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THE WALL STREET JOURNAL.

DOW JONES | News Corp * * * * * * MONDAY, APRIL 2, 2018 ~ VOL. CCLXXI NO. 76 WSJ.com ★★★★ $4.00

Last week: DJIA 24103.11 ▲ 569.91 2.4% NASDAQ 7063.44 ▲ 1.0% STOXX 600 370.87 ▲ 1.4% 10-YR. TREASURY ▲ 24/32, yield 2.741% OIL $64.94 ▼ $0.94 EURO $1.2324 YEN 106.24

What's News

Business & Finance

A **data breach** at Saks Fifth Avenue and Lord & Taylor compromised the personal information, including credit-card numbers, of shoppers at the stores. **A1**

◆ **Deal talks** between Walmart and Humana are deepening anxiety in a hospital sector grappling with sluggish growth. **B1**

◆ **The NTSB expressed** displeasure with Tesla's disclosure that the firm's semiautonomous driving system was activated before a fatal crash last month. **B1**

◆ **High levels of triple-B** debt are fueling fears of a shakeout in the lowest investment-grade bonds should confidence slip. **B1**

◆ **Trump's tweets** about Amazon have renewed concerns about the prospect of antitrust action being brought against it. **B4**

◆ **Iraq-stock-market** listed firms are among the world's top performers as investors bet on the country's economic recovery. **B11**

◆ **Energy shares** appear to be bargains, some analysts say, after sector stocks in the S&P 500 fell 6.6% in the first quarter. **B12**

◆ **Empty space** in regional shopping malls reached a six-year high in the first quarter amid shifting consumer spending patterns. **A3**

World-Wide

◆ **The administration's** commitment to coal is under its stiffest test yet after FirstEnergy made a plea to favor that power source over its many rivals. **A1**

◆ **China imposed tariffs** on a range of U.S. goods, following through on a promise to retaliate against penalties on imports of Chinese steel and aluminum. **A2**

◆ **Trump suggested** he was ruling out a deal with Democrats to legalize undocumented immigrants brought to the U.S. as children. **A4**

◆ **U.S.-South Korean** military exercises are set to test the durability of a diplomatic opening with North Korea. **A6**

◆ **Israel faces** a political challenge in Gaza after soldiers fired on demonstrators at the border on Friday, killing at least 15. **A8**

◆ **Iowa and other** Midwest states have too few workers to fill jobs despite training programs meant to close the gap. **A1**

◆ **A police shooting** of an unarmed black man in California highlighted the question of how many people police kill each year. **A3**

◆ **Teachers are** mobilizing in several states after observing peers' successful strike in West Virginia. **A3**

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Christians Celebrate Easter Around the World

ALVARO BARRIENTOS/ASSOCIATED PRESS

HOLY DAY: In the small town of Tudela, Spain, relatives helped 8-year-old Ariadna Vallej prepare for the Easter Sunday ceremony 'Descent of the Angel.' In his Easter message, Pope Francis encouraged multilateral peace talks for Korea. **A6**

Worker Shortage Dogs Midwest

Region is only one where openings outnumber out-of-work job seekers

By Shayndi Raice And Eric Morath

MASON CITY, Iowa—Manufacturers in northern Iowa are begging Terry Schumaker for freshly trained workers for their factories. The problem is he doesn't have enough students to train.

"It's not like we have the people beating down our door to apply," said Mr. Schumaker, a dean at the North Iowa Area Community College in Mason City.

It is a problem playing out in many parts of the Midwest, a region with lower unemployment and higher job-opening rates than the rest of the country. Employers, especially in more rural areas, are finding that there are just too few workers. That upends a long-running view in Washington, D.C., and many state capitals, where policy makers often say the unemployed simply lack the skills to get hired.

Mr. Schumaker said Iowa has plenty of free programs to train workers. And Iowa Gov. Kim Reynolds is poised to sign legislation Tuesday that would provide an estimated $18 million for worker-training programs. But shrinking high-school classes and a declining population leave fewer potential trainees.

Other states, like Indiana and Wisconsin, are undertaking similar moves. President Donald Trump has touted worker-training programs, and his daughter Ivanka visited Iowa in March to highlight the efforts.

The U.S. labor market is the tightest it has been in nearly two decades: The unemployment rate held at a 17-year low of 4.1% for five straight months, and the number of job openings is at a record.

In the Midwest, the worker shortage is even more pro-

Please see IOWA page A4

◆ Outlook: Economic uncertainty is rising..... A2

Trump's Loyalty To Coal Is Tested

By Timothy Puko

The Trump administration's commitment to coal is under its stiffest test yet after an Ohio energy company made a plea to favor that power source over its many rivals, including oil and natural gas, in a clash that could end with higher costs for consumers.

FirstEnergy Corp.'s fleet of coal- and nuclear-power plants filed for bankruptcy over the weekend, just days after the company asked the federal government for an emergency declaration that would keep many of them open. That forces President Donald Trump's Energy Department into a decision on whether to intervene under a lightly used, 83-year-old law and compel the nation's largest electric-grid operator to dispatch power from FirstEnergy's coal and nuclear plants effectively before any other.

Mr. Trump has been one of the coal industry's biggest boosters, campaigning on reviving a downtrodden industry, and his administration has voiced support for nuclear, too. Both of those fuels are facing tough competition as alternatives—including natural gas, and wind and solar power—have become cheap and more plentiful.

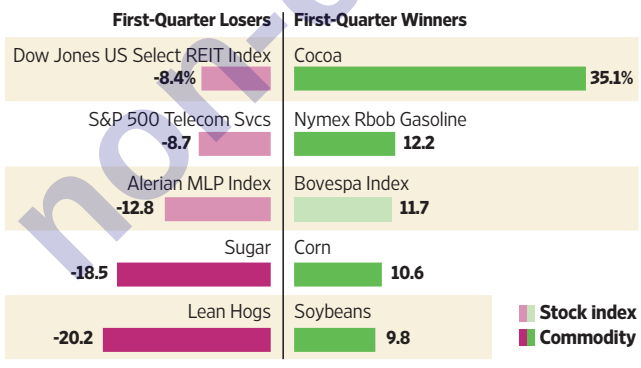
Should the Ohio company's

Please see COAL page A4

◆ Energy stocks are poised to power higher..... B12

Cocoa Is Hot, but Hogs Are Not

Investors begin the second quarter with an apprehensive mind-set, reflecting the sharp late-March retreat of tech shares and concern about rising interest rates. **Markets Review & Outlook. R1-R6**



Note: Bovespa measures Brazilian stocks; Alerian MLP measures energy-infrastructure stocks.
Sources: SIX Financial Information (stock indexes); WSJ Market Data Group (commodities)

THE WALL STREET JOURNAL.

Demographic Tsunami Menaces World's Developing Economies

More retirees, fewer young workers mean little money for growth

By Paul Kiernan and Luciana Magalhaes

RIO DE JANEIRO—Mariuza da Conceição Aparecida taught math and science at public schools for 27 years, enough to retire on a full pension in her late 50s.

Last year, more than two decades later, the 80-year-old was forced to wait in line at food banks. Swelling retirement obligations have nearly bankrupted the Rio de Janeiro state government, leaving Ms. Aparecida without her pension checks for as long as four months at a time. She resorted to singing in the streets to draw attention to the situation of the elderly.

"It saddens me to see the Rio that I love in a situation like this," she said.

The country's pension system is unusually generous. Helping make it unaffordable is a demographic shift likely to weigh on Brazil and other emerging economies for decades to come: the steady aging of the population, which is happening faster than in the developed world, leaving these economies less time to adjust.

In other words, they're getting old before they get rich.

Please see RETIRE page A10

The Toughest Bird to Watch Is Usually in Plain View

* * *

Gulls are tricky to identify and not for everyone, 'like single malt Scotches'

By Neal Templin

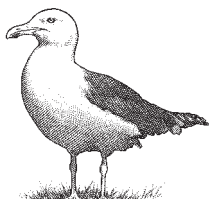
Birders climb mountains, endure extreme temperatures and travel the globe to get flitting glances of unusual warblers and flycatchers.

But one of the hardest birds to identify is often in plain view. It's a gull.

"You can drive right up to the buggers and they dutifully stare back and say, 'I'm going to show you every feather and you still don't know what the heck I am,'" says Martin Reid, a Texas birder.

Gull watching is "more a masochistic practice than other forms of birding," he says.

The problem: There are numerous closely related large white-headed gulls in North America.



ID, please

Each one flaunts up to eight different plumages during its first four years. Birders engage in online debates over the identities of juvenile gulls.

It gets worse. Different gull species mate, creating hybrid offspring. And then there are gull subspecies.

In February at the "Gull

Please see GULL page A10

INSIDE

AFP/GETTY IMAGES

NEW FORM OF ANTI-SEMITISM IN GERMANY

WORLD, A9

GENE TEST AIDS IN CANCER DECISIONS

HEALTH, A11

Saks, Lord & Taylor Hit With Data Breach

By Robert McMillan And Suzanne Kapner

Hackers breached the payment systems of Saks Fifth Avenue and Lord & Taylor department stores and stole credit card information for millions of shoppers, the latest in a series of intrusions that have exposed security gaps in corporate networks.

Hackers claim they have five million credit card and debit card numbers from the stores and have been releasing them for sale on the "dark web," a network of websites used by hackers and others to anonymously share information, according to Gemini Advisory LLC, a New York-based cybersecurity firm. The hackers began stealing the card numbers in May 2017, the firm estimates.

A spokesman for Hudson's Bay Co. of Canada, which owns the two chains, confirmed a security breach involving customer payment card data at its Saks Fifth Avenue, Saks Off 5th and Lord & Taylor chains in North America.

He said an investigation is ongoing and didn't say how many accounts were exposed. At this point, the company doesn't believe Social Security or driver's license numbers have been compromised and said it would notify any affected customers once it has completed its investigation.

"We have identified the issue, and have taken steps to contain it," the spokesman said, adding that the company is coordinating with law enforcement. Customers will be offered free identity protection services,

Please see SAKS page A2

◆ Too much digital privacy can pose risks of its own..... A3

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U.S. NEWS

THE OUTLOOK | By Jon Hilsenrath

Economic Uncertainty Is on the Rise

During Barack Obama's presidency, uncertainty about U.S. economic policy was much higher than it had been during the previous 25 years, according to calculations by a trio of academic economists.

You would think uncertainty would be low now, with economic expansion advanced and secure, the global economy on a stable footing, and a president in the White House focused on helping business by cutting regulation.

But it isn't. The researchers find economic policy uncertainty is slightly higher under President Donald Trump than it was during an Obama era marked by deep recession, auto bailouts, unconventional Federal Reserve interventions into the financial system and routine brinkmanship between Democrats and Republicans on fiscal policy.

The academics devised an "economic policy uncertainty index" that tracks mentions of the words "uncertain" and "uncertainty" in major newspapers' articles about economic policy. The dependence on newspapers could make the index prone to shifts in media coverage of issues or people over time. Still it is instructive. The index averaged 140.2 during Mr. Trump's first 13 months in office, compared with 126.0 during the comparable period of Mr. Obama's tenure and 134.7 during his two terms in office.

In January and February of 2018, the index averaged 127, still well above its average of 100 between 1985 and 2010. The measure was developed by Scott Baker, Nicholas Bloom and Steven Davis, of Northwestern University, Stanford University and the University of Chicago Booth School of Business, respectively.

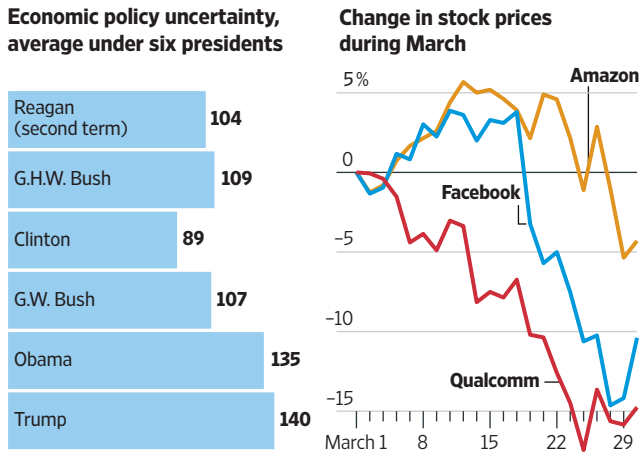
"Obama was president in a time when you needed extreme policy action," said Mr. Bloom. "Trump has incredibly benign economic conditions. He should have very low levels of policy uncertainty."

It is hard to say exactly why uncertainty is high now. Mr. Bloom said it is likely partly because of big policy changes happening in Washington—such as an aggressive new stance on trade—and partly because of the decision-making process, which he described as chaotic.

Investors got a taste of Trump era economic policy uncertainty in recent weeks: New U.S. tariffs on steel and aluminum imports and a range of goods imported from China; exemptions from those tariffs dribbled out piecemeal; federal intervention to stop the proposed acquisition of Qualcomm Inc. by a foreign competitor on national security grounds; and the acquisition of Time Warner Inc. by AT&T Inc. landing in federal court.

Which Way Next?

Despite a steady economy, policy uncertainty continues to rise. Stocks of some big U.S. companies were rattled in March.



Note: 100 is the average of the index between 1985 and 2010.
Source: FactSet
THE WALL STREET JOURNAL.

Last week, Amazon Inc.'s share price dropped 4% in a day after a news report by Axios that Mr. Trump wanted the company to pay more taxes and had concerns that its business model is hurting brick-and-mortar retailers. **Facebook** Inc.'s shares were off 10% in March amid a Federal Trade Commission investigation and fears of a regulatory crackdown.

"It has been a gut punch to tech investors," Daniel Ives, chief strategy officer at GBH Insights, an investment research firm, said of the Amazon and Facebook matters.

In theory, uncertainty about the economy and economic policy damps investment, hiring and economic growth, though it would be hard to argue that is a problem now. Business investment rose 6% in 2017, up from an annual average of 3% during Mr. Obama's presidency. Overall economic growth picked up last year and the jobless rate, at 4.1%, is at its lowest level since 2000.

Mr. Trump's supporters can argue policy uncertainty is the outcome of delivering on the changes he had promised, said Stanford's Mr. Bloom. That includes a more muscular trade policy that demands other countries open up as much to U.S. trade as the U.S. does to them, and support of blue-collar industries such as manufacturing. Still, he said, the concern surrounding Mr. Trump's policies represents "an unnecessary cost" to the economy.

It is also hard to see a comprehensive policy framework behind Mr. Trump's interventions, making it hard to predict what might come next.

Some analysts have described the trade approach as mercantilism, a government effort to prop up exports and restrain imports in pursuit of trade and financial surpluses. But Qualcomm, AT&T and Amazon aren't about that.

"He's picking winners and losers," said Matthew Slaughter, dean of Dartmouth's Tuck School of Business, who also served as an economist at the Council of Economic Advisers under President George W. Bush.

Andy Laperriere, an analyst at Cornerstone Macro, an economic research firm in Washington, said there is no question the president's recent trade moves are creating uncertainty in financial markets.

But other actions, like the shots he took at Amazon, are more benign because they won't amount to much change in regulation.

His advice to Wall Street: "Don't fear the Tweeter."

ECONOMIC CALENDAR

This week features inflation and unemployment figures in Europe and the March U.S. jobs report.

WEDNESDAY: The eurozone's annual rate of **inflation** fell for a third straight month in February, reinforcing the European Central Bank's sense of caution as it considers further steps to wind down its stimulus programs. But some relief may be at hand, with economists forecasting that figures released by the European Union's statistics agency will record a pickup to 1.4% in March, from 1.1% in the previous month.

Separate figures are expected to show a further decline in **unemployment** in February, which also may strengthen the ECB's conviction that inflation will reach its target of just below 2% and stay there, though not this year.

FRIDAY: The U.S. Labor Department releases **jobs data** for March after the labor market clocked robust growth in February. Given the recently low number of layoffs and gains in labor-force participation that could soon moderate, analysts expect the **unemployment rate** to drop to a near two-decade low of 4%, from the current 4.1% level, where it has been parked for almost half a year.

SATURDAY: China releases its monthly **foreign-exchange reserves** data. The world's largest stockpile likely rebounded a little in March, ending the month at around $3.155 trillion, compared with $3.134 trillion at the end of February, driven by changes in exchange rates and market pricing of reserve assets, economists say.

SAKS

Continued from Page One

including credit monitoring, and won't be liable for fraudulent charges, he said.

The retailer said there was no indication at this time that the breach affected its e-commerce operations, or other store brands it owns, including the Hudson's Bay department-store chain in Canada or Galeria Kaufhof in Germany.

So far, 125,000 cards that had been used at Saks or Lord & Taylor have been released for sale by the hackers, according to Gemini Advisory. Some were cards that were used by card owners as recently as last month in one of the affected stores, according to Dmitry Chorine, Gemini Advisory's chief technology officer.

The group behind the hack is known as JokerStash Syndicate or Fin 7. It appears to have penetrated the retailers' point of sale systems, Mr. Chorine said.

After previous breaches the JokerStash group has released credit-card data in smaller batches, to avoid flooding the market for illegally obtained payment credentials, Mr. Chorine said.

The incident is the latest in a string of hacks that have compromised consumer data. Nearly 148 million U.S. consumers had personal information stolen, including parts of their driver's license, as part of a breach last year at Equifax Inc., a credit-rating firm. In 2013, more than 40 million people had their name, address or phone number taken in a Target Corp. breach.

On Friday, Under Armour Inc. disclosed that someone illegally accessed data from its MyFitnessPal fitness-tracking app in late February, affecting some 150 million users. Personal data such as emails, usernames and passwords were exposed, but credit-card information and driver's license numbers weren't compromised, the athletic-wear company said. Under Armour said it has enlisted data-security firms and law enforcement to investigate the scope of the breach.

RICHARD B. LEVINE/NEWSCOM/ZUMA PRESS

Hudson's Bay said the breach involved card data at its Saks Fifth Avenue, Saks Off 5th and Lord & Taylor chains in North America.

JokerStash has been linked to a series of breaches, dating back years, including break-ins at Whole Foods Market, Chipotle Mexican Grill Inc., Omni Hotels & Resorts and Trump Hotels, according to Gemini Advisory.

To make their systems more secure, retailers have been switching to a new form of payment called EMV, for Europay Mastercard and Visa, which uses a computer chip in the card to authenticate transactions.

Hudson's Bay said all Saks Fifth Avenue and Saks Off 5th stores had EMV systems installed by the fall of 2016, while Lord & Taylor stores were equipped with the system by February 2017.

The breach is the latest challenge for Hudson's Bay, which acquired Lord & Taylor in 2012 and Saks in 2013. Like other department store operators, it has been struggling with slowing or declining sales as shoppers buy more online, shift their preferences to specialty stores and spend more of their budgets on travel and entertainment.

In addition, Hudson's Bay has had to contend with an activist investor and a recent CEO switch. In February, the company hired CVS Health Inc. executive Helena Foulkes as chief executive, filling a position that was vacated last fall.

Last week, the company reported mixed results for its latest quarter, with same-store sales rising at Saks but falling at its department-store group and off-price division. Ms. Foulkes told analysts that "everything is on the table" when it comes to fixing the business. "There are no sacred cows," she said on a conference call.

For the 12 months ended Feb. 3, the company reported a loss of 581 million Canadian dollars ($450 million) and total sales that were little changed at C$14.4 billion.

Activist shareholder Land & Buildings Investment Management LLC has been urging the company to sell divisions and make better use of its real estate, including its flagship Saks Fifth Avenue store in Manhattan. In January, it sent a letter to Hudson's Bay's shareholders saying the company should consider going private.

Last year, Hudson's Bay agreed to sell its Lord & Taylor flagship store in Manhattan for $850 million to a group that includes WeWork Cos, the office-sharing startup. The company has been slimming down its workforce, as part of an effort to save $350 million annually.

China Retaliates With Own Tariffs

By Charles Hutzler

BEIJING—China imposed tariffs on a range of U.S. goods, following through on a promise to retaliate against the Trump administration's penalties on imports of Chinese steel and aluminum.

The Chinese Finance Ministry said in a statement dated Sunday that the previously announced tariffs on the imports of American goods would take effect Monday.

Penalties range from 25% on American pork and eight other kinds of goods to 15% on fruit and 120 types of commodities, the ministry said.

The Finance Ministry renewed China's criticisms of the administration's 25% tariffs on steel and 10% tariffs on aluminum under Section 232 of the Trade Act as violating global trading rules. At the same time, the ministry suggested that Beijing's response doesn't seek to escalate tensions.

The Trump administration didn't immediately comment on the Chinese action.

The back-and-forth over the U.S. steel and aluminum tariffs is part of a broader effort by the Trump administration to punish Beijing for what it sees as unfair trade practices and rally international support.

President Donald Trump has also ordered a series of actions to penalize Beijing under Section 301 of the Trade Act for the use of intimidation and other unfair practices to acquire American technology. Those actions include tariffs on as much as $60 billion in Chinese imports and filing a complaint with the World Trade Organization against Chinese technological licensing practices as well as considering other limits on Chinese investment in U.S. technology.

U.S. and Chinese officials are engaged with one another to try to resolve the disputes, or at least prevent tensions from escalating. U.S. Treasury Secretary Steven Mnuchin is considering a trip to Beijing in the next several weeks to continue conversations with China's economic czar, Liu He, on potential U.S. investment restrictions.

Beijing has promised retaliatory measures in response to specific actions by the Trump administration. Soybeans and other products from American farm states are high on the list of potential targets, as well as other big-ticket U.S. goods like **Boeing** Co. aircraft.

Penalties include 25% on U.S. pork and other goods and 15% on fruit.

"It's nothing we like to see," said David Salmonsen, senior director of the American Farm Bureau Federation, of potential tariffs. "We know it will have some impact."

—Bob Davis in Washington contributed to this article.

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U.S. WATCH

WASHINGTON, D.C.

Shulkin Rejects Claim He Resigned

Former Veterans Affairs Secretary David Shulkin says he was fired amid conflicting claims from the White House.

White House spokeswoman Lindsay Walters on Sunday told the Associated Press that Mr. Shulkin had "resigned" from his job when President Donald Trump announced via Twitter last Wednesday that he was nominating White House doctor Ronny Jackson to replace him.

But in TV interviews, Mr. Shulkin said he hadn't submitted a resignation letter and was only told of Mr. Trump's decision shortly before the tweet.

The semantics could be relevant to Mr. Trump's ability to name an acting VA secretary. Last week, he named Defense Department official Robert Wilkie to the acting position.

Under law, a president has authority to temporarily fill a federal agency job if someone "dies, resigns, or is otherwise unable to perform the functions and duties of the office." There is no mention of a president having that authority if the person is fired. A VA spokesman didn't have immediate comment Sunday.

—Associated Press

MISSISSIPPI

Teens Marching 50 Miles to Honor King

A group of teenagers on Saturday launched a 50-mile walk from northern Mississippi to Memphis, Tenn., a tribute to civil-rights leader Martin Luther King Jr. on the 50th anniversary of his assassination.

Six middle school, high school and college students, along with two adult mentors, began their march in Dundee. Their journey on Highway 61 will take them past fields and farms before they meet friends and family on the Tennessee-Mississippi line Tuesday.

The distance represents one mile for each year since Dr. King was slain in Memphis on April 4, 1968. The teens range in ages from 14 to 19. Five are black. One is white.

—Associated Press

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Data Elusive In Shootings By the Police

Two U.S. efforts aim to tally annual number killed to move beyond piecemeal approach

By Zusha Elinson

A deadly police shooting of an unarmed black man in Sacramento, Calif., has spurred fresh protests and again highlighted a long-vexing question: How many people do police kill each year?

There isn't an easy answer.

A Federal Bureau of Investigation effort launched in 2015 to track the number of people killed by police in the U.S. could begin gathering national data next year, but there is no set timetable, officials said. Another effort by the Justice Department's research arm, the Bureau of Justice Statistics, to count arrest-related deaths was supposed to begin in 2016 but has yet to do so.

Federal agencies began drawing up plans for tallies in the wake of mass protests over the fatal police shooting of Michael Brown in Ferguson, Mo., in 2014.

"When something like Ferguson happens, or more recently in Sacramento with Stephon Clark, there is understandable outrage," said Justin Nix, an assistant professor at University of Nebraska Omaha who studies police shootings. "What we need to be able to do is to step back and say, 'How often do these things occur? How often are officers firing their guns?' "

Stephen Fischer, an FBI spokesman, said the bureau doesn't have a precise timetable for beginning the nationwide data-collection program or releasing public reports on the results. He said the bureau tested its system with 100 police agencies last year and is analyzing the results.

The FBI aims to collect data on deaths and injuries caused by police use of force as well as any incident in which a police officer shoots at a someone.

It could begin as soon as 2019, hinging on various bureaucratic approvals and the ability to recruit enough police departments, said Doug Middleton, who chairs the FBI committee overseeing the use-of-force data collection. He said that 1,600 of the nation's nearly 18,000 law-enforcement agencies have voluntarily agreed to submit data so far.

"We are embryonic in our efforts to recruit and we hope that law-enforcement agencies will see the value of being a part of this historic effort," said Mr. Middleton, a former police chief who now serves as deputy county manager for public safety in Henrico County, Va.

The FBI plans to issue public reports with the data much as it does with national crime statistics. These could help identify trends and inform police agencies about what kind of training to give their officers while also informing the public, Mr. Middleton said.

A spokeswoman for the Bureau of Justice Statistics referred questions to another federal agency, the Bureau of Justice Assistance, which is now taking the lead. A spokeswoman for that agency said it is "working with stakeholders to develop the arrest related deaths data collection process" and would outline what it proposes to do in coming weeks.

In the past, the federal government has counted police killings in piecemeal fashion, resulting in incomplete numbers. In 2014, a Wall Street Journal analysis found that among 105 of the nation's largest police departments, about 45% of killings by officers went unreported to the FBI between 2007 and 2012. A 2015 study by the Bureau of Justice Statistics found the bureau and the FBI had each undercounted by about half the number of arrest-related deaths between 2003 and 2009.

Meantime, the Washington Post and the Guardian began keeping their own tallies. The number of deadly police shootings has hovered just under 1,000 annually for the past three years, according to the Post's count.

Criminal-justice researchers say it shouldn't take so long for the government to figure out how to count police killings and that official data would be valuable in understanding how and when police use deadly force. But they also point out that far more than 1,600 agencies would need to report to present a true national picture.

BOB STRONG/REUTERS

The police shooting of Stephon Clark in Sacramento, Calif., which drew protests, has highlighted the lack of data on such incidents.

ALEX FLYNN FOR THE WALL STREET JOURNAL

Teachers at Edwards Elementary School in Oklahoma City prepared protest signs on Friday.

Oklahoma Teachers to Strike

By Michelle Hackman

TULSA, Okla.—Alberto Morejon, a teacher in Stillwater, Okla., created a Facebook group early last month with an idea his colleagues called far-fetched: to re-create the statewide teachers strike in West Virginia that led to 5% across-the-board pay raises.

One month later, the Facebook group Mr. Morejon created has more than 73,000 members and has helped spark a grass-roots labor movement. The threat of a strike here has prompted the Republican-dominated legislature to pass the first tax increase in 28 years to fund a boost in teacher pay.

On Monday, teachers across the state are planning to walk out to demand a bigger pay raise.

Kentucky teachers also plan to protest Monday against a pension bill rapidly passed through the legislature last week that shifts future teachers into a hybrid between a traditional pension and a 401(k) plan. And unions in Arizona and North Carolina are taking steps toward possible actions over pay and benefits.

The strategy is a perilous one, as the unions—already unpopular here in Oklahoma—risk appearing to push their luck by asking for more than the $6,000 average raise awarded them in a bill passed last week.

"A strike is hugely disruptive to families and kids," said Dan Weisberg, CEO of TNTP, a nonprofit group promoting teacher quality. "This is high stakes, and it's of particular risk in low-wage states."

Oklahoma's education budget has fallen by 28% since the 2007-09 recession, according to the liberal-leaning Center on Budget and Policy Priorities, and teachers get paid less than in any other state in the nation.

Oklahoma is one of 13 states that requires a supermajority of votes in the legislature—75%—to pass tax increases.

"There was nowhere left to cut to fund education, and when there is nowhere left to cut because of the deepness of your cuts, people realized the reality," said Leslie Osborn, a Republican representative from Mustang, west of Oklahoma City. Ms. Osborn said she was elected as a "fire-breathing" conservative, but as a former House appropriations chair, she said she realized the tax cuts her party had supported were "devastating" the state.

The $6,000 pay raise, passed by the legislature on Wednesday, would be funded in part through a new 5% tax on oil and gas production, a feat thought unthinkable here several months ago. Unions in the state have demanded a $10,000 raise, and the debate over whether they should accept the smaller sum has divided teachers.

Too Much Digital Privacy Can Pose Its Own Risks

By Jessica Donati

WASHINGTON—The firestorm over **Facebook** Inc.'s handling of personal data raises a question for those pondering a regulatory response: Is there such a thing as too much privacy?

Recent scrutiny of data-analytics firm **Cambridge Analytica** has shown how questionable actors can abuse the power of networks that play an increasingly large role in society. Facebook claims Cambridge Analytica violated its policies, a charge the firm denies. The firm, which counts Donald Trump's presidential campaign among its clients, crunched the data of 50 million Facebook profiles claiming it could predict individual personality traits and make ads more effective.

Legislators, the Federal Trade Commission and other agencies now are considering rules to protect the privacy of users of social networks.

Yet some law-enforcement agencies, including the Federal Bureau of Investigation, and national-security advocates point to a trade-off, noting that too much privacy can be as bad as too little. Bad actors take advantage of both extremes, abusing access to individuals on networks that are too open or freely conspiring on systems that are too closed.

Law-enforcement agencies rely on access to user data as an important tool for tracking criminals or preventing terrorist attacks. As such, they have long argued additional regulation may be harmful.

Telegram is an example of a service offering users complete security. Encrypted from end to end, domiciled in a country out of reach of subpoenas—and very easy to use—the app is among the top choices of people worried about snooping governments and malicious third parties. Telegram's reputation has been a double-edged sword.

Clinton Watts, a senior fellow at George Washington University's Center for Cyber and Homeland Security, said such apps are a big concern for law enforcement. "This is perfect for terrorist groups that want to network, propagate their message and recruit new members," he said.

Telegram is popular in countries like Iran, where it was instrumental in helping the population organize anti-government protests that swept across the country in January. But it also has become the app of choice for Islamic State and other extremist groups, after U.S.-based tech companies like **Twitter** Inc. began cooperating with government agencies, removing accounts and content that promoted violence.

Bad actors can abuse networks that are too open and conspire on closed systems.

Some firms already are adapting to fears of new regulation and offering even greater security than Telegram. Signal, in San Francisco, says it deletes all user information once it is no longer necessary for communication, making it impossible to comply with demands for users' personal data.

That would make Signal more secure than, for example, WhatsApp, the popular encrypted messaging service, which Facebook bought in 2014 and that stores information such as with whom users are communicating and when.

"When we receive a subpoena for user data," Signal founder Moxie Marlinspike posted on Signal's website, we "have nothing to send back but a blank sheet of paper."

Observers warn the #deletefacebook movement will drive more users to these secure systems.

Telegram's founder, Russian entrepreneur Pavel Durov, said the firm recorded 200 million active users in March, a 70% increase on the year. "We don't do deals with marketers, data miners or government agencies," he wrote in a post. "For us Telegram is an Idea: it is the idea that everyone on this planet has a right to be free."

Mr. Durov has relocated the company several times since leaving Russia, where it faces a court order to turn over encryption keys to the intelligence services. It is now based in the United Arab Emirates.

Telegram's terms are simple: No calls to violence, porn or copyright infringement on public channels. The app can't take action on private channels because all private content is encrypted and largely inaccessible even to the company. The Telegram press team didn't respond to requests for comment, but the company says it closes hundreds of public channels every day that promote violence.

Mall Vacancies Reach Six-Year High as Sector's Slump Deepens

By Peter Grant

Empty space in regional shopping malls reached a six-year high in the first quarter, adding further stress to regions being hit by a retail earthquake that is shaking up the job market across the U.S.

The vacancy rate in big U.S. malls increased to 8.4% in the first quarter of 2018, up from 8.3% in the fourth quarter and the highest since the fourth quarter of 2012, according to real-estate data firm **Reis** Inc., which studies 77 metropolitan areas.

Meanwhile, neighborhood and community shopping centers in 41 of the 77 areas experienced an increase in vacancy during the 12 months ended March 31.

The numbers show that brick-and-mortar malls and shopping centers continue to be hurt by shifting consumer spending patterns, particularly the increasing use of online retail. Numerous department stores and other retailers that traditionally have been mainstays of shopping areas have been contracting or have failed.

Reis reported that retailers occupied 453,000 more square feet of shopping center space at the end of the first quarter than the fourth quarter of 2017, but that amount of "absorption" was the lowest for any quarter in more than five years. The completion of 712,000 square feet of new shopping center space also was "much lower" than average, Reis said.

"The first quarter tends to see the lowest activity," the Reis report said. "However, this was an unusually slow quarter for retail leasing and construction."

The weakness in the retail real-estate sector comes at a time of overall growth in the U.S. economy. Store and shopping center closings have been particularly painful to small cities that have been reliant on the sector for jobs and taxes.

The trend is attracting increasing scrutiny from elected officials. State governments have been enacting new laws to require Amazon.com Inc. and others to collect sales tax on online purchases so physical stores aren't disadvantaged.

Last week, President Donald Trump renewed his attack on Amazon over its business practices and economic impact in a tweet. Mr. Trump also has targeted Amazon Chief Executive Jeff Bezos, owner of the Washington Post.

Amazon declined to comment on the tweet. The company has pointed out that it now collects sales taxes on its own inventory in all 45 states that have such a tax.

The impact of the weak retail real-estate sector was on full display on Wall Street last week when Brookfield Property Partners LP and GGP Inc. announced a deal in which Brookfield will buy the roughly 66% stake in the mall owner it doesn't currently own. The price of $23.50 a share was lower than many expected and was interpreted as a sign that even the highest quality malls that GGP owns are being hurt.

Reis reported that the overall neighborhood and community shopping center vacancy rate remained unchanged in the quarter at 10% compared with the fourth quarter of 2017 and up slightly from 9.9% one year ago.

Shopping Shakeout

Vacancy rate in U.S. regional malls

Source: Reis Inc.

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Trump Signals He Won't Deal on DACA

In Easter Day tweets, president hits Mexico on its border controls; warns of 'caravans'

By Andrew Ackerman

WASHINGTON—President Donald Trump suggested Sunday he was ruling out a deal with Democrats to legalize hundreds of thousands of undocumented immigrants brought to the U.S. as children, calling on GOP lawmakers to instead toughen "our dumb immigration laws."

In a series of morning tweets, Mr. Trump said "NO MORE DACA DEAL," a reference to the Obama-era Deferred Action for Childhood Arrivals program, which the administration announced last fall would end on March 5.

Leading up to the deadline, Congress and the administration were unable to agree to a deal on the fate of the roughly 690,000 immigrants shielded from deportation under the program. Meanwhile, two federal judges issued injunctions blocking plans to end it for now and ordered administration officials to continue to process renewals. As a result, Congress doesn't face an imminent deadline to act, and lawmakers appear to have given up trying for now.

Mr. Trump had sought a deal that would give DACA-eligible people a path to citizenship in exchange for a set of conservative changes to immigration policies. He rejected a deal that would give him $25 billion for a border wall and other security measures as well as the DACA legalization because it didn't also restrict family-based immigration and end the diversity visa lottery, which gives people from underrepresented countries a chance to come to the U.S.

PABLO MARTINEZ MONSIVAIS/ASSOCIATED PRESS

President Trump criticized Mexico on Sunday. He is shown with family arriving for church in Florida.

In his tweets Sunday, Mr. Trump rebuked Mexican authorities for "doing very little, if not NOTHING" to stop immigrants "flowing into Mexico through their Southern Border, and then into the U.S."

Mr. Trump, in Palm Beach, Fla., also said before entering an Easter church service Sunday that "Mexico has got to help us at the border."

"A lot of people are coming in because they want to take advantage of DACA," he said.

People arriving in recent years, and future migrants, aren't eligible for DACA.

He also tweeted that U.S. Border Patrol agents are "not allowed to properly do their job," citing "ridiculous liberal (Democrat) laws." "Getting more dangerous. 'Caravans' coming."

"Time and time again, the President has walked away from bipartisan proposals that are exactly what he asked for," said Drew Hammill, a spokesman for House Minority Leader Nancy Pelosi (D., Calif.) "When an agreement to protect the Dreamers is reached, it will be despite this President rather than with his leadership."

—Laura Mecker and Louise Radnofsky contributed to this article.

IOWA

Continued from Page One

nounced. If every unemployed person in the 12-state region filled an open job, there would still be more than 180,000 unfilled positions, according to the most recent Labor Department data. The region is the only area of the country where job openings outnumber out-of-work job seekers.

"The crux of the problem is that we don't have the people here," said Dave Zrostlik, president of commercial truck manufacturer Stellar Industries Inc., based in Garner, a rural community of about 3,000 people near Mason City.

The labor shortage is hurting Stellar's bottom line. "We've got the biggest backlog of orders ever," said Mr. Zrostlik, as he walked past an assembly line sitting unused because he can't find the workers for a second shift. Normally, his 450-employee company fills orders in about eight weeks. Today, it takes 18 weeks or more.

With about 28,000 residents, Mason City is the largest municipality in about a 100-mile radius. It supports industries such as manufacturing, construction and agriculture. A sign at an Arby's restaurant on the highway from Mason City to Garner proclaims, "If you're smiling, we're hiring."

Companies in rural areas are more likely to report their applicant pool is limited, the Federal Reserve Bank of Atlanta said. Controlling for other factors, such as the size of a business or education level required for a job, 68% of rural firms reported too few applicants for open jobs, versus 57% of employers in urban areas.

Compounding the issue: The Midwest has seen an outflow of residents. A net 1.3 million people living in the region in 2010 had left by the middle of last year, according to census data.

The area also attracts fewer immigrants than the rest of the country. As a result, Midwest employers are more dependent on filling jobs with workers who already live there.

David Swenson, a regional economist at Iowa State University, doesn't believe Iowa suffers from a skills gap. More job training programs are a "solution to a problem that doesn't exist," he said. "Thinking that it's going to solve rural labor issues is misguided."

Beth Townsend, head of Iowa's department of workforce development, said Iowa has an abundance of low-skilled workers but is facing a gap when it comes to jobs that require some specialized training.

"We've got a lot of adults who could be easily upskilled," she said. In particular, she is trying to get more disabled people or ex-convicts into the workforce because they often face more hurdles in finding employment.

Iowa's 2.9% unemployment rate has already drawn thousands of workers off the sidelines. The share of Iowa adults working or seeking work was 67.9% in February, nearly 5 percentage points higher than the national average, U.S. Labor Department data show. North Dakota, Minnesota, Wisconsin and Kansas similarly have a relatively high rate of adults in the labor force.

That suggests many potential workers on the fringe of the labor market have come back. And those who aren't working now may not be for other reasons, such as staying home with children or a lack of transportation.

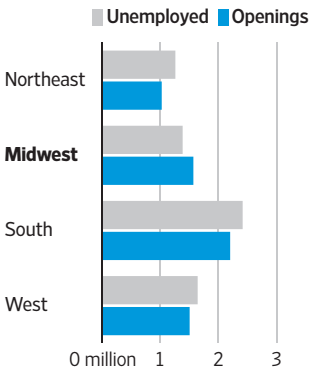
"If someone needs to buy a car and commute 60 miles to take a job in a rural community, they may find it's not worth taking the job," said Carl Van Horn, director of the John J. Heldrich Center for Workforce Development at Rutgers University.

Eric Sauey, chief executive of Seats Inc. in rural Reedsburg, Wis., says that as his business making seats for commercial vehicles has grown, it has become harder to find the workers he needs. He is competing with other industries in his town of 9,200, like health care and carpentry, for the same pool of workers.

His company trains employees internally. In fact, Mr. Sauey said he would rather his employees weren't trained externally before they get to his factory. "We'd rather people not have any experience because then they're not bringing bad habits with them," he said.

Ready Workers

Number of unemployed and job openings in January 2018, by region



Note: Seasonally adjusted
Source: Labor Department
THE WALL STREET JOURNAL.

SHAYNDI RAICE/THE WALL STREET JOURNAL

Kevin Johnson teaches welding to new hires at Stellar Industries in Garner, Iowa. But the company hasn't had many new workers.

COAL

Continued from Page One

plea succeed, it could protect thousands of jobs at nuclear and coal plants, as well as their suppliers. But it would hurt rival energy businesses and could raise electricity prices for companies and consumers across the Midwest and mid-Atlantic states. That poses significant risk to Mr. Trump by antagonizing supporters among electricity users and companies in the oil-and-gas industry that have become primary suppliers to power plants.

A broad alliance formed last year opposes a bailout for nuclear and coal plants. The group includes traditional Republican allies in oil, gas and manufacturing that have joined in an unusual pairing with wind and solar producers and environmentalists.

This alliance is a rising power in the energy industry. Steadily improving technology and the shale-drilling boom have made natural gas, wind and solar the growing sources of electricity.

Natural gas recently became the most common source of power, accounting for 32% of the nation's electricity generation in 2017, up from 17% around the turn of the century. Coal's share fell over the same period to 30% from 50%.

The result is that coal- and nuclear-power plant operators are struggling, creating political pressure for federal and state leaders to consider bailouts or tax incentives to slow that shift and to stop even more plants from closing.

"It's urgent," said Energy Secretary Rick Perry in an interview last year. "It is one of the highest priorities and one of the greatest concerns, to make sure we don't lose these plants."

FirstEnergy's gambit has implications well beyond Ohio, and might affect dozens of nuclear and coal-burning plants owned by other companies across about a dozen states. There has been no outpouring of support from rival power companies in the region that would be affected, and some outright oppose its request to the administration, advocating that governments avoid giving bailouts and disrupt the competitive markets that have led to cheaper, cleaner electricity. Government approval would set an important precedent.

FirstEnergy delivered its appeal to the Energy Department the morning after it announced plans Wednesday to close three struggling nuclear-power plants in Ohio and Pennsylvania by 2021 if it can't sell them.

One of FirstEnergy's big coal suppliers is Murray Energy Corp., which warned in personal letters to the White House last year that bankruptcy at an arm of FirstEnergy could also push its mines to their own financial brink. On Sunday Murray Energy chastised the federal government for failing to intervene sooner.

Murray Energy and its controlling owner, Robert Murray, have been generous donors to Mr. Trump's political groups, federal records show, and Mr. Murray's letters last year made the same request for emergency action that FirstEnergy did in its formal request Thursday.

FirstEnergy and Murray have warned financial troubles could lead to a national-security risk by leaving the grid too reliant on natural gas. While it may be cheap now, it is historically one of the most volatile commodities and, with fewer competitors, prices might be vulnerable to surges should supplies be disrupted, they say.

"Immediate action is needed," wrote FirstEnergy lawyers in their appeal, to ensure that nuclear and coal receives "compensation commensurate with the value it provides to the Nation."

Research from Mr. Perry's Energy Department has also stressed the need for nuclear or coal to assure a reliable and diverse mix of fuels for the power grid.

Those claims are disputed. Several states have surplus capacity, and the grid's mix of fuels is one of its most diverse ever. Competitive markets have helped lower wholesale prices nationwide, and developers are building new capacity anyway, deploying newer, more efficient technology.

"For FirstEnergy to cry wolf on the issue of grid reliability is irresponsible and is the company's latest attempt to force consumers to pay for a bailout," said Todd Snitchler of the American Petroleum Institute, which represents the oil-and-gas industry and opposes the FirstEnergy request of the government.

The cost of emergency federal intervention would indeed fall to consumers. FirstEnergy's request would force the market's biggest grid operator, PJM Interconnection LLC, to take supply from nuclear and coal-fired plants. It would have to set prices that guarantee profits for those plants, with retail and industrial electricity consumers ultimately picking up the tab.

A broad alliance formed last year opposes a bailout for nuclear and coal.

Mr. Perry had made a similar proposal in September, ordering a review at the Federal Energy Regulatory Commission, which oversees interstate, wholesale power markets. FERC rejected the plan in a unanimous ruling.

FirstEnergy's move sidesteps FERC with an appeal directly to Mr. Perry.

Critics questioned the legitimacy of FirstEnergy's claims and their timing. The plant closings it announced Wednesday are at least two years away, and it said it would reconsider if it gets government help. If it does, rate increases could be huge, said John Hughes, chief executive of the Electricity Consumers Resource Council.

"It's silly because there's such a surplus of power out there," Mr. Hughes said.

—Julie Bykowicz contributed to this article.

FirstEnergy Units File for Bankruptcy

FirstEnergy Corp. placed a fleet of power-generation businesses into chapter 11 bankruptcy, underscoring the financial pressures on the nation's coal and nuclear power-plant operators.

The Saturday chapter 11 filing in U.S. Bankruptcy Court in Akron, Ohio, covers **FirstEnergy Solutions** Corp., which sells power to retail and wholesale customers primarily in the Midwest and mid-Atlantic regions.

The bankrupt FirstEnergy affiliates operate seven power facilities in Midwestern markets where aggressive competition from cheaper gas-fired and renewable energy sources has undercut the economics of traditional nuclear and coal plants.

The Ohio-based company said it would operate those plants normally while state and federal regulators consider its recent requests for a bailout.

The FirstEnergy Corp. parent company isn't part of the chapter 11 case, nor are other company subsidiaries that operate in regulated electricity markets. But creditors are considering asserting claims that the parent failed to honor its financial obligations to the bankrupt units, a person familiar with the matter said.

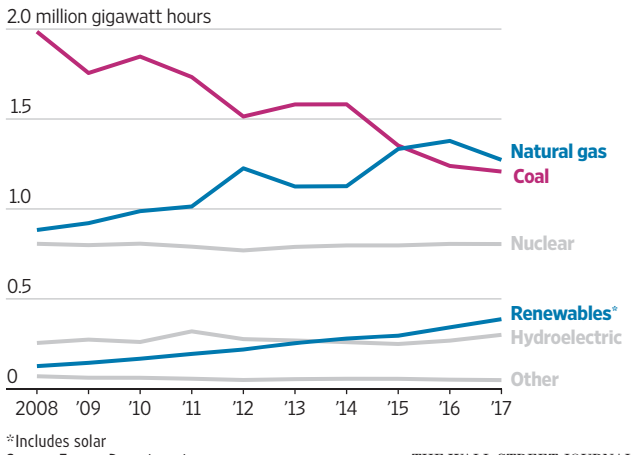
The companies filing for bankruptcy have more than 3,000 employees and total debt of about $3.8 billion, according to court documents. FirstEnergy Solutions alone has $1.5 billion in debt, including a $150 million revolving credit note with Allegheny Energy Supply Co. under which $102 million is currently outstanding and due Monday.

First Energy said the bankrupt units have access to $550 million in cash that will allow them to meet their obligations to employees, suppliers and customers while under court protection.

—Andrew Scurria

A Changing Mix

Electricity from natural gas and renewables in the U.S. has grown over the past decade, while power from coal has declined.



*Includes solar
Source: Energy Department
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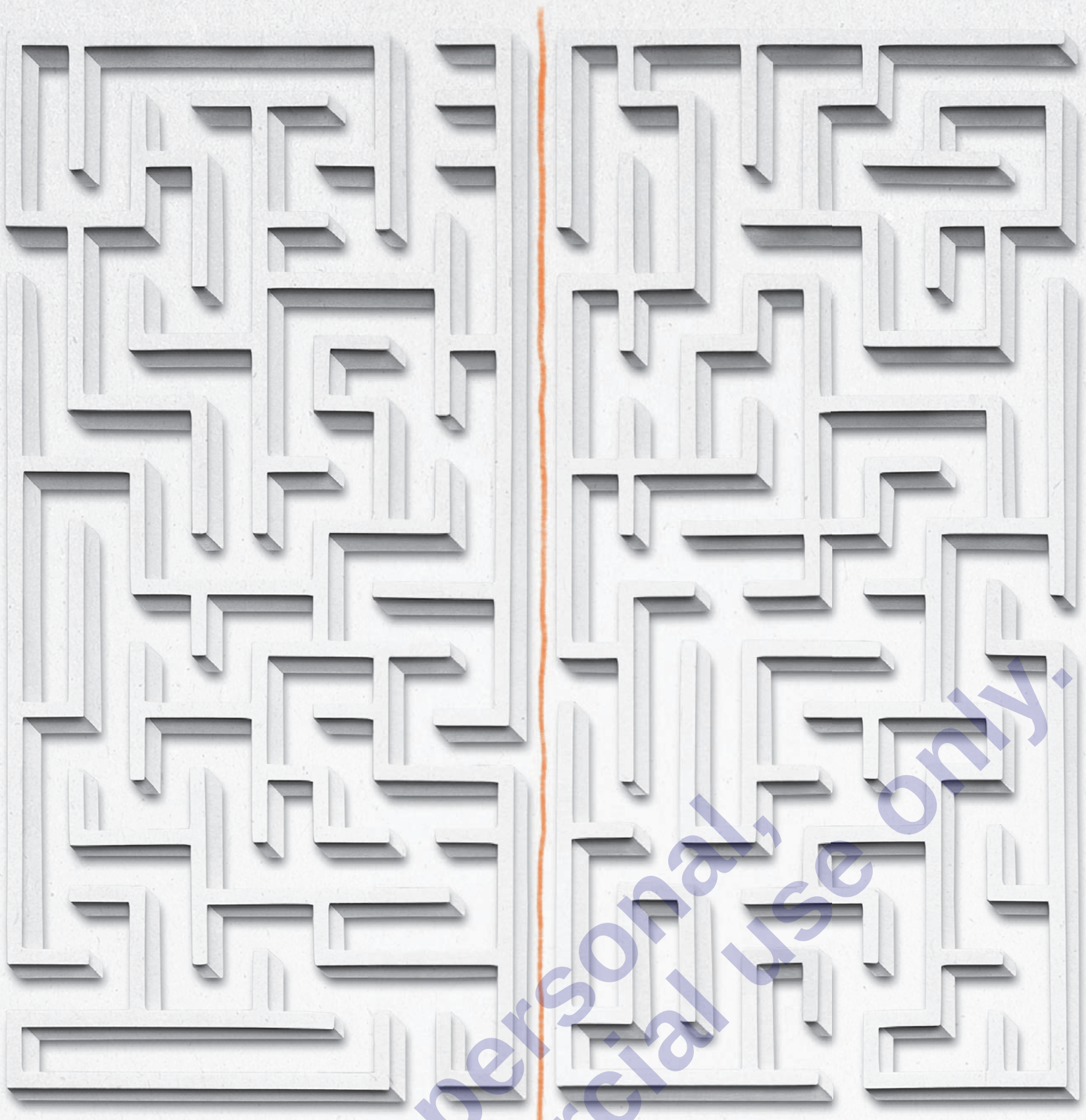

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WORLD NEWS

Allied Drills Test North Korea Diplomacy

Pyongyang's response to U.S.-South Korean exercises could shape outcome of talks

By Jonathan Cheng

SEOUL—U.S.-South Korean military exercises that began Sunday are set to test the durability of a diplomatic opening with North Korea aimed at halting the regime's nuclear program.

The annual exercises will run through the end of April, involving thousands of U.S. troops and 300,000 South Korean personnel.

The Pentagon has described the maneuvers on the peninsula as defensive in nature and said that they would take place on the "same scale, scope and duration as previous years."

The U.S. is expected to refrain from bringing military hardware to the region that has upset the North Koreans in the past, including aircraft carriers and B-1 and B-2 bombers. One element, however, will include a patrol drill by the USS Wasp amphibious assault ship and F-35B stealth fighters, according to a U.S. official.

Resuming the exercises extends the allied campaign of pressure on Pyongyang and could challenge the regime's sincerity in negotiations aimed at convincing it to relinquish its nuclear weapons. A meeting between the two Koreas on Thursday failed to yield an agreement on whether denuclearization would be part of talks between their leaders scheduled for this month.

North Korea has said it views the exercises as a prelude to invasion, and has responded in past years by launching test missiles. In late February and early March, North Korea's state mouthpiece warned that it couldn't tolerate the military maneuvers, calling them "a vicious challenge to the entire Korean nation" that would bring "clouds of war to hang over the Korean Peninsula."

But as a diplomatic opening has developed in recent weeks between Kim Jong Un and his counterparts in Seoul, Washington and Beijing, the North Korean leader has softened his tone.

Senior South Korean officials who met Mr. Kim last month said that he expressed his understanding of the need for the annual exercises, and "promised not to raise issues with this."

North Korean state media hasn't repeated that remark directly, but since that meeting it has dialed down its criticism of the exercises, sticking to vaguer denunciations about South Korea's "cooperation with foreign aggression forces."

Mr. Kim is slated to meet South Korean President Moon Jae-in on April 27, around the time the exercises are to end, and has agreed in principle to a summit with President Donald Trump that is expected to happen before the end of May.

The White House is positioning itself ahead of the planned summit. Mr. Trump replaced some of his closest advisers last month with more hawkish figures, appointing Mike Pompeo as secretary of state and John Bolton as national security adviser. Both have mused openly about replacing the North Korean regime as a solution to the nuclear standoff.

With Mr. Trump and his advisers issuing more credible threats of force than in the past, military preparedness is a priority, making the exercises essential, said Michael Mazza, a research fellow in foreign and defense policy studies at the American Enterprise Institute. But he said it was also crucial to send a nuanced message to Pyongyang ahead of negotiations.

"It is important to show that we're returning to business as usual, that the delay was an aberration rather than a precedent," Mr. Mazza said.

On the other hand, he added, "at a time where there is potential progress in the crisis on the peninsula, we want to be careful not to rock the boat."

North Korea's response to new military hardware, such as the USS Wasp or F-35B fighters, would "show us how serious they are about this diplomatic offensive," Mr. Mazza said.

Patrick Cronin, senior adviser and senior director of the Asia-Pacific Security Program at the Center for a New American Security in Washington, predicted that North Korea's reaction would be more subdued than in years past.

"It is in Kim's interest to remain low-key" ahead of the proposed summits with South Korea's leader and with Mr. Trump, he said.

—Nancy Youssef in Washington contributed to this article.

PRESS POOL

North Korean leader Kim Jong Un, left, and South Korea's Culture Minister Do Jong-hwan attended a show in Pyongyang on Sunday.

Hundreds of Thousands Take Part in Exercise

The U.S. and South Korea had postponed the joint military exercises, known as Key Resolve and Foal Eagle, earlier this year to avoid overlapping with the Winter Olympics in South Korea.

About 12,200 U.S. and 10,000 South Korean troops will participate in Key Resolve, a command-and control exercise featuring computer-simulated war games. At the same time, about 11,500 U.S. and 290,000 South Korean troops will take part in Foal Eagle, a field-training exercise involving major troop movements, the Pentagon said.

A Seoul defense official said the Foal Eagle exercises would last for about four weeks, while Key Resolve would begin in mid-April and would last two weeks.

Seoul Rolls Out K-Pop as Peacemaker in Pyongyang

By Jonathan Cheng

SEOUL—After an Olympics outreach that helped spark a thaw between South Korea and its nuclear-armed rival in the North, the newest tension-easing technique is K-pop diplomacy.

REPORTER'S JOURNAL

North Korean leader Kim Jong Un and his wife were in the audience Sunday as some of the biggest names in South Korean popular entertainment took to the stage in Pyongyang for the first of two planned concerts ahead of a summit between Mr. Kim and South Korea's president.

Mr. Kim applauded and, after the show, posed for a group photo with the South Korean stars, who were the first K-pop performers to appear in the North in a decade. He told the performers that such concerts should take place frequently, and suggested a show in Seoul in the fall, according to a South Korean pool report.

South Korea's infectious brand of pop music has overcome a formidable language barrier to win large fan bases across Asia, the Middle East and the Americas—and become an important signifier of Seoul's soft power, highlighting the country's economic and cultural rise.

K-pop's use as a tool of rapprochement with the North marks a reversal of the role that South Korean bubble gum pop has often played in inter-Korean politics.

PRESS POOL

South Korean girl band Red Velvet in Pyongyang on Saturday.

For years, the South Korean military has blared K-pop over the border into North Korea alongside denunciations of Kim Jong Un's leadership.

Human-rights activists have spent years smuggling USB drives into North Korea, loaded with information from the outside world—including e-books, an offline Korean version of Wikipedia and, in many cases, K-pop music.

Fueling those efforts has been a belief in the power of what some scholars call "subversive engagement"—that showing people in North Korea the most attractive elements of life outside the socialist country will undercut the Pyongyang regime's grip on its people.

Adam Cathcart, an expert in North Korea history at the University of Leeds in the U.K. who has published scholarly articles on the role of music in North Korean politics, said Pyongyang would likely be careful about who is exposed to K-pop.

The audience on Sunday was most likely the country's better-off citizens, living in the capital—many of whom will be familiar with South Korean music, movies and television dramas.

The North also uses music as a political tool. Since taking power in 2011, Mr. Kim has emphasized updating North Korea's musical landscape with Western-style pop groups like the Moranbong Band, which employs electric guitar solos and drum fills.

Lee Sung-yoon, a Korea expert at Tufts University and a skeptic of engagement with North Korea, compared the K-pop effort to the novelty of retired U.S. basketball star Dennis Rodman's trips to North Korea.

"In the end, ping-pong and sing-song diplomacy are entertainment," said Mr. Lee.

Such moves are "helpless in reshaping government policy, in particular that of dictatorships," he said.

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Pope Francis greets the crowd after Easter Mass at the Vatican.

Pope in Easter Message Pushes Talks on Korea

By Francis X. Rocca

Pope Francis encouraged multilateral peace talks on the Korean Peninsula during his traditional Easter address, ahead of a possible meeting this spring between President Donald Trump and North Korean leader Kim Jong Un.

The pope's traditional Easter message "Urbi et Orbi"—"to the city [of Rome] and the world"—was as usual a global survey of conflicts and crises, including the war in Syria and the economic and political crisis in Venezuela.

In his remarks to a crowd in St. Peter's Square at the Vatican, shortly after celebrating Easter Mass there, the pope voiced the hope that the Korea talks might "advance peace and harmony" and "build relationships of trust within the international community."

Last month, Mr. Trump accepted an invitation to meet with Mr. Kim, in what would be the first time a serving U.S. president has sat down with a North Korean leader, amid growing tension over the Communist country's nuclear weapons. The meeting is expected to take place before the end of May.

From Latin America, Pope Francis quoted a statement from Venezuela's Catholic bishops last month that their country, where shortages of food and medicine have become widespread amid a protracted standoff between President Nicolás Maduro and the political opposition, has become a "foreign land" for its citizens.

Pope Francis also appealed for peace in Syria, now in the eighth year of what he described as an "apparently endless" war.

WORLD WATCH

COSTA RICA

Ruling Party Wins Presidential Runoff

Voters gave a resounding "no" to an upstart evangelical pastor who rose to political prominence by campaigning against same-sex marriage, allowing Costa Rica's governing party to win an easy presidential victory.

While polls had indicated Sunday's runoff would be tight, it wasn't even close. Carlos Alvarado, a novelist and former cabinet minister running for the ruling Citizen Action Party, won by a wide margin.

The Supreme Electoral Council said that with 95% of ballots counted late Sunday, Mr. Alvarado had 61% of the votes, and evangelical Fabricio Alvarado of the National Restoration party had 39.2%.

—Associated Press

GUATEMALA

Former Dictator Rios Montt Dies

Former dictator Efrain Rios Montt, who seized power in 1982, died Sunday, his lawyers said. He was 91.

The U.N. found some 245,000 people were killed or disappeared during Guatemala's 1960-1996 civil war, with the vast majority of the deaths attributed to the army or pro-government groups and tens of thousands of them occurring during his 17-month rule.

Mr. Rios Montt was convicted in 2013 of genocide and crimes against humanity for the massacre of 1,771 indigenous Ixil Mayans by security forces under his command. The ruling was set aside and a new trial ordered. Echoing Mr. Rios Montt's denials, one of his attorneys, Luis Rosales, said, "Here (in Guatemala) there was no genocide."

—Associated Press

KASHMIR

Protests Erupt in Disputed Region

Anti-India protests erupted in parts of Indian-controlled Kashmir Sunday amid fighting between rebels and government forces that left at least 12 militants and three soldiers dead, officials said.

At least four civilians were killed in the latest protests, which broke out after Indian troops launched counterinsurgency operations. targeting mainly the southern parts of disputed Kashmir.

In recent years, Kashmiris, mainly youths, have displayed open solidarity with anti-India rebels. The protests have persisted despite the Indian army chief warning recently that tough action would be taken against stone throwers during counterinsurgency operations.

Thousands of Kashmiris hit the streets on Sunday, chanting anti-India slogans and demanding an end to Indian rule over Kashmir as troops launched anti-rebel operations in three southern villages.

—Associated Press

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Gaza Deaths Put Pressure On Israel

Violence flares in border protest and soldiers open fire, hardening positions

Israel faces a new political challenge in the Gaza Strip after Israeli soldiers fired on at-times violent demonstrators on the border on Friday, killing at least 15, and prompting activists to vow to carry on the protest for weeks.

*By **Rory Jones** in Tel Aviv and **Abu Bakr Bashir** in Gaza City*

Palestinians rallied again on Sunday along the fence dividing the strip from Israeli territory, in what organizers had billed as a peaceful protest demanding the right to return to homes in what is now Israel. More than 1,400 Gazans were injured Friday in the confrontation, including about 740 by gunfire, according to Palestinian health authorities,

Israeli officials challenged the casualty numbers and said the protest was hijacked by Hamas, the organization that governs Gaza and which the U.S. has designated as a terrorist group. The military said it mostly used rubber bullets and tear gas to disperse the crowd on Friday, firing regular ammunition only in response to what it said were attacks by militants among the demonstrators.

Hamas acknowledges it is involved in the protest, but denies it is the principal organizer. The group's leaders have said that Gazans have a legitimate right to protest for a return to their land in Israel.

Israel—which has said that it won't allow significant numbers of Palestinians to return to Israel, because doing so could risk the country's Jewish majority—moved to counter condemnations of Friday's Palestinian deaths from its neighbors Egypt, Turkey and Jordan and calls for an international investigation by U.N. Secretary-General António Guterres.

"Any country having its sovereignty violated would have reacted much more forcefully," Israeli Defense Minister Avigdor Lieberman told Israeli radio on Sunday. He said Israel wouldn't cooperate with any international investigation.

The protest represents a fresh test for Prime Minister Benjamin Netanyahu, who has enforced an economic blockade on Gaza that has hurt Hamas and blunted its ability to target Israel with rockets.

Unlike the Palestinian Authority, which runs the West Bank, recognizes Israel and cooperates with its security forces, Hamas vows to defeat Israel and has long been more inclined toward armed conflict than peaceful protest.

Israel and Hamas fought a brief war in the Gaza Strip in 2014 that left some 2,200 Palestinians and more than 70 Israelis killed, according to the United Nations.

Hamas has said it doesn't want another war with Israel. But a flatlining economy in Gaza has caused many Western officials in recent weeks to warn another round of fighting could be imminent.

"Since they don't want to go to a full-scale war [or] be criticized on their poor governance, they sacrificed people," Amos Yadlin, former head of Israeli military intelligence and director of Tel Aviv's Institute for National Security Studies, said of Hamas.

"I think that Hamas was, and is still, in a very uncomfortable political and financial situation and they realized that this nonviolent activity is the safest way to win popularity," said Ghassan Khatib, a Palestinian political scientist at Birzeit University in the West Bank.

The Israeli military said 10 of those killed were members of Hamas or other extremist groups. Hamas said five of its members died during the protests.

The last round of Israeli-Palestinian peace talks broke down in 2014 and the Palestinian leadership has rejected a White House plan to relaunch negotiations even before it has been formally unveiled.

The protest's organizers say they will demonstrate until May 15, the day after Israelis annually mark the establishment of their state. They have set up tents, portable toilets and other facilities near the Israeli border to encourage Gazans to stay there and keep protesting.

—Dov Lieber contributed to this article.

MOHAMMED SALEM/REUTERS

Palestinian protesters in the Gaza Strip take cover on Sunday from tear gas lobbed by soldiers from the Israeli side of the border.

Shared Videos Are Tool in the Conflict

Israel sought to counter images circulating on social media and on Arab television that showed Palestinians being shot.

In one example of a video shared widely, a Palestinian man, identified by his family as 20-year-old Abdul Fattah Abdul Nabi, was fatally shot in the head as he tried to help another man running away from the border fence, his family said.

"He was thinking it is a peaceful rally. We never expected it was going to be that bloody," Mr. Abdul Nabi's father, Bahjat, said in an interview on Sunday.

Israeli defense officials said the younger Mr. Abdul Nabi was a member of Hamas. Mr. Abdul Nabi's father denied that.

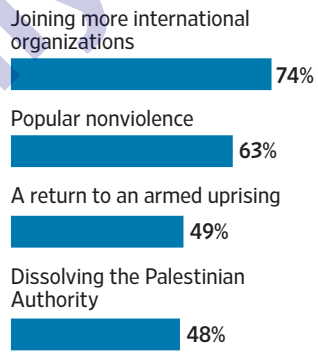
Israeli officials also questioned the authenticity of the videos posted online and released their own of men they said were Hamas militants trying to breach the security wall between Gaza and Israel.

They distributed videos they said showed Palestinians throwing stones and firebombs at the fence and running toward it.

Shifting Attitudes

As peace talks with Israel stall, more Palestinians are supporting protests over armed resistance.

Percentage of Palestinians who support:



Source: Palestinian Center for Policy and Survey Research poll of 1,200 adults interviewed face-to-face in 120 randomly selected locations in the West Bank and Gaza Strip, conducted March 14–17. Margin of error +/– 3%.

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U.K.'s Labour Accused Of Bias

By Wiktor Szary

LONDON—Britain's opposition Labour Party is facing accusations of anti-Semitism that reached the party's senior leadership and triggered the resignation of a close ally of party leader and veteran leftist Jeremy Corbyn.

The controversy threatens to undermine the party's strong links to Britain's Jewish community and could spell trouble for Mr. Corbyn

The row intensified after Luciana Berger, a Labour lawmaker and parliamentary chair of a Jewish organization affiliated with the party, unearthed on March 23 a social media post from 2012 in which Mr. Corbyn appeared to criticize the removal of a London mural depicting a group of bankers over a game of Monopoly, some of them resembling caricature-like Jews.

Challenged about his comment by Ms. Berger, Mr. Corbyn said on the same day that he regretted not having looked more closely at the image when he commented on the removal, saying the mural was disturbing and anti-Semitic. "I wholeheartedly support its removal," he said. He also said his 2012 remarks were general comments referring to freedom of speech.

The crisis intensified further after the emergence last week of an email from Christine Shawcroft, a Corbyn ally, in which she defended a party activist who had posted Holocaust-denying material on social media.

She later said she had not seen the material posted before sending the email, apologized and stepped down as chief of an internal Labour body that arbitrates disputes and from the party's governing body.

New Face of Hate Visits Germany

By Bojan Pancevski

MUSTAFAH ABDULAZIZ FOR THE WALL STREET JOURNAL

Wenzel Michalski at home in Berlin with his son, Solomon, who was the victim of anti-Semitic violence in his Berlin school.

BERLIN—Solomon Michalski loved going to his new school on a leafy Berlin street because it was vibrant and diverse, with most students from migrant families. But when the teenage grandson of Holocaust survivors let it slip that he was Jewish, former friends started hissing insults at him in class, he says. Last year some of them brandishing what looked like a gun took him aside and said they would execute him.

It was no isolated occurrence. The police registered 1,453 anti-Semitic incidents in Germany last year, more than in five of the previous seven years, and organizations including the American Jewish Congress say fewer than a third of such incidents are reported. Their stubborn persistence in the country where the Holocaust was plotted and executed is raising concern that decades of work to eradicate anti-Semitism are slowly being undone as prejudice against Jews spreads beyond its traditional home in the far right.

"I fear that a new generation of anti-Semites is coming of age in Germany," Josef Schuster, head of the country's chief Jewish organization, told journalists on Wednesday.

German police attribute more than 90% of cases nationwide to far-right offenders. But Jewish activists and victim representatives say the data are misleading because police automatically label any incident where the perpetrators aren't known as coming from the far right.

The problem goes beyond Germany. The recent murder of an elderly Holocaust survivor in Paris in what prosecutors said was an anti-Semitic attack has fueled a perception that anti-Jewish acts—from casual insults to brutal violence—are on the rise across Europe and that governments appear unable to do much about it.

Levi Salomon, head of the Jewish Forum for Democracy against Anti-Semitism, a Berlin-based organization that documents hate crimes against Jews, says most violent incidents these days come from Muslim perpetrators.

"It is wrong to generalize or to stigmatize Muslim communities," Mr. Salomon said. "But to say there is no specific problem there is even worse. We need to devise urgent strategies to deal with this."

Others paint a more nuanced picture, saying prejudice and stereotypes harbored by recent migrants from largely Muslim countries have added to an existing undercurrent of anti-Semitism among some Germans and older migrant communities from Eastern Europe, resulting in an increasingly threatening environment.

Liam Rückert, a 15-year-old Jewish student in Berlin, said he was recently mobbed by Arab and Polish classmates. And Klara Kohn, a 16-year-old whose father survived the Auschwitz death camp and Dachau concentration camp, said German students at her elite school in Hanover had taunted her, chanting "gas for the Jews!"

Heinz-Peter Meidinger, head of Germany's teachers association, said a particular hot spot of anti-Semitism seemed to be schools, many of them in Berlin, where children from migrant families made up between 70% and 100% of students.

Anti-Semitism crops up among migrants in the land where the Holocaust was plotted.

"The key part of the problem are the parents," Mr. Meidinger said. "But we can't reach them as teachers. Most of them don't speak German and they are sometimes hostile toward authorities." He said there was a tendency among Arabic- and Turkish-speaking communities to view Jews in Germany in the context of the Israeli-Palestinian conflict.

In an interview at his family's home this week, Solomon Michalski said his tormentors were "actually cool kids, but they get this from their parents."

The notion that some among the well over a million recent arrivals—many from Syria, where criticism of Israel laced with anti-Semitic clichés has been part of the official discourse for decades—might be harboring prejudice about Jews has presented authorities here with a dilemma.

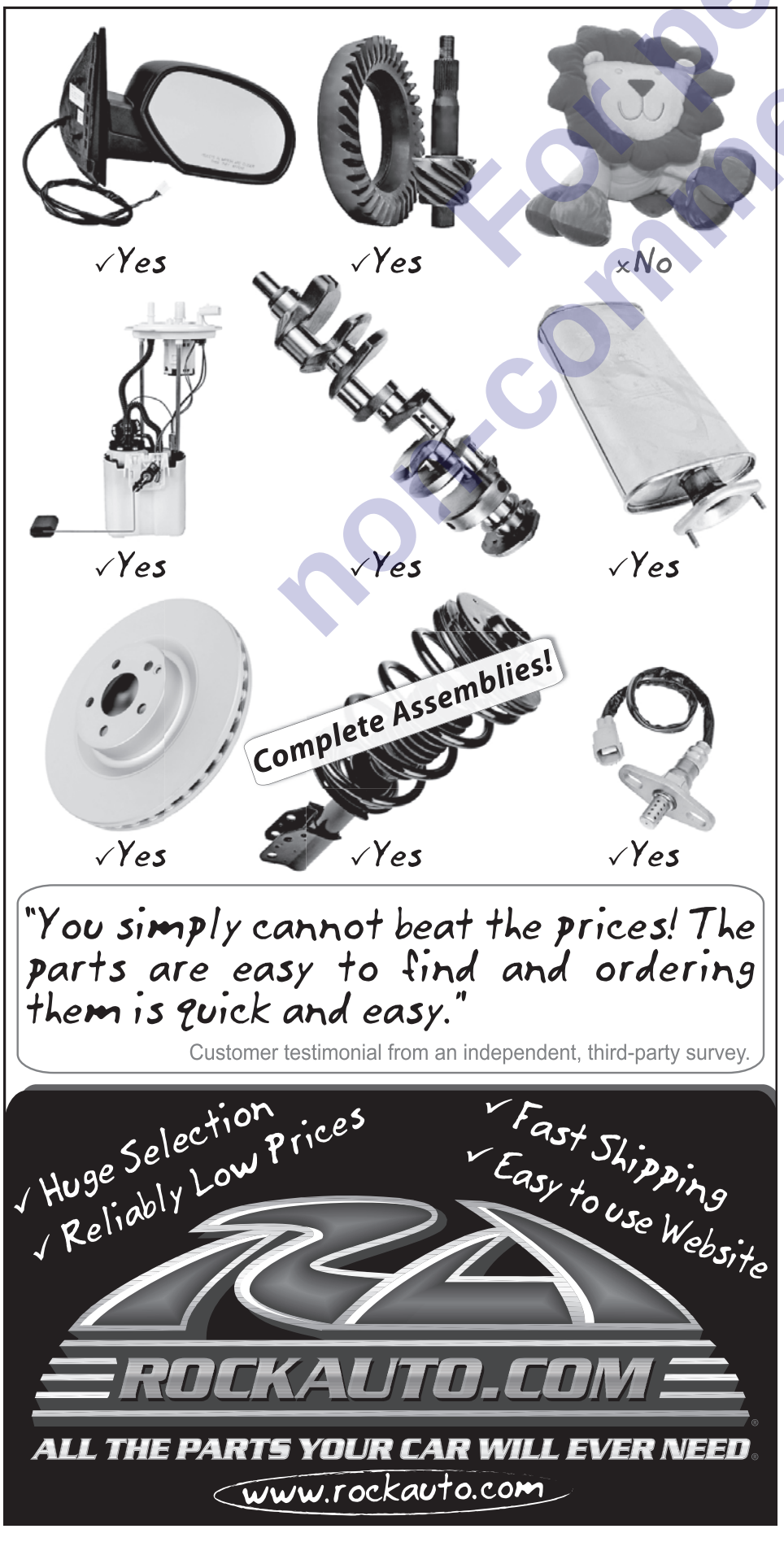
Jewish representatives say Germany's tried and tested tool set to combat anti-Semitism through education is failing to reach communities that often don't speak German and know little about Nazism and the Holocaust.

With the media now increasingly pointing the finger at Muslim perpetrators, some Islamic organizations are taking steps to combat prejudice among their members.

Aiman A. Mazyek, president of the Central Council of Muslims, said it would make 10 imams available to join with rabbis and visit problematic Berlin schools.

"There is racism attached to every religion," Mr. Mazyek said. "Our job is to help remove racism from our midst and educate people about our religion, to explain that we are devoted to living in respect, peace and tolerance with other religions."

—Ayla Albayrak in Berlin contributed to this article.



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RETIRE

Continued from Page One

Throughout Latin America and Asia, decades of falling birth rates and growing life expectancies have produced more retirees with fewer workers to underwrite their care. For government policy makers, this means challenges as burgeoning pension and health costs leave less money for economic development.

Population aging is well known in advanced economies such as the U.S., where falling fertility after the post-World War II baby boom long ago tightened the worker-to-retiree ratio. The U.S. was already wealthy, however, with extensive infrastructure and institutions in place.

That's not the case in Brazil. Chronic housing shortages have left every major city dotted with makeshift settlements known as *favelas*. São Paulo's subways have one-fifth the mileage of New York's, although São Paulo has 40% more people. Nationally, more than half of sewage goes untreated. The average adult has just eight years of formal schooling.

Tackling such growth-impeding problems has long been a government priority, but the financial firepower for it is set to erode. Retirement outlays already eat up 43% of Brazil's national budget, and health care about 7%, while two expenditures that are critical to economic development—education and infrastructure—claim only about 3% each.

Retirement outlays already consume 43% of Brazil's national budget.

The social security system's revenue shortfall widens each year as the worker-to-pensioner ratio shrinks. The United Nations projects that by 2050, the number of potential workers per retiree in upper-middle-income developing countries such as Brazil will tumble from the 2015 figure of seven to just 2.5.

Only Japan has ever faced a shift of this scale in a similarly short period, and it now has one of the world's most indebted governments.

In the U.K. and U.S., it took 95 years and 82 years, respectively, for fertility rates to fall from above six children per woman to below three. In Turkey this change took just 27 years, in Brazil 26 and in China only 11.

Credit-rating firms are getting anxious. Standard & Poors estimates that unless there are major changes to publicly funded pension and healthcare systems, population aging will help drive net government debt in the biggest emerging economies to extraordinary levels—307% of gross domestic product in Brazil, 274% in China, 262% in Russia and 341% in Saudi Arabia by 2050.

Their sovereign bonds would be rated junk in that scenario, said an S&P analyst, Marko Mrsnik. The most indebted major economy at present, Italy, has net debt just 120% of GDP. "It is very important to understand the situation and to act earlier rather than later," Mr. Mrsnik said.

Political pitfalls

The good news, experts say, is that policy makers can tackle social-security deficits from various angles: They can raise the minimum retirement age, increase the number of years that workers must pay into the system, or reduce payouts. The bad news is that such measures tend to repel voters.

The political pitfalls are on display in Brazil, where the average worker retires around age 55. President Michel Temer's government in February shelved a year-long push to overhaul the deficit-ridden social security system. Its failure partly reflected low approval ratings for Mr. Temer, who faces corruption accusations, which he has denied, but it also underscores the political reality that once bestowed, entitlements are hard to scale back.

"People don't take to the streets in favor [of a pension overhaul], only against it," said Marcelo Caetano, Brazil's social-security secretary and the architect of the shelved proposal.

Vastly higher healthcare costs also loom, in part because of poor countries' success in reducing infant and child mortality.

Children under five now account for just 2.9% of deaths in Brazil, down from 35% in 1976. This partly reflects the low cost of treating most childhood ailments; diarrhea, once a major killer of small children, can be treated with rehydration salts that cost as little 10 cents a packet.

Older people's ills hit the budget differently. "If you save people from dying of cheap things, they die of expensive things," said Lant Pritchett, a development economist at Harvard University. "Doing an open-heart surgery on a 72-year-old man—you can't pretend that's going to have future productivity benefits."

Shifting safety net

In the old days of high birth rates and large families, an elderly farm hand could often count on a small army of children for support after hanging up his pitchfork.

Nowadays, that task falls to the government. But in countries where informal labor is rampant, authorities wrestle with a gut-wrenching decision: whether or not to cover aging citizens who didn't contribute enough to social security.

Brazil, where formal jobs are rare outside of cities, chose to do so. Its 1988 constitution said everyone had a right to health care and retirement benefits and made it the state's duty to provide them.

Such benefits were financially fanciful in that era of raging inflation, but they were increasingly granted under the leftist Workers' Party government that took over in 2003. Fueled by a commodity boom, it granted pensions to millions of peasants and informal workers who hadn't paid in. It also nearly doubled the minimum monthly wage, which the constitution set as the floor for retirement checks.

LIANNE MILTON FOR THE WALL STREET JOURNAL (2)

Above: Retired teacher Mariuza da Conceição Aparecida had to turn to food banks when the state was late paying her pension. Below: Lack of maintenance funds idled many of Brazil's police patrol cars in Rio de Janeiro.

The upshot: Rural workers paid about $3 billion in social-security taxes for the 12 months through September 2017, while rural retirees drew about $36 billion in benefits.

The 'Viagra effect'

In another fiscal nightmare, various pension systems for government employees often promise them benefits equal to their full salaries at retirement.

Take the late João Mansur, a legislator in Paraná state. Because he served as interim governor for 39 days in 1973, he was able to retire with a pension now topping $9,000 a month because of inflation adjustments. He died in 2012, but his widow continues to receive the payouts. Bereaved spouses are usually entitled to their partner's pensions, providing an incentive for young women to marry old men that Brazilians call "the Viagra effect."

An especially generous privilege belongs to the unmarried daughters of military men. When former military dictator Emílio Garrastazu Médici was on his deathbed in 1984, his biological granddaughter, Cláudia Médici, chose to be adopted by him as a daughter. More than three decades after his death, she continues receiving his pension. A lawyer for Ms. Médici said the general loved her like a daughter.

Courtesy of such largess, Brazil's pension outlays already match levels in some countries that have more elderly. Brazil spends 13.1% of its GDP on pensions, which is about the same as Greece, where the share of residents over 65 is more than twice as large.

Rio de Janeiro state, where the median age is three years higher than the country as a whole, suggests what is in store for emerging economies if they continue to spend as though they'll never grow old.

Though just 11% of Rio's population is 65 or older, the state government's payroll already includes more pensioners than working civil servants.

Social-security payouts for nongovernment workers are capped at the equivalent of $1,700 a month, but most government workers get pensions equaling their full pay when they last worked, indexed to inflation. The highest paid receive around $10,000 monthly, in a country where the average worker earns less than $700 a month.

Cost of benefits

On a recent weekday, most of the people coming and going from a downtown Rio office of the state pension fund, known as Rioprevidência, were widows of state-government employees collecting survivors' pensions. In Rio state, unmarried daughters of civil servants who died before 1998 can receive a parent's pension.

Payroll taxes cover less than a third of Rioprevidência's expenditures. To cope, the state government sometimes delays checks that are owed to hundreds of thousands of people, not only retirees but also current government employees, from nurses to police.

Walter Cecchetto, a 53-year-old IT technician at a state government office, said the situation left him with thousands of dollars in high-interest debt he had to take on when the government couldn't meet its payroll.

"The outcome of the state's financial crisis for me was a decline in my quality of life, indebtedness, depression and an enormous anger at the government," Mr. Cecchetto said.

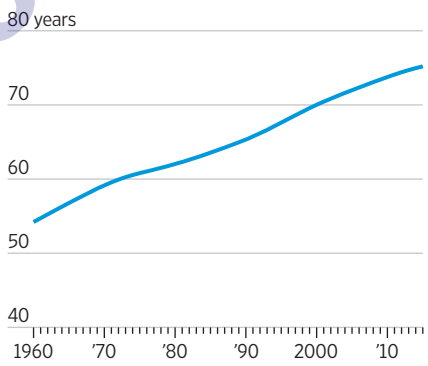
Schools and universities periodically close. Public hospitals are perpetually short on supplies. At one point late last year, scarce funds to maintain police patrol cars kept half of them off the streets.

Investment spending by the state government has ground to a halt.

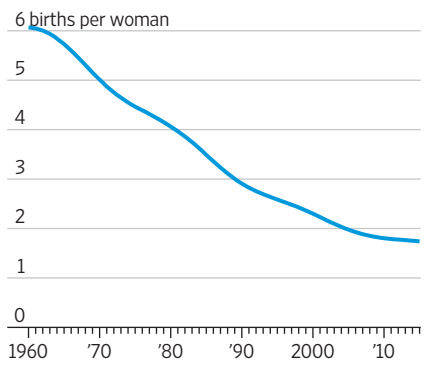
Gustavo Barbosa, the former state finance secretary, said he doesn't know when the state will be able to resume such projects. "I have to pay light bills here every month. I have to pay for gasoline for police cars. I have to pay rent," he said. Investment "is what is compromised when there's no money."

Demographic Pincer

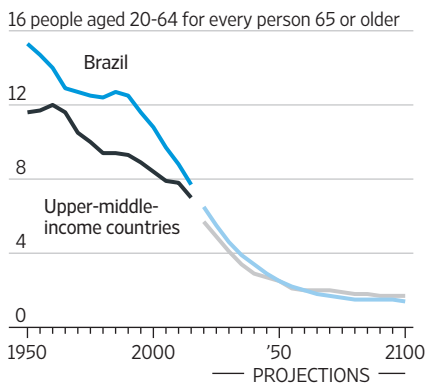
As Brazil's economy developed over the decades, life expectancy has risen...



...while fertility rates have declined...



...leading to fewer workers to support the elderly. A gaping social-security deficit has ensued.



Sources: World Bank (life expectancy, fertility); United Nations

THE WALL STREET JOURNAL.

GULL

Continued from Page One

Frolic," an annual event in Chicago, 175 birders gathered to see a multitude of different species on a single day. Amar Ayyash, a math professor who also studies gulls, knows better than to call out certain birds in flight, because identification can be so tricky.

But at this year's event, he got a good look at a Thayer's gull, a subspecies of the Iceland gull, and called it out. Almost immediately, the bird landed and he realized he had the wrong subspecies.

"I said, 'Uh, I take that back,' Mr. Ayyash. "This is a Kumlien's gull."

All winter, Mr. Ayyash gets up at 4 a.m. once a week and drives two hours to a frigid Wisconsin lake reeking of dead fish to count the gulls.

He peers at up to 10,000 gulls each trip though his binoculars, searching for rare birds amid everyday birds. He has been doing it for years. But one or two birds stump him every time.

"You'd be surprised how often the top gull watchers look at a bird, and say, 'We don't know what that is,'" he says.

"The fact that it's challenging makes it appealing," he says. While most people take up birding because it's relaxing, "people who get involved with gulls bring on this added responsibility, added pressure, added ambition to their lives."

The arrival of DNA sequencing has transformed ornithology, settling many contentious identification questions. Scientists rely increasingly on bird genomes as they build family trees.

But the large gulls that pose the biggest identification challenges descended from a common ancestor relatively recently and share more DNA than most other birds.

It would take months of in-depth DNA examination to tell the difference between two species, said evolutionary biologist Irby Lovette of the Cornell Lab of Ornithology.

KIMBALL GARRET

Amar Ayyash compares two subspecies of the Mew gull at the Natural History Museum in Los Angeles.

Years ago, Mr. Reid, the Texas birder, spotted a bird with strange markings at a sewage treatment plant in Fort Worth. He thought it could be a Caspian gull, which would have been a stunning find in Texas. But he wasn't sure. So he went to Bahrain for a week to observe Caspian gulls in their native setting.

He returned and still wasn't sure.

"The appeal of the gull is that they present a very unusual opportunity," Mr. Reid says. Other birds have calls or songs that identify them, he says, but gulls must be sorted out by looking at them.

He adds: "There is a certain type of birder drawn to the challenge of that."

Gull watching is an acquired taste. "The way I refer to gulls is that they are like single malt Scotches," says educator Kevin McGowan of the Cornell Lab. "Some people go wildly crazy over them, and other people, don't know why you'd taste them in the first place."

Alvaro Jaramillo has spent 25 years observing gulls in California's Half Moon Bay, a birding hot spot south of San Francisco. A year ago, a fellow birder called him to say a Ross's gull, a rare Arctic creature, had been spotted there. The problem was Mr. Jaramillo was on his way to the airport for a trip with his son's hockey team.

"I made the calculation: 'Could I drive back and look at it, and make the flight?'" he recalled. He decided he couldn't and hoped the gull would still be there when he returned four days later.

Each morning, he got up and checked his email. Midway through the trip, a Peregrine falcon ate the rare gull.

"The good news is that my kid's team won the tournament," Mr. Jaramillo said. His son, who is 14, "has no interest whatsoever in gulls."

Mr. Jaramillo led a birding trip to Japan in February. Participants had the thrill of seeing a Steller's sea eagle, a huge yellow-beaked creature that dwarfs a bald eagle. And they saw the Blakiston's fish owl, another gargantuan bird that can devour a large salmon.

But the highlight of the trip for Mr. Jaramillo came when the other birders weren't there. He spent four days in Choshi, a fishing port, watching gulls. He dined at a 7-Eleven convenience store so he could keep birding.

"It was the No. 1 spot I wanted to go for years," he said. "All the fishing boats come in, and the gulls gather up by the thousands."

Mr. Ayyash, the Chicago professor, is raising a brood of two young birders. "Sometimes I'm running errands with the kids, and we'll stop at a parking lot somewhere and feed gulls. And we'll get 30 minutes with them."

The mathematician says he never stops thinking about gulls for long. When his sister-in-law got married last year in downtown Los Angeles, Mr. Ayyash walked to church in suit and tie carrying his binoculars with his family.

"We're not going to pass up that opportunity of a 10-minute walk and have something go by we can't identify," he said.

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GREATER NEW YORK

New Budget Sets Direction

Albany creates a way to offset U.S. tax bite, gives more to NYCHA; ethics rules untouched

By Mike Vilensky

ALBANY—Gov. Andrew Cuomo and state lawmakers passed a $168 billion budget over the weekend, a spending package that slaps a surcharge on Uber rides in Manhattan, seeks to protect state taxpayers from the federal overhaul and provides new funding for New York City's public housing.

But the plan left out some long-sought measures advocates had pushed for, including ethics laws and new spending oversight, an extension of the statute of limitations for child sex-abuse victims and more traffic-safety cameras.

The budget passed early Saturday ahead of its April 1 deadline after weeks of slow and tense negotiations between Mr. Cuomo, the Democratic-led Assembly and Republican-led Senate.

"We had to restructure our tax code to avoid an attack," Mr. Cuomo said Friday night at the state Capitol before legislators passed the spending plan. The Democratic governor said the Republican-led Congress "launched a missile. We were standing in the target zone."

In total, the budget spends some $26 billion on education and $18 billion on Medicaid, the biggest expenditures annually. Mr. Cuomo said the budget's growth was kept to his self-imposed 2% cap.

The budget isn't purely a monetary plan. Albany lawmakers attach their political priorities to its passage, giving them leverage and a hard deadline. Typically, major legislation won't pass again until June, the last week of the session.

Winners

Since Congress passed the tax overhaul in December, capping federal deductions for state and local taxes at $10,000, Democratic lawmakers and downstate business advocates have expressed concerns the measure would raise tax burdens and could lead higher earners to leave New York or businesses to avoid the state.

They scored a win with a measure in the budget allowing New Yorkers to offset the impacts of losing that deduction by donating to new charitable-contribution funds set up by local governments. Because charitable contributions aren't limited under the tax law the same way state and local taxes are, the move could help New Yorkers decrease their federal tax liability.

Questions remain on whether the IRS will permit the arrangement, but downstate business leaders praised the move. "The governor and legislature have done everything within their power to mitigate any negative impact of the federal tax bill on New Yorkers," said Kathy Wylde, president of the Partnership for New York City, a business group.

Advocates for managerial changes and more money at the ailing New York City Housing Authority got a boost in the budget from an additional $250 million in state funds and the creation of an independent monitor to oversee it.

The public-housing system has faced crumbling conditions and criticisms of its management over its misleading federal authorities about lead-paint inspections.

$168B

Tab for the New York state budget that passed in Albany

"In partnership with the state legislature, the governor has delivered the best budget the tenants of public housing have seen in a decade," said Democratic Bronx Councilman Ritchie Torres.

New York City Council Speaker Corey Johnson fared well in the budget outcome, after having been thrust into the middle of the long-running feud between Mr. Cuomo and Mayor Bill de Blasio.

The budget includes a number of measures Mr. Johnson had sought, including forcing the city to pay $400 million more for the subways, which Mr. de Blasio had resisted.

Losers

The budget came on the heels of a corruption conviction of Joseph Percoco, a former aide to Mr. Cuomo, but it didn't include any state ethics changes or the spending oversight sought by state government watchdogs.

"The leaders wrote billions in blank checks while doing nothing to protect public economic-development funds despite the convictions," said Alex Camarda, a policy analyst for the group Reinvent Albany.

Proponents for a bill called the Child Victims Act were also left empty-handed after Mr. Cuomo earlier this year signaled he would push for the measure. The bill would allow sexual-abuse victims to bring civil lawsuits until their 50th birthday and felony criminal cases until their 28th birthday. Currently, they have until the age of 23 to pursue either type of case.

The measure has some of the most ardent activists in Albany behind it and 80% support in a recent Siena College poll, but opposition by religious leaders doomed it in the Republican-led Senate.

"The Senate...disgracefully protected predators over child victims of sex abuse," said Gary Greenberg, a businessman and activist.

DON EMMERT/AFP/GETTY IMAGES

New fees on rides in Manhattan's business district arrive in 2019.

Trip Fee to Take Additional Toll On Taxi Drivers

By Paul Berger

The state budget dealt a blow to New York's struggling taxi and livery car industry, imposing a fee of $2.50 to $2.75 per trip in Manhattan's business district to pay for improvements to mass transit.

While some public-transportation advocates complained that the budget doesn't charge all vehicles entering Manhattan's busiest areas, taxi drivers said the fees could turn away passengers and further dent their declining incomes.

"Any drop in ridership would bring thousands of drivers to the brink of bankruptcy," said Bhairavi Desai, executive director of the New York Taxi Workers Alliance.

Gov. Andrew Cuomo raised expectations that New York could include a broader congestion-pricing plan in the state budget after he voiced support for it last summer.

The Democratic governor subsequently convened a panel of business and transit experts who recommended a phased approach, beginning with better traffic enforcement and more money for the Metropolitan Transportation Authority, which runs the subway and buses. Ultimately, the panel recommended a fee of $11.52 on cars entering a congestion zone, though that idea didn't make it into the budget deal.

The state budget directed hundreds of millions of dollars toward the MTA. But it didn't include language authorizing the gantries and cameras needed to set up a defined congested zone.

The budget will raise an estimated $400 million annually through the fee on taxi and for-hire trips south of 96th Street in Manhattan. The fee is scheduled for introduction in January 2019.

Yellow taxis are required to pay $2.50. Other vehicles such as livery cars, black cars and ride-hailing services like Uber and Lyft, will pay $2.75. Riders in shared trips, such as Uberpool, will pay 75 cents per passenger.

Uber and Lyft welcomed the charges, while calling for the state to implement a broader congestion-pricing plan.

Yellow taxi, livery and black-car drivers have been overwhelmed by an influx of ride-hailing drivers, who number about 70,000 today; there are about 45,000 yellow-taxi, black-car and car-service drivers.

Driver revenue is falling. Taxi medallions, which give drivers the right to pick up street hails, have plummeted from a value of over $1 million to as little as $200,000.

Sergio Cabrera, a medallion owner and driver for 20 years, said ride-hailing companies such as Uber, which are backed by billions of dollars in venture capital, can cover the new trip fees. But cab drivers will have to pass the fee on to passengers. "Potentially, it could ruin the taxi industry," he said.

Decked Out in Easter Finery for a Parade on Fifth Avenue

CLOCKWISE FROM LEFT: STEPHANIE KEITH/GETTY IMAGES; BESS ADLER FOR THE WALL STREET JOURNAL (2)

BONNET BONANZA: People donned their most fanciful attire in Midtown on Sunday. See more photos of Easter outfits at WSJ.com.

Debt Collector Agrees To Pay in Class Action

By Melanie Grayce West

A New Jersey-based debt-collection business and its law firm have agreed to settle a class-action lawsuit that alleged they abused the New York City civil court system in trying to collect tens of millions of dollars on thousands of AT&T Wireless debts that may have been owed by New Yorkers.

Asta Funding Inc. of Englewood Cliffs, N.J., a subsidiary of Palisades Collection LLC, and the law firm Pressler & Pressler of Parsippany, N.J., have proposed to pay a combined $3.9 million to settle the allegations, according to terms of a settlement agreed with plaintiffs in the case and submitted in the U.S. District Court for the Southern District of New York.

Beyond the settlement payment, the defendants also agreed to cease permanently all collections against the more than 60,000 people in the class. According to court documents, the defendants had obtained some $83.4 million in judgments against the class, and some $37 million of that had been collected.

Asta Funding, Palisades Collection and Pressler didn't admit wrongdoing as part of the proposed settlement. Attorneys for the defendants didn't return repeated requests for comment.

AT&T has declined to comment on whether it sold debt to Palisades Collection or Asta Funding, as the suit alleged.

For plaintiffs, the case goes back more than a dozen years. Many were sued by the defendants and never learned of the default judgments against them, according to attorney Danielle Tarantolo of the nonprofit New York Legal Assistance Group who, along with attorneys from the private law firm Hughes, Hubbard & Reed, served as plaintiffs' counsel on the lawsuit.

Palisades Collection was in the business of purchasing debts from creditors at pennies on the dollar with the hope of fully collecting on the debt, according to the lawsuit. That is a common practice in the debt-collection industry, and collection agencies regularly use court systems to try to collect debts.

The defendants also would cease collections against over 60,000 people.

But the lawsuit alleged the defendants didn't follow proper legal procedures, had no evidence to support claims and, in many cases, never notified plaintiffs of the filing.

According to the lawsuit, some 50,000 default judgments were awarded in court.

Dionisio Infante, 31 years old and from the Bronx, said he first learned of the judgment against him when he was a teenager and his wages were garnished at his first job, some $50 a paycheck.

That judgment followed him to a new job and it was then, during repeated court dates, that he learned he owed more than $1,300 for a wireless account he said he never had.

Councilman Keeps Close Eye on NYPD

By Zolan Kanno-Youngs

At a dinner hosted by William Bratton at the Penn Club in Manhattan in March, a guest asked the former police commissioner if other police forces across the country should embed officers in the New York Police Department to see "how [policing] actually operates."

Then Donovan Richards, the new chair of the City Council's Committee on Public Safety, spoke up.

"I just want to put it out there," said Mr. Richards, as the room grew quiet. He described being stopped-and-frisked as a teenager in southeast Queens, referring to the NYPD practice deemed unconstitutional in 2013. "It was one of the most demoralizing experiences that anyone could go through," he said.

Three months into his new role, Mr. Richards has taken to publicly bird-dogging the police department, attending fraternal organizations, crime-statistics briefings, the dinner of the former commissioner and the local precinct in Mr. Richards's district in Queens.

The public-safety committee has oversight powers over multiple departments, including the NYPD and district attorneys. The committee can call officials to testify before the council and put forward legislation.

Already, Mr. Richards has gathered the committee six times, including three testy hearings. After a city agency report claimed the NYPD's Special Victims Division was "severely understaffed," he announced he would probe police officials in another hearing in April.

"We are watching," Mr. Richards said. "And we are going to be a watchdog."

In an interview, Mr. Richards said New Yorkers can expect hearings on multiple topics, including the rise of sex crimes in the city and a state civil rights law, 50-A, which city officials say shields disciplinary information of police officers from the public. The city for decades made disciplinary summaries of officers public before reversing the practice two years ago, saying they had previously interpreted the law incorrectly.

Mr. Richards said he is exploring forming an independent commission that would look at the department's disciplinary process, one similar, he said, to commissions formed decades ago to root out systemic corruption by the NYPD. He is particularly bothered by recent reports of officers caught falsifying records and the lack of public knowledge over how the department disciplines officers.

"It's in the purview," Mr. Richards said in his lower Manhattan office, with a copy of a 1990s-era commission report in front of him. "The council has powers and we're going to make sure we use those powers to the full extent."

NYPD officials said there was no need for an independent commission, pointing to the multiple watchdogs of the NYPD, including the Civilian Complaint Review Board, which investigates complaints made by civilians, and a court-appointed monitor that stemmed from the 2013 stop-and-frisk case.

"We don't have any issues in the agency that would rise to that level," NYPD First Deputy Commissioner Benjamin Tucker said in an interview. "The disci-

Please see NYPD page A10B

ELIZABETH SHAFIROFF FOR THE WALL STREET JOURNAL

Donovan Richards, head of City Council's Committee on Public Safety.

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High-Tech Hopes for Old Post Office

By Keiko Morris

PROPERTY

The venture behind the commercial redevelopment of the old Farley Post Office Building in Midtown Manhattan is focusing on a high-tech use of the 105-year-old structure as its long-delayed makeover into a grand train hall gains traction.

The venture of Vornado Realty Trust and Related Cos., which has a 99-year lease to develop about 900,000 square feet of office and retail space, is gearing up to attract biotechnology, pharmaceutical and other life-sciences businesses to the massive Roman classic structure.

The development team has hired a broker with expertise in the Boston region's more mature life-sciences real-estate market, developed a brochure laying out potential designs for office and laboratory space and is planning an educational event at the building this May.

The brochure's title: "Moynihan Research Center at Farley." The conversion of a portion of the Farley building into a train station, which was first proposed in the 1990s, is named after the late Sen. Daniel Patrick Moynihan.

The joint venture's effort highlights the recognition among the city's biggest real-estate developers that the city's office market will be powered by new types of businesses. For the last decade, expanding technology firms have eclipsed New York's financial-services industry as the biggest engine of growth.

"Just as Google and Facebook have decided they need a major presence in New York, there is the recognition by life-sciences companies that for kids who are the scientists of the future, they want to live in urban areas," said David Greenbaum, president of Vornado's New York division.

The Vornado-Related venture isn't the only one pursuing the business. A venture of Taconic Investment Partners LLC and Silverstein Properties Inc. is hoping to attract companies needing lab space to the office building at 619 W. 54th St., which it is investing $20 million to upgrade.

NYU Langone Medical Center is collaborating with Cambridge, Mass.-based BioLabs to create a 50,000-square-foot biotech co-working center on Varick Street in Lower Manhattan. And the Long Island City Partnership is working on a plan to foster a life-sciences center in that Queens district.

The city's Economic Development Corp. has requested proposals from developers to create a life-sciences hub, offering to kick in $100 million in city land, funds and other benefits.

The city has long had top medical and research institutions, generating research and startups and drawing significant federal funding.

Still, the city historically has struggled to keep startups here as they grow. New York has only 2.8 million square feet of rentable lab space, compared with New Jersey's 16.2 million and the 26.8 million square feet in the greater Boston area, according to data from the spring of 2017 collected by real estate services firm JLL.

New York lab space development has been limited by the high cost of upgrading buildings to accommodate the more intensive mechanical needs. Zoning requirements also have limited the supply of space.

And, because the life-sciences industry in the city is young, the pool of experienced entrepreneurs who have launched multiple ventures is still limited, some veterans in the field have said.

"New York is eight years into a 25-year process to grow a [life-sciences] cluster," said Joel Marcus, founder and chief executive of Alexandria Real Estate Equities Inc., which has developed a life-sciences campus on Manhattan's East Side.

The Vornado and Related venture is hoping that tenants will be lured by the building's location atop a regional transportation hub and its accessibility to a large labor supply in northern New Jersey. It is also hoping to attract life-sciences businesses to New York by touting the city's labor force.

FROM TOP: RICHARD B. LEVINE/NEWSCOM/ZUMA PRESS; VISUALHOUSE

The old Farley Post Office Building in Midtown Manhattan, top. Above, a rendering of the interior of a West 54th Street building.

NYPD

Continued from page A10A

plinary system in the department is perhaps more effective and functioning right now than it's been in a long time."

At a press briefing on Tuesday, Mr. Tucker said "in the next week or so" the police would provide those disciplinary summaries—but without disclosing officers' names.

But citing 50-A, Mr. Richards said the state of oversight "is poor."

The commissioner and the mayor have both said they support changing the law, but argue the onus is on the state government. State officials have said the city is simply interpreting the law differently than it did for decades, when it made disciplinary information of officers public. Mr. Richards said he planned to use City Council hearings to raise awareness on the issue.

A lifelong resident of Southeast Queens, Mr. Richards, 34 years old, was first elected to the New York City Council in March 2013 after working for about a decade as an aide for his predecessor, James Sanders Jr., who is now a state senator.

He previously served as the chair of the environmental protection committee, and now keeps the lights off while he works in a modest office near City Hall.

He has advocated for public safety since at least 2003, when his close friend was fatally shot in the head in Queens. The tragedy spurred him to attend a community meeting on gun violence prevention and question why there wasn't more input from young people. "That left a big impact on my life," he said.

A whiteboard in the office lists multiple policing issues ranging from body-camera rollout to crimes in shelters to reform of the CCRB.

So far, the committee approved a bill requiring the police to submit reports on the enforcement of marijuana-possession violations, which was later passed. Mr. Richards publicly criticized department officials for not coming prepared with data during a hearing on the topic.

GREATER NEW YORK WATCH

LOTTERY JACKPOT

Winning Ticket Sold in New Jersey

A winning ticket for a lottery jackpot estimated at $521 million was sold at a Lukoil station in Riverdale, Morris County, lottery officials said over the weekend.

Mega Millions said one winning ticket was sold in Friday night's drawing. The winning numbers were 11, 28, 31, 46, 59 and Mega Ball 1.

The jackpot is the nation's 10th-largest. No one had matched all six numbers since January.

The $521 million is the annuity option, in which payments are made over 29 years. The cash option would pay $317 million. Mega Millions is played in 44 states plus Washington, D.C., and the U.S. Virgin Islands.

—Associated Press

CONNECTICUT

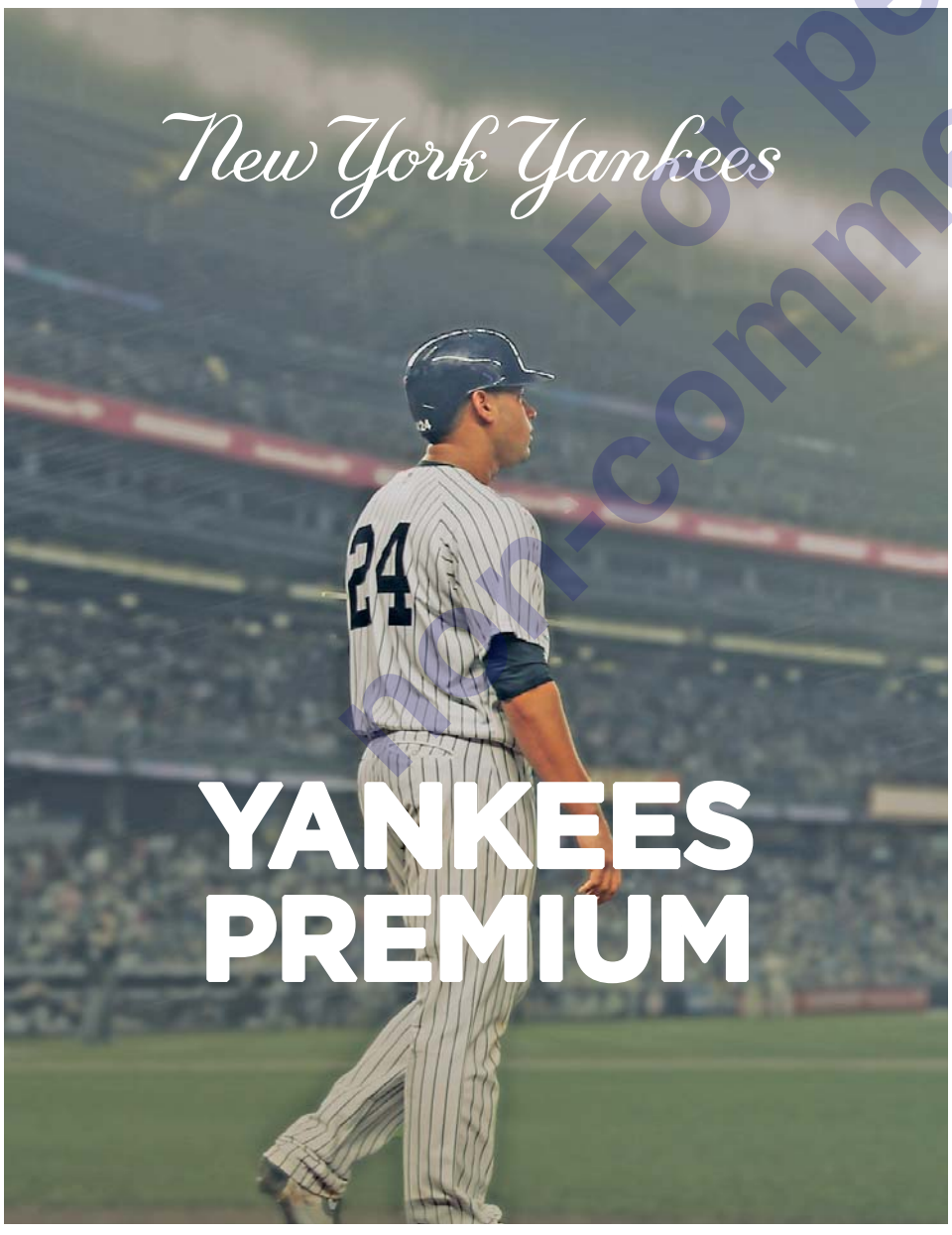
Students Prepare For Geography Bee

Which river forms part of the border between Costa Rica and Nicaragua? This is the kind of question students will be asked at this week's Connecticut National Geographic State Bee.

The bee will be held Friday at Central Connecticut State University. Over 100 fourth-to-eighth-graders will compete in the second level of the annual National Geographic Bee. The winner will represent the state next month in the final round in Washington, D.C.

The state champion will win $200, a visual atlas and a trip to the nation's capital. The grand prize for the national round will be a $50,000 college scholarship, a lifetime subscription to the magazine and an expedition to the Galápagos Islands.

—Associated Press



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LIFE & ARTS

HEALTH

Prostate Cancer Surgery or Not?

Genomics tests help doctors figure out which patients can follow 'active surveillance' and which ones need treatment

BY LUCETTE LAGNADO

IN 37 YEARS as a police officer, Edwin Michel coped with a plane crash, a sniper, wildfires and three bullet wounds.

Nothing much rattled him until he was diagnosed with prostate cancer in November 2016. His doctor said the cancer wouldn't kill him but Mr. Michel, now 76 years old, wasn't entirely reassured.

He felt more confident after a genomics test later revealed his prostate cancer was very low risk. The test, known as Oncotype DX, takes a sample from a prostate biopsy and analyzes 17 genes in it to estimate how aggressive a cancer may be.

Mr. Michel, who retired as chief of patrol for Suffolk County, N.Y., didn't have surgery to remove the cancer. Instead he went on "active surveillance," where the disease is closely monitored.

His doctor, Aaron Katz, chairman of urology at NYU Winthrop Hospital in Mineola, N.Y., recommends active surveillance when possible. He says he wants to spare men the side effects that can happen if a cancerous prostate is removed or radiated. For Dr. Katz, the genomics test "is an extremely important diagnostic tool to help me identify patients who are best to go on to surveillance."

In the U.S., there are 165,000 new cases of prostate cancer a year and about 29,000 deaths from the disease. Researchers say some men with low-risk prostate cancer, which may not require intervention, have been overtreated. Improved treatments mean men with prostate cancer are living longer. However, screening and tests have declined—some say too much—as the field responded to claims of overtreatment.

Today, the challenge is distinguishing small, low-risk cancers from those likely to metastasize. Doctors say that genomics tests, which look at the biology of a tumor, provide precious clues. The tests have been used extensively on breast cancer to determine which women can be spared chemotherapy.

Several prostate-cancer genomics tests, including Prolaris and Decipher, have come on the market in recent years. Oncotype DX, made by Genomic Health, was launched in 2013. Its use isn't as widespread as the company's breast-cancer test, company officials say, but is growing. The various genomics tests, which have a list price between $3,800 and $5,000, generally are covered by Medicare and some private insurers.

Results can prompt patients to change course radically. In the fall of 2016, Ken Huner scheduled surgery to have his prostate removed after learning he had low- to intermediate-risk cancer. Mr. Huner, a financial consultant from Milan, Mich., went for a second opinion.

His new doctor, Todd Morgan, is a member of Music—Michigan Urological Surgery Improvement Collaborative—a group of urologists whose aims include curbing overtreatment.

Dr. Morgan, a urologic oncologist at the University of Michigan, ordered a genomics test, Prolaris. Based on encouraging results, Dr. Morgan told Mr. Huner that without treatment he had only a 3% chance of dying over the next decade from prostate cancer. Mr. Huner canceled his surgery and ever since has been on active surveillance, the course Dr. Morgan suggested.

For a man diagnosed with prostate cancer, "it is an incredible struggle if they are borderline" between low- and intermediate-risk cancer, Dr. Morgan says. "We need some type of tie-breaker." He sees genomics test results filling that role in some cases.

At the annual meeting of the American Urological Association in May, Dr. Morgan will unveil a study of how genomic testing influenced treatment decisions. His team looked at 3,966 Michigan men diagnosed with early-stage prostate cancer, and found that those "who underwent [genomics] testing were significantly more likely to undergo surveillance," Dr. Morgan says.

Among patients with low-risk or low-to-intermediate-risk cancer who scored favorably on the genomics test, 78% chose active surveillance compared with 57% of men who didn't take the test.

Other doctors are more guarded. "No one test is that good," says Eliezer Van Allen, a medical oncologist at Dana-Farber Cancer Institute who runs a research laboratory on genomics. "All our patients are asking us to do the impossible, which is to see the future," he says. "The reality is filled with uncertainty." The prostate-cancer genomics test is still fairly new, he says, and there isn't enough data on it.

In addition, a favorable result one day doesn't mean a patient is home free forever. The genomics tests "are useful...in the moment," says Eric Klein, a Cleveland Clinic urologist who was involved in early studies of Oncotype DX.

He sees them answering the question: Does this patient have a cancer that needs treatment? However, "that does not mean he won't need treatment in the future," he says.

Dr. Klein, chairman of the Glickman Urological and Kidney Institute, is on an American Society of Clinical Oncology panel considering guidelines for genomics testing of prostate cancer. He has been a paid consultant for the makers of Oncotype DX and Decipher, but has no financial interest in the companies.

Peter Carroll, a surgeon and the chairman of urology at UCSF Health in San Francisco, runs an active surveillance program of prostate-cancer patients, some of whom have been followed for years. Genomics testing "tells you which patients aren't likely to progress and which are harboring disease which you should not be watching—you should be treating," he says.

Albert "Tony" Cellini had a taste of both the joy and heartbreak that the tests can trigger. Mr. Cellini, 67, a retired equities trader in San Francisco, was diagnosed with prostate cancer in 2013. He had his first genomics test in 2015, which—along with other aspects of his disease—suggested he could continue active surveillance.

Last year, he had another biopsy—and genomics test—which showed a dimmer picture. Dr. Carroll's conclusion: "Treatment rather than surveillance may be in order." Mr. Cellini had surgery in January. He has been suffering some side effects but is grateful for nearly five years without treatment.

"My cousin asked me, 'If you had to do it all over again, would you do active surveillance?' and I said, 'Absolutely.' "

Over the weekend, Mr. Michel received disturbing news. Dr. Katz, his urologist, was troubled by Mr. Michel's recent MRI and says it may be time to step up from active surveillance to treatment, preferably radiation.

It's disappointing to Mr. Michel, who says, "I was looking for a five-year, six-year run" of surveillance.

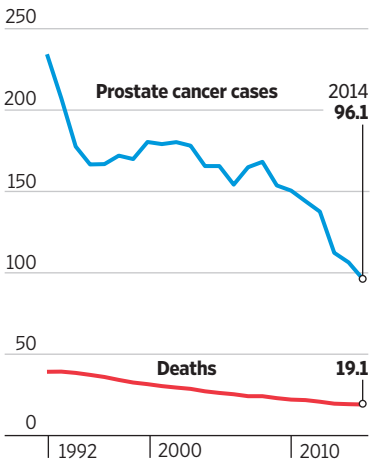
FROM TOP: GENOMIC HEALTH; JASON HENRY FOR THE WALL STREET JOURNAL; MICHIGAN PHOTOGRAPHY

Inside the Redwood City, Calif., laboratory of Genomic Health, which makes Oncotype DX, a genomic test that estimates how aggressive a prostate cancer may be. Albert Cellini, below right, spoke recently with Dr. Peter Carroll, who advised Mr. Cellini about factors including the results from his genomics test.

Dr. Todd Morgan of the University of Michigan sees genomics tests as a 'tie-breaker' in deciding how to treat some borderline cases of prostate cancer.

Sleuthing Out Sickness

Deaths from prostate cancer have decreased due to better treatments and early detection, doctors say. At the same time the number of cases has fallen, which many attribute to a decline in screening.



Source: National Cancer Institute

THE WALL STREET JOURNAL.

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THE METROPOLITAN MUSEUM OF ART

For its 'Visitors to Versailles' exhibit, the Metropolitan Museum of Art in New York used wallpaper printed with architectural and ornamental details from the real-life French palace.

ART

THE MET BRINGS SOME VERSAILLES TO N.Y.

BY BRENDA CRONIN

TO TRANSPORT VISITORS to the grandest palace in France, New York's Metropolitan Museum of Art is counting on wallpaper and a recording technique with roots in the 19th century.

"Visitors to Versailles (1682-1789)," which opens April 16, "is a very different show" for the Met, says Daniëlle Kisluk-Grosheide, its curator of European sculpture and decorative arts.

That is in part due to the nearly 200 works on display, including paintings, snuffboxes, swords and samples of the sumptuously embroidered costumes worn by eminent guests. There are gifts exchanged by French royalty and their visitors, such as a cast-iron cannon presented by the Kingdom of Siam to Louis XIV in 1686. And there is the copy of the U.S. Constitution, translated into French, that Benjamin Franklin gave to Louis XVI.

Wallpaper custom-designed to resemble foliage in places, marble columns in others, along with an audio program letting visitors eavesdrop on Versailles visitors from centuries past, complete the immersive effect.

About six years ago, Ms. Kisluk-Grosheide and Bertrand Rondot, senior curator at the Palace of Versailles, began gathering letters and other first-person accounts of Versailles visitors in the 17th and 18th centuries. The original thought was to put the travelogues into a book. But they eventually became an exhibition, which opened at Versailles in October and is coming to the Met in slightly modified form.

For more than 100 years, Versailles, a former hunting lodge about 12 miles from Paris, was the magnificent seat of the French court. To pull listeners in, Ms. Kisluk-Grosheide says, a traditional audio guide with explanations of individual works wouldn't do. Instead, she envisioned something more like a movie soundtrack.

To create the experience, Nina Diamond, managing editor and producer in the Met's digital department, combed through visitors' tales. With a dozen actors, sound effects and music, the Met created an introduction and 10 scenes, each two to four minutes long.

Visitors can listen to them with head-

Please see VERSAILLES page A13

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WHAT'S YOUR WORKOUT? | By Jen Murphy

When Tennis Doubles as Bonding

An executive carves out quality time with his grown daughters by playing with them in tournaments

FATHERS CAN STRUGGLE to connect with their teenage daughters. Steve Heitzner bonded with his two girls by becoming their doubles partner in father-daughter tennis tournaments.

At 59, the chief sales and marketing officer for Marriott International's Americas group plays tennis constantly after years away from the sport. He'd played on Michigan State University's team in college, but as he transitioned into the corporate world he was down to playing once or twice a year.

That changed two decades ago, when he moved his family to Scottsdale, Ariz., and found a group of friends who played tennis. He discovered his game had actually improved, thanks to the endurance he'd built up from long-distance running.

He used his rekindled love of the sport to bond with his daughters, Jordan, now 28, and Kendall, now 24. At the time, the girls were just getting into tennis. "I got to travel all over the country to junior tournaments with my dad," Jordan says. "He was always there to scope out the competition and pump me up for my matches."

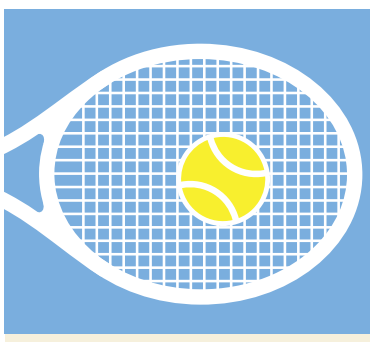
By the time the girls were teenagers, the family was living in Southern California. Mr. Heitzner heard about the U.S. Tennis Association's Father-Daughter Hardcourt Championships in San Diego and in 2008 entered with Jordan, who was then 18.

When she went off to college Mr. Heitzner began competing with Kendall. "They have totally different styles," he says. "Jordan is a retriever. She loves to run down the ball. Kendall wants to kill the ball and have a play be over in one shot."

The USTA holds four national family tournaments on different surfaces—hard courts, grass, clay and indoors—in categories including father-daughter, father-son, grandfather-grandson, husband-wife, mother-son and mother-daughter.

Mr. Heitzner and Kendall became the second-ranked father-daughter team in the country in 2013.

Both daughters moved on to high-level college tennis careers. When their schedules align now they still practice and compete with Mr. Heitzner, who lives with his wife in Potomac, Md.



Age With Tennis Gracefully

Tennis has long been recognized as the rare sport that you can enjoy for a lifetime. "While older players might not be able to bomb their serves like they once did, or race for drop shots like a collegiate athlete, they do gain tactical experiences over decades of play," says Bill Mountford, senior racquets director at Chelsea Piers Connecticut in Stamford.

Older players can usually still hit the ball well. Getting to the ball, or maintaining explosiveness or quick and balanced footwork, is what gets tougher with age, Mr. Mountford says.

Anticipation skills, knowing when and how to move to where the opponent will hit the ball, take years to develop but can make an older or even out-of-shape player appear quicker than younger and super-fit players. Mr. Mountford calls a proper warm-up and a post-match cool-down crucial for aging players.

"Light stretching and a cool down jog or walk is also paramount to recovering and not feeling sore the next day," he says.

Steve Heitzner with daughters Jordan Heitzner, below left, and Kendall Heitzner, below right, at Bethesda Country Club in Maryland.

MATT ROTH FOR THE WALL STREET JOURNAL

The Workout

Mr. Heitzner plays tennis any chance he can get. Locally, he plays with both daughters at Bethesda Country Club. He also regularly practices with colleagues who are ex-college players. On Friday nights he plays in a competitive league in Bethesda with local tennis pros and former college players from 20 to 60.

Mr. Heitzner estimates that he's on the road 60% of the year. "I try to make tennis a priority," he says. He asked his daughter's Brazilian tennis coach to set him up with a local pro when he traveled to Brazil. In Rome, his request for a tennis pro got lost in translation. "They thought I just wanted a court, so I ended up 30 minutes outside of the city without an opponent," he says. "Finally someone understood my request and found me two pros who played with me for two hours."

Mr. Heitzner works out seven days a week at home, at the company gym or a hotel gym. He feels low-energy when he misses a day. Having had his hip replaced two years ago, he opts for the elliptical machine over the treadmill. "I try to keep the pounding for the court," he says. He aims for an hour of cardio a day. He lifts weights and focuses on muscles he uses in tennis, including core and upper back. "I stick to light weights," he says. "In tennis you want to be lean and strong rather than bulky."

The Diet

A nutritionist told Mr. Heitzner 10 years ago that with his lifestyle and travel schedule, he needed to eat a consistent breakfast. "So for 10 years I've eaten an English muffin with peanut butter every morning," he says. Chicken Caesar salad is a lunch staple. Dinner is usually out and he orders chicken or fish and occasionally steak.

"I know you're not supposed to eat a lot of red meat, but I figure I work out enough so I can enjoy a steak," he says. He fuels himself with Power Bars and Clif Bars during competitions. Pizza is his splurge.

The Gear & Cost

Wilson discontinued its Steam BLX model, but Mr. Heitzner can still find the racket on eBay from $90 to $160. He will only use Tecnifibre Black Code string ($15). He restrings his racket once a week. He wears Wilson tennis shoes and recently started hitting the gym in Altra sneakers. "They look kind of like clown shoes, but they are actually shaped just like your foot, with a boxy front for your big toe."

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FROM LEFT: MUSEE DU LOUVRE; NATIONAL MUSEUM OF ANTIQUITIES, LEIDEN

EXHIBITION REVIEW

A Cross-Cultural Journey Begins

BY EDWARD ROTHSTEIN

Los Angeles

AN IMPOSING basalt sarcophagus from about 600 B.C. gets pride of place in one gallery of the J. Paul Getty Museum's illuminating new exhibition "Beyond the Nile: Egypt and the Classical World." The stone coffin's onetime inhabitant is identified as Wahibreemakhet, the "Royal Sealer." And its artistry would have done any Egyptian proud, with etchings of falcon heads, winged gods, and a head of pharaonic gravity. Inscribed, too, are the names of the Royal Sealer's parents: Alexikles and Zenodote. He was, it seems, Greek or the child of Greek immigrants; he rose in the court high enough so he could commission this impressive testament to his earthly success and afterlife.

This is probably what the biblical Joseph—whose career as an immigrant Israelite followed a similar course—might also have hoped for. We think of ancient civilizations as somewhat monolithic, free-standing and impermeable. But, as we see, these cultures were often profoundly affected by others. Sometimes the effect is slight—the excellent catalog notes that the 13th century B.C. Temple of Ramesses II is carved with graffiti from sixth century B.C. Greek mercenaries.. And sometimes the effect is profound—as in the evolution of Greek sculpture (to which we will return).

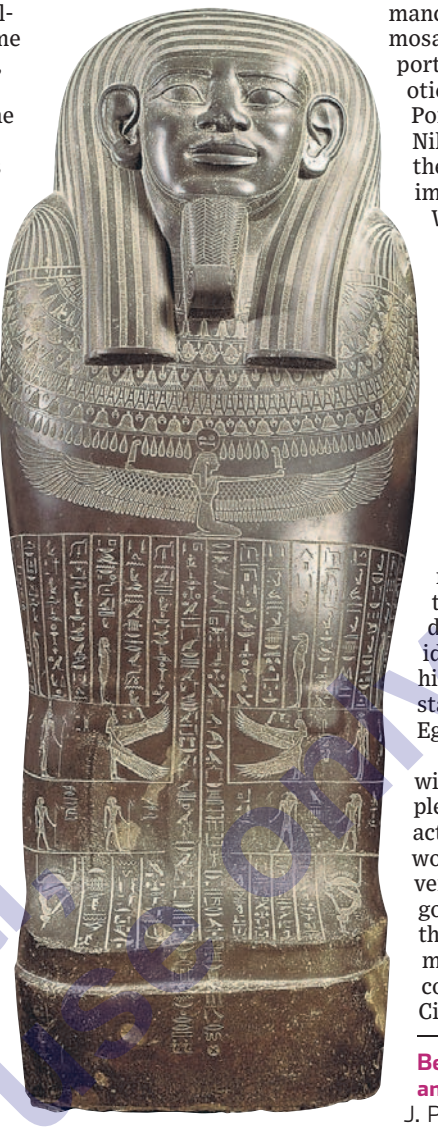
This exhibition makes it difficult to imagine Egypt, Greece and Rome as wholly distinct realms. It also undermines the current "woke" orthodoxy that "cultural appropriation" is a distinctive Western, colonial and current phenomenon. Such appropriation is a misnomer; interaction and transformation are what really take place.

Gathering from major museums some 200 artifacts that span more than 2,000 years—from the Bronze Age through the Roman Empire—the show is also the first sally in an ambitious Getty project, "The Classical World in Context." In the catalog, Timothy Potts, the Getty's director, announces that a multiyear series of exhibitions will trace the classical world's interactions with other cultures. After Egypt will come Persia, then Mesopotamia, Anatolia, the Levant, Central and South Asia and the Eurasian steppes.

The curators—Mr. Potts along with Jeffrey Spier, the Getty's senior curator of antiquities, and Sara E. Cole. a curatorial assistant—have mounted a propitious beginning to this enterprise. Their account begins in the Bronze Age as trade between Egypt and Minoan cultures on Crete led to a long-lasting exchange. Egyptian stone vessels shown here have been found in Minoan palaces. Recently, Egyptian bull-leaping scenes like those of the Minoan civilization have been discovered. A fragment of the "London Medical Papyrus" from late in the second millennium B.C., seen here, is a collection of medical and magical spells, some in foreign languages, transliterated into cursive Egyptian script. From a later period (1295-1069 B.C.), an extraordinary Egyptian wooden ship model resembles an Aegean galley, with a painted base that recalls—the exhibition tells us—Homer's description of "black hulled" ships.

Influences became more elaborate in later centuries as Egypt re-emerged from a mysterious cataclysm that struck Mediterranean cultures after 1200 B.C. The classical Greek world then also began to take shape. Before the late seventh century B.C., we are told, Greeks had no sculptural tradition. But full-scale human figures in Egypt became an inspiration. Here we see a seventh-century B.C. Egyptian priest next to a sculptural heir: a sixth-century B.C. Grecian nude male.

The 332 B.C. conquest of Egypt by Alexander the Great amplified the intermingling as the Greek Ptolemaic dynasty adopted Egyptian gods and garb, while Greek culture established an Egyptian presence that extended into the 20th century. The intertwined cultures even led to a new god, Serapis, a Greek transformation of Osiris. A gallery of uncanny sculpted portraits shows the aesthetic accomplishments accompanying these confrontations and embraces.



Sarcophagus of Wahibreemakhet, about 600 B.C., above; Antinous as Osiris, about A.D. 130, above left

A different kind of influence came after the Roman conquest. The Egyptian written language was forgotten while evocations of Egypt shaped a Roman romance. Here, a marvelous mosaic found near Rome portrays the Nile as an exotic realm. A first-century Pompeian fresco gives the Nile a wild character like the one Europeans later imagined for the New World. A fourth-century B.C. hieroglyphic panel here was found in a Temple of Isis in Pompeii, though it had nothing to do with Isis and probably, we are told, could not even be understood. When the Emperor Hadrian went to Egypt in A.D. 130-131, his lover, Antinous, drowned in the Nile; in response, Hadrian turned him into a god, demonstrating a literal idolatry by populating his imperial villa with statues of Antinous in Egyptian costume.

The exhibition ends with a remarkable example of the syncretic character of the classical world: a bust of a Greek version of an Egyptian god (Serapis), made for the far reaches of the Roman empire. It was discovered in 1954, in the City of London.

Beyond the Nile: Egypt and the Classical World
J. Paul Getty Museum, through Sept. 9

Mr. Rothstein is the Journal's Critic at Large.

THE METROPOLITAN MUSEUM OF ART

An 18th-century folding screen by Charles Cozette, one of the works included in the Met's exhibit.

VERSAILLES

Continued from page A11

phones provided by the Met as they meander through the galleries. During an outdoor scene, for example, they might hear conversation as well as birdsong, the snip-snip of gardening shears or the crunch of gravel underfoot.

"You're going to hear someone whispering to you," Ms. Diamond says. "You're going to hear the movement of the queen as she goes past with her courtiers."

To capture the palace's creaky floors, reverberations and other sounds, Ms. Diamond says, several scenes were recorded at Oldway Mansion, a 19th-century estate in Devon, England, with replicas of some rooms at Versailles.

The Met used binaural technology, which incorporates multiple microphones for a more three-dimensional sound, to record the segments. The technology got its start in the late 19th century and more recently has been used by museums and other institutions.

To steep Met visitors in the experience of paying a call on French royalty, Ms. Kisluk-Grosheide sought to suggest—but not re-create—Versailles and its gardens. She and the Met's design team ruled out huge photographs, which would take up wall space and risked clashing with the period works on display.

They decided on wallpaper printed with architectural and ornamental details from Versailles' Hall of Mirrors and smaller rooms the Met envisioned, such as the private quarters of one of the king's mistresses.

"It was really hard to imagine initially," Ms. Kisluk-Grosheide says. "We had a few test runs...but still it was a little bit of a leap of faith."

The show is laid out to track the progress of a visitor to Versailles, starting with the gardens and then moving inside the palace. The doorways of the interior galleries are aligned, so one can see down the entire corridor to a striking 1778 portrait of Marie Antoinette, her husband King Louis XVI and her brother, the Archduke Maximilian.

The Met's design team pored over paintings, books and other resources to come up with interior and exterior patterns to print on the wallpaper. To portray the groves and gardens, a canvas wall covering was printed with foliage designs based on period etchings.

For the interiors, a vinyl-faced wallpaper with a reflective base was layered with black ink to convey details such as marble columns or wood wainscoting. Among the challenges was using ink to temper the level of reflectivity, from the low sheen of gilded woodwork in private chambers to the high gloss of the Hall of Mirrors.

The "rooms are really meant to make you feel like you're in the palace," exhibition designer Alejandro Stein says. "And this is where the elaborate wallpaper comes into play, to give each room a different character."

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Baroque master. Powerful subject. Luminous composition. This original oil on canvas is the work of the Italian master Giovanni Battista Salvi, known as Sassoferrato. Entitled *Madonna in Ecstasy*, the composition evokes a devotional piety that enamored Baroque-era Italy. Tranquil and contemplative, she reveals why Sassoferrato is widely regarded as "the master of the prayerful Madonna." Circa 1650. Canvas: 19¼"h x 15"w; Frame: 27½"h x 23½"w. #30-7041

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SPORTS

WOMEN'S BASKETBALL

NOTRE DAME WINS TITLE

BY JIM CHAIRUSMI

Notre Dame women's basketball coach Muffet McGraw called it her toughest season, with only seven healthy scholarship players available for the Final Four.

"We just constantly focus on what we have, what we can do, who's going to step up?" McGraw said ahead of Sunday's championship game against Mississippi State.

With the score tied at 58 and the clock ticking down, Notre Dame's Arike Ogunbowale stepped up to be the hero. The junior guard hit a 3-pointer from the corner with a tenth of a second left in the game to lead the Fighting Irish to a 61-58 victory.

The heroics came after Ogunbowale hit a game-winning shot in overtime to shock previously unbeaten Connecticut in a national semifinal game on Friday.

"I work at it in practice all the time," Ogunbowale said. "My teammates can attest to that. It just felt right."

For most of the game, it appeared as if Mississippi State would be the team lifting the championship trophy. Notre Dame entered the final averaging 92.4 points in five NCAA tournament games, but were held to a season-low 17 points in the first half by a tenacious Bulldogs defense.

Mississippi State led by as many as 15 points in the third quarter. But as they did against Connecticut, Notre Dame clawed back from a double-digit deficit to even the game at 41 heading into the fourth quarter.

The final minute of the game featured a wild sequence in which both teams had a chance to take the lead with Mississippi State center Teaira McCowan stealing the ball, teammate Morgan William losing possession after getting bumped, and McCowan fouling out during the ensuing scramble.

"They really dug deep. That Fighting Irish spirit. They would just not be denied," McGraw said.

RON SCHWANE/ASSOCIATED PRESS

Arike Ogunbowale hits the winner.

NCAA TOURNAMENT

A Big Factor in the Title Game

Michigan's Moritz Wagner and Villanova's Omari Spellman are both long-range shooting threats

BY JARED DIAMOND AND RACHEL BACHMAN

San Antonio

In the days leading up to his team's Final Four matchup against Villanova and its turbocharged offense, Kansas coach Bill Self sought out some advice. He texted his West Virginia counterpart, Bob Huggins, whose Mountaineers had just surrendered 90 points in a Sweet 16 loss to the seemingly unstoppable Wildcats. Self hoped for any nugget of wisdom.

"He said, 'You better hope Spellman doesn't shoot the ball well,'" Self recalled. Right on cue, Omari Spellman sank two 3-pointers in the first four minutes of the game. The Wildcats won by 16.

In other words, 3-point shooting played an integral role in determining which programs survived the madness of March to reach Monday night's national title game. This shouldn't come as a surprise. Modern basketball revolves around the three, a paradigm shift taking over the professional and college ranks.

> The Villanova/Michigan match-up represents the next phase of the 3-point movement.

But this clash between Villanova and Michigan represents the next phase of that movement. Their 3-pointers don't all originate from the expected sources, dynamic guards in the mold of Stephen Curry and James Harden. Many come from the biggest people on the court, outside-shooting giants who create matchup nightmares for under-equipped defenses.

For the Wildcats, that means Spellman, the player who worried Huggins and Self. Spellman stands nearly 6-foot-10, making him the tallest player in Villanova's primary rotation. He has connected on 44% of his threes this year, the best mark on a team that set a men's Division I record for 3-pointers made in a single season.

The Wolverines' threat is perhaps even scarier: Moritz Wagner, a 6-foot-11 German with a Dirk Nowitzki-type game, who paces the Wolverines with a 3-point field-goal percentage of about 40%. He scored 24 points and hit two key 3-pointers down the stretch against Loyola-Chicago on Saturday, sealing the victory that sent Michigan to within 40 minutes of its first title since 1989.

Lots of teams have players who can shoot threes in 2018. Not many have a big man who can shoot threes. Michigan and Villanova both have one.

"It's invaluable," Villanova coach Jay Wright said. "It's the toughest thing to guard."

It's not difficult to see why. Wagner and Spellman put opposing defenses in a near-impossible quandary: trying to find someone tall enough to stop them from dominating inside but athletic enough to keep them off the 3-point arc.

That explains why, at their respective news conferences Sunday, both Wright and Michigan coach John Beilein referenced not Curry as the progressive trendsetter changing the fabric of basketball, but instead another Golden State Warrior: Draymond Green, the 6-foot-7 versatile swingman who often acts as a center in a smaller Warriors lineup—a player, Beilein said, who can "do everything."

"It's a great concept," Beilein said. "It doesn't mean we can stop it."

While many big men in America still stick to banging bodies in the post, sharpshooting big men have been big in Europe for years, said Michigan assistant coach DeAndre Haynes, who played on pro teams there from 2006 to 2012.

"Every big man I think I played with over there, they would shoot the '3' ball," Haynes said. "That's what made the game a little harder over there. You really had to adjust to it."

Increasingly, American coaches are embracing the advantage of tall shooters. While coaching at West Virginia in the mid-2000s, Beilein had Kevin Pittsnogle, a beefy 6-foot-11 center with 3-point range. Wagner is the natural progression from players like that—"thinned down, eating healthier, a little more skilled," Wright said.

Players listed at 6-foot-9 or taller made 4,806 3-pointers this season, the most since at least 1996-97, according to data from Stats LLC. That's almost 1,000 more than last season and close to 2,000 more than five years ago. These taller players' .342 3-point shooting percentage is the highest in the sport since 2007—when those players attempted 5,700 fewer shots than this season.

"You see it in the NBA, you see it in college," Haynes said. A lot of guys in high school right now are starting to do it."

No player embodies that idea more than Wagner, who said that despite his height, he wanted to be a guard as a child, so he "always shot threes." He scored 21 points and made all three of his threes against Texas A&M in the Sweet 16 and then exploded against Loyola.

The Ramblers revamped their schemes for Wagner, but nothing worked. When they kept their center on Wagner, he utilized his guard-like quickness and shooting ability. When they switched to a smaller defender, it left the inside open, allowing Wagner to control the glass, resulting in 15 rebounds, including six on the offensive end.

Granted, Loyola is smaller and doesn't have the weapons Villanova has. But even Wildcats guard Phil Booth admitted, "We never really guard a five-man like Wagner."

Then again, Michigan hasn't seen many big men like Spellman, who lost about 50 pounds after arriving at Villanova last season, enabling him to be a consistent threat from the outside. Haynes said he told Wagner, "It's going to be like you're guarding yourself."

Welcome to basketball in 2018: Everybody shoots threes.

"The game is starting to evolve," Haynes said "You see guys that are more athletic, more bigs stepping out to shoot threes, making a team a lot more dangerous."

JUNFU HAN/TNS/ZUMA PRESS

Michigan's Moritz Wagner scored 24 points in Saturday's win over Loyola.

Shooting From Deep

Three-pointers made and attempted by players 6 foot 9 or taller, in Division I:

SEASON	MADE	ATT.	PCT.
2008-09	2,422	7,420	.326
2009-10	2,568	8,077	.318
2010-11	2,745	8,310	.330
2011-12	2,851	8,367	.341
2012-13	2,988	9,292	.322
2013-14	3,046	8,995	.339
2014-15	3,653	11,093	.329
2015-16	4,588	13,453	.341
2016-17	3,994	11,853	.337
2017-18	4,806	14,068	.342

Source: Stats LLC

Weather

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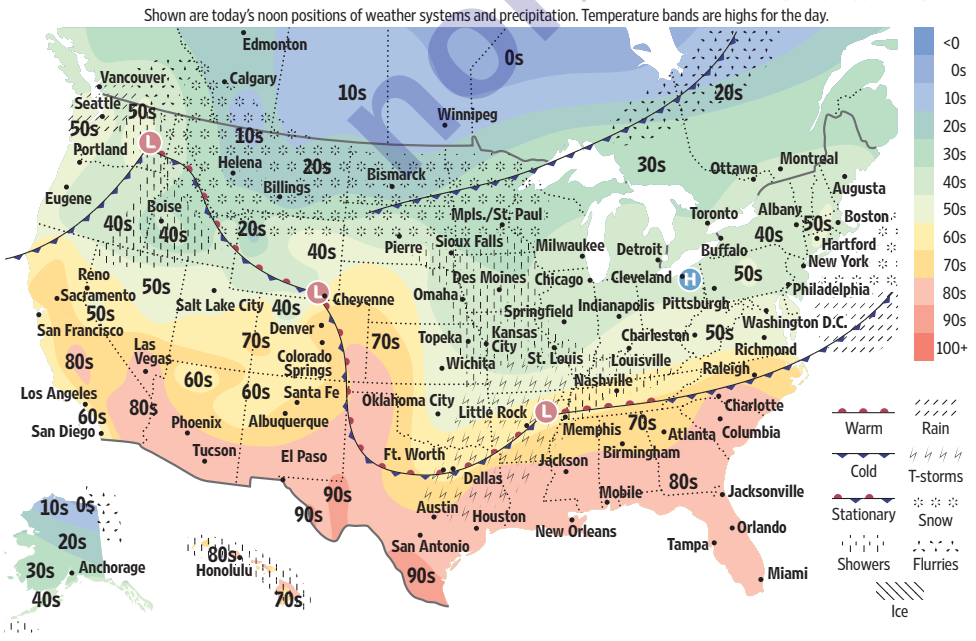


U.S. Forecasts

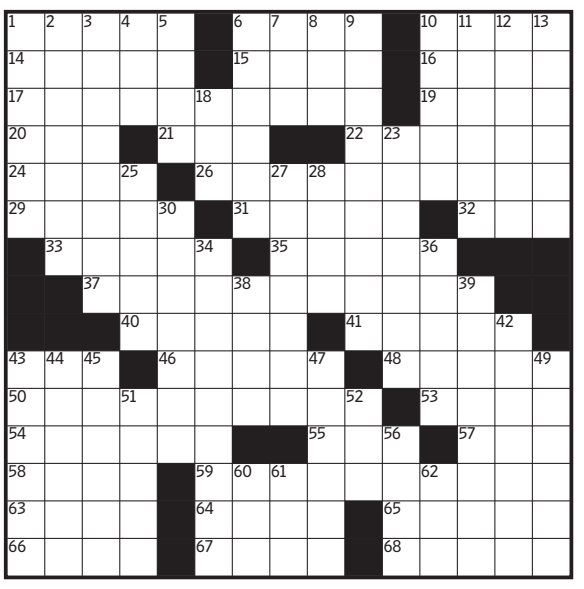
s...sunny; pc... partly cloudy; c...cloudy; sh...showers; t...t'storms; r...rain; sf...snow flurries; sn...snow; i...ice

City	Today Hi	Lo	W	Tomorrow Hi	Lo	W
Anchorage	39	19	s	33	22	s
Atlanta	79	59	pc	79	57	t
Austin	80	69	c	79	48	sh
Baltimore	51	39	pc	58	54	r
Boise	46	29	c	56	42	pc
Boston	44	35	sn	48	43	r
Burlington	45	29	pc	47	41	r
Charlotte	80	55	c	81	64	pc
Chicago	46	39	pc	49	26	r
Cleveland	45	37	pc	69	39	r
Dallas	68	63	c	73	44	t
Denver	70	23	pc	52	26	pc
Detroit	46	35	pc	57	32	r
Honolulu	80	73	sh	81	74	pc
Houston	84	70	c	82	54	c
Indianapolis	48	45	pc	67	33	t
Kansas City	45	41	c	49	20	pc
Las Vegas	85	57	s	76	57	s
Little Rock	63	58	c	75	36	t
Los Angeles	67	55	pc	70	56	s
Miami	84	72	s	83	72	pc
Milwaukee	41	33	pc	40	27	r
Minneapolis	35	27	sn	35	10	sn
Nashville	63	56	c	78	40	pc
New Orleans	81	69	c	83	61	c
New York City	46	39	sn	49	47	r
Oklahoma City	59	54	c	60	29	pc
Omaha	44	35	c	36	17	r
Orlando	86	65	pc	87	68	pc
Philadelphia	48	39	sn	55	51	r
Phoenix	88	62	pc	87	64	s
Pittsburgh	49	41	pc	69	48	r
Portland, Maine	44	31	s	46	39	pc
Portland, Ore.	53	35	pc	54	44	c
Sacramento	74	44	s	77	48	pc
St. Louis	46	45	r	62	28	t
Salt Lake City	59	30	r	53	42	pc
San Francisco	64	50	pc	66	51	pc
Santa Fe	71	39	c	64	31	pc
Seattle	53	38	c	52	43	c
Sioux Falls	41	26	c	28	5	sn
Wash., D.C.	55	44	pc	63	58	sh

International

City	Today Hi	Lo	W	Tomorrow Hi	Lo	W
Amsterdam	52	48	r	60	46	sh
Athens	70	52	s	70	51	s
Baghdad	85	61	s	89	63	c
Bangkok	89	77	t	90	79	t
Beijing	85	53	s	57	39	c
Berlin	47	39	pc	61	48	pc
Brussels	56	51	c	60	49	r
Buenos Aires	77	59	c	78	59	pc
Dubai	87	76	s	89	75	s
Dublin	51	45	r	55	41	c
Edinburgh	40	35	sn	47	36	r
Frankfurt	57	48	pc	64	49	c
Geneva	60	46	c	63	46	t
Havana	87	65	s	87	66	s
Hong Kong	81	72	pc	81	72	s
Istanbul	57	46	pc	59	45	s
Jakarta	88	78	c	89	76	t
Jerusalem	74	49	s	68	48	pc
Johannesburg	74	57	c	74	58	t
London	53	49	r	56	46	sh
Madrid	68	51	c	60	45	c
Manila	89	77	c	90	77	pc
Melbourne	70	53	c	70	49	pc
Mexico City	80	57	pc	79	56	pc
Milan	63	47	pc	57	49	r
Moscow	43	36	r	42	32	c
Mumbai	92	79	pc	92	80	pc
Paris	60	50	c	60	48	r
Rio de Janeiro	91	78	pc	85	76	r
Riyadh	87	69	c	89	70	pc
Rome	61	48	pc	66	53	pc
San Juan	86	73	pc	84	75	sh
Seoul	70	54	pc	66	51	pc
Shanghai	77	63	c	79	62	pc
Singapore	89	75	t	88	77	pc
Sydney	88	69	pc	75	68	pc
Taipei City	87	68	s	86	69	pc
Tokyo	71	59	s	71	58	pc
Toronto	45	30	pc	43	38	r
Vancouver	49	37	pc	50	37	c
Warsaw	44	31	sn	59	43	pc
Zurich	59	42	c	62	39	c

The WSJ Daily Crossword | Edited by Mike Shenk



AROUND THE CLOCK | By Dan Fisher

Across

1 Girders and rafters
6 Shouted end-of-the-week letters
10 Unwanted email
14 Capital of Jordan
15 Moreno with an Emmy, Grammy, Oscar and Tony
16 Minnelli with an Emmy, Grammy, Oscar and Tony
17 *Feelings
19 Steel component
20 Anger
21 File folder feature
22 Sporty Chevy
24 New Horizons space probe org.
26 *Approximate width of a pencil
29 Support for an injured arm
31 Reeves of "John Wick"
32 Twisty shape
33 Tour schedule listing
35 Tumbler or snifter
37 Illinois hours, and a feature of the starred answers
40 "Try to ___ my way"
41 Bottled water from France
43 Org. for doctors
46 Less risky
48 Rocker John
50 *Mix of text, sound, images, etc.
53 "___ perpetua" (Idaho motto)
54 Texas city on the Rio Grande
55 Metal source
57 Conclusion for Descartes
58 Highlands family
59 *1973 Lillian Hellman book
63 "Darn it!"
64 Peace Prize winner Wiesel
65 Headdress for a bishop
66 Letters that look like H's
67 "Finest" force, for short
68 Battery terminal

Down

1 Washroom fixtures
2 May birthstone
3 Jane Doe, perhaps
4 Yoga class need
5 Sulky state
6 His career is in "Jeopardy!"
7 Tom Collins ingredient
8 "The Addams Family" cousin
9 Charm
10 Oozy stuff
11 "Arrr!" shouter
12 Portuguese islands in the Atlantic
13 Stately homes
18 Bub
23 Tending to tickle
25 Pays to play
27 Made invalid
28 Starbucks size
30 First book
34 Unseal without tearing
36 Prepare to be photographed
38 Abundant
39 Erodes
42 Wrote, as a musical score
43 Don of "Cocoon"
44 "Party in the back" hairdo
45 Llama's cousin
47 Turned to anarchy
49 "That's enough!"
51 Aquarium fixtures
52 Onassis nickname
56 Jane Austen novel
60 English cathedral city
61 Puppy's bite
62 German article

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

Previous Puzzle's Solution

The contest answer is CUBIC YARDS. Take the multiple choice letter of each theme entry, followed by the first letter of the entry itself, to spell the contest answer.

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OPINION

Political Winds Shift in Argentina

AMERICAS
By Mary Anastasia O'Grady

Buenos Aires Are Argentines ready to throw off the yoke of *peronista* populism, thuggery and politics by roadblock that has destroyed their nation, and to rebuild the free republic of the 19th century?

The governor of Buenos Aires Province, María Eugenia Vidal of the Republican Proposal Party, doesn't quite say as much during a recent interview. But speaking at her offices in the capital city, she does argue that "the most important change Argentina is going through is not economic" but rather "cultural."

The governor of the biggest province is finding a way beyond peronist populism.

As proof Ms. Vidal cites her 2015 election, which made her the first non-peronist in almost three decades to lead Argentina's most populous province. That couldn't have happened unless her constituents wanted deep change in the political culture, she says. Though she doesn't mention it, she also is Argentina's most popular politician, and has been for the past couple of years.

To understand the 44-year-old governor and her popularity, consider what happened to her on an official visit to the coastal city of Mar del Plata in December. Unionists who had blocked the road began pounding on the SUV she was riding in and jumping on the hood.

They had a dispute with the municipality and wanted the province to mediate. Ms. Vidal says that when she saw the police approaching, she feared someone would get hurt. So she got out and confronted the mob.

"I told them what I felt," she recounts: " 'Do you think this right? Do you have to jump on my truck? Someone could get hurt. You're blocking traffic. Is this the way to solve this problem?' " The protest's leader stepped forward, claiming that the crowd had "overflowed" and that "people did not listen" to him.

NATACHA PISARENKO/ASSOCIATED PRESS

María Eugenia Vidal campaigns in October.

"And then I became angrier," Ms. Vidal tells me. "I said, 'I am responsible for what the police do. You are responsible for all these people that you brought saying that they had to do this. Now you cannot tell me you cannot handle them.' "

She then announced that a meeting already arranged between her chief of staff and the unionists would go forward "as agreed." She told the unionists: "And if you want a meeting with me, ask for it as appropriate." Then she added: "I'm going to get in the truck and I'm going to go, because I have to go." The mob dispersed, and "shortly after, they issued a public apology."

Ms. Vidal says she was angry "because the attitude seemed so violent, so unjustified." Yet this all-too-familiar means of making political demands flourished during the 12 years of Kirchner presidents, from 2003-15. "Without realizing it, I think I expressed what many Argentines have at some time wanted to do," Ms. Vidal says. Namely, to get out of the car and "say my rights matter. Let's talk, let's find another way, not violence, not roadblocks."

Ms. Vidal declares that change in the political culture has begun. But she warns that it will "cost a lot," mainly because backers of the status quo "are defending many privileges."

Nowhere is this more apparent than in the province's high crime rates and its failing education system. In two years, Ms. Vidal has removed some 9,000 police officers—almost 10% of the force—for corruption. Meanwhile she has upgraded police training, retraining, technology, equipment and salaries. A new law requires supervisory police and politicians to report their income and wealth. Her office is still compiling the data, but Ms. Vidal says the murder rate has fallen to between 5.3 and 5.8 per 100,000 from 7.3 when she took office. Auto theft has dropped 18%.

Containing public-sector wages in the province is key to reducing deficits and thereby reining in inflation, which was 25% last year. A tough negotiation with the teachers' union is in progress. The province is offering a 15% pay increase and a promise to revisit salaries in October.

The quality of provincial education is alarming. Ms. Vidal notes that 40% of junior-high and high-school students cannot pass exams in reading comprehension or basic mathematics. She partly blames the fact that "last year, only 30% of teachers went to work every day."

Students "have two, or three, or four teachers," which implies learning continually starts over. If the governor has her way, the new contract will link teacher compensation to attendance and a willingness to upgrade skills.

Ms. Vidal says Buenos Aires Province has often been shortchanged by politicians who used it only as a path to the presidency. "I do not want to do that," she says, brushing off my hint at her prospects for higher office.

"It is very difficult today," she says, "to ask for commitment, to ask for effort, to ask for a long-term project if one is not willing to give that commitment first, to make that effort, to set the example. And to be willing to face situations that have not been faced before"—like perhaps that day in Mar del Plata when the governor cleared the road.

Write to O'Grady@wsj.com.

The Twisted Case of the 'Deceptive' Pretzels

By Sheldon Bradshaw And Marisa Maleck

Rold Gold pretzels don't have much fat, and their label used to say so. But a plaintiff sued the company, alleging the "low fat" label was deceptive because the pretzels are . . . salty. The Rold Gold label depicts a pretzel with glistening salt crystals, but the plaintiff demanded a statement on the packaging: "See nutrition facts for sodium information."

The lawsuit was dismissed in 2014, but how did it get anywhere in the first place? Blame the Food and Drug Administration. The plaintiff's attorney relied on a warning letter in which the FDA accused a different company of a similar "deception."

Warning letters are a form of informal guidance. They lack the input of key stakeholders and are open to varying interpretations. In sending them out, the FDA acts like the opposite of a regulatory agency, which is supposed to issue rules to ensure that commerce remains regular and predictable.

But at least they aren't supposed to affect anyone other than the recipient. Yet attorneys have used them in recent years to file hundreds of class actions against food and beverage companies. These cases often cite the FDA's nonbinding guidance as evidence that a company has violated state consumer-protection laws.

In one recent flurry of suits, plaintiffs have taken companies to task for using the term "natural" to challenge products that contain genetically modified ingredients or are distantly touched by genetic modification. One suit against Dannon challenged its claim that its yogurt was "all natural." The plaintiff did not allege that any ingredient in the yogurt was artificial. The claim was that the yogurt was not natural because cows that produced the milk ate genetically modified feed.

How FDA 'guidance' letters feed meritless lawsuits against food and beverage makers.

This meritless suit was made possible in part because of the FDA's informal statements on the term "natural." The agency has no official position as to what constitutes "natural" products. But the agency has an unofficial—if tautological—view that "natural" means nothing artificial or synthetic has been included in, or added to, a food that would not normally be expected to be in that food.

The FDA has refused to weigh in on whether genetically modified ingredients are natural, but it has issued warning letters to companies claiming that their product's "natural" label is misleading because the product contains various ingredients that may or may not be synthetic depending on how the ingredient is processed.

There's more. One lawsuit alleged that a coffee company defrauded customers by advertising that its iced drinks contain more liquid than they actually do, even though a reasonable consumer would understand that ice displaces liquid. The FDA had issued informal guidance that consumers may be misled as to the amount of liquid in a container that is not entirely transparent—even if the container is transparent enough that you can see ice in it.

Given the uncertainty surrounding the FDA guidance documents, these cases seldom proceed to trial. Instead, companies settle for millions, the vast majority of which goes to the lawyers. Consumers often get vouchers to buy more of the product that allegedly misled them.

FDA Commissioner Scott Gottlieb has a chance to stop many of these abusive lawsuits by returning to administrative-law basics. Agencies should regulate industry by issuing a proposed rule, seeking comments, and then promulgating a final rule that reflects stakeholders' input and applies clearly and across the board. At the very least, the FDA should make clear that courts should no longer rely on subregulatory guidance in evaluating whether consumer class actions should proceed.

If Dr. Gottlieb takes these actions, he will go a long way to advancing the rule of law and common sense. He will also ensure that companies have the guidance they need to ensure their actions are lawful and that consumers, not lawyers, are the real beneficiaries of the FDA's actions.

Mr. Bradshaw is a partner and Ms. Maleck a senior associate with King & Spalding LLP. He was chief counsel to the FDA, 2005-07. She has represented defendants in some of the cases cited in this article.

'Craft' Beer Turns Out to Be a Big Business

By Robert Glennon

Were Eberhard Anheuser and Adolphus Busch craft brewers when they introduced their lager in 1876? "Craft beer" is not so easy to define. According to the Brewers Association, craft brewers are "small, independent and traditional." But "small" turns out to mean less than six million barrels, or 186 million gallons, a year.

Six of the 10 largest U.S. breweries by volume are craft brewers. Sierra Nevada, New Belgium and Deschutes are national brands. The Boston Beer Co., producer of Sam Adams, trades on the New York Stock Exchange under the ticker symbol "SAM," and has a market capitalization of more than $2 billion. Oregon-based Craft Brew Alliance trades on Nasdaq as "BREW" and controls beer made by Red Hook, Kona Brewing and other once-independent breweries.

Recent years have seen a world-wide wave of beer consolidation. When the dust settled from various mergers, two conglomerates, Molson Coors and AB InBev, controlled 90% of U.S. beer production. They've been buying up craft breweries, including Blue Moon, Karbach, Wicked Weed and Goose Island. Last year Heineken acquired Lagunitas.

Recent years have seen a world-wide wave of consolidation.

Are the acquired brands still craft brewers? Heineken promised to "maintain the Lagunitas culture and free spirit." Walt Dickinson, co-founder of Wicked Weed Brewing, promised "nothing's going to change" under Ab InBev. Such promises aren't enough for the Brewers Association, since the brewers are no longer "independent."

The conflict between craft brewers and the multinationals has become a fight in the trenches. Craft brewers in Massachusetts and Texas are struggling to reform franchise and distribution laws. Lurking beneath the legal technicalities lies a critical issue for craft brewers: access to shelf space and beer taps. It's a big challenge given the structure of the beer industry. After the repeal of Prohibition in 1933, Congress and most state legislatures implemented a three-tier system of producers, distributors and retailers. Most producers must retain the services of a distributor.

For some craft brewers, that's a major problem. Most distributors are aligned with one of the two conglomerates, which exert leverage on distributors to favor their brands.

At one level, the question is whether drinkers care whether their beer comes from a small, independent brewery. Perhaps craft beer is merely another fragmented market going through a consolidation process. Equally plausible is that it's truly a cultural phenomenon.

The answer may become clearer. In June 2017, the Brewers Association launched a seal to be put on bottles or cans, labeling the product as "Brewers Association Certified Independent Craft." As of Feb. 26, 3,033 craft brewers out of 5,546 nationwide pledged to use the seals. Consumers may end up voting with their wallets in a referendum on the importance of sustaining small, independent craft brewers.

Mr. Glennon is a professor at the University of Arizona and author of "Unquenchable: America's Water Crisis and What to Do About It."

BOOKSHELF | By Tom Perrotta

The Saints Of the Sidelines

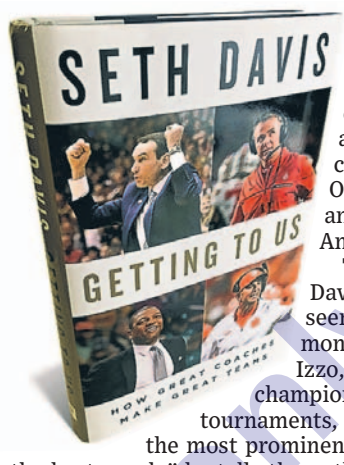
Getting to Us

By Seth Davis
(Penguin Press, 294 pages, $28)

Early in the 1981-82 season, his second as the coach of Duke University's men's basketball team, Mike Krzyzewski cried in the shower. Duke had lost four of its first five games, and it wouldn't have been a surprise if Mr. Krzyzewski needed to start worrying about his job. Did he recruit the wrong players? Had he run the wrong plays, or destroyed the confidence of the team? Whatever it was, Mr. Krzyzewski was sure he had to figure it out quickly.

By now you know the result: Mr. Krzyzewski is still the coach of Duke, whose team has won five NCAA College Championships and this year made it to the Elite Eight before being knocked out by the Kansas Jayhawks.

To learn exactly how Coach K got from there to here, you can pick up "Getting to Us: How Great Coaches Make Great Teams" by Seth Davis, the longtime college basketball expert who, among other roles, is part of the CBS broadcast during the college basketball season. This series of profiles is a brisk and colorful companion if you want to know how several of the best coaches in college hoops operate. (It also offers vivid sketches of college football coaches, like Ohio State's Urban Meyer, and pro coaches like the Los Angeles Clippers' Doc Rivers.)



The winning coaches Mr. Davis writes about often don't seem to have much in common. Michigan State's Tom Izzo, who has won one NCAA championship and five Big Ten tournaments, sums up what seems to me the most prominent theme. "I don't think I'm the best coach," he tells the author, "but I do think I work as hard as anybody." Hard-working he may be, but Mr. Izzo also comes across as boisterous, friendly and energetic. He always leaves his office door open, we're told. Syracuse's Jim Boeheim, by contrast, is dry and taciturn. The master of the zone defense in college basketball does not celebrate victories, and constantly fears defeat. "It's all about losing," he tells the author. "When we win, I'm pretty happy for about an hour, and then I'm thinking about the next game. When we lose, I'm thinking about that game until we get to the next one." Mr. Boeheim doesn't build relationships with his players the way that Mr. Izzo does, but it doesn't matter. Mr. Boeheim has now been head coach at Syracuse for more than 40 years and competed in the NCAA tournament more than 30 times, including this year, when his team made it to the Sweet 16 but lost—to Coach K's Blue Devils.

Then there's Geno Auriemma, the coach of the University of Connecticut's women's basketball team, who has 11 national championships to his name. While winning title after title, he's helped change the way people viewed women's basketball. ("He would coach them just as hard as he would coach men," Mr. Davis says the coach vowed to himself early in his career.) Of all the characters in the book, Mr. Auriemma—boisterous, demanding and relentless—has accomplished the most. But Mr. Davis also has a fine chapter on a young coach who's still getting started, 41-year-old Brad Stevens, who twice coached the men's team of tiny Butler University to the NCAA Championship game. Mr. Stevens now leads the young and talented Boston Celtics.

From Syracuse's Jim Boeheim to Duke's Mike Krzyzewski, the best coaches in sports get their players to work together as a collective unit.

These coaches are certainly some of the best around, and just hearing their stories can be educational, but somewhere along the line either Mr. Davis or his publishers became convinced that storytelling alone wasn't good enough. He needed a big idea about what makes these men great leaders. So Mr. Davis proposes two. First he suggests that this very disparate group of individuals all share what he calls PEAK qualities: persistence, empathy, authenticity and knowledge. Then he also claims they have a common strategy, what he calls "Getting to Us"—essentially, turning a team of individuals into one powerful "Us." Mr. Davis introduces these terms into every chapter but thankfully doesn't write about them for very long. Still, when they appear, they cause confusion and, for me, provoke disbelief.

As far as I can tell, Mr. Davis didn't talk to his subjects about his "Us" and PEAK theories, perhaps knowing full well how they would respond: "What are you talking about?" Here's just one occasion where the author's jargon seems out of touch: "Whenever one of his players finally does buckle under all the stress, Auriemma unleashes all the dimensions of his PEAK profile." Mr. Auriemma puts it better, and more simply: "[I] blow so much smoke up their butt that they feel like they're the king of the world." Maybe Mr. Davis never spoke to his subjects about PEAK or "Us," because the ideas were not in his head until after his interviews were done. But why not follow up?

Even if you accept Mr. Davis's concepts as real, they seem too diffuse to have much meaning. The author lavishes praise on Jim Harbaugh, currently the coach of the University of Michigan's football team, despite little evidence that he fits the author's model of a team-centered coach. Mr. Harbaugh is a hard-charger, one who does things his way or no way. For a while, this worked, and in four short years he led the San Francisco 49ers to the playoffs and a Super Bowl. But, as Mr. Davis says of Mr. Harbaugh, "diplomacy has never been his forte." More important, as the author himself notes, the coach's professional players on the 49ers—who should have been believers in "Us"—grew tired of the ways he treated them like children, including banning "music and card games on flights because he wanted them to focus on the game."

Is Jim Harbaugh an intelligent man and a capable coach? For sure. But is he the type that players love for long periods, and will do anything for? The jury, I suppose, is out. I wonder if Mr. Davis shouldn't have focused on a different Michigan coach, John Beilein, who rarely gets elite recruits but, for the second time in six years, has taken his basketball team to the championship game of the NCAA tournament.

Mr. Perrotta writes about tennis and other sports for the Journal and other publications.

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OPINION

REVIEW & OUTLOOK

Citizenship and the Census

Justice wants the data for more race-based gerrymandering.

The Trump Administration has decided to include a question about citizenship in the 2020 census, and Democrats are calling it an attempt to rig the count. That's unlikely, and it ignores the real problem, which is that the White House is continuing the Obama Administration's practice of politically weaponizing the Voting Rights Act.

The Constitution mandates a survey of all U.S. residents every decade, and Commerce Secretary Wilbur Ross has wide discretion over the questions to ask. Researchers and lawmakers desire a wealth of data, but longer surveys reduce response rates. So the Census Bureau over the decades has truncated the survey to data necessary to administer federal laws and project population growth—such as gender, race, age, household size and home ownership.

The American Community Survey, which each year samples about 2.6% of residents, collects more detailed information including citizenship status and country of origin. But the decennial data is used in reapportioning House seats and doling out federal grants, and while noncitizen residents can receive government benefits, only citizens can vote.

Democrats claim the citizenship question will depress response rates by undocumented immigrants and that left-leaning state populations will be underestimated. That's possible, though by how much and how it would matter is far from clear. Response rates for the 2000 long-form Census, which asked about citizenship, declined by a mere 3.3% more for noncitizens than citizens.

If there were an undercount, Republican-leaning states would also be as likely, if not more, to be harmed. Undocumented immigrants make up 10.3% of Yuma, Arizona; 10.2% of McAllen, Texas; 10.1% of Gainesville, Georgia; and 7.3% of Miami, according to the Pew Research Center. Compare that to Los Angeles (7.5%), New York City (5.7%) and Chicago (4.5%).

Many of the dozen or so Democratic states that have sued the Trump Administration over the question—e.g., California, Illinois, New York, Pennsylvania and Rhode Island—are likely to lose House seats after 2020 due to slow population growth with or without a citizenship question. The Trump Administration may be a convenient scapegoat for out-migration caused by high taxes or slow job growth.

The progressive critics are also missing that Commerce says the Justice Department requested the citizenship question to continue a long-time progressive policy: to wit, enforcing Section 2 of the Voting Rights Act, which prohibits voting practices that discriminate by race. Justice supposedly needs detailed data on citizen voting-age population by census block, which the American Community Survey doesn't provide.

For decades, the federal government and courts have held that Section 2 requires majority-minority districts—i.e., where minority groups constitute a majority of a district. The Obama Justice Department used Section 2 as a cudgel against GOP redistricting plans and voter ID laws.

In 2013 then Attorney General Eric Holder joined a complaint against the Texas state House and Congressional maps, which allegedly submerged "majority-minority areas into a majority-Anglo district" while packing "minorities into certain districts to dilute overall minority voting strength." The Supreme Court in January agreed to hear the case, which provides a good opportunity to clean up its jurisprudence.

The Court has ruled that state legislatures must consider race when drawing maps, but not too much. In 2015 a 5-4 liberal majority blocked Alabama's legislative redistricting plan because it concentrated too many blacks in one district (*Alabama Legislative Black Caucus v. Alabama*). As Justice Clarence Thomas wrote in his dissent, Alabama's "redistricting effort was indeed tainted, but it was tainted by our voting rights jurisprudence and the uses to which the Voting Rights Act has been put."

For all of the attention this year on political gerrymanders, the Court's tolerance for race-based redistricting has created far more mischief and political division. No matter the Trump Administration's intentions, collecting granular citizenship data will give Justice lawyers more ammunition for paint-by-numbers racial-voting litigation. The progressives now denouncing the Trump Administration may find they can use the data to further their agenda of race-based representation.

Egypt's 92% President

Sisi wins a second term but could learn from Mubarak's mistakes.

Egyptian President Abdel Fattah Al Sisi won his second term as President last week with an estimated 92% of the vote, which says all you need to know about the contest. The former general has blunted any serious political opposition in a country still reeling from the Arab Spring and the attempt by the Muslim Brotherhood to turn Egypt into an Islamist state.

Egyptian authorities jailed or sidelined Mr. Sisi's political opponents, plastered the country with pro-Sisi propaganda and threatened citizens with fines if they didn't vote. Yet only about 42% of the public seems to have voted, down from 47% in 2014. The turnout should worry Mr. Sisi because it signals a combination of apathy and cynicism that sooner or later will turn into harder political opposition.

The American left is criticizing the Trump Administration for not denouncing Mr. Sisi, and we wish Donald Trump would speak up for more political and social space in Egypt. But the critics would have more credibility if they had shown more alarm at the Muslim Brotherhood's attempt to impose one man, one vote, once. America's pundits descended on Cairo's Tahrir Square to celebrate the revolution against long-ruling strongman Hosni Mubarak in 2011 but could afford to leave as the Brothers took power and tried to squash the opposition. Mr. Sisi and the military intervened and have ruled since.

Yet Mr. Sisi could learn from the mistakes of Mr. Mubarak, who ruled by telling Egyptians their only political choice was him or Islamist radicals. By crushing civil-society groups and political alternatives other than the Muslim Brotherhood, Mr. Mubarak let the Brothers seize the brief political opening after he was ousted. Mr. Sisi should use his second term to allow more moderate voices to emerge as a channel for political dissent even as he stresses economic growth and crushing an Islamist insurgency in the Sinai.

The U.S. needs a stable Egypt as an ally against Islamic radicalism, and in the long run that means letting Egyptians develop social and political alternatives to Sunni radicalism.

A Defective Safety Squad

The Consumer Product Safety Commission is still run by Democrats.

Based on its quirky Twitter account, the U.S. Consumer Product Safety Commission looks benign, even friendly. Turtles in space, unicorns and a dog named Barks McWoofins warn about household hazards and offer tips to avoid injuries. But this regulator has jurisdiction over more than 15,000 products, from baby cribs to chain saws, and Barack Obama's appointees still run the place.

Under Democratic control, commissioners have held businesses to unattainable safety standards, punishing them even for freak accidents. Fines run as high as $15 million. The agency sets its annual agenda each spring, so if Senators don't move fast to confirm Trump nominees Ann Marie Buerkle and Dana Baiocco, Mr. Obama's picks will continue their reign well into 2019.

One egregious regulatory abuse involves Michaels, an arts and crafts retail chain. On nine occasions between 2006 and 2010 Michaels received reports that one of its vases had shattered, cutting customers. During those four years the company sold more than 203,000 vases, meaning an injury occurred 0.004% of the time.

Michaels nonetheless reported the vase as possibly defective in 2010. But because Michaels failed to file a report after the first accident, the commission imposed a $7.1 million fine. The retailer spent years in court challenging the penalty, settling last month for $1.5 million. Businesses beware: The feds want an immediate report of every customer cut, scrape or bruise.

The agency has also gone after businesses when a non-defective product causes an injury due to consumer misuse or negligence. Witness Zen Magnets. Shihan Qu, then 22, founded the company in Colorado in 2009 with $800. He sold sets of magnetic beads, which users can twist and click into whimsical sculptures. They're more like art supplies than a toy, and Zen Magnets never marketed them to kids. Even so, the commission learned that toddlers and teens had swallowed the magnets, causing life-threatening intestinal pinches and perforations. The agency treated the magnets like a defective product, ordered a full recall, and later sought to ban them.

"It's not like this is the first product that's dangerous if ingested and not dangerous if not ingested," Mr. Qu said. "If you were to look at one of our products, it's almost comical how many warning labels are on it. It has more warnings than cigarettes and trampolines and pistols combined. But the Commission has been saying that there's no warning, no age restriction, no waiver that will make these magnets safe enough."

In this case and others, the Democratic commissioners are setting a precedent that a business is at risk if it can't guarantee the unconditional safety of its wares. Mr. Qu calls this as "a corporate death sentence" for many small businesses. He's challenging the agency, and even with discounted legal help he's spent more than $200,000. Six years into the battle, the company is down to three employees from 12.

Legitimate product abuses warrant federal intervention, but regulatory power can also be misused. The Senate could restore some balance by confirming Ms. Buerkle and Ms. Baiocco before the agency does more harm.

LETTERS TO THE EDITOR

Facebook and Its Fake News Comeuppance

Paul Bergevin's "Mark Zuckerberg Is No James Madison" (op-ed, March 21) about Facebook hits the mark. Mr. Zuckerberg and others pretend they are selling something new, when in reality it's the same old come-on where suckers think they're getting something for nothing.

Facebook users believe they are customers, but in truth they are product sold to the highest bidder. To quote B.F. Skinner, "a system of slavery so well designed that it does not breed revolt is the real threat."

All actions have consequences, and our "friends" at Facebook are about to learn a hard lesson.

GERRY DEMSKI
Clarkston, Mich.

Mr. Bergevin's piece accurately cites the beauty of our founding document and failure of today's cultural pioneers to account for human nature. His solution, however, is all wrong. Once again we are presented with the option of saving ourselves from ourselves. Whatever happened to caveat emptor, common sense and the ability to reason?

PETER SMITH
W. Newbury, Mass.

Our data is for sale and will be in one form or another as long as this and other "free" social media sites exist. The KKK wore masks in the past just like Antifa does now to hide from prosecution. Now we have the digital mask of social media where anyone can publish anything behind easily fabricated identities. Fake news, phony political content and bullying are all produced 24 hours a day. Most lives appear perfect.

"Free" is too high a price to pay for this social destruction.

MICHAEL P. CARTER
Savannah, Ga.

Paul Bergevin joins the chorus calling for "filtering" of internet content, in this case Mr. Zukerberg's Facebook. During most of my adult life the news that I received was indeed filtered, in most instances by liberal newspaper editors. I'll take my chances on a wide-open internet, thank you.

RODGER CORNELL
Kinsale, Va.

The impact of fake news as disseminated through Facebook isn't indicative of the failure of the platform, but rather its success. The design is for clicks to surge through the infrastructure as quickly as possible. As Mr. Bergevin mentions, the MIT study asserts that fake news travels faster than real news does.

The failure of Facebook was neither in its platform nor in designing such a platform. We couldn't have expected the company to anticipate the impact of fake news. The failure, instead, was in Facebook's reaction and handling of its role in disseminating fake news.

KEVIN BENDESKY
New Haven, Conn.

Up at Night and Worrying About the Country

Regarding Thomas Lee's "What's Keeping David McCullough From Sleeping" (op-ed, March 26) in which he discusses Mr. McCullough's sleeplessness from worrying about our country, I was reading his "John Adams" when we suffered the shock and heartbreak of 9/11. His skill portraying the great tragedies of our just-forming country and the heroism and character of Adams and others put in perspective the magnitude of what terror and adversity can truly be. It gave great comfort that we would overcome such a treacherous assault. If we put Mr. McCullough's books in the hands of younger generations to learn why things have turned out as well as they have, I have no doubt we'd all sleep better at night.

CAROL COOKERLY
Atlanta

When I travel, I rarely find anyone reading a book. Most are glued to their electronic device. We have produced a self-centered population with attention-span limitations and entertainment needs that aren't conducive to focusing on a thick book about the life of another person. Furthermore, although Mr. McCullough won Pulitzer Prizes for his biographies of John Adams and Harry Truman, popular culture is trying to marginalize the importance of dead white guys.

I can understand why David McCullough suffers with insomnia over the prospect that the coarsening of our society might render his life's work irrelevant to more and more Americans.

BRIAN KENT
Tulsa, Okla.

I think it is a monumental sadness that so many Americans lost their love of country and cultural heritage, blaming themselves for every petty grievance that emerges in the world. The left-wing, hate-America instinct has triumphed in our schools. The immigrant victimization experience has eclipsed America's frontier experience. Where the builders were once icons of the American spirit, the takers in a increasingly socialist state are killing that spirit. These thoughts require that I nap.

Three cheers for Mr. McCullough.

RITCHIE CORYELL
Centreville, Va.

Constitution Says Congress, Not Economists

Regarding Alan S. Blinder's "Pols Use Economics the Way Drunks Use Lampposts" (op-ed, March 27): As Ludwig von Mises pointed out, "economics is a theoretical science and as such abstains from any judgment of value." It may tell us that price controls are likely to lead to shortages but is silent on whether or not such a policy should be pursued. It lacks the defined scale of values necessary to normative judgments. In a representative democracy, such judgments are left to the voter and their chosen representatives. This system, while far from perfect, strikes me as superior to having values imposed by an unaccountable technocrat however proficient in economic theory. How interesting that Mr. Blinder's opinion piece ran next to an article warning of the danger posed by the entrenched and unaccountable bureaucracy that has come to be known as the "deep state."

JIM REARDON
San Diego

Let's face it, economists' predictions don't have the best accuracy. It's hard for me to see how economic policy from the Federal Reserve has helped me as a retiree. In my lifetime I have paid over 11% for a mortgage, about 13% for a car loan, and now I am forced into risky investments to maintain a decent, not great, retirement income. Mr. Blinder thinks this is a successful history for the Fed's monetary policy. I think we need to give President Trump a chance before we decide his ideas are a disaster. It would be fine with me if the politicians would use economics the way a dog uses a fire hydrant.

MICHAEL P. CARTER
Savannah, Ga.

Trump Doesn't Need Advice On Negotiating With Kim

I find it hard to believe that Robert Zoellick thinks that President Trump needs a refresher course in negotiating when he knows full well that Mr. Trump literally wrote the book ("10 Tips for Negotiating With Kim Jong Un," op-ed, March 28).

It's been my experience and observation that keeping one's opponent off balance is a primary tactic in negotiating. It seems to me that we have proof of North Korea's vertigo given that Kim Jong Un visited Beijing on March 26. The relationship between Pyongyang and Beijing is no lovefest. It's symbiotic at best.

I say, let Trump be Trump. He knows what he's doing.

RICH ELLIS
Winter Park, Fla.

Mr. Zoellick gave President Trump 10 tips for negotiating with North Korea. I'll give him one: Don't.

DAN SMITH
Detroit

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Pepper ... And Salt

THE WALL STREET JOURNAL

"This month has five Mondays."

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OPINION

Climate Alarmists May Inherit the Wind

By Phelim McAleer

San Francisco

Five American oil companies find themselves in a San Francisco courtroom. *California v. Chevron* is a civil action brought by the city attorneys of San Francisco and Oakland, who accuse the defendants of creating a "public nuisance" by contributing to climate change and of conspiring to cover it up so they could continue to profit.

No trial date has been set, but on March 21 the litigants gathered for a "climate change tutorial" ordered by Judge William Alsup—a prospect that thrilled climate-change alarmists. Excited spectators gathered outside the courtroom at 6 a.m., urged on by advocates such as the website Grist, which declared "Buckle up, polluters! You're in for it now," and likened the proceeding to the 1925 Scopes Monkey Trial.

They likened a courtroom 'tutorial' to the Scopes Monkey Trial. But their side got schooled.

In the event, the hearing did not go well for the plaintiffs—and not for lack of legal talent. Steve W. Berman, who represented the cities, is a star trial lawyer who has made a career and a fortune suing corporations for large settlements, including the $200 billion-plus tobacco settlement in 1998.

"Until now, fossil fuel companies have been able to talk about climate science in political and media arenas where there is far less accountability to the truth," Michael Burger of the Sabin Center for Climate Change Law at Columbia University told Grist. The hearing did mark a shift toward accountability—but perhaps not in the way activists would have liked.

Judge Alsup started quietly. He flattered the plaintiffs' first witness, Oxford physicist Myles Allen, by calling him a "genius," but he also reprimanded Mr. Allen for using a misleading illustration to represent carbon dioxide in the atmosphere and a graph ostensibly about temperature rise that did not actually show rising temperatures.

Then the pointed questions began. Gary Griggs, an oceanographer at the University of California, Santa Cruz, struggled with the judge's simple query: "What do you think caused the last Ice Age?"

The professor talked at length about a wobble in the earth's orbit and went on to describe a period "before there were humans on the planet," which "we call hothouse Earth." That was when "all the ice melted. We had fossils of palm trees and alligators in the Arctic," Mr. Griggs told the court. He added that at one time the sea level was 20 to 30 feet higher than today.

Mr. Griggs then recounted "a period called 'snow ballers,' " when scientists "think the entire Earth

PHIL FOSTER

was frozen due to changes in things like methane released from the ocean."

Bear in mind these accounts of two apocalyptic climate events that occurred naturally came from a witness for plaintiffs looking to prove American oil companies are responsible for small changes in present-day climate.

The defendants' lawyer, Theodore J. Boutrous Jr., emphasized the little-discussed but huge uncertainties in reports from the United Nations Intergovernmental Panel on Climate Change and the failure of worst-case climate models to pan out in reality. Or as Judge Alsup put it: "Instead of doom and gloom, it's just gloom."

Mr. Boutrous also noted that the city of San Francisco—in court claiming that rising sea levels imperil its future—recently issued a 20-year bond, whose prospectus asserted the city was "unable to predict whether sea level rise or other impacts of climate change or flooding from a major storm will occur."

Judge Alsup was particularly scathing about the conspiracy claim. The plaintiffs alleged that the oil companies were in possession of "smoking gun" documents that would prove their liability; Mr. Boutrous said this was simply an internal summary of the publicly available 1995 IPCC report.

The judge said he read the lawsuit's allegations to mean "that there was a conspiratorial document within the defendants about how they knew good and well that global warming was right around the corner. And I said: 'OK, that's going to be a big thing. I want to see it.' Well, it turned out it wasn't quite that. What it was, was a slide show that somebody had gone to the IPCC and was reporting on what the IPCC had reported, and that was it. Nothing more. So they were on notice of what in IPCC said from that document, but it's hard to say that they were secretly aware. By that point they knew. Everybody knew everything in the IPCC," he stated.

Judge Alsup then turned to Mr. Berman: "If you want to respond, I'll let you respond. . . . Anything you want to say?"

"No," said the counsel to the plaintiffs. Whereupon Judge Alsup adjourned the proceedings.

Until now, environmentalists and friendly academics have found a receptive audience in journalists and politicians who don't understand science and are happy to defer to experts. Perhaps this is why the plaintiffs seemed so ill-prepared for their first court outings with tough questions from an informed and inquisitive judge.

Activists have long claimed they want their day in court so that the truth can be revealed. Given last week's poor performance, they may be the ones who inherit the wind.

Mr. McAleer is a journalist, playwright and filmmaker. He is currently writing a play about Chevron Corp.'s legal fight over alleged pollution in Ecuador.

Europe Will Now Decide if the Iran Deal Survives

By Mark Dubowitz

If you heard a series of loud booms on March 22, they probably came from the exploding heads of many in the American and European political elite, following the appointment of John Bolton as White House national security adviser. With the ascension of this "hawk," President Obama's nuclear accord with the Islamic Republic of Iran appears to be on life support. Whether the deal survives is effectively Europe's choice, but Mr. Trump must be prepared to accept a real fix if it's offered.

On Jan. 12, Mr. Trump laid out three conditions for the Europeans to meet for the U.S. to remain in the nuclear deal, also known as the Joint Comprehensive Plan of Action. First, eliminate the provisions under which key nuclear restrictions expire over time. Second, constrain Tehran's nuclear-capable long-range missile program. Finally, allow for the inspection of military sites where the regime conducted clandestine nuclear activities in the past and may be doing so now. If the Europeans do not agree to these demands by May 12, Mr. Trump will impose powerful economic sanctions against the Islamic Republic.

The U.S., France, the U.K. and Germany negotiated the 2015 deal, along with Iran, China and Russia. Beijing and Moscow aren't likely to agree to a fix. But the Europeans are another story: They are massively invested in the U.S. and remain critical business partners for the Iranians. Europe is exposed to American secondary sanctions against Iran, and it has economic leverage over Tehran. Europeans also fear U.S. or Israeli military action against the Islamic Republic.

The recent trans-Atlantic talks have included how and when economic sanctions would be reimposed if Iran violates key red lines. The two sides also have been defining illegitimate commerce with the Islamic Republic. These discussions have focused on companies with ties to parties that control Iran's economy, including the supreme leader, the Islamic Revolutionary Guard Corps and the clerical establishment, as well as state and military companies.

European and American negotiators are also studying sanctions specifically targeted against the Revolutionary Guards, the praetorians of the Iranian regime. Sanctions on Hezbollah, the first and favorite foreign-born child of the Islamic revolution and Iran's most effective Shiite militia in the Syrian civil war, are also being discussed. Trans-Atlantic measures against Iranian cyberwarfare and interference with maritime shipping remain on the table.

Until Mr. Bolton's announcement, European negotiators were digging in on key aspects of these talks.

France, the U.K. and Germany can accept Trump's conditions or kill the agreement.

While showing some flexibility on Iran's long-range missiles and military-site inspections, they refused to budge in any meaningful way on sunset provisions. Germany has been particularly intransigent on this issue, as well as on Washington's call for Europe to designate Hezbollah's military and political wings as a terrorist organization—a longstanding and bipartisan American request. This resistance is even stranger given that Hezbollah has engaged in terrorism on European soil.

France, the U.K. and Germany also have refused to join the U.S. in designating the Revolutionary Guards a terrorist organization, which the Trump administration did in October. And they have resisted deploying the most powerful sanctions proposed to target Iran's missile program. Tehran's short-, medium- and intermediate-range missiles threaten U.S. forces in the Middle East and America's closest regional allies.

There is a lot riding on these talks, as Tehran is moving toward regional dominance. It has shown its willingness to deploy its deadly forces and foreign Shiite militias abroad. The Islamic Republic continues to develop easy-to-hide advanced centrifuges and long-range ballistic missiles. Its economy will be increasingly immunized against American sanctions. This should be as unacceptable to the Europeans as it is to the U.S.

France, the U.K. and Germany are now in a bind. They are terrified that concessions to Washington could prompt Iran to walk away, leading to a full-blown nuclear crisis. They watched President Barack Obama and Secretary of State John Kerry cave to Iranian nuclear blackmail, which was Tehran's negotiation strategy in 2015. But now they face an equally daunting challenge from Mr. Trump and his soon-to-be national security adviser, who seem prepared to walk away from the nuclear deal without even trying to fix it.

For the Europeans the least awful option should be to fix the nuclear deal. At least in private, they found it to be far short of the brilliant diplomatic achievement that Mr. Kerry touts. They will have to swallow some pride, as their dislike for Mr. Trump is profound. But if they don't act, Mr. Bolton will ensure that the president walks away in May.

Do the Europeans really want to have a nasty trans-Atlantic row over the clerical regime? They ought to want to make this too good a deal for Messrs. Trump and Bolton to turn down.

If the president rejects such an agreement, the Europeans will have negotiated in good faith. But, if they won't go far enough to strike an accord with Washington, then they will in part own the consequences that follow.

Mr. Dubowitz is chief executive of the Foundation for Defense of Democracies.

How the NLRB Evades the Law—and Can Bring Itself Into Line

By Peter Schaumber

In the wrong hands the National Labor Relations Board can become a law unto itself. In the past, it has spent thousands of taxpayer dollars prosecuting employers in cases it knew would be reversed on appeal. In one 2016 ruling, the U.S. Court of Appeals for the District of Columbia Circuit criticized President Obama's NLRB for using a 60-year-old policy as an "instrument of oppression" against unionized businesses. President Trump's board appointees should change this policy, which the Obama administration abused, and replace it with a new rule that prevents the hounding of businesses with meritless prosecutions.

Under the current policy, the board maintains that its national jurisdiction entitles it to ignore federal circuit court interpretations of the National Labor Relations Act. It applies the board's interpretations of the law unless they are reversed by the Supreme Court, ignoring the law of both the D.C. Circuit, which has national jurisdiction, and the 11 regional circuit courts.

The NLRB uses this abusive tactic because it knows many employers will settle rather than endure the cost of defending themselves. When defendants don't cave in, the board quietly accepts the circuit court's ruling but denies it any precedent for future cases. It also declines to seek Supreme Court review, so as to avoid the risk of losing its board law with an unfavorable ruling.

In the D.C. Circuit case mentioned above, the NLRB ignored the court's longstanding precedent on an employer's bargaining obligations under a collective-bargaining agreement, forcing a Michigan health clinic to defend itself against charges it knew the court would reject. Finding bad faith, the court awarded the employer $18,000 in attorney fees.

On its own, the court's rebuke will do little to restrain future boards from using the techniques of Obama board. The fine was paid with taxpayer dollars, and the culprits remained in office. But the new board can pass a rule requiring the NLRB to adhere to controlling federal circuit court interpretations of the National Labor Relations Act. Unlike board decisions, which can flip-flop from one board to the next, rules adopted after public notice and comment cannot be overturned without "substantial justification" or renewed rule-making.

The current board also has the opportunity to revisit other policies that have harmed American workers and businesses. One is the board's continued use of a Depression-era rule that makes unions, once elected, perpetual. Thanks to the rule, today a mere 6% of private-sector union workers have voted for the union that represents them, according to a 2017 Heritage Foundation report. To get rid of an unwanted union, employees must take the initiative to file a petition for a decertification election—a daunting task for workers, who might rightly fear a backlash from union representatives.

When an employer wins a case in court, the board's policy is to ignore the precedent.

To prevent an unwanted union from being kept in place, the Trump board should promulgate a rule that provides workers periodic and detailed notice of their right to file a decertification petition and enables employers to petition for an election when the union seeks a new contract and there is reason to believe the union lacks majority support.

The board should also address the labor-law regime that compels unionized workers to support their union's political activities. Board law requires workers to object formally to their dues being used for nonrepresentational purposes, such as supporting a political candidate. Those who object can be forced out of the union, and most are depriving them of a voice in the union that will negotiate their terms of employment.

Many unions also suppress information about workers' right to object, while others require that objections be renewed annually during a narrow time frame. As a result, 43% of unionized workers voted for Donald Trump in 2016, but less than 10% filed formal objections to their dues being used to further Hillary Clinton's campaign.

To protect workers' constitutional right not to be forced to support causes they disagree with, the NLRB should propose a rule that requires a worker to opt in—instead of having to opt out—before his dues can be extracted to support the union's nonrepresentational activities. Eighty-one percent of union members already support such a reform, according to a 2015 survey by Opinion Research Corporation.

These changes to NLRB policy are long overdue. Big Labor and its allies will fiercely oppose the proposed reforms, but let the debates begin. The NLRB claims to be impartial and proudly describes itself as "protecting workplace democracy." Let's see if it really does.

Mr. Schaumber, a former chairman of the NLRB, was appointed to the board by President George W. Bush and served from 2002-10.

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Notable & Quotable: Kasich

From "Party of One: John Kasich, 'positive populist,' eyes 2020" by John McCormack, Weekly Standard, April 2:

The common thread between Kasich's case for cutting welfare in the 1990s and expanding welfare now is the moralism behind each argument. It's this rhetoric, when aimed at other Republicans, along with his criticism of Trump, that makes Kasich anathema to so many GOP voters and leaders—not his ideological heresies. Trump himself, after all, campaigned on not touching entitlements, called the House GOP bill to partially repeal Obamacare "mean," and endorsed an assault weapons ban and a bill to protect "Dreamers" in various White House meetings (comments that were never acted upon). Kasich seems to recognize that they both color outside the lines when it comes to conservative dogma. "I understand Trump's negative populism," he says. But "I'm a positive populist. I've always been a populist." . . .

Kasich frequently talks about the need to restore certain moral values and civility. These goals are sometimes in tension, as demonstrated by the implication that those who opposed expanding Medicaid are immoral. "It was probably not right for me to do it because it put people off," Kasich tells me. . . . "At the same time, I didn't tell you to feel like I'm judging you. . . . But if I had thought it was going to be really offensive, I would not use that."

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TECHNOLOGY: FACEBOOK DRAWS FIRE FROM SILICON VALLEY B4

BUSINESS & FINANCE

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Walmart's Plans Worry Hospitals

By Melanie Evans

Early-stage deal talks between **Walmart** Inc. and **Humana** Inc. are deepening anxiety in the hospital sector, which already has been grappling with sluggish growth and competition from cheaper health-care options.

Hospitals have been eyeing Walmart nervously for years as it advances into health care, seeking to leverage its enormous purchasing heft, physical reach and focus on price. The Bentonville, Ark., retailer already operates pharmacies and primary-care clinics and plans to begin offering lab-testing services. It has also recently increased its direct negotiations with hospitals for competitive prices on some procedures for its employees.

Now, a deal for Louisville, Ky.-based insurer Humana could accelerate Walmart's transformation into a direct competitive threat and a force in tamping down spending on hospital services, according to industry executives and consultants.

A deal isn't guaranteed. But a merger could add to the wave of consolidation in U.S. health care, pairing insurers with other sectors of the industry that offer cheaper care through clinics and pharmacies. **CVS Health** Corp. announced last year a $69 billion deal for insurer **Aetna** Inc. **Cigna** Corp. early last month said it would buy **Express Scripts Holding** Co. for $54 billion, in a combination that would marry a health insurer and the largest U.S. pharmacy-benefit manager.

"These vertical deals are super exciting, mostly for the potential to keep people out of the hospital," said Zack Cooper, health economist at Yale University.

With a potential Walmart-Humana deal, "there is scope for this new entity to, in a sense, offer a product that has less bells

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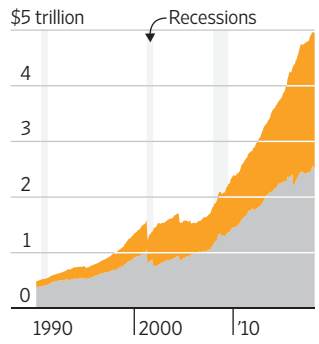
Widening Gap

Amount of U.S. investment-grade debt outstanding, by rating category



Sources: Morgan Stanley; Citigroup
THE WALL STREET JOURNAL.

In Spotify Offering, Turbulence Is Possible

By Alexander Osipovich And Maureen Farrell

Investors in **Spotify Technology** SA could be in for a turbulent Tuesday as the company uses an unorthodox maneuver to go public on the New York Stock Exchange, without many of the protections built into a standard initial public offering.

The music-streaming company has warned the process, called a direct listing, could result in greater volatility on the first day of trading than in a typical IPO. In part, that is because there isn't any bank to act as a "stabilizing agent" and prop up the stock if it plunges. On the other hand, Spotify's stock price could surge if its well-known brand name triggers a deluge of buying interest.

In a direct listing, a company floats its existing shares and lets the market find a price, without banks serving as underwriters to set pricing or allocate shares to big investors. While the process lets existing shareholders cash out, it doesn't raise any new money for the company itself.

It is unprecedented for a

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'Black Panther' Pulls Oxygen From Other Hollywood Offerings

JAKE MAY/ASSOCIATED PRESS

SMASHING RECORDS: The Disney movie has dominated box-office results, with other contenders turning in disappointing results. Many in the industry voice alarm that ticket sales are increasingly concentrated among just a few ultrasuccessful pictures. B3.

Inside Nike, a Boys-Club Culture

By Sara Germano And Joann S. Lublin

Inside the Tiger Woods Center at **Nike** Inc. headquarters, hundreds of employees gathered on March 20 to hear a message from top executives: We need to change.

The event, part of an initiative to encourage men to be better allies for their female co-workers, happened five days after a leadership shake-up that came about after employees shared concerns about representation of women in the company's top ranks, women's pay and a culture some former employees have described as a boys club.

Among the panelists was Elliott Hill, a 30-year Nike veteran who had been promoted in the shuffle to president of consumer and marketplace. He told the crowd about his Texas upbringing by a single mother, according to one person in attendance.

"I'm not here because of the brand or because of the athletes or because of the product," Mr. Hill said, according to the person. "I'm here because of the people." He and Michael Spillane, another top Nike executive, told the group that the company needed to create a better environment for its employees.

Nike, maker of the world's best-selling sportswear, built its global empire through deft

Please see NIKE page B2

Some Fear Shakeout In Triple-B Debt Arena

By Ben Eisen And Sam Goldfarb

U.S. companies have been bulking up on debt, introducing another wild card into financial markets already rattled by the recent tech selloff and the prospect of rising interest rates.

One slice of the high-grade corporate bond universe is fast becoming the epicenter of these concerns. There is $2.5 trillion in outstanding U.S. debt rated triple-B, according to Morgan Stanley, up from $1.3 trillion five years ago and $686 billion a decade ago. That is the most ever for companies rated triple-B, which is the lowest rung of the ratings ladder for companies that are above more speculative, or junk, bonds.

The fear: If the long economic expansion takes a turn for the worse, investors could jettison the debt of more leveraged borrowers such as triple-B issuers. That would further weigh on companies and potentially exacerbate any contraction.

The International Monetary Fund recently highlighted the

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INSIDE

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NTSB Rebukes Tesla in Wake of Crash

By Mike Spector And Tim Higgins

The National Transportation Safety Board expressed displeasure with **Tesla** Inc.'s recent disclosure that the company's semiautonomous driving system was activated before a fatal crash last month in California.

The agency, which dispatched a team last week to investigate the March 23 crash, said Sunday it is "unhappy" that Tesla revealed detailed information it had gleaned from vehicle logs about the collision, including its suggestion that the driver had time to put his hands on the wheel and react.

Tesla declined to comment Sunday about the NTSB statement.

The rare rebuke from the U.S. agency, which investigates significant accidents involving various transportation modes, comes amid mounting scrutiny of partial and fully automated driving technologies. The NTSB is also probing the March 18 death of a pedestrian fatally struck by an Uber Technologies Inc. self-driving vehicle with a safety operator behind the wheel in Tempe, Ariz.

Not long after the NTSB expressed its disapproval Sunday, Tesla Chief Executive Elon Musk joked on Twitter that the company was going bankrupt. "Despite intense efforts to raise money, including a last-ditch mass sale of Easter eggs, we are sad to report that Tesla has gone completely and totally bankrupt," he wrote. "So bankrupt, you can't believe it."

Mr. Musk's tweet, which doesn't appear to be in response to the NTSB, was timed for April Fools' Day and Easter. But it also comes at a particularly sensitive time for Tesla, which is also in a tight cash situation as it tries to ramp up production of its mass-market car, the Model 3.

Tesla is expected to report first-quarter vehicle sales numbers this week, and the market will be carefully examining the company's guidance

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BUSINESS & FINANCE

GILLES SABRIE/BLOOMBERG NEWS

A Nike store in Beijing. Interviews with current and former employees say culture problems have persisted at the company for years.

NIKE

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marketing that made competitiveness cool. Interviews with current and former employees say culture problems have persisted at the company for years. Some Nike veterans say when they tried to seek help for issues related to the work environment, they found human-resources leaders unhelpful or in some cases disrespectful.

Nike says it is conducting a review of its human-resources department and instituting mandatory manager training.

"When we discover issues, we take action. We are laser-focused on making Nike a more inclusive culture and accelerating diverse representation within our leadership teams," Chief Executive Mark Parker said in a statement.

Mr. Parker, in a staff memo in March, said the company received complaints of inappropriate behavior. In the memo, he also said Trevor Edwards, who had been widely considered the next CEO, was resigning his position immediately and would remain at the company until August. Additionally, Jayme Martin, a charismatic deputy of Mr. Edwards, left the company. Messrs. Edwards and Martin didn't respond to requests for comment.

Overseeing Nike's human-resources and employee-relations departments is an executive vice president who reports directly to the CEO. Nike hired David Ayre from PepsiCo Inc. for the position in 2007.

Several years ago, Nike conducted an investigation into complaints that Mr. Ayre was demeaning and condescending to others, according to people familiar with the matter. Mr. Ayre didn't respond to requests for comment.

Subsequently, Mr. Ayre agreed to seek counseling and meet with fellow executives to ask how he could improve, the people said. According to one person, he also then told a large group of colleagues, "My behavior has to change."

Mr. Edwards, whose position was Nike brand president, wielded control over all product categories and geographies as well as brand management. Being a close pal of Mr. Edwards was one way that helped men rise through the organization, people familiar with the matter said; some said they felt women weren't promoted as frequently and were subject to a more rigorous vetting process when they were promoted. Some people coined a catch phrase—"FOT" or "friend of Trevor," according to former employees.

"If someone was rising quickly, it was likely they were FOT," said a former employee in Nike+, a digital sports division that Mr. Edwards spearheaded.

Former employees said culture problems have existed at Nike for years. In September 2002, the global sports-marketing team had several days of meetings in Bradenton, Fla., and on the last night, after dinner, a bus carrying the group of several dozen employees pulled up to a strip club, said two people who were present.

Loredana Ranza, who worked in the group at the time, said only four people didn't enter the strip club—the three women on the trip, including herself, plus one male colleague.

"At the end of the day, you need to survive. You don't say, 'This is bad.' You just think it, and you try to work around it," said Ms. Ranza, who left Nike in 2008 and later worked at rival **Puma** SE. She filed a lawsuit in 2016, currently pending in the Netherlands, where Nike's European offices are based, alleging gender and age discrimination. Nike didn't comment on the case.

After a Nike designer, Marc Dolce, left to work for rival **Adidas** AG, two Nike vice presidents, Brian Zappitello and Dirk-Jan van Hameren, left vulgar, disparaging comments on his Instagram post of an Adidas sneaker design in 2016. Current and former employees said they were disappointed Nike didn't openly condemn the comments. Both executives remain at Nike; in January Mr. van Hameren was promoted to chief marketing officer. Neither responded to requests for comment.

Last year, Nike received a complaint that Mr. Ayre was creating a hostile work environment, which triggered a second investigation into the HR chief, according to people familiar with the matter.

In July, Mr. Parker held an annual leadership team meeting at a resort in Oregon's Willamette Valley, where he informed Mr. Ayre he could no longer stay, one person said.

The next day, Nike announced Mr. Ayre's retirement and the promotion of Monique Matheson, a 19-year Nike veteran and former chief talent and diversity officer, to succeed him.

Around the same time, women at Nike who were frustrated with the culture felt it was time to do some homework. After watching several female leaders depart, they drew up a survey to circulate quietly among staff. They wanted to gather information about pay equity and allegations of inappropriate workplace behavior, people familiar with the survey said.

The survey came to the attention of Mr. Parker in recent weeks, these people said. Soon after, the company started an internal investigation that led to the management shake-up in March.

TESLA

Continued from the prior page

on whether or not it can hit its oft-delayed goal, of producing 5,000 Model 3 cars each week, by the end of the second quarter. Analysts say that milestone is an inflection point for Tesla when the company can start generating cash.

Tesla's shares had surged over the past couple of years on the promise that Mr. Musk could not only deliver an all-electric car for the masses, but also fulfill his vision of creating cars that drive themselves.

Tesla's disclosure on Friday that the semiautonomous system, called Autopilot, was engaged before the fatal crash near Mountain View, Calif., immediately reignited questions about the technology. A man was killed after his Tesla Model X sport-utility traveling southbound on Highway 101 collided with a barrier and was struck by two other vehicles, according to the California Highway Patrol.

Tesla late Friday said Autopilot was activated in the seconds leading up to the crash. The driver's hands weren't detected on the wheel for six seconds before the collision, the company said. Tesla said vehicle logs showed the driver took no action despite having five seconds and about 500 feet of unobstructed view of the concrete highway divider.

On Sunday, the NTSB said it needs Tesla to decode the data recorded by the vehicle. "In each of our [past] investigations involving a Tesla vehicle, Tesla has been extremely cooperative on assisting with the vehicle data," an agency spokesman said. "However, the NTSB is unhappy with the release of investigative information by Tesla."

The NTSB said it would probe all aspects of the crash, including suggestions the driver had expressed previous concerns about Autopilot. It said it would publish a preliminary report on the investigation, likely within a few weeks of completion of field work.

"We've been doing a thorough search of our service records and we cannot find anything suggesting that the customer ever complained to Tesla about the performance of Autopilot," Tesla said in a statement. "There was a concern raised once about navigation not working correctly, but Autopilot's performance is unrelated to navigation."

The NTSB probe won't necessarily lead to sanctions against the electric car company. The NTSB determines probable causes of accidents and makes recommendations to policy makers, but doesn't issue penalties or take other punitive actions.

DEAL

Continued from the prior page

and whistles and is more efficient and lower cost," he said.

Outside its pharmacies—which operate across 4,700 U.S. Walmart stores—the retailer's health-service offerings are currently limited. Walmart operates 19 clinics in Georgia, South Carolina and Texas, and other providers operate about 50 additional clinics. But Walmart's expansive retail footprint would make it a formidable competitor should it build out low-cost outpatient offerings, said industry executives and consultants.

Humana, one of the nation's largest insurers, already announced in December it would jointly acquire home-health-care and hospice provider Kindred Healthcare Inc. with two private-equity firms.

A potential Walmart-Humana deal "should be a concern to everybody in health care," said Randy Oostra, president and chief executive officer of nonprofit hospital system **ProMedica**.

Walmart would join an increasingly crowded field of competitors poised to siphon patients and revenue from ProMedica's outpatient business, which Mr. Oostra said helps to subsidize unprofitable hospital services. "What worries us is death by a thousand cuts," he said. "Another deal and another deal." ProMedica, which operates 13 hospitals in Ohio and Michigan, is looking to diversify its revenue with international expansion and new businesses, he said.

Walmart is "a huge presence in a lot of people's lives" and has price-conscious consumers who trust the company's brand, said Lisa Bielamowicz, president of health-care consultancy Gist Healthcare LLC.

As an employer, Walmart has been a very sophisticated negotiator as it buys health benefits, which could increase competitive pressure on services delivered inside the hospital as well, said Dr. Bielamowicz and other industry experts.

Walmart has increased its use of direct contracting, offering to send employees from around the country to a small group of hospitals that agree to a fixed price and submit data on performance for review.

The retailer and other companies that employ the strategy use their employee health-plan and other outside data to analyze trends and identify hospital candidates, said David Lansky, president and chief executive of Pacific Business Group on Health, which works with the companies to run the contracting.

Walmart, the nation's largest private employer, declined to disclose how many employees have sought care from the 12 facilities with which it contracts for certain spine, cardiac, weight-loss and hip and knee replacement procedures and some cancer care. "Our focus has been on improving quality and identifying outstanding hospital systems for our associates," the company said in a statement.

—Anna Wilde Mathews and Sarah Nassauer contributed to this article.

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Other Films Hurt in Wake Of 'Panther'

Disney's superhero movie has taken in $650.7 million since it opened in mid-February

By Ben Fritz

This year's box office so far has been a story of one completely dominant movie, "Black Panther," highlighting a potentially troubling trend for Hollywood in which ticket sales are increasingly concentrated among just a few ultra-successful pictures.

With $650.7 million and counting, "Black Panther" is on track to become the third highest grossing movie ever in the U.S. and Canada. It accounted for 23% of all ticket sales in the first three months of the year, ended Saturday, according to comScore. That is the second-highest percentage ever behind only "Titanic," which took 25% in the winter of 1998.

The success of "Black Panther" is more impressive, considering it opened Feb. 15. "Titanic" was in theaters for the entire January-March period 20 years ago.

"Black Panther" has left a string of disappointments in its wake, like Jennifer Lawrence's "Red Sparrow" and the adaptation of the children's book "A Wrinkle in Time." Numerous sequels and reboots this winter significantly underperformed their predecessors, including "Pacific Rim Uprising," "Death Wish," "Tomb Raider," "Paddington 2" and "Maze Runner: The Death Cure."

The year's non-"Black Panther" box office only started to show signs of life this weekend, as director Steven Spielberg's adaptation of the best-selling novel "Ready Player One" opened to $53.2 million between Wednesday night and Sunday.

"Black Panther" is an extreme example of the trend that Hollywood has been struggling with for some years. In 2015, 2016 and 2017, the top 10 movies raked in between 32% and 35% of total box office, comScore said. Previously, that figure never exceeded 30%. So far this year, it is 58%.

Domestic box office has been roughly even for the past few years at around $11 billion, with rising ticket prices making up for slowly declining attendance. With the rapidly growing high-quality television options and more original movies available to watch at home on streaming services, it is harder to draw people to movie theaters.

Because people no longer need to go to theaters to find something good to see, they are more likely to be drawn when a movie becomes a cultural phenomenon, like "Black Panther" or last year's horror sensation "It."

The success of "Black Panther" is in part attributable to the long-running popularity of **Walt Disney**-owned Marvel Studios, which has created the strongest brand in Hollywood and released 17 hit movies, with only one disappointment, since 2008, an unprecedented streak.

"Black Panther" didn't just draw fans of the overarching Marvel cinematic universe, however. It stood out as the first big budget movie to feature a primarily black cast, becoming a cultural phenomenon for African-American audiences at a time when diversity is increasingly salient in the entertainment business.

Director Ryan Coogler also made a movie that earned almost universally positive reviews and strong word-of-mouth, resulting in repeat viewing by many fans.

The success of "Black Panther" has been good news for Disney and any theater playing it. But many in Hollywood are worried that the overall trend this winter is alarming for the movie business.

"The short-term benefit that a single, massively performing title may provide is often offset down the road by a lack of a foundation of solid hits to bolster the overall bottom line," said Paul Dergarabedian, senior media analyst at comScore.

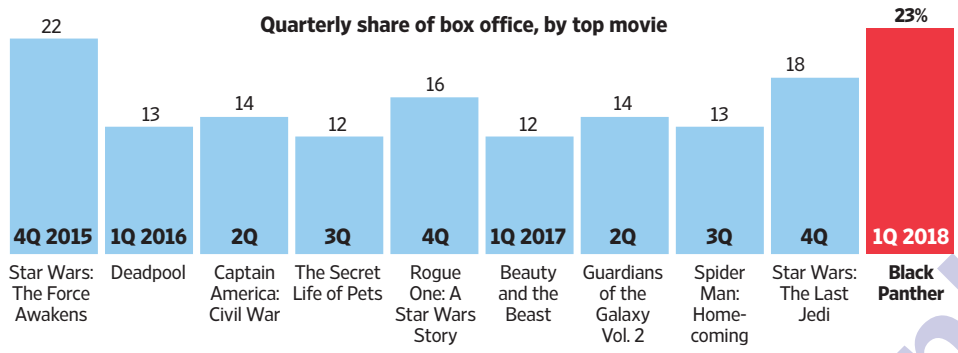
A few pictures released in December continued to do healthy business in January, particularly "Jumanji: Welcome to the Jungle" and "The Greatest Showman."

WALT DISNEY/EVERETT COLLECTION

'Black Panther' accounted for 23% of all ticket sales in the U.S. and Canada in the first three months of the year, comScore said.

Torn to Shreds

'Black Panther' has become one of the most successful movies ever in a near-record amount of time, completely dominating the winter box office in the process.



*Still in release Sources: comScore (share); Box Office Mojo (number of days)

THE WALL STREET JOURNAL.

Estimated Box-Office Figures, Through Sunday

FILM	DISTRIBUTOR	SALES, IN MILLIONS WEEKEND*	CUMULATIVE	% CHANGE
1. Ready Player One	Warner Bros.	$41.2	$53.2	--
2. Tyler Perry's Acrimony	Lions Gate	$17.1	$17.1	--
3. Black Panther	Disney	$11.3	$650.7	-34
4. I Can Only Imagine	Roadside Attractions	$10.8	$55.6	-21
5. Pacific Rim Uprising	Universal	$9.2	$45.7	-67

*Friday, Saturday and Sunday Source: comScore

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DAVE HOGAN/GETTY IMAGES FOR SPOTIFY

Kylie Minogue performed for the music service's Premium fans in London last month. The offering comes with unanswered questions.

How Competitors Are Muscling In On Spotify's Turf

By Anne Steele

Spotify Technology SA, the Swedish company set to go public this week, is the global leader in music streaming, but several competitors are working to differentiate their service to win over artists and listeners. Here is a look at the competition for music streaming, or listening to music over the internet in exchange for paying a flat monthly fee or listening to ads.

Apple Music

Apple Inc. launched its music-streaming service in 2015 and quickly became the No. 2 on-demand service.

Apple Music has benefited from its integration with Apple devices, from iPhones and MacBooks to Apple Watches and HomePod voice-activated speakers, which sync easily with Apple Music but less so with Spotify or other services.

Apple Chief Executive Tim Cook has said streaming isn't a money-making business but has emphasized the importance of providing music and supporting artists.

Pandora

Veteran internet-radio company **Pandora Media** Inc. has built the largest audio music-streaming service in the U.S. with 74.7 million active listeners to its free, ad-supported personalized music stations. The company and its stock have struggled recently as users and ad dollars have migrated to services that allow listeners to play individual songs on demand.

A new on-demand subscription service called Pandora Premium has nearly 5.5 million subscribers.

SoundCloud

Founded in 2007, Berlin-based SoundCloud Ltd. says it reaches about 175 million monthly listeners.

In 2016, it rolled out subscription tier SoundCloud Go+, which lets users listen to music offline and without ads for $9.99 a month.

Last year, SoundCloud laid off more than 40% of its staff and then replaced its leadership when it took $169.5 million from boutique investment bank Raine Group and Singapore investment company Temasek to stay afloat.

Google/YouTube

Alphabet Inc.'s YouTube alone accounts for twice as much time spent listening to on-demand music as all paid audiostreaming services combined, according to the International Federation of the Phonographic Industry. While artists continue to rack up massive streaming numbers on the video-sharing platform, the payout from those streams is much smaller than revenue brought in via subscription services.

After the record industry urged Google to offer more subscription options, it expanded its Google Play Music library platform in 2013 to include an "All Access" on-demand music-streaming service and has since launched a paid version of its popular video-sharing service called YouTube Red. The company is planning to combine the two services.

Amazon Music

The main draw for **Amazon.com** Inc.'s music service, introduced in 2016, is its ability to integrate with the company's voice-activated Echo smart speaker. The speaker's virtual-assistant technology, Alexa, takes requests such as "chart toppers from 1999."

Amazon has been pouring resources into Alexa as competition heats up among artificial-intelligence assistants from Google and Apple, according to people familiar with the company's thinking.

IPO

Continued from page B1

company as big as Spotify—which by mid-March was valued as high as $23.6 billion—to go public on the NYSE via a direct listing, though the process is often used for lower-profile transactions, such as a spinoff or emerging from bankruptcy.

Spotify has said it chose a direct listing because it doesn't need to raise more money. It also says the process is fairer because it puts large and small investors on a level playing field. In a normal IPO, the underwriting banks can allocate shares to favored clients ahead of the first trade.

Spotify is also saving tens of millions of dollars in fees by bypassing the IPO process, though it has hired **Goldman Sachs Group** Inc., **Morgan Stanley** and **Allen & Co.** as advisers. The banks will play a limited role compared with underwriters in a standard IPO, and Spotify will pay them only about €29 million ($36 million) in fees.

Two firms have the job of keeping Spotify's listing from going off the rails: adviser Morgan Stanley and Citadel Securities, which the company selected as its designated market maker. DMMs help ensure the orderly trading of NYSE-listed stocks and make money by quoting prices throughout the trading day and collecting the difference between the buying and selling price.

One of Citadel's traders on the exchange floor will determine the price of the first trade in Spotify, in consultation with Morgan Stanley. Ahead of the open, the bank will gather information about the price ranges at which investors want to buy or sell shares. The DMM will find the optimal price to balance out buying and selling interest.

That is similar to how a typical IPO works. A key difference is that Spotify's banks haven't been running a formal process to gauge demand for the company's shares, though Morgan Stanley has been working to assess interest.

There also won't be a "deal price" set the night before the listing, when underwriters usually sell shares to IPO investors. Without those steps, there will be less guidance for Morgan Stanley and Citadel to figure out the opening price.

In the absence of an IPO price, the NYSE will publish a so-called reference price for Spotify by early Tuesday. This placeholder figure may be used by trading systems to compute percentage moves once trading kicks off.

More important is the price range in which Spotify is expected to start trading. Spotify's range is likely to be wide when announced. In a typical IPO, that happens within the first hour after the opening bell at 9:30 a.m. Eastern time.

From then on, working with Morgan Stanley, Citadel will tighten the range and eventually open the stock at a specific price. An IPO at the NYSE can take anywhere from minutes to more than two hours to reach that point, with bigger deals typically taking longer to open. With Spotify, the NYSE and others close to the deal have warned it could take an unusually long time to open, given the uncertainties of the direct-listing process.

Pricing, Float Size Are Mysteries

As the year's hottest new tech listing of the year, Spotify Technology SA could pop on the first day—but uncertainties around its unusual approach to going public cloud the picture.

There has been a flurry of trading over the past week in Spotify's private shares, with prices as high as $137.50, up from a previous high of $132.50, according to people familiar with these trades.

One risk factor: it is unclear how many shares could trade on the first day. As much as 91% of Spotify's 178 million shares will be eligible for trading, but people close to the deal said they expect the actual float to be closer to two-thirds of the shares, and for co-founders Daniel Ek and Martin Lorentzon to hold on to their stakes in the company, at least initially.

Since 1995, U.S.-listed firms have sold roughly 35% of their shares on average in IPOs and U.S.-listed technology firms have sold 27%, according to Dealogic.

The people close to the deal didn't expect excessive selling because there is no one huge owner seeking to cash out. They expected it would be more controlled than the market has anticipated.

—Alexander Osipovich and Maureen Farrell

Tech Rivals Take Shots at Facebook

By Yoree Koh

Facebook Inc. is battling a backlash from lawmakers, regulators and users on multiple continents. Some of the sharpest criticism is coming from close to home.

A succession of Silicon Valley rivals have stepped forward in recent weeks and months to speak out against the social-media giant, some reprising old points of contention and others reacting to revelations about its handling of user data and of deceptive or manipulative content on its platform. The list includes the chief executive of **Apple** Inc., an artificial-intelligence expert at **Alphabet** Inc.'s Google and several former Facebook executives.

Apple CEO Tim Cook criticized Facebook and Google for their collection and usage of personal data.

A mix of factors is behind the barbs, observers say, from genuine concern to a desire to keep the scrutiny of regulators and lawmakers focused on Facebook and away from their own companies.

"Certainly a political stratagem would be to point to this one entity that's just gotten into trouble and say 'they're the problem, not us,'" said Roger Kay, president of Endpoint Technologies Associates, a technology market-research firm.

The industry opprobrium has grown louder with the revelation in mid-March that Facebook user data were improperly obtained by **Cambridge Analytica**, a data-analytics firm that worked for the 2016 Trump campaign. That incident has rekindled long-standing concerns about privacy practices at Facebook and other tech companies.

Apple Chief Executive Officer Tim Cook last Wednesday criticized companies such as Facebook and Google for their practices of collecting personal data across different products and using that data to build user profiles. Speaking to an audience in Chicago, Mr. Cook, who has long sought to differentiate Apple on privacy matters, contrasted its focus on selling devices with Facebook's and Google's ad-based businesses that are built on user data.

Asked what he would do if he were Facebook CEO Mark Zuckerberg, Mr. Cook replied: "I wouldn't be in this situation." He called for regulation of data and privacy, saying the companies had failed to self-regulate and limit what they collect from users. He also said that Apple could improve its privacy efforts and the way it polices content available on its devices.

Facebook and Google declined to comment. Mr. Zuckerberg has apologized for the Cambridge Analytica episode. He vowed to look for potential abuses of personal data by app developers and tweaked the privacy tools so users will be able to track and change with more ease some of the social network's data about them.

Days earlier, François Chollet, an artificial intelligence engineer at Google, sought to draw a line between his company and Facebook. He tweeted that Google products like search and Gmail help users "to do more, to know more." Facebook's newsfeed, he wrote, "manipulates your worldview and seeks to maximally waste your time."

Mr. Chollet pointed to his blog post about why he believes search engines are less dangerous than social networks. He declined to provide additional comment.

—Deepa Seetharaman and Tripp Mickle contributed to this article.

Amazon Is Tough Antitrust Target

By Laura Stevens

President Donald Trump's tweets against **Amazon.com** Inc. have renewed investor concerns about the prospect of antitrust action being brought against the online retail giant.

But targeting Amazon on anticompetition grounds would be difficult, requiring an overturn of the principles that have guided U.S. antitrust enforcement for decades, policy experts say.

ANALYSIS

On Thursday and again on Saturday, Mr. Trump on Twitter blasted Amazon over its business practices and economic impact, saying the company should pay more in taxes and is "putting many thousands of retailers out of business." The president's tweets followed a report Wednesday from online news site Axios stating Mr. Trump was looking at more strictly regulating Amazon through antitrust law, sending the company's stock down more than 4%.

Amazon's rapid growth over more than two decades from an online bookseller to a $178 billion retailer that also has a cloud-computing business, a Hollywood studio, a device business and a grocery-store chain has prompted Mr. Trump and some policy experts to question how big is too big.

Current regulations typically only kick into effect when a company is dominant in one market or is hurting consumers—neither of which experts think currently applies to Amazon. While Amazon has about 43% of the U.S. e-commerce market, it is still less than 4% of total U.S. retail, according to eMarketer.

Some people in the business community, including those who know Mr. Trump well, have said that antitrust law has failed its historical purpose when it comes to Amazon, focusing too much on pricing and not enough on concerns that integrated businesses can be anticompetitive, people familiar with the matter have said.

ULI DECK/DPA/ZUMA PRESS

A German Amazon.com warehouse. President Donald Trump has taken Amazon to task on its clout.

In particular, some of those who worried about Amazon's reach have circulated a January 2017 article in Yale Law Journal, "Amazon's Antitrust Paradox," by Lina M. Khan, that maps out how to restructure the antitrust enforcement.

Her basic argument is that the antitrust framework has moved from looking at market structure to consumer welfare, something that has led Amazon to escape scrutiny so far. She lays out an argument that if Amazon is practicing predatory pricing in various markets, that can squeeze competition, even if it is good for consumers. She argues that restoring an approach that examines Amazon's power across markets, rather than its impact on consumers, would more adequately address the tech giant's power.

Ms. Khan and other researchers recently have triggered some debate about antitrust regulation in the policy and academic community, says A. Douglas Melamed, a law professor at Stanford University and previous acting assistant attorney general in charge of the antitrust division at the U.S. Justice Department during the Clinton administration. But many of the theories are too general and operate on potentially problematic and unproven premises.

Targeting Amazon would necessitate a reversal of entrenched regulatory principles.

If Mr. Trump does decide to pursue any new regulations, he would either have to push a law through a Republican Congress that is unlikely to be receptive to more regulation, or involve the Justice Department and other regulators to bring a case before the courts, Mr. Melamed said. "It's a huge amount of work, with a very dubious payoff," he adds.

A White House spokeswoman on Thursday said "the president has expressed his concerns with Amazon. We have no actions at this time."

The Justice Department has no active antitrust investigations of Amazon, according to people familiar with the matter.

Amazon declined to comment. The company has said it collects sales taxes on its own inventory in all 45 states that have such a tax and has voluntarily started collecting taxes in some municipalities.

In an interview last year, retail chief Jeff Wilke pointed to the company's "diverse and horizontally large set of businesses" and the incredible competition it faces in each industry.

Many experts think it is unlikely Amazon will face increased regulation for just those reasons.

—David Benoit contributed to this article.

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Look for a busy night beyond the arc.

With Villanova being one of the most prolific three-point-shooting teams in the NCAA®, everyone's expecting they'll let it fly tonight. But what can the data tell us? By cross-referencing student-athlete performance with overall team stats, Google Cloud found that Villanova has five student-athletes who consistently contribute 12 to 22 percent of the team's total made three-pointers per game. And when they connect, they do so from 2.178 inches farther away from the basket than Michigan. So while Michigan is strong at defending against the three, guarding that many shooters could be a tall order in San Antonio.

Find out what your data is trying to tell you. See how at **g.co/marchmadness**, and look for real-time predictions powered by NCAA data and Google Cloud during the game tonight.

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HERE'S THE STORY...
Folks, we all have heard that a famous big box toy retailer is closing hundreds of brick & mortar stores across the country!
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TECHNOLOGY

KEYWORDS | By Christopher Mims

3-D-Printed Homes Are Happening, Stirring Global Buzz

Many inventions, in hindsight, feel more like discoveries. Think of the bicycle, or the steam engine, or glass—all simple and useful enough to be widely copied once they were known.

Another such invention, 3-D printing, is now scaling up. All over the world, an impressive diversity of people and organizations, ranging from startups and hobbyists to construction and engineering firms, are successfully prototyping 3-D-printed buildings.

The government of Dubai has set a goal of 3-D printing 25% of every new building by 2030. Prototype single-family dwellings have been 3-D-printed in China, Italy, Russia—and Texas. Global infrastructure firm **AECOM** uses 3-D printing to prefabricate jail cells and hospital rooms. Arup, a construction engineering giant in Europe, is testing a variety of such "additive manufacturing" technologies, in materials ranging from concrete to stainless steel.

This technology is still nascent. It isn't about to disrupt the approximately $10 trillion global construction market. It can't instantly solve housing crises or radically shrink building costs. It could remain a novelty, the 21st-century equivalent of the geodesic dome.

But the more you examine the basics—the way the technology could potentially save energy, materials and time—the more it starts to feel like an idea that just might work.

Meanwhile, architectural-scale additive manufacturing is yielding experiments that might directly benefit both the world's richest and poorest people. An Italian architect and a housing activist in El Salvador don't have a lot in common, aside from both having radical plans for combining robots with the Romans' favorite building material: concrete.

Massimiliano Locatelli, founder of architecture firm CLS Architetti in Milan, has just finished 3-D-printing an 1,100-square-foot, single-family dwelling to be unveiled April 15. He partnered with Arup and the startup CyBe, which makes a portable concrete 3-D printer.

The printer extrudes cement in much the same way a desktop 3-D printer extrudes plastic: A print head attached to a robotic arm moves around and around, depositing one layer at a time, until a structure grows up from nothing.

In love with the aesthetic of 3-D-printed buildings—unfinished, they look like layer cakes or exposed sedimentary rock—Mr. Locatelli says he is enthusiastic about using 3-D printing to shape retail spaces inside of larger buildings.

For Lisselot Tronconis, the appeal of 3-D printing isn't aesthetics, but that it can cut the cost, time and labor required to build homes. She wants to use 3-D-printed buildings to increase the number of houses she builds every year for some of the world's poorest people—families in the sprawling suburban slums of El Salvador.

Ms. Tronconis is the executive director of the charity People Helping People of El Salvador and the local program manager for El Salvador of New Story, which has partnered with Icon, an Austin, Texas, 3-D-printer construction startup. Using traditional methods, New Story has already built more than 800 homes world-wide, including 200 homes in El Salvador for families who previously lived in single-room shanties made of timber and sheet metal.

Currently, a cinder-block house requires about 15 days and $6,500 to build. Printing a home instead is projected to take 24 hours, cost $4,000 and use half as much iron rebar, a New Story spokeswoman said.

Icon printed a prototype home in Austin and has adjusted its process in anticipation of conditions and materials available in El Salvador. Still, unknown challenges may arise when the first New Story house is printed later this year, the spokeswoman said.

Fundamentally, 3-D printing with concrete is a modern update of incredibly old building technologies, says Rick Rundell, a senior director at Autodesk, which makes design and engineering software popular among architects, engineers and contractors. All over the world, our prehistoric ancestors made homes from mud, adobe, cob and similar materials, building up their walls one layer after another. Their structures shared many of the same advantages of modern 3-D-printing: They were strong, cheap and locally sourced, and they minimized waste.

The more you look at the basics, the more 3-D building feels like it might work.

While concrete is by far the most widespread architectural-scale additive-manufacturing material, it isn't the only one. In Nantes, France, a team of university researchers printed a home out of both concrete and foam. Researchers in Sweden, the U.S. and elsewhere are attempting architectural-scale building with cellulose, glass and a variety of novel composite materials.

As in manufacturing, the main challenge to 3-D printing for buildings is that existing techniques for making things are already pretty good. This could confine the new approach to niche uses.

However, 3-D printer construction could find applications where there is little market for current techniques, owing to cost or other difficulties. That might mean housing the world's billion poorest people, but it could also mean erecting fantastical, currently impossible-to-build structures in the deserts of the United Arab Emirates—or for astronauts on the moon.

ICON

A home 3-D-printed by startup Icon in Austin, Texas.

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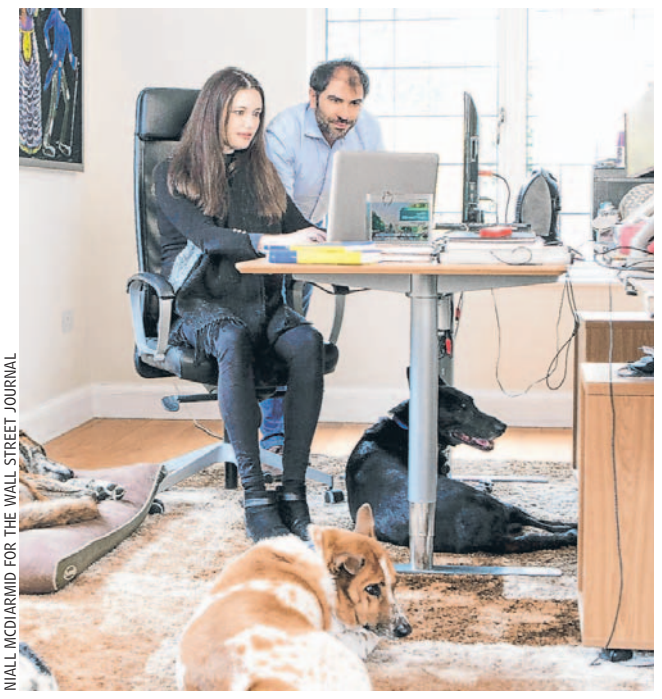


NIALL MCDIARMID FOR THE WALL STREET JOURNAL

Irene Perdomo and Leonardo Marroni in their unpretentious office.

No Rent, $100 Art: How a Hedge Fund Keeps Costs Low

Devet Capital's frugal ways have helped it survive in an industry where big firms rule

By Laurence Fletcher

Italian financier Leonardo Marroni runs a $115 million hedge fund from the spare room downstairs in a house in the leafy London suburb of Wimbledon.

The space is **Devet Capital**'s trading floor, conference room and occasional bedroom for six formerly stray dogs, where the firm operates on an annual budget of up to about £66,000 ($98,000). That amount would barely cover the costs of most hedge funds' software systems.

"Staggeringly low," Dale Gabbert, partner at law firm Simmons & Simmons LLP said of Devet's budget, adding that the average hedge fund of a similar size normally cost between 10 and 20 times that much to run.

Devet is an extreme example of a hedge fund finding a way to stay afloat in a sector where big is increasingly seen as best. Institutional investors like pension funds and endowments, now the biggest investors in hedge funds, often put money with bigger, better-known managers, rather than risk backing a startup. Bigger funds are usually more able to absorb rising compliance costs and benefit from economies of scale.

Managers over $5 billion in size run 69% of the industry's $3.2 trillion of assets, up from 60% a decade before, according to HFR. Managers with less than $1 billion now run 9% of assets, down from almost 13%.

"Larger firms are getting bigger" while "it has become increasingly difficult to get a startup hedge fund" to break-even, said Jim Neumann, partner at advisory firm Sussex Partners, who has worked both at a startup and as an investor.

Mr. Marroni and co-founder Irene Perdomo reckon their low-cost approach has helped Devet survive in an industry where fund closures have outnumbered launches for the past three years, according to data group HFR.

Devet's level of cost-consciousness is rare. While the technology industry is full of firms such as Amazon and Google that began in a garage or spare room, hedge-fund traders still often rent offices in upmarket districts of New York or London, recruit pricey staff and buy expensive trading systems

As part of the firm's cost-control, neither founder plans to take a salary until the fifth year, although as owners they share in any profits. Aside from office rental savings, they minimize business travel expenses, flying economy. Rather than use hotels, they stay with friends or use Airbnb.

Art displays—once a must-have for aspiring hedge funds—are two paintings by a Uruguayan street artist that cost $100 each. Hospitality includes lettuce cookies baked by Ms. Perdomo, a devotee of healthful eating.

Devet also refuses to pay retainers to external salespeople, who can demand from £2,000 to £15,000 a month, plus a slice of the assets they bring.

Devet has attracted its assets via its broker, **R.J. O'Brien**, and through word-of-mouth during its 3½ years of trading. One investor became a client after Devet contacted them on networking site LinkedIn. Another invested after hearing the founders speak of their support for charities that care for stray dogs.

"So many activities are overrated. It's bullshit that traders have to trade and they can't do anything else" such as investor relations or reconciling trades, said Ms. Perdomo, a Uruguayan who came to Europe after winning the prestigious Elite Model Look modeling contest in her home country.

The low-cost model has been popular with Americans, who are around 85% of the fund's clients. Wealthy individuals, family offices and proprietary trading firms are investors. "Americans love the idea you start from a bedroom, rather than a serviced office," said Mr. Marroni.

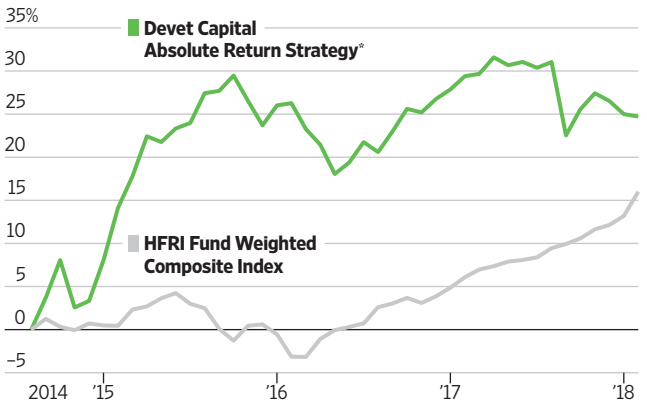
Devet's relative longevity is partly down to its focus. It uses computers to trade small movements in the futures curves of commodities such as energy and grains. It has benefited from a renewed interest in quant funds—which use complex computer programs to trade market moves—as some investors believe computers are a safer bet than human traders.

The most popular version of Devet's Absolute Return Strategy rose 7.9% from launch in mid-2014 to the end of that year, and 19% in 2015, beating the wider hedge fund industry. But the strategy gained just 1.6% in 2016 and lost 3.3% last year, in both cases lagging behind the wider industry.

Lower Costs, Higher Returns

Even with a low-cost approach, Devet has outperformed the wider hedge fund industry.

Cumulative performance since July 2014



*August 2014 performance includes performance since July 21, 2014.
Devet Capital strategy is the 5x version. Note: Monthly data
Sources: Devet newsletter; HFR

THE WALL STREET JOURNAL.

A registration statement relating to the securities proposed to be issued in the Offer (as defined below) has been filed with the U.S. Securities and Exchange Commission but has not yet become effective. Such securities may not be sold nor may offers to buy such securities be accepted prior to the time the registration statement becomes effective. This announcement is neither an offer to purchase nor a solicitation of an offer to sell shares of MuleSoft Common Stock (as defined below), nor is it an offer to purchase or a solicitation of an offer to sell shares of Salesforce Common Stock (as defined below), and the statements herein are subject in their entirety to the terms and conditions of the Offer. The Offer is made solely by the prospectus/offer to exchange and the related letter of transmittal, and any amendments or supplements thereto, and is being made to all holders of shares of MuleSoft Common Stock. The Offer is not being made to (nor will tenders be accepted from or on behalf of) holders of shares of MuleSoft Common Stock in any jurisdiction in which the making of the Offer or the acceptance thereof would not be in compliance with the securities, "blue sky" or other laws of such jurisdiction. In those jurisdictions where applicable laws require the Offer to be made by a licensed broker or dealer, the Offer will be deemed to be made on behalf of the Offeror (as defined below) by one or more registered brokers or dealers licensed under the laws of such jurisdiction to be designated by the Offeror.

Notice of Offer

by

Malbec Acquisition Corp.,

a wholly owned subsidiary of

salesforce.com, inc.,

to exchange each outstanding share of Class A common stock and Class B common stock of

MuleSoft, Inc.

for

$36.00 in cash

and

0.0711 shares of common stock of salesforce.com, inc.

(subject to the terms and conditions described in the prospectus/offer to exchange and letter of transmittal)

salesforce.com, inc. ("Salesforce"), a Delaware corporation, through its wholly owned subsidiary Malbec Acquisition Corp., a Delaware corporation (the "Offeror"), is offering to exchange for each outstanding share of Class A common stock of MuleSoft, Inc., a Delaware corporation ("MuleSoft"), par value $0.000025 per share (the "MuleSoft Class A Common Stock") and Class B common stock of MuleSoft, par value $0.000025 per share (the "MuleSoft Class B Common Stock" and together with the MuleSoft Class A Common Stock, "MuleSoft Common Stock"), validly tendered in the Offer and not validly withdrawn:

- $36.00 in cash; and
- 0.0711 of a share of common stock of Salesforce, par value $0.001 per share (the "Salesforce Common Stock"), plus cash in lieu of any fractional shares of Salesforce Common Stock;

in each case, without interest and less any applicable withholding taxes (such consideration, the "offer consideration," and such offer, on the terms and subject to the conditions and procedures set forth in the prospectus/offer to exchange, dated April 2, 2018 (the "prospectus/offer to exchange"), and in the related letter of transmittal, together with any amendments or supplements thereto, the "Offer").

THE OFFER AND THE WITHDRAWAL RIGHTS WILL EXPIRE AT 11:59 P.M., NEW YORK TIME, AT THE END OF MAY 1, 2018, UNLESS EXTENDED OR TERMINATED. SHARES TENDERED PURSUANT TO THE OFFER MAY BE WITHDRAWN AT ANY TIME PRIOR TO THE EXPIRATION OF THE OFFER.

The Offer is being made pursuant to the Agreement and Plan of Merger, dated as of March 20, 2018 (as it may be amended from time to time, the "Merger Agreement"), by and among Salesforce, the Offeror and MuleSoft. The Merger Agreement provides, among other things, that the Offeror will make the Offer and, subject to the satisfaction or waiver of certain conditions, the Offeror will accept for exchange, and promptly thereafter exchange, shares of MuleSoft Common Stock validly tendered in the Offer and not validly withdrawn. Following consummation of the Offer, subject to the terms and conditions set forth in the Merger Agreement, the Offeror will be merged with and into MuleSoft (the "Merger"), with MuleSoft continuing as the surviving corporation in the Merger and as a wholly owned subsidiary of Salesforce. If the Offer is completed, the Merger will be governed by Section 251(h) of the General Corporation Law of the State of Delaware, and accordingly, no stockholder vote will be required to consummate the Merger. At the effective time of the Merger, each outstanding share of MuleSoft Common Stock (other than shares of MuleSoft Common Stock held in treasury by MuleSoft or held by Salesforce, the Offeror or any wholly owned subsidiary of Salesforce or MuleSoft and shares of MuleSoft Common Stock held by stockholders who have properly exercised appraisal rights with respect to such shares in accordance with Delaware law) will be automatically converted into the right to receive the offer consideration. As a result of the Merger, MuleSoft will cease to be a publicly traded company and will become wholly owned by Salesforce. The Merger Agreement is more fully described in the prospectus/offer to exchange.

The Offer and withdrawal rights will expire at 11:59 p.m., New York Time, at the end of May 1, 2018 (the "Expiration Date," unless the Offeror has extended the period during which the Offer is open in accordance with the Merger Agreement, in which event "Expiration Date" will mean the latest time and date at which the Offer, as so extended by the Offeror, shall expire).

The Offer is not subject to any financing condition. The Offer is conditioned upon, among other things, the satisfaction of the Minimum Tender Condition (as described below) and the HSR Condition (as described below).

The "Minimum Tender Condition" requires that, prior to the expiration of the Offer, there have been validly tendered and not validly withdrawn in accordance with the terms of the Offer a number of shares of MuleSoft Common Stock that, upon the consummation of the Offer (assuming that shares of MuleSoft Class B Common Stock validly tendered (and not validly withdrawn) will convert, on a one-to-one basis, into shares of MuleSoft Class A Common Stock upon the consummation of the Offer), together with any shares of MuleSoft Common Stock then owned by Salesforce and the Offeror, would represent at least a majority of the aggregate voting power of the shares of MuleSoft Common Stock outstanding immediately after the consummation of the Offer.

The "HSR Condition" requires that any applicable waiting period (or extension thereof) under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, has expired or been terminated.

The Offer is also subject to other conditions as set forth in the Merger Agreement and described in the prospectus/offer to exchange (together with the conditions described above, the "Offer Conditions").

The board of directors of MuleSoft has unanimously (i) determined that the terms of the Merger Agreement and the transactions contemplated by the Merger Agreement, including the Offer, the Merger and the issuance of shares of Salesforce Common Stock in connection therewith, are fair to, and in the best interests of, MuleSoft and its stockholders; (ii) determined that it is in the best interests of MuleSoft and its stockholders and declared it advisable to enter into the Merger Agreement; (iii) approved the execution and delivery by MuleSoft of the Merger Agreement, the performance by MuleSoft of its covenants and agreements contained in the Merger Agreement and the consummation of the Offer, the Merger and the other transactions contemplated by the Merger Agreement upon the terms and subject to the conditions contained in the Merger Agreement; and (iv) resolved to recommend that the stockholders of MuleSoft accept the Offer and tender their shares of MuleSoft Common Stock to the Offeror pursuant to the Offer.

Under certain circumstances, as set forth in the Merger Agreement and summarized in the prospectus/offer to exchange, the Offeror may be required to extend the Offer and the previously scheduled expiration date. In the case of any extension, any such announcement will be issued no later than 9:00 a.m., New York Time, on the next business day following the previously scheduled expiration date. Subject to applicable law (including Rules 14d-4(c) and 14d-6(d) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which require that any material change in the information published, sent or given to stockholders in connection with the Offer be promptly disseminated to stockholders in a manner reasonably designed to inform them of such change) and without limiting the manner in which the Offeror may choose to make any public announcement, the Offeror assumes no obligation to publish, advertise or otherwise communicate any such public announcement of this type other than by issuing a press release. During any extension, shares of MuleSoft Common Stock previously validly tendered and not validly withdrawn will remain subject to the Offer, subject to the right of each MuleSoft stockholder to withdraw previously tendered shares of MuleSoft Common Stock. No subsequent offering period will be available following the expiration of the Offer without the prior written consent of MuleSoft, other than in accordance with the extension provisions set forth in the Merger Agreement.

Subject to the terms and conditions of the Merger Agreement, the Offeror also reserves the right to waive any Offer Condition or modify the terms of the Offer.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of the shares of Salesforce Common Stock to be issued as consideration in the Offer or passed on upon the adequacy or accuracy of the prospectus/offer to exchange. Any representation to the contrary is a criminal offense.

Upon the terms of the Offer and subject to the satisfaction or waiver of the Offer Conditions (including, if the Offer is extended or amended, the terms and conditions of any such extension or amendment), promptly after the Expiration Date, the Offeror will accept for exchange, and will thereafter promptly exchange, shares of MuleSoft Common Stock validly tendered and not validly withdrawn prior to the Expiration Date. In all cases, a MuleSoft stockholder will receive consideration for tendered shares of MuleSoft Common Stock only after timely receipt by the exchange agent of certificates for those shares, if any, or a confirmation of a book-entry transfer of those shares into the exchange agent's account at The Depository Trust Company ("DTC"), a properly completed and duly executed letter of transmittal or an agent's message in connection with a book-entry transfer and any other required documents.

For purposes of the Offer, the Offeror will be deemed to have accepted for exchange shares of MuleSoft Common Stock validly tendered and not validly withdrawn if and when it notifies the exchange agent of its acceptance of those shares pursuant to the Offer. The exchange agent will deliver to the applicable MuleSoft stockholders any cash and shares of Salesforce Common Stock issuable in exchange for shares of MuleSoft Common Stock validly tendered and accepted pursuant to the Offer promptly after receipt of such notice. The exchange agent will act as the agent for tendering MuleSoft stockholders for the purpose of receiving cash and shares of Salesforce Common Stock from the Offeror and transmitting such cash and shares to the tendering MuleSoft stockholders. **MuleSoft stockholders will not receive any interest on any cash that the Offeror pays in the Offer, regardless of any extension of the Offer and even if there is a delay in making the exchange.**

MuleSoft stockholders may withdraw tendered shares of MuleSoft Common Stock at any time until the Expiration Date and, if the Offeror has not agreed to accept the shares for exchange on or prior to June 1, 2018, MuleSoft stockholders may thereafter withdraw their shares from tender at any time after such date until the Offeror accepts shares for exchange. Any MuleSoft stockholder that validly withdraws previously tendered shares of MuleSoft Common Stock will receive shares of the same class of MuleSoft Common Stock that were tendered.

For the withdrawal of shares to be effective, the exchange agent must receive a written notice of withdrawal from the MuleSoft stockholder at one of the addresses set forth in the prospectus/offer to exchange, prior to the Expiration Date. The notice must include the MuleSoft stockholder's name, address and social security number, the certificate number(s), if any, the number of shares to be withdrawn and the name of the registered holder, if it is different from that of the person who tendered those shares, and any other information required pursuant to the Offer or the procedures of DTC, if applicable.

The Offeror is not providing for guaranteed delivery procedures and therefore MuleSoft stockholders must allow sufficient time for the necessary tender procedures to be completed during normal business hours of DTC prior to the expiration of the Offer. MuleSoft stockholders must tender their shares of MuleSoft Common Stock in accordance with the procedures set forth in the prospectus/offer to exchange and related letter of transmittal.

The information required to be disclosed by paragraph (d)(1) of Rule 14d-6 of the General Rules and Regulations under the Exchange Act is contained in the prospectus/offer to exchange and is incorporated herein by reference.

MuleSoft has provided the Offeror with MuleSoft's stockholder list and security position listings for the purpose of disseminating the prospectus/offer to exchange, the related letter of transmittal and other related materials to MuleSoft stockholders. The prospectus/offer to exchange and related letter of transmittal will be mailed to record holders of shares of MuleSoft Common Stock and to brokers, dealers, commercial banks, trust companies and similar persons whose names, or the names of whose nominees, appear on the stockholder list or, if applicable, who are listed as participants in a clearing agency's security position listing for subsequent transmittal to beneficial owners of shares of MuleSoft Common Stock.

Each MuleSoft stockholder should read the discussion under "Material U.S. Federal Income Tax Consequences" in the prospectus/offer to exchange and should consult its own tax advisor as to the particular tax consequences of the Offer and the Merger to such stockholder, including the applicability and effect of any U.S. federal, state, local or non-U.S. tax laws.

The prospectus/offer to exchange and the related letter of transmittal contain important information. Holders of shares of MuleSoft Common Stock should carefully read those documents in their entirety before any decision is made with respect to the Offer.

Questions and requests for assistance may be directed to the information agent at its address and telephone number set forth below. Requests for copies of the prospectus/offer to exchange, the letter of transmittal and other exchange offer materials may be directed to the information agent. Stockholders may also contact brokers, dealers, commercial banks or trust companies for assistance concerning the Offer. Salesforce will reimburse brokers, dealers, commercial banks and trust companies and other nominees, upon request, for customary clerical and mailing expenses incurred by them in forwarding offering materials to their customers. Except as set forth above, neither Salesforce nor the Offeror will pay any fees or commissions to any broker, dealer or other person for soliciting tenders of shares of MuleSoft Common Stock pursuant to the Offer.

The Information Agent for the Offer is:

MORROW SODALI

509 Madison Avenue
Suite 1608
New York, NY 10022
Stockholders Call Toll Free: (800) 662-5200
E-mail: tenderinfo@morrowsodali.com

April 2, 2018

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BONDS

Continued from page B1

triple-B risk in a report on financial stability that warned about "a buildup of financial balance sheet" debt.

"When markets start restricting access to capital in a downturn or a bear market, we tend to find that leverage levels matter a lot," said Adam Richmond, a credit strategist at Morgan Stanley.

Triple-B-rated bonds, which now account for 50% of the investment-grade market, have weighed on overall returns for high-quality debt this year. They returned negative 2.2%.

And that wasn't just due to rising short-term interest rates. Notably, bonds above and below triple-B on the ratings ladder did better. Double-A bonds fell 1.8%, while junk-rated single-B bonds were down just 0.6%.

Growing apprehension over debt levels is another sign that investors are retreating from risk and are increasingly questioning whether long bull markets in stocks and bonds are nearing an end. Highflying technology stocks have been crushed in recent days, despite rebounding a bit on the final day of trading last week. More broadly, stocks have swung wildly as worries over inflation have emerged.

As the new quarter begins, some money managers are fearing a shakeout. "There's enough manic news in the marketplace right now to keep investor nerves on edge," said Tom Stringfellow, president and chief investment officer of Frost Investment Advisors, a $3.7 billion advisory firm.

In contrast to junk bonds, those most often associated with leverage, high-grade corporate bonds are considered to be some of the safest debt.

Some investors are concerned that the rating scale doesn't fully reflect the risks in a less hospitable market environment. An economic slowdown that hits companies' sales and profits, for example, would spur a rethink of the current ratings breakdown, investors say, potentially leading to many market-roiling downgrades.

"It does appear there may be some overrating, at least compared to history," said Gene Tannuzzo, a bond manager at Columbia Threadneedle Investments, referring to companies having higher ratings than they should.

For now, default rates remain low, making elevated debt levels more of a medium-term worry for investors than an immediate crisis. Companies have also had an easy time refinancing their debt with interest rates at rock-bottom levels, though that could become more difficult and costly in a rising-rate environment. And as long as the economy and corporate earnings continue to grow, debt burdens may be less of a concern.

But there are signs the benign lending environment is eroding. Since Feb. 2, the extra yield that investors demand to own triple-B-rated bonds relative to Treasurys has climbed to 1.34 percentage points from 1.08 percentage points, according to Bloomberg Barclays data.

McDonald's Corp. recently sold $500 million of 30-year bonds at a yield of 1.4 percentage points above the comparable Treasury yield. Just before the deal was marketed, the company's existing bonds with the same maturity traded at a 1.29 point spread, according to MarketAxess. That means the company had to make a meaningful concession to investors to get the deal done.

One reason why the amount of triple-B debt is at record levels: Once highly rated companies have bulked up on debt over the years. McDonald's, for example, was rated AA by S&P and Aa2 by Moody's in 2001. Today, the fast-food retailer is rated BBB+ by S&P and Baa 1 by Moody's—a five-notch drop down the ratings ladder as its total debt more than tripled.

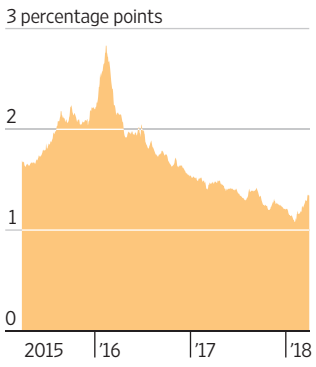
The use of cheap debt to finance megamergers is another factor driving up the amount of lower-rated bonds.

Pharmacy chain CVS Health Corp. issued $40 billion of bonds in March to help pay for its acquisition of health insurer Aetna Inc., boosting its debt load. Moody's Investors Service has put CVS's Baa 1 rating on review for a downgrade, while S&P Global Ratings has already dropped it to BBB from BBB+.

—Michael Wursthorn contributed to this article.

Reversing Course

Yield premium on triple-B corporate debt over Treasurys



Source: Bloomberg Barclays via FactSet
THE WALL STREET JOURNAL.

Copper's Quarterly Slide First Since 2015

By Amrith Ramkumar

Copper just recorded its first quarterly decline since 2015—a sharp reversal by one of last year's hottest assets that is fueling concerns among investors who look to the industrial metal as an indicator of global growth.

Futures prices for the red metal shed 7.9% in the first quarter after hitting a nearly four-year high in late December.

While other commodities such as oil have continued climbing, copper has lagged behind, hurt by lukewarm economic data from China and anxiety over possible disruptions to international trade.

Because copper is used to build everything from electronic devices to houses, weaker global growth projections tend to curb prices. They are particularly sensitive to numbers from China, which accounts for nearly half the world's copper consumption. Data from the country recently has shown slower manufacturing activity and a drop in copper imports.

Some investors also worry that U.S. tariffs on steel and aluminum and other levies against China could lead other countries to enact their own protectionist trade policies, leading to cautious activity by corporations world-wide. That could crimp demand for raw materials like copper.

"My biggest worry is this whole trade situation because it's easy to start a trade war—it's hard to put an end to it," said Francisco Blanch, head of commodities and derivatives research at Bank of America Merrill Lynch.

Hedge funds and other speculative investors have turned more cautious on copper.

After reaching their highest level yet last fall in Commodity Futures Trading Commission data going back to 2006, net bullish bets by the group have fallen to their lowest point since 2016.

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 569.91 points, or 2.42%, 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 $29,242, or a loss of 2.53%, 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) $1,000
5.51	2.72	18.73	**Intel**	INTC	$52.08	$1,136
4.69	4.09	28.16	**Microsoft**	MSFT	91.27	1,072
4.44	3.37	23.20	**Procter & Gamble**	PG	79.28	869
4.16	3.55	24.44	**WalMart**	WMT	88.97	906
3.75	6.44	44.34	**Home Depot**	HD	178.24	946
3.31	1.53	10.53	**Verizon**	VZ	47.82	914
3.14	0.41	2.82	**General Electric**	GE	13.48	779
3.13	2.83	19.49	**American Express**	AXP	93.28	943
3.05	4.54	31.26	**IBM**	IBM	153.43	1,010
2.94	3.96	27.27	**Travelers**	TRV	138.86	1,029
2.90	1.00	6.89	**Pfizer**	PFE	35.49	989
2.87	3.51	24.17	**United Technologies**	UTX	125.82	992
2.80	1.81	12.46	**Nike**	NKE	66.44	1,065
2.77	2.96	20.38	**JPMorgan Chase**	JPM	109.97	1,034
2.69	6.60	45.44	**Goldman Sachs**	GS	251.86	991
2.60	1.10	7.57	**Coca-Cola**	KO	43.43	955
2.44	3.05	21.00	**Johnson & Johnson**	JNJ	128.15	923
2.36	1.72	11.84	**Exxon Mobil**	XOM	74.61	901
2.24	2.62	18.04	**Visa**	V	119.62	1,051
2.14	6.88	47.37	**Boeing**	BA	327.88	1,118
2.14	3.09	21.28	**Caterpillar**	CAT	147.38	940
1.98	1.06	7.30	**Merck**	MRK	54.47	976
1.93	1.90	13.08	**Walt Disney**	DIS	100.44	934
1.93	4.16	28.64	**3M**	MMM	219.52	938
1.72	2.84	19.55	**Apple**	AAPL	167.78	995
1.11	0.47	3.24	**Cisco Systems**	CSCO	42.89	1,128
1.03	0.65	4.48	**DowDuPont**	DWDP	63.71	899
0.94	1.06	7.30	**Chevron**	CVX	114.04	920
0.90	1.40	9.64	**McDonald's**	MCD	156.38	914
0.68	1.45	9.98	**UnitedHealth Group**	UNH	214.00	974

*Based on Composite price. DJIA is calculated on primary-market price.
Source: WSJ Market Data Group; FactSet.

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CLASS ACTIONS

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

IN RE ALLERGAN, INC. PROXY VIOLATION DERIVATIVES LITIGATION

Case No. 2:17-cv-04776 DOC (KESx)
The Hon. David O. Carter
CLASS ACTION

To: All persons and entities who transacted in derivative securities that are price-interdependent with Allergan, Inc. (AGN) publicly traded common stock ("Allergan Derivatives") from February 25, 2014 through April 21, 2014, inclusive.

This Summary Notice is given pursuant to Rule 23 of the Federal Rules of Civil Procedure and an Order of the United States District Court for the Central District of California ("Court"), dated March 19, 2018. The purpose of this Summary Publication Notice is to inform you of the proposed settlement of the above-entitled class action ("Action") against Defendants Pershing Square Capital Management, L.P., PS Management GP, LLC, William Ackman, PS Fund 1, LLC, Pershing Square, L.P., Pershing Square II, L.P., Pershing Square GP, LLC, Pershing Square Holdings, Ltd., Michael Pearson, Valeant Pharmaceuticals International, and Valeant Pharmaceuticals International, Inc. (collectively, "the Defendants").

A settlement hearing will be held before the Honorable David O. Carter, United States District Judge, at the Ronald Reagan Federal Building and United States Courthouse, 411 West Fourth Street, Courtroom 9D, Santa Ana, California 92701-4516, at 7:30 a.m. on May 30, 2018 in order to: (1) determine whether the Court should grant certification to the Settlement Class pursuant to Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure; (2) determine whether the proposed Settlement consisting of $40,000,000 in cash should be approved as fair, reasonable, and adequate to the Class and the proposed Final Judgment entered; (3) determine whether the proposed Plan of Allocation for the proceeds of the Settlement is fair and reasonable, and should be approved by the Court; (4) determine whether the applications by Plaintiffs' Lead Counsel for an award of attorneys' fees equal to or up to one-fourth of the Settlement Fund and reimbursement of their litigation expenses should be approved; and (5) rule upon such other matters as the Court may deem appropriate.

If you transacted in derivative securities that are price-interdependent with Allergan, Inc. publicly traded common stock from February 25, 2014 through April 21, 2014, both dates inclusive, and are not otherwise excluded from the Class, you are a Class Member. Class Members will be bound by the Final Judgment of the Court. If you are a Class Member, in order to share in the distribution of the Net Settlement Fund, you must submit a Proof of Claim postmarked no later than July 31, 2018 establishing that you are entitled to recovery. If you are a Class Member and need a Proof of Claim, copies may be obtained by telephoning the Claims Administrator at 1-800-349-5116 or by downloading the form on the Internet at: www.allerganderivativessettlement.com.

If you do not wish to be included in the Class, you do not wish to participate in the Settlement and you do not wish to receive a distribution from the Net Settlement Fund, you may request to be excluded, in the manner set forth in the full Notice of Proposed Settlement and Motion for Attorneys' Fees and Expenses ("Notice"), no later than May 9, 2018. If you are a Class member and do not timely and validly request exclusion from the Class, and you wish to object to the Settlement, the Plan of Allocation, and/or Plaintiffs' Lead Counsel's application for an award of attorneys' fees and/or reimbursement of expenses, you may submit a written objection. You also may, but are not required to, appear at the Final Approval Hearing. You must file and serve your written objection, in the manner specifically set forth in the Notice, no later than May 9, 2018.

This Summary Notice is only a summary of information regarding the Action and the Settlement. You are urged to obtain a copy of the full, detailed Notice, which includes, among other things, a description of: (1) the litigation in the Action prior to the Settlement; (2) the terms of the proposed Settlement; (3) the benefits of the Settlement to the Class; (4) the Plan of Allocation for the proceeds of the Settlement; (5) the rights of Class members; (6) the release of claims against Defendants; (7) the application for an award of attorneys' fees and expenses; and (8) additional details concerning the Final Approval Hearing, excluding oneself from the Class and/or objecting to the Settlement, the Plan of Allocation, and/or the application for attorneys' fees and/or reimbursement of expenses, including the procedures that MUST be followed for Class members to request exclusion from the Class or to object to the Settlement, the Plan of Allocation and/or application for attorneys' fees and/or reimbursement of expenses.

A copy of the full Notice may be accessed at: www.allerganderivativessettlement.com, and for additional information, you may contact Garden City Group, LLC, the Claims Administrator, at the following address:

Allergan Proxy Violation Derivatives Litigation Settlement
c/o GCG
P.O. Box 10556
Dublin, OH 43017-5116

PLEASE DO NOT CONTACT THE COURT OR DEFENDANTS' COUNSEL REGARDING THIS NOTICE.

Dated: April 2, 2018

Honorable David O. Carter
United States District Judge

NOTICE OF SALE

PUBLIC AUCTION – FORECLOSURE SALE INCLUDING
100% OF THE MEMBERSHIP INTERESTS OF ALTAMONT WINDS LLC

Sale of collateral of the Secured Party, WTG Lending Solutions LLC, including without limitation, 100% of the membership interests in Altamont Winds LLC (the "LLC Interests").

The LLC Interests are to be sold as a single block to the highest bidder. All of the LLC Interests are **unregistered securities** under the Securities Act of 1933 (the "33 Act"). This notice of sale is being made solely to ensure compliance with the commercially reasonable manner of sale requirements of the New York UCC, and is not being made to enable the Secured Party to solicit offers.

Non-binding letters of intent are due by April 20, 2018. For those interested bidders that move on to "round two," binding letters of intent will be due by May 18, 2018. If necessary, any meeting(s) with final bidders to select the winning bid will occur between May 21-25 in the offices of Norton Rose Fulbright US LLP, located at 1301 Avenue of the Americas, New York, New York.

TERMS OF SALE:

Cash Sale: Prospective purchasers must be prepared to pay by wire transfer of immediately available funds. The Secured Party, WTG Lending Solutions LLC, reserves the right to bid for and purchase the LLC Interests and to credit the expenses of the sale and all or a portion of the principal, interest and any other amounts owing for which SW Energy Holdco LLC, the parent company of Altamont Winds LLC, is liable to the Secured Party against the purchase price.

Block Sale: The LLC Interests will be sold only as a block.

INFORMATION: Interested parties may obtain financial and other information with respect to the collateral by contacting Chris LeWand (Chris.Lewand@fticonsulting.com or (303) 689-8839) or Scott Javor (Scott.Javor@fticonsulting.com or (424) 237-4136) at FTI Capital Advisors, LLC.

PURCHASER REPRESENTATIONS: Because the LLC Interests are UNREGISTERED and are being sold as a block, the purchaser of the LLC Interests will be required to represent (either in a separate letter or in the sale agreement) (i) that it is purchasing the LLC Interests for its own account and not with a view to distribution thereof; (ii) that the LLC Interests will not be resold or transferred or otherwise hypothecated by the purchaser without prior REGISTRATION in compliance with provisions of the 33 Act and applicable state blue sky laws or unless an exemption from such registration under the 33 Act or applicable state blue sky laws is available; (iii) that it possesses sufficient business experience to evaluate the risk of purchasing the LLC Interests; and (iv) that it has sufficient financial means to be able to afford the risk of the investment.

RESTRICTIVE LEGEND: Certificate(s) for the shares of the LLC Interests when issued to the purchaser thereof, will bear an appropriate legend to the effect that the LLC Interests represented thereby may not be sold or transferred without registration under the 33 Act or the availability of a valid exemption from such registrations.

BRIEF DESCRIPTION OF BUSINESS OF ALTAMONT: Altamont Winds LLC holds all of the rights and assets in respect of a wind repowering project in the advanced stages of development. The project is anticipated to comprise 55 MW of installed capacity upon completion of construction and is located in the high wind resource area of the Altamont Pass in Alameda County, CA. The project provides an opportunity to acquire a wind farm in a well-known wind resource area which has achieved major development milestones and is approaching NTP-ready status. Furthermore, the project has taken steps to commence construction in 2016 in order to qualify for Production Tax Credits (PTC) under Section 45 of the Internal Revenue Code at 100% of the PTC rate.

DEA

LEGAL NOTICE

The U.S. Dept. of Justice, Drug Enforcement Administration (DEA) New York gives notice that the property listed below has been abandoned to the custody of the United States and has remained unclaimed. The property shall be held for 30 days from the date of initial publication of notice. Upon expiration of this 30 day period title to the property will vest in the United States. Any person desiring to claim this property must file with the DEA within 30 days. Claims may be filed at the following address: 99 Tenth Ave., NY, NY 10011. Last date to file: 04/16/2018. *Property:* one (1) .38 caliber revolver pistol Serial# L114889. Date seized: 05/03/2005. Seized from: Louis KELSEY, Location: 2406 8th Avenue, Apt. 6-B, New York, NY; *Property:* one (1) silver Davis Industries pistol Serial# P010581. Date seized: 05/03/2005. Seized from: Louis KELSEY, Location: 2406 8th Avenue, Apt. 6-B, New York, NY; *Property:* one (1) Johnsons Arms and Cycle Works revolver Serial# E20420. Date seized: 02/08/2005. Owner's name: Foday JAITETH, Location: 152 W. 143rd Street, Apt. 6T, New York, NY; *Property:* one (1) .38 caliber Special Serial# 1303063. Date seized: 06/12/2012. Owner's name: Roberto CRUZ, Location: 416 Webster Avenue, Cranston, RI; *Property:* one (1) Glock 17 9mm semi-automatic pistol with laser sight Serial# 12451. Date seized: 08/14/2003. Owner's name: Jon S. SLUTZLEY, Location: 526 Long Lane, Huntingdon Valley, PA; *Property:* one (1) 357 Magnum revolver Serial# CBF9143. Date seized: 02/15/2005. Owner's name: Javon HARRELL, Location: 131 Hemlock Street, Brooklyn, NY; *Property:* one (1) 45 caliber semi-auto handgun Serial# FR20137E. Date seized: 01/04/2005. Owner's name: Sharvon GUMBS, Location: 67 Stuyvesant Avenue, Apt. 3R, Brooklyn, NY; *Property:* one (1) 40 caliber semi-auto handgun Serial# ATX762. Date seized: 01/04/2005. Owner's name: Allen COVINGTON, Location: 613 E. 102nd Street, Apt. 2, Brooklyn, NY

THE WALL STREET JOURNAL.
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Insider-Trading Spotlight

Trading by 'insiders' of a corporation, such as a company's CEO, vice president or director, potentially conveys new information about the prospects of a company. Insiders are required to report large trades to the SEC within two business days. Here's a look at the biggest individual trades by insiders, based on data received by Thomson Financial on March 30, and year-to-date stock performance of the company

KEY: B: beneficial owner of more than 10% of a security class **CB:** chairman **CEO:** chief executive officer **CFO:** chief financial officer **CO:** chief operating officer **D:** director **DO:** director and beneficial owner **GC:** general counsel **H:** officer, director and beneficial owner **I:** indirect transaction filed through a trust, insider spouse, minor child or other **O:** officer **OD:** officer and director **P:** president **UT:** unknown **VP:** vice president Excludes pure options transactions

Biggest weekly individual trades

Based on reports filed with regulators this past week

Date(s)	Company	Symbol	Insider	Title	No. of shrs in trans (000s)	Price range ($) in transaction	$ Value (000s)	Close ($)	Ytd (%)
Buyers									
Mar. 22-23	**DDR Corp**	**DDR**	A. Otto	**DO**	990	6.95-6.97	**6,892**	7.33	-18.2
Mar. 26-27			A. Otto	**DO**	666	6.98	**4,650**		
Mar. 28			A. Otto	**DO**	377	7.24	**2,731**		
Mar. 22-26	**Entercom Communications**	**ETM**	J. Field	**R**	640	9.38-9.68	**6,140**	9.65	-10.6
Mar. 27	**TRACON Pharmaceuticals**	**TCON**	M. Barrett	**BI**	708	2.70	**1,912**	2.30	-31.3
Mar. 27			P. Barris	**BI**	708	2.70	**1,912**		
Mar. 27			F. Baskett	**BI**	708	2.70	**1,912**		
Mar. 27			A. Florence	**BI**	708	2.70	**1,912**		
Mar. 27			P. Kerins	**BI**	708	2.70	**1,912**		
Mar. 27			D. Mott	**BI**	708	2.70	**1,912**		
Mar. 27			S. Sandell	**BI**	708	2.70	**1,912**		
Mar. 27			P. Sonsini	**BI**	708	2.70	**1,912**		
Mar. 27			R. Viswanathan	**BI**	708	2.70	**1,912**		
Mar. 21	**Advance Auto Parts**	**AAP**	T. Greco	**CEO**	9	115.77	**1,000**	118.55	18.9
Mar. 28-29	**Tiffany & Co**	**TIF**	F. Trapani	**DI**	10	98.42-98.67	**985**	97.66	-6.1
Mar. 27			R. Farah	**CBI**	10	97.66	**977**		
Mar. 23			F. Trapani	**DI**	10	95.90-96.33	**961**		
Mar. 23-26	**Tellurian**	**TELL**	D. Derycz-Kessler	**DI**	125	6.68-7.39	**888**	7.21	-26.0
Sellers									
Mar. 22	**Wynn Resorts**	**WYNN**	S. Wynn	**BI**	8,027	175.00	**1,404,674**	182.36	8.2
Feb. 27	**Mondelez International**	**MDLZ**	N. Peltz	**DI**	6,523	43.67	**284,871**	41.73	-2.5
Mar. 22	**Facebook**	**FB**	M. Zuckerberg	**CEOI**	153	164.36-170.12	**25,441**	159.79	-9.4
Mar. 21			M. Zuckerberg	**CEOI**	149	164.02-172.88	**25,008**		
Mar. 23			M. Zuckerberg	**CEOI**	145	159.70-166.76	**23,675**		
Mar. 27			M. Zuckerberg	**CEOI**	146	151.40-162.49	**22,996**		
Mar. 26			M. Zuckerberg	**CEOI**	145	149.70-160.90	**22,556**		
Mar. 28			M. Zuckerberg	**CEOI**	140	151.62-155.51	**21,528**		
Mar. 21-22	**Thermo Fisher Scientific**	**TMO**	M. Casper	**CEO**	80	209.28-214.43	**16,945**	206.46	8.7
Mar. 21-22	**Gap Inc**	**GPS**	W. Fisher	**DO**	500	31.59-32.36	**16,049**	31.20	-8.4
Mar. 27-29	**RealPage**	**RP**	S. Winn	**CEO**	291*	51.15-53.32	**14,943**	51.50	16.3
Mar. 14-15	**Hewlett Packard Enterprise**	**HPE**	M. Whitman	**D**	674	18.84-18.91	**12,722**	17.54	22.1
Mar. 28-29			M. Whitman	**D**	674	17.53-17.60	**11,838**		
Mar. 26	**National Vision Holdings**	**EYE**	D. Peeler	**DI**	338	31.68	**10,709**	32.31	-20.4
Mar. 29	**Bright Horizons Family Solutions**	**BFAM**	D. Lissy	**OD**	100	102.35	**10,235**	99.72	6.1
Mar. 21-22	**Kohl's**	**KSS**	K. Mansell	**CEOI**	151	64.00-64.20	**9,705**	65.51	20.8
Mar. 23	**Laboratory Corporation of America Holdings**	**LH**	D. King	**CEO**	50	163.58-166.38	**8,232**	161.75	1.4
Mar. 26	**L3 Technologies**	**LLL**	M. Strianese	**CB**	40	204.51-207.24	**8,124**	208.00	5.1

* Half the transactions were indirect **Two day transaction
p - Pink Sheets

Buying and selling by sector

Based on actual transaction dates in reports received this past week

Sector	Buying	Selling	Sector	Buying	Selling
Basic Industries	99,823	24,718,416	Finance	884,223	15,396,354
Business services	112,199	17,886,251	Health care	1,472	29,236,975
Capital goods	0	0	Industrial	477,839	27,437,879
Consumer durables	233,743	851,062	Media	0	831,568
Consumer nondurables	4,278	52,988,238	Technology	977,265	80,111,977
Consumer services	4,763,970	51,268,805	Transportation	0	317,936
Energy	2,016,719	4,547,179	Utilities	0	2,159,388

Sources: Thomson Financial; WSJ Market Data Group

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CLOSED-END 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

Thursday, March 29, 2018

Fund (SYM)	NAV	Close	Prem /Disc	52 wk Ttl Ret
General Equity Funds				
Adams Divers Equity Fd **ADX**	17.32	14.77	-14.7	17.7
Boulder Growth & Income **BIF**	12.71	10.78	-15.2	20.5
Central Securities **CET**	32.60	26.66	-18.2	15.5
CohSteer Opprtnty Fd **FOF**	13.29	12.32	-7.3	7.6
Cornerstone Strategic **CLM**	12.78	15.28	+19.6	16.3
Cornerstone TR Fd **CRF**	12.41	15.12	+21.8	15.7
EtnVnc TaxAdvDiv **EVT**	NA	21.90	NA	11.9
Gabelli Dividend & Incm **GDV**	23.77	22.10	-7.0	12.4
Gabelli Equity Trust **GAB**	6.27	6.12	-2.4	13.6
Genl American Investors **GAM**	39.75	33.47	-15.8	9.2
Guggenheim Enh Fd **GPM**	8.49	8.34	-1.8	15.4
HnckJohn TxAdv **HTD**	23.60	21.69	-8.1	-3.8
Liberty All-Star Equity **USA**	6.71	6.13	-8.6	24.2
Royce Micro-Cap **RMT**	10.35	9.36	-9.6	18.6
Royce Value Trust **RVT**	17.11	15.56	-9.1	18.1
Source Capital **SOR**	NA	39.90	NA	9.4
Tri-Continental **TY**	29.60	26.31	-11.1	18.9
Specialized Equity Funds				
Adams Natural Rscs Fd **PEO**	21.66	18.21	-15.9	-0.1
AllnzGl NFJ Div Interest **NFJ**	NA	12.70	NA	6.7
AlpnGlblPrProp **AWP**	7.02	6.24	-11.1	19.8
BlkRk Enh Cap Inco **CII**	16.39	15.75	-3.9	17.3
BlkRk Engy Res Tr **BGR**	14.33	13.22	-7.7	2.9
BlackRock Enh Eq Div Tr **BDJ**	9.46	8.73	-7.7	8.7
BlackRock Enh GI Div Tr **BOE**	12.36	11.57	-6.4	11.2
BlkRk Intl Grwth&Inco **BGY**	6.64	6.09	-8.3	13.0
BlkRk Health Sci **BME**	34.92	35.00	+0.2	8.3
BlackRck Rscs Comm Str Tr **BCX**	9.68	8.89	-8.2	10.9
BlackRock Science & Tech **BST**	29.11	30.08	+3.3	50.0
BlackRock Utilities Infr **BUI**	20.17	19.81	-1.8	7.2
CBREClarionGlblRlEstIncm **IGR**	8.39	7.31	-12.9	5.8
Sprott Physical Gold **CEF**	NA	13.22	NA	2.8
ClearBridge Amer Engy **CBA**	NA	6.81	NA	-24.3
ClearBridge Engy MLP Fd **CEM**	NA	12.59	NA	-17.0
Clearbridge Engy MLP Opp **EMO**	NA	9.81	NA	-18.7
Clearbridge Engy MLP Tr **CTR**	NA	9.84	NA	-20.5
Cohen & Steers Infr Fd **UTF**	23.88	21.41	-10.3	7.6
C&S MLP Incm & Engy Opp **MIE**	9.40	9.08	-3.4	-11.3
Cohen & Steers Qual Inc **RQI**	12.14	11.85	-2.4	4.1
CohnStrsPfdInco **RNP**	21.03	18.69	-11.1	3.9
Cohen & Steers TR **RFI**	12.28	11.85	-3.5	3.8
CLSeligmn Prem Tech Gr Fd **STK**	21.45	21.95	+2.3	20.3
Duff & Phelps **DNP**	8.81	10.28	+16.6	3.1
Duff&PhelpsGblUtilIncFd **DPG**	NA	13.97	NA	-6.2
Eaton Vance Eqty Inco Fd **EOI**	NA	13.96	NA	14.6
Eaton Vance Eqty Inco II **EOS**	NA	15.76	NA	25.0
EtnVncRskMngd **ETJ**	NA	8.99	NA	9.1
Etn Vnc Tax Mgd Buy-Write **ETB**	NA	15.59	NA	3.7
Eaton Vance BuyWrite Opp **ETV**	NA	14.89	NA	7.1
Eaton Vance Tax-Mng Div **ETY**	NA	11.57	NA	13.9
Eaton Vance Tax-Mngd Opp **ETW**	NA	11.55	NA	16.4
EtnVncTxMngGlDvEqInc **EXG**	NA	9.12	NA	18.1
Fiduciary/Clymr Opp Fd **FMO**	10.84	10.56	-2.6	-22.9
FT Energy Inc & Growth Fd **FEN**	21.47	21.75	+1.3	-13.2
FstTrEnhEqtIncFd **FFA**	15.91	14.77	-7.2	10.1
First Tr Engy Infr Fd **FIF**	15.98	15.00	-6.1	-16.5
First Tr MLP & Engy Incm **FEI**	12.36	12.25	-0.9	-17.5
Gabelli Hlthcr & Well **GRX**	11.17	9.50	-15.0	0.0
Gabelli Utility Tr **GUT**	4.87	6.23	+27.9	3.3
GAMCOGlblGoldNatRscs&Inc **GGN**	5.05	4.89	-3.2	2.2
Goldman Sachs MLP Inc Opp **GMZ**	NA	7.77	NA	-20.1
Goldman Sachs MLP Energy **GER**	NA	5.74	NA	-21.8
John Hancock Finl Opps Fd **BTO**	37.32	38.35	+2.8	17.5
Macquarie Glbl Infrstrctr **MGU**	25.27	22.20	-12.1	3.1
Neuberger Berman MLP Incm **NML**	8.34	8.16	-2.2	-13.5
Neubrgr Brm Rl Est Sec Fd **NRO**	5.04	4.77	-5.4	-0.8
Nuveen Dow 30 Dynamic **DIAX**	18.17	17.77	-2.2	21.0
Nuveen Core Eq Alpha **JCE**	14.69	14.60	-0.6	23.8
Nuveen Diversified Div **JDD**	12.00	12.11	+0.9	14.2
Nuveen Engy MLP Fd **JMF**	10.16	9.98	-1.8	-18.6
Nuv NASDAQ 100 Dyn Over **QQQX**	22.45	24.69	+10.0	27.5
Nuveen Real Est Incm Fd **JRS**	10.16	9.74	-4.1	-3.9
Nuveen Real Asset Income **JRI**	18.56	16.22	-12.6	1.5
Nuv S&P 500 Dyn Overwrite **SPXX**	NA	17.11	NA	23.0
Nuveen S&P 500 Buy-Write **BXMX**	13.55	13.32	-1.7	7.5
Reaves Utility Fund **UTG**	NA	28.23	NA	-7.4
Tekla Hlthcr Investors **HQH**	23.37	21.53	-7.9	-2.4
Tekla Healthcare Opps Fd **THQ**	18.29	16.48	-9.9	2.2
Tekla Life Sciences **HQL**	19.85	19.22	-3.2	7.7
Tekla World Hlthcr Fd **THW**	13.99	12.83	-8.3	-1.2
Tortoise Energy **TYG**	NA	24.98	NA	-21.0
Tortoise MLP Fund **NTG**	NA	15.94	NA	-15.4
Voya GI Equity Div **IGD**	7.82	7.30	-6.6	9.3
Income & Preferred Stock Funds				
Calamos Strat Fd **CSQ**	NA	11.83	NA	15.1
Cohen & Steers Dur Pfd **LDP**	26.37	25.52	-3.2	8.5
Cohen & Strs Sel Prf Inco **PSF**	26.74	26.03	-2.7	6.2
FT Interm Duration Pfd **FPF**	24.18	23.26	-3.8	7.9
Flaherty & Crumrine Dyn **DFP**	25.33	24.17	-4.6	5.9
Flaherty & Crumrine Pfd **FFC**	19.83	19.00	-4.2	-0.4
John Hancock Pfd Income **HPI**	20.82	20.48	-1.6	4.2
John Hancock Pfd II **HPF**	20.54	20.05	-2.4	2.9
John Hancock Pfd Inc III **HPS**	18.34	17.63	-3.9	3.4
JHancock Pr Div **PDT**	14.36	15.18	+5.7	6.3
LMP Cap & Inco Fd **SCD**	NA	12.62	NA	-2.9
Nuveen Pfd & Incm Opps Fd **JPC**	10.37	10.01	-3.5	10.1
Nuveen Pfd & Incm Secs Fd **JPS**	9.99	9.78	-2.1	10.4
Nuveen Preferred & Incm **JPI**	24.98	23.71	-5.1	5.5
Nuv Tax-Adv Div Gr **JTD**	17.15	16.37	-4.5	18.2
TCW Strategic Income Fund **TSI**	NA	5.57	NA	7.8
Virtus Global Dividend **ZTR**	NA	10.99	NA	4.4
Convertible Sec's. Funds				
AdvntClymrFd **AVK**	16.99	15.08	-11.2	4.8
AllianzGI Conv & Incm **NCV**	NA	6.72	NA	11.7
AllianzGI Conv & Incm II **NCZ**	NA	5.95	NA	10.4
AllianzGI Equity & Conv **NIE**	NA	20.69	NA	15.3
Calamos Conv Hi Inco Fd **CHY**	NA	11.70	NA	13.8
Calamos **CHI**	NA	11.10	NA	11.8
World Equity Funds				
Alpine Tot Dyn Div **AOD**	9.93	8.94	-10.0	16.7
Calamos Glbl Dyn Inc **CHW**	NA	8.99	NA	26.8
Cdn Genl Inv **CGI**	32.87	23.40	-28.8	16.5
China Fund **CHN**	24.18	22.14	-8.4	36.7
Clough Global Opp Fd **GLO**	NA	10.70	NA	15.4
EtnVncTxAdvGblDiv **ETG**	NA	16.71	NA	14.6
EatonVance TxAdv Opport **ETO**	NA	25.01	NA	18.5
First Trust Dynamic Eur **FDEU**	18.44	17.98	-2.5	12.5
Gabelli Glbl Multimedia **GGT**	8.85	9.27	+4.7	26.2
GDL Fund **GDL**	11.27	9.32	-17.3	-0.2
India Fund **IFN**	28.41	24.63	-13.3	8.9
Japan Sml Cap **JOF**	14.02	12.29	-12.3	31.4
Korea Fund **KF**	NA	40.82	NA	21.9
Mexico Fund **MXF**	NA	16.21	NA	1.9
Morgan-Stanley Asia-Pac **APF**	20.99	18.21	-13.2	19.6
MS China a Shr Fd **CAF**	29.73	24.90	-16.2	36.4
MS Emerging Fund **MSF**	20.75	18.43	-11.2	25.3
MS India Invest **IIF**	34.41	30.38	-11.7	11.5
New Germany Fund **GF**	21.59	19.53	-9.5	37.3
Swiss Helvetia Fund **SWZ**	13.55	12.25	-9.6	6.7
Templeton Dragon **TDF**	25.59	22.24	-13.1	28.2
Templeton Emerging **EMF**	18.35	16.28	-11.3	24.2
Virtus Total Return Fund **ZF**	NA	11.22	NA	9.4
Voya Infr Indls & Matls **IDE**	16.22	15.19	-6.4	7.8
Wells Fargo Gl Div Opp **EOD**	NA	5.69	NA	8.7

Fund (SYM)	NAV	Close	Prem /Disc	12 Mo Yld
U.S. Mortgage Bond Funds				
BlackRock Income Trust **BKT**	6.42	5.87	-8.6	5.3
Nuveen Mtg Opp Term Fd **JLS**	24.44	23.75	-2.8	7.7
Investment Grade Bond Funds				
Blackrock Core Bond Tr **BHK**	14.25	13.10	-8.1	5.9
BlkRk Credit Alloc Incm **BTZ**	14.26	12.67	-11.2	6.5
John Hancock Income Secs **JHS**	14.80	14.14	-4.5	5.6
MFS Inc Tr **MIN**	4.25	3.93	-7.5	9.8
WstAstClymr InflLnkd Fd **WIW**	NA	11.32	NA	3.7
WstAssetClymr InflLnk Sec **WIA**	NA	11.53	NA	3.5
Loan Participation Funds				
Apollo Sr Fltg Rate Fd **AFT**	17.88	16.83	-5.9	6.5
BlkRk Debt Strat Fd **DSU**	12.59	11.62	-7.7	7.1
BlackRock FR Incm Strat **FRA**	14.99	14.53	-3.1	5.0
Blkrk FltRt InTr **BGT**	14.44	13.98	-3.2	5.0
BlackstoneGSO Strat Cred **BGB**	NA	15.88	NA	7.9
Blackstone GSO Sr Float **BSL**	NA	18.46	NA	6.5
Eagle Point Credit **ECC**	NA	18.14	NA	14.4
Eaton Vance FR Incm Tr **EFT**	NA	14.95	NA	5.6
EatonVnc SrFltRate **EFR**	NA	14.78	NA	5.8
Eaton Vance Sr Incm Tr **EVF**	NA	6.81	NA	5.5
First Trust Sr FR Fd II **FCT**	14.07	13.23	-6.0	6.0
FT Sr Floating Rate 2022 **FIV**	9.69	9.36	-3.4	5.3
Highland FR Opps Fd **HFRO**	15.11	NA	NA	NA
Invesco Credit Opps Fund **VTA**	13.07	11.73	-10.3	7.1
Invesco Senior Income Tr **VVR**	4.90	4.40	-10.2	5.7
Nuveen Credit Strt Inc Fd **JQC**	9.01	7.94	-11.9	7.4
NuvFloatRteInco Fd **JFR**	11.45	10.89	-4.9	7.3
Nuv Float Rte Opp Fd **JRO**	11.35	10.92	-3.8	7.5
Nuveen Senior Income Fund **NSL**	6.80	6.55	-3.7	7.3
Pioneer Floating Rate Tr **PHD**	12.41	11.65	-6.1	6.3
Voya Prime Rate Trust **PPR**	5.68	5.21	-8.3	5.6
High Yield Bond Funds				
AllianceBernstein Glbl **AWF**	13.56	11.89	-12.3	6.9
Barings Glbl Short Dur HY **BGH**	20.36	18.66	-8.3	9.7
BlackRock Corp Hi Yd Fd **HYT**	11.90	10.59	-11.0	7.9
BlackRockDurInco Tr **BLW**	16.75	15.08	-10.0	6.4
Brookfield Real Assets **RA**	24.13	21.77	-9.8	10.8
Credit Suisse High Yld **DHY**	2.70	2.66	-1.5	9.8
DoubleLine Incm Solutions **DSL**	NA	20.08	NA	9.1
Dreyfus Hi Yd Strat Fd **DHF**	NA	3.19	NA	9.2
Fst Tr Hi Inc Lg/Shrt Fd **FSD**	17.26	15.05	-12.8	9.5
Guggenheim Strat Opps Fd **GOF**	19.25	20.30	+5.5	10.9
Ivy High Income Opps Fund **IVH**	15.87	14.18	-10.6	9.9
Neuberger Berman HYS **NHS**	12.73	11.14	-12.5	7.8
NexPoint Strat Opps Fund **NHF**	NA	22.98	NA	10.0
Nuveen Credit Opps 2022 **JCO**	9.81	9.62	-1.9	NS
Nuveen GI Hi Incm Fd **JGH**	18.01	16.12	-10.5	8.8
Nuveen High Incm Dec18 **JHA**	9.98	9.79	-1.9	4.6
Nuveen High Incm Dec19 **JHD**	10.05	9.85	-2.0	5.7
Nuveen Hi Incm Nov 2021 **JHB**	9.97	9.67	-3.0	6.1
Pioneer High Income Trust **PHT**	10.54	9.41	-10.7	8.1
Prud GI Shrt Dur Hi Yd **GHY**	16.16	13.88	-14.1	7.9
Prudentl Sh Dur Hi Yd Fd **ISD**	16.31	14.13	-13.4	7.9
Wells Fargo Incm Opps Fd **EAD**	NA	8.04	NA	8.6
Wstrn Asset Glbl Hi Inco **EHI**	10.82	9.41	-13.0	8.5
Wstrn Asset High Inco II **HIX**	NA	6.56	NA	8.9
Wstrn Asset Opp Fd **HIO**	5.45	4.81	-11.7	7.2
West Asst HY Def Opp Fd **HYI**	NA	14.60	NA	7.7
Other Domestic Taxable Bond Funds				
Ares Dynamic Credit Alloc **ARDC**	NA	16.24	NA	7.0
Barings Corp Investors **MCI**	NA	15.10	NA	6.0
BlackRock Multi-Sector IT **BIT**	18.89	16.79	-11.1	8.8
BlackRock Taxable Mun Bd **BBN**	23.39	22.52	-3.7	7.2
Doubleline Oppor Credit **DBL**	NA	21.59	NA	9.2
Duff & Phelps Utl & Cp Bd **DUC**	9.36	8.58	-8.3	6.5
EtnVncLtdFd **EVV**	NA	13.02	NA	7.4
Franklin Ltd Duration IT **FTF**	11.89	11.17	-6.1	13.3
Guggenheim Taxable Muni **GBAB**	22.94	21.63	-5.7	7.1
Invesco High Incm 2023 **IHIT**	10.01	9.86	-1.5	6.1
KKR Income Opps Fund **KIO**	NA	15.88	NA	9.8
MFS Charter **MCR**	8.93	8.12	-9.1	9.1
MFS Multimkt **MMT**	6.36	5.77	-9.3	9.2
Nuveen Build Am Bd Fd **NBB**	21.89	20.79	-5.0	5.9
PIMCO Corporate & Incm **PTY**	NA	16.92	NA	9.4
PIMCO Corporate & Incm **PCN**	NA	16.57	NA	8.0
PIMCO Hiinco **PHK**	NA	7.58	NA	12.9
PIMCO Inco Str Fd **PFL**	NA	11.69	NA	9.4
PIMCO Incm Strategy Fd II **PFN**	NA	10.43	NA	9.2
Putnam Mas Inco **PIM**	5.04	4.70	-6.7	6.6
Putnam Premier Income Tr **PPT**	5.62	5.23	-6.9	6.0
Wells Fargo Multi-Sector **ERC**	NA	13.05	NA	9.8
World Income Funds				
Abeerden Asia-Pacific **FAX**	5.29	4.74	-10.4	8.8
Brandywine Global Incm **BWG**	NA	12.89	NA	8.0
Etn Vnc Short Dur Fd **EVG**	15.11	13.64	-9.7	6.8
MS EmMktDomDebt **EDD**	9.16	7.82	-14.6	7.9
PIMCO Dynamic Credit **PCI**	NA	22.88	NA	8.8
PIMCO Dynamic Income Fund **PDI**	NA	30.84	NA	8.7
PIMCO Income Opportunity **PKO**	NA	26.17	NA	9.0
PIMCO Strat Income Fund **RCS**	NA	9.28	NA	9.6
Templeton Emerging **TEI**	12.48	11.30	-9.5	5.2
Templeton Global **GIM**	7.32	6.39	-12.7	6.8
Wstrn Asset Emerg Mkts **EMD**	NA	14.53	NA	8.1
Wstrn Asset Gl Def Opp Fd **GDO**	NA	16.73	NA	8.0
National Muni Bond Funds				
AllianceBrnstn NtlMun **AFB**	14.37	12.51	-12.9	4.8
Blackrock Invest **BKN**	15.38	13.73	-10.7	5.3
BlackRock Mun 2030 Target **BTT**	23.53	21.31	-9.4	4.1
BlackRock Municipal Trust **BFK**	14.09	12.89	-8.5	5.8
BlackRockMuni **BLE**	14.66	13.41	-8.5	6.2
BlackRockMuni Tr **BYM**	14.74	13.15	-10.8	5.6
BlkRk MuniAssets Fd **MUA**	14.06	13.49	-4.1	5.0
BlkRk Munienhanced **MEN**	11.57	10.63	-8.1	6.1
BlkRk MuniHldgs Inv **MFL**	14.23	13.07	-8.2	6.2
BlkRk MuniHldgs Qlty II **MUE**	13.62	12.25	-10.1	5.9
BlkRk MuniVest **MVF**	9.41	8.86	-5.8	6.0
BlkRk MuniVest II **MVT**	14.86	14.35	-3.4	5.8
BlkRk MuniYield **MYD**	14.49	13.37	-7.7	6.1
BlkRk MuniYld Quality **MQY**	15.37	14.07	-8.5	5.9
BlkRk MuniYld Qlty II **MQT**	13.50	12.12	-10.2	5.7
BlRkMunyldQltyIII **MYI**	13.99	12.64	-9.6	6.2
Deutsche Mun Income Tr **KTF**	12.20	11.20	-8.2	6.3
Dreyfus Mun Bd Infr Fd **DMB**	13.97	12.29	-12.0	5.1
Dreyfus Strat Muni Bond **DSM**	8.18	7.61	-7.0	6.4
Dreyfus Strategic Munis **LEO**	8.40	7.71	-8.2	6.5
Eaton Vance Mun Bd Fd **EIM**	13.25	11.82	-10.8	5.3
Eaton Vance Mun Income **EVN**	13.00	11.71	-9.9	5.6
EV National Municipal Opp **EOT**	21.32	20.67	-3.0	4.9
Invesco Adv Mun Incm II **VKI**	11.79	10.61	-10.0	6.0
Invesco Mun Incm Opps Tr **OIA**	7.43	7.41	-0.3	5.4
Invesco Mun Opportunity **VMO**	13.16	11.72	-10.9	6.0
Invesco Municipal Trust **VKQ**	13.14	11.69	-11.0	6.0
Invesco Qlty Mun Inco **IQI**	13.24	11.90	-10.1	5.5
Invesco Inv Grade Muni **VGM**	13.61	12.22	-10.2	6.1
Invesco Value Mun Incm Tr **IIM**	15.82	14.52	-8.2	5.1
MainStay Mac Defined Muni **MMD**	19.88	18.82	-5.3	5.7
MFS Muni Inco **MFM**	7.26	6.52	-10.2	5.8
Nuveen AMT-Free Mun Value **NUW**	16.39	15.93	-2.8	4.4
Nuveen AMT-Free Quality **NEA**	14.69	13.00	-11.5	5.5
Nuveen AMT-Free Mun **NVG**	15.99	14.51	-9.3	6.0
Nuveen Mun Credit Incm Fd **NZF**	15.56	14.14	-9.1	6.2
Nuveen Enhncd Mun Val Fd **NEV**	14.59	13.34	-8.6	5.9
Nuveen Intermed Dur Mun **NID**	13.48	12.56	-6.8	4.9
NuveenMuniIncoOpp Fd **NMZ**	13.26	12.50	-5.7	6.1
Nuveen Muni Value Fund **NUV**	10.08	9.47	-6.1	4.0
Nuveen Qual Mun Incm Fd **NAD**	15.01	13.14	-12.5	5.5
Nuveen Sel TF **NXQ**	14.52	13.47	-7.2	3.7
PIMCO MuniFd **PMF**	NA	12.53	NA	5.7
Pimco Muni Inc II **PML**	11.79	12.61	+7.0	6.3
PIMCO Muni Inc III **PMX**	10.76	11.37	+5.7	6.1
Pioneer Mun Hi Inc Adv Tr **MAV**	11.59	10.72	-7.5	5.6
Pioneer Mun Hi Incm Tr **MHI**	12.58	11.25	-10.6	5.3
Putnam Tr **PMM**	7.83	7.14	-8.8	5.5
Putnam Muni Opportunities **PMO**	13.02	11.66	-10.4	5.4
Wstrn Asset Mngd Muni **MMU**	NA	13.04	NA	5.8
Western Asset Mun Tr Fund **MTT**	NA	21.73	NA	4.6
Single State Muni Bond				
BlackRock CA Municipal Tr **BFZ**	14.80	12.99	-12.2	5.3
BlkRk MuniHldgs CA Qlty **MUC**	15.03	13.19	-12.2	5.3
Blkrck MunHl NJ Qlty **MUJ**	15.20	13.39	-11.9	5.8
BlRk MuHldg NY Qlty **MHN**	14.36	12.57	-12.5	5.2
BlkRk MuniYld CA Fd **MYC**	15.06	13.33	-11.5	5.3
BlkRk MuniYld CA Quality **MCA**	15.24	13.32	-12.6	5.4
BlkRk MuniYld MI Qlty **MIY**	15.06	13.30	-11.7	5.5
BlRk Muyld NY Qlty **MYN**	13.77	12.05	-12.5	5.1
Eaton Vance CA Mun Bd **EVM**	11.96	10.26	-14.2	5.4
Invesco CA Value Mun Incm **VCV**	13.01	11.67	-10.3	5.4
Invesco PA Value Mun Incm **VPV**	13.67	11.75	-14.0	5.3
Invesco Inv Grade NY Muni **VTN**	14.13	12.82	-9.3	5.2
Nuveen CA AMT-Free Qual **NKX**	15.31	13.54	-11.6	5.5
Nuveen CA Muni Value **NCA**	10.24	9.33	-8.9	4.2
Nuveen CA Quality Muni **NAC**	15.24	13.39	-12.1	5.7
Nuveen MD Qual Muni **NMY**	14.19	12.10	-14.7	5.0
Nuveen MI Qual Muni **NUM**	14.97	12.67	-15.4	4.8
Nuveen NJ Qual Muni **NXJ**	15.42	13.05	-15.4	5.3
Nuveen NY AMT-Free **NRK**	14.02	12.16	-13.3	5.0
Nuveen NY Qual Muni **NAN**	14.63	12.69	-13.3	5.3
Nuveen OH Qual Muni **NUO**	16.17	13.71	-15.2	5.0
Nuveen PA Qual Muni **NQP**	14.75	12.52	-15.1	5.5
Nuveen VA Qual Muni **NPV**	14.11	12.36	-12.4	4.5
PIMCO California Muni **PCQ**	13.66	14.72	+7.8	6.3
PIMCO California Mun II **PCK**	NA	8.23	NA	6.6

Fund (SYM)	NAV	Close	Prem /Disc	52 wk Ttl Ret
General Equity Funds				
Specialized Equity Funds				
Griffin Inst Access RE:L	NA	NA	NA	NS
NexPointRlEstStrat;A	19.46	NA	NA	-0.1
NexPointRlEstStrat;C	19.53	NA	NA	-0.3
NexPointRlEstStrat;Z	19.54	NA	NA	0.7
NorthStar RE Cap Inc:Adv	NA	NA	NA	NS
PREDEX;T	NA	NA	NA	NS
PREDEX;W	NA	NA	NA	NS
Resource RE Div Inc:L	NA	NA	NA	NS
SharesPost 100;A	27.06	NA	NA	7.1
SharesPost 100:I	27.09	NA	NA	NS
Tot Inc+ RE:L	NA	NA	NA	NS
USQ Core Real Estate:I **USQIX**	25.08	NA	NA	NS
USQ Core Real Estate:S **USQSX**	25.08	NA	NA	NS
Versus Cap MMgr RE Inc:I	27.69	NA	NA	NE
Versus Capital Real Asst **VCRRX**	25.14	NA	NA	NS
Wildermuth Endwmnt Str	13.25	NA	NA	13.0
Wildermuth Endwmnt S:C	13.04	NA	NA	12.2
Wildermuth Endwmnt S:I	13.32	NA	NA	NS
Income & Preferred Stock Funds				
MultiStrat Gro & Inc:A	14.42	NA	NA	-1.7
MultiStrat Gro & Inc:C	14.07	NA	NA	-2.4
MultiStrat Gro & Inc:I	14.61	NA	NA	-1.5
MultiStrat Gro & Inc:L	14.18	NA	NA	-2.2
The Relative Value:CIA **VFLEX**	24.77	NA	NA	NS
Convertible Sec's. Funds				
Calamos Dyn Conv & Incm **CCD**	NA	19.65	NA	NA
World Equity Funds				
BMO LGM Front ME	11.77	NA	NA	24.4
Calamos Global Tot Ret Fd **CGO**	NA	14.47	NA	NA

Fund (SYM)	NAV	Close	Prem /Disc	12 Mo Yld
U.S. Mortgage Bond Funds				
Vertical Capital Inc:A	12.33	NA	NA	3.3
Vertical Capital Inc:C	12.40	NA	NA	NS
Vertical Capital Inc:I	12.42	NA	NA	NS
Vertical Capital Inc:L	12.42	NA	NA	NS
Loan Participation Funds				
504 Fund	9.61	NA	NA	3.9
Angel Oak Strategic Crdt **ASCIX**	25.11	NA	NA	NS
Blackstone/GSO FR EI I	25.02	NA	NA	NS
FedProj&TrFinanceTendr	10.00	NA	NA	2.2
FS Global Crdt Opptys D	NA	NA	NA	4.7
Invesco Sr Loan A	6.71	NA	NA	4.0
Invesco Sr Loan C	6.72	NA	NA	3.3
Invesco Sr Loan IB	6.71	NA	NA	4.3
Invesco Sr Loan IC	6.71	NA	NA	4.1
Invesco Sr Loan Y	6.71	NA	NA	4.3
RiverNorth MP Lending **RMPLX**	23.95	NA	NA	11.3
Sierra Total Return:T **SRNTX**	NA	NA	NA	NS
Voya Senior Income:A	12.59	NA	NA	5.0
Voya Senior Income:C	12.57	NA	NA	4.5
Voya Senior Income:I	12.55	NA	NA	5.3
Voya Senior Income:W	12.60	NA	NA	5.3
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	5.8
PionrILSInterval	9.54	NA	NA	1.4
WA Middle Mkt Dbt	744.15	NA	NA	10.7
WA Middle Mkt Inc **WMF**	772.70	NA	NA	10.7
Other Domestic Taxable Bond Funds				
BlackRock Mlt-Sctr Oppty	99.74	NA	NA	NS
Capstone Church Capital	11.68	NA	NA	3.4
CION Ares Dvsfd Crdt;A	NA	NA	NA	5.0
CION Ares Dvsfd Crdt;C	NA	NA	NA	NS
CION Ares Dvsfd Crdt;I	NA	NA	NA	NS
CION Ares Dvsfd Crdt;L	NA	NA	NA	NS
CNR Select Strategies	9.62	NA	NA	NS
GL Beyond Income	2.69	NA	NA	NE
Palmer Square Opp Income	NA	NA	NA	4.7
Resource Credit Inc:A	NA	NA	NA	6.4
Resource Credit

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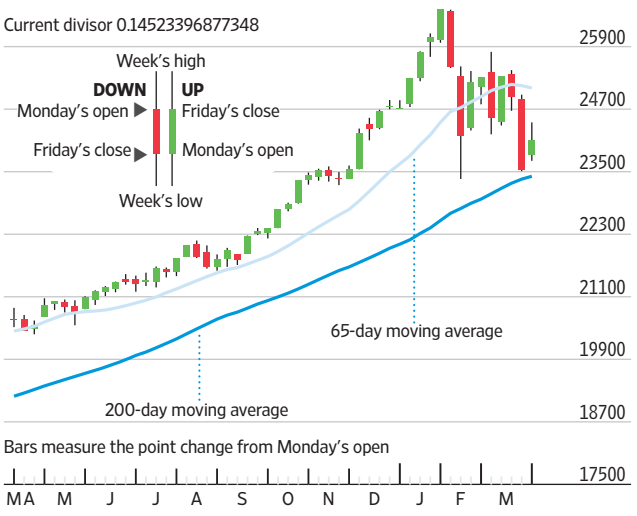
MARKETS DIGEST

Dow Jones Industrial Average

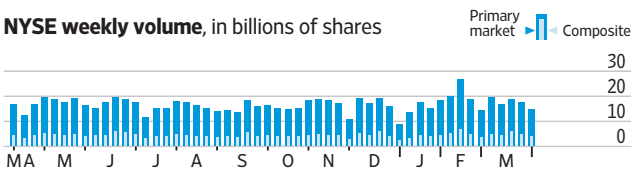
24103.11 ▲569.91, or 2.42% last week

High, low, open and close for each of the past 52 weeks

	Last	Year ago
Trailing P/E ratio	25.46	21.15
P/E estimate *	16.24	17.72
Dividend yield	2.22	2.35
All-time high	26616.71, 01/26/18	



NYSE weekly volume, in billions of shares



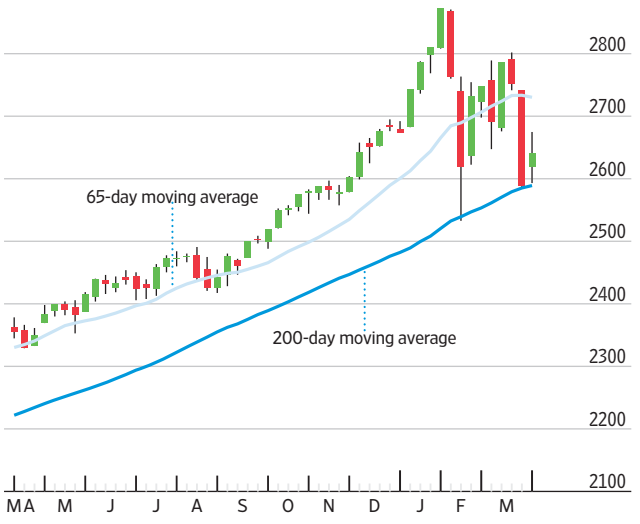
*Weekly P/E data based on as-reported earnings from Birinyi Associates Inc.

S&P 500 Index

2640.87 ▲52.61, or 2.03% last week

High, low, open and close for each of the past 52 weeks

	Last	Year ago
Trailing P/E ratio *	24.51	24.52
P/E estimate *	16.85	18.27
Dividend yield	1.95	1.97
All-time high	2872.87, 01/26/18	



Financial Flashback

The Wall Street Journal, April 2, 2008

Lehman Brothers Holdings Inc. raised $4 billion of preferred shares, hoping to strengthen its balance sheet and dispel speculation that it was facing a capital crunch.

Major U.S. Stock-Market Indexes

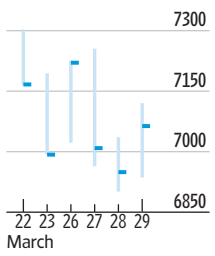
	Latest Week High	Low	Close	Net chg	% chg	52-Week Low	Close (●)	High	% chg	% chg YTD	3-yr. ann.
Dow Jones											
Industrial Average	24446.22	23708.73	**24103.11**	569.91	2.42	20404.49		26616.71	16.3	-2.5	10.8
Transportation Avg	10480.51	10109.47	**10396.56**	233.24	2.29	8783.74		11373.38	13.6	-2.0	6.1
Utility Average	696.80	674.55	**692.63**	18.95	2.81	647.90		774.47	-0.4	-4.2	6.1
Total Stock Market	27717.94	26896.69	**27383.00**	509.64	1.90	24125.20		29630.47	11.6	-1.0	8.2
Barron's 400	718.60	698.99	**711.59**	12.04	1.72	610.89		757.37	13.3	0.1	8.1
Nasdaq Stock Market											
Nasdaq Composite	7255.54	6901.07	**7063.44**	70.78	1.01	5805.15		7588.32	19.4	2.3	13.0
Nasdaq 100	6793.50	6410.04	**6581.13**	73.04	1.12	5353.59		7131.12	21.0	2.9	14.9
S&P											
500 Index	2674.78	2593.06	**2640.87**	52.61	2.03	2328.95		2872.87	11.5	-1.2	8.6
MidCap 400	1888.61	1844.00	**1878.77**	39.30	2.14	1681.04		1995.23	9.3	-1.1	7.6
SmallCap 600	946.34	924.90	**938.46**	15.34	1.66	815.62		979.57	11.4	0.2	9.5
Other Indexes											
Russell 2000	1543.81	1505.64	**1529.43**	19.34	1.28	1345.24		1610.71	10.6	-0.4	7.2
NYSE Composite	12517.26	12241.48	**12452.06**	274.36	2.25	11324.53		13637.02	8.1	-2.8	4.6
Value Line	550.47	537.92	**546.67**	8.75	1.63	503.24		589.69	5.2	-2.8	2.5
NYSE Arca Biotech	4644.95	4438.03	**4504.23**	8.48	0.19	3449.61		4939.86	26.6	6.7	3.8
NYSE Arca Pharma	532.78	514.02	**528.95**	12.64	2.45	498.46		593.12	3.6	-2.9	-2.7
KBW Bank	108.32	103.87	**106.50**	2.56	2.47	88.02		116.52	14.5	-0.2	14.3
PHLX§ Gold/Silver	82.77	79.32	**81.12**	-0.39	-0.47	76.42		93.26	-2.6	-4.9	6.2
PHLX§ Oil Service	139.51	131.87	**135.69**	-1.10	-0.80	117.79		171.55	-19.6	-9.3	-10.6
PHLX§ Semiconductor	1391.01	1294.31	**1328.90**	4.98	0.38	960.01		1445.9	31.3	6.1	24.2
CBOE Volatility	24.94	19.60	**19.97**	-4.90	-19.70	9.14		37.32	73.1	80.9	9.8

§Nasdaq PHLX

Sources: SIX Financial Information; WSJ Market Data Group

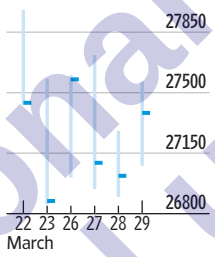
Nasdaq Composite

▲ 70.78, or 1.01% last week



DJ US TSM

▲ 509.64, or 1.90% last week



International Stock Indexes

Region/Country	Index	Latest Week Close	% chg	52-Week Range Low	Close	High	YTD % chg
World	**The Global Dow**	3023.53	1.17	2647.00		3323.74	-2.0
	DJ Global Index	392.07	1.29	343.54		425.41	-1.3
	DJ Global ex U.S.	262.74	0.64	228.10		285.34	-1.5
Americas	**DJ Americas**	634.00	1.87	562.20		687.75	-1.3
Brazil	**Sao Paulo Bovespa**	85365.56	1.17	60761.74		87652.64	11.7
Canada	**S&P/TSX Comp**	15367.29	0.94	14951.88		16412.94	-5.2
Mexico	**S&P/BMV IPC**	46124.85	-0.84	46124.85		51713.38	-6.5
Chile	**Santiago IPSA**	4173.22	0.94	3593.92		4442.56	-0.9
EMEA	**Stoxx Europe 600**	370.87	1.38	363.18		402.81	-4.7
	Stoxx Europe 50	2965.44	1.81	2894.75		3276.11	-6.7
Eurozone	**Euro Stoxx**	373.99	1.47	365.68		404.86	-3.0
	Euro Stoxx 50	3361.50	1.92	3278.72		3697.40	-4.1
Austria	**ATX**	3428.53	0.54	2828.79		3688.78	0.2
Belgium	**Bel-20**	3857.10	1.05	3745.95		4176.88	-3.0
France	**CAC 40**	5167.30	1.41	4990.25		5541.99	-2.7
Germany	**DAX**	12096.73	1.77	11787.26		13559.60	-6.4
Greece	**Athex Composite**	780.50	-0.66	666.06		886.54	-2.7
Israel	**Tel Aviv**	1436.22	-2.33	1363.50		1549.87	-4.9
Italy	**FTSE MIB**	22411.15	0.55	19443		23890	2.6
Netherlands	**AEX**	529.52	1.55	507.15		570.82	-2.8
Portugal	**PSI 20**	5405.57	1.18	4876.43		5791.88	0.3
Russia	**RTS Index**	1249.41	-0.95	973.33		1324.62	8.2
South Africa	**FTSE/JSE All-Share**	55474.52	-1.65	50831.89		61684.77	-6.8
Spain	**IBEX 35**	9600.40	2.21	9381.0		11135.4	-4.4
Sweden	**SX All Share**	559.67	1.42	545.83		600.20	-1.6
Switzerland	**Swiss Market**	8740.97	2.01	8509.29		9611.61	-6.8
U.K.	**FTSE 100**	7056.61	1.95	6888.69		7778.64	-8.2
Asia-Pacific							
Australia	**S&P/ASX 200**	5759.40	-1.05	5651.8		6135.8	-5.0
China	**Shanghai Composite**	3168.90	0.51	3052.79		3559.47	-4.2
Hong Kong	**Hang Seng**	30093.38	-0.71	23825.88		33154.12	0.6
India	**S&P BSE Sensex**	32968.68	1.14	29319.10		36283.25	-3.2
Japan	**Nikkei Stock Avg**	21454.30	4.06	18335.63		24124.15	-5.8
Malaysia	**FTSE Bursa Malaysia KLCI**	1863.46	-0.09	1713.13		1876.87	3.7
Singapore	**Straits Times**	3427.97	0.19	3126.28		3609.24	0.7
South Korea	**Kospi**	2445.85	1.20	2123.85		2598.19	-0.9
Taiwan	**Weighted**	10906.22	0.77	9632.69		11253.11	2.5

Source: SIX Financial Information; WSJ Market Data Group

Commodities and Currencies

	Last Week Close	Net chg	% Chg	YTD % chg
DJ Commodity	**631.07**	0.55	0.09	0.91
TR/CC CRB Index	**195.36**	-0.90	-0.46	0.77
Crude oil, $ per barrel	**64.94**	-0.94	-1.43	7.48
Natural gas, $/MMBtu	**2.733**	0.100	3.80	-7.45
Gold, $ per troy oz.	**1322.80**	-27.10	-2.01	1.26
U.S. Dollar Index	**90.15**	0.71	0.80	-2.14
WSJ Dollar Index	**83.75**	0.35	0.42	-2.59
Euro, per dollar	**0.8115**	0.0021	0.26	-2.60
Yen, per dollar	**106.24**	1.51	1.44	-5.73
U.K. pound, in dollars	**1.40**	-0.0116	-0.82	3.73

	52-Week Low	Close (●)	High	% Chg
DJ Commodity	532.01		645.87	11.34
TR/CC CRB Index	166.50		200.52	5.31
Crude oil, $ per barrel	42.53		66.14	28.98
Natural gas, $/MMBtu	2.55		3.63	-14.35
Gold, $ per troy oz.	1208.60		1362.40	6.25
U.S. Dollar Index	88.59		101.13	-10.36
WSJ Dollar Index	82.70		90.93	-7.34
Euro, per dollar	0.80		0.94	-13.54
Yen, per dollar	104.73		114.29	-4.62
U.K. pound, in dollars	1.24		1.43	11.71

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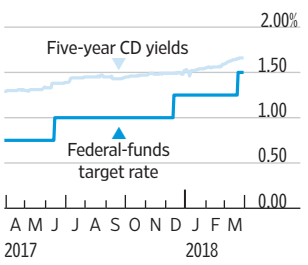
Consumer Rates and Returns to Investor

U.S. consumer rates

A consumer rate against its benchmark over the past year



Selected rates

5-year CDs

Bankrate.com avg†:	**1.66%**
Goldman Sachs Bank USA	**2.75%**
New York, NY	855-730-7283
Popular Direct	**2.75%**
New York, NY	800-274-5696
Third Federal Savings and Loan	**2.75%**
Cleveland, OH	888-274-7952
First Internet Bank of Indiana	**2.78%**
Indianapolis, IN	888-873-3424
M.Y. Safra Bank, FSB	**2.80%**
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	1.50-1.75	1.50-1.75	0.75	1.50	1.50
Prime rate*	4.75	4.75	4.00	4.75	1.50
Libor, 3-month	2.31	2.29	1.15	2.31	2.04
Money market, annual yield	0.35	0.35	0.25	0.36	-0.07
Five-year CD, annual yield	1.66	1.65	1.29	1.66	0.17
30-year mortgage, fixed†	4.40	4.43	3.73	4.49	0.50
15-year mortgage, fixed†	3.85	3.91	2.99	3.95	0.60
Jumbo mortgages, $424,100-plus†	4.66	4.74	4.21	4.96	0.31
Five-year adj mortgage (ARM)†	4.13	4.39	3.20	4.50	0.76
New-car loan, 48-month	3.67	3.63	2.85	3.67	0.70

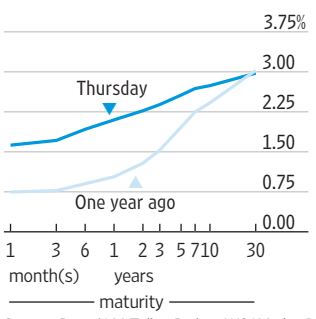
Bankrate.com rates based on survey of over 4,800 online banks. *Base rate posted by 70% of the nation's largest banks.† Excludes closing costs.

Sources: SIX Financial Information; WSJ Market Data Group; Bankrate.com

Benchmark Yields and Rates

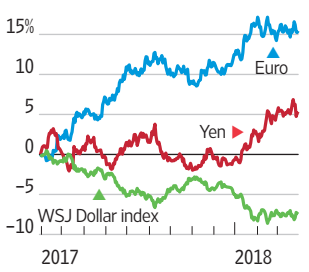
Treasury yield curve

Yield to maturity of current bills, notes and bonds



Forex Race

Yen, euro vs. dollar; dollar vs. major U.S. trading partners



Sources: Ryan ALM; Tullett Prebon; WSJ Market Data Group

Corporate Borrowing Rates and Yields

Bond total return index	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	**2.741**	2.826				-0.63	-0.44
DJ Corporate	**3.703**	3.785				2.44	2.20
Aggregate, Barclays Capital	**3.120**	3.170	41	34	45	1.19	1.24
High Yield 100, Merrill Lynch	**6.265**	6.269	363	304	376	2.743	3.495
Fixed-Rate MBS, Barclays	**3.300**	3.360	29	20	34	0.86	1.18
Muni Master, Merrill	**2.491**	2.504	13	5	18	2.008	1.820
EMBI Global, J.P. Morgan	**n.a.**	6.104	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: J.P. Morgan; Ryan ALM; S&P Dow Jones Indices; Barclays Capital; Merrill Lynch

Notice to Readers

U.S. financial markets were closed Good Friday, March 30.

New to the Market

Public Offerings of Stock

IPOs in the U.S. Market

None expected this week

Lockup Expirations

Below, companies whose officers and other insiders will become eligible to sell shares in their newly public companies for the first time. Such sales can move the stock's price.

Lockup expiration	Issue date	Issuer	Symbol	Offer price($)	Offer amt ($ mil.)	Through Friday (%)	Lockup provision
April 2	Oct. 4, '17	Black Ridge Acquisition	**BRACU**	10.00	138.0	**4.2**	180 days
	Oct. 4, '17	Rhythm Pharmaceuticals	**RYTM**	17.00	137.8	**17.1**	180 days
April 3	Oct. 5, '17	Switch	**SWCH**	17.00	610.9	**-6.4**	180 days

Sources: Dealogic; WSJ Market Data Group

IPO Scorecard

Performance of IPOs, most-recent listed first

Company **SYMBOL** IPO date/Offer price	Thursday's close ($)	% Chg From Offer price	1st-day close	Company **SYMBOL** IPO date/Offer price	Thursday's close ($)	% Chg From Offer price	1st-day close
Genprex **GNPX** March 29/$5.00	4.70	**-6.0**	...	OneSmart Intl Edu Grp **ONE** March 28/$11.00	10.75	**-2.3**	-0.5
iQiYi **IQ** March 29/$18.00	15.55	**-13.6**	...	GreenTree Hospitality Grp **GHG** March 27/$14.00	12.75	**-8.9**	-1.9
Unum Thera **UMRX** March 29/$12.00	11.11	**-7.4**	...	Dropbox **DBX** March 23/$21.00	31.25	**48.8**	9.7
Bilibili **BILI** March 28/$11.50	11.00	**-4.3**	-2.1	Sunlands Online Edu Grp **STG** March 23/$11.50	8.30	**-27.8**	-25.2
Homology Medicines **FIXX** March 28/$16.00	18.70	**16.9**	0.2	Golden Bull **DNJR** March 20/$4.00	4.50	**12.5**	-2.6

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

None expected this week

Public and Private Borrowing

Treasurys

Monday, April 2

Auction of 13 and 26 week bills; announced on March 29; settles on April 5

Tuesday, April 3

Auction of 4 week bill; announced on April 2; settles on April 5

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)
April 3	April 1, 2029	Albany Co-New York	151.8	N.R.	N.R.	N.R.	Preliminary/ Hodgson Russ LLP
April 4	Feb. 15, 2048	Howard Co-Maryland	170.7	N.R.	N.R.	N.R.	Preliminary/ McKennon Shelton & Henn
April 6	Feb. 15, 2048	Bexar Hospital Dt	308.0	N.R.	N.R.	N.R.	Siebert Cisneros Shank & Co/ Bracewell LLP
April 6	June 15, 2040	NYC Municipal Water Fin Auth	425.0	N.R.	N.R.	N.R.	Siebert Cisneros Shank & Co/ Orrick H & S
April 6	prelim.	San Diego Reg Trans Comm	537.5	N.R.	N.R.	N.R.	Citi/—
April 6	prelim.	Santa Monica Comm College Dt	250.0	N.R.	N.R.	N.R.	RBC Cptl Mkt/—
April 6	prelim.	University of Delaware	200.0	N.R.	N.R.	N.R.	Barclays/—

Source: Thomson Reuters/Ipreo

Borrowing Benchmarks | WSJ.com/bonds

Money Rates

March 30, 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

	Feb. index level	Chg From (%) Jan. '18	Feb. '17
U.S. consumer price index			
All items	**248.991**	0.45	2.2
Core	**255.783**	0.45	1.8

International rates

	Latest	Week ago	52-Week High	Low
Prime rates				
U.S.	**4.75**	4.75	4.75	4.00
Canada	**3.45**	3.45	3.45	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.	**2.05**	1.80	2.05	0.76

U.S. government rates

	Latest	Week ago	52-Week High	Low
Discount				
	2.25	2.25	2.25	1.50
Federal funds				
Effective rate	**1.7000**	1.7000	1.7100	0.8400
High	**1.8125**	1.8125	1.9000	1.0625
Low	**1.6000**	1.6000	1.6500	0.7000
Bid	**1.6700**	1.6700	1.7000	0.8100
Offer	**1.7000**	1.6900	1.7200	0.8200
Treasury bill auction				
4 weeks	**1.705**	1.720	1.720	0.695
13 weeks	**1.760**	1.780	1.780	0.780
26 weeks	**1.895**	1.950	1.950	0.905

Secondary market

Fannie Mae

30-year mortgage yields

	Latest	Week ago	52-WEEK High	Low
30 days	**4.012**	4.068	4.109	3.253
60 days	**4.041**	4.100	4.139	3.281

Other short-term rates

	Latest	Week ago	52-Week high	low
Call money				
	3.50	3.50	3.50	2.75
Commercial paper (AA financial)				
90 days	**2.21**	2.21	2.25	0.95
Libor				
One month	**1.88313**	1.87500	1.88688	0.98278
Three month	**2.31175**	2.29155	2.31175	1.14956
Six month	**2.45240**	2.44971	2.45380	1.39072
One year	**2.66263**	2.66638	2.67700	1.69511
Euro Libor				
One month	**-0.407**	-0.408	-0.391	-0.420
Three month	**-0.371**	-0.381	-0.358	-0.389
Six month	**-0.325**	-0.331	-0.250	-0.339
One year	**-0.246**	-0.251	-0.122	-0.263
Euro interbank offered rate (Euribor)				
One month	**-0.372**	-0.370	-0.366	-0.375
Three month	**-0.328**	-0.329	-0.325	-0.332
Six month	**-0.271**	-0.270	-0.241	-0.279
One year	**-0.190**	-0.190	-0.109	-0.194

	Latest	Value Traded	52-Week High	Low
DTCC GCF Repo Index				
Treasury	**2.068**	52.400	2.068	0.791
MBS	**1.971**	115.350	1.971	0.794

	Settle	Change	Open Interest	Implied Rate
DTCC GCF Repo Index Futures				
Treasury Apr	**98.230**	unch.	1848	1.770
Treasury May	**98.230**	0.005	835	1.770
Treasury Jun	**98.105**	unch.	551	1.895

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 March 22, 2018. **Other prime rates** aren't directly comparable; lending practices vary widely by location; **Discount rate** is effective March 22, 2018. **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.

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Why a Dollar Rally Hasn't Yet Happened

By Ira Iosebashvili

CURRENCIES

The dollar can't seem to catch a break.

The U.S. currency posted its fifth straight quarterly loss in the first three months of the year, puzzling investors who bet it would benefit from corporations repatriating cash in the wake of tax cuts signed into law late last year.

Many investors now believe uncertainty over U.S. policy, the risks of a global trade war and an acceleration in growth abroad mean more declines are in store for the dollar. The WSJ Dollar Index, which measures the U.S. currency against a basket of 16 others, was down 2.6% in the first quarter, extending a 12-month loss which now stands at 7.3%. The euro, yen and some emerging-market currencies, meanwhile, are up in 2018.

A drop in the dollar's value over the past year has had broad implications, which would likely intensify if the U.S. currency's decline continues. A weaker dollar helps make U.S. goods more competitive abroad, boosting profits for multinational companies and potentially buoying their stock prices. It also lifts prices for commodities such as oil, copper and gold, which are denominated in the U.S. currency and become more affordable to foreign investors when the dollar falls.

If the dollar falls too rapidly, however, that could shake faith in the U.S. economy and complicate the Federal Reserve's plans to tighten monetary policy. An extended fall also could juice inflation and spark concerns that consumer prices will rise too quickly.

Most recently, investors have been spooked by a trade spat with China, after President Donald Trump threatened to levy tariffs on as much as $60 billion of imports from China, while Beijing announced retaliatory measures. The dollar edged lower on that news, although its losses were counterbalanced by steeper drops in other currencies.

The threat of a trade war "has certainly not had a constructive impact on the dollar," said Christian Lawrence, a senior market strategist at Rabobank. "The market interprets trade wars as potentially bad for the U.S."

The U.S. currency has proven vulnerable to trade conflicts in the past. The ICE Dollar Index, which measures the dollar against six major currencies, fell nearly 20% between 2001 and 2003, as the U.S. imposed tariffs on steel imports, data from TD Securities showed. It declined around 12% between 1993 and 1995 in response to contentious trade relations between the U.S. and Japan.

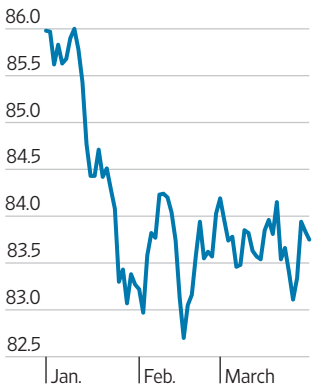
Also weighing on the dollar has been a global economic upswing that has encouraged central bankers in Europe and Asia to take the first steps toward normalizing monetary policy after years of expansive support. Indications that the European Central Bank and Bank of Japan are on course to phase out their stimulus programs and eventually raise interest rates have boosted the yen and euro by 5.9% and 2.7% against the dollar in the first quarter, respectively.

Meanwhile, many investors believe that three or even four U.S. rate increases this year are already reflected in the dollar's price. Rising interest rates tend to make a currency more attractive to yield-seeking investors.

"If I was a dollar bull, I would be concerned that the euro didn't weaken in the face of Italian elections and trade concerns," said Paresh Upadhyaya, a portfolio manager at Amundi Pioneer Asset Management.

Slipping

WSJ Dollar Index



Source: WSJ Market Data Group
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	.0497	20.1150	8.1
Brazil real	.3026	3.3051	–0.2
Canada dollar	.7753	1.2898	2.6
Chile peso	.001656	603.90	–1.9
Ecuador US dollar	1	1	unch
Mexico peso	.0551	18.1614	–7.7
Uruguay peso	.03522	28.3900	–1.4
Venezuela b. fuerte	.00002	49600.0001	479504.7
Asia-Pacific			
Australian dollar	.7682	1.3017	1.7
China yuan	.1590	6.2911	–3.3
Hong Kong dollar	.1274	7.8489	0.5
India rupee	.01537	65.079	1.9
Indonesia rupiah	.0000727	13748	2.0
Japan yen	.009412	106.24	–5.7
Kazakhstan tenge	.003132	319.28	–4.0
Macau pataca	.1235	8.0970	0.6
Malaysia ringgit	.2589	3.8625	–4.9
New Zealand dollar	.7242	1.3808	–2.1
Pakistan rupee	.00864	115.710	4.6
Philippines peso	.0192	52.173	4.4
Singapore dollar	.7631	1.3104	–2.0
South Korea won	.0009423	1061.28	–0.6
Sri Lanka rupee	.0064251	155.64	1.4
Taiwan dollar	.03450	28.988	–2.3
Thailand baht	.03207	31.180	–4.3
Vietnam dong	.00004387	22794	0.4

Country/currency	Fri in US$	Fri per US$	US$ vs, YTD chg (%)
Europe			
Czech Rep. koruna	.04861	20.571	–3.3
Denmark krone	.1653	6.0484	–2.5
Euro area euro	1.2324	.8115	–2.6
Hungary forint	.003942	253.71	–2.0
Iceland krona	.010142	98.60	–4.8
Norway krone	.1275	7.8420	–4.4
Poland zloty	.2924	3.4199	–1.7
Russia ruble	.01749	57.180	–0.9
Sweden krona	.1199	8.3420	1.9
Switzerland franc	1.0482	.9540	–2.1
Turkey lira	.2528	3.9552	4.2
Ukraine hryvnia	.0377	26.4915	–5.9
UK pound	1.4017	.7134	–3.6
Middle East/Africa			
Bahrain dinar	2.6522	.3771	–0.01
Egypt pound	.0566	17.6620	–0.6
Israel shekel	.2865	3.4906	0.3
Kuwait dinar	3.3379	.2996	–0.6
Oman sul rial	2.5980	.3849	–0.01
Qatar rial	.2746	3.642	–0.2
Saudi Arabia riyal	.2666	3.7503	...
South Africa rand	.0845	11.8335	–4.3

	Close	Net Chg	% Chg	YTD % Chg
WSJ Dollar Index	83.75	–0.09	–0.11	–2.59

Sources: Tullett Prebon, WSJ Market Data Group

Iraqi Stocks Defy Swings

Market is up 10% this year as investors bet on country's recovery, but challenges abound

By Isabel Coles And Ali Nabhan

ABAH ARAR/AGENCE FRANCE-PRESSE/GETTY IMAGES

The opening of a Baghdad business center in February is among the signs of Iraq's economic recovery.

BAGHDAD—Iraq's stock market, tucked behind blast walls in an upscale part of Baghdad, is defying the violent swings that have struck the global markets this year.

Shares of companies listed on the frontier market are among the world's top performers in the first quarter as investors bet on the country's economic recovery following the defeat of Islamic State. The three-year war destroyed parts of the country's infrastructure, leaving many businesses struggling.

As the government seeks to rebuild with the help of foreign aid and investments, investors are buying up shares of Iraqi companies they expect to benefit the most from those efforts—from banks and industrials to telecommunications firms and hotels.

The Iraq Stock Exchange benchmark ISX index is up about 10% this year, ahead of other similar frontier markets that are up 0.6%, according index provider MSCI Inc., placing it among the top 10 markets globally. Those gains come even as many other stock markets have been hard hit by worries of an imminent bear market after a multiyear bull run.

Iraq's market missed out on that cycle, losing about 60% of its value over the past three years since Islamic State took over around one-third of the country in 2014. That drop also coincided with a steep fall in the price of oil, the government's biggest revenue earner.

"Iraq today resembles other early-stage markets—like post-Soviet Russia and others—that ended up performing well for investors," said Grant Felgenhauer, principal of Euphrates Advisors, which manages the Euphrates Iraq Fund. The fund has $130 million invested in the Iraqi stock market and is up more than 31% in the first quarter of 2018, according to Mr. Felgenhauer.

"You've got very cheap assets, very few foreign investors, misunderstood politics and a wave of oil liquidity coming into a very small capital market. The pieces are falling into place for good things to happen," he said.

With a market capitalization of around $10 billion, the Iraqi bourse is relatively small compared with other similar frontier markets such as Argentina and Vietnam and even regional markets such as Saudi Arabia and Kuwait. Just over 100 companies are listed on the stock market, accounting for an average daily turnover of around $1 million to $2 million.

A frontier market is generally thought to be a developing country that is much smaller than what many index compilers classify as an emerging market.

As security in the Iraq improves and oil stabilizes at relatively higher prices, investors are focusing again on the country's economy.

Iraq's gross domestic product is forecast to grow by 3% in 2018 after contracting last year, according to the International Monetary Fund. That growth is expected to increase once Iraq receives the tens of billions of dollars its allies have committed to help finance the country's reconstruction and development, which the World Bank estimates will cost $88 billion.

At an investment conference in February, Baghdad showcased more than 150 projects—from hospitals and factories to airports and resorts—receiving pledges worth as much as $30 billion in aid, investments and loans. Prime Minister Haider al-Abadi has vowed to reduce corruption and red tape to attract more investors and boost the private sector.

Foreign investors have long eyed frontier markets such as Iraq for relatively higher growth compared with developed markets, but remain cautious about the wider challenges that come with them—from outdated or opaque legislation to unreliable trading and banking systems.

Iraq faces other risks including the re-emergence of the insurgency that could disrupt the country's redevelopment plans. A parliamentary election in May will be watched.

"We are looking with optimism at what's taking place in the stock market and the economy," said Shwan Ibrahim Taha, chairman of Rabee Securities, one of the biggest brokers in Iraq.

"But really Iraq needs to work very hard," he added.

China Is Steel's Biggest Wild Card

By David Hodari

COMMODITIES

U.S. import tariffs have brought global attention to steel in recent weeks, hitting its price. But it is China that has really made investors anxious.

Growth in Chinese steel demand is decelerating and inventories have remained stubbornly high despite Beijing-imposed winter production cuts. This torpid demand growth and big stockpiles could further weigh on prices.

The price of steel rebar futures has slumped 12.6% so far this year, closing at 3,452 yuan, or about $550, on March 23, according to Macquarie.

In the first two months of 2018, Chinese steel production grew 4.1% from a year earlier, far higher than the 2.5% increase seen in the rest of the world, according to Macquarie. In the first two months of 2017, Chinese production contracted by 0.5%, the bank said.

"Steel demand is starting to grow at a slower pace. We're past the peak of the industrial growth cycle...and there's a lot of concern about China and its inventories—which have been too high," said Colin Hamilton, managing director of commodities research at BMO Capital Markets.

Analysts turned bullish on steel at the end of last year, anticipating cuts aimed at cutting pollution in heavily populated areas of China during the winter would prompt a reduction in supply early this year.

"Our thesis had been that inventories would run low from that cut...but inventories surged in late February and early March," said Seth Rosenfeld, managing director of equity research, metals and mining at Jefferies.

There also hasn't been the usual pickup in demand in China that you would normally see at this time of year, said Serafino Capoferri, commodity research analyst at Macquarie.

Analysts give several reasons for that change.

"Credit conditions have been reasonable, construction activity [has been] weaker than expected, exports [are] low compared with last year, and importantly, steel margins [have been] strong keeping production volumes high," BMO Capital Markets's Mr. Hamilton said.

Over recent weeks, though, investors' attention has been fixed on U.S. steel tariffs. In March, the White House imposed a 25% levy on some steel imports, including China, and later announced it was mulling further tariffs aimed at the country worth $60 billion. China reacted with its own measures and the promise of more should the U.S. escalate. Though the Sino-American steel trade is relatively small—China isn't even in the top 10 origins of U.S. steel imports—the introduction of U.S. levies has damped sentiment even though discussions about exemptions continue.

More than tariffs, a slump in demand and rising inventories worry some analysts.

"There's a lot of incomplete information out there, leading people to take a negative view of [the tariff's] impact on the market," said Jefferies's Mr. Rosenfeld.

To be sure, some analysts don't see Chinese demand falling away.

For a start, Chinese economic data has proven resilient so far this year, confounding the expectations of dwindling economic growth. Data from Mysteel.net, a Chinese steel news website, released on Thursday for the week to March 23 also showed a 4.3% on-the-week drop in Chinese steel mill inventories. Some analysts even say steel prices may now rally.

"I'm starting to see inventories calm down... I was in China a couple of weeks ago and the sentiment there seems pretty good," said Macquarie's Mr. Capoferri.

TRAVIS DOVE/BLOOMBERG NEWS

Construction at a Lennar Corp. development in South Carolina. The home builder is scheduled to report results Wednesday.

THE TICKER | Market events coming this week

Monday

Construction spending
Jan., previous 0.0%
Feb., expected up 0.5%

ISM mfg. index
Feb., previous 60.8
March, expected 59.8

Tuesday

Total vehicle sales domestically produced, at an annual rate
Feb., previous 17.08 mil.
March, expected 16.9 mil.

Wednesday

Mort. bankers indexes
Purch., previous up 3%
Refinan., prev. up 7%

EIA status report
Previous change in stocks in millions of barrels
Crude oil up 1.6
Gasoline down 3.5
Distillates down 2.1

Factory orders
Jan., previous down 1.4%
Feb., expected up 1.7%

ISM non-mfg index
Feb., previous 59.5
March, expected 59.0

Earnings expected*

	Estimate/Year Ago($)
Acuity Brands	2.09/1.77
CarMax	0.87/0.81
Lennar	0.78/0.55

Thursday

Initial jobless claims
Previous 215,000
Expected 225,000

EIA report: natural gas
Previous change in stocks in billions of cubic feet
down 63

Int'l trade deficit in billions
Jan., previous $56.6 bil.
Feb., expected $56.8 bil.

Earnings expected*

	Estimate/Year Ago($)
RPM	0.18/0.09

Friday

Consumer credit
Jan., prev. up $13.91 bil.
Feb., exp. up $15.0 bil.

Unemployment rate
Feb., previous 4.1%
March, expected 4.0%

Nonfarm payrolls
Feb., previous 313,000
March, expected 173,000

* FACTSET ESTIMATES EARNINGS-PER-SHARE ESTIMATES DON'T INCLUDE EXTRAORDINARY ITEMS (LOSSES IN PARENTHESES) ◆ ADJUSTED FOR STOCK SPLITNOTE: FORECASTS ARE FROM DOW JONES WEEKLY SURVEY OF ECONOMISTS

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MARKETS

Energy Stocks Poised to Power Higher

Analysts think there are bargains following first-quarter decline; some concerns remain

By Michael Wursthorn

The first quarter wasn't kind to energy companies: The stocks suffered their worst three-month period in three years.

Now some investors think there are bargains to be had.

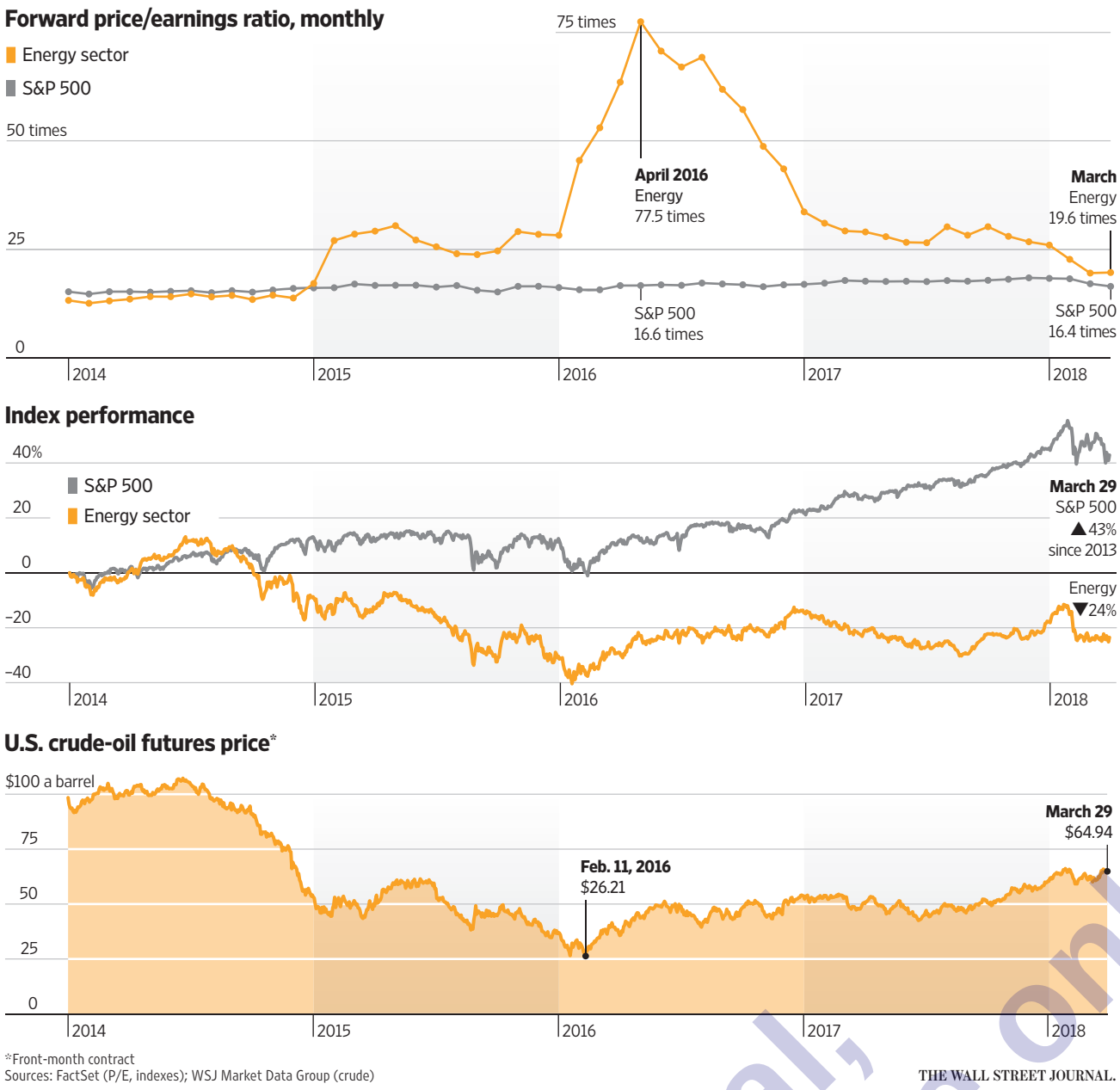
Energy shares in the S&P 500 fell 6.6% in the first quarter, extending 2017's 3.8% slide. After surging in December and January as oil prices neared $70 a barrel, the sector plunged in early February as the broader market fell on fears about the potential for rising interest rates. Only telecommunications and consumer staples in the S&P 500 fared worse in the first quarter.

Thanks to solid corporate earnings and higher oil prices, however, analysts say the sector is poised for a comeback.

Energy companies, which posted the strongest earnings growth of all 11 major sectors in the S&P 500 in the latest period, are expected to outperform again when the first-quarter reporting season kicks off. Meanwhile, oil prices rose 7.5% to $64.94 a barrel in the first quarter and are continuing to build momentum, having risen six of the past seven months.

A recovery in share prices is also taking hold: Energy stocks climbed 1.6% in March, outperforming the broader S&P 500, which fell 2.7% on tumult in the technology sector.

Michael Scanlon, a portfolio manager with Manulife Asset management, says the disconnect between the weak share prices of energy companies and their improved earnings and cash flows has created an "incredible" situation in which the stocks are at their most appealing valuations in years.



*Front-month contract
Sources: FactSet (P/E, indexes); WSJ Market Data Group (crude)

THE WALL STREET JOURNAL.

"Those cash flow streams going out into the future are far more valuable, yet the stock prices haven't kept in sync with that," Mr. Scanlon said. "That's an environment where oil can be held higher from here. Those stocks are very attractive."

After the recent declines, energy companies' valuations are more in sync with the broader market, analysts say. The shares are trading at 20 times their forward-looking earnings over the next 12 months, compared with 16 times for the broader index, according to FactSet.

"The selloff brought valuations back in line to where they are much more balanced than they were 18 or 24 months ago," said Patrick Palfrey, an energy equity analyst with Credit Suisse, which recently upgraded allocations to energy stocks to "market neutral" from underweight. "We're quite confident that the growth potential for the group remains strong."

Analysts are broadly encouraging investors to increase their energy exposure. About 59% of their projections for energy stocks include "buy" ratings, according to FactSet's data, putting energy among the sectors with the highest number of buy ratings—the others being technology and health care.

That is partly because energy companies are projected to boost earnings by 79% in the first quarter, the most of any other sector, in part because of higher oil prices. The S&P 500, altogether, is expected to grow earnings 17% in the first quarter.

At the same time, many of the energy companies that suffered through the oil rout that began in 2014 are operating more efficiently, with U.S. shale companies building more cost-effective wells. That is helping many companies again generate free cash flow.

Some of that cash is expected to end up in the hands of investors. Energy firms are expected to return some $53 billion in cash to investors this year, a 5% increase from 2017, according to a Morgan Stanley research note. About 75% of the cash returned to shareholders this year will be through dividends, with the rest via share buybacks.

Despite the better prospects for energy stocks, some investors worry the sector's outlook could change suddenly. Some reports show oil and gasoline are accumulating in storage, while U.S. production is also expanding, two primary factors in oil-price volatility.

A surge in oil-and-gas reserves would drive down prices, potentially starving companies of their free cash flow. Energy companies need oil prices to be somewhere between $40 and $50 a barrel to sustain break-even cash flow, Morgan Stanley said, and if prices were to tumble below that, companies could be forced to cut back their spending drastically.

"This creates concern if oil prices retrench toward that threshold," Morgan Stanley said in its research note, ""producers may have to consider suspending buybacks, cutting dividends or even look to raise equity."

HEARD ON THE STREET

Email: heard@wsj.com FINANCIAL ANALYSIS & COMMENTARY WSJ.com/Heard

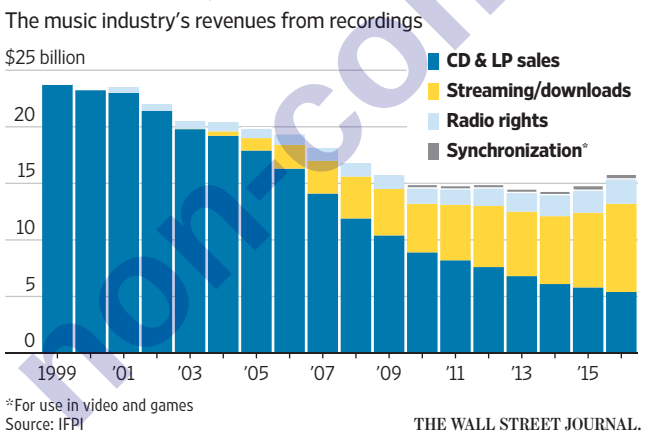
Spotify's Goal: Friendly Disruption

Spotify's unspoken promise to investors is to take on the big record labels that supply it with music. Chief Executive Daniel Ek better be good at cultivating frenemies.

Streaming technology is reviving the retail end of the music business, bringing Spotify growth but little profit. The company is squeezed between the "big three" music groups, which control distribution for three-quarters of all music, and intense competition from **Apple**, **Amazon.com**, **Pandora** and **Alphabet**'s YouTube—not to mention free radio.

As investors settle on a valuation in anticipation of the company's stock listing, set for Tuesday, they must consider how Spotify's current business model will change.

Winning more subscribers will ease Spotify's pain by giving it more negotiating leverage with the music groups; these may accept a lower fee per stream as long as growth in streaming gives them higher fees overall. But it doesn't cure the underlying problem that music retail is a low-margin business deserving a low valuation.



*For use in video and games
Source: IFPI

THE WALL STREET JOURNAL.

Hence Spotify needs a bigger role. The streaming giant's prospectus referred to "building a two-sided marketplace for users and artists." The tacit implication is that Spotify can cut out the middlemen. This is the kind of vision tech investors pay up for.

There is no evidence of a shift yet. On the contrary, big labels have been increasing their market share by buying up independents.

Spotify has tried in the past to work directly with artists. Metallica signed a deal with the company in late 2012, but only after the band took ownership of its recordings from Warner Music. And smaller labels rely on the "majors" to access far-flung markets in an increasingly global industry. Spotify might persuade some to deal with it directly, but many will surely prefer to focus on recording music.

Spotify's consumer platform gives it an edge in some areas. "They can tell a band whether it should plan a tour to Baltimore based on how its fan base is developing there," says Pär-Jörgen Pärson, a Spotify investor at venture-capital firm Northzone. But it is a leap to suggest the company can displace the big distributors. More likely it will force them to improve their service.

The root of the problem is that Spotify can't afford to antagonize the big three. The breadth of its catalog is a key part of the streaming giant's customer proposition. That gives **Universal Music**, for example, with its roughly 35% market share of distribution rights, a veto over anything Spotify does.

Mr. Ek needs to excite investors by promising disruption while keeping the big record labels on board by promising growth. Juggling these messages will become harder once the company goes public.

—Stephen Wilmot

OVERHEARD

Saudi Arabia has something to celebrate—sort of.

Attracting international investors is a big priority for the petro-state as it mulls a privatization and stock-market listing for **Saudi Aramco**, the world's largest oil producer and potentially the world's most valuable public company. A decision this past week by index provider FTSE Russell to include the kingdom's stock market in an emerging-markets index in a year will help a lot as investment funds rush to add exposure.

The country has positives—vast oil wealth—and negatives—it recently made use of a swanky Ritz-Carlton hotel in the capital Riyadh as a prison.

That explains why Saudi Arabia is being classified as an emerging market, and just a "secondary emerging market" at that.

The only "advanced emerging market" in the region is Turkey. More irksome still is the region's lone "developed market," Israel.

A Chance to Do Better on MPG Rules

By now the cycle is familiar: The Trump administration proposes rolling back environmental regulations and hand-wringing ensues about the potentially disastrous long-term consequences.

Perhaps the best-known set of rules target fuel economy. These may be overhauled this week, according to a report in the New York Times.

Yet while studies have shown that the rules have led to less gasoline consumption than might otherwise have been the case, loopholes have allowed manufacturers to remain within them. Meanwhile, technology has made engines more efficient, but consumers have used most of those gains to drive bigger vehicles.

By putting the onus on manufacturers rather than incentivizing consumers to translate more of that power into mileage gains, the market becomes warped. Gas guzzlers become even more profitable to sell and, because the supply of new ones is restricted, they depreciate less and consumers are less likely to scrap them as soon. That keeps them on the road longer, which matters for fuel use.

A more direct way to affect the car fleet, and one that could raise revenue, is for consumers to pay more for actual fuel consumed through higher excise taxes. In California, for example, average pump prices are $3.49 a gallon and the most popular car is a Honda Civic, which gets 42 miles per gallon on the highway. In Texas, gasoline costs $2.43 and the most popular vehicle is a 26 mpg Ford F 150.

Unfortunately, such a move, while good policy, would cause much wider public outcry than endangering the environment. That probably makes it a nonstarter.

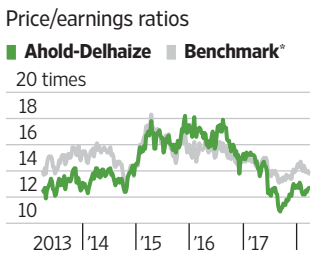
—Spencer Jakab

Activists and the Rising Barriers to Global Deal-Making

Shareholder clout in takeover situations is on the wane. In an increasingly protectionist world, investors need to get used to it.

The Trump administration's intervention in the **Broadcom-Qualcomm** battle last month is one example. The Committee on Foreign Investment in the U.S. argued that the $117 billion takeover of Qualcomm by Broadcom could jeopardize U.S. investment in 5G technology. The Treasury Department also is coming up with plans to restrict Chinese investment in the U.S. more broadly.

Yet the trend is apparent elsewhere, too. Take the Netherlands: Its companies have some of the toughest takeover protections in the world—and if anything they are getting tougher.



*Euro Stoxx Food & Drug Retailers
Source: FactSet

Grocery giant **Ahold-Delhaize**, which runs a trans-Atlantic portfolio of supermarket chains including Food Lion, Stop & Shop and online pioneer Peapod, enjoys the classic Dutch defense of a "stichting," or foundation. If necessary, the company can issue preferred stock to this foundation that dilutes the voting rights of other shareholders. The arrangement is explicitly designed to repel threats to the company's "continuity, independence or identity," according to a corporate-governance report.

Catherine Berjal of CIAM, a Paris-based activist investor with a small stake in Ahold-Delhaize, argues that the foundation is archaic and is pushing for a vote to close it in a shareholder meeting this month. She thinks the stock would rise at least 10% if the company could be seen as a target.

At Ahold-Delhaize, activist investors might focus on splitting the U.S. and European businesses, which have little in common, and selling the U.S. arm to **Kroger**, for example.

But Ms. Berjal may be pushing on a closing door. During the heyday of free-markets thinking in the mid-2000s, there was a move to loosen Dutch anti-takeover restrictions, says Ferdinand Mason, a lawyer at Jones Day. However, this backfired when ABN Amro, in response to a 2007 letter from London-based activist TCI Fund Management, was broken up and acquired by **RBS**, **Banco Santander** and Fortis in a debt-laden megadeal. Barely a year later, RBS and Fortis required substantial state bailouts.

Since then the Dutch pendulum has swung back toward protecting companies, says Mr. Mason. When the remains of Fortis were refloated as ABN Amro in late 2015, they were protected by a particularly assertive defense structure involving a foundation owning the stock.

Corporate takeover defenses are anything but archaic. Activists need to update their strategies.

—Stephen Wilmot

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MARKETS REVIEW & OUTLOOK

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THE WALL STREET JOURNAL. Monday, April 2, 2018 | R1

QILAI SHEN/BLOOMBERG NEWS

Protectionist trade measures on imports of commodities including Chinese steel put a chill into shares, especially of materials firms.

U.S. Stocks' Rally Falters

Shares wobbled in first quarter despite rosy indicators as investors' confidence wavered

By Akane Otani

Investors enter the second quarter with an apprehensive mind-set, reflecting both the sharp late-March retreat of once-favored technology shares and increasing concern about the impact of rising interest rates on market valuations and volatility.

Some of last year's most enduring trades wobbled toward the end of the quarter, with investors dumping technology darlings like **Facebook** Inc. and Google parent **Alphabet** Inc. over fears that tighter regulation could hit the industry.

The S&P 500 fell 1.2% for its first quarterly loss since 2015, while the Dow Jones Industrial Average slipped 2.5% over the same period and the Nasdaq Composite rose 2.3%.

Yet even after a rocky quarter, major indexes remain up in the double digits on a percentage basis over the past 12 months, and economists' outlooks remain largely positive. Both the U.S. and global economies are expected to continue expanding throughout the year, supported in part by a $1.5 trillion tax-cut package that is expected to boost corporate earnings and help prolong an eight-year U.S. economic expansion.

Now, investors say, the question is whether that will be enough, as they brace for further increases in interest rates at the same time that many economists are questioning whether the pace of the global economic expansion will slow. Many have credited the global stock market's remarkable run since the financial crisis in large part to anemic bond yields, which have drawn investors seeking heftier returns into relatively risky stocks.

"The market is still trying to work out whether an increase in rates will choke off economic activity," said Joe Amato, president and chief investment officer for equities at Neuberger Berman Group LLC. "It continues to be our biggest concern and the thing we're watching most closely."

The market couldn't have ended the quarter more differently than it began. Stocks roared in January, with the S&P 500 jumping more than 5% to set repeated records and surpass the level that analysts at Goldman Sachs had thought it would end the year. Optimism about the global economy drove investors to pour a record amount of money into mutual funds and exchange-traded funds tracking equities.

Yet stocks tumbled into correction territory in February, hurt by interest-rate jitters and collapsing bets on volatility remaining low—and have struggled to regain their momentum since then. The last time the S&P 500 rose more than 5% in January but closed the quarter in the red was in 1980, according to broker-dealer LPL Financial LLC. Stocks elsewhere also slid, with Japan's Nikkei Stock Average losing 5.8% and the Stoxx Europe 600 declining 4.7%.

The stunning reversal has put many investors on edge. But many say that beneath the uncertainty over the White House's trade policies and the path of interest rates, the economic outlook continues to look positive—something that should help boost stocks, even as volatility has rattled the markets anew this year.

Corporate earnings among S&P 500 firms are projected to log growth of 17% in the first

Please see STOCKS page R2

Bond Bears Get Wary of Treasurys

By Daniel Kruger

Investors ended the quarter asking whether the Treasury market selloff has abated.

The yield on the benchmark 10-year U.S. Treasury note posted its third consecutive quarterly gain, boosted by surging expectations for growth and inflation in the wake of a $1.5 trillion tax cut passed at the end of last year.

Proponents of the tax cut said lower levies on corporations would lead to increases in business investment and worker wages, spurring demand and juicing inflation. Inflation undermines the value of bonds by eroding the purchasing power of their fixed interest payments and their principal.

Data showed wages and consumer prices rose in January, encouraging more investors to sell government bonds and driving the yield on the benchmark 10-year Treasury more than half a percentage point higher in less than two months. Yields rise as bond prices fall.

But the rise in yields stalled in March. The strong January wage data was revised lower in the following month's labor report. Subsequent weaker-than-forecast inflation data suggested the tax cuts were unlikely to spur growth that matched the move in market expectations. Bonds also attracted buyers as rising yields have spooked some stock-market investors, leading to a surge of volatility in financial markets after a placid 2017.

"The move is in some ways very similar to what we saw after the election" as expectations for acceleration of growth and consumer prices sent investors pouring into stocks and out of bonds, said Wan-Chong Kung, a bond-fund manager for Nuveen. "There's been some tempering of this inflation optimism," she said. "There's some healthy skepticism about growth."

The most recent inflation data showed a loss in momentum. The Labor Department said on March 13 that the consumer-price index, which measures what Americans pay for everything from laundry detergent to motorcycle helmets, rose 2.2% year over year in February, below the 2.3% estimated by economists surveyed by The Wall Street Journal. Core prices rose 1.8% for a

Please see BONDS page R2

Uphill Climb

Yield on the 10-year Treasury note

Source: Ryan ALM

THE WALL STREET JOURNAL.

Next Week

The investing in Funds & ETFs quarterly report will be published on April 9.

INSIDE

BITCOIN AND OTHER DIGITAL CURRENCIES TAKE A THUMPING

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OIL-PRICE FORECASTS ARE TILTING MORE BULLISH

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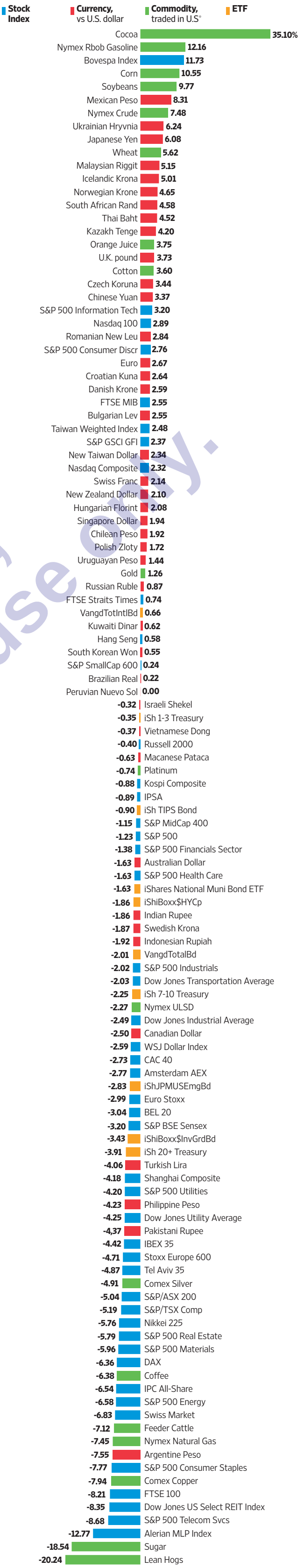
MUNICIPAL BONDS SURPRISE WITH A DECLINE

R6

Track the Markets: Winners and Losers

A look at how selected global stock indexes, bond ETFs, currencies and commmodities performed around the world for the quarter



*Continuous front-month contracts

Sources: SIX Financial Information (stock indexes); Tullett Prebon (currencies); WSJ Market Data Group (bond ETFs, commodities)

THE WALL STREET JOURNAL

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Volatility Stages a Return

By Gunjan Banerji

A measure of volatility in U.S. stocks had one of its biggest quarterly rises ever, reflecting growing investor concerns about inflation, rising interest rates and global trade tension.

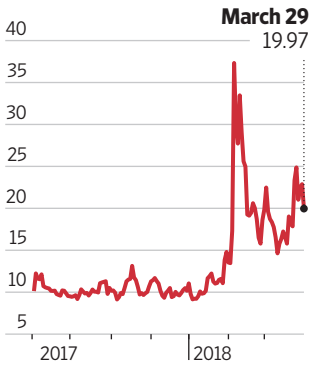
The Cboe Volatility Index, or VIX, surged about 80% during the first quarter after the measure of equity-market turbulence slid for three years. Loose central-bank policies and steady economic expansion world-wide suppressed price swings in markets during that streak.

But hints of a pickup in inflation and higher bond yields shattered that prolonged stretch of serenity in the first quarter. The U.S. stock market entered correction territory during February, while fears of a trade war continued to spark market tumult throughout March.

"We had a regime change with respect to both volatility and interest rates," said Joanne Hill, chief adviser for research and strategy at asset manager Cboe Vest Financial, a majority-owned subsidiary of Cboe Global Markets, which oversees the VIX.

Turbulence

The Cboe Volatility Index, or VIX, surged in the first quarter.



Source: Cboe Global Markets
THE WALL STREET JOURNAL.

Some investors have taken the recent turmoil as an end to the once lucrative strategies of betting against volatility through selling options or making bearish wagers via exchange-traded products.

Ms. Hill said retail investors are now putting money into portfolios that include options hedging—a strategy that can give investors protection when markets turn bearish.

When market volatility briefly subsided in February, some investors opportunistically loaded up on hedges as options prices slipped.

"We try to take advantage of periods when volatility is low to put hedges on," said Baltimore-based Rick de los Reyes, co-portfolio manager at T. Rowe Price.

"The spike in volatility that we saw in early February—that definitely constitutes a change in the market," he added.

Mr. de los Reyes recently scooped up bearish put options on individual stocks that he thinks have a weak outlook, including contracts on shares of industrial companies.

One beneficiary of higher volatility: options traders, who have been starved of the market gyrations that help them capture profits. Equity options volume is off to a record start in 2018, according to a spokeswoman for Options Clearing Corp., after years of torpor.

February's turbulence was so severe that it triggered the demise of two ETPs that track the VIX—a blow to the short volatility trade that has become wildly popular in recent years. It also prompted other ETPs to revise their designs, reducing the degree to which investors can wager on volatility with a single bet.

At the start of 2018, coming off a year when the S&P 500 index surged 19%, few investors had allocated money for stock hedges, tired of burning cash on options contracts that tended to expire worthless since markets were calm.

And some say habits haven't changed much. Jim Strugger, a derivatives strategist at Stamford, Conn.-based MKM Partners, said that the recent tumults haven't triggered big changes in hedging.

Some investors have already reverted to shorting volatility, rather than springing for protection, according to him.

"A little volatility event was not going to dislodge people from the anchoring of the past 10 years," Mr. Strugger said.

KIYOSHI OTA/BLOOMBERG NEWS

Coincheck Chief Operating Officer Yosuke Otsuka spoke in February, the month after the exchange lost $500 million to a cyberheist.

Bitcoin Hits the Skids in Quarter

By Paul Vigna

The first quarter was a prime example of why investors shouldn't get too excited about bitcoin.

The digital currency has always been prone to wild price swings, pushed around by news flow and investors' rapidly changing sentiment. In 2017, those trends pushed the price of bitcoin 1,375% higher. This year, they have reversed sharply.

Bitcoin posted its second-worst quarter on record in the first quarter of 2018. As of Thursday, bitcoin was down 49% in the quarter, trading around $7,115. That would make the first quarter the worst since the third quarter of 2011, when it fell 68%, and the second-worst quarter since it started trading regularly in 2010. Moreover, it slid 64% from its record of $19,800 set on Dec. 17. It was the first down quarter for bitcoin since the third quarter of 2016, when it fell 9.5%.

Of course, in the third quarter of 2011, bitcoin slid from around $16 to $5, meaning investors lost $11 per bitcoin. In 2018, they lost about $6,930 for each bitcoin they owned.

Paced by bitcoin, the rest of the cryptocurrency market fell as well. Ethereum reached as high as $1,369 on Jan. 13 but ended the quarter around $402, down 46% from the end of 2017 when it closed at $743. Ripple traded as high as $3.84 on Jan. 4 but finished the quarter at 52 cents, down 78% from its Dec. 31 close of $2.37. The total market value of the cryptocurrency sector declined 56% in the quarter to $263 billion, according to coinmarketcap.

There were several catalysts for the decline: The Wall Street Journal reported in February that the U.S. Securities and Exchange Commission has been investigating the nascent world of initial coin offerings, warning that most of the token offerings often paid for with cryptocurrencies appear to be unregistered securities. A slowdown in ICOs, as the technology and software deals are often called, could hurt bitcoin and other cryptocurrencies if it turns into a broader regulatory review that cools investor interest in the area.

Another headwind came as **Facebook** Inc. and **Alphabet** Inc. during the quarter banned online ads for the controversial ICOs.

Another wrinkle was trading on markets that enable short bets, or wagers on declines in bitcoin's price. Exchange operators Cboe Global Markets Inc. and **CME Group** Inc. began offering bitcoin futures in December, allowing investors for the first time to effectively bet against bitcoin on a large platform. While still small, the futures market showed that large traders made bets against bitcoin early in the quarter. While momentum shifted back and forth during the quarter, it was most recently tilted toward the shorts.

Another problem was an inability to effectively protect funds from cyberthieves. Japanese exchange Coincheck lost $500 million of bitcoin and other cryptocurrencies in January, though it later said it had paid back customers. An Italian exchange named BitGrail lost $170 million of a cryptocurrency called nano in February.

With all that weighing against it, trading sagged in the quarter. Daily bitcoin transactions were over 400,000 at the fourth quarter peak. They fell back down below 200,000 in the first quarter.

BONDS

Continued from the prior page

third consecutive month, also below economists' expectations.

The 10-year yield reached a four-year peak at 2.943% on Feb. 21, and has since fallen to 2.741%. The increase of 0.332 percentage point was the largest for a quarter since December 2016.

Investors will head into the second quarter looking for signs of whether Federal Reserve officials are edging closer to signaling a fourth interest-rate increase this year. After policy makers raised interest rates at their March meeting, the officials' forecasts showed they are moving closer to the view that they should accelerate the pace of rate increases this year.

Most Fed officials still expect to raise rates no more than three times this year. While policy makers forecasting four rate increases in 2018 remained short of a majority, that cohort of central bankers grew to seven in March from four in December. Policy makers also boosted their projections for the pace of rate increases in both 2019 and 2020.

Those forecasts notwithstanding, many investors said they thought Fed Chairman Jerome Powell showed a bias toward a slower approach to raising interest rates in his first news conference speaking for the central bank. Fed-funds futures, which investors use to bet on central-bank policy, late Thursday showed the chances that the Fed will boost rates for four times this year at 32%, compared with 31% a week before, according to the CME Group.

"The Fed's going to have to be convinced to go to four, and right now I'm not seeing this," said Andrew Brenner, head of global fixed income at NatAlliance Securities. "I'd be leaning more towards two than four."

The rising supply of short-term debt being sold at the same time the Fed is raising interest rates is pushing up two-year yields in relation to the 10-year yield, leading to a smaller gap between two- and 10-year Treasury yields. That gap, known as the yield curve, is sometimes seen by investors as a measure of economic health, with steeper, more positively sloped curves signaling a better growth outlook.

Investors also are grappling with the relationship between stock prices and bond yields, as an array of crosscurrents are adding to the uncertainty about the direction of financial markets. Rising bond yields in February helped instigate a tumble for stocks as investors became increasingly concerned that the climb might curtail economic growth and reduce the appeal of stocks in analysts' valuation formulas, which often consider bond yields.

At the same time, investors are trying to assess how the economy will respond to a weakening dollar, rising oil prices and bond-market credit spreads. With the yield gap between corporate bonds and Treasurys narrowing during the economic expansion, a reversal in that trend could signal problems for the economy.

"There are enough reasons to think that volatility is here to stay for the rest of 2018," said Daniela Mardarovici, who helps manage the BMO TCH Core Plus Bond Fund.

Investment Bankers Face Growth Puzzle

By Liz Hoffman

Investment bankers have had a good run. What now?

These Wall Street elite, who broker corporate mergers and underwrite stock and bond sales, have been their firms' star performers over the past few years, aided by a bull market that encouraged companies to do deals and a sea of cheap debt to finance them.

But growth will likely get tougher from here, as interest rates rise and a regulatory action on some mergers and market tremors rattle CEO confidence.

The past few years were "as good as it gets," said Charles Peabody of Compass Point Research. He expects investment-banking revenues at the largest Wall Street firms to drop 5% to 10% year to year in the first quarter and to be roughly flat in 2018.

Investment banking refers to three businesses linked by their proximity to corporate boardrooms: advice about mergers and other restructurings, as well as underwriting of stock and debt securities. Assignments in one area often spur activity in others, as companies borrow for takeovers or repurchase stock to pacify an activist investor.

Revenue gains going forward are likely to hinge more on intensified competition for clients and deals, rather than the pie growing for everyone.

Already, **Goldman Sachs Group** Inc. is going after smaller deals and lending more, challenging commercial banks such as **Bank of America** Corp. on their own turf. Bank of America is going the other direction, working to strengthen advisory relationships by covering clients more proactively and being choosier about the loans it makes, executives say. **Morgan Stanley** is raising fees for some M&A assignments, according to a person familiar with the matter.

Investment bankers at the five biggest Wall Street firms made $31.5 billion last year, representing 10% of overall revenues, up from $24.5 billion, or 6.6% of revenues, in 2010. Investment-banking revenues have compensated for those lost in trading since the financial crisis.

The wave has been strong enough to vault star merger bankers including Morgan Stanley's Paul Taubman and Citigroup's Michael Klein to solo careers running their own boutique firms. David Solomon recently was named Goldman's next CEO after leading its investment-banking arm through a decade of strong growth.

While a sharp decline is unlikely, so is the kind of double-digit growth many firms have seen over the past few years.

M&A is surging by dollar volume and the tax overhaul could prompt new acquisitions, but the number of deals in the first quarter was at its lowest level since 2005, down nearly 15% from last year, according to Dealogic.

A regulatory campaign could chill activity further. The U.S. government is suing to block **AT&T** Inc.'s $85 billion takeover of **Time Warner** Inc., and earlier this month barred the potential tie-up of semiconductor makers **Broadcom** Ltd. and **Qualcomm** Inc.

Revenue gains are likely to hinge on intensified rivalry for clients and deals.

Meanwhile, fewer companies are going public as entrepreneurs find plenty of cash in the private market.

Furthermore, debt underwriting—which accounted for half of the 2017 investment-banking revenue at the five biggest U.S. firms—could suffer as the Federal Reserve raises interest rates, making companies likely to borrow less, Mr. Peabody said.

And the recent tax overhaul frees up billions of dollars that should reduce the need for companies to borrow to pay dividends or make investments. So far this year, debt issuance is down 5% globally and down 9% in the U.S., according to Dealogic.

STOCKS

Continued from the prior page

quarter from the year-earlier period, according to FactSet, building on a strong fourth quarter and putting firms on track for their best results since the first quarter of 2011.

In another reassuring sign, some of the companies that had taken the biggest hit in March are expected to post the fastest pace of earnings growth.

Shares of materials companies in the S&P 500, which slumped on fears that increasingly protectionist trade measures could crimp profits at companies depending on steel and aluminum imports, are expected to post earnings growth of 44% from the year-earlier period, according to FactSet.

Technology firms, which rebounded Thursday but have struggled for traction in the past month, also are expected to impress: Analysts estimate first-quarter earnings growth of 23% for the S&P 500 technology sector.

"The underlying economy continues to be strong, and consumer spending throughout the rest of this year should benefit companies," said Tracie McMillion, head of global asset allocation strategy at Wells Fargo Investment Institute. She added that she believes the U.S. stock market remains attractive.

Bond yields also haven't risen to the level that many fear could portend a turning point for the stock market.

A steep rise in bond yields could slow stock gains by raising borrowing costs, potentially eating into companies' profits and slowing spending among consumers. It also could make stocks, whose valuations are often calculated relative to bond yields, look less attractive to investors.

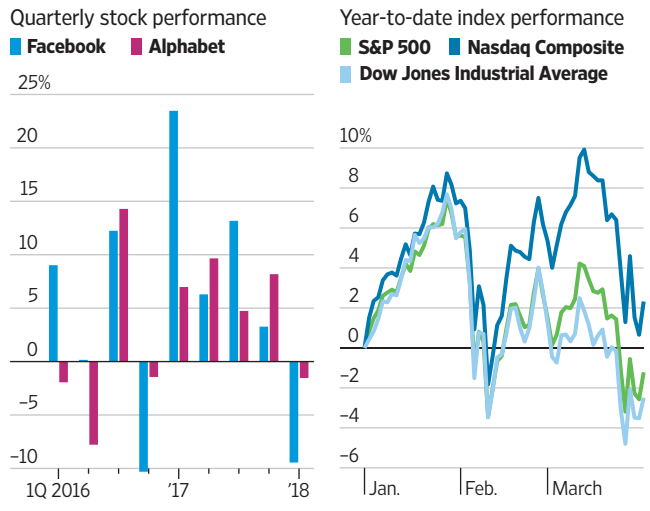
Yet the key threat that investors say could push bond yields higher—a sharp rise in inflation—hasn't materialized yet.

Various measures of inflation, including the Commerce Department's personal-consumption expenditures price index, have largely come in below the Federal Reserve's 2% target—easing investors' fears that the Fed could be forced to pencil in more rate increases than initially anticipated for the year.

Wage growth also has remained muted, even as the unemployment rate has held near a 17-year low.

Investors will be closely watching the March jobs report, expected to be released April 6, for signs of a pickup in inflation.

A Rocky Quarter



Source: FactSet
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MARKETS REVIEW & OUTLOOK | FIRST QUARTER MARKETS DIGEST

Top 10 Rankings

Global Mergers & Acquisitions
Deals announced in first quarter 2018

Adviser	Value $billions	No. of Deals	Market Share%
Morgan Stanley	290.2	63	26.0
JPMorgan	266.2	82	23.9
Goldman Sachs	238.0	79	21.3
BofA-Merrill Lynch	233.2	47	20.9
Citi	220.4	59	19.8
Lazard	207.2	55	18.6
Credit Suisse	134.1	48	12.0
Barclays	117.7	46	10.6
Centerview Partners	115.3	14	10.3
Rothschild Co	113.6	60	10.2

Global Equity Capital Markets
Deals priced in first quarter 2018

Bookrunner	Value $billions	No. of Deals	Market Share%
Morgan Stanley	21.7	110	10.3
Goldman Sachs	19.7	102	9.3
Citi	16.7	88	7.9
JPMorgan	12.6	97	6.0
BofA-Merrill Lynch	12.5	70	5.9
Credit Suisse	8.5	65	4.0
UBS	8.2	50	3.9
Deutsche Bank	7.9	58	3.7
Barclays	7.4	45	3.5
China Securities Co Ltd	5.0	12	2.4

Global Debt Capital Markets
Deals priced in first quarter 2018

Bookrunner	Value $billions	No. of Deals	Market Share%
Citi	125.0	519	6.7
JPMorgan	119.1	526	6.4
BofA-Merrill Lynch	118.4	413	6.3
Barclays	94.2	334	5.0
Goldman Sachs	86.5	324	4.6
HSBC	77.5	371	4.1
Deutsche Bank	71.0	307	3.8
Morgan Stanley	65.8	384	3.5
Wells Fargo Sec	63.7	340	3.4
BNP Paribas	62.3	237	3.3

Global Syndicated Loans
Deals credited in first quarter 2018

Bookrunner	Value $billions	No. of Deals	Market Share%
BofA-Merrill Lynch	87.9	282	10.6
JPMorgan	86.6	271	10.4
Citi	49.2	151	5.9
Wells Fargo Sec	37.9	177	4.5
Mizuho	37.7	183	4.5
Mitsubishi UFJ Fin	35.9	274	4.3
Goldman Sachs	33.5	104	4.0
Barclays	30.4	117	3.6
Deutsche Bank	29.3	114	3.5
Credit Suisse	24.5	107	2.9

U.S. Mergers & Acquisitions
Deals announced in first quarter 2018

Adviser	Value $billions	No. of Deals	Market Share%
Morgan Stanley	232.2	38	39.3
JPMorgan	172.0	48	29.1
Lazard	155.4	24	26.3
Goldman Sachs	132.5	48	22.4
BofA-Merrill Lynch	127.2	25	21.5
Citi	110.4	32	18.7
Centerview Partners	108.2	12	18.3
Barclays	95.1	34	16.1
Credit Suisse	91.6	26	15.5
Evercore Inc	65.3	31	11.0

U.S. Initial Public Offerings
Deals priced in first quarter 2018

Bookrunner	Value $millions	No. of Deals	Market Share%
BofA-Merrill Lynch	1,432	16	14.0
Goldman Sachs	1,042	12	10.2
Credit Suisse	861	9	8.4
RBC Capital Markets	784	6	7.7
Deutsche Bank	756	7	7.4
Morgan Stanley	736	9	7.2
Citi	676	9	6.6
JPMorgan	646	8	6.3
Barclays	467	7	4.6
UBS	402	5	3.9

U.S. Investment-Grade Bonds
Deals priced in first quarter 2018

Bookrunner	Value $billions	No. of Deals	Market Share%
BofA-Merrill Lynch	47.1	140	13.5
JPMorgan	39.9	117	11.5
Goldman Sachs	32.6	151	9.4
Citi	30.8	131	8.8
Barclays	25.5	89	7.3
Wells Fargo Sec	24.8	99	7.1
Morgan Stanley	24.8	100	7.1
Deutsche Bank	13.1	40	3.8
BNP Paribas	11.4	31	3.3
Credit Suisse	11.1	46	3.2

U.S. High-Yield Bonds
Deals priced in first quarter 2018

Bookrunner	Value $billions	No. of Deals	Market Share%
JPMorgan	6.1	44	10.2
Credit Suisse	4.8	32	8.0
Barclays	4.6	31	7.7
Wells Fargo Sec	4.4	33	7.4
BofA-Merrill Lynch	4.3	39	7.2
Citi	4.2	35	7.1
Goldman Sachs	4.0	33	6.8
Deutsche Bank	3.7	27	6.2
Morgan Stanley	3.2	24	5.4
RBC Capital Markets	3.0	25	5.0

U.S. Core Leveraged Finance[1]
Fees paid in first quarter 2018

Bank	Revenue $millions	2018 Mkt Shr %	2017 Mkt Shr %
JPMorgan	187	9.0	10.9
Credit Suisse	186	8.9	8.9
Barclays	165	7.9	9.3
BofA-Merrill Lynch	161	7.7	8.8
Goldman Sachs	141	6.8	7.6
Jefferies LLC	140	6.7	4.2
Deutsche Bank	112	5.4	5.4
Citi	107	5.1	5.6
Morgan Stanley	97	4.7	5.9
RBC Capital Markets	96	4.6	4.3

Global Investment Banking[1]
Fees paid for M&A, ECM, DCM and loans in first quarter 2018

Bank	Revenue $millions	2018 Mkt Shr %	2017 Mkt Shr %
JPMorgan	1,469	8.1	8.2
Goldman Sachs	1,330	7.3	6.8
Morgan Stanley	1,152	6.3	5.5
BofA-Merrill Lynch	1,049	5.8	6.5
Citi	978	5.4	5.3
Barclays	826	4.5	4.8
Credit Suisse	818	4.5	4.8
Deutsche Bank	592	3.3	3.6
UBS	442	2.4	2.2
Jefferies LLC	436	2.4	1.7

[1]Dealogic Revenue analytics are employed where fees aren't disclosed. Source: Dealogic

Who's No. 1?
Top banks in Dealogic rankings across M&A, equity capital markets (ECM), debt capital markets (DCM) and loans, in first quarter 2018

Product and Deal Type	No.1 - Ranked Bank	1st-qtr market share (%)	Chg in share from 1st-qtr (pct. points)
Investment Banking			
Global IB Revenue[1]	JPMorgan	8.1	-0.1
Global M&A Revenue[1]	JPMorgan	10.4	2.1
Global ECM Revenue[1]	Morgan Stanley	9.5	3.8
Global DCM Revenue[1]	BofA - Merrill Lynch	6.9	-0.1
Global Loans Revenue[1]	JPMorgan	7.9	-1.1
Global M&A	Morgan Stanley	26.0	6.8
U.S. M&A	Morgan Stanley	39.3	12.7
Global M&A Boutique	Centerview Partners	10.3	7.4
Equity Capital Markets			
Global ECM	Morgan Stanley	10.3	5.1
Global IPOs	BofA - Merrill Lynch	7.8	5.6
Global All Follow-Ons	Morgan Stanley	12.9	8.3
Global Convertible Bonds	Goldman Sachs	13.3	2.5
U.S. ECM	Morgan Stanley	17.4	9.7
U.S. IPOs	BofA - Merrill Lynch	14.0	10.1
U.S. Block Trades	Morgan Stanley	28.6	19.7
U.S. Non-Block Follow-Ons	Morgan Stanley	11.7	5.2
U.S. Convertible Bonds	Morgan Stanley	18.8	10.9
Fixed Income			
Global DCM	Citi	6.7	-0.3
Global Investment-Grade Bonds	BofA - Merrill Lynch	7.0	1.1
Global High-Yield Bonds	JPMorgan	8.3	-1.7
U.S. DCM	BofA - Merrill Lynch	11.0	1.4
U.S. Investment-Grade Bonds	BofA - Merrill Lynch	13.5	3.6
U.S. High-Yield Bonds	JPMorgan	10.2	-1.8
U.S. FIG Bonds	BofA - Merrill Lynch	14.4	4.5
Global Loans	BofA - Merrill Lynch	10.6	-0.9
Global Investment-Grade Loans	BofA - Merrill Lynch	11.6	-2.5
Global Leveraged Loans	BofA - Merrill Lynch	9.7	...
U.S. Loans	JPMorgan	15.4	2.3
U.S. Investment-Grade Loans	BofA - Merrill Lynch	18.5	-3.6
U.S. Leveraged Loans	JPMorgan	12.7	2.6
U.S. Total Leveraged Finance	JPMorgan	12.3	1.8
U.S. Core Leveraged Finance	BofA - Merrill Lynch	9.4	0.3
U.S. Core Leveraged Finance Revenue[1]	JPMorgan	9.0	-1.90

[1] Dealogic Revenue analytics are employed where fees are not disclosed Source: Dealogic

How the 30 Dow Jones Industrials Performed
Percentage change in the first-quarter

Company	Close ($) 3/29/18	Close ($) 12/31/17	1st-qtr % chg	Company	xxx-qtr close	Percent Chg xxx-qtr	Percent Chg YTD
Intel	52.08	46.16	12.8	Coca-Cola	43.43	45.88	-5.3
Cisco Systems	42.89	38.30	12.0	Home Depot	178.24	189.53	-6.0
Boeing	327.88	294.91	11.2	American Express	93.28	99.31	-6.1
Microsoft	91.27	85.54	6.7	Caterpillar	147.38	157.58	-6.5
Nike	66.44	62.55	6.2	Walt Disney	100.44	107.51	-6.6
Visa	119.62	114.02	4.9	3M	219.52	235.37	-6.7
JPMorgan Chase	109.97	106.94	2.8	Johnson & Johnson	128.15	139.72	-8.3
Travelers	138.86	135.64	2.4	Chevron	114.04	125.19	-8.9
IBM	153.43	153.42	0.01	McDonald's	156.38	172.12	-9.1
Apple	167.78	169.23	-0.9	Verizon	47.82	52.93	-9.7
Goldman Sachs	251.86	254.76	-1.1	Walmart	88.97	98.75	-9.9
United Technologies	125.82	127.57	-1.4	DowDuPont	63.71	71.22	-10.5
Pfizer	35.49	36.22	-2.0	Exxon Mobil	74.61	83.64	-10.8
Unitedhealth Group	214.00	220.46	-2.9	Procter & Gamble	79.28	91.88	-13.7
Merck	54.47	56.27	-3.2	General Electric	13.48	17.45	-22.8

Source: WSJ Market Data Group

Biggest Percentage Gainers...

Company	Symbol	Close	1st Quarter Net chg	1st Quarter % chg	52-Week Low	52-Week High	52-Week % chg
BlueLinx Holdings	BXC	32.59	22.83	233.9	7.57	38.77	275.5
ACM Research Cl A	ACMR	12.30	7.05	134.3	4.74	15.60	...
ChemoCentryx	CCXI	13.60	7.65	128.6	5.42	15.08	92.1
Pfenex	PFNX	6.00	3.34	125.6	2.07	6.77	3.1
Zion Oil & Gas	ZN	4.76	2.60	120.4	1.09	6.90	290.2
Ablynx ADR	ABLX	54.56	29.57	118.3	17.75	55.01	...
Atara Biotherapeutics	ATRA	39.00	20.90	115.5	11.80	49.90	93.5
Endocyte	ECYT	9.09	4.81	112.4	1.17	11.54	275.6
Iovance Biotherapeutics	IOVA	16.90	8.90	111.3	4.45	19.90	129.9
Tandem Diabetes Care	TNDM	4.96	2.60	110.2	2.14	13.00	-58.7
Daxor Corp	DXR	9.58	5.01	109.5	3.40	21.66	29.5
Juniper Pharmaceuticals	JNP	10.15	5.30	109.3	3.65	13.25	116.0
FTE Networks	FTNW	19.78	9.86	99.4	5.90	26.25	4.1
Alliance One Intl	AOI	26.05	12.80	96.6	9.85	30.70	110.9
Arrowhead Pharmaceuticals	ARWR	7.21	3.53	95.9	1.42	8.09	283.5

Biggest Percentage Losers

Company	Symbol	Close	1st Quarter Net chg	1st Quarter % chg	52-Week Low	52-Week High	52-Week % chg
ProSharesShtVIXST	SVXY	11.74	-116.47	-90.8	9.53	139.47	-83.7
Edge Therapeutics	EDGE	1.18	-8.19	-87.4	1.12	17.77	-87.0
VelocityShares VIX Short	XIVH	13.15	-64.16	-83.0	11.86	82.84	-74.5
InspireMD	NSPR	1.04	-3.45	-76.9	0.99	36.75	-97.1
DPW Holdings	DPW	0.80	-2.41	-75.1	0.40	5.95	1.3
Camber Energy	CEI	0.77	-2.29	-74.8	0.71	19.25	-95.0
Axovant Sciences	AXON	1.33	-3.94	-74.8	1.32	27.98	-91.1
Dermira	DERM	7.99	-19.82	-71.3	7.78	35.76	-76.9
Ascent Capital Grp A	ASCMA	3.68	-7.81	-68.0	3.56	17.84	-73.3
Vascular Biogenics	VBLT	2.30	-4.80	-67.6	2.20	9.05	-57.4
Roadrunner Trans Sys	RRTS	2.54	-5.17	-67.1	2.54	9.75	-61.6
Tintri	TNTR	1.71	-3.39	-66.5	1.70	7.75	...
Diana Containerships	DCIX	1.50	-2.56	-63.1	1.50	9014.04	-100.0
Link Motion ADR	LKM	1.66	-2.36	-58.7	1.56	4.68	-59.5
Protagonist Therapeutics	PTGX	8.59	-12.21	-58.7	7.85	23.97	-35.9

Most Active Stocks
Most heavily traded issues in First quarter of 2018; composite volume, in millions

Company	Symbol	Volume	Close	1st Quarter Net chg	1st Quarter % chg	52-Week High	52-Week Low	52-Week % chg
SPDR S&P 500	SPY	7,236	263.15	-3.71	-1.4	286.63	232.51	11.4
General Electric	GE	5,811	13.48	-3.97	-22.8	30.54	12.73	-54.9
iShares MSCI Emg Markets	EEM	4,644	48.28	1.16	2.5	52.08	38.71	21.7
Bank of America	BAC	4,605	29.99	0.47	1.6	33.05	22.07	25.6
Finl Select Sector SPDR	XLF	3,918	27.57	-0.34	-1.2	30.33	22.89	15.2
Micron Technology	MU	3,207	52.14	11.02	26.8	63.42	26.36	80.0
Ford Motor	F	3,119	11.08	-1.41	-11.3	13.48	10.14	-5.1
iPath S&P 500 VIX ST Fut	VXX	3,015	47.31	19.39	69.4	73.60	25.59	-23.8
PwrShrs QQQ Tr Series 1	QQQ	2,958	160.13	4.37	2.8	175.21	130.38	20.9
ProSharesUltVIXST	UVXY	2,778	18.53	8.32	81.5	87.00	8.52	-70.4
VanEck Vectors Gold Miner	GDX	2,619	21.98	-1.26	-5.4	25.58	20.84	-2.5
VS 2x VIX Short Term	TVIX	2,478	9.42	3.88	70.0	47.19	4.66	-72.2
Chesapeake Energy	CHK	2,404	3.02	-0.94	-23.7	6.59	2.53	-48.4
Apple	AAPL	2,298	167.78	-1.45	-0.9	183.50	140.06	16.6
Intel	INTC	2,225	52.08	5.92	12.8	53.78	33.23	45.7
Microsoft	MSFT	2,047	91.27	5.73	6.7	97.24	64.85	38.9
Facebook Cl A	FB	2,007	159.79	-16.67	-9.4	195.32	138.81	12.2
Twitter	TWTR	1,997	29.01	5.00	20.8	36.80	14.12	94.4
iShares MSCI EAFE ETF	EFA	1,833	69.68	-0.63	-0.9	75.27	61.35	11.7
Cisco Systems	CSCO	1,803	42.89	4.59	12.0	46.16	30.36	27.1

Gainers and losers include common issues of $2 or more listed on NYSE, Nasdaq, NYSE MKT or NYSE Arca at the beginning of the quarter.

IPO Scorecard
Best-performing U.S. -listed IPOs in first-quarter 2018 ranked by % change in price from offer to last trade in the quarter

Issuer	Exchange	$ Offer price	% Chg from offer	Pricing Date	IPO Value $ millions
Menlo Therapeutics	Nasdaq	17.00	121.1	Jan. 24	137
ARMO BioSciences	Nasdaq	17.00	120.1	Jan. 25	147
PagSeguro Digital	NYSE	21.50	78.2	Jan. 23	2,606
Zscaler	Nasdaq	16.00	75.4	Mar. 15	221
Farmmi	Nasdaq	4.00	57.5	Feb. 16	8
Dropbox	Nasdaq	21.00	48.8	Mar. 22	756
Senmiao Technology	Nasdaq	4.00	47.8	Mar. 16	14
PlayAGS	NYSE	16.00	45.4	Jan. 25	189
Cactus	NYSE	19.00	41.7	Feb. 7	503
Americold Realty Trust	NYSE	16.00	19.3	Jan. 18	834
Homology Medicines	Nasdaq	16.00	16.9	Mar. 27	144
Cardlytics	Nasdaq	13.00	12.5	Feb. 8	76
Golden Bull	Nasdaq	4.00	12.5	Mar. 19	7
Bridgewater Bancshares	Nasdaq	11.75	11.2	Mar. 13	91
Nine Energy Service	NYSE	23.00	5.9	Jan. 18	185
Arcus Biosciences	NYSE	15.00	2.9	Mar. 14	138
FTS International	NYSE	18.00	2.2	Feb. 1	404
Liberty Oilfield Services	NYSE	17.00	-0.6	Jan. 11	249
OneSmart International Education	NYSE	11.00	-2.3	Mar. 27	179
Quintana Energy Services	NYSE	10.00	-2.5	Feb. 8	96

Worst-performing U.S. -listed IPOs in first-quarter 2018 ranked by % change in price from offer to last trade in the quarter

Issuer	Exchange	$ Offer price	% Chg from offer	Pricing Date	IPO Value $ millions
Solid Biosciences	Nasdaq	16.00	-53.1	Jan. 25	144
ADT	NYSE	14.00	-43.4	Jan. 18	1,470
resTORbio	Nasdaq	15.00	-36.1	Jan. 25	98
Sunlands Online Education	NYSE	11.50	-27.8	Mar. 22	150
Corporacion America Airports	NYSE	17.00	-27.4	Feb. 1	486
Evolus	Nasdaq	12.00	-24.8	Feb. 7	61
Hudson	NYSE	19.00	-16.3	Jan. 31	749
Industrial Logistics Properties Trust	Nasdaq	24.00	-15.3	Jan. 11	480
Sol-Gel Technologies	Nasdaq	12.00	-14.2	Jan. 31	86
iQIYI	Nasdaq	18.00	-13.6	Mar. 28	2,250
One Stop Systems	Nasdaq	5.00	-12.0	Feb. 1	20
Motus GI Holdings	Nasdaq	5.00	-10.4	Feb. 14	18
GreenTree Hospitality Group	NYSE	14.00	-8.9	Mar. 27	143
Gates Industrial Corp	NYSE	19.00	-7.8	Jan. 24	841
Unum Therapeutics	Nasdaq	12.00	-7.4	Mar. 28	69
Eyenovia	Nasdaq	10.00	-7.1	Jan. 24	27
BioXcel Therapeutics	Nasdaq	11.00	-6.9	Mar. 8	60
Victory Capital Holdings	Nasdaq	13.00	-5.4	Feb. 7	167
Bilibili	NYSE	11.50	-4.3	Mar. 28	483
Huami Corp	NYSE	11.00	-3.4	Feb. 7	127

Source: Dealogic

Country-by-Country Derby
First-quarter stock-market performance, based on the S&P Global BMI (Broad Market Index) in U.S.-dollar and local-currency terms ranked by U.S.-dollar performance

Country	U.S. dollar	Local currency	Country	U.S. dollar	Local currency
Vietnam	22.2%	22.7%	Chile	0.6%	-1.2%
Kenya	19.4	16.8	Japan	0.2	-5.4
Romania	18.7	15.7	France	0.1	-2.3
Egypt	17.3	16.4	South Korea	0.0	-0.4
Tunisia	14.5	10.0	New Zealand	-0.2	-1.6
Jordan	11.8	11.9	Mauritius	-0.4	-1.8
Nigeria	10.6	10.5	Sri Lanka	-0.5	0.9
Brazil	10.3	10.5	Qatar	-0.8	-0.8
Latvia	9.7	7.1	Argentina	-0.8	6.1
Russia	9.1	8.9	Bahrain	-1.0	-1.0
Lithuania	9.0	6.5	U.S.	-1.1	-1.1
Peru	8.6	8.6	Denmark	-1.1	-3.3
Pakistan	7.6	12.5	Bulgaria	-1.1	-3.5
Czech Republic	6.2	3.2	Spain	-1.6	-3.9
Kuwait	6.1	5.3	Hungary	-1.6	-3.3
Lebanon	5.7	5.7	Hong Kong	-1.6	-1.3
Morocco	5.7	4.2	UAE	-2.2	-2.2
Slovakia	5.3	2.8	Cyprus	-2.7	-5.0
Malaysia	5.3	0.6	South Africa	-3.0	-7.2
Estonia	5.0	2.5	Ireland	-3.0	-5.3
Finland	4.8	2.3	Germany	-3.4	-5.6
Italy	4.6	2.1	Israel	-3.5	-2.8
Austria	4.6	2.1	Sweden	-3.6	-1.4
Thailand	4.5	0.4	Luxembourg	-3.9	-6.2
Taiwan	4.4	2.3	Indonesia	-4.1	-2.7
Kazakhstan	3.3	-0.9	U.K.	-4.6	-8.0
Slovenia	3.3	0.9	Switzerland	-4.8	-6.4
Portugal	3.1	0.6	Turkey	-5.5	-1.3
Ukraine	3.0	-3.0	Greece	-5.6	-7.8
Singapore	2.9	1.1	Australia	-6.8	-5.0
Colombia	2.4	-4.2	India	-7.6	-5.6
China	2.1	2.4	Canada	-7.9	-5.2
Norway	1.8	-2.2	Poland	-7.9	-9.2
Croatia	1.3	-1.3	Oman	-8.7	-8.7
Mexico	1.1	-5.6	Bangladesh	-10.0	-10.0
Netherlands	0.8	-1.6	Philippines	-10.1	-6.1
Belgium	0.6	-1.7			

Source: S&P Dow Jones Indices

Market Boxscores
How the major indexes performed

	First-quarter performance	Close 3/29/18	% chg from 3/29/17
Dow Jones Industrial Average	-2.5%	24103.11	16.6
DJ U.S. Total Stock Market	-1.0	27383.00	11.7
DJ World (excl. U.S.)	-1.4	262.74	14.3
Nasdaq Composite	2.3%	7063.44	19.5
Russell 2000	-0.4	1529.43	10.4
S&P 500	-1.2	2640.87	11.8
Value Line (Geometric)	-2.8	546.67	5.1
NYSE Composite	-2.8	12452.06	8.3
NYSE MKT Composite	-7.7	2456.29	-2.2

Sources: WSJ Market Data Group; S&P Dow Jones Indices

Top 15 Global M&A Deals in 1st Quarter
Ranked by deal value excluding net debt of the target company, excludes spin-offs & repurchases

Acquirer	Target	Date Announced	Value $ billions
Cigna	Express Scripts	8-Mar	55.0
E.ON	innogy	11-Mar	35.2
mcast	Sky	27-Feb	30.8
Alibaba Group	Ant Small & Micro (33%)	1-Feb	19.8
Keurig Green Mountain	Dr Pepper Snapple	29-Jan	18.9
AXA	XL Group	5-Mar	15.3
JERA	Thermal power plants assets	27-Feb	13.2
GlaxoSmithKline	Novartis Consumer Healthcare Business JV	27-Mar	13.0
Carlyle Group, GIC	Akzo Nobel Specialty Chemicals Business	27-Mar	12.6
Sanofi	Bioverativ	22-Jan	11.6
Melrose Industries	GKN	12-Jan	11.0
International Paper	Smurfit Kappa	6-Mar	10.7
Suzano Papel e Celulose	Fibria Celulose	16-Mar	10.4
Celgene	Juno Therapeutics (90%)	22-Jan	9.9
Microchip Technology	Micorsemi	1-Mar	8.4

Top 15 Global IPOs Priced in 1st Quarter
Ranked by proceeds raised, including overalottment

Issuer	Exchange	Offer Price	%Chg To Qtr-End	Pricing Date	Value $ millions
Siemens Healthineers	Frankfurt	EUR 28.00	19.2	15-Mar	4,521
PagSeguro Digital	NYSE	USD 21.50	78.2	23-Jan	2,606
iQIYI	Nasdaq	USD 198.00	-13.6	28-Mar	2,250
DWS Group	Frankfurt	EUR 32.50	-3.2	22-Mar	1,597
Fibra E - Grupo Aeroportuario de la Ciudad de Mexico	Mexico	MXN 100.00	0.0	23-Mar	1,474
ADT	NYSE	USD 14.00	-43.4	18-Jan	1,470
Bank of Gansu	Hong Kong	HKD 2.69	4.8	11-Jan	875
Dropbox	Nasdaq	USD 21.00	48.8	22-Mar	869
Fideicomiso CIB/2919 - CFE Fibra E	Mexico	MXN 19.00	0.3	7-Feb	864
Gates Industrial	NYSE	USD 19.00	-7.8	24-Jan	841
Americold Realty Trust	NYSE	USD 16.00	19.3	18-Jan	834
ELKEM	Oslo	NOK 29.00	4.0	21-Mar	833
Metrovacesa	Madrid	EUR 16.50	-9.1	2-Feb	804
Huaxi Securities	Shenzhen	CNY 9.46	41.3	23-Jan	776
Hudson	NYSE	USD 19.00	-16.0	31-Jan	749

Top 15 Global Bonds Priced in 1st Quarter
Ranked by face value, in U.S. dollars

Issuer	Deal Type	Issuer Nation	Currency	Pricing Date	Value $ billions
CVS Health	Corp IG	United States	USD	6-Mar	40.0
Kingdom of Spain	Sovereign	Spain	EUR	23-Jan	12.2
Republic of Italy	Sovereign	Italy	EUR	10-Jan	10.8
Anheuser-Busch InBev	Corp IG	Belgium	USD	20-Mar	10.0
Sanofi	Corp IG	France	EUR	14-Mar	9.9
Republic of Argentina	Sovereign	Argentina	USD	4-Jan	9.0
mmonwealth of Australia	Sovereign	Australia	AUD	17-Jan	7.6
Morgan Stanley	Corp IG	United States	USD	18-Jan	7.5
Kingdom of Spain	Sovereign	Spain	EUR	20-Feb	7.5
EFSF	Supranational	Luxembourg	EUR	10-Jan	7.2
Bank of America	Corp IG	United States	USD	28-Feb	7.0
Goldman Sachs Group	Corp IG	United States	USD	18-Jan	6.8
Sultanate of Oman	Sovereign	Oman	USD	10-Jan	6.5
ChemChina	Corp IG	China	EUR, USD	7-Mar	6.4
European Investment Bank	Supranational	Luxembourg	EUR	7-Mar	6.2

Source: Dealogic

Industry Groups
Best and worst-performing U.S. industry groups in the past quarter based on the DJ U.S. Total Stock Market Index family

Best Performers

Industry group	% chg from prev qtr
Broadline Retailers	15.1
Travel & Tourism	15.0
Specialty Retailers	13.1
Defense	9.3
Specialty Finance	9.2
Marine Transportation	9.0
Real Estate Services	8.4
Software	7.7
Telecommunications Equipment	7.1
Business Training & Employment Agencies	6.7

Worst Performers

Industry group	% chg from prev qtr
Consumer Electronics	-24.4
Diversified REITs	-18.6
Tires	-17.6
General Mining	-16.6
Aluminum	-14.8
Alternative Electricity	-14.1
Furnishings	-13.4
Automobiles	-12.5
Retail REITs	-12.5
Durable Household Products	-12.3

Source: S&PDow Jones Indices

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Money Managers Wrestle With New Rule on Asset Data

By Justin Baer

U.S. regulators are willing to spare money managers from telling shareholders more details about their holdings in hard-to-sell assets. But they still want to see that information for themselves.

Mutual-fund managers are now scrambling to meet new Securities and Exchange Commission rules requiring them to classify their investments by how easily they could be sold to meet investor redemption requests.

"I've been thinking about this in stages of grief," said Kevin Ehrlich, chief compliance officer at **Western Asset Management** Co. "I'm now in the acceptance stage."

The industry argued that classifying all of their funds' holdings into these buckets would be an onerous and complex task, forcing them to make imprecise judgments that might be second-guessed.

Money managers won a partial victory in March, when the SEC proposed tabling the part of the rule that would have forced managers to disclose those classifications to the public. But the underlying information still will have to be turned over to regulators starting in 2019.

Some firms, particularly small ones with little or no debt holdings, will have an easier time getting ready for the new rules, Mr. Ehrlich said.

But many others have concluded they need an outside firm to help with the new calculations.

Managers cited **State Street** Corp., **Bloomberg** LP and **Intercontinental Exchange** Inc. as among those that have emerged as top choices in providing this service to investment firms.

One sign of how the rules are affecting the industry came during a conference in January, when Nathan Greene, a partner with the law firm Shearman & Sterling, asked the audience: "Who's ready for the liquidity rule?"

After a number of hands shot up, Mr. Greene posed a follow-up question: "How many of you are vendors?" Most of those same attendants raised their hands again, he said.

The collapse of Third Avenue Management's Focused Credit Fund in December 2015 trained a spotlight on how mutual funds unload hard-to-sell bonds when the credit markets seize up.

In 2016, the SEC adopted the new rules requiring funds to review liquidity risks and hold a minimum amount of liquid securities, while formalizing a cap on the amount of illiquid holding to 15% of the fund's net assets.

The provision also compelled firms to give the SEC regular snapshots of their funds' buckets.

It is a complicated task, with many factors that can affect a bond's liquidity. Newer bonds tend to trade more often than older ones, and larger issues are bought and sold more than smaller bonds, said Eric Jacobson, a senior manager research analyst at Morningstar Research Services LLC. Many higher-quality bonds are also traded by more investors than riskier credits, he added.

There are other components to calculating how hard it will be to sell those securities in a pinch, such as how much of a fund's holdings they represent—or even how much sway the manager has with the Wall Street banks serving as intermediaries between sellers and buyers, managers say.

"The problem is that there are several dimensions to liquidity," Mr. Jacobson said.

Oil-Price Forecasts Climb

By Christopher Alessi

LONDON—Banks raised their forecasts for oil prices for the sixth month in a row in March, in a sign they expect draining crude inventories and rising geopolitical risks to global supply to further balance the market in the coming months.

Brent crude—the global benchmark—is now expected to average $63 a barrel this year, while West Texas Intermediate, the U.S. standard, should average close to $59 a barrel, according to a poll of 15 investment banks surveyed by The Wall Street Journal toward the end of March. Both estimates are about $1 higher than the February survey's forecast.

The banks in the Journal survey predict that, on average, Brent will fall to around $61 a barrel next year, before averaging close to $62 a barrel by 2020.

On Thursday, Brent closed up 1% at $70.27 a barrel on London's Intercontinental Exchange, and WTI closed up 0.9% at $64.94 a barrel on the New York Mercantile Exchange. But in the longer term, the crude prices should plateau before falling again, said Christyan Malek, an analyst at JPMorgan, adding that "$70 is as good as its going to get."

Crude prices, which had risen above $70 a barrel to three-year highs in January before falling back on indications of burgeoning U.S. shale-oil production, have in recent weeks been bolstered by declining crude stocks outside the U.S. and rising tensions between the U.S. and Iran.

President Donald Trump recently moved to shuffle his national security team, bringing in more hawkish officials opposed to the 2015 U.S.-led international agreement to curb Iran's nuclear program. Analysts now widely expect the Trump administration to withdraw from the deal, triggering a reimposition of some economic sanctions on the Islamic Republic that would ultimately hinder the country's oil exports and reduce the world's crude supply. Up to 350,000 barrels a day of crude are at risk of disruption, according to analysts.

"Low inventories increase the oil market's sensitivity to disruptive events," according to Martijn Rats, an equity analyst at Morgan Stanley. As a result, "with the inventory cushion largely gone, oil prices will likely be more sensitive to geopolitical risk factors again," Mr. Rats wrote in a note.

Global petroleum inventories have been falling largely as a result of strong demand for refined products such as diesel fuel, according JPMorgan's Mr. Malek. "That's raising the prospect of supply and demand tightening" further in the near term, he said.

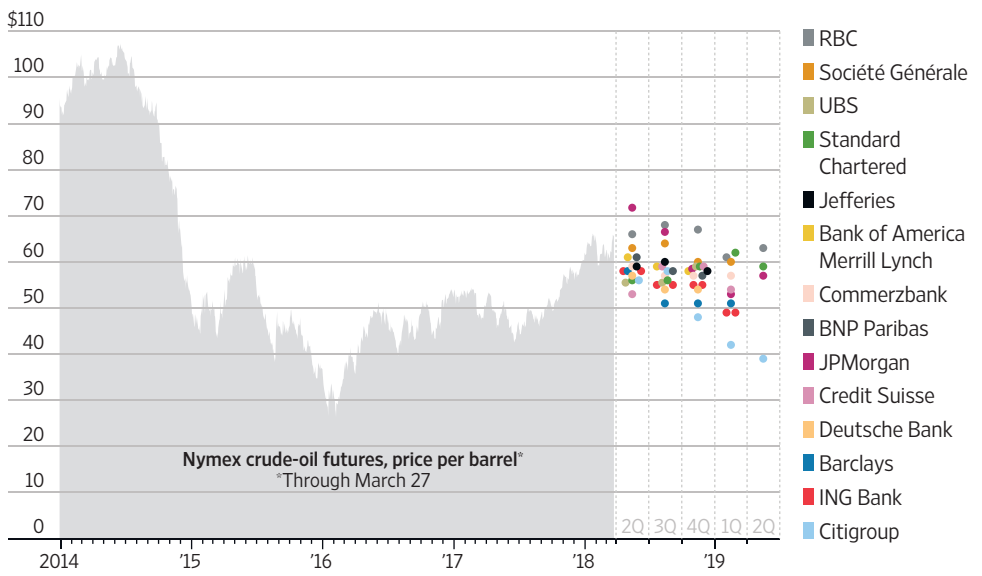
At the same time, prices have continued to be supported by the Organization of the Petroleum Exporting Countries' commitment to reducing crude production. OPEC and 10 producers outside the cartel, including Russia, have been holding back crude output by around 1.8 million barrels a day, or nearly 2% of global supply, since the start of 2017.

The pact, which was meant to help mop up a global supply glut that has weighed on the market since late 2014, helped crude prices jump more than 50% in the second half of last year. The deal is set to expire at the end of 2018, but Saudi Arabia—the de facto head of OPEC—has suggested it could continue coordinating with Russia and other producers on production curbs into 2019.

OPEC's efforts, combined with supply outages in Venezuela and mounting geopolitical uncertainty, mean in the near term, price risks should be "tilted to the upside," according to Giovanni Staunovo, a commodity analyst at UBS Wealth Management.

Looking Ahead

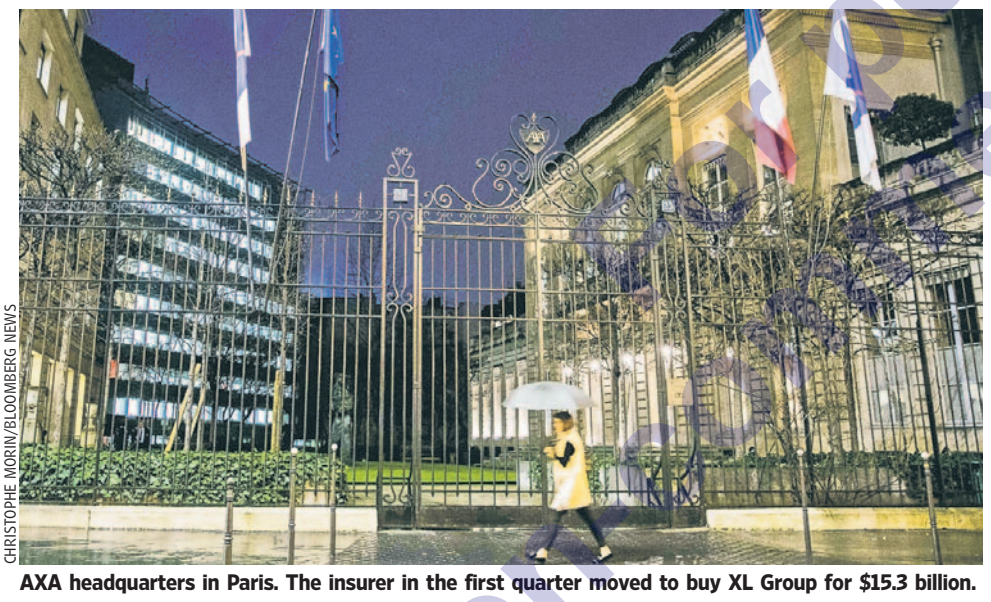
Where investment banks in March's survey see the price of U.S. crude-oil futures in the next few quarters



Sources: WSJ Market Data Group (oil price); the companies (forecasts) THE WALL STREET JOURNAL.

ALI MOHAMMADI/BLOOMBERG NEWS

Brent crude is expected to average $63 a barrel this year and decline to $61 in 2019. Above, the bridge of an oil tanker in Iran.



CHRISTOPHE MORIN/BLOOMBERG NEWS

AXA headquarters in Paris. The insurer in the first quarter moved to buy XL Group for $15.3 billion.

European M&A Surges On

By Ben Dummett

European deal making hit an 11-year high for the first quarter and shows no sign of slowing, even as the threat of a possible China-U.S. trade war and pressure on global technology stocks hang over equity markets.

Heading into 2018, conditions were ripe for mergers and acquisitions: European stocks finished higher last year, the region's economy grew at its fastest rate in a decade, borrowing costs remained low, and shareholder activism was on the rise to push for corporate restructuring.

Many of those factors remain in place. As a result, confidence among chief executives to pursue bigger and more complex M&A remains high as corporate chiefs seek new sources of growth, defend against technological disruption or simplify their operations to boost value, bankers say.

In the first quarter, CEOs demonstrated their confidence through transactions such as **AXA** SA's $15.3 billion tie-up with **XL Group** Ltd., a bid to create one of the world's largest property-and-casualty insurers. **Comcast** Corp. announced plans in February to bid £22.1 billion ($31.02 billion) for European pay TV operator **Sky** PLC, threatening to upend **21st Century Fox** Inc.'s deal to consolidate its ownership of the U.K. broadcaster. The Wall Street Journal's parent company **News Corp** and Fox share common ownership.

Overall, the value of M&A transactions involving a European company totaled about $394.1 billion in the quarter, according to Dealogic. That is up about 56% from the year-earlier period and represents the highest total since the first quarter of 2007.

It is also emblematic of broader strength in deals globally as total dollar value exceeded $1 trillion—a record for the year-to-date period, according to Dealogic. By contrast, the number of tie-ups in Europe fell almost 19%, highlighting a predominance of bigger deals in the latest period as companies accept greater integration and other types of risk to achieve their strategic goals.

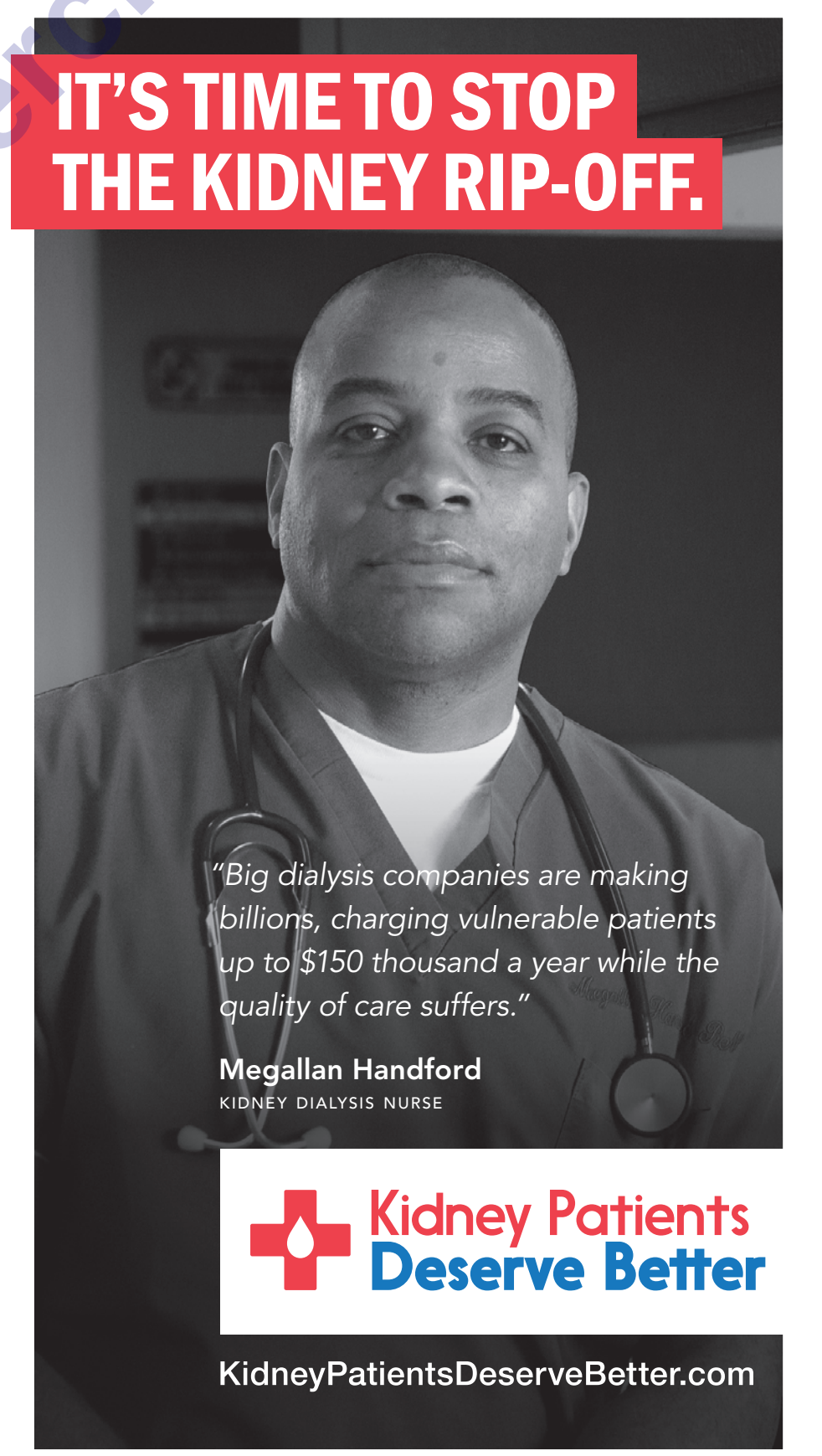
"There's a lot of pressure to continue to deliver revenue growth and lower costs and the way they see they can do that is through transactions," said Alison Harding-Jones, head of M&A for Europe, the Middle East and Africa at **Citigroup** Inc. "I see [the high level of M&A activity] continuing all through the end of this year and early into the next year."

Though not always aligned, historically M&A often has moved in line with stock-market performance as they share similar drivers such as the outlook for corporate profits and economic growth, political stability and lower interest rates. That suggests the recent selloff in global equities, if it persists, could test the favorable outlook for M&A.

In March, President Donald Trump spooked investors by signaling that his administration may impose tariffs on $60 billion of imports and tighter restrictions on acquisitions. China retaliated with its own tariff plan against $3 billion in U.S. imports. China and the U.S. have since started talks to ease the trade tensions, but worries over the health of the technology sector have weighed on stocks. Meanwhile, eurozone business activity slowed for a second straight month, a possible indication that the economy may be losing some momentum.

Bankers note that the year's strong start in M&A comes despite the backdrop of political uncertainty and the wild swings in the market, including in February when the Dow Jones Industrial Average posted its largest-ever single-day point decline and major indexes in the U.S., Europe and Asia gave up their gains for the year.

Almost half of the 10 largest deals in the quarter involving a European acquirer or target were trans-Atlantic and their value totaled more than $80 billion, according to Dealogic.



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Investors Flee From Risky Bond Funds

By Asjylyn Loder And Sam Goldfarb

The exodus from junk-rated debt funds accelerated in the first quarter as rising interest rates cut into investors' appetite for taking on greater credit risk.

Investors in the first three months of 2018 yanked $6.5 billion from the five largest exchange-traded funds that invest in bonds issued by less creditworthy companies, according to FactSet. March was the fifth consecutive month of outflows from high-yield ETFs.

Riskier debt has become less appealing as interest rates rise and volatility returns to the stock market. The average yield premium over Treasurys, a measure of how much an investor is paid to take on the increased risk of default, declined to 3.11 percentage points in January, the lowest since 2007, from 8.39 percentage points in February 2016. Falling demand for high-yield debt has since nudged the spread up to 3.54 percentage points.

Investors sold bonds this past quarter, following last year's $1.5 trillion U.S. tax cut and signs that economies around the world are gaining strength.

Global economic expansion raises the risks of inflation and boosts the chances that central banks will reduce the monetary support that has kept benchmark government-bond yields near record lows.

The iShares ETF iBoxx High Yield Corporate Bond ETF has declined 1.9% since the start of the year and the SPDR Bloomberg Barclays High Yield Bond ETF fell 2.4%.

State Street Corp., one of the largest owners of the SPDR high-yield ETF, began selling off some its junk debt investments in November as spreads tightened, said Matthew Bartolini, head of SPDR Americas Research. The exposure to high-yield bonds in its tactical asset allocation portfolio was reduced to 4% from 6%, he said.

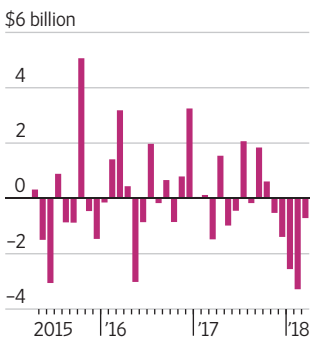
"Spreads had fallen considerably and our expectations were for lower returns in high yield," Mr. Bartolini said. "We know other managers were doing the same."

As investors pulled their money out, bets against high-yield ETFs swelled to a record. At the end of February, nearly 40% of the shares outstanding of the $14.2 billion iShares iBoxx High Yield Corporate Bond ETF were tied up in wagers on falling prices. The percentage had fallen to 31% as of March 15, the most recent data available, according to FactSet.

Wagers on falling junk-debt prices help investors hedge existing holdings without the hassle and expense of liquidating their bond investments, said Arnim Holzer, portfolio manager at EAB Investment Group, a firm that specializes in portfolio risk management. He has advised clients to buy options that profit if the ETFs fall. Those wagers will pay off if the high-yield market enters a negative spiral, with falling prices leading to waves of withdrawals from ETFs, which in turn could produce more selling, Mr. Holzer said.

Junk-Debt Exodus

Investors pulled money from the five biggest high-yield ETFs for five consecutive months.



Source: FactSet

THE WALL STREET JOURNAL.

Munis Record a Surprise Decline

Tax overhaul and interest-rate worries damp what is usually a season of strength

By Heather Gillers

Munis tied to Puerto Rico climbed on hopes the island will recover quickly from Hurricane Maria.

CARLOS GARCIA RAWLINS/REUTERS

The first quarter is normally one of the best times of year to be a municipal bondholder. Not in 2018.

A widely followed municipal-bond index fell more in the first three months—1.11%—than any first quarter of the past 15 years. That is because new tax rules and concerns about rising interest rates are pushing down demand for new debt from state and local governments.

"We haven't seen prices drop this much in a long time," said Howard Cure, director of municipal bond research at Evercore Wealth Management.

The last time the Bloomberg Barclays Municipal Bond Total Return Index dropped for the entire first quarter was in 2008.

Bond values usually jump in the first few months of the year as investors look to reinvest cash from stock gains and maturing bonds. Prices were expected to again follow that pattern this year due to limited supply.

But this time, demand turned scarce early in the year, partly because Congress late last year passed new legislation lowering tax rates, making tax-exempt bonds less appealing for banks and insurance companies that traditionally hold a large chunk of the nation's municipal debt. The tax rates paid by these institutions fell to 21% from 35%.

"With the lower corporate tax rate, there is less incentive for banks and property and casualty companies to buy munis," said Vikram Rai, Head of Municipal Strategy at Citigroup.

At the same time, individual investors became wary about the prospects for inflation and higher interest rates. Inflation undermines the value of outstanding bonds in part by reducing the purchasing power of their fixed payments, and rising rates make newly issued bonds more appealing than outstanding bonds with lower coupons, driving down their prices. Federal officials in March raised interest rates and are forecasting two more rate increases in 2018.

The low bond prices have driven up borrowing costs for state and local governments that have issued debt in recent months. The state of Maryland, for example, is paying yields of 2.54% on 10-year general-obligation debt issued in March. That is up from 2.49% on 10-year general-obligation debt sold in March 2017.

To be sure, mutual-fund investors did buy bonds in January as nearly $6 billion flowed into municipal-bond funds, an uptick analysts attributed to efforts to rebalance portfolios following stock gains. That is 58% above the average for the past five first quarters.

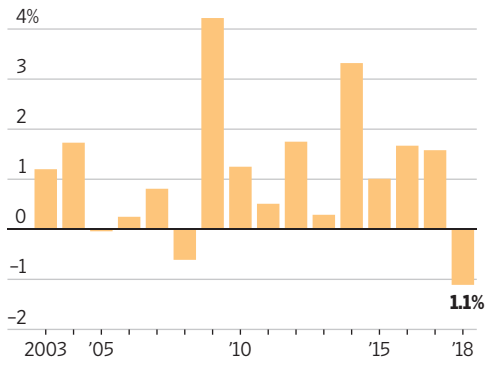
But in February and March, investors put $268 million into municipal-bond mutual funds, according to Lipper data. It was the lowest inflow for the period in five years and a 92% drop from the five-year average for the first quarter.

Some bonds bucked the pricing trend: Municipal debt tied to Puerto Rico increased in value during the first quarter because of investor hopes that the island would recover more quickly from Hurricane Maria than earlier expected.

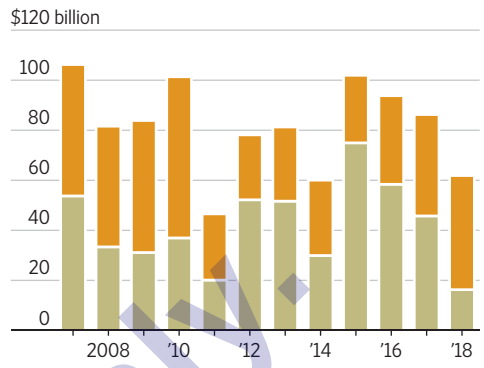
Prices Plunge

Municipal-bond values showed a first-quarter drop for the first time in a decade this year even as issuance fell as a result of the tax overhaul.

First-quarter change in the Bloomberg Barclays Municipal Bond Total Return Index



First-quarter municipal-bond issuance



Sources: FactSet (index); Thomson Reuters Deals Intelligence (issuance)

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