landed a full scholarship to the University of Cincinnati.

Fafsa first

The first task is to fill out the Free Application for Federal Student Aid, known as the Fafsa, which is used to determine eligibility for federal financial aid. Some wealthier families may skip this step, thinking it isn't worth their time because they make too much money. That's a mistake, experts say, because the Fafsa is used for other types of aid unrelated to need.

Many states use Fafsa information for loans and grants, and many colleges and universities use the information to make decisions about institutional aid, so filling out the form is worth it regardless of income, says Megan Coval, vice president of policy and federal relations at the National Association of Student Financial Aid Administrators.

The Fafsa, which must be filed annually, becomes available each year on Oct. 1. Experts advise filing the form as close to this date as possible since some programs allocate money on a first-come, first-served basis.

If students need help completing the form, they can go to formyourfuture.org, a national Fafsa-completion campaign organized by the National College Access Network, a nonprofit that seeks to improve access to college for first-generation, underrepresented and low-income students. Some states also run College Goal Sunday campaigns—free programs to help students and families complete the Fafsa.

In addition to the Fafsa, some students may want to complete the College Board's CSS Profile, at cssprofile.collegeboard.org. This application is used by nearly 400 colleges, universities, professional schools and scholarship programs to determine eligibility for nongovernment aid such as institutional grants, loans and scholarships.

Students should check in with the individual colleges they are interested in to determine what types of financial aid they offer and which aid forms they require. Many schools, for example, offer merit aid based on factors such as grades, test scores or extracurricular activities.

To identify schools that are generous with financial aid, students can use tools on the College Board's website, bigfuture.com, to compare attendance costs and average financial-aid awards. Once students have acceptances in hand, they can compare aid packages from up to three colleges at a time using the government website consumerfinance.gov. Search for "paying for college" and click on "compare financial aid and college cost."

'Free money' available? Students at Temple University in Philadelphia.

MARK MAKELA/REUTERS

Students shouldn't be afraid to negotiate if they aren't satisfied with a college's aid offer, experts say, especially if they received a better package from another school. Most colleges have an appeal process, according to the National Scholarship Providers Association.

Students also can search for outside scholarships on their own. Mr. Loparo suggests starting this process during the student's sophomore year of high school.

The bigfuture.com site has a Scholarship Search tool that allows students to find scholarships, aid and internships from more than 2,200 programs. Students also should check with local organizations, community foundations, employers and professional associations to see if they offer any scholarships. Students also can search for available scholarships free of charge on websites such as fastweb.com, cappex.com and edvisors.com.

Paid specialists

Even with the array of free resources available, some families prefer to hire a consultant to help.

Several years ago, Michael Ross, a retired science writer in San Jose, Calif., used a college adviser to help him navigate the financial-aid process for a son and daughter, at different times. The adviser or a member of his team filled out the Fafsa for the family yearly and provided tips on negotiating financial aid with colleges. Mr. Ross says the adviser provided the family with "peace of mind" that they were doing things correctly.

Manuel Fabriquer, president of College Planning ABC in San Jose, Calif., who worked with Mr. Ross, says the full menu of his services can run as much as $20,000. That includes guided visits to schools.

A more basic package costs around $4,000, and includes helping students with college selection, filing aid forms and finding scholarships. He also offers some services a la carte. Help with aid forms, for example, runs about $375, while help finding scholarships costs about $1,500, he says.

"If you have uncertainty, it can be worth it," says Mr. Ross.

Ms. Winokur Munk is a writer in West Orange, N.J. She can be reached at reports@wsj.com.

SAVING FOR COLLEGE | CHANA R. SCHOENBERGER

Savvy Ways to Withdraw Money From College Accounts

Both 529s and Coverdell accounts can be ideal when it comes time to pay for school

We again asked experts to help address readers' questions on saving for college. The main focus here is on sticking points when it is time to take money from "529" college-savings plans and other college accounts.

* * *

What is the best strategy to handle withdrawals from tax-advantaged accounts to pay for college?

"If you're setting up a savings account strictly with the intention of paying for a child or grandchild's future college expenses, we would rank the following tax plans as follows: 529 plans and Coverdell accounts, Roth IRA, traditional IRA and then a 401(k) plan, which offers no income-tax benefits for qualified education expenses," says Charlie Javice, chief executive of college-finance information site Frank (www.frankfafsa.com).

She says that is because both 529 and Coverdell accounts allow you to withdraw money for qualified higher-education expenses without paying taxes or penalties. With a Roth IRA, early withdrawals, before age 59½, are normally subject to income tax and a 10% penalty on the earnings portion, but there is a special exception when the funds are withdrawn to pay for qualified higher-education expenses for you, your spouse, your children or your grandchildren. In this case, the 10% penalty will be waived, but you will pay income tax on the earnings portion (if any) of the distribution. Traditional IRA holders will owe income taxes on any money they withdraw above their deductible contributions, Ms. Javice says.

"It should also be noted that while an IRA is not factored into the federal Fafsa student-aid form, any withdrawal made from the account—even for noneducation expenses—does need to be listed as income on the application, increasing the student's Expected Family Contribution," Ms. Javice says.

Because the Fafsa penalizes student-held assets more than those held by parents, it is more beneficial for a Roth IRA to be held by the parent if you intend to use it to pay for college, she says. When Fafsa calculates each applicant's ability to pay, 20% of assets owned by the student are considered payable toward their education expenses, while for parents, only 5.64% of nonretirement assets are counted. When students receive money from a 529 owned by a grandparent, meanwhile, that money is only required to appear on the student's aid application two years after the money was initially spent.

* * *

Do withdrawals from a 529 or a Coverdell have to be spent during the same year in which they are made?

Yes. "The IRS limits the amount that can be withdrawn from those savings plans to the student's qualified higher-education expenses for a given tax year, even though one tax year includes two academic years," Ms. Javice says.

* * *

Are Coverdell accounts treated the same way as 529s for tax purposes? How about for financial-aid purposes?

Yes. Under the newly passed tax plan, both accounts can now be used for qualified K-12 education expenses, like private-school tuition, as well as for college tuition. Some state tax benefits may only accrue to state residents who invest in their state's 529 plan, Ms. Javice says.

"Some schools will also use the [College Board's] CSS Profile to determine need-based institutional aid, and the way 529 and ESA [education savings accounts] assets and withdrawals are counted will vary by school," says Kathryn Flynn, content director at Savingforcollege.com, a college-finance information site.

* * *

I would like to set up a plan for college for my 15 grandchildren. Must I have a 529 for each or would a trust from which any could draw be better?

In terms of the Fafsa, the answer is the same, Ms. Javice says. But once you set up a 529, you'll only be able to use it for one grandchild at a time, changing the beneficiary each time you want to pay for another child to go to college. It will be easiest for you if you set up individual accounts for each grandchild.

Keeping the plans separate, you can invest each one according to the age of the child, and name each child's parent as the successor owner after yourself, says Ms. Flynn. That way, if something happens to you before the funds are disbursed, each child will have his or her own parent in charge of the funds.

* * *

Funds are still left in my daughter's Coverdell education account. Her new employer will reimburse her if she attends college and gets a master's degree. As this reimbursement is similar to her receiving a scholarship, can the amount she gets from her employer be used to withdraw the same amount in Coverdell funds in the same fashion (i.e., with no 10% penalty) as if she received a scholarship from the college to attend?

Yes. The rule is that you must pay taxes and a 10% penalty on the earnings portion of nonqualified withdrawals, Ms. Flynn says. But there are a number of exceptions, including cases in which a student gets a tax-free scholarship, dies or becomes disabled, or receives veterans' educational assistance or employer-provided educational assistance.

Beneficiaries who leave funds in a Coverdell account for graduate school should remember that those funds must be disbursed, or transferred to another family member, before the beneficiary turns 30, Ms. Javice says.

HAVE A COLLEGE-FINANCE QUESTION IN GENERAL? We'll be answering some of them in future Investing in Funds & ETFs reports. Write to reports@wsj.com.

Monitoring Money-Market Funds

Data provided by LIPPER

Performance figures for these consumer-oriented funds are estimated annualized yields, which include earnings from the funds' investments and the effects of compounding. Funds open only to institutions, special-purpose and tax-exempt funds are excluded from these tables.

Largest Funds

Fund Name	Assets ($millions)	Performance (%) 4th–qtr	Performance (%) 12-mos	Compound 7-day yield (%)
Fidelity Govt Cash Res	135,286.7	0.79	**0.56**	0.93
Vanguard Federal MMF	85,209.4	1.06	**0.81**	1.19
Fidelity Government MMF	83,625.3	0.74	**0.51**	0.88
Vanguard Prime MMF/Inv	83,468.1	1.20	**1.02**	1.37
Schwab Cash Reserves	35,976.0	0.75	**0.59**	0.89
Schwab Govt MF/Sweep	25,495.8	0.51	**0.26**	0.64
Edward Jones MMF/Inv Cl	16,126.6	0.45	**0.25**	0.62
Vanguard Treasury MMF	15,803.2	1.05	**0.79**	1.15
Schwab US Treas MF	15,711.6	0.51	**0.30**	0.64
Northern US Govt MMF	15,645.0	0.82	**0.57**	1.00

Highest 12-Month Yield

Fund Name	Assets ($millions)	Performance (%) 4th–qtr	Performance (%) 12-mos	Compound 7-day yield (%)
Fidelity Inv MM/Instit	13,835.9	1.32	**1.17**	1.48
JPMorgan Liq Assets/Cap	81.1	1.24	**1.10**	1.40
BlackRock MMP/Instit Cl	294.3	1.23	**1.09**	1.40
Federated Prime Csh/Wealth	3,926.0	1.24	**1.08**	1.38
Invesco Premier Portfolio/Inst	696.7	1.22	**1.05**	1.35
Dreyfus Prime MMF/Cl A	155.4	1.19	**1.02**	1.33
Vanguard Prime MMF/Inves	83,468.1	1.20	**1.02**	1.37
First Amer Ret Prime/Z	256.0	1.20	**1.01**	1.37
Schwab Value Adv MF/Ultra	12,531.4	1.18	**1.00**	1.33
BMO Prime MMF/Premier	233.1	1.11	**0.91**	1.30

Highest Seven-Day Yield

Fund Name	Assets ($millions)	Performance (%) 4th–qtr	Performance (%) 12-mos	Compound 7-day yield (%)
Fidelity Inv MM/Instit	13,835.9	1.32	1.17	**1.48**
BlackRock MMP/Instit Cl	294.3	1.23	1.09	**1.40**
JPMorgan Liq Assets/Cap	81.1	1.24	1.10	**1.40**
Federated Prime Csh/Wealth	3,926.0	1.24	1.08	**1.38**
First Amer Ret Prime/Z	256.0	1.20	1.01	**1.37**
Vanguard Prime MMF/Inv	83,468.1	1.20	1.02	**1.37**
Invesco Premier Port/Inst	696.7	1.22	1.05	**1.35**
Dreyfus Prime MMF/Cl A	155.4	1.19	1.02	**1.33**
Schwab Value Adv MF/Ultra	12,531.4	1.18	1.00	**1.33**
BMO Prime MMF/Premier	233.1	1.11	0.91	**1.30**

Source: Money Fund Report (iMoneyNet.com)

Lowest 12-Month Yield*

Fund Name	Assets ($millions)	Performance (%) 4th–qtr	Performance (%) 12-mos	Compound 7-day yield (%)
Federated Govt Rev Fund/P	9,683.0	0.12	**0.04**	0.31
RBC US Govt MMF/Investor	1,660.1	0.15	**0.05**	0.37
AZL Government MMF	490.4	0.17	**0.04**	0.45
Federated Tr/UST Oblig/Cash	379.5	0.11	**0.03**	0.28
Transamerica Govt MMF/A	184.8	0.01	**0.01**	0.01
Federated Govt Ob/Cash	165.5	0.10	**0.03**	0.28
BlackRock Liq:T-Fund Sel	80.2	0.15	**0.05**	0.32
The US Treas Trust/S	56.7	0.00	**0.00**	0.00
Ready Assets USA Govt MF	39.8	0.02	**0.03**	0.14
BlackRock Liq:Treas Tr S	35.3	0.15	**0.05**	0.26
Average Yields (all retail taxable funds)		**0.59%**	**0.41%**	

* - Ranked by assets.

Mutual-Fund Yardsticks: How Fund Categories Stack Up

Includes mutual funds and ETFs for periods ended Dec. 29. All data are final.

Investment objective	Perfomance (%) December	4th-qtr	1-yr	5-yr*
Diversified stock & stock/bond funds				
Large-Cap Core	1.2	**6.3**	20.7	14.3
Large-Cap Growth	0.5	**6.4**	29.6	15.7
Large-Cap Value	1.5	**5.8**	15.9	13.3
Midcap Core	0.8	**5.5**	15.8	13.2
Midcap Growth	0.3	**5.9**	24.7	13.8
Midcap Value	1.1	**5.3**	12.9	13.1
Small-Cap Core	−0.2	**3.7**	12.6	13.0
Small-Cap Growth	0.5	**5.2**	23.2	13.8
Small-Cap Value	−0.1	**3.6**	9.0	12.0
Multicap Core	1.1	**5.8**	19.5	13.7
Multicap Growth	0.5	**6.2**	28.0	14.8
Multicap Value	1.5	**5.8**	15.3	13.3
Equity Income	1.3	**5.5**	15.5	12.3
S&P 500 Funds	1.3	**6.8**	21.5	15.2
Specialty Divers. Equity	0.3	**3.0**	10.0	−3.1
Balanced	0.9	**3.4**	13.4	8.0
Stock/Bond Blend	0.9	**3.2**	13.2	7.0
Avg. U.S. Stock Fund†	0.7	**5.1**	18.3	12.7
Sector stock funds				
Science & Technology	−0.3	**6.1**	36.8	19.0
Telecommunication	1.1	**2.2**	9.9	9.5
Health/Biotechnology	0.5	**0.8**	25.8	18.2
Utility	−4.2	**0.4**	13.0	10.2
Natural Resources	5.5	**6.3**	−2.6	−0.7
Sector	0.1	**2.5**	7.6	8.0
Real Estate	0.1	**2.3**	6.0	8.5

Investment objective	Performance (%) December	4th-qtr	1-yr	5-yr*
World stock funds				
Global	1.2	**4.9**	23.8	10.8
International (ex-U.S.)	1.7	**4.1**	26.8	7.4
European Region	1.2	**1.9**	24.5	8.0
Emerging Markets	3.4	**6.3**	34.6	4.3
Latin American	5.3	**−0.1**	28.2	−3.0
Pacific Region	2.3	**8.1**	37.6	9.2
Gold Oriented	5.9	**0.6**	8.4	−10.4
Global Equity Income	1.3	**3.8**	17.0	8.7
International Equity Income	2.2	**3.5**	22.5	5.0
Taxable-bond funds				
Short-Term	0.1	**0.04**	1.7	1.0
Long-Term	0.7	**0.9**	5.8	3.1
Intermediate Bond	0.4	**0.3**	3.6	2.0
Intermediate U.S.	0.5	**0.7**	2.3	0.02
Short-Term U.S.	0.03	**-0.2**	0.7	0.3
Long-Term U.S.	0.4	**0.2**	2.9	1.2
General U.S. Taxable	0.5	**0.5**	5.5	3.4
High-Yield Taxable	0.3	**0.5**	6.6	4.6
Mortgage	0.2	**-0.03**	2.3	1.6
World Bond	0.5	**0.6**	7.8	1.0
Avg. Taxable-Bond Fund**	0.4	**0.4**	4.2	2.1
Municipal-bond funds				
Short-Term Muni	0.02	**−0.2**	0.7	0.3
Intermediate Muni	0.6	**0.3**	5.2	1.1
General & Insured Muni	1.0	**0.9**	5.4	2.8
High-Yield Muni	1.1	**1.2**	7.8	4.1

Stock & Bond Benchmark Indexes All total return unless noted

Investment objective	Perfomance (%) December	4th-qtr	1-yr	5-yr*
Large-cap stocks				
DJIA	1.9	**11.0**	28.1	16.4
S&P 500	1.1	**6.6**	21.8	15.8
Midcap stocks				
S&P MidCap 400	0.2	**6.3**	16.2	15.0
Small-cap stocks				
Russell 2000	−0.4	**3.3**	14.6	14.1
Broad stock market				
DJ U.S. Total Stock Market	1.0	**6.3**	21.2	15.5
Russell 3000	1.0	**6.3**	21.1	15.6

Investment objective	Perfomance (%) December	4th-qtr	1-yr	5-yr*
Stock indexes				
DJ U.S. TSM Growth	0.9	**6.8**	27.0	16.8
DJ U.S. TSM Value	1.1	**5.9**	15.9	14.3
Taxable bonds				
Barclays Agg. Bond	0.5	**0.4**	3.5	2.1
Municipal bonds				
Barclays Muni. Bond	1.0	**0.7**	5.4	3.0
International stocks				
MSCI EAFE†† (price return)	1.5	**3.9**	21.8	5.0
Dow Jones World (ex. U.S.)	2.3	**5.3**	27.7	7.4

*Annualized †Diversified funds only **Excludes money-market funds ††Europe, Australia, Far East

FUNDAMENTALS OF INVESTING

Muni Bonds May Not Be The Safe Bet Any Longer

Investors need to understand how the risks have changed, and perhaps alter their strategy

BY JOHN COUMARIANOS

CAN INVESTORS still use municipal-bond funds as core holdings in their taxable accounts?

For a long time, many have done just that—taking advantage of the bonds' big tax benefits, and using their low risk as a haven in times of stock-market turmoil.

But munis aren't looking like such a reliable bet anymore. Since the financial crisis, some big municipalities have defaulted on their obligations, while a number of states, cities and now Puerto Rico are currently facing financial woes. And bankrupt municipalities are increasingly making bondholders scrounge for what's left after paying employee pension funds.

So while it may still be possible to keep a muni fund as a core holding, investors should understand how the asset class has changed.

Municipal bonds offer investors interest that's tax-free at the federal level and at the state and local levels, if investors own bonds issued by any government entity within their state of residence.

When deciding whether to buy muni bonds, investors usually make a comparison between the yields of a muni bond and a U.S. Treasury note or bond of similar maturities. The "taxable yield equivalent" to a municipal bond is the municipal bond's yield adjusted for the investor's tax bracket.

So if an investor is hypothetically in a 50% bracket, including both federal and state taxes, a taxable yield twice that of a municipal yield—or a municipal yield half that of a taxable bond—would make two bonds equivalent. In that case, if a highly rated muni bond offered more than half the yield of a comparable U.S. Treasury, an investor could consider the muni bond the better choice in a taxable account.

A changed asset class

For decades, that was a reasonable comparison, and largely all that investors had to consider about munis. The chance of losing an investment was not even an issue: The historical default rate of the roughly $3.8 trillion market with more than 80,000 issuers has been low—0% for AAA-rated bonds and only 0.30% for AA- and A-rated bonds from 1970 through 2009, according to a Moody's study.

Unfortunately, municipal profligacy has begun to result in more high-profile distress and bankruptcy in recent years, including Jefferson City, Ala.; Detroit; Harrisburg, Pa.; Central Falls, R.I.; and Vallejo, San Bernardino and Stockton in California. Now the fate of more than $70 billion that creditors have lent to Puerto Rico is in doubt, as Hurricane Maria battered the island already struggling with manufacturing and population loss.

An updated Moody's study from 2016 notes that the "sector has changed over the past decade and more profound changes may be in the offing. The once-comfortable aphorism that 'munis don't default' is no longer credible, although default rates remain low."

In some cases, investors betting on munis have gotten burned. Recently, Franklin Double Tax Free Income fund merged with **Franklin High Yield Tax Free Income** fund (FHYVX) after it inflicted significant losses on investors. The fund had more than half its assets in Puerto Rico bonds.

Some analysts warn that many bond issuers are heading into precarious financial situations. In a 2016 research report from PNC Capital Markets, Tom Kozlik argues that around 20% of issuers haven't adjusted their spending to reflect diminished revenue after the financial crisis.

Mr. Kozlik doesn't cite names, but other observers have pointed fingers at issuers at risk.

"Though I'm not warning of an industrywide municipal-bond crisis, I think investors have to think carefully about individual credits and what, exactly, they're investing in," says Nicole Gelinas of the Manhattan Institute think tank. In the case of Chicago, "it's difficult to see, 10 years from now or even sooner, how, exactly, Chicago figures out [its problems with underfunded pensions] without bondholders having to take some sort of hit, as well." (Chicago officials declined to respond to a request for comment.)

And when a municipality goes bankrupt, investors aren't always first in line to recover their money. Stockton and San Bernardino honored their obligations to state-employee pension funds at the expense of bondholders in their bankruptcies. "General obligation" bondholders, once thought to be above revenue bondholders in the case of defaults, aren't necessarily ahead of unions.

Munis aren't Treasurys

Not all municipal-bond experts are pessimistic. Tracy Gordon, a senior fellow at the Urban Institute think tank, says investors shouldn't be alarmed about munis' safety, emphasizing their low historical default rates. "It's unfair to paint the whole sector with a broad brush," she says.

But if investors choose munis as a core holding, many analysts advise using a diversified fund to lessen the risk of issuers defaulting. What's more, investors shouldn't expect the bonds to rally during a stock-market decline, as U.S. Treasurys often do.

That's because munis have become closely tied to the health of state-employee pension funds. If stocks fall and pension funds lose money, the funds often turn to municipalities to make up losses—which makes muni bonds less attractive and hurts muni investors.

Indeed, the Bloomberg Barclays Municipal Index lost nearly 2.5% in 2008 during the stock crash—instead of providing municipal-bond investors with protection. That's hardly catastrophic, but it might not have represented the resilience that the bond investors were expecting. And results might be less benign during the stock market's next wipeout.

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Puerto Rico Gov. Ricardo Rosselló, at right after last year's statehood vote, has his hands full.

JIM WATSON/AFP/GETTY IMAGES

FUND RESULTS

WSJ .COM Lipper's A-to-Z quarterly fund listings are free at WSJ.com/FundsAnalysis.

Largest Taxable-Bond Funds

Data provided by LIPPER

Total returns are for periods ended Dec. 29 and are final; assets are through Nov. 30, and include all share classes.

Fund Name	Symbol	Assets ($ millions)	Performance (%) Dec.	4th-qtr	1-yr	3-yr*	5-yr*
Vanguard Tot Bd;Adm	VBTLX	193,360.0	0.5	0.4	3.6	2.2	2.0
Vanguard Tot Bd II;Inv	VTBIX	143,915.1	0.5	0.4	3.5	2.1	2.0
PIMCO:Income;Inst	PIMIX	105,272.2	0.2	1.1	8.6	6.6	6.4
Vanguard Tot Itl Bl;Adm	VTABX	96,673.7	0.03	1.1	2.4	2.7	N.A.
Met West:Total Return;I	MWTIX	80,267.3	0.4	0.4	3.4	2.0	2.5
PIMCO:Tot Rtn;Inst	PTTRX	73,643.5	0.6	0.1	5.1	2.8	2.2
Vanguard Sh-Tm Inv;Adm	VFSUX	64,097.9	unch.	−0.1	2.1	2.0	1.8
DoubleLine:Tot Rtn;I	DBLTX	53,859.7	0.3	0.2	3.8	2.8	3.0
Dodge & Cox Income	DODIX	53,560.3	0.4	0.5	4.4	3.1	3.1
iShares:Core US Agg Bd	AGG	52,223.4	0.4	0.4	3.5	2.2	2.1
Vanguard Sh-Tm Bd;ETF	BSV	51,070.0	0.01	−0.3	1.2	1.2	1.0
Lord Abbett Sh Dur;F	LDLFX	42,331.8	0.1	0.2	2.6	2.4	2.2
iShares:iBoxx $IG Corp	LQD	39,450.1	1.2	1.3	7.2	4.0	3.5
Templeton Gl Bond;Adv	TGBAX	38,821.3	−1.5	−1.8	2.6	1.6	1.8
American Funds Bond;A	ABNDX	36,883.1	0.2	−0.1	3.2	2.1	1.9
Fidelity Str Adv Cre Inc	FPCIX	35,525.1	0.4	0.3	4.6	3.0	2.5
Vanguard Int-Tm Bd;ETF	BIV	34,626.4	0.3	0.01	3.8	2.6	2.2
Fidelity US B Id;IP	FXNAX	34,614.9	0.5	0.4	3.5	2.2	2.1
T Rowe Price New Inc	PRCIX	33,629.6	0.4	0.5	4.0	2.3	2.0
Fidelity Total Bond	FTBFX	31,715.1	0.4	0.4	4.2	3.2	2.8
BlackRock:Str Inc Opp;I	BSIIX	31,277.0	0.6	0.9	4.9	2.7	3.1
Vanguard Int-Tm Inv;Adm	VFIDX	29,501.6	0.3	0.2	4.3	3.3	2.9
Pru Tot Rtn Bond;Z	PDBZX	29,051.5	0.9	1.1	6.6	3.8	3.5
Vanguard Infl-Prot;Adm	VAIPX	27,361.9	0.9	1.2	2.9	1.9	0.1
Vanguard ST Corp Bd;ETF	VCSH	26,765.4	0.1	−0.1	2.4	2.1	1.9
JPMorgan:Core Bond;R6	JCBUX	26,731.5	0.4	0.4	3.9	2.5	2.2
Fidelity Srs Inv Gd Bd	FSIGX	26,723.8	0.5	0.5	4.4	2.8	2.4
Vanguard HY Corp;Adm	VWEAX	24,718.6	0.3	0.1	7.1	5.6	5.2
Vanguard GNMA;Adm	VFIJX	24,717.5	0.2	0.04	2.0	1.8	2.0
iShares:TIPS Bd ETF	TIP	23,979.5	0.9	1.2	2.9	1.9	0.02

*Annualized N.A.=not applicable, fund is too new

Category Kings in 16 Realms

Data provided by LIPPER

Top-performing funds in each category, ranked by one-year total returns (changes in net asset values with reinvested distributions) as of Dec. 29; assets are as of Nov. 30. All data are final.

Best and Worst

Total return for the best- and worst-performing stock, bond and mixed mutual-fund categories; for period ended December 31; ranked by 4th-quarter returns.

Source: Lipper

Best Performers

Fund	Fourth-quarter	12-month
Pacific Region	8.1%	37.6%
S&P 500	6.8	21.5
Large-Cap Growth	6.4	29.6
Natural Resources	6.3	–2.6
Large-Cap Core	6.3	20.7
Emerging Markets	6.3	34.6
Multicap Growth	6.2	28.0

Worst Performers

Fund	Fourth-quarter	12-month
Short-Term Muni	–0.2%	0.7%
Latin American	–0.1	28.2
Mortgage	unch	2.3
Short-Term Bond	.04	1.7
Long-Term U.S.	0.2	2.9
Intermediate Muni	0.3	4.0
Intermediate Bond	0.3	3.6

International

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Morg Stan I:Intl Opp;I	MIOIX	528.6	5.6	4.7	53.4	17.2
Pru Jenn Intl Opps;Z	PWJZX	64.1	5.9	1.4	49.6	9.1
AdvisorShs DorsWr ADR	AADR	150.5	6.1	5.5	46.9	14.2
Bail Giff EAFE;5	BGEVX	2,822.0	2.9	0.6	46.3	N.A.
Morg Stan I:Intl Adv;I	MFAIX	281.3	4.4	2.7	44.8	13.6
Category Average:		1,103.3	4.1	1.7	26.8	7.4
Number of Funds:			1,647	1,664	1,552	1,069

Global Stock

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Bail Giff LTGGE;2	BGLTX	198.5	6.1	–1.0	54.1	N.A.
Oppenheimer Glbl Opp;A	OPGIX	6,910.5	14.3	0.7	52.5	21.2
Baron Global Advtg;Inst	BGAIX	40.2	9.9	3.6	49.8	14.9
Morg Stan I:Gl Opp;I	MGGIX	1,719.8	6.6	2.4	49.4	22.3
Kinetics:Global;NL	WWWEX	13.2	21.7	8.8	49.2	10.8
Category Average:		535.8	4.9	1.2	23.8	10.8
Number of Funds:			1,086	1,095	992	668

Global Equity Income

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
WBI Tactical LCY	WBIG	81.6	8.9	3.1	25.0	N.A.
Alpine:Dynamic Div;Inst	ADVDX	166.1	5.8	1.9	23.4	11.1
Steward:Gl Eq Inc;Inst	SGISX	270.7	6.5	1.8	22.3	12.6
Tweedy Browne:WW Hi Dv	TBHDX	306.7	4.6	1.5	22.1	6.8
Fidelity Glbl Eq Inc	FGILX	82.4	6.0	1.9	22.1	11.5
Category Average:		1,020.8	3.8	1.3	17.0	8.7
Number of Funds:			132	132	132	97

Emerging Markets

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
iPath ETN LgEn MSCI EM	EMLB	2.6	13.5	6.5	88.6	6.7
VnEck Vctrs:Poland	PLND	19.4	2.9	1.9	54.1	1.2
Bail Giff Em Mkt;5	BGEDX	2,015.0	7.6	2.0	53.3	N.A.
Principal:Origin EM;R-6	POEFX	741.5	6.6	1.3	51.0	N.A.
VanEck:Emerg Mkts;Y	EMRYX	1,870.7	8.4	4.1	50.3	7.8
Category Average:		630.6	6.3	3.4	34.6	4.3
Number of Funds:			865	877	820	477

Large-Cap Core

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
BlackRock:IS USA MF;K	BKMTX	13.5	8.0	0.04	37.3	N.A.
Amer Cent:Foc DG;Inv	ACFOX	28.9	5.4	–1.5	34.6	16.0
BNY Mellon:Foc Eq Op;M	MFOMX	537.1	8.8	0.6	32.7	17.5
iPath ETN LgEx S&P	SFLA	2.4	9.2	1.5	31.7	26.7
Vanguard PRIMECAP;Adm	VPMAX	61,535.9	7.3	1.2	29.6	19.6
Category Average:		1,057.5	6.3	1.2	20.7	14.3
Number of Funds:			863	879	800	640

Large-Cap Growth

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Transam:Cap Growth;I	TFOIX	853.8	7.5	–0.1	44.3	19.9
Morg Stan I:Growth;A	MSEGX	4,194.2	7.3	–0.2	43.5	19.8
Baron Fifth Ave Gro;Inst	BFTIX	199.5	6.0	–0.6	41.0	16.8
Touchstone:LC Gro;Inst	DSMLX	223.2	5.7	0.4	38.6	16.7
JPMorgan:LgCp Gro;R6	JLGMX	13,040.4	8.1	0.1	38.4	16.8
Category Average:		1,468.1	6.4	0.5	29.6	15.7
Number of Funds:			679	687	638	524

Large-Cap Value

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
SPDR MFS Sys Value Eqty	SYV	6.6	9.5	3.6	22.4	N.A.
iShares:Edge MSCI USA VF	VLUE	$2,926.7	8.6	1.6	22.0	N.A.
BlackRock:IS US VFI;K	BKVFX	11.6	8.7	1.6	22.0	N.A.
BrndywnGLB Dyn US LCV;IS	LMBGX	157.2	8.6	2.1	22.0	N.A.
MassMutual Sel:Eq Op;I	MFVZX	707.1	6.5	1.2	21.7	15.4
Category Average:		1,020.5	5.8	1.5	15.9	13.3
Number of Funds:			499	504	473	373

Small-Cap Core

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Auer Growth	AUERX	31.0	7.7	2.3	28.8	9.0
Bernzott US Sm Cap Val	BSCVX	98.5	5.2	–0.2	26.9	12.5
Wasatch:Micro Cp Val;Inv	WAMVX	234.3	6.4	1.8	26.4	16.7
Royce Fd:McCp Oppty;Inv	ROSFX	48.1	4.6	1.2	25.0	12.3
ICON:Opportunities	ICONX	20.9	5.2	–2.2	24.9	15.5
Category Average:		514.5	3.7	–0.2	12.6	13.0
Number of Funds:			1,075	1,079	1,021	718

Small-Cap Growth

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
JPMorgan:Dyn SCG;I	JDSCX	199.6	8.0	2.2	41.8	17.2
JPMorgan:SmCp Gro;R6	JGSMX	1,541.9	8.1	2.2	41.8	17.6
Alger:SMid Cap Focus;A	ALMAX	194.9	7.3	4.1	37.9	14.0
Federated Kauf SC;A	FKASX	860.2	8.4	3.2	37.9	17.8
Victory:RS Sm Cap Eqty;A	GPSCX	76.3	6.6	0.6	37.6	18.2
Category Average:		318.3	5.2	0.5	23.2	13.8
Number of Funds:			597	609	558	457

Small-Cap Value

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Small Cap Value Fund	SCAPX	...	8.7	0.3	26.3	13.3
Royce Fd:Oppty;Inv	RYPNX	1,639.8	3.5	0.9	21.9	14.3
Invesco SC Value;Y	VSMIX	2,699.9	6.4	0.6	18.6	14.8
Ancora MicroCap;I	ANCIX	21.9	0.3	–0.5	18.0	14.8
Perritt Ultra MicroCap	PREOX	69.5	3.9	0.7	17.9	15.6
Category Average:		453.8	3.6	–0.1	9.0	12.0
Number of Funds:			281	282	269	210

Midcap Core

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
CB Select;IS	LCSSX	28.8	8.5	2.8	39.0	19.0
RBB:Mtly Great Amer;Inv	TMFGX	267.5	11.7	0.4	29.2	15.0
Tarkio	TARKX	101.2	5.5	0.9	29.0	18.1
Guggenhm Insider Snt ETF	NFO	75.5	6.0	–0.2	27.8	13.7
Frst Tr Srs:AQA Eqty;A	AQAAX	45.0	9.3	–0.1	26.2	N.A.
Category Average:		904.2	5.5	0.8	15.8	13.2
Number of Funds:			457	463	439	305

Midcap Growth

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Renaissance IPO ETF	IPO	16.7	5.9	1.3	36.7	N.A.
PowerShares Russ MdCp PG	PXMG	95.2	9.9	0.1	36.5	13.7
Tocqueville:Opportunity	TOPPX	79.5	5.7	–0.1	34.7	15.0
BlackRock:MC Gro;A	BMGAX	1,021.0	5.4	–0.9	34.2	18.0
PRIMECAP:Odyssey Ag Gr	POAGX	9,529.2	11.1	0.6	33.6	23.0
Category Average:		557.9	5.9	0.3	24.7	13.8
Number of Funds:			396	400	383	316

Midcap Value

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Deep Value	DVP	107.8	12.2	4.6	27.3	N.A.
AllianzGI:NFJ MCV;A	PQNAX	995.9	4.9	0.7	26.6	15.4
SS Inst Inv:Dsp US Eq;I	SSJIX	4.0	11.5	5.2	25.7	N.A.
O'Shaughnessy Mkt Ld V;I	OFVIX	67.7	8.5	2.8	24.6	N.A.
Mt Lucas US Focus Eq;I	BMLEX	10.9	9.0	3.1	23.9	14.9
Category Average:		620.1	5.8	1.5	15.3	13.3
Number of Funds:			383	383	360	275

Multicap Core

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
TCW:New America Prm Eq;I	TGUSX	19.4	8.5	0.2	38.0	N.A.
AlphaMark Lg Cap Gr	AMLCX	24.3	9.5	2.0	29.1	16.2
Schwab Cap:Lg-Cap Gro	SWLSX	262.0	7.2	1.3	28.9	16.0
Victory:Multi-Cap;A	MNNAX	465.8	9.7	1.3	28.4	16.1
SPDR MFS Sys Gro Eqty	SYG	51.1	6.0	1.4	28.1	N.A.
Category Average:		1,490.1	5.8	1.1	19.5	13.7
Number of Funds:			811	816	777	562

Multicap Growth

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Zevenbergen Genea;Inst	ZVGIX	8.6	4.6	1.4	52.2	N.A.
Morg Stan MultiCp Gr;A	CPOAX	426.5	10.2	1.5	47.8	19.2
Baron Opportunity;Rtl	BIOPX	250.5	6.1	2.1	40.5	12.9
Wisconsin:Plumb Equity	PLBEX	26.0	10.0	0.4	39.7	16.7
Franklin Cust:Dyna;A	FKDNX	4,466.6	5.5	–0.6	39.3	18.0
Category Average:		723.7	6.2	0.5	28.0	14.8
Number of Funds:			534	537	511	402

Multicap Value

	Symbol	Assets ($ millions)	4th-qtr (%)	Total return (%) December	1-yr	5-yr*
Deep Value	DVP	107.8	12.2	4.6	27.3	N.A.
AllianzGI:NFJ MCV;A	PQNAX	995.8	4.9	0.7	26.6	15.4
SS Inst Inv:Dsp US Eq;I	SSJIX	4.0	11.5	5.2	25.7	N.A.
O'Shaughnessy Mkt Ld V;I	OFVIX	67.7	8.5	2.8	24.6	N.A.
Mt Lucas US Focus Eq;I	BMLEX	10.9	9.0	3.1	23.9	14.9
Category Average:		618.4	5.8	1.5	15.3	13.3
Number of Funds:			383	383	360	275

N.A.: Not applicable; fund is too new   * Annualized Note: For funds with multiple share classes, only the largest is shown.

Winners and Losers

Data provided by LIPPER

Best- and worst-performing stock funds for the periods ended Dec. 29; assets as of Nov. 30 and include all share classes. Performance data are final and include share prices and reinvested dividends.

Fourth-Quarter Best Performers

Fund Name	Assets ($ millions)	Performance (%) Dec.	4th-qtr	1-year
Direxion:Hbldrs&Sup Bl3X	87.5	1.8	67.4	270.4
Crdt Suis AT3X L Brnt CO	25.3	23.1	65.2	N.A.
UBS PS Daily 3x Lng Crd	20.7	15.5	49.7	N.A.
VelShs 3x Long Crude ETN	156.4	15.3	49.6	–9.8
VelShs 3x Long Crude	181.8	15.3	49.6	–9.9
ProShs II:UltPro 3x CO	9.8	15.4	49.5	N.A.
USCF:US 3x Oil	3.9	15.1	49.3	N.A.
UBS E-TRACS MR2xL ISE Hb	4.8	–0.3	48.7	160.6
VelShs DlyInv VIX ST ETN	1208.6	13.7	36.3	182.6
ProShs II:ShVIX STF ETF	992.2	13.6	35.9	179.1
Direxion:S Korea Bull 3X	15.1	7.1	35.2	171.2
ProShares:UltP Dow30	347.8	5.4	34.5	98.9
ProShs II:Ult Blm CrO	522.1	10.4	32.2	1.4
Direxion:MSCI Ind Bull3X	95.4	13.1	31.9	128.2
VelShs 1x Dly Inv VSTOXX	50.1	5.1	27.6	N.A.
VelShs VIX Short Vol Hdg	68.3	10.6	27.4	116.6
Kinetics:Internet;NL	149.2	10.0	27.4	57.4
American Growth II;E	0.6	22.3	25.9	–5.7
ProShares:UlP Fin Sel	37.6	5.2	25.5	66.6
Direxion:Tech Bull 3X	501.8	0.6	25.1	125.0
Direxion:MSCI Jpn Bull3X	22.9	1.5	24.8	80.7
Direxion:S&P OG EP Bl 3X	128.6	12.1	24.6	–40.2
SEI Inst Inv:LC Dsc Eq;A	3,436.7	19.5	24.4	41.6
iPath Bloomberg Nickel A	12.3	16.8	24.2	28.4
Arrow Mgd Fut Str;Inst	147.8	5.3	23.8	19.4
ProFunds:UltraJapan;Inv	33.4	–1.1	23.6	39.7
Direxion:Retail Bull 3X	31.1	10.4	23.4	–1.7

Fourth-Quarter Worst Performers

Fund Name	Assets ($ millions)	Performance (%) Dec.	4th-qtr	1-year
iPath Bloomberg NatGas A	1.6	–24.3	–53.9	–83.3
ProShs II:UltVIX STF ETF	500.6	–24.2	–49.9	–94.1
VelShs Dly 2x VIX ST ETN	291.5	–24.1	–49.8	–94.0
Crdt Suis AT3X I Brnt CO	24.9	–21.9	–45.2	N.A.
ProShs II:UltPro 3x SCO	18.3	–16.0	–39.6	N.A.
UBS PS Daily 3x Inv Crd	17.9	–15.9	–39.5	N.A.
VelShs 3x Inv Crude	225.1	–15.7	–39.5	–37.1
VelShs 3x Inv Crude ETN	13.0	–15.7	–39.4	–37.0
USCF:US 3x Short Oil	1.3	–15.6	–39.4	N.A.
VelShs 3x Long Nat Gas	877.7	–13.6	–36.3	–84.0
Direxion:S&P OG EP Br 3X	36.7	–14.9	–30.1	–9.0
Rex VolMAXX LVW Ftrs Str	2.6	–11.9	–29.6	–81.5
VelShs Dly 2x VIX MT ETN	3.7	–17.7	–29.1	–75.6
ProShs II:VIX ST Fut ETF	158.9	–12.6	–28.3	–72.5
VelShs VIX ShTm ETN	12.0	–12.5	–28.2	–72.4
iPath ETN SP500 VIX ST A	1,179.5	–12.6	–28.2	–72.4
ProShs II:UlS Blm CrO	236.3	–10.6	–27.6	–23.3
DB Crude Oil Db Sht ETN	32.3	–10.3	–26.7	–15.4
Direxion:MSCI Mex Bl 3X	3.2	–3.4	–26.6	N.A.
ProShares:UltP Sht Dow30	151.9	–5.3	–26.5	–52.2
VelShs 1x Long VSTOXX	13.2	–6.9	–25.7	N.A.
ProShs II:Ult Blm Nat Gs	50.8	–8.8	–25.3	–65.4
ProShares:UlPS Fin Sel	1.3	–5.9	–22.9	–49.5
Direxion:Tech Bear 3X	17.7	–1.4	–22.4	–60.7
Direxion:Semicnd Bear 3X	48.7	3.6	–21.7	–69.4
Direxion:China Bear 3X	40.1	–6.6	–21.5	–65.0
ProFunds:UltSh Japan;Inv	1.9	0.6	–21.0	–34.2

Five-Year Best Performers

Fund Name	Assets ($ millions)	Performance (%) 4th-qtr	1-year	5-year*
Direxion:Semicnd Bull 3X	662.7	19.6	141.6	84.5
ProShares:UltP QQQ	2,381.0	21.1	118.7	60.7
Direxion:Tech Bull 3X	501.8	25.1	125.0	56.0
ProShares:Ult Semicond	84.6	20.5	80.9	52.7
VelShs DlyInv VIX ST ETN	1,208.6	36.3	182.6	51.3
ProShs II:ShVIX STF ETF	992.2	35.9	179.1	50.4
ProShares:UlP Fin Sel	37.6	25.5	66.6	50.3
Direxion:Hlthcre Bull 3X	153.2	2.6	69.3	48.0
ProShares:UltP Dow30	347.8	34.5	98.9	47.4
Direxion:Finl Bull 3X	1,693.0	21.9	67.0	46.8
ProShares:UltPro S&P500	1,139.0	19.6	71.3	44.9
Direxion:S&P 500 Bull 3X	750.7	19.7	70.9	44.4
ProShares:UltP MidCap400	40.3	18.1	46.9	40.3
ProShares:Ult QQQ	1,498.2	14.0	70.5	40.0
Direxion:MidCapBull 3X	69.0	18.1	46.5	39.8
Direxion:M NAS Bl 2x;Inv	207.6	13.7	68.6	39.6
Rydex:NASDAQ 2x;H	444.1	13.7	68.9	38.8
ProFunds:UltraNASDAQ;Inv	436.3	13.7	68.6	38.7
ProShares:Ult Tech	298.0	17.2	81.2	38.1
ProFunds:Semiconduct;Inv	307.9	15.1	56.7	38.0
ProShares:UltP Rus2000	168.1	8.5	39.8	35.8
Direxion:Sm Cap Bull 3X	688.2	8.5	39.6	35.2
Direxion:Retail Bull 3X	31.1	23.4	–1.7	34.6
ProShares:Ult Hlth Cr	111.4	2.5	46.0	33.6
ProFunds:Internet;Inv	148.9	10.5	57.9	32.9
ProShares:Ult Cons Sv	19.3	19.0	40.4	32.8
ProShares:Ult Indust	28.4	12.9	49.8	32.2

Five-Year Worst Performers

Fund Name	Assets ($ millions)	Performance (%) 4th-qtr	1-year	5-year*
ProShs II:UltVIX STF ETF	500.6	–49.9	–94.1	–87.9
VelShs Dly 2x VIX ST ETN	291.5	–49.8	–94.0	–87.9
Direxion:Nat Gas Bull 3X	38.2	9.4	–42.8	–69.7
VelShs 3x Long Nat Gas	877.7	–36.3	–84.0	–69.4
Direxion:Semicnd Bear 3X	48.7	–21.7	–69.4	–63.8
Direxion:Gold M Id Bl 3X	1,208.5	0.1	3.3	–62.7
VelShs 3x Long Crude ETN	156.4	49.6	–9.8	–61.5
ProShs II:VIX ST Fut ETF	158.9	–28.3	–72.5	–57.5
VelShs VIX ShTm ETN	12.0	–28.2	–72.4	–57.4
iPath ETN SP500 VIX ST A	1,179.5	–28.2	–72.4	–57.4
VelShs Dly 2x VIX MT ETN	3.7	–29.1	–75.6	–56.7
Direxion:Gold M Id Br 3X	324.2	–8.3	–50.9	–50.3
ProShares:UltP Sht QQQ	509.0	–19.4	–58.8	–49.4
Direxion:Tech Bear 3X	17.7	–22.4	–60.7	–48.3
ProShares:UlPS Fin Sel	1.3	–22.9	–49.5	–47.6
ProShs II:Ult Blm Nat Gs	50.8	–25.3	–65.4	–47.0
Direxion:China Bear 3X	40.1	–21.5	–65.0	–46.1
VelShs 3x Long Silver	242.7	4.4	4.2	–45.9
iPath Bloomberg NatGas A	1.6	–53.9	–83.3	–45.7
Direxion:Finl Bear 3X	161.0	–19.4	–46.1	–45.4
ProShares:UlS Semicond	3.1	–19.5	–51.3	–45.0
Direxion:Sm Cap Bear 3X	569.6	–10.1	–38.4	–43.7
ProShares:UltPSh Rus2000	88.7	–10.2	–38.4	–43.0
ProShares:UlS Nasdaq Bio	41.8	7.1	–37.2	–41.9
Direxion:MidCapBear 3X	5.6	–16.6	–38.4	–41.5
ProShares:UltPSh MdCp400	2.3	–16.7	–38.6	–41.2
Direxion:S&P 500 Bear 3X	343.0	–17.1	–44.5	–41.1

One-Year Best Performers

Fund Name	Assets ($ millions)	Performance (%) Dec.	4th-qtr	1-year
Direxion:Hbldrs&Sup Bl3X	87.5	1.8	67.4	270.4
VelShs DlyInv VIX ST ETN	1,208.6	13.7	36.3	182.6
ProShs II:ShVIX STF ETF	992.2	13.6	35.9	179.1
Rex VolMAXX SVW Ftrs Str	15.9	4.7	23.2	172.9
Direxion:S Korea Bull 3X	15.1	7.1	35.2	171.2
Direxion:CSI Ch Int Bl2X	95.5	7.4	5.1	168.0
UBS E-TRACS MR2xL ISE Hb	4.8	–0.3	48.7	160.6
Direxion:S&P Btech Bl 3X	478.3	4.3	–8.8	148.7
Direxion:Semicnd Bull 3X	662.7	–5.4	19.6	141.6
Direxion:MSCI EM Bull 3X	259.2	11.1	19.2	138.8
Direxion:China Bull 3X	243.1	5.0	18.6	130.2
Direxion:MSCI Ind Bull3X	95.4	13.1	31.9	128.2
Direxion:Tech Bull 3X	501.8	0.6	25.1	125.0
ProShares:UltP QQQ	2,381.0	1.0	21.1	118.7
VelShs VIX Short Vol Hdg	68.3	10.6	27.4	116.6
ProFunds:UltraChina;Inv	42.7	6.4	6.4	105.7
ProShares:UltP Dow30	347.8	5.4	34.5	98.9
Direxion:FTSE EU Bull 3X	64.3	4.1	4.4	91.0
ARK Web x.0	185.5	5.5	17.5	90.4
ARK Innovation	276.3	2.2	11.0	89.4
iPath ETN LgEn MSCI EM	2.6	6.5	13.5	88.6
VelShs DlyInv VIX MT ETN	190.2	10.0	17.6	88.5
Direxion:MSCI DM Bull 3X	32.2	3.6	10.1	84.7
VnEck Vctrs:Rare E/SM	149.7	7.1	19.9	81.6
ProShares:Ult MSCI EM	45.9	7.3	12.9	81.5
ProShares:Ult Tech	298.0	–0.4	17.2	81.2
ProShares:Ult Semicond	84.6	–2.4	20.5	80.9

One-Year Worst Performers

Fund Name	Assets ($ millions)	Performance (%) Dec.	4th-qtr	1-year
ProShs II:UltVIX STF ETF	500.6	–24.2	–49.9	–94.1
VelShs Dly 2x VIX ST ETN	291.5	–24.1	–49.8	–94.0
VelShs 3x Long Nat Gas	877.7	–13.6	–36.3	–84.0
iPath Bloomberg NatGas A	1.6	–24.3	–53.9	–83.3
Rex VolMAXX LVW Ftrs Str	2.6	–11.9	–29.6	–81.5
Direxion:S&P Btech Br 3X	75.2	–7.8	0.4	–75.6
VelShs Dly 2x VIX MT ETN	3.7	–17.7	–29.1	–75.6
ProShs II:VIX ST Fut ETF	158.9	–12.6	–28.3	–72.5
iPath ETN SP500 VIX ST A	1,179.5	–12.6	–28.2	–72.4
VelShs VIX ShTm ETN	12.0	–12.5	–28.2	–72.4
Direxion:Semicnd Bear 3X	48.7	3.6	–21.7	–69.4
ProShs II:Ult Blm Nat Gs	50.8	–8.8	–25.3	–65.4
Direxion:China Bear 3X	40.1	–6.6	–21.5	–65.0
Direxion:MSCI EM Bear 3X	88.5	–10.8	–19.1	–64.2
Direxion:Jr Mnr Bear 3X	101.1	–21.9	–9.3	–63.9
Direxion:Tech Bear 3X	17.7	–1.4	–22.4	–60.7
ProShares:UltP Sht QQQ	509.0	–1.5	–19.4	–58.8
ProFunds:UlSh China;Inv	2.0	–7.0	–9.1	–57.7
Nvgtr Sentry Mgd Vol;I	8.4	–5.3	–18.7	–55.3
ProShares:UPS Nasdaq Bio	5.4	–5.2	9.8	–52.5
ProShares:UltP Sht Dow30	151.9	–5.3	–26.5	–52.2
ProShares:UlS Semicond	3.1	1.6	–19.5	–51.3
Direxion:Gold M Id Br 3X	324.2	–12.8	–8.3	–50.9
ProShares:UlS FTSE Ch 50	30.6	–4.5	–14.6	–49.8
ProShares:UlS MSCI Brz	27.1	–11.2	–0.9	–49.6
ProShares:UlPS Fin Sel	1.3	–5.9	–22.9	–49.5
ProShs II:VIX MT Fut ETF	37.8	–9.2	–15.5	–49.5

Ten-Year Best Performers

Fund Name	Assets ($ millions)	Performance (%) 4th-qtr	1-year	10-year*
ProFunds:Biotech;Inv	303.1	–7.5	34.7	20.5
ProShares:Ult Cons Sv	19.3	19.0	40.4	20.3
ProFunds:Internet;Inv	148.9	10.5	57.9	20.0
ProShares:Ult QQQ	1,498.2	14.0	70.5	19.6
Rydex:NASDAQ 2x;H	444.1	13.7	68.9	18.7
ProFunds:UltraNASDAQ;Inv	436.3	13.7	68.6	18.7
ProShares:Ult Hlth Cr	111.4	2.5	46.0	18.1
Frst Tr:NYSEArcaBiotech	1,227.8	0.4	37.0	17.9
Delaware Healthcare;Inst	443.2	1.4	32.3	17.6
T Rowe Price Glbl Tech	6,279.3	6.2	47.0	16.9
Fidelity Sel Retailing	1,922.8	13.1	25.8	16.5
SPDR S&P Biotech	3,973.6	–1.9	43.7	16.2
ProShares:Ult Tech	298.0	17.2	81.2	16.0
Frst Tr:DJ Internet Idx	5,399.0	7.3	37.6	16.0
Fidelity Sel Bio Tech	8,773.9	–4.4	27.9	15.9
ProShares:Ult Cons Gd	14.1	10.5	32.9	15.7
Rydex:Biotechnology;Inv	329.1	–1.2	29.7	15.5
Fidelity Adv Biotech;I	2,595.4	–4.9	26.2	15.5
ProFunds:Cnsmr Svcs;Inv	35.4	13.8	28.2	15.4
T Rowe Price Hlth Sci	11,913.3	1.7	28.0	15.3
PIMCO:Stk+ L Dur;Inst	727.9	8.4	32.9	15.2
Direxion:M NAS Bl 2x;Inv	207.6	13.7	68.6	15.2
PowerShares Dyn Pharm	656.9	–1.7	15.3	15.2
PRIMECAP:Odyssey Ag Gr	9,529.2	11.1	33.6	15.1
Fidelity Sel IT Svcs	2,076.4	8.6	34.3	14.9
iShares:Nasdaq Biotech	9,840.7	–3.9	21.2	14.9
Pru Jenn Health Sci;Z	2,301.2	2.0	31.4	14.7

Ten-Year Worst Performers

Fund Name	Assets ($ millions)	Performance (%) 4th-qtr	1-year	10-year*
iPath Bloomberg NatGas A	1.6	–53.9	–83.3	–45.4
ProShares:UlS Rl Est	32.0	–4.9	–18.0	–41.4
Direxion:M SC Br 2x;Inv	4.6	–6.2	–25.5	–36.4
ProShares:UlS Semicond	3.1	–19.5	–51.3	–36.3
ProShares:UlS FTSE Ch 50	30.6	–14.6	–49.8	–36.2
ProShares:UlS Finl	35.3	–12.7	–31.6	–35.1
Rydex:Inv Rus 2x;H	11.8	–6.6	–26.6	–33.9
ProFunds:UltSh Sm-Cp;Inv	5.9	–6.9	–27.2	–32.9
ProFunds:UltSh NAS;Inv	13.9	–13.4	–44.6	–32.5
ProShares:UlS SC600	2.7	–8.0	–25.1	–32.4
United States Nat Gas	551.0	–10.8	–37.2	–32.3
ProShares:UlS QQQ	318.8	–13.1	–44.0	–32.1
Rydex:Inv NAS 2x;H	14.9	–13.2	–44.3	–32.0
ProShares:UlS Rus2000	135.5	–6.7	–26.5	–32.0
ProShares:UlS MSCI EM	32.3	–13.1	–49.0	–31.2
ProShares:UlS Cons Sv	1.6	–16.5	–31.3	–31.0
ProShares:UlS Tech	3.8	–16.1	–48.5	–30.6
ProFunds:UltSh Md-Cp;Inv	1.5	–11.5	–27.3	–30.5
ProShares:UlS Bas Mat	5.4	–12.9	–37.8	–30.4
ProFunds:UltSh Latin;Inv	17.6	–0.1	–45.6	–29.7
ProShares:UlS MC400	3.9	–11.3	–27.2	–29.7
ProShares:UlS Indust	2.8	–12.3	–36.2	–28.8
ProShares:UlS Hlth Cr	1.1	–3.3	–34.4	–27.0
ProFunds:UltSh Japan;Inv	1.9	–21.0	–34.2	–26.8
Direxion:M S&P Br 2x;Inv	7.1	–11.9	–32.5	–25.9
ProFunds:UltSh Dow30;Inv	3.6	–18.7	–39.0	–25.6
ProFunds:UltraBear;Inv	10.4	–11.9	–32.6	–25.6

Note: For funds with multiple share classes, only the largest is shown   *Annualized   N.A. = not applicable, fund is too new

BEST BET/WORST BET

Invest in people who are doing what they do well, says Daymond John.

PENGUIN RANDOM HOUSE

Daymond John's Lessons About Apparel Ventures

In 1989, Daymond John and some friends spent $40 and some elbow grease making hats in the home he shared with his mother. They sold out. Pretty soon, half of the house was a factory, and Mr. John and his friends had a feeding frenzy on their hands.

Building on their success, they branched out into other products. Within a decade, their FUBU apparel was being worn by the likes of LL Cool J, and clothes such as baggy jeans and football jerseys had made it an essential brand with young people and the hip-hop community.

BY CHRIS KORNELIS

"Nobody knew my customer better than I did," Mr. John says, "and I learned every aspect of the business, everything from cutting and sewing to marketing and distribution, street team, advertising, photo shoots. It empowered myself [and] a whole culture of hip-hop kids, and got me to this point in my life."

In the years since, Mr. John has invested in many companies, both as a panelist on the ABC reality show "Shark Tank" and away from national TV. But he says the "$40 and a whole lot of sweat" he spent to start FUBU forever be the best investment he has ever made.

Here's what he learned from the best and worst investments he has made outside the home.

BEST BET: COOGI

INVESTMENT: $10 million

GAINS: "Way more than we invested in it"

In 2001, Mr. John and his partners spent $10 million to buy an Australian company that was known for bold, colorful—perhaps even purposefully ugly—sweaters. The pricey apparel had cachet on the golf course—as well as with hip-hop fans, getting name-dropped in lyrics by rapper the Notorious B.I.G. For a guy who made his money founding a hip-hop apparel company, Mr. John thought Coogi was right in his sweet spot.

He did with Coogi just what he did with FUBU: scaled an apparel company targeted at hip-hop fans, building it out into a full line of hypercolored products, from denim to sneakers.

Mr. John says that from 2002 to 2007, Coogi was bringing in $100 million to $150 million in annual sales. The company, which Mr. John and his partners still own, has become more of a boutique brand in recent years. While he won't specify its current value, he says it's worth "way more than we invested in it."

THE TAKEAWAY: Mr. John says he second-guessed himself a bit as he considered the Coogi purchase. He wondered if FUBU had been his one bite at the apple. But the success of Coogi made him realize that he had a skill and a pattern of success that could be replicated.

"I wasn't learning a new buyer, a new style, fit or styling for a new gender," he says. "We did what we do best," working with a men's apparel brand, "then we replicated it by licensing it out in different categories, to people who do what they do best."

In that way, the success of Coogi changed the way that Mr. John looks at investments: invest in people who are very skilled at what they do and can benefit from what he does best, and use his talents to take their business to the next level.

"What is my skill? Am I a great designer? No. I'm a great marketer," he says. "I have a distribution pipeline, and whatever the brand is, if I know my customer, I know how to sell through to them."

It's a system that "you can keep replicating time and time again," Mr. John says. "It's almost like a great record producer having a formula."

WORST BET: HEATHERETTE

INVESTMENT: $6 million

LOSSES: $6 million "and letting down other partners"

In the early 2000s, Mr. John invested in the then up-and-coming women's-wear brand Heatherette, when the company's designers were known for their outrageous runway styles.

He put $6 million into the company to help Heatherette attract a more mainstream audience with ready-to-wear items like shirts and jeans. But the styles didn't catch on, and the brand ended up going under.

Mr. John says part of the problem was that none of the parties involved really knew the market they were going into.

Mr. John says he didn't know the women's market. And his new partners at Heatherette, he says, while skilled at designing for the runway, didn't have the same kinds of chops when it came to creating clothes for a mass audience.

> 'What is my skill? Am I a great designer? No. I'm a great marketer. I have a distribution pipeline.'

(Traver Rains, a Heatherette co-founder and designer, says in an email that "there are many reasons for its failure, but me not knowing the market is not one of them.")

Mr. John blames himself and his company for their handling of Heatherette.

"I failed them," he says. "If we'd kept these guys as costume and custom designers, we would have done great by them, because they would be able to do what they do best."

Instead, Mr. John says, his company thought that it could transform Heatherette into a ready-to-wear brand. But "we were not equipped enough or knowledgeable enough to do that for them, and they trusted us that we could do that. So, we let them down."

THE TAKEAWAY: Mr. John says the lesson from his losses with Heatherette is to invest in companies that want to scale what they're already doing well, not companies that need to enter a new market if they want to grow.

If entrepreneurs can show him that they know the business and how to expand it, and that they just need Mr. John's money to finance them down that path, that's a bet he's willing to take, even if it's a new market for him.

Mr. John says, "I may not need to know anything about it, but you do know, and you showed me you've scaled a little bit, you've done some great work. And you have a history? All right, I'm down."

Mr. Kornelis is a writer in Seattle. He can be reached at ***reports@wsj.com.***

EXCHANGE-TRADED FUNDS

What to Look for in ETFs in 2018

Investors should expect an increase in the types of products

BY ARI I. WEINBERG

EXCHANGE-TRADED funds are taking over. Many industry observers say that the party will continue, even if a downturn hits the stock market, and especially if a pullback hits the bond market.

U.S. ETF investing had another record year in 2017, with net flows at $463 billion, of which $330 billion went into stock funds and $119 billion into debt and fixed-income funds. Total U.S. assets under management now top $3.4 trillion, though that is still one-fifth of the total assets in long-term mutual funds (excluding money markets).

During the year, 275 new products were launched and 136 products were delisted, according to research firm XTF. The announced acquisition by **Invesco** Ltd.'s Invesco PowerShares of Guggenheim Investments' ETF business has brought the slow but steady consolidation toward the top of the ETF pyramid. The fourth-largest issuer at $177 billion in assets, when combined, will still trail **State Street** Corp.'s State Street Global Advisors ($567 billion), **Vanguard Group** ($851 billion) and **BlackRock** Inc. ($1.35 trillion). Additionally, three issuers—Global X, **Goldman Sachs** and Exchange-Traded Concepts—experienced more than 100% asset growth in 2017, according to Toroso Asset Management.

Here are five trends to watch in 2018.

1. The time for fixed-income ETFs has come. This argument is made every year, but rising short-term interest rates and a flattening yield curve in the U.S. will shine a spotlight on fixed-income fund performance and drive more investors to consider ETFs, both active and passive, according to Todd Rosenbluth, senior director of ETF and mutual-fund research at CFRA. For investments where outperformance is measured more in basis points than percentage points, the fact that 2017 flows equaled 21.5% of total fixed income ETF assets (compared with 12.3% for equity ETF assets) is an indicator of the growth that should continue this year.

2. More products and issuers. Even with 123 fund sponsors already in the U.S. market, Toroso's Michael Venuto sees room for even more entrants. Last year, the asset-management units of several insurance companies (USAA, Transamerica, Principal) launched a number of funds, while established asset managers without significant ETF businesses were emboldened to cut fees and ramp up marketing on new products or previous acquisitions. Mr. Venuto says new issuers and products will fall into three categories: hot ideas, catch-up by existing asset managers and insurers, and registered investment advisers converting separate accounts to ETF-based strategies.

3. ETF "innovators" will continue to push the envelope of investible assets. Empowered by fringe investment trends in the legal-marijuana industry and bitcoin/blockchain ecosystems, new and established ETF issuers alike have applied to list at least six marijuana-investment products and 16 bitcoin/blockchain-related strategies, according to Bloomberg ETF analyst Eric Balchunas. And, following the launch of bitcoin futures in December, two exchanges—NYSE Arca and Cboe Global Markets—have applied to list bitcoin ETFs in the U.S. While these products are still waiting for approval from the Securities and Exchange Commission (approval which for some of them may never come, especially if the federal government succeeds in a new push against state legalization of marijuana), Optimal Capital's Chief Investment Officer Ray Batcha says there are many esoteric strategies that could get more attention should the U.S. stock market and debt markets move sideways. These include ETFs offering downside protection with options and swaps.

4. The robots come home to roost. Robo advisers are dead; long live robo advisers. Like "ETF strategists" before them, stand-alone automated investment platforms have ceased to threaten established financial advisers or brokerage firms, despite shining a light on costs and minimums for professional advice. "Distribution is a major choke point for ETF issuers. Even BlackRock has pivoted to model portfolios on the strength of its Aladdin analytics platform," says Matt Hougan, CEO of Inside ETFs. **JPMorgan Chase** & Co. revealed its own plans for a digital-wealth offering in December, following **Morgan Stanley** and Merrill Lynch, while Vanguard's low-cost Personal Advisor Services had $93 billion in discretionary assets and **Charles Schwab**'s Intelligent Portfolios $21 billion through Sept. 30. A November deal between **PayPal** and microinvesting services Acorns (and its 1.3 million customers) could open up a new front for banks and investment managers.

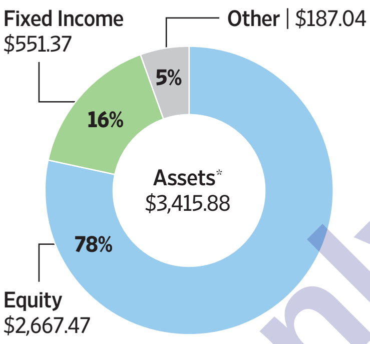
5. Active management is redefined. Even supporters of actively managed stock funds argue that active vs. passive/indexing can be boiled down to high cost vs. low cost. (And, yes, there is high-cost passive in some areas of the market.) Now, Vanguard is gearing up to blow a hole in the active/passive distinction by introducing low-cost, actively managed ETFs in the first quarter—index funds with that will home in on areas of the market recently ruled by the smart-beta crowd—namely momentum, value and minimum volatility, among others.

But perhaps the index giant's entry into active equity ETFs—stock funds that mesh the low cost and tax benefits of ETFs with an active manager—will jostle the sleepiest region of the ETF market. The niche has just $8.3 billion in assets, according to XTF, across 74 funds.

Mr. Weinberg is a writer in Connecticut. He can be reached at ***reports@wsj.com.***

The ETF Pie

Exchange-traded funds assets, in billions of dollars



*Exchange-traded funds only

Source: XTF.com THE WALL STREET JOURNAL.

Tracking Exchange-Traded Portfolios

Performance figures are total returns for periods ended Dec. 29; for largest exchange-traded funds and other portfolios, ranked by asset size.

Fund	Symbol	Assets ($ billions)	Volume (000s)	Expense ratio	Launch date	Performance (%) December	4th-qtr	1-year
SPDR S&P 500 ETF	SPY	**277.54**	92,159.8	0.09	01/22/93	1.1	6.6	21.7
iShares Core S&P 500 ETF	IVV	**141.49**	3,362.8	0.05	05/15/00	1.1	6.6	21.8
Vanguard Tot Stk Mkt Idx ETF	VTI	**90.53**	2,255.3	0.04	05/24/01	1.0	6.3	21.2
iShares MSCI EAFE ETF	EFA	**84.80**	16,180.7	0.32	08/14/01	1.6	4.2	24.9
Vanguard 500 Index ETF	VOO	**82.30**	778.8	0.04	09/07/10	1.1	6.6	21.8
Vanguard FTSE Developed Markets ETF	VEA	**66.71**	7,046.1	0.07	07/20/07	1.7	4.4	26.4
Vanguard FTSE Emerging Markets ETF	VWO	**65.09**	10,462.0	0.14	03/04/05	3.5	6.3	31.4
PowerShares QQQ Nasdaq 100	QQQ	**58.26**	32,250.1	0.20	03/10/99	0.5	7.2	32.7
iShares Core US Aggregate Bond ETF	AGG	**53.01**	2,813.3	0.06	09/22/03	0.4	0.4	3.5
iShares Core S&P Mid-Cap ETF	IJH	**44.17**	1,331.8	0.09	05/22/00	0.2	6.2	16.2
iShares Russell 2000 ETF	IWM	**43.29**	20,353.5	0.20	05/22/00	−0.4	3.3	14.7
iShares Core MSCI Emerging Markets	IEMG	**42.78**	8,021.3	0.14	10/18/12	3.7	7.7	36.8
iShares Core MSCI EAFE	IEFA	**42.26**	3,391.9	0.09	10/18/12	1.8	4.5	26.4
iShares Russell 1000 Value ETF	IWD	**41.17**	2,282.1	0.20	05/22/00	1.4	5.3	13.5
iShares Russell 1000 Growth ETF	IWF	**40.30**	2,199.8	0.20	05/22/00	0.8	7.8	30.0
iShares MSCI Emerging Markets Index Fund	EEM	**39.44**	46,416.4	0.69	04/07/03	3.6	7.3	36.4
iShares iBoxx $ Inv Grade Cor B ETF	LQD	**39.08**	3,003.3	0.15	07/22/02	1.2	1.3	7.2
Vanguard Total Bond Market ETF	BND	**36.82**	2,531.5	0.05	04/03/07	0.4	0.4	3.6
iShares Core S&P Small-Cap ETF	IJR	**36.25**	2,369.0	0.09	05/22/00	−0.5	3.9	13.2
Vanguard Value ETF	VTV	**35.54**	872.6	0.06	01/26/04	1.5	7.0	17.1
Vanguard REIT ETF	VNQ	**35.25**	2,957.4	0.12	09/23/04	−0.2	1.4	5.0
SPDR Gold Shares	GLD	**34.90**	7,827.3	0.40	11/18/04	1.2	0.9	11.4
Financial Select Sector SPDR	XLF	**32.83**	53,655.4	0.14	12/16/98	2.0	8.6	22.0
Vanguard Growth ETF	VUG	**31.17**	574.6	0.06	01/26/04	0.7	6.2	27.8
Vanguard Div Appreciation ETF	VIG	**26.99**	706.3	0.08	04/21/06	1.4	8.1	22.2
iShares TIPS Bond ETF	TIP	**24.02**	963.2	0.20	12/04/03	0.9	1.2	2.9
Vanguard Short-Term Bd Idx ETF	BSV	**23.51**	1,797.8	0.07	04/03/07	0.01	−0.3	1.2
Vanguard FTSE All-World ex-US ETF	VEU	**22.45**	1,816.1	0.11	03/02/07	2.0	4.7	27.3
SPDR Dow Jones Industrial Average	DIA	**22.29**	2,906.9	0.17	01/14/98	1.9	10.9	28.0
Vanguard Short-Term Crp Bd Idx ETF	VCSH	**21.71**	1,437.4	0.07	11/19/09	0.1	−0.1	2.4
Vanguard Mid Cap ETF	VO	**21.56**	491.5	0.06	01/26/04	0.9	5.6	18.9
Vanguard Small Cap ETF	VB	**20.96**	396.7	0.06	01/26/04	0.4	5.1	16.3
Vanguard High Dividend Yield ETF	VYM	**20.96**	1,209.4	0.08	11/10/06	1.3	6.3	16.4
SPDR S&P MidCap 400 ETF	MDY	**20.47**	1,979.8	0.25	04/28/95	0.2	6.2	15.9
iShares Russell 1000 ETF	IWB	**20.37**	1,954.9	0.15	05/15/00	1.1	6.6	21.5
iShares S&P 500 Growth Index Fund	IVW	**19.64**	331.0	0.18	05/22/00	0.6	6.8	27.2
Technology Select Sector SPDR	XLK	**19.43**	6,684.5	0.14	12/16/98	0.4	8.5	34.3
iShares MSCI Japan Index Fund	EWJ	**19.11**	3,730.8	0.49	03/12/96	0.7	8.4	23.6
Vanguard FTSE Europe ETF	VGK	**18.27**	3,175.4	0.10	03/04/05	1.5	2.1	27.1
Vanguard Intm-Term Corp Bd Idx ETF	VCIT	**18.23**	1,117.2	0.07	11/19/09	0.5	0.5	5.5
Energy Select Sector SPDR	XLE	**18.10**	7,260.5	0.14	12/16/98	5.0	6.1	−1.0
iShares Select Dividend ETF	DVY	**17.89**	346.6	0.39	11/03/03	0.8	6.1	15.0
iShares US Preferred Stock	PFF	**17.79**	2,637.3	0.47	03/26/07	−0.1	−0.1	8.3
iShares iBoxx $ Hi Yld Corp Bd ETF	HYG	**17.64**	5,116.8	0.49	04/04/07	0.2	0.03	6.1
iShares Russell Mid Cap Value Index Fund	IWR	**17.03**	245.2	0.20	07/17/01	0.9	6.0	18.3
Vanguard Info Tech Ind ETF	VGT	**16.81**	427.4	0.10	01/26/04	−0.03	8.6	37.1
Health Care Select Sector SPDR	XLV	**16.52**	4,864.8	0.14	12/16/98	−0.7	1.4	21.7
SPDR S&P Dividend ETF	SDY	**16.36**	470.0	0.35	11/08/05	1.1	6.7	15.8
iShares MSCI Eurozone	EZU	**15.36**	3,146.6	0.49	07/25/00	−0.2	0.9	27.9
iShares S&P 500 Value Index Fund	IVE	**15.25**	463.2	0.18	05/22/00	1.7	6.3	15.2

*Expense charge is a maximum of 8 cents a share †Assets are estimated N.A.= Not applicable, fund is too new.

Note: Total returns are based on the change in the net asset values, not changes in market prices. Net asset values can vary from market prices, which therefore can reflect a premium or discount to the net asset values.

Source: Thomson Reuters

NEED TO KNOW

Is the Fund-Flow Indicator Dead?

Flow stats aren't what they used to be. We can thank ETFs.

BY SIMON CONSTABLE

SMART INVESTORS used to be able to identify market tops and bottoms by watching the weekly flows of money into and out of mutual funds.

Then came the stampede into exchange-traded funds, and the crystal ball for predicting market shifts grew cloudy.

Because weekly flow data now measures not just money moving into or out of mutual funds or between stock and bond funds, but also between one type of investment product (stock mutual funds) and another (lower-cost ETFs), the data has lost much of its usefulness for gauging small-investor sentiment toward equities in general.

Strategists still keep close watch on the aggregate weekly flows into or out of U.S. stock-focused mutual funds to get an idea of what individual investors are doing on a macro level. Some 95% of long-term mutual-fund assets (which includes around $10 trillion in stock funds) are owned by retail investors, according to estimates from the Investment Company Institute.

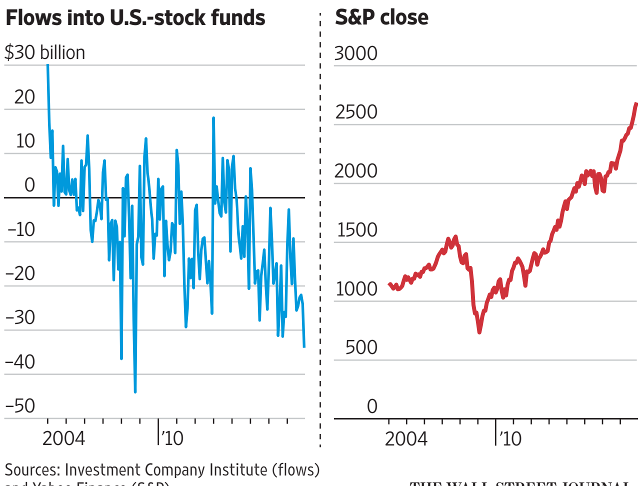
"We've always used fund flows to measure investing styles, bond versus equities; we use it as a sentiment of retail [or individual] investors," says Terry Gardner, senior managing director at CJ Lawrence LLC in New York.

What has changed, however, is experts' confidence in the ability to use the flow data to call a broad market shift.

To understand how that worked in the past requires a bit of reverse psychology. Namely, recognizing that individual investors are often perfectly bad market timers: They have a record of selling low and buying high. Thus, the worst excesses of each tendency tend to be seen at market peaks and troughs.

What 2008-09 Taught Us

Fund investors sold heavily as the market dropped in 2008-09, setting up the market for the rally that followed. Net new cash flow into U.S.-stock mutual funds, against the S&P 500's performance



Sources: Investment Company Institute (flows) and Yahoo Finance (S&P)

THE WALL STREET JOURNAL.

Back in 2008 and 2009, for example, mutual-fund investors sold heavily as the market fell. The dumping reached its zenith as the market hit bottom, as the accompanying chart shows. Those watching fund flows thus had a pretty good indication that a market shift was under way. Similarly, in the late 1990s, individual investors piled into stock funds as the market peaked, signaling a reversal was imminent.

Assessing the current situation, Mr. Gardner says, "we continue to see outflows from domestic equities and inflows to bond funds; that tells you the retail investor hasn't fully bought into the rally." In other words, small investors haven't yet gone crazy for stocks, as they did in the late 1990s.

That's useful as far as it goes. But whether the traditional fund-flow data will be of any use in calling a market top this time is an open question.

It all changed

The reason for doubt is that over the past decade, individuals have changed the way they invest. Increasingly they are moving out of actively managed mutual funds and into lower-cost indexed mutual funds and ETFs, says Shelly Antoniewicz, senior director, industry and financial analysis, at ICI. Those shifts are believed to be driven by cost considerations and by financial advisers moving clients into lower-cost products including ETFs, Ms. Antoniewicz says. Thus, flows out of mutual funds may have zero to do with market sentiment and much to do with the long-term trend of small investors moving to ETFs.

Institutions, hedge funds and portfolio managers increasingly use ETFs, too, says Arthur Hogan, chief market strategist at B. Riley FBR in New York. A portfolio manager may want to sell short the **SPDR S&P 500** ETF, which tracks the S&P 500, to protect from a drop in the market. Portfolio managers switching investments between sectors also sometimes use ETFs to park money before a final investment choice is made.

Flow data that is made public, meanwhile, doesn't distinguish between money of institutions and small investors.

"Anecdotally we understand that there is a 50-50 split between retail and institutional, but we don't have data on that," she says. "The data is closely held by brokers."

Nevertheless, institutional investors tend to invest differently from individuals, so big institutional moves will skew the data away from what small investors are doing.

In seeking to determine whether fund flows are still a useful market bellwether, one could argue that ETFs were around during the last downturn in 2008 and that market watchers at that time were able to use flow data to spot a market reversal. ETFs then, however, were a smaller part of the retail investing picture.

Use in combination

Meantime, market professionals say it can make sense to use the flow data in conjunction with other indicators when trying to decide whether the market has reached a pinnacle or a trough.

Stephen Wood, chief market strategist at Russell Investments, says it is worth adding sentiment metrics into the analytical mix.

Russell uses proprietary sentiment measures. For the rest of us, the American Association of Individual Investors publishes a regular Sentiment Survey indicating how bullish or bearish individual investors feel about the market.

If the metric looks very bullish and there are major fund flows into stocks, it would support the view that the market was peaking. If the AAII data is bearish and investors are dumping stock funds, that's a bullish indicator.

Mr. Constable is a writer in Edinburgh, Scotland. Email reports@wsj.com.

Q&A

Mr. Long-Term

Baron sticks with what works

BY CHUCK JAFFE

RON BARON STARTED his mutual-fund firm in the 1990s and estimates he has generated $23.5 billion in investment profits since then.

He expects to double that number in the next five or six years. That's not a market call, because the 74-year-old investor doesn't make them. He expects to do what he has always done, which has involved beating the market long term at a point when most investors have given up on active management.

CHIP EAST/BLOOMBERG NEWS

Ron Baron buys and holds.

His version of active management isn't that active at all; it's mostly buy-and-hold. But $10,000 invested in **Baron Growth** (BGRFX) when it opened in 1994 would be worth $163,000 today, compared with $85,000 for the Russell 2000.

"The hard part for most people," he says, "is just ignoring everything else that is happening to stick with what you know works. I tried those other things early in my career and they didn't work."

Edited excerpts from a recent interview:

WSJ: *You are one of the few fund managers with a long-term record of beating the indexes, yet you advise millennials to buy index funds.*

MR. BARON: What millennials—and really investors of any age—should be thinking is that the stock market basically doubles every 10 to 12 years since 1960, because the economy doubles every 10 or 12 years over that time. The other side of the equation is that the value of your money falls in half every 17 years.

If you're a millennial and you want to provide for yourself for the long term, then invest for the long term; if you can take $5,000 a year and invest it in an S&P index fund through a low-cost place like Vanguard, Schwab or Fidelity, after 10 years it would be worth $110,000. You can become a millionaire by just investing $5,000 a year in your index funds.

WSJ: *But then why don't you buy index funds, or run one?*

MR. BARON: You can't beat an index fund if you are trying to beat the market at all times, and most people are. They want to fire managers when their fund falls behind, and that's why managers try to figure out whether interest rates are going up or down or oil prices are going up or down or bitcoin is going up or down, or who will be the president, or will they pass the tax bill, and whether there will be a Brexit or will we attack Korea.

WSJ: *You have said that the real difference is the process. So what's your process?*

MR. BARON: The reason the stock-market index goes up 6% or 7% or 8% a year is business grows at that rate. But the reason we have done better than that, historically, is we have bought businesses that grow at closer to 15%.

Mr. Jaffe is a writer in Boston. He can be reached at reports@wsj.com.

SECTOR STRATEGY

After a Strong Year for Home Builders, Mutual-Fund Managers Look for More

Even after last year's 27%-plus gain, builder shares draw optimism

BY BAILEY MCCANN

MICK TSIKAS/REUTERS

New-housing demand could stay strong because it can be hard for builders to build quickly.

LAST YEAR WAS A great one for home builders. The S&P Homebuilders Select Industry Index was up 27.49% for 2017, compared with 17.74% for the S&P 500. Home builders got a boost from demand for new housing as well as a broad market rally, but many investors stayed out of the sector.

It may not be too late to give home builders a second look.

"We see a lot of fundamental support for home builders over the next two to three years," says Wilson Magee, director of real estate and infrastructure securities at Franklin Templeton. Mr. Magee oversees Franklin Templeton's real-estate fund, **Franklin Global Real Estate Fund** (FGRRX), which has exposure to new and existing homes in the U.S. "There was a significant increase in new-home sales in the most recent data from December, and we still have low housing supply overall."

According to Mr. Magee, demand for new housing is likely to remain strong because it can be hard for home builders to build quickly. "Land availability has been and will remain a challenge for home builders," Mr. Magee says.

Demand rising

Demographic changes are also driving housing demand. While younger Americans have been slower to form independent households than previous generations, that trend is beginning to shift.

"We are about to hit that sweet spot where the youngest millennials are graduating from college and the oldest millennials are starting to think about settling down," says Neil Nabar, portfolio manager for **Fidelity Select Construction & Housing Portfolio** (FSHOX) at Fidelity Investments. "I expect to see more household formation over the next several years, which is positive for home builders broadly."

In addition to sourcing land, home builders will also have to hire more skilled construction laborers to handle the workload.

Home builders have reported recent difficulty finding skilled laborers to fill empty slots, and Mr. Nabar suggests that may continue. After the financial crisis, many home builders took a more measured approach, which made it harder for home-construction workers to find jobs. And as housing recovered, a skills gap emerged.

"Because we weren't building, many people left the industry," Mr. Nabar says. "We may be in a place where you need to retrain a generation of workers to consider skilled construction as a job opportunity."

Taken together, industry analysts suggest that these supply constraints are likely to keep housing prices and home-builder margins high—a boon for investors.

The new tax law could spur interest in living in some lower-cost states.

The positive trends for home builders have led some formerly short-term investors in this niche market to adopt more long-term strategies. Some, for example, are holding on longer to their shares of Direxion's **Daily Homebuilders & Supplies Bull 3X Shares** (NAIL), a leveraged ETF that aims to deliver triple the daily returns of the Dow Jones U.S. Select Home Construction Index, says Sylvia Jablonski, managing director, capital markets, and institutional ETF strategist at Direxion.

Because the positions held by the ETF are rebalanced every day, in line with the fund's stated investment goal, the company typically advises investors to consider it a fund to be bought and sold on the same day.

Otherwise, "it can lead to decay or losses," Ms. Jablonski says, due to its history of volatility. But that has started to change, she notes. "Interestingly, we have seen investors stay with it because the trend in home builders has been consistent over the past year." NAIL was up 259.59% in 2017.

Ms. Jablonski adds that in her view from a short-term perspective, home builders are still "in liftoff" going into 2018. "As the economy continues to grow there will be demand for housing, and that will create job opportunities and support overall demand," she says.

Rebuild or relocate?

The extreme weather events in California, Florida, Puerto Rico and Texas in 2017 also mean that residents of those states who saw their homes damaged will have to decide whether to rebuild or relocate.

Mark Kiesel, global credit CIO and managing director at Pacific Investment Management Co., says it is too early to tell exactly when the rebuilding effort will start to meaningfully affect home builders, but it is likely to drive growth over the second half of 2018 and into 2019.

In addition, the new tax law will make it more expensive to live in many coastal states including California and New York.

Starting with their tax returns for 2018, residents of high-tax states will be able to deduct only $10,000 of their state and local taxes—an issue that Mr. Kiesel says could drive migration and new housing starts over the next three to five years.

"When you look at property taxes in some of these states, after the tax bill they become very uncompetitive—if you can save 10% or more in taxes by moving, that's a meaningful amount for a lot of people," Mr. Kiesel says.

The savings would be most meaningful for high-end homeowners who took the biggest deductions under the old tax rules. "You are likely to see interest in lower-cost states like Texas grow."

Ms. McCann is a writer in New York. She can be reached at reports@wsj.com.

SPOTLIGHT | OAK RIDGE SMALL CAP

PAYOUT HITS A SMALL-CAP FUND

Shareholders of **Oak Ridge Small Cap Growth Fund** (ORIGX) got an unpleasant surprise during the holiday season.

The small-cap growth fund made a capital-gains payout of nearly $22.77 a share, or about 60% of its net asset value, on Dec. 12, according to FactSet. The payment sent its share price tumbling to $15.07 from $38 the prior day.

The massive distribution, which may add to some shareholders' tax burdens, follows an investor exodus—and resulting sales of stock—as the fund underperformed.

It was a perfect storm, says Todd Rosenbluth, director of ETF and mutual-fund research at CFRA. Managers David Klaskin and Robert McVicker try to identify emerging blue-chip companies in infancy. Their stock-picking skills tend to shine in difficult markets. The fund lost 29.8% in 2008, less than its average small-cap growth peer, which shed 41.6%, and the Russell 2000 Growth Index's 38.5%.

But the fund underperformed the Russell index in six of the eight years from 2009 to 2016, and investors began redeeming. Assets total $491.3 million from a peak of $2.6 billion in 2015. "This is a great example of investors moving away from expensive, underperforming funds," says Mr. Rosenbluth.

Oak Ridge Investments declined to comment.

—Daisy Maxey

INDEX INVESTING

'Smart Beta' Keeps Soaking Up Money, but Performance Lags

BY TIM MULLANEY

THE BUZZ around one of the investment industry's most-watched, most-publicized trends is being called into question.

No, this isn't about bitcoin, but rather smart-beta funds, which new research suggests may not be working as planned.

Designed to bridge the gap between active mutual funds and exchange-traded funds that passively track indexes, smart beta offers the low costs and infrequent trading of an ETF, and ties holdings to both an index like the S&P 500 and factors such as value or growth in an effort to match or beat the performance of indexes that reflect particular investing styles.

But data from UBS Group AG show that only about 32% to 39% of the 560 smart-beta funds the firm studied beat the performance of the closest capitalization-weighted index over a 10-year period, according to research by David Perlman, ETF strategist at UBS. Factor in the extra risk that ETFs take by indexing themselves to benchmarks other than broad indexes, and smart-beta funds outperform on a risk-adjusted basis only 25% to 32% of the time, Mr. Perlman says.

The numbers got a little better in 2017, "but it's not more than 50% outperforming," Mr. Perlman says. "The biggest headwind has been that value has lagged and a lot of smart beta has a value tilt."

Attracting cash

Smart-beta funds attracted $65 billion in new capital for the year through mid-December, according to Morningstar.

Mr. Perlman is right that value funds play an outsize role in smart beta. The fastest-growing fund by far was **Vanguard Value** ETF (VTV), which reeled in just shy of $5 billion over the past year, bringing its total assets to about $37 billion, according to ETF.com. The largest fund in the category is **iShares Russell 1000 Value** ETF (IWD), which has more than $41 billion in assets, according to ETF.com.

There are differences in the industry over which funds should be classified as smart beta. ETF.com counts more than 900 smart-beta funds, while Vanguard, which has several of the 10 largest funds on ETF.com's list, doesn't consider any of its existing ETFs to be smart beta, says John Ameriks, head of Vanguard's quantitative equity group.

$65 billion
New capital that smart-beta funds attracted in 2017

Those classifications can make a big difference in how to look at performance indicators, says Rob Nestor, head of iShares Smart Beta at New York-based **BlackRock** Inc.

Beating the market isn't the only reason to use smart beta in a portfolio, Mr. Nestor says, adding that investors also can use smart-beta funds to manage volatility, especially when they use more than one fund in tandem. He says 70% to 80% of iShares' 45 smart-beta funds have recently beaten their benchmarks for both absolute and risk-adjusted return. But, like Vanguard, he says its results may differ from the UBS data because BlackRock considers fewer of its funds to be smart beta than outside researchers do.

Those who invest in smart-beta funds need to be patient, says David Nadig, chief executive of ETF.com. Other research shows that smart-beta approaches can take as long as seven years to beat the market even if strategies are well thought out, he says.

"Smart beta works by reducing risk in drawdowns, not by juicing returns in up markets," Mr. Nadig says.

The best approach to smart beta is to use a combination of factors, rather than just one, Mr. Perlman says. Relying on research by UBS quantitative strategist Ronald Sutedja, he says the best approach is to choose investments that equally weight picks made to reflect size of companies, low volatility, dividend yield, quality and momentum.

Mr. Sutedja's research found that smart-beta portfolios that chose individual stocks reflecting those five factors would have consistently beaten the S&P 500, according to back-testing of returns. The strategy can work with ETFs as well, Mr. Perlman says, though he cautions that it's impossible to project performance as precisely as backtesting can measure what would have happened in the past.

Research needed

Individual investors should do the same research on funds marketed as smart beta as they would on any other, and should review their results to make sure the fund is doing what it promises, Vanguard's Mr. Ameriks says. That is true whether an investor's goal is to beat the market, to lower volatility or simply to gain exposure to a particular factor like value or growth, he says.

"Don't start with what fits the label—ask what you are trying to do. It's bad news to get involved in an investment based on a category."

Mr. Mullaney is a writer in Maplewood, N.J. He can be reached at reports@wsj.com.

Largest Stock and Balanced Funds

Data provided by LIPPER

Total returns are for periods ended Dec. 29 All data are final. Assets are through Nov. 30. Performance data include both share prices and reinvested dividends.

Fund Name	Symbol	Assets ($ millions)	Performance (%) December	4th-qtr	1-year	3-year*	5-year*
Vanguard TSM Idx;Adm	VTSAX	657,015.3	1.0	6.3	21.2	11.1	15.6
Vanguard 500 Index;Adm	VFIAX	383,399.7	1.1	6.6	21.8	11.4	15.8
Vanguard Tot I Stk;Inv	VGTSX	321,184.6	2.1	4.8	27.4	8.4	7.0
SPDR S&P 500 ETF	SPY	255,164.6	1.1	6.6	21.7	11.3	15.7
Vanguard Instl Indx;Inst	VINIX	233,654.6	1.1	6.6	21.8	11.4	15.8
American Funds Gro;A	AGTHX	176,870.4	1.2	6.9	26.1	13.0	16.1
American Funds EuPc;R6	RERGX	160,371.6	1.1	4.2	31.2	9.7	9.2
iShares:Core S&P 500	IVV	140,272.7	1.1	6.6	21.8	11.4	15.7
Fidelity 500 Idx;Pr	FUSVX	136,826.6	1.1	6.6	21.8	11.4	15.7
Fidelity Contrafund	FCNTX	124,619.0	0.3	6.8	32.3	13.3	16.4
American Funds Bal;A	ABALX	123,225.6	1.4	4.5	15.5	8.5	11.1
American Funds Inc;A	AMECX	110,383.8	1.6	3.5	13.4	7.3	9.6
American Funds CIB;A	CAIBX	108,836.3	1.0	2.4	14.3	5.8	7.8
Vanguard Wellington;Adm	VWENX	105,557.7	1.3	4.6	14.8	8.5	11.0
Vanguard FTSE Dev Mk ETF	VEA	104,107.0	1.7	4.4	26.4	9.0	8.3
American Funds Wash;A	AWSHX	100,149.5	1.6	6.5	20.2	10.8	14.8
American Funds CWGI;A	CWGIX	97,422.3	1.5	5.1	24.7	9.1	11.0
American Funds FInv;A	ANCFX	95,410.9	1.9	6.7	23.4	12.8	15.5
Vanguard Md-Cp Idx;Adm	VIMAX	93,725.4	0.9	5.6	19.3	9.4	15.0
American Funds ICA;A	AIVSX	93,080.2	1.8	6.2	19.7	10.6	15.0
Vanguard FTSE Em Mkt ETF	VWO	89,230.3	3.5	6.3	31.4	7.5	3.5
Vanguard Sm-Cp Idx;Adm	VSMAX	83,745.2	0.4	5.1	16.2	9.8	14.4
iShares:MSCI EAFE ETF	EFA	82,846.0	1.6	4.2	24.9	7.7	7.8
Franklin Cust:Inc;A	FKINX	82,340.7	0.9	0.8	8.4	5.1	6.7
American Funds NPer;A	ANWPX	76,578.8	0.4	4.6	28.9	11.4	12.6
Vanguard Gro Idx;ETF	VUG	72,643.7	0.7	6.2	27.8	11.9	16.1
Dodge & Cox Stock	DODGX	69,876.1	2.4	5.8	18.3	11.1	16.3
Dodge & Cox Intl Stock	DODFX	64,913.4	2.0	1.2	23.9	6.0	8.5
Vanguard REIT Idx;ETF	VNQ	64,635.8	−0.2	1.4	5.0	5.3	9.2
Vanguard Value Idx;ETF	VTV	63,636.9	1.5	7.0	17.1	10.7	15.4
Vanguard Ext Mk Id;Adm	VEXAX	62,586.5	0.5	4.8	18.1	9.9	14.6
Vanguard PRIMECAP;Adm	VPMAX	61,535.9	1.2	7.3	29.6	13.8	19.6
American Funds AMCP;A	AMCPX	60,703.9	0.9	6.0	22.1	10.3	15.5
PowerShares QQQ Trust 1	QQQ	59,498.9	0.5	7.2	32.7	15.9	20.4
First Eagle:Global;I	SGIIX	57,792.9	0.7	3.3	13.8	7.8	8.4
Vanguard Wellesley;Adm	VWIAX	55,459.5	1.1	3.1	10.3	6.5	7.4
T Rowe Price Gro Stk	PRGFX	53,388.7	−0.3	6.1	33.6	14.5	17.9
Vanguard Windsor II;Adm	VWNAX	50,094.0	2.0	5.9	16.9	8.7	13.3
American Funds Mut;A	AMRMX	48,505.0	1.1	5.1	17.7	9.3	13.5
Fidelity Tot Mk;Pr	FSTVX	48,088.4	1.0	6.3	21.2	11.1	15.5
Vanguard Health Care;Adm	VGHAX	47,587.4	0.2	0.6	19.7	7.1	17.7
MFS Value;I	MEIIX	47,020.7	1.2	5.0	17.8	10.2	15.0
iShares:Russ 2000 ETF	IWM	46,424.6	−0.4	3.3	14.7	10.0	14.2
T Rowe Price BC Gro	TRBCX	45,560.0	0.01	7.0	36.6	15.3	18.9
iShares:Core S&P Md-Cp	IJH	43,729.7	0.2	6.2	16.2	11.1	14.9
Vanguard Ins T StMk;Ins+	VITPX	43,360.7	1.0	6.3	21.1	11.1	15.6
Oakmark Internatl;Inv	OAKIX	41,961.3	1.9	2.4	29.8	10.4	10.5
Fidelity Gro Company	FDGRX	41,676.9	1.0	6.9	36.8	16.1	19.7
iShares:Core MSCI EAFE	IEFA	41,188.4	1.8	4.5	26.4	8.8	8.7
iShares:Core MSCI EmMkts	IEMG	40,888.5	3.7	7.7	36.8	9.0	4.4
iShares:Russ 1000 Gr ETF	IWF	40,019.9	0.8	7.8	30.0	13.6	17.1
iShares:Russ 1000 Vl ETF	IWD	39,665.3	1.4	5.3	13.5	8.5	13.8
Fidelity Low-Prcd Stk	FLPSX	39,445.2	1.9	6.6	20.7	9.3	13.6
BlackRock:Gl Alloc;I	MALOX	38,826.0	0.6	2.5	13.6	5.5	6.6
Vanguard Tgt Ret2025;Inv	VTTVX	38,749.1	1.1	3.9	15.9	7.3	9.4
American Funds SMCP;A	SMCWX	38,581.4	0.9	4.9	26.8	11.2	12.6
Oppenheimer Dev Mkts;Y	ODVYX	38,198.8	3.0	5.1	35.1	7.7	5.3
iShares:MSCI Em Mkts	EEM	37,824.7	3.6	7.3	36.4	8.4	3.7
Vanguard FTSE xUS;ETF	VEU	36,771.3	2.0	4.7	27.3	8.3	6.9
Vanguard Bal Index;Adm	VBIAX	36,658.0	0.8	4.0	13.9	7.6	10.1

Note: For funds with multiple share classes, only the largest is shown *Annualized N.A.=Not applicable or not available

NEWS CHALLENGE: FUNDS AND INVESTING

Test Your Smarts on...Fintech

BY VICTOR REKLAITIS

IT DOESN'T HAVE the most creative name, but millions have embraced it: fintech, the innovative industry straddling the worlds of finance and technology.

Success stories in fintech range from mobile check deposit to robo advisers. The boom in cryptocurrencies and their underlying blockchain technology, too, are often viewed as fintech phenomena.

The industry faces its challenges, despite growing into a global force that attracted $71 billion in investment over 2015 and 2016, according to KPMG estimates.

How much do you know about fintech? Take our quiz to find out.

1. *Fill in the blank: The chief executive for a fintech startup focused on insurance recently said: "From binding a policy to making a claim, the consumer doesn't have to ______ to anybody."*

A. pay money B. speak
C. kowtow D. watch what they say

ANSWER: B. To insure individual items of personal property, Trov Inc. offers a novel type of coverage that can be turned on and off with the swipe of a smartphone, CEO Scott Walchek said in The Wall Street Journal in April.

2. *The number of active mobile-banking users at the three biggest U.S. retail banks jumped to how many in 2017, from 33.8 million in 2012?*

A. 57.7 million B. 71.7 million
C. 89.6 million D. none of the above

ANSWER: B. That total, covering JPMorgan Chase, Bank of America and Wells Fargo, is an estimate from S&P Global Market Intelligence as of mid-2017.

3. *Fill in the blank: The chief executive for a fintech startup focused on helping banks vet high-risk clients recently said: "The ______ label gets you further now than 'fintech' because you [can] point to legislation that you are solving."*

A. govtech B. lawtech
C. regtech D. fixtech

ANSWER: C. Fintech startups are rebranding themselves as "regulatory technology," or "regtech," companies, in a bid to convince banks that their products and services are indispensable, according to a May article in Financial News, a Dow Jones publication based in the U.K. Jane Jee, chief executive of **Kompli-Global**, a fintech company with offices in London and New York, said in the article, "Fintech is often a solution looking for a problem."

Fintech, or financial technology, includes the robo-adviser business and many others.

4. *True or false: UBS analysts wrote that while they are "doubtful cryptocurrencies will ever become a mainstream means of exchange, the underlying technology, blockchain, is likely to have a significant impact in industries ranging from finance to manufacturing, health care and utilities."*

ANSWER: True. Blockchain is the technology that cryptocurrencies such as bitcoin run on, and it functions as a decentralized ledger used to record and verify transactions.

5. *What did London-based venture capitalist Eileen Burbidge recently point to as potentially the top threat to the U.K. capital's position as a fintech hub?*

A. Brexit B. Asia
C. U.K. Foreign Secretary Boris Johnson
D. London Mayor Sadiq Khan

ANSWER: B. While London "might lose ground to other European hubs" due to Britain's planned exit from the European Union, "Asia is going to blow everything else away," Ms. Burbidge, a partner at Passion Capital, said at a London conference.

6. *Lending startup Social Finance Inc., or SoFi, has ditched plans to expand into foreign markets and asset management after CEO Mike Cagney resigned. What prompted his decision to step down?*

A. A workplace scandal
B. A controversial change to the company's name
C. A push to open a banking subsidiary
D. None of the above

ANSWER: A. Lawsuits claiming sexual harassment and a toxic corporate culture prompted the resignation in September. Mr. Cagney said in a note to employees at the time of his resignation that recent litigation and "negative press have become a distraction from the company's core mission."

7. *China's "insuretech" industry has become known for offbeat insurance products. Which of the following have Chinese insurers offered?*

A. Overtime-work insurance
B. Mid-autumn moon insurance
C. Traffic-jam insurance
D. All of the above

ANSWER: D. The moon-insurance product offers compensation if rain clouds block one's view of the moon during China's mid-autumn festival, when a glimpse of the moon is considered good luck. Other Chinese insuretech products have included policies that cover package returns, parking tickets and love.

8. *Fill in the blank: San Francisco Federal Reserve President John Williams said the Fed is "not developing its own digital currency" at the moment, and "this will be ________ over the next decade."*

A. a very exciting area
B. a disaster zone
C. fun for bankers
D. a source of confusion

ANSWER: A. Mr. Williams made the remarks in November. He expressed reluctance to weigh in on the "hoopla" surrounding bitcoin, but predicted that more attention will paid to the idea that if there is going to be digital currency, perhaps it should be official government currency. Meanwhile, New York Fed President William Dudley has said that digital currency was something the Fed was "starting to think about."

9. *In mid-2017, Betterment, the largest pure-play robo-adviser startup, topped a round number in assets. It was:*

A. $1 billion B. $10 billion
C. $100 billion D. $1 trillion

ANSWER: B. Betterment's assets under management are up sharply after topping $1 billion roughly three years ago. The world's biggest asset manager, BlackRock Inc., boasts $6 trillion in AUM.

10. *The U.K. startup with the fastest-growing valuation among all of Britain's startups is a fintech company, according to a ranking from SyndicateRoom, an investing platform. Which company?*

A. WorldRemit B. eToro
C. Nutmeg D. Transferwise

ANSWER: D. Transferwise offers low-cost international money transfers and was founded by two Estonians. Its valuation over three years has grown by a multiple of 57, according to SyndicateRoom.

Mr. Reklaitis is a markets writer for MarketWatch in London. Email him at vrek@marketwatch.com.

ALTERNATIVE INVESTMENTS

Sports and Mutual Funds Can't Seem to Team Up

BY DAN WEIL

WHILE MILLIONS OF Americans count themselves as devoted sports fans, few exchange-traded funds or mutual funds are available for them to invest in their passion. And even those options are only indirectly related to professional sports, with returns that have been mixed.

The irony is that sports analogies are common in investment discussions, and investing and sports have a similar competitive appeal for many people. But the disconnect stems from the fact that most of the revenue generated in professional sports isn't accessible through public securities, analysts say.

"The idea of investing in what you know and love has been around for a long time," says Matt Hougan, chief executive officer of Inside ETFs, which organizes ETF conferences. "But most of what we associate with the economic value of sports—team ownership and player contracts—comes in private transactions."

Chris Marangi, a portfolio manager at Gamco Investors Inc. who has researched the sports industry extensively, found only a handful of leagues, teams and regional sports networks that are publicly traded:

◆ The New York Knicks basketball team and Rangers hockey team, which are part of Madison Square Garden Co.

◆ TV networks that are part of MSG Networks Inc.

◆ The Atlanta Braves baseball team, part of Liberty Braves Group.

◆ Formula One car racing, part of Liberty Formula One.

◆ U.K. soccer team Manchester United.

◆ German soccer team Borussia Dortmund.

◆ The wrestling franchise World Wrestling Entertainment.

Given this limited universe, it's difficult to put together a diversified mutual fund or ETF with stocks directly related to pro sports.

A rare ETF

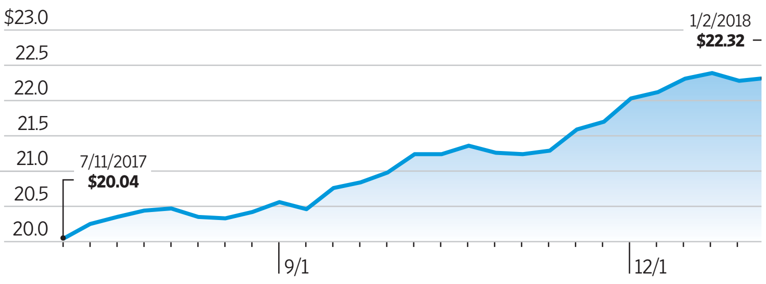
One of the few indirect options available for individual investors is the **ProSports Sponsors** ETF (FANZ), which invests in sponsors of pro sports leagues.

FANZ has about 70 predominantly large-cap stocks, with the consumer sector accounting for about 51% of the fund, information technology 15% and financial services 15%. The fund's top holdings, in descending order, are media company **21st Century Fox**, sneaker retailer **Foot Locker** Inc. and athletic-apparel giant **Nike** Inc. Other companies in the top 10 include liquor company Brown-Forman Corp., Amazon.com Inc., software analytics company New Relic Inc., hot-dog purveyor Nathan's Famous Inc. and hotelier Marriott International Inc. (21st Century Fox and The Wall Street Journal's parent, News Corp, share common ownership.)

Foot Locker, including this store in Strongsville, Ohio, passes for a 'sports stock.'

Keeping Score

ProSports Sponsors ETF (FANZ), weekly closes since its debut



Source: FactSet THE WALL STREET JOURNAL

Some analysts say the fund is unfocused and sports aren't the main determinant of its performance. Foot Locker and Nike do make sense for someone looking to invest in sports-related companies. "But Amazon, Marriott and Microsoft [the No. 11 holding]: Are they really going to rise and fall with sports?" asks Russel Kinnel, director of mutual-fund research at research firm Morningstar Inc. "No, you could run a similar fund with ballet sponsors." Sports sponsorships represent a small portion of the revenue of most companies in the fund.

"This is a portfolio of great companies making investments in their brands," says Dave Nadig, CEO of research firm ETF.com. "That's a legitimate way of looking at companies, but the fact that it's connected to sports strikes me as a bit irrelevant."

The fund also may be overly diversified. "Diversification is supposed to be good, but for a niche ETF, it could be a bad thing," says Eric Balchunas, an ETF analyst at Bloomberg Intelligence. "That's because diversification can make it difficult for a fund to outperform broad market indexes.

"We created the ProSports Sponsors Index because we believe that companies that invest in their brands through partnerships with professional sports leagues will potentially outperform the general market over the long term," says Nick Fullerton, co-founder and president of SportsETFs LLC. The ProSports fund's investments are meant to track the index.

The fund, which had $4.4 million of assets at the beginning of this year, according to Morningstar, has traded fairly closely to the S&P 500, which the managers consider its benchmark, since its July 11 inception.

From that date through the end of 2017, FANZ returned 11.63%, compared with 11.16% for the S&P 500, according to Morningstar Direct.

Motif's basket

If pro sports are inaccessible to fund investors, how about investing in fitness?

A fund focused on health-and-fitness stocks could succeed, analysts say, as the industry is booming, and there are numerous companies tightly focused on it. "That's a legitimate market segment of the economy," Mr. Nadig says.

But the offerings here are sparse, too. **Motif Investing** Inc. offers a basket of mostly fitness stocks titled World of Sports on its online investment platform. The basket includes shares of apparel and footwear makers, equipment makers, fitness facilities and sporting-goods retailers. The fund has about 20 stocks, and the biggest holdings are Nike, apparel and shoe manufacturer VF Corp., Columbia Sportswear Co. and Footlocker.

The basket has underperformed the broad market. From its Dec. 17, 2012, inception through the end of 2017, the fund returned 74.6%, compared with 103.4% for the S&P 500, according to Motif.

"This is a reminder that a logical theme-based investment doesn't always perform well," says Todd Rosenbluth, director of ETF and mutual-fund research at research firm CFRA. "A portfolio is driven by the prospects of its holdings and not the concept."

So sports fans may fare better simply watching and playing their games than trying to invest in them.

Mr. Weil is a writer in West Palm Beach, Fla. He can be reached at reports@wsj.com.

SPOTLIGHT | REVERSE CAP WEIGHTED U.S.

THE 'UPSIDE DOWN' ETF

A new fund offers investors market-cap-weighted exposure to America's biggest companies, like many other exchange-traded funds. There's one difference: Its weighting is upside down.

Reverse Cap Weighted U.S. Large Cap ETF (RVRS), launched by Exponential ETFs in November, tracks an index of companies in the S&P 500. Except it is weighted in reverse order: The index it tracks rebalances at the same time as the S&P 500, but it overweights the smallest firms and underweights the largest.

This means, for example, that firms such as **Apple** Inc. were just a small component of the fund as of early January, while companies like the medical-supplies provider **Patterson** Cos. and **Chesapeake Energy** Corp. were in its top five holdings.

There is a premium to investing in smaller-cap companies, says Phil Bak, chief executive of Exponential ETFs. Small-caps can be riskier than their larger counterparts, but they also tend to perform better over the long term. This is true when a basket of microcaps is compared with a basket of market giants, he says, but the phenomenon extends down the spectrum from the largest to the smallest companies.

By staying within the S&P 500, investors get exposure to large, well-known firms like **Mattel** Inc. or **Foot Locker** Inc.—both in the fund's top 10 holdings—and still benefit from the premium, Mr. Bak says. And the approach allows for a more-diverse portfolio, avoiding a concentration of megacapitalization companies.

"These are very large companies: they're in the large-cap index for a reason," he says. "We're not taking any gambles on tiny companies that come with a lot more uncertainty."

—Gerrard Cowan

ASK ENCORE | GLENN RUFFENACH

My Favorite Retirement-Planning Writers

We also answer a reader's question on Social Security benefits and Part B premiums

I will be retiring in a few years and want to learn more about managing my finances in retirement. Who are some of your favorite financial writers? What do you look for when reading about retirement planning?

I look, first, for people who write clearly, and frequently, about the fundamentals: the mix of assets in your nest egg, budgeting, tapping your savings, Social Security, taxes, estate planning, etc. The basics are hard enough; a guide who makes sense of them—month after month, year after year—is invaluable.

Second, I look for writers who can help me stay abreast of changes in retirement planning. Such planning, for better and worse, always has new wrinkles: new products and investments, new research, tools and rules.

Yes, you might have a financial adviser (one you pay handsomely) to do all of the above. But in the end, just as with your physical health, you are responsible for your financial well-being. That doesn't mean you have to be an expert, but it does mean you should be familiar with, again, the fundamentals and some of the latest thinking in retirement finances.

With that in mind, take a look at:

◆ **Mike Piper**. A certified public accountant and author of a half-dozen personal-finance books. Writes the Oblivious Investor blog (obliviousinvestor.com). His focus: "simple, low-maintenance investing." And he does it better than just about anyone.

◆ **Christine Benz**. Director of personal finance at researcher Morningstar Inc. (Registration may be required: morningstar.com/articles/author/30-christine-benz.aspx.) A prolific writer and interviewer who tackles all things retirement: investing, withdrawal strategies for nest eggs, charitable giving, Medicare—you name it. Solid, practical advice.

◆ **Kimberly Blanton**. Writes the Squared Away Blog for the Center for Retirement Research at Boston College (squaredawayblog.bc.edu). The focus is on "financial behavior…so that Americans of all ages can act in their own best interest." Smart writing and a wonderful mix of topics.

◆ **Michael Kitces**. Director of wealth management at Pinnacle Advisory Group in Columbia, Md., and one of the top minds on financial planning. His blog, Nerd's Eye View (kitces.com), is designed primarily for his fellow advisers. But it's worth checking (and searching) periodically for his thoughts about retirement. Two recent examples: "Strategies to Minimize or Delay Required Minimum Distribution (RMD) Obligations" and "The Impact of Early Retirement on Projected Social Security Benefits."

◆ **Darrow Kirkpatrick**. An engineer, former business owner and early retiree who writes the Can I Retire Yet? blog (caniretireyet.com), one of my favorites. A deft combination of finance ("A Flexible Plan for Health Insurance in Early Retirement") and lifestyles ("Camping in Retirement"). Doesn't publish as much as others, but each article is worth waiting for.

◆ **Jonathan Clements**. Author and former Wall Street Journal columnist. Edits and blogs at HumbleDollar, which advocates a "relentless focus on the things you can control": spending, savings, fees and avoiding unnecessary investment risk, among others. Regularly tackles topics you won't find elsewhere. See, for instance, his recent post ("Crisis? What Crisis?") about why retirees might not need an emergency fund.

◆ Finally, and at the risk of blowing our own Journal horn, **Jason Zweig**. Writes The Intelligent Investor column. A voice of reason in anxious financial times. See also his website, jasonzweig.com, if for no other reason than to read his Statement of Principles. There isn't a better summary of what makes for successful investing.

Preparing for Retirement

Asked what steps they are taking to prepare for retirement, the following percentages of surveyed workers said they…*:

Thought about how they would occupy their time in later life	44%
Estimated how much income they would need each month	38%
Estimated Social Security benefit at planned retirement age	38%
Thought about moving or downsizing	38%
Estimated expenses in retirement	34%
Talked with a professional adviser about retirement planning	23%
Calculated money needed to cover health-care expenses	21%
Prepared a formal, written financial plan for retirement	11%

*Includes multiple responses

Source: Employee Benefit Research Institute and Greenwald & Associates, '2017 Retirement Confidence Survey'

THE WALL STREET JOURNAL.

* * *

I just received a letter from the Social Security Administration telling me that my benefits are going to increase by 2% in 2018. But the same letter goes on to say that, as a result of my adjusted gross income increasing for tax year 2016, my Medicare Part B premium is increasing $53.30, and my Part D premium is increasing $13. My income increased during tax year 2016 only because of an inheritance received from my mother-in-law's estate. Are these increases in premiums correct? I paid capital-gain taxes on the inheritance, and now I am paying again by having my benefits penalized for an entire year?

Unfortunately, the increases are correct. Some background: As part of the Affordable Care Act, people with high incomes pay more for Medicare. But if income falls—because of a "life-changing event," as outlined by the Social Security Administration—you can ask the SSA to re-evaluate and, ideally, lower your Medicare premiums.

For example, if you have a high-paying job and are suddenly laid off, the subsequent drop in income qualifies as a life-changing event. If you had been hit with a Medicare surcharge (because of the high-paying job), you could appeal to the SSA to lower the premium and cite the loss of employment as the reason.

The catch: There are only about a half-dozen events that qualify as "life changing"—and an inheritance isn't one. (For a list of life-changing events, go to the SSA website, ssa.gov, and search for: life-changing events.)

You should see your Social Security payout return to normal in 2019. Your inheritance is producing a spike in Medicare premiums—only for a year.

* * *

I am 66 years old and am going to retire in 60 days. I don't have a clue what to do with myself. All I know is that I don't want to go to work anymore. Do you have any suggestions?

Interestingly…on almost the same day that I received this email, I received the following note from Don Sullivan, a retired auto executive in Florida and self-described "20-year survivor of retirement." He responded to a November column about finding one's purpose in later life:

"I have found that few people can fill their retirement days with sports and hobbies. I tried. In my case it was skiing, hunting and fishing. It is not enough. You need to find a way to help other people that you feel passionate about. In my case it was teaching skiing to disabled children. Eventually I got too old for this and now I cook in a soup kitchen a couple of days a week. The key is to stop worrying about yourself, get off your butt and start volunteering with service organizations until you find the one you are passionate about. I guarantee you will be happy and fulfilled."

Thanks, Mr. Sullivan. That's good advice, a good answer for our 66-year-old reader—and a good way to kick off this column in the New Year.

*Mr. Ruffenach is a former reporter and editor for The Wall Street Journal. His column examines financial issues for retirement. Send questions and comments to **askencore@wsj.com**.*

IN TRANSLATION

ALTERNATIVE RISK PREMIUM

It used to be an obscure technical term: alternative risk premium.

The phrase has become more mainstream as investment companies like **Goldman Sachs** have started using it in discussions about possible investment strategies that customers might want to implement.

First, what is a plain old risk premium? It is "compensation for bearing risk," Goldman recently wrote in a report to clients on a variety of factors likely to influence investing, including risk premiums.

Alternative risk premiums, by contrast, or premia, as Wall Street often calls them, represent potential additional rewards for more specific risks within each asset class. For instance, one alternative risk premium, or ARP, is associated with value stocks. That is, shares that have been beaten down to levels that market watchers believe don't reflect their true worth, and so have a bigger risk premium than stocks in general. Stocks that trade just a few shares each day have an illiquidity premium that is higher than the general equity-risk premium.

"Alternative risk premium is a fancy term for compensated investment exposures that are associated with taking certain risks," says Erik Knutzen, chief investment officer for multiasset strategies at Neuberger Berman.

—Simon Constable