THE WALL STREET JOURNAL.

DOW JONES | News Corp ******

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WSJ.com

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Last week: DJIA 21006.94 ▲ 66.43 0.3% | NASDAQ 6100.76 ▲ 0.9% | STOXX 600 394.54 ▲ 1.9% | 10-YR. TREASURY ▼ 20/32, yield 2.352% | OIL $46.22 ▼ $3.11 | EURO $1.0999 | YEN 112.72

What's News

Business & Finance

IPOs have rebounded this year as stocks soar, but some big-name startups are waiting to see if public markets can match private valuations. A1

◆ **Sinclair is close** to buying Tribune for nearly $4 billion, a deal that would join two of the top operators of local TV stations. B1

◆ **Comcast and Charter** are striking a wireless deal, as the cable giants seek a piece of the cutthroat business. B1

◆ **Trading firms** are exiting the U.S. options market as volumes fall and costs rise, draining liquidity. B1

◆ **Buffett has installed** new CEOs at Berkshire units, but offered no new clues about who would succeed him. B1

◆ **VW's head said** new SUVs and electric cars will help its unprofitable U.S. unit break even by 2020. B3

◆ **Indian outsourcing firms** are applying for fewer U.S. work visas as Trump tightens immigration curbs. B3

◆ **The euro hit** a seven-month high against the dollar on Macron's win. A10

◆ **China said** its foreign-currency reserves rose for a third month in April, on the back of a less bullish U.S. dollar. B8

◆ **China's exports** increased for a second straight month in April, up 8% from a year earlier. A12

World-Wide

◆ **Macron was elected** president of France with 66.1% of the vote, defeating rival Le Pen. The 39-year-old campaigned on promises to reform France's economy and stem a tide of nationalism. A1, A8-A10

◆ **A North Korean** and a Chinese firm have had a joint venture since 2008, showing how easily Pyongyang has skirted sanctions. A1

◆ **North Korea detained** another U.S. citizen tied to a Christian-backed school. A6

◆ **A property firm** owned by Kushner's family is targeting wealthy Chinese to invest in a New Jersey project for the chance to secure a visa. A6

◆ **The Pentagon** has backed a plan to invest nearly $8 billion to bulk up the U.S.'s Asia-Pacific presence. A6

◆ **The White House** is hoping insurance-market woes can help the GOP health-care bill win Senate passage. A4

◆ **Yates is set** to testify before a Senate panel probing alleged Russian interference in the U.S. election. A4

◆ **Boko Haram freed** 82 of the nearly 300 Nigerian schoolgirls it seized in exchange for militants. A12

◆ **The U.S. military said** a joint U.S.-Afghan raid killed Islamic State's leader in Afghanistan. A12

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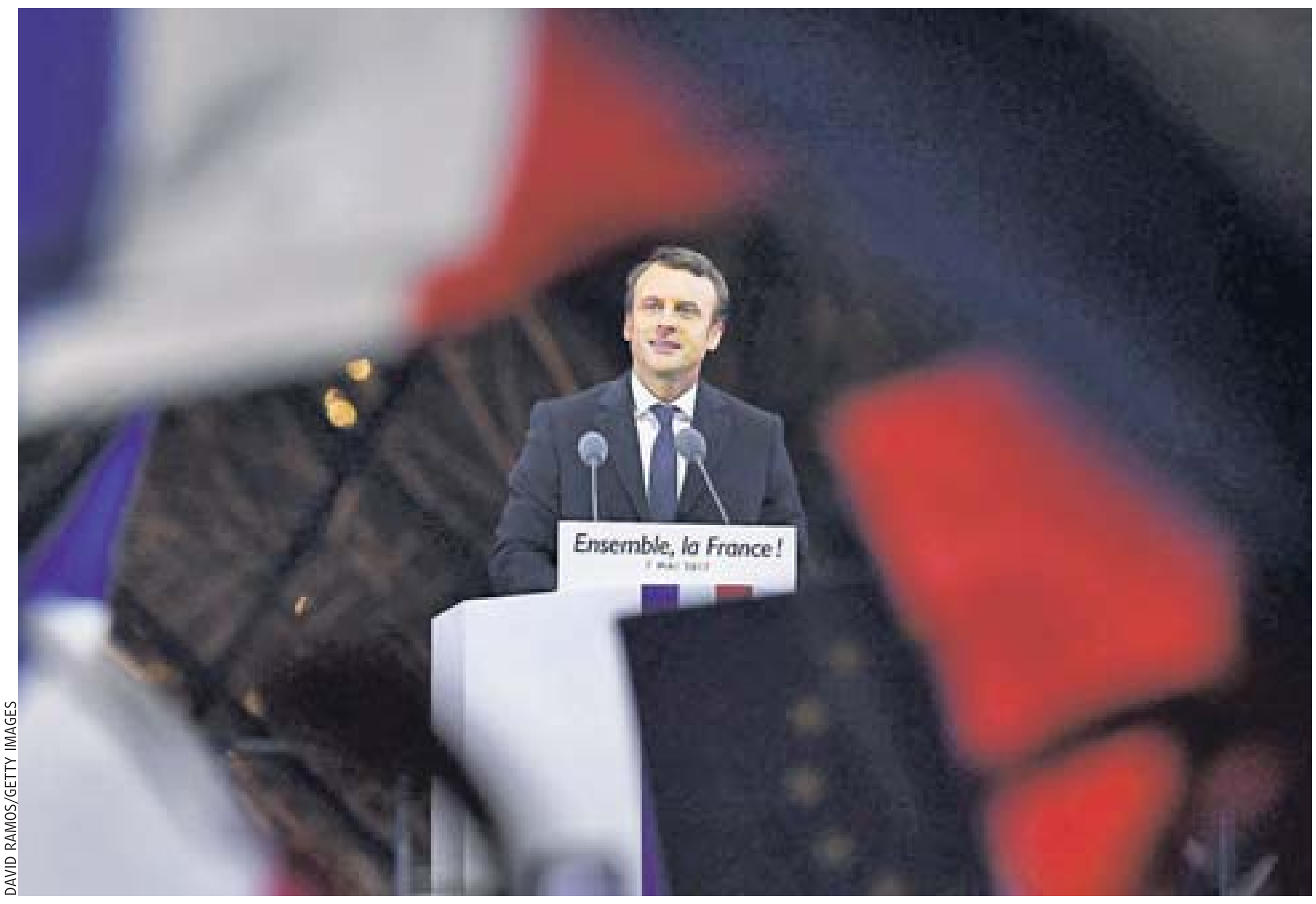
Macron Cruises to French Victory



DAVID RAMOS/GETTY IMAGES

Emmanuel Macron addressed supporters in Paris on Sunday after scoring a big win over Marine Le Pen in the French presidential election. The 39-year-old former investment banker says he will push for greater economic convergence among the European Union states.

Centrist defeats nationalist Le Pen, promises to tackle economic reforms

By William Horobin And Stacy Meichtry

PARIS—Emmanuel Macron was elected president of France Sunday in a victory for a political newcomer who campaigned on promises to reform France's heavily regulated economy and fight a tide of nationalism sweeping the European Union.

The 39-year-old former investment banker, who won 66.1% of the vote, has vowed to undertake contentious labor reforms in France as part of a push for greater economic convergence among the European Union's fractious member states.

Marine Le Pen, who ran on a plan to pull the country out of the euro and close its borders to migrants, took 33.9%.

Mr. Macron will become the youngest president in French history at a time when France and the EU, the 60-year political project it helped found, are at a major crossroads.

Nearly a decade of lost economic growth for many EU countries has fueled the rise of Ms. Le Pen and other nationalists across the Continent, emboldened by the British vote to leave the EU, or

Please see VOTE page A8

New Deal for EU Faces Old Doubt

By Marcus Walker

BERLIN—Emmanuel Macron wants to save the euro by deepening the ties among its 19 countries, completing a rickety union that he likens to a "half-pregnancy."

ANALYSIS

His chances of achieving change in France and Europe may well go hand in hand. If he fails, it is likely to revive the nationalist challenge to the European Union represented by Marine Le Pen, his beaten opponent in Sunday's French presidential election.

At the core of the French president-elect's program is a double overhaul: of France's sluggish economy and of the eurozone, with all its shortcomings. To get what he wants, Mr. Macron needs Europe's dominant economic power, Germany, to accept a rethink. His proposals, including for a common eurozone budget, go against firmly held German views that eurozone countries should follow common rules but keep their taxpayers' money separate.

Yet the stakes are as high for German Chancellor Angela Merkel as they are for Mr. Macron. In recent months Berlin's political establishment feared losing its closest partner in Europe, France, to a nationalist backlash against the EU. Following the U.K.'s referendum vote to

Please see EUROPE page A10

Wide Margin

Second-round results

Emmanuel Macron
En Marche (centrist party)
66.1%

Marine Le Pen
National Front (far-right party)
33.9%

Note: 100% of votes counted
Source: French Interior Ministry
THE WALL STREET JOURNAL.

The French Election

Market Fuels an IPO Push But Biggest Names Hold Off

By Corrie Driebusch And Maureen Farrell

A soaring stock market, historically low volatility and a rally in technology stocks has fueled a rebound in the market for initial public offerings. But the biggest, highest-profile startups are still hanging back, reflecting broader concerns about whether they can match the rich valuations offered by private investors.

A slew of companies are preparing to go public later this year, as the volume of new listings reaches levels not seen since 2014. U.S.-listed IPOs raised more than $18 billion in the first four months of the year, more than four times as much as in the same period last year and nearly double the comparable 2015 total, according to Dealogic.

Among the companies preparing for IPOs, according to people familiar with the matter, are MongoDB Inc., which has hired Goldman Sachs Group Inc. and Morgan Stanley to lead an offering that's expected to value the data-analytics provider at more than its last valuation of $1.6 billion; Switch Ltd., an operator of data-storage facilities that recently hired Goldman and J.P. Morgan Chase & Co. for a debut that's expected to carry a valuation of more than $2 billion; and Axiom Global Inc., a tech-based legal-services provider that recently held a bakeoff for potential underwriters.

Altice USA filed paperwork last month for an offering that could raise more than $1 billion and value the Cablevision owner at more than $20 billion.

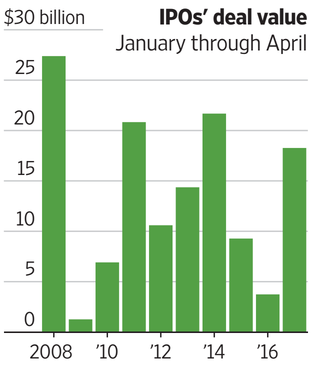
"It feels like some companies are rushing to go because there's a window in the market," said Jim Callinan, portfolio manager at Osterweis Capital Management in San Francisco.

Yet the market still has a long way to go to return to full health. Conspicuously

Please see IPO page A2

Pickup

U.S. IPOs have raised the most money in the first four months of the year since the same period in 2014.



Source: Dealogic
THE WALL STREET JOURNAL.

Chinese, North Korean Companies Teamed Up

By Jeremy Page And Jay Solomon

DANDONG, China—For most of the past decade, a Chinese state-owned company had a joint venture with a North Korean company under sanctions for involvement in Pyongyang's atomic-weapons program, Chinese corporate and government records show.

China's Limac Corp. and North Korea's Ryonbong General Corp. set up a joint venture in 2008 to mine tantalum, niobium and zirconium, minerals that are useful in making phones and computers but also nuclear reactors and missiles.

The partnership of nearly a decade, not previously reported, shows how easily North Korea has skirted sanctions to do business with Chinese firms, a vital lifeline for the regime. A February report by United Nations sanctions experts said North Korea had acquired rocket parts and light aircraft via China and used front companies there to access the international financial system.

The U.S. sanctioned Ryonbong in 2005 and the U.N. did so in 2009, both saying the North Korean company was involved with weapons of mass destruction. Just six weeks ago, Washington added three Ryonbong employees to the U.S. sanctions list individually.

Please see KOREA page A6

Britain's Next Pressing Question: Paper or Parchment?

* * *

Penny-pinching parliamentarians push to stop printing on calfskin; 'a great shame'

By Jenny Gross

LONDON—Veteran British lawmaker James Gray strode out of the committee room in disgust. "This little committee, one afternoon, has overturned the will of the House of Commons," he recalls saying as he left.

There's plenty of debate in Westminster these days over legislation, what with Brexit and all. This particular argument was over what those laws should be printed on.

Since medieval times, Parliament has recorded its acts on sheep and goat skins made into parchment, and since 1849 only on vellum, a fine calfskin. Now, penny-pinching parliamentarians have pushed forward a plan to switch to paper.

Vellum costs Parliament roughly £35 ($45) an A4-size sheet—bought in bulk, including delivery, tax and printing—versus about 16 pence for archival paper, a House of

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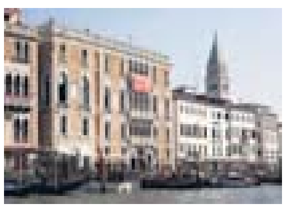

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U.S. NEWS

THE OUTLOOK | By Josh Zumbrun

Fiscal Plans Could Fuel Rate Surge

Two of the most powerful economic forces in Washington could be aligning in coming years to put considerable upward pressure on long-term interest rates.

President Donald Trump is flirting with tax and spending plans that could widen the budget deficit, just as the Fed considers plans to shrink its $4.5 trillion portfolio of bond and other holdings. Larger deficits could mean that the supply of U.S. Treasury securities hitting the market rises just as demand for these securities diminishes with the Fed unwinding.

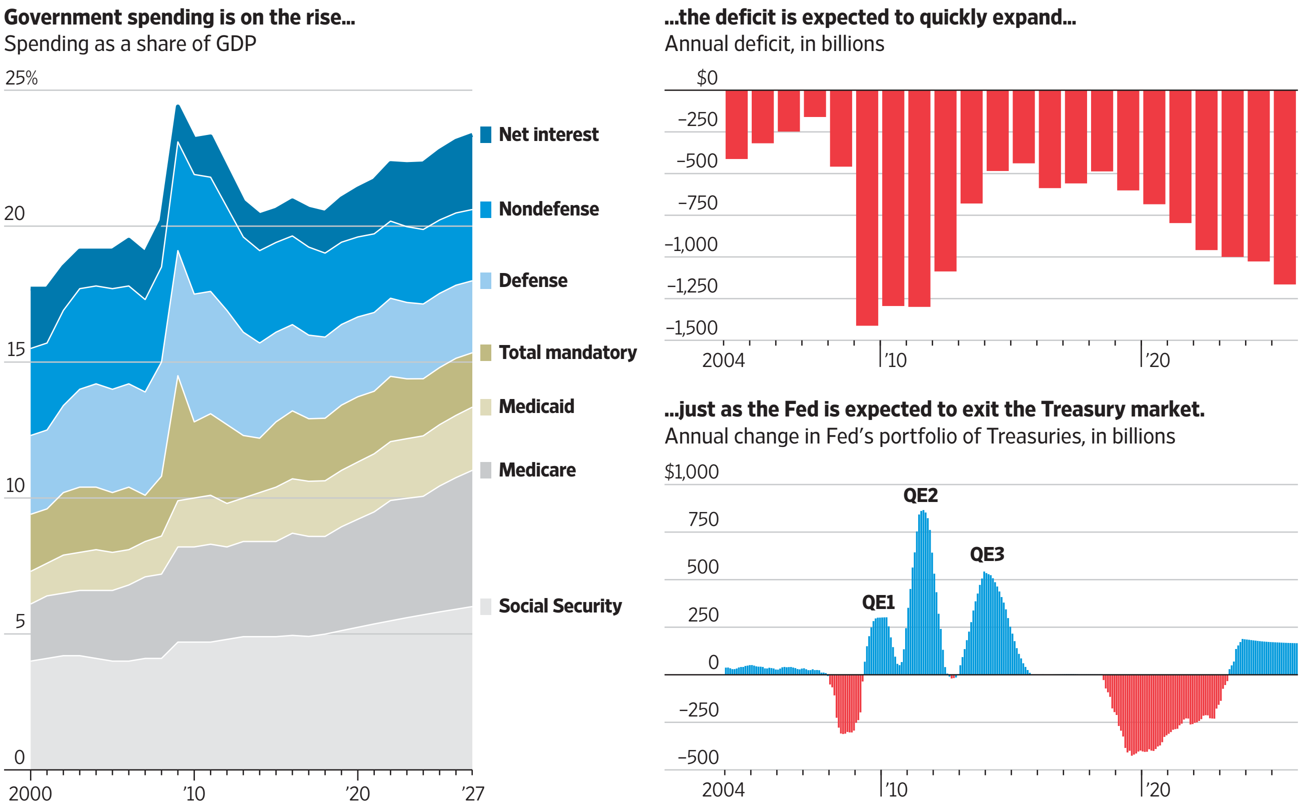
More supply and less demand tends to mean lower prices, and with bonds, lower prices mean higher yields and interest rates. "The bond market is about to get hit all at once," said Stephen Stanley, chief economist of Amherst Pierpont Securities.

This would be a remarkable reversal.

The U.S. deficit exploded during the 2007-09 recession as tax receipts collapsed. In 2009, the deficit topped $1 trillion for the first time in history. It began to narrow but remained over $1 trillion from 2010 to 2012, as tax collections remained depressed from the era of high joblessness, and as President Barack Obama enacted an $800 billion stimulus plan.

Rising Pressure

Increased deficits in coming years will coincide with the Fed's withdrawal from the market for Treasury bonds



Note: Figures for 2017-2027 are forecasts.
Sources: Congressional Budget Office (government spending, deficits); Federal Reserve (change in Fed's portfolio)
THE WALL STREET JOURNAL.

During that era of high deficits, demand soared world-wide for the safety of U.S. government bonds. The Treasury also had a big buyer for its debt in the form of the Fed, which began purchasing billions of dollars a month worth of Treasury securities in March 2009, under the program that became known as "quantitative easing," or QE.

Though not intended to finance the deficit, the Fed's first QE program sucked in $300 billion of Treasury debt. The second program, launched in 2010, added another $600 billion. In the third round of QE, from 2012 to 2014, the Fed added $800 billion more. Deficits eventually started narrowing, thanks to a reduction in crisis-era spending and new caps on spending combined with rising tax revenue.

Now the tide is poised to turn.

The Congressional Budget Office projects deficits will reach $1 trillion again by 2023 under current law. This owes largely to the baby boom generation hitting retirement en masse and claiming Social Security and Medicare benefits. Medicaid and Medicare spending are set to rise to 7.3% of gross domestic product over the next decade, from 5.8% now, according to CBO estimates. Social Security is set to rise to 6% of GDP from 5%. Mr. Trump has said he doesn't plan to alter these entitlements.

Some plans, such as for tax cuts, could widen deficits. The University of Chicago regularly polls leading academic economists on important public policy issues. Asked this month if Mr. Trump's tax plan would pay for itself through higher economic growth, not one respondent thought that it would. Instead, it could force the Treasury to issue significantly more debt.

"Absent offsetting tax increases, it would be a fiscal disaster," said David Autor, a Massachusetts Institute of Technology economist.

One estimate from the Penn Wharton Budget Model, which calculates the effects of tax plans, projects the current version of Mr. Trump's tax plan would raise U.S. debt by 31% more than current policy.

This could all happen at precisely the moment the Fed is getting out of the market. Since its large-scale bond-buying program ended in 2014, the Federal Reserve has continued to buy new Treasury securities when its existing holdings mature.

Fed officials are eager to move away from these crisis-era policies and are considering allowing their bondholdings to mature later this year, without being replaced. That will leave about $400 billion of debt hitting the market as it rolls off the Fed balance sheet, according to a Fed estimate.

"We will have to see the specifics of the Fed's implementation of balance-sheet reduction, but all indications are that they will be very cautious and gradual," said Roberto Perli, a former Fed economist and partner at Cornerstone Macro. "If true, that should reassure markets and reduce the odds of any tantrums."

Treasury Secretary Steven Mnuchin and his staff are already considering how to handle the challenge of raising large amounts of debt.

Last week, the Treasury sought the counsel of its Borrowing Advisory Committee, composed of major Wall Street bond market participants.

The committee cautioned that under plausible scenarios, the Treasury might have to more than double the amount of debt it auctions for 10-year and 30-year bonds.

Right now, the markets seem unperturbed by all of this.

Yields on 10-year Treasury notes, at 2.35%, aren't far from historic lows, held down by a range of forces including low inflation and global demand for safe assets.

Most forecasters have long expected rates to rise, and been embarrassed by those forecasts when interest rates stayed stuck in a rut.

But the market risks becoming complacent about the idea that the old logic of low rates will last forever.

ECONOMIC CALENDAR

MONDAY: St. Louis Fed President James Bullard kicks off a busy week of **speeches by U.S. central-bank officials** with a talk in Florida on low interest rates. Other regional Fed bank presidents set to speak include Boston's Eric Rosengren, Dallas's Robert Kaplan and New York's William Dudley. Their appearances come after the central bank's policy-setting committee last week decided not to raise interest rates but signaled future increases.

WEDNESDAY: China's April inflation data (to be released Tuesday night U.S. time) are expected to show that the consumer-price index edged up last month around 1% year-to-year, compared with March's 0.9%, on higher nonfood prices and a low year-earlier base of comparison. The producer-price index is forecast to decelerate to around a 7% rise in April, from March's 7.6%, on declining commodity prices.

THURSDAY: The **Bank of England** is expected to hold its benchmark interest rate steady at 0.25%, ahead of a national election in the U.K. June 8 and talks with the European Union over Brexit. Some officials in recent months have signaled they are closer to voting for a rate increase to keep a lid on inflation, though a first-quarter economic slowdown will likely persuade a majority to stand pat.

FRIDAY: Economists expect official figures to show the **German economy** accelerated during the first quarter, outpacing the U.S., the U.K. and France with a 0.6% rise in gross domestic product compared with the prior quarter. While a pickup in the eurozone's largest member should support European Central Bank efforts to raise inflation sustainably to its target, faster growth also is likely to strengthen the conviction of many Germans that interest rates are too low and the bond-buying program is unnecessary.

Economists will watch to see if **U.S. retail sales**, which fell for the second straight month in March, can align with recent indications of strong consumer optimism and rising wages. Sales are expected to rise 0.5% from the prior month, according to a Wall Street Journal survey of economists. The Labor Department will also release **April consumer price** figures, which are expected to rise 0.2% from the prior month. Steady readings could give further ammunition to the Fed for rate increases.

Blaze Spreads in Southern Georgia


BEN PALM/OKEFENOKEE NATIONAL WILDLIFE REFUGE/ASSOCIATED PRESS

SKY HIGH: Firefighters along the Georgia-Florida line worked this weekend to contain a lightning-sparked fire that consumed thousands of acres in the Okefenokee National Wildlife Refuge.

U.S. WATCH

BOSTON

Police Investigating Homicides of Doctors

Two engaged doctors found dead inside a South Boston penthouse most likely knew their killer, police said.

Police discovered the bodies of Dr. Lina Bolanos, 38, and Dr. Richard Field, 49, Friday night at the Macallen Building. Police haven't said how the couple were killed but believe the man suspected of their deaths knew them.

Police had gone to the building on a report of a man with a gun. Police Commissioner William B. Evans said the suspect opened fire when officers confronted him at the door. He said police fired back and hit the man several times. Bampumim Teixeira, 30, of Chelsea, was hospitalized with non-life-threatening injuries; the officers weren't hurt.

Mr. Teixeira's arraignment is scheduled for Monday. It wasn't known if he had an attorney.

—Associated Press

COLORADO

Pipeline Safety In Focus After Accident

State records show Colorado has only three people assigned to check the safety of pipelines running from about 54,000 active oil and gas wells.

Since 2016, an inspector has checked about 400 of those pipelines and an engineer has audited company records for line inspections at about 2,800 wells, the Denver Post reported.

An April 17 explosion in the town of Firestone killed two people. Investigators have said gas was leaking into a house from a pipeline thought to be out of service but that was still connected to a nearby well.

The pipeline, called a flow line, is one of thousands in the state installed to carry oil and gas from wells to storage tanks.

Lawmakers and regulators are weighing a comprehensive map of all flow lines.

—Associated Press

IPO

Continued from Page One

missing from the current IPO pipeline are some of the highest-profile private companies, such as Uber Technologies Inc. and Airbnb Inc., which aren't expected to come to market before 2018. Several investment bankers say there have been fewer bakeoffs than they'd expect given the favorable market conditions.

Shares of newly public companies are performing well, with this year's batch of IPOs trading 11% above their offering price on average through Friday's close, according to Dealogic. Last year's batch of IPOs have gained an average of 29%, Dealogic data shows.

The flurry of activity is a sign the new-issue market that's languished in recent years may be in the midst of a sustained rebound. Snap Inc. successfully debuted in March at a valuation of $24 billion, far above the Snapchat parent's latest private funding round. Although the shares have fallen from their highs, they still trade well above the price at which they were first offered to the public.

It's a change from much of last year and late 2015, when investors and corporate boards stepped back from the IPO market, wary that the stock market would value their companies at less than prior fundraising rounds. That fear still permeates private-company boards, bankers, investors and analysts say. And together with cheap funding that's widely available for private companies, it helps explain why many richly valued startups and others aren't rushing to go public.

"The good news is we have an IPO market," said Matthew Sperling, a managing director who runs the equity advisory business at Rothschild & Co. "But issuers and owners are looking at it with a measured level of enthusiasm."

Cloudera Inc. stoked those concerns last month when the big-data software startup debuted at a level far below its last private valuation of more than $4 billion. Meanwhile, shares of Twilio Inc., a software company that went public last June, fell 27% last week on the back of soft first-quarter results. Still, the company remains valued at more than $2 billion, well above its last private round.

So far the IPOs that have debuted "have been priced to sell, but once investors get a taste of success, the companies that come next don't have to offer quite as much of a discount," said Scott Sandell, a managing general partner at venture-capital firm New Enterprise Associates. He added that he expects a robust pipeline for IPOs in the balance of the year, but warned that some companies could still get scooped up by corporate buyers who are sitting on piles of cash and seeking new growth opportunities in a sluggish economy.

Indeed, some investors and underwriters say there's concern that the public markets are being used as a last resort. Some of the companies debuting have tried to sell themselves and failed. It's symptomatic of a decadeslong trend that's seen the total number of public companies in the U.S. decline sharply as more entrepreneurs and others choose to avoid the increased disclosure and other perceived drawbacks of broad ownership.

One of the most closely watched private companies, shared-office-space provider WeWork Cos., is soon expected to close on a new round of private funding in excess of $3 billion—more than any U.S.-listed IPO has raised this year and last, other than Snap. The investment will likely keep WeWork from tapping the public markets for more than a year, according to people familiar with its plans.

The likely path for Spotify AB, the music-streaming service last valued at $8.5 billion, is yet another sign of the antipathy some companies have toward raising money in the public markets and the IPO process. Spotify is considering a so-called direct listing of its shares, in which—unlike in a typical IPO—the Swedish company wouldn't sell stock and raise capital or use underwriters, The Wall Street Journal has reported.

CORRECTIONS & AMPLIFICATIONS

The name of Gormley, a racehorse in the Kentucky Derby, was misspelled as Gormely in a Sports article on Saturday about how to pick the winner of the derby.

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

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JUSTIN MERRIMAN FOR THE WALL STREET JOURNAL

Indiana University of Pennsylvania offers training to students and staff on how to use the overdose-reversal drug Naloxone.

Opioid Deaths Tax Colleges

Schools stock up on overdose-reversal medicine, distribute it to staff, even students

By Melissa Korn And Jon Kamp

Colleges around the U.S., spurred by fatal student overdoses and grieving families, are distributing lifesaving medication and adding on-campus recovery programs as the nation's opioid epidemic worsens.

Some 33,000 people in the U.S. died of opioid overdoses in 2015, according to the Centers for Disease Control and Prevention. College students are as likely as others to abuse the narcotics, according to a survey of 1,200 college-aged adults commissioned that same year by the Hazelden Betty Ford Institute for Recovery Advocacy and the Christie Foundation.

Federal law doesn't require colleges to report drug deaths unless they are deemed criminal. But fatal overdoses have been rising at schools nationwide, underscoring a harrowing reality for administrators: Like binge-drinking and marijuana, the opioid crisis is now entrenched on campus.

"Now, you couldn't possibly talk about drugs and alcohol without talking about opioids," said John Downey, dean of students at Queens University of Charlotte, a school of 2,300 in North Carolina where two students have died from overdoses in the past five years.

Last fall, three Washington State University students overdosed on opioids and died in Pullman, Wash.; a 25-year-old died from an overdose on the potent opioid fentanyl and heroin in a bathroom at Columbus State Community College in Ohio; and a student died from a suspected overdose at State University of New York at Geneseo.

Substance-abuse experts say they believe many colleges haven't fully come to grips with the rising prevalence of opioids on campus.

"I still think that most administrations say, 'Oh no, that's not our campus. That's not our kids,'" said Tim Rabolt, a graduate student at George Washington University who is in long-term recovery after struggling with substances including pain pills in high school. He is a board member at the Association of Recovery in Higher Education.

Mr. Rabolt started his freshman year at GW in 2011, just four months into his recovery, and said he soon contemplated suicide. To fill what he saw as a void, he helped create a student-based support program, and the university is now building its own recovery program. Peter Konwerski, dean of student affairs at GW, credits students for the push. "We heard them loud and clear," he said.

Scores more colleges and universities have or are creating similar recovery programs.

Schools are also distributing the anti-overdose drug naloxone to campus police and even students. **Adapt Pharma** Ltd. announced last month that it would offer 40,000 free doses of its branded version, called Narcan, to colleges nationwide. So far about 60 schools have reached out, according to company officials.

Idaho State University and Indiana University of Pennsylvania recently offered training for the overdose-reversal drug. The University of Texas at Austin now stocks naloxone at the front desk of its residence halls.

Sometimes, it takes a death to galvanize schools.

The University of Rochester launched a two-year review of counseling, prevention and treatment programs after freshman Juliette Richard fatally overdosed in her dorm room in March 2014. The school added more drug counselors, and case managers.

Columbus State said it was already in the process of training campus police to administer naloxone when the student died there last fall.

A Washington State spokesman said the school has drug-risk education programs and good Samaritan policies for individuals in trouble. A spokesman for SUNY Geneseo said campus police have been carrying naloxone since 2014.

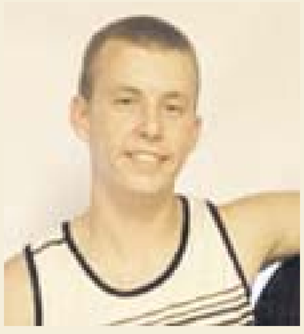
Campuses Adopt Recovery Programs

When touring colleges a few years ago with her son, Aimee Manzoni-D'Arpino asked about sober dorms and recovery support meetings.

"They looked at me like I had 20 heads," she said, as few of the schools had such offerings to help students maintain their sobriety.

Ms. Manzoni-D'Arpino's son, Emmett Scannell, died of a heroin overdose April last year when he was a sophomore at Worcester State University.

The landscape has begun to change, as more schools establish campus-recovery programs, but treatment advocates say they should be as common as



WILLIAM SCANNELL

Emmett Scannell

basic health services to help destigmatize addiction. Despite recent growth in recovery programs, fewer than 200 of the nation's nearly 5,000 colleges and universities now have one.

The four-year-old Collegiate Recovery Community at Ohio State University includes regular meetings, as well as a nondescript house with 28 beds, staff offices, and study and meditation space. Starting last summer, Ohio State's health-services center also began offering medication-assisted treatment to students with opioid addictions.

The school acknowledged that buy-in has been slow: Students haven't used the in-house medically assisted treatment yet, and just four of 14 rooms in the house are filled.

"There's no reason that any university should not have a collegiate recovery program," said Lori Holleran Steiker, a social-work professor at the University of Texas at Austin. Even at small schools, she said, the absence of anyone in recovery is "very unlikely."

—Melissa Korn and Jon Kamp

Some Clergy Wary After Curb Lifted

By Ian Lovett

WASHINGTON—When President Donald Trump signed an executive order last week effectively lifting the ban on tax-exempt organizations, like churches, endorsing political candidates, a cheer went up from the clergy members assembled in the Rose Garden.

But not every preacher is rushing to join the political fray from the pulpit.

Clergy from a variety of faith traditions said that removing the threat of an Internal Revenue Service crackdown could create a different set of problems for houses of worship, with some worrying about the potential for the influence of political money on their congregations.

Some pastors, rabbis and imams fret that engaging politically could create fault lines in their congregations. They were wary that major donors might now, in some cases, expect them to endorse candidates or distribute literature in exchange for big gifts. And some said aligning with one political party or another would dilute the force of their moral message.

"Practically speaking, churches with any diversity in the congregation need to stay away from this business—it's just dangerous to church fellowship," said Daniel Glaze, a pastor at River Road Church, a Cooperative Baptist Fellowship church in Richmond, Va.

The executive order doesn't eliminate the 1954 tax regulation, known as the Johnson Amendment, that prohibits tax-exempt organizations from endorsing political candidates. But Mr. Trump effectively instructed the IRS to stop any enforcement of the law, which was already seldom enforced.

Supporters of repealing the Johnson Amendment—long a goal of social conservatives—say that getting churches to engage more politically was never the point: It was about stopping government regulation of sermons.

"We are a free nation, and the people who are ministering should be able to speak freely what is in their hearts," Cyril Rayan, pastor of the Potter's Ministries, a nondenominational Christian church in San Jose, Calif., said.

Trump Set to Nominate Slate of Federal Judges

By Brent Kendall And Michael C. Bender

WASHINGTON—With Justice Neil Gorsuch now sitting on the Supreme Court, President Donald Trump is preparing to turn to the nomination of a slate of conservatives for judgeships to the lower federal courts.

Mr. Trump as soon as Monday will announce a batch of picks for 10 judicial posts, including five nominees for the powerful federal appeals courts, a person familiar with the matter said.

The picks will include five nominees for the powerful federal appeals courts.

While the appeals courts attract less public attention than the Supreme Court, judges who serve at that level play a significant role in shaping the law.

The high court only hears about 70 cases a year, meaning the federal appellate level is the final stop for the overwhelming majority of cases filed in the federal system.

Mr. Trump's new nominees will include two judges whom he had placed on his Supreme Court shortlist during his presidential campaign, the person familiar with the matter said. He will nominate Michigan Supreme Court Justice Joan Larsen for a seat on the Sixth U.S. Circuit Court of Appeals in Cincinnati, and Minnesota Supreme Court Justice David Stras for a seat on the Eighth Circuit in St. Louis.

Both previously served as law clerks to conservative Supreme Court justices.

The other imminent appeals court nominees are Louisville, Ky., lawyer John K. Bush for the Sixth Circuit, University of Notre Dame law professor Amy Coney Barrett for the Chicago-based Seventh Circuit and Alabama lawyer Kevin Newsom to the Atlanta-based 11th Circuit, the person said.

Mr. Trump will also nominate four people to serve as judges at the federal district courts, and one for the U.S. Court of Federal Claims. District court nominees typically don't spark as much political wrangling because they serve at the trial level and aren't usually the final word on disputed areas of the law.

To date, the president has announced only one lower-court nominee: U.S. District Judge Amul Thapar for the Sixth Circuit appeals court.

Mr. Trump's list was reported by the New York Times.

Republicans Put Focus on Insurers

Trump administration cites problems in some states as health bill moves to Senate

By Louise Radnofsky
And Michael C. Bender

EVAN VUCCI/ASSOCIATED PRESS

President Trump speaks at the White House Thursday after House Republicans passed a health bill.

WASHINGTON—The White House is hoping to harness insurance-market woes in some states to help lift the GOP's health-care measure over hurdles in Congress, a strategy that reflects President Donald Trump's own high-stakes approach to deal-making.

With the House GOP health bill now before the Senate, White House aides say their job may become easier as health insurers in the next few weeks make final decisions about where to sell coverage next year and how to price it. Early signals have raised the prospect of no insurers offering coverage in parts of Iowa and Tennessee, and of premium surges in states such as Virginia and Maryland.

Democrats say Mr. Trump has stoked uncertainty that is to blame for many of the problems. Mr. Trump, for his part, has cited those problems as a reason to pass the GOP bill.

"Republican Senators will not let the American people down! ObamaCare premiums and deductibles are way up—it was a lie and it is dead!" Mr. Trump said Sunday on Twitter. Last week, he noted potential market disruptions in Iowa, writing, "It's time to fix this broken system!"

White House officials say that more bad news from states in the coming weeks could help them move the health-care bid across the finish line in the Senate, where statewide issues will come to the fore.

"It does encourage members to act," a senior White House official said.

The strategy carries risks. It isn't immediately clear whether Americans would blame the administration of former President Barack Obama, or that of Mr. Trump, for market shocks. In addition, some GOP senators have specifically cited the insurance markets' fragility in the past as a reason to tread carefully.

Building a sense of urgency is a tactic Mr. Trump regularly leans on to advance his political points. He justified a ban on Muslim immigration during the campaign by warning that more Sept. 11-style attacks were imminent, and he has warned the Islamic State terror group would infiltrate the country without a southern border wall.

A potential counterweight to the administration pressure is a coming estimate from the Congressional Budget Office of the revised GOP health bill. The estimate of the first bill, in March, said that measure would increase the number of people without health insurance by 24 million by 2026, which contributed to its collapse. House Republican leaders moved their bill last week without the CBO "score" of the latest revisions, but some senators have said they would wait to see the new estimates before proceeding.

Democrats say the better course is to shore up the Affordable Care Act.

The federal government has set a late-June deadline for insurers to make decisions about which plans they will sell and how much they will charge next year. State and federal laws may delay the release of information in some parts of the country, so senators can expect a drumbeat of insurance-market snapshots between now and the fall.

Insurers have cited a combination of reasons for their decision to pull out of markets or raise rates. Most prominent among them: a sicker-than-expected group of enrollees under the ACA and the turbulent early years of implementation of the Democrats' law—but also, in some cases, a lack of conviction that the law would remain in place and make their risk-taking worthwhile.

Republicans control 52 Senate seats and can afford to lose no more than two to pass the health-care measure, assuming no Democrats back it.

White House aides have concluded they need to build stronger coalitions with lawmakers, including conservatives who had felt shut out of the early process, as well as business groups that could offset the opposition from groups representing insurers, hospitals, doctors and patients.

Senate leaders have indicated they plan to start from scratch with the health-care legislation that passed the House.

Yates Set To Testify On Russia Inquiries

By Del Quentin Wilber
And Byron Tau

WASHINGTON—Testimony from a former acting attorney general Monday could shed new light on the largely secretive investigations into Russia's alleged interference in the 2016 presidential election.

Sally Yates, a top Justice Department official in the Obama administration, was serving as President Donald Trump's acting attorney general when she told a White House official about conversations between former national security adviser Mike Flynn and a Russian diplomat.

Ms. Yates will be joined by James Clapper, former President Barack Obama's director of national intelligence, at a hearing before a Senate Judiciary subcommittee.

The Federal Bureau of Investigation is leading a probe into any collusion between the Trump campaign and Russian operatives. The House and Senate Intelligence Committees are also conducting inquiries. Russia has denied any election interference and Mr. Trump has rejected allegations that anyone connected to his campaign coordinated with Russian officials.

Political Ads Zero In on Health Care

By Natalie Andrews

The House vote approving a Republican overhaul of the Affordable Care Act is quickly becoming the focus of the emerging battle for control of Congress in next year's midterm elections, with groups on both sides of the health debate running ads that target GOP House members in political swing districts.

Some 23 House Republicans represent districts that Democratic presidential nominee Hillary Clinton carried last November, suggesting that those seats could be in play next year. Fourteen of those lawmakers voted for the House bill, while nine voted against it.

Several groups said they were starting ad buys in those districts.

The House Democrats' campaign arm, the Democratic Congressional Campaign Committee, said it had placed a radio and digital ad buy targeting Republicans in Clinton districts. Lawmakers targeted include Reps. David Valadao and Darrell Issa of California and Mike Coffman of Colorado. Voters there backed Republicans for Congress while favoring Mrs. Clinton by 15.6 percentage points, 7.5 points and nearly 9 points, respectively.

In addition, Save My Care, a coalition of health-care and liberal advocacy groups that opposes the GOP legislation, said it would launch an ad campaign attacking 24 Republicans who voted for the bill. Its ad notes that the House GOP health bill is opposed by the American Medical Association, the American Cancer Society and AARP, the seniors' lobby.

Eleven of the targeted lawmakers represent districts that Mrs. Clinton won.

Lawmakers in some swing districts will have cover from American Action Network, a center-right advocacy group, which plans to spend $2 million in the next 10 days on ads "to help sell the legislation to the American people," said executive director, Corry Bliss. The ads won't support Republicans who voted against the bill.

The House bill, which was approved Thursday and sent to the Senate, would replace most of the Affordable Care Act, the signature domestic legislation of President Barack Obama's tenure. It would end the requirement that most individuals buy health insurance and that larger employers offer it. The bill also would reduce projected Medicaid funding and replace the ACA's system of subsidies to help people buy insurance with a set of tax credits available to a larger set of people, but which would be less generous for most people who receive them under the current law.

Democrats need a net gain of 24 seats to reclaim a majority in the House. They will have to defend a number of vulnerable House seats of their own, among them 12 seats held by Democrats in districts that President Donald Trump won last year, in four cases by double-digit margins.

Obama: ACA Vote a 'Profile in Courage'

Former President Barack Obama on Sunday night made his first public defense of his signature health-care law since House Republicans voted to repeal it, calling for members of Congress to display "political courage" to save the Affordable Care Act.

Speaking at the John F. Kennedy Presidential Library in Boston as he accepted the Profile in Courage award, Mr. Obama said Democrats who backed the law known as Obamacare in 2010 knew that it would "likely cost them their new seats and likely their political careers," yet voted for it.

"They did the hard thing," Mr. Obama said. "Theirs was a profile in courage....Most of them did lose their seats, but they were true to what President Kennedy defined in his book as a congressional profile in courage."

After Mr. Obama signed the ACA in March 2010, the midterm elections that November wiped out Democrats at nearly all levels of government.

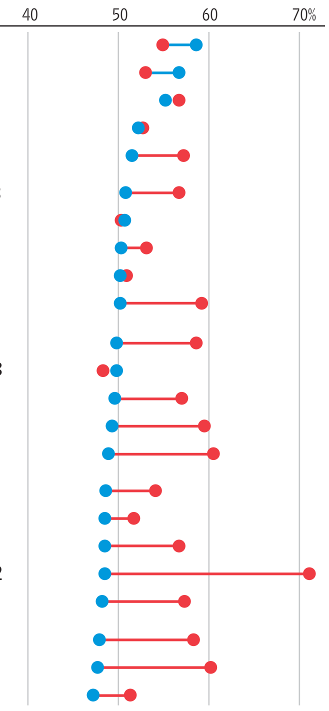
—Reid J. Epstein

On the Target List

Twenty-three House Republicans represent districts that Democrat Hillary Clinton carried in November. Opponents are trying to make the GOP-backed American Health Care Act an issue in next year's midterm elections.

Districts that Clinton won

AHCA Vote	Congressman	District
NO	Illeana Ros-Lehtinen*	Fla.-27
YES	Carlos Curbelo	Fla.-26
YES	David Valadao	Calif.-21
NO	Barbara Comstock	Va.-10
YES	Ed Royce	Calif.-39
YES	Erik Paulsen	Minn.-03
YES	Darrell Issa	Calif.-49
YES	Steve Knight	Calif.-25
NO	Mike Coffman	Colo.-6
YES	Peter Roskam	Ill.-6
YES	Mimi Walters	Calif.-45
NO	Will Hurd	Texas-23
YES	Martha McSally	Ariz.-2
NO	Pat Meehan	Pa.-7
NO	John Katko	N.Y.-24
NO	Leonard Lance	N.J.-7
YES	Jeff Denham	Calif.-10
YES	John Culberson	Texas-7
YES	Pete Sessions	Texas-32
NO	Ryan Costello	Pa.-6
YES	Dana Rohrabacher	Calif.-48
NO	David Reichert	Wash.-8
YES	Kevin Yoder	Kan.-3



*She has announced that she's retiring at the end of her term
Sources: House of Representatives (AHCA vote); Daily Kos (vote share)
THE WALL STREET JOURNAL.

Pratt's Pledge

"In support of the President's outstanding leadership in further making America the greatest place in the world to manufacture, I'd like to announce that Pratt Industries pledges to invest an additional $2 billion over the next decade, doubling our rate of investment in America to create 5,000 high-paying manufacturing jobs mainly in the Midwest."

— **Anthony Pratt**

Executive Chairman,
Pratt Industries

NATHAN EDWARDS/NEWS CORP AUSTRALIA

President Donald Trump thanking Anthony Pratt for his pledge.

Pratt Industries Chairman Anthony Pratt made this pledge last Thursday night in New York City at an event with President Trump. Pratt Industries currently employs 7,000 Americans in high-paying manufacturing jobs.

Pratt Industries is one of the largest corrugated box manufacturers in the United States.
Our boxes save money and save the environment.

www.prattindustries.com

Pentagon Backs Added Spending on Asia

Military endorses plan floated by McCain that would boost U.S. presence in the region

By Gordon Lubold

WASHINGTON—The Pentagon has endorsed a plan to invest nearly $8 billion to bulk up the U.S. presence in the Asia-Pacific region over the next five years by upgrading military infrastructure, conducting additional exercises and deploying more forces and ships.

The effort is seen by backers as one way to signal more strongly the U.S. commitment to the region as Washington confronts an increasingly tenuous situation on the Korean peninsula, its chief security concern in the area.

The Trump administration is still formulating its larger policy for Asia after essentially discarding former President Barack Obama's so-called Asia pivot, which was disparaged by critics as thin on resources and military muscle, and dropping U.S. support for the Trans-Pacific Partnership, a 12-nation trade deal.

Given President Donald Trump's recent overtures to Chinese President Xi Jinping, any plan to expand the U.S. military presence in Asia eventually may require steps to reassure Beijing that new military measures aren't directed at the Chinese. A spokesman for China's embassy in the U.S. didn't immediately respond to a request for comment.

JUNG YEON-JE/AGENCE FRANCE-PRESSE/GETTY IMAGES

South Korean and American soldiers watched a joint live-firing drill in Pocheon, 40 miles northeast of Seoul, on April 26.

The proposal, dubbed the Asia-Pacific Stability Initiative, was first floated by Sen. John McCain (R., Ariz.) and has been embraced by other lawmakers and, in principle, by Defense Secretary Jim Mattis and the head of U.S. Pacific Command, Adm. Harry Harris. Proponents haven't developed details of the $7.5 billion plan.

"This initiative could enhance U.S. military power through targeted funding to realign our force posture in the region, improve operationally relevant infrastructure, fund additional exercises, pre-position equipment and build capacity with our allies and partners," Mr. McCain told Adm. Harris in an April hearing.

Dustin Walker, a spokesman to Mr. McCain, described the plan in an email as a way to make the American posture in the region more "forward-leaning, flexible, resilient and formidable."

Supporters liken the initiative to an Asia version of the European Reassurance Initiative, or ERI, begun after Russia's 2014 intervention in Ukraine and funded at $3.4 billion in this year's U.S. budget.

Backers have not spelled out how they plan to get funding. The Trump administration has asked for additional money for defense spending in the current fiscal year, and are seeking a $54 billion increase for fiscal 2018.

U.S. officials and congressional staffers, citing the uncertainties of federal budget deliberations, said it is unclear how much will be immediately available for the new Asia initiative. But they also point out that the spending would take place over five years.

Mr. Mattis has voiced support for the concept of the plan. "I don't understand all the details in Senator McCain's plan, but I support the themes that he outlined and the importance he assigned to that region," said Mr. Mattis during a recent congressional hearing.

Cmdr. Gary Ross, a Pentagon spokesman, said the Defense Department "supports in principle" Mr. McCain's proposal.

"The Asia-Pacific is a top priority for the United States, and the Department is committed to ensuring that U.S. forces are as capable and ready as possible to face the evolving challenges in the region," Cmdr. Ross said in a statement.

A former top Pentagon policy official in the Obama administration said the initiative could have value if it is used for a specific purpose and is part of a broader American policy in Asia.

"If used strategically, it can help stem the tide of the military challenges we face in the Pacific," Kelly Magsamen, who was an acting assistant secretary of defense for Asian and Pacific Affairs under Mr. Obama, said in an email. But it has to be tied to specific requirements for U.S. Pacific Command, she said. "It shouldn't just be a slush fund for PACOM."

Mr. Obama's Asia pivot, later termed a "rebalance," fell short of expectations, experts said.

Still, the effort produced visible changes. More than 1,200 Marines have been stationed on a rotating basis in Darwin, Australia, the U.S. began the deployment of Littoral Combat Ships to Singapore, and U.S. access to military bases in the Philippines was restored.

In the meantime, the deployment of a Thaad missile defense system to South Korea, years in the making, was completed days ago, according to U.S. and South Korean defense officials.

KOREA

Continued from Page One

two of them based in China.

The scope of the Limac-Ryonbong joint venture and its current status are unclear. It was incorporated in North Korea, which doesn't disclose corporate records. The Ryonbong-Limac link was identified by Sayari Analytics, a financial-intelligence firm that works for banking and U.S. government clients and didn't publicize its findings.

Ryonbong couldn't be reached for comment. Limac said that the venture "never launched regular business activities" and that Limac has tried to dissolve it since 2009.

Still, Chinese corporate records show the joint venture maintained a registered office in China until this past February. And Limac's website said Limac and Ryonbong executives held talks in 2011 on advancing their partnership. Information about the venture disappeared from Limac's website after The Wall Street Journal inquired about it.

The Chinese company has a U.S. affiliate in Houston through which it seeks investment opportunities, according to the affiliate's chief executive. In another U.S. connection, Limac, which manufactures and trades nuclear-energy and other industrial machinery, imported Canadian nuclear-power equipment to China in 2013 by way of the U.S., customs records show.

KCNA/KNS/STR/AGENCE FRANCE-PRESSE/GETTY IMAGES

North Korea paraded missiles in April on the 105th anniversary of founder Kim Il Sung's birth.

U.S. legislation passed last year obliges the White House to sanction entities doing business with blacklisted North Korean entities or explain to Congress why it hasn't. The Limac-Ryonbong joint venture has been discussed inside the Trump administration, said people familiar with the matter.

Secretary of State Rex Tillerson said last week the U.S. has been "leaning hard into China" over North Korea.

China's commerce ministry, foreign ministry and government information office didn't respond to requests for comment. China has said in the past it complies fully with U.N. sanctions on North Korea but opposes U.S. unilateral sanctions. The North Korean embassy in Beijing didn't respond to requests for comment.

Last September, the U.S. indicted a Chinese businesswoman on charges that she and her trading company, Dandong Hongxiang Industrial Development Co., helped blacklisted North Korean companies evade U.S. sanctions. China said in January she was under investigation. The businesswoman, Ma Xiaohong, couldn't be reached for comment, and her company didn't respond to comment requests. A Justice Department spokesman said Ms. Ma hasn't filed a plea and "is believed to be a fugitive."

A spokesman for the Treasury declined to comment on Limac but said the administration is targeting North Korea's operations in China, and Ryonbong in particular.

Ryonbong is the trading arm of a committee in North Korea's ruling party that oversees its defense industry, according to U.S. officials.

Limac, the Chinese company, was founded in 1953. The industrial-machinery company's website said it expanded into mining in North Korea in 2006. Limac Chairman Wu Yan visited North Korea the next year with a team of mining specialists.

In 2008, a time when North Korea was engaged in international talks about potentially dismantling its nuclear program, China's commerce ministry approved the joint venture, a 20-year mining project in North Korea's Kangwon province. Mr. Wu became the joint venture's chairman and a Ryonbong executive his deputy, said Limac's website.

In 2013, the venture set up an office in the Chinese city of Dandong, on the North Korean border, appointing to lead it a North Korean who used the Chinese name Jin Zhezhu, according to Chinese public records.

The office's address is an apartment in a rundown block near the Yalu River that forms the border. Mr. Jin lived there for several years but left a few months ago, said the current occupant, neighbors and a former employee of the venture. Mr. Jin couldn't be reached for comment.

Limac said the venture never began regular operations because the North Koreans didn't comply with the contract.

Limac denied knowledge of a joint-venture office in Dandong and said staff members hadn't obtained North Korean visas since 2009. Fourteen Limac employees visited North Korea for a company-sponsored vacation in 2014, the website said. It is unclear whether they had visas.

The Dandong office had its registration revoked in February 2017 for failing to file its 2016 inspection paperwork, according to Chinese corporate registry officials.

—Chun Han Wong, Junya Qian and Jonathan Cheng contributed to this article.

Pyongyang Detains Fourth American

By Jonathan Cheng

SEOUL—North Korea's state media said officials detained a U.S. citizen tied to a Christian-backed university in North Korea, two weeks after arresting one of his colleagues.

Saturday's arrest of Kim Hak-song for committing "hostile acts" brings the number of known U.S. citizens detained in North Korea to four, adding another twist to troubled relations between Washington and Pyongyang as the U.S. seeks to slow the North's nuclear and missile program.

According to Sunday's report by North Korea's official Korean Central News Agency, Mr. Kim works for the Pyongyang University of Science and Technology, a university founded in 2010 by James Kim, a Korean-American Christian businessman.

Two weeks ago, North Korea detained Tony Kim, a Korean-American accounting professor at PUST, as he was preparing to depart North Korea at Pyongyang's main international airport, citing "hostile acts."

PUST, while not officially Christian, hires largely Christian faculty and says on its website that "churches can support PUST through prayer and through spreading the news about this project among congregation members."

North Korea has arrested U.S. citizens doing Christian-related work in the country. Kenneth Bae, a Korean-American missionary, was sentenced to 12 years' hard labor for hostile acts and was freed after two years in November 2014.

In 2014, American Jeffery Fowle was detained and held for six months after leaving a Bible in a nightclub bathroom.

A spokesman for PUST's leadership confirmed Kim Hak-song's arrest on Saturday, just as he was about to leave North Korea after a visit of several weeks. The spokesman said Mr. Kim was at PUST to do agricultural work at an experimental farm operated by the university.

A U.S. State Department official said the government was aware of the reports of a U.S. citizen detained in North Korea, but declined further comment, citing privacy considerations. "The security of U.S. citizens is one of the department's highest priorities," the official said.

—Paul Sonne in Washington contributed to this article.

Kushner Cos. Pushes Visas to Wealthy Chinese

By James T. Areddy

SHANGHAI—New York property developer **Kushner** Cos. launched a weekend marketing campaign for a New Jersey development, targeting major Chinese cities for wealthy individuals to invest a combined $150 million for the chance to secure U.S. immigration rights.

The developer, owned by the family of Trump administration senior adviser Jared Kushner, is trying to draw investment into twin 66-floor commercial-and-residential towers called One Journal Square that would cost almost $1 billion to build, according to marketing materials. As many as 300 individuals who put $500,000 each into the project could be eligible for green cards under a U.S. investment-for-immigration program called EB-5, the materials said.

The China marketing push, being led by Mr. Kushner's sister, Nicole Meyer, began in Beijing on Saturday and shifted to Shanghai on Sunday.

It is the latest sign the Kushner family is looking to China for funding to support its U.S. property development. In March, Kushner Cos. ended talks with Beijing-based Anbang Insurance Group Co. over participation in a $7.5 billion redevelopment of a Manhattan tower amid an outcry about possible conflicts of interest involving the Trump administration.

Mr. Kushner, who is married to President Donald Trump's daughter Ivanka, had been running the family-controlled Kushner business before last year's election. But to protect against potential conflicts he resigned from the business and sold his personal stake in some projects and assets to family members and others.

Blake Roberts, an attorney at WilmerHale, which provides personal counsel for Mr. Kushner, said his client "has no involvement in the operation of Kushner Cos. and divested his interests in the One Journal Square project to a family trust that he, his wife, and his children are not beneficiaries of, a mechanism suggested by the Office of Government Ethics. As

ASSOCIATED PRESS; OLIVIER DOULIERY/CNP/ZUMA PRESS (RIGHT)

An event in Shanghai on Sunday, left, promoted investment in a development being built by Kushner Cos., owned by the family of Trump administration senior adviser Jared Kushner, right.

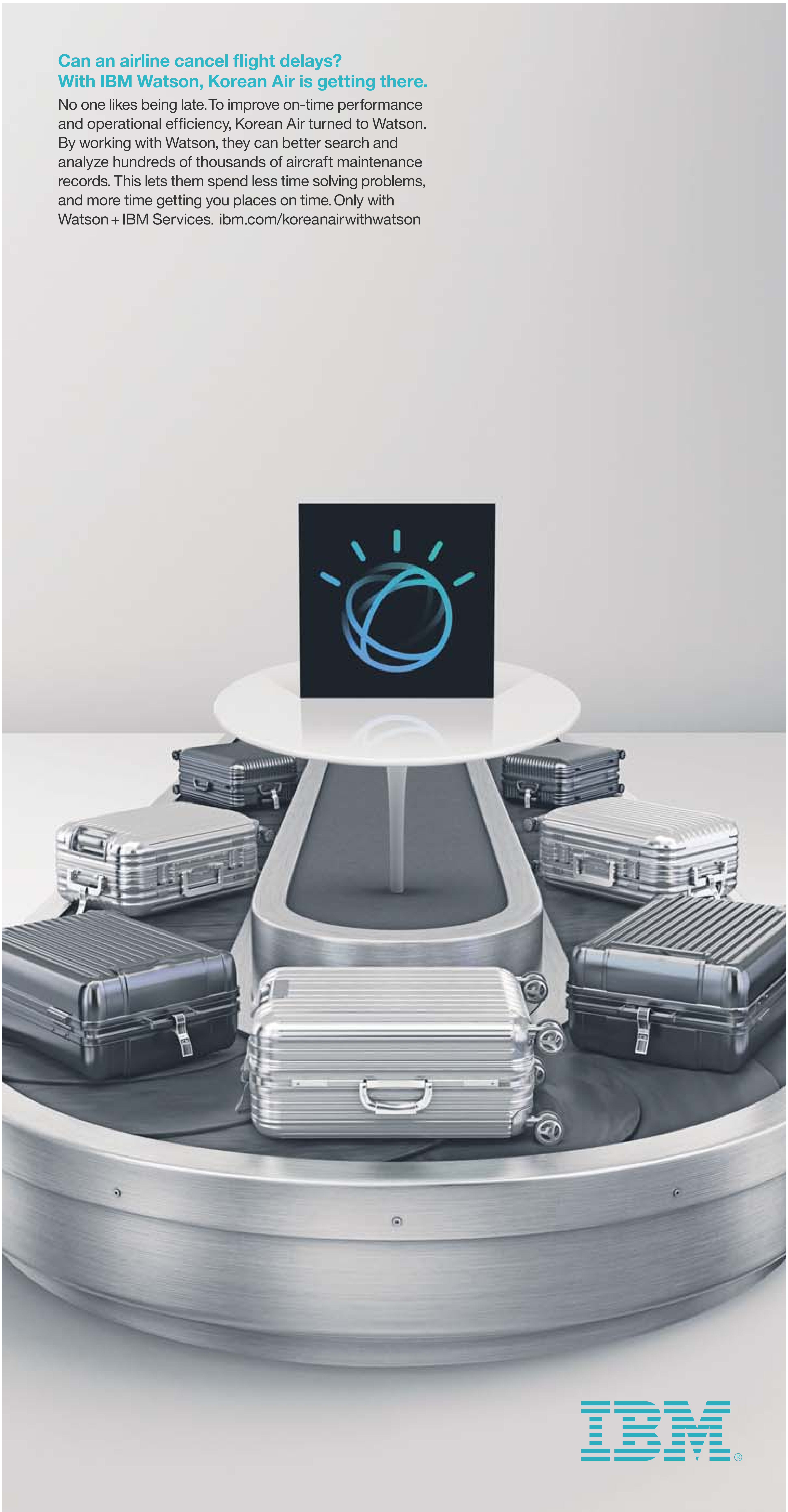
previously stated, he will recuse from particular matters concerning the EB-5 visa program."

At Shanghai's Four Seasons Hotel on Sunday, organizers barred media from the two-hour marketing event, which attendees said included a brief presentation by Ms. Meyer, a principal at Kushner Cos. Before the event, a woman staying in the hotel identified herself over the telephone as Ms. Meyer, but hung up when a reporter for The Wall Street Journal identified himself.

Organizers tried to keep reporters from interviewing attendees, with a representative from QWOS Group, a local partner of Kushner Cos., telling one not to discuss details with reporters. Representatives of QWOS, an immigration-services provider, declined to comment.

Still, some attendees said the project was well-timed, given Beijing is tightening foreign-exchange controls to make it tougher to move money out of the country, and that U.S. authorities may raise minimum-investment thresholds for the EB-5 program.

Attendees interviewed said they were aware of the Trump-Kushner ties, but it is unclear how they were factoring that into any investment decisions.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Win Slows Anti-EU Movement

Several emboldened nationalist parties have challenged the bloc's existence

BY VALENTINA POP

BRUSSELS—The election of Emmanuel Macron and his upstart pro-European party in France marks a significant pushback against nationalist parties that have challenged the existence of the European Union over the past year.

Euroskeptic movements, long on the fringe in Britain and a few other EU countries, began to spread over the past decade as financial and security crises hit the bloc.

In Greece and Italy, the financial austerity that followed the euro crisis stoked anti-EU sentiment, and then, many in ex-communist central and Eastern Europe bristled at the mass influx of migrants in 2015 and the perception that Brussels was forcing them to accept them.

The 2015 victory of the euroskeptic Law and Justice party in Poland, which until then had been governed by a staunchly Europhile government, marked the first recent success of an anti-EU party in one of the bloc's larger countries.

Austria's far-right Norbert Hofer added to the momentum by making it into the runoff of the presidential election in May 2016, bringing for the first time the prospect of an EU head of state who had campaigned for a referendum on leaving the EU.

His pro-EU, Green opponent, Alexander Van Der Bellen, won by a razor-thin margin, but the vote was annulled because of irregularities and rerun in December. Mr. Van Der Bellen won again, by a larger margin.

His victory was barely noticed, however, because the EU had by then sunk into a deeper existential crisis with the U.K.'s June 2016 vote to leave the bloc, a result that sent shock waves around the world.

November brought the election of U.S. President Donald Trump, who supported Brexit and predicted other countries would follow. Brexit and Mr. Trump's victory boosted euroskeptic parties across the continent, which expressed the hope that several elections in core countries could lead to the beginning of the end of the EU.

The Dutch election in March, however, began to turn the tide. The far right, anti-EU party of Geert Wilders came in second despite having polled first for months. The victory of the center-right party led by Prime Minister Mark Rutte was modest. He may need to govern with three other parties to muster a parliamentary majority.

Mr. Wilders consoled Marine Le Pen on Sunday, tweeting, "Well done anyway...millions of patriots voted for you! You will win next time—and so will I!"

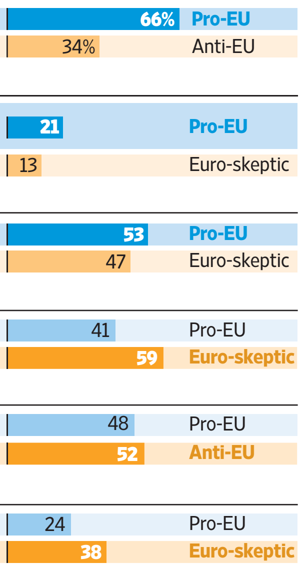
European Commission President Jean-Claude Juncker's chief of staff, Martin Selmayr, on Sunday tweeted his celebration of the victories against anti-EU parties: "Kick off: Felix Austria. Quarterfinal: Stable Netherlands. Semi final: La France en Marche!"

GIUSEPPE CICCIA/PACIFIC PRESS/ZUMA PRESS

Anti-EU protesters demonstrated in Rome on March 25.

Ebbing Euroskeptics

Emmanuel Macron's victory is seen as turning the tide of rising anti-EU parties.



Election	Date	Candidate / party / option	Result	Trend (highlighted)
French presidential election	May 2017	**Emmanuel Macron**	**66%**	**Pro-EU**
		Marine Le Pen	34%	Anti-EU
Dutch parliamentary election	March 2017	**People's Party for Freedom and Democracy**	**21**	**Pro-EU**
		Party for Freedom	13	Euro-skeptic
Austria presidential election	Dec. 2016	**Alexander Van der Bellen**	**53**	**Pro-EU**
		Norbert Hofer	47	Euro-skeptic
Italy constitutional referendum	Dec. 2016	YES	41	Pro-EU
		NO	**59**	**Euro-skeptic**
Brexit referendum	June 2016	Stay	48	Pro-EU
		Leave	**52**	**Anti-EU**
Polish parliamentary election	Oct. 2015	Citizens Platform	24	Pro-EU
		Law & Justice	**38**	**Euro-skeptic**

Sources: the countries' governments; staff reports

THE WALL STREET JOURNAL.

Victory Heartens Europe Leaders

BY VALENTINA POP

BRUSSELS—The success of pro-European Union candidate Emmanuel Macron in the French presidential election triggered immediate sighs of relief by EU leaders and expectations that his victory will strengthen the embattled bloc.

Mr. Macron's support for the EU was in stark contrast to his opponent, nationalist Marine Le Pen, an advocate for France's leaving the bloc and abandoning the euro. His victory is seen as an endorsement of the European project and comes after months of uncertainty about the future of the bloc following the U.K.'s decision to leave; the U.S. election of President Donald Trump, a critic of the EU; and the rise of nationalist politicians across the bloc.

EU leaders were quick to congratulate Mr. Macron.

German Chancellor Angela Merkel called Mr. Macron Sunday night and told him that "the French voters' decision was a clear commitment to Europe," said her spokesman, Steffen Seibert. Ms. Merkel's party, the Christian Democrats, won state elections Sunday in Schleswig-Holstein.

Former Italian Prime Minister Matteo Renzi congratulated his political role model on Twitter, saying "Macron's victory writes an extraordinary page of hope for France and for Europe." Mr. Renzi was elected Sunday as leader of Italy's center-left Democratic Party, bringing him back into play for national elections in early 2018.

Belgian Prime Minister Charles Michel said Mr. Macron's victory represented "a clear rejection of a dangerous project of European withdrawal."

European Commission President Jean-Claude Juncker was the first top EU official to send congratulations to Mr. Macron, after having endorsed him ahead of the Sunday vote—an unusual move for an EU official. Mr. Juncker wrote that "the history of the EU is so closely linked to that of France that the public debate about France's place in Europe echoed far beyond your country."

"For my part, I am happy that the ideas that you defended, of a strong and progressive France which protects all its citizens are those which France will bring in the debate about the future of Europe," Mr. Juncker said.

Before the election, EU officials were privately warning that a victory for Ms. Le Pen would spell the end of the 27-country union. Mr. Macron's win solidifies pro-EU gains made in the Austrian presidential elections last year and in the Dutch election in March.

"It is a third and very important turning point," said a senior EU official.

The French president-elect, however, has called for significant overhauls aimed at getting the EU more involved in social policies.

Macron Makes a Quick Journey to Forefront

BY WILLIAM HOROBIN

In the space of three years, Emmanuel Macron, a 39-year-old pro-European newcomer to electoral politics, has climbed from a backstage role as a government technocrat to France's youngest-ever president.

Mr. Macron, a former investment banker, founded his own centrist party, En Marche, last year and espouses positions borrowed from the left and right.

As president, he says he will cut public spending and roll out sweeping pro-business measures to reduce taxes and make it easier for employers to hire and fire.

But Mr. Macron, who served as economy minister in the Socialist government of President François Hollande, also says he will open up unemployment benefits to more people and launch a €50 billion ($55 billion) investment plan focused on clean energy.

Born to a family of medical doctors in the northern French town of Amiens, Mr. Macron met his future wife, Brigitte Trogneux, while he was in high school and she was his drama coach. He starred in a play organized by Ms. Trogneux, who is 20 years older than Mr. Macron, and they moved in together a couple of years later.

Mr. Macron gained entry to the halls of power after his acceptance into the École Nationale d'Administration, a highly selective school that counts numerous presidents among its alumni, including Mr. Hollande.

In 2012, Mr. Macron left his job at investment bank **Rothschild & Cie.** when Mr. Hollande brought him to the Élysée Palace as a senior adviser. He was promoted to economy minister in 2014, and pushed for economic overhauls that met resistance within the Socialist Party.

In February 2015, Mr. Hollande got those economic overhauls designed by Mr. Macron—and known as the "Macron Law"—past the lower house of Parliament. Opposition from the president's own party was so fierce that Mr. Hollande invoked special constitutional powers to bypass the National Assembly, the first use of that maneuver in nearly a decade.

Angry lawmakers retaliated by subjecting Mr. Hollande's government to a no-confidence vote, which failed.

Mr. Macron quit the government last year to pursue his own presidential ambitions, leaving behind him a deeply divided and unpopular party that ultimately fell out of contention in this year's presidential elections.

At the start of the year, polls showed Mr. Macron was trailing in the race for the top job. But when conservative candidate François Fillon was hit by allegations that relatives received state funds for work they didn't do, it opened the way for Mr. Macron. Mr. Fillon has denied wrongdoing.

In the first-round vote on April 23, Mr. Macron garnered the largest share, with 24%.

In the second round on Sunday, 66.1% of voters cast ballots for Mr. Macron, with Marine Le Pen taking 33.9%, according to final results.

PHILIPPE HUGUEN/AGENCE FRANCE-PRESSE/GETTY IMAGES

Emmanuel Macron greeted supporters after voting in Le Touquet, northern France, on Sunday.

The President-Elect, In His Own Words

May 3, to his opponent Marine Le Pen during a live televised debate: "[Islamist radicals] are seeking radicalization, division and civil war. You are falling into their trap. I will never go down that road."

May 1, in an interview with the British Broadcasting Corp.: "We have to face the situation, to listen to our people, and to listen to the fact that they are extremely angry today, impatient and the dysfunction of the [European Union] is no more sustainable."

April 17, at a rally in Paris: "Some candidates want us to become Cuba without the sun, or Venezuela without the oil."

Feb. 14, in Algiers, where he urged France to apologize for crimes committed in the Algerian war of independence: "Colonization is part of the history of France. It's a crime, a crime against humanity. It's truly barbaric."

January 2015, in an interview with financial daily Les Echos: "We need young French people who want to become billionaires. I'm not one of those people who is going to stigmatize big companies."

VOTE

Continued from Page One

Brexit, and the election of U.S. President Donald Trump.

"I know the divisions in our nation, which led some to vote for extremist parties. I respect them," Mr. Macron said in a somber address after the victory. "I will work to re-create the link between Europe and its peoples."

Still, the scale of Mr. Macron's victory provides a shot in the arm to the pro-EU establishment. He ran as a staunch defender of the bloc, positioning himself as a bulwark against Europe's nationalist wave. The strategy broke with parts of France's political mainstream that had been gravitating toward more populist positions.

The euro rose by around 0.2% to $1.102 against the dollar after the results, taking the common currency to its highest level since the U.S. presidential election in November.

On Sunday evening, the soaring notes of Beethoven's Ninth Symphony, the EU's anthem, played as Mr. Macron entered the courtyard of the Louvre Museum to deliver his victory speech.

In conceding defeat Sunday, Ms. Le Pen said her far-right National Front party was in need of "deep transformation...to build a new political force."

Ms. Le Pen said the election cemented her status as the leading opposition figure of a new political order centered around "the divide between patriots and globalists."

In the coming weeks, Mr. Macron will face a scramble to show that his fledgling political party, En Marche, or "On the Move," is capable of winning a majority in June's legislative elections. En Marche has so far refused to forge alliances with mainstream parties and has only named a handful of candidates it intends to field in the 577 seats up for grabs.

If Mr. Macron fails to secure a majority, he would have to seek ad hoc alliances with opposition parties or could even be forced into a so-called cohabitation—a form of power-sharing under which a prime minister from the opposition runs the government.

Mr. Macron has said the EU's future depends on whether its shaky architecture can undergo a root-and-branch overhaul to correct stark economic imbalances among wealthier Northern and poorer Southern members and develop a security apparatus able to protect the bloc from terror attacks and control a recent wave of migration.

For that to happen, he says, France needs to set an example among countries that have been slow to embrace economic restructuring by loosening its own rigid labor market to become more competitive with stronger neighbors like Germany.

Those mammoth tasks fall to a relative newcomer to politics. Until now, Mr. Macron has never held elected office. He was trained in elite French academies to become a high-ranking civil servant, but switched to a career in investment banking, joining Rothschild & Cie. at the height of the financial crisis.

The rise of both Mr. Macron and Ms. Le Pen stems from a meltdown of the political establishment that had ruled France for decades. No candidate from the country's main conservative or center-left parties survived the first round of voting last month. François Hollande, the incumbent president, didn't run, and the candidate of his party captured just 6.4% of the first-round vote.

Mr. Hollande tapped Mr. Macron as a top aide in 2012 and later promoted him to economy minister. Those posts have given him insight into policy-making but have provided limited experience on the sort of parliamentary coalition-building needed to pass difficult legislation—of the type that will be needed to move ahead with his agenda.

Despite her defeat, Ms. Le Pen managed to pick up millions of supporters, breaking through a key political barrier of previous elections, when big majorities overwhelmingly rallied against the National Front, tainted by the xenophobia of her father, Jean-Marie Le Pen, who has faced criticism for anti-Semitic rhetoric.

The preliminary results show Ms. Le Pen nearly doubled the 17.8% of the vote her father won in 2002.

"The National Front is now very ingrained, so we have to live with it," said Xavier Néront, a 51 year-old translator, who voted for Mr. Macron in Paris.

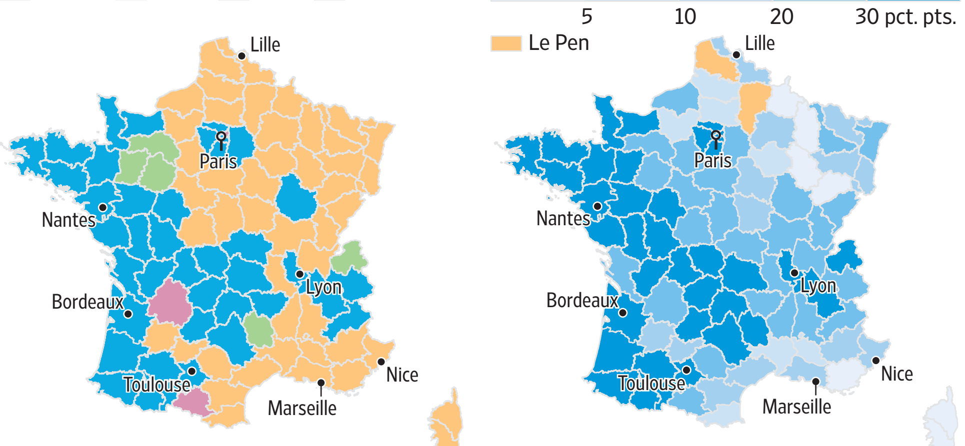
—Nick Kostov, Matthew Dalton and Noemie Bisserbe contributed to this article.

Shifting Support

Many departments that supported other candidates swung to Emmanuel Macron in the second round of the French presidential vote, handing the centrist a resounding victory over Marine Le Pen.

First-round winner Macron, Le Pen, Fillon, Mélenchon

Macron's margin of victory in the second round 5, 10, 20, 30 pct. pts.; Le Pen



Note: Unofficial results
Source: French Interior Ministry

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Macron at Odds With Trump, Putin

French President-elect Emmanuel Macron, a consummate internationalist, heads into office primed for clashes with two nationalist rivals on the world stage: U.S. President Donald Trump and Russian President Vladimir Putin.

*By **Matthew Dalton** in Paris and **Paul Sonne** in Washington*

From climate change to the war in Syria, international trade and the conflict in Ukraine, Mr. Macron has staked out positions at times at odds with the two leaders and clashed at a distance with both on the campaign trail.

Though he didn't offer a formal endorsement during the French campaign, Mr. Trump had cheered on Mr. Macron's vanquished rival, far-right nationalist Marine Le Pen, calling her "strongest on borders" and "the strongest on what's been going on in France."

"[Mr. Trump] should have a little more humility," Mr. Macron said in January, defending the European Union from the U.S. president's criticisms. "Mr. Trump, never forget what you owe us, liberty, your existence. Mr. Trump look at your history, it's that of Lafayette, it's ours!"

Messrs. Trump and Macron are poised to meet for the first time in late May at the North Atlantic Treaty Organization summit in Belgium.

Mr. Macron takes control of one of the world's foremost military powers, a nuclear-armed state with a permanent seat on the U.N. Security Council. His convincing win against Ms. Le Pen amounts in part to a broad rejection of her foreign-policy program, which called for France to close its borders, withdraw from the EU and NATO, and align itself more closely with Russia.

Now, Mr. Macron has a mandate to pursue a foreign-policy program that largely maintains the status quo under current French President François Hollande. Despite that continuity, France's relationship with Russia in particular is at risk of deteriorating under Mr. Macron.

Russian 'Fingerprints'

By Thomas Grove And Matthew Dalton

The digital fingerprints of a man with onetime ties to a Russian government-linked cybersecurity firm are on some of the files hacked from the political party of French election winner Emmanuel Macron, a cybersecurity expert said on Sunday.

The name of the employee appeared nine times as the last person to have modified some of the files that contain thousands of party emails and documents, said Selahaddin Karatas, CEO of the San Francisco-based cybersecurity company SAASPASS, who examined the metadata of some of the caches of hacked records.

No one in the Macron campaign has accused Russia of involvement in the hacking, but an official in the French president's office who examined metadata of the hacked documents said Sunday that "it points directly to Russia."

After Mr. Macron's party En Marche, or On the Move, disclosed late Friday the hacking of its computer systems, Kremlin spokesman Dmitry Peskov denied Russian involvement.

In the program of a computer conference held in the southern Russian city of Rostov-on-Don in 2014, the man said to have modified the documents was listed as an employee of the Russian internet firm Evrika. It isn't known whether he is still employed there.

Le Pen Grows in Stature

By David Gauthier-Villars And William Horobin

Marine Le Pen at the polling station in Hénin-Beaumont, northern France, where she cast her vote.

OLIVIER HOSLET/EUROPEAN PRESSPHOTO AGENCY

PARIS—Far-right nationalist Marine Le Pen suffered a stinging defeat at the hands of centrist Emmanuel Macron in the final round of France's presidential elections.

But her showing at the polls, combined with the disarray of mainstream Socialist and conservative parties, positions the vociferous critic of the European Union to take command of France's political opposition.

The 48-year-old Ms. Le Pen, who blames the EU and the euro for economic and security woes in France, won 33.9% of the vote, according to final results. That is more than the 21.3% she garnered in the first round, but significantly short of the 40% pollsters had predicted.

Speaking on Sunday night, Ms. Le Pen vowed to make her National Front "the No. 1 opposition force" to Mr. Macron and said she would work to transform the party ahead of June legislative elections.

Ms. Le Pen's performance was a measure of the strength of anti-globalization sentiment in France, part of the swell of antiestablishment currents that fueled Donald Trump's election in the U.S. and Britain's referendum vote to leave the EU last year.

And it showed that the appeal of her pledge to lead a "patriotic revolution" to restore France's control of its borders and currency resonated with voters beyond the traditional strongholds of her once-fringe National Front.

Ms. Le Pen's duel with Mr. Macron—who says French people shouldn't fear globalization, but instead roll up their sleeves and embrace it—showed how France's traditional left-right divide has been replaced by a new split between globalists and nationalists, and pro- and anti-EU voters.

Building on her enlarged base, Ms. Le Pen could impose herself as the lead architect of a broader nationalist platform, opening her arms to both conservatives—who dislike Mr. Macron's liberal social ideas, and leftist politicians—who abhor the president-elect's pro-business agenda.

The Socialist and conservative parties were thrown in disarray after their respective candidates were ejected from the presidential race in the April 23 first round.

To consolidate a role as opposition leader, Ms. Le Pen would need to quell rebellious party voices that have challenged her incendiary rhetoric against Europe in general, and the euro in particular.

Party members such as Marion Maréchal-Le Pen, Ms. Le Pen's niece, have said proposing to replace the euro with a new French franc risked alienating large swaths of voters, fearful a currency swap would hammer their savings.

In the last stretch of the campaign, Ms. Le Pen said she would take time to consult the population before making any decision on the euro if she were elected. But Ms. Maréchal-Le Pen said the move may have come too late.

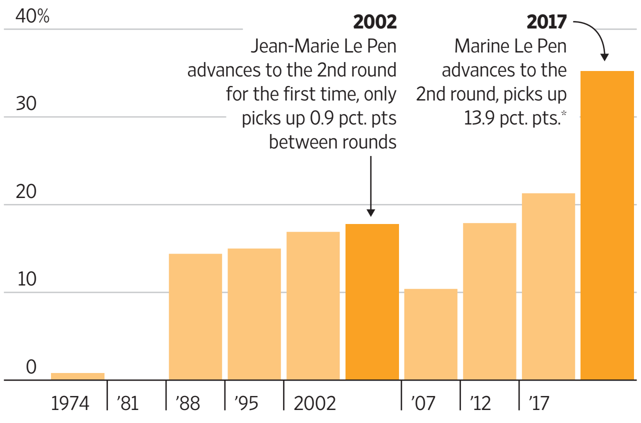
"I think it was necessary to reassure French people," Ms. Maréchal-Le Pen told television Sunday evening.

Ms. Le Pen also needs to improve the National Front's ability to convert its support into legislative seats. Voters are due to cast ballots in parliamentary elections next month. The party now has just two affiliated members in the current 577-seat National Assembly.

"We need to organize ourselves differently," said Jean-Lin Lacapelle, a senior National Front official. "The National Front has seen its limits." National Front interim leader Steeve Briois said: "It's not a real defeat tonight. It's a semi-victory.

Strengthening Front

National Front results, first ( ) and second ( ) rounds



*Results as of 6:18 p.m. E.D.T.
Note: National Front did not qualify for the 1981 presidential election
Source: French Interior Department
THE WALL STREET JOURNAL.

Business Hails Election Outcome

By Nick Kostov

PARIS—The victory of Emmanuel Macron is a relief to French business executives who welcomed the election of a president they see as strongly business-friendly.

As economy minister under a Socialist president, the 39-year-old former investment banker said France needs young people who "want to become billionaires."

Mr. Macron believes the country should embrace the European Union and not fear globalization, vowing unpopular overhauls of labor laws to make France more competitive.

That kind of rhetoric made him an easy target for rivals who used his four years as a banker at **Rothschild & Cie.** to attack him with populist jabs as an agent of global finance. Voters, however, made clear they preferred those policies to those of his defeated opponent, Marine Le Pen, who pledged to pull France from the EU and the euro and close borders to immigrants and cheap imports, which she says hurt the French economy.

Mr. Macron says he would adjust, rather than abolish, France's wealth tax.

"Macron is indisputably pro-business and the French generally don't like those who are pro-business," said Maurice Lévy, chief executive of advertising giant Publicis Groupe SA. "He knows that profitable businesses are the way to create jobs. He's dynamic and—as long as he chooses the right team—he's going to provide France with a boost."

Among other things, Mr. Macron's economic plan centers on cuts to welfare spending and a €50 billion ($55 billion) investment plan. Mr. Macron said the proposal would focus on renewable energy and training programs for young people and the unemployed, taking advantage of the low cost of government borrowing.

Mr. Macron's tax proposals also have a pro-business slant, with cuts to corporate tax and employers' social-security contributions. But Mr. Macron said he wouldn't raise sales taxes and would adjust, rather than abolish, France's wealth tax.

The center-right candidate, François Fillon. who was eliminated in the first round, would have gone much further in shifting the tax burden to households from businesses and the wealthy.

"I voted for [Mr. Macron] because he has a program that's friendly to entrepreneurs," said Pierre Morsard, a 29-year-old who founded a company that makes films for corporations.

Euro Gains As Focus Turns to Growth

By Mike Bird

The euro hit a seven-month high against the dollar after Emmanuel Macron won the French presidency on Sunday, a victory that should continue to boost the currency as political concerns fade and investors focus on the eurozone's economic recovery.

The euro climbed to as high as $1.1021 in the hours after voting closed, rising by around 0.3% from Friday's close. The common currency gave up most of its postelection gain in Asian trading on Monday.

Asian stock markets rose early Monday, with Japan's Nikkei Stock Average up 1.5%, but it was also playing catch-up with other markets in the region, having been shut since Wednesday for public holidays.

Mr. Macron's win ends a series of votes in Europe that have spurred worries that the rise of populist politicians could threaten the euro. That helped prompt a long period of weakness for the single currency, even as the eurozone posted increasingly strong economic data that has outpaced the U.S. recently.

With the uncertainty lifting and the economy doing well, the European Central Bank is more likely to taper the massive stimulus program that has helped keep pressure on the euro.

Mr. Macron, a pro-European Union former banker, won 66.1% of the vote.

"Populism hasn't gone away, but for now it's been pushed onto the back burner," said Jane Foley, senior foreign exchange strategist at Rabobank. "It's going to be more economics and less politics for the next six, eight, nine months," she said, predicting the euro will end the year at around $1.10.

CAPITAL ACCOUNT | By Greg Ip

Win Offers Reprieve for Common Currency

Emmanuel Macron should thank the euro. While there were a lot of things French voters didn't like about Marine Le Pen, leader of the National Front, perhaps foremost was her promise to ditch the common currency and bring back the franc, with the implicit threat of inflation and devaluation.

Yet there is an irony to this. While Ms. Le Pen never offered a plausible path out of the euro and the European Union, her critique of both was sound. The rigidity of the euro coupled with strict budget rules enforced by Brussels impose one-size-fits-all macroeconomic policy on every country in the union no matter how divergent its circumstances. That planted the seeds of the latest crisis and could create the conditions for another.

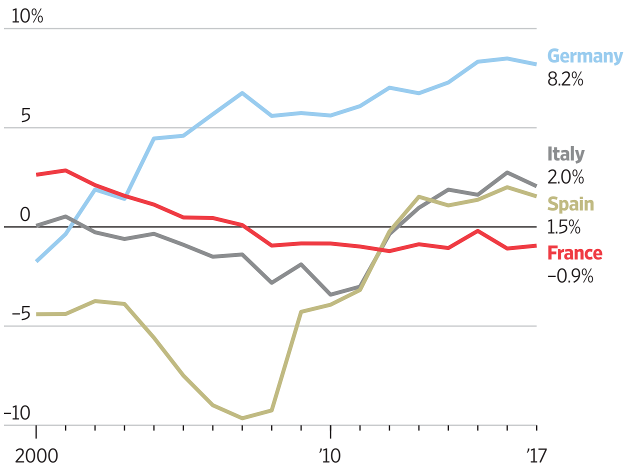
The eurozone today remains fragile, like a building constructed on an earthquake fault line. Ms. Le Pen's solution, to simply tear it down, was brutal. But it was no less logical than the status quo, which amounts to hoping another earthquake doesn't happen. Mr. Macron's plan is to reinforce it against future earthquakes by deepening its governance and economic ties. Yet that risks inflaming the grievances that sustain nationalist movements like Ms. Le Pen's.

The low inflation and steady growth of the euro's early years masked growing imbalances. Until 2000, French and German labor costs largely tracked each other. But with the introduction of the euro and German labor market reforms, French costs began to rise much more sharply, and those in Spain, Italy, Portugal and Greece even more so. The result was a large and growing trade imbalance in Germany's favor, which its neighbors couldn't cure through the usual mechanism, devaluation.

The public and private debts taken on to finance those trade deficits proved unsupportable, yet member countries' central banks could no longer act as lender of last resort to guarantee that governments and their biggest banks wouldn't default. The euro crisis was the result.

Receding Trade Imbalances

Current account balances as a share of GDP



Source: IMF

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The acute phase of the crisis subsided once the European Central Bank decided it would act as lender of last resort to its members. A €500 billion ($550 billion) European Stability Mechanism now exists to bail out indebted governments and banks, and a more independent regionwide bank supervisory system ensures banks are better insulated from their governments' troubles. This "makes potentially a huge difference," says Nicolas Veron, an expert on the eurozone at Bruegel, a Brussels-based think tank.

But flaws will persist: the failure of the eurozone's underlying economies to converge and their inability to calibrate macroeconomic policy to those divergent needs.

Germany's unemployment and government debt are much lower than its neighbors' now, raising the prospect that in a few years time interest rates will have to rise to contain German inflation when its neighbors are poorly positioned to afford it.

Mr. Macron would address the euro's flaws by deepening its governance and creating a common budget. He will try to complete the work he began under President François Hollande: injecting more flexibility into France's labor market.

But labor reform remains deeply unpopular in France. In an interview with Foreign Affairs last year Ms. Le Pen blamed French unemployment on "completely free trade, which puts us in an unfair competition with countries that engage in social and environmental dumping, leaving us with no means of protecting ourselves and our strategic companies." Mr. Macron has five years to overhaul the labor market and the EU. If he fails, voters at the next election may find Ms. Le Pen's siren song irresistible.

EUROPE

Continued from Page One

leave the EU, and Donald Trump's election as U.S. president on a platform of "America First," Germany feared being left isolated as the last major defender of liberal internationalism.

Ms. Le Pen, in conceding defeat, also proclaimed herself the leader of France's opposition. Other euroskeptic politicians are waiting in the wings around Europe, including Beppe Grillo, whose antiestablishment 5 Star Movement is currently the most popular party in Italy, where elections are due next year.

The Dutch far-right Party for Freedom fell short of its aims in elections in March, and the nationalist Alternative for Germany is mired in internal squabbles, but the government establishment in both countries fears the potential of such movements in an age of discontent with mainstream parties.

Mr. Macron showed on Sunday that an expressly pro-EU candidate can triumph in elections. But his victory over Ms. Le Pen represents a reprieve for the EU, not salvation, Europe's policy elite knows.

French and German leaders now have a chance to revamp the eurozone and the wider EU. If they can't rebuild public trust in the European project, battered by a decade of crises, populist insurgents on the left and right will return strengthened in the next election cycle.

Economic growth is improving in the bloc, but it remains unevenly spread, and deep scars from the crisis persist, including high unemployment in France and Europe's indebted South.

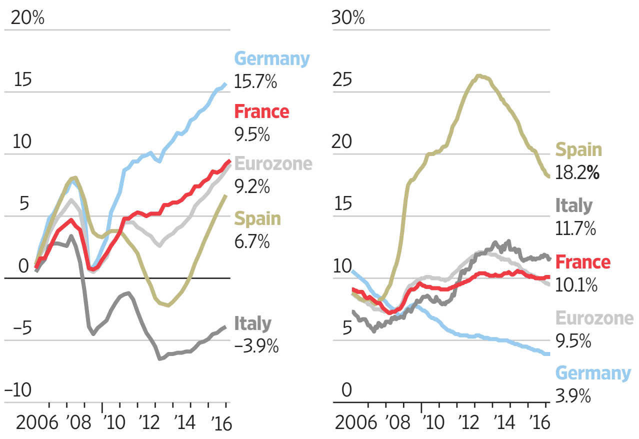
Economists widely agree the euro falls short of being an ideal currency union, because—in addition to the limited pan-European mobility of workers—the 19-country eurozone lacks common taxes, spending and borrowing, while its banking union is only half-built.

Such a deepening of the eurozone, however, risks fueling political opposition to a further loss of national sovereignty. The first big hurdle facing Mr. Macron, a 39-year-old centrist, is to convince a skeptical Berlin.

"For Macron to succeed, he needs a partner in Germany," said former European Central Bank director Jörg Asmussen. "If Macron can show that he is able to shape change in Europe, that would also help him domestically."

Disunited

Countries' fortunes have diverged in recent years under the euro.



Source: Eurostat

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ADAM BERRY/GETTY IMAGES

German Chancellor Angela Merkel in April

Last week, Mr. Asmussen joined with numerous, mainly left-of-center German politicians, economists and other public figures in a public call for Berlin to engage with Mr. Macron and not rebuff his ideas. The strength of anti-EU voter sentiment in France partly reflects the perception that Germany dominates Europe, their joint statement said.

The prevailing view in Chancellor Merkel's government, however, is that more steps toward a federal Europe would inflame anti-EU populism, rather than counter it.

Yet Berlin is also keen for Mr. Macron to succeed where outgoing President François Hollande failed: in shaking up a sluggish French economy. Economists say France needs to overhaul its heavily regulated labor market. The price if Mr. Macron were to fail, many policy makers across the EU fear, could well be victory in the 2022 presidential elections for Ms. Le Pen, a far-right, anti-EU nationalist.

German Foreign Minister Sigmar Gabriel, who recently stepped down as leader of the center-left Social Democrats, has welcomed Mr. Macron's call to reform the eurozone.

But his party, the junior partner in Ms. Merkel's governing coalition in Berlin, is deeply ambivalent about putting more of German taxpayers' money at Europe's disposal. Ms. Merkel's conservative Christian Democrats are even less eager.

Aware of the prevailing skepticism, Mr. Macron made his pitch to Germany in a speech at Berlin's Humboldt University in January. His language was diplomatic, but the subtext was clear: Germany's huge trade surpluses and fixation on fiscal austerity have hurt growth and support for the EU elsewhere in the continent.

Offering a "New Deal," Mr. Macron suggested France needed to win Germany's trust through overhauls to meet eurozone fiscal rules—and that Germany should accept that it can't sustain economic growth if other nations in the euro are struggling. "The euro is incomplete and cannot last without major reforms," he said.

Nigerian Militants Free 82 Chibok Girls

Some Boko Haram suspects are released, but government says no ransom was paid

By Joe Parkinson and Gbenga Akingbule

AGENCE FRANCE-PRESSE/GETTY IMAGES

Nigerian President Muhammadu Buhari on Sunday met in Abuja with some of the 82 Chibok girls recently released by Boko Haram.

ABUJA, Nigeria—Eighty-two of the nearly 300 Chibok schoolgirls seized three years ago by Boko Haram were freed in exchange for detained members of the jihadist group, the biggest breakthrough in the effort to recover the insurgency's most-famous captives.

Dozens of the women—dressed in brightly colored dresses given to them by Nigerian authorities upon their release—were escorted to Abuja by soldiers on Sunday for an audience with President Muhammadu Buhari before being reunited with their families. Media access was restricted, but images of the girls screened on state television showed some looking tired and confused by the attention after their lengthy captivity.

"This evening, I received 82 of our daughters, who have just regained their freedom after three years in Boko Haram captivity," Mr. Buhari said.

The fate of the girls—whose April 2014 kidnapping from the government school in the town of Chibok kindled the #BringBackOurGirls campaign—fixed global attention on the rampage of the Boko Haram insurgency across swaths of northern Nigeria. Then-first lady Michelle Obama tweeted a picture of herself holding a placard with the #BringBackOurGirls appeal. Mr. Buhari, elected in 2015, pledged to defeat the Islamic State-affiliated group and free the girls, the highest profile of the estimated 30,000 people the group has taken hostage.

The news was a boost for the embattled president, who has made hefty territorial gains against the insurgency since his 2015 election but struggled with illness and growing discontent amid Nigeria's worst economic recession in decades.

Hours later, the presidency confirmed he would return to London Sunday night for an undisclosed period of medical treatment. The president, who returned from extended leave in March, has in recent weeks missed three cabinet meetings and looked increasingly drawn, prompting growing concerns over his ability to govern.

"He decided to tarry a bit, due to the arrival of 82 Chibok girls who arrived [in] Abuja earlier in the day. The president wishes to assure all Nigerians that there is no cause for worry," the presidency said.

"The timing of the release is not coincidental. Buhari has been facing criticism within his own camp about his capacity to rule amid speculation over his health," said Gillian Parker, a Lagos-based analyst at Control Risks Group, a risk consultancy. "Buhari's second leave of absence this year will contribute even further to conjecture he is seriously unwell. This weekend's news is unlikely to be enough of a distraction from an ailing president."

The freeing of the girls this weekend, brokered by the International Committee of the Red Cross and the Swiss government, follows the release of 21 of the Chibok girls in October after talks with the militants.

The presidency on Sunday said "some Boko Haram suspects held by authorities," were released, but offered no further detail. One official with knowledge of the rescue operation said the girls were released near the town of Banki close to the border with Cameroon.

Sunday's release means 113 of the 276 kidnapped girls remain missing. Some relatives didn't live long enough to see their daughters go free.

For the families of those that remain, the news of the 82 girls was met with joy but also trepidation. Some captive girls have been forced into marriage, some raped, some enlisted as child soldiers. One escaped with a baby daughter born in captivity.

"This is very, very exciting news. For us, for the parents, for the Chibok community," said Bukky Shonibare, a founding member of the Bring Back Our Girls group, in Abuja. Emmanuel Yakubu, father to one of the kidnapped girls, traveled to Abuja from Chibok on Sunday morning in anticipation of the release.

"I don't know whether or not my daughter, Dorcas, is among the released girls. But whatever be the outcome, as a parent, I'm very happy at this huge number of released girls after three years in captivity," he said. It was unclear whether the daughter was among those released.

Nigeria's military, along with forces from Cameroon and Chad and the help of Western powers including the U.S. and France, has been gaining back territory from Boko Haram.

An internal battle for control between Abu Musab al-Barnawi, declared by Islamic State to be the group's new leader, and longtime Boko Haram leader Abubakar Shekau—has also slowed the group, which under Mr. Shekau pledged allegiance to Islamic State last year.

Signs that the militants were ready to talk had been building for several months.

Islamic State Leader In Afghanistan Killed

By Jessica Donati

KABUL—The U.S. military on Sunday said its forces killed Sheikh Abdul Hasib, Islamic State's leader in Afghanistan, in a joint raid with Afghan soldiers in the eastern Nangarhar province.

A combined force of U.S. Army Rangers and Afghan Special Forces—who were dropped into the Mohmand Valley near the border with Pakistan by helicopter—carried out the operation on the night of April 26 in which a number of the extremist group's top commanders also were killed, according to a U.S. military statement.

The U.S. military has since said it is investigating whether the two U.S. soldiers who died in the operation were killed by friendly fire.

"This successful joint operation is another important step in our relentless campaign," said General John Nicholson, the top commander of U.S. forces in Afghanistan. "This is the second ISIS-K emir we have killed in nine months, along with dozens of their leaders and hundreds of their fighters."

The operation took place in the same area where the U.S. military dropped one of the largest nonnuclear bombs in its arsenal, nicknamed the "Mother of All Bombs," on an Islamic State tunnel-and-cave complex.

In the weeks leading up to the blast, U.S. and Afghan forces killed more than a dozen Islamic State fighters, driving the militants out of villages that had been occupied for years into the mountains, according to Afghan special forces.

Residents there were returning home for the first time in years to inspect the damage. Locals interviewed by The Wall Street Journal during the visit to the area were supportive of the strike and hoped for compensation after years of hardship.

The Islamic State Khorasan, as the Afghan affiliate is known, emerged in Afghanistan in late 2014, as most coalition troops were withdrawing from the country. The group established a foothold in the east and has been working to win pockets of support in other parts of the country.

The U.S. military said Islamic State's Afghan leader was responsible for a recent attack on a military hospital in Kabul that killed more than 100 people.

Islamic State's presence in the area has shrunk in the weeks since U.S. and Afghan forces have pressed an offensive into its eastern stronghold.

RONEN ZVULUN/REUTERS

Construction work took place at the Israeli settlement of Ramot in the West Bank in January.

Israel Presses Trump on Vows

By Jay Solomon

NEW YORK—President Donald Trump came under increased pressure from the Israeli government to follow through on foreign-policy pledges he made during the campaign, including moving the U.S. Embassy to Jerusalem, days before he embarks on his trip to the Middle East.

Israeli Prime Minister Benjamin Netanyahu welcomed Mr. Trump's election, following eight years of butting heads with former President Barack Obama on issues including Israel's building in disputed territories.

But Mr. Trump's pledge this month to resume Mideast diplomacy has unnerved members of Mr. Netanyahu's cabinet, many of whom spoke at a conference on Sunday in New York. The U.S. leader is scheduled to visit Saudi Arabia, Israel and Europe beginning on May 19.

Some of Mr. Netanyahu's top aides questioned the nature of the Mideast peace process, which for decades has sought to establish an independent Palestinian state on lands in the West Bank and Gaza Strip. They sharply criticized the leadership of Palestinian Authority President Mahmoud Abbas, whom Mr. Trump welcomed to the White House last week.

Another, more pressing issue, is the status of the U.S. Embassy in Israel. Both Israel and the Palestinians claim Jerusalem as the capital of their states, making its status among the most contentious issues in the peace process. White House officials recently have said the status of the embassy is still under review.

WORLD WATCH

CHINA

April Exports Rose, Second Month in Row

China's exports rose for a second straight month in April, as external demand for goods from the world's largest economy continued to show improved strength.

Exports increased 8% in April from a year earlier, following growth of 16.4% in March, the General Administration of Customs said Monday. The value of shipments overseas had been forecast to grow by 10% according to economists polled by The Wall Street Journal.

—Grace Zhu

HAMAS

Islamist Movement Names New Leader

Hamas named Ismail Haniyeh as head of the Islamist movement's political arm, replacing Khaled Meshaal, who steps down after a decade in power.

Hamas dropped a call for Israel's destruction and accepted the notion of a Palestinian state based on Israeli borders before the 1967 Arab-Israeli war. The group said it would continue not to recognize Israel's right to exist and would eventually seek to control all of historic Palestine, making up Israeli territory, the West Bank and Gaza.

—Rory Jones

PRINT

Continued from Page One

Lords spokeswoman says. Rancor over the worth of that difference has pitted traditionalists against modernists.

"It's a great shame," says Mr. Gray, a Conservative lawmaker for 20 years. He resigned in protest from the Administration Committee, a panel that advises on parliamentary operations, after it voted 3-to-2 for paper in October. "This is destroying a piece of culture, history and tradition for no particular reason."

Paper does the job just as well, says Martyn Day, a Scottish National Party lawmaker on the panel who voted against parchment. "Vellum, to me, is just a waste of money."

Vellum is unquestionably more durable, says Professor Timothy Barrett, a University of Iowa expert on European paper. But well-made paper stored somewhere cool with low humidity, he says, will survive for centuries, if not millennia.

Britain's House of Lords switched to paper in 1999 with no reported untoward effects. Laws and resolutions of the U.S. government were printed on parchment until 1920, says Jane Fitzgerald, a National Archives archivist. Since then, they have gone on paper.

The antivellum movement is part of a broader modernist trend that Mr. Gray says is upsetting. He was irritated this year when the House of Commons clerks cast aside their wigs, ending a 300-year custom. That came on top of House Speaker John Bercow's dropping the traditional court dress to wear a suit, tie and gown.

"All these things, one by one, are disappearing," Mr. Gray says. "At the moment, there seems to be an awful rush toward modernization."

Parliament still adheres to some archaic traditions. Members don't use one another's names in the chamber, instead referring to "the honorable member" or "right honorable." When the speaker is elected, lawmakers drag him to his chair by parts of his suit and his hair.

GEOFFREY ROBINSON/REX FEATURES/ZUMA PRESS

Inside a workshop at William Cowley, a vellum manufacturer.

The vellum dispute comes as Parliament prepares to transfer 19,000 pieces of European Union law onto Britain's books to pave the way for an exit from the EU. This process, to avoid a legal vacuum once the U.K. leaves the bloc, would have been a bonanza for Paul Wright, manager of vellum manufacturer William Cowley, which supplies Parliament.

Mr. Wright says the Magna Carta, which in 1215 established the English-speaking world's rule of law, has remained pristine because it is printed on vellum. Paper lasts for 350 years under normal conditions, compared with vellum's 5,000 years, he says. The Dead Sea Scrolls, he points out, were parchment and remained preserved in a cave for more than 2,000 years.

"The Brexit documentation will be as important in 800 years' time as the Magna Carta is today," says Mr. Wright, whose family-owned company uses a secret process passed down over generations and supplies vellum for special documents around the world.

Parchment, unlike paper, is fire-resistant and difficult to tear, says Matthew Collins, a University of York archaeologist.

Vellum production goes back thousands of years. Craftspeople soak calfskin in lime for weeks, making it easier to scrape off fat and fur. They wash and stretch it onto a wooden frame, dry it and scrape it with a curved knife.

Documents in both materials are "readable and perfectly usable as records," says Adrian Brown, director of the parliamentary archives, which occupy 12 floors of dark rooms with records dating to 1497.

The House of Lords spokeswoman says the House of Commons's switching to paper would save at least £80,000 ($103,000) a year. Mr. Wright puts it at £26,000 a year.

In April 2016, the House of Commons voted to overturn a House of Lords recommendation to stop using vellum. Six months later, the Administration Committee advised against that vote. A parliamentary commission ratified the paper decision in January but agreed to print the covers of future acts on vellum.

It's "nonsense" that vellum won't be used, said U.K. Defense Secretary Michael Fallon, adding that efforts were under way to overturn the committee vote. Mr. Fallon, who has a 1662 vellum document from diarist Samuel Pepys, says paper isn't an adequate substitute. "We're not admitting defeat."

Calligrapher Patricia Lovett says losing a beloved tradition to save money makes no sense. "We send the queen in a coach drawn by horses in a crown to open Parliament," she says. "If you put a bottom line on everything, as accountants would do, she'd go to Parliament in a taxi in an ordinary frock."

GREATER NEW YORK

ATF Agents Help Police Fight Crime

BY ZOLAN KANNO-YOUNGS AND CORINNE RAMEY

A vest and ballistic shield labeled "ATF Police" are stashed in a corner of the Bronx field office of the Bureau of Alcohol, Tobacco, Firearms and Explosives.

The "police" label is for when federal agents go to suspects' homes to make arrests, said special agent Andrew Boss. "It's because people don't know what ATF is."

While the federal agency's local policing role may not be well known, law-enforcement officials say the agency is changing how some local crimes are investigated and prosecuted. Its agents are nearly always paired with New York Police Department detectives, and officials from both agencies say this relationship has improved in recent years.

When the ATF is involved, defendants are typically prosecuted under federal laws and are therefore more likely to cooperate with law-enforcement officials in bringing cases against other defendants, experts say.

"There's nothing scarier for a defendant than to be dragged into federal court," said Eugene O'Donnell, a professor at John Jay College of Criminal Justice. "It's well known in the streets that that's game, set and match."

Within the past year, the agency started a new local task force focused on arson and explosives, and expanded its firearms group to Brooklyn. Since October 2011, some 1,000 defendants have been indicted as a result of investigations that involved both the ATF and NYPD, the ATF said. In fiscal 2016, the ATF, which has about 100 agents statewide, worked with the NYPD on 236 investigations.

Critics, meanwhile, have questioned whether the small agency, which also enforces federal gun laws, should allocate its agents differently. "One of the concerns is whether it is the best use of ATF's limited resources to do some of these local partnerships that are focused on the kind of criminal offenses that fall within jurisdiction of local agencies," said Chelsea Parsons, vice president for guns and crime policy at the Center for American Progress, a left-leaning think tank.

Some lawmakers have called for eliminating the agency, pointing to management problems and scandals involving some of its agents. ATF officials say they have made changes to ensure this no longer happens.

In the New York City area, ATF cases have included commercial robberies, gun trafficking and gang raids. Recent efforts included investigating an explosion in Central Park that severely injured a teenager and a takedown of more than 120 gang members in the Bronx.

In the Bronx office, ATF agents work side by side with NYPD officials, who are given federal law enforcement training. One room, dubbed the vault, holds hundreds of guns and other evidence, ranging from a guitar case used to conceal firearms to a small cannon a Brooklyn motorcycle gang used in a video intended to threaten its rivals.

NYPD Lt. Keith Smith said his detectives who work with ATF contribute local policing knowledge. He said working with ATF allows access to federal wiretaps and other surveillance tools, in addition to more time to build cases.

Resulting cases, particularly ones where a gun is used to commit a violent crime or drug trafficking offense, carry "a big hammer" when charged in federal court, said special agent in charge Ashan M. Benedict. Defendants convicted of federal crimes are often sent to prisons outside of New York. And they often do more time in prison because of mandatory sentencing guidelines for many federal crimes.

"To break the back of gangs, you cannot send them to Rikers or state prison," said former NYPD Commissioner William Bratton. "They're just going to be around the homies. You have to ship them out to Utah."

Critics said locking up defendants far from their families doesn't result in long-term public safety. "The 'ship off, lock and throw away the key' mentality has never worked and only leads to broken families, broken lives and broken communities," said Tina Luongo, an attorney at public-defender organization the Legal Aid Society.

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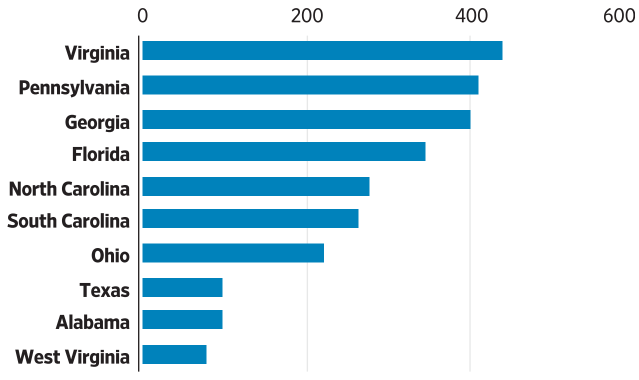
Investigations last year in which ATF agents worked with the NYPD

Out-of-State Guns

The top 10 states where guns recovered by law enforcement in New York in 2015 were originally purchased.



Note: Doesn't include New York state. In 2015, 1,350 guns recovered in New York were originally purchased within the state.
Source: Bureau of Alcohol, Tobacco, Firearms and Explosives

THE WALL STREET JOURNAL.

Cyclists Take a Spin Through the City

PETER J. SMITH FOR THE WALL STREET JOURNAL

READY TO ROLL: Tens of thousands massed at the start of the Five Boro Bike Tour on Sunday before heading out on a 40-mile ride.

More New Yorkers Go on Defense

BY THOMAS MACMILLAN

In a Manhattan elementary school auditorium, self-defense instructor Gabriella Belfiglio led a dozen students through a review of techniques. "Practice your voice," she said. "Let go! Front kick! Foot stomp!"

The students shouted along with Ms. Belfiglio, slamming their heels to the ground in unison to crush the insteps of imaginary attackers.

Following a divisive presidential campaign characterized at times by racially charged rhetoric, more New Yorkers have been signing up for self-defense and hate-crime intervention classes similar to the one recently held at P.S. 11 in Chelsea at the request of school parents, according to anti-violence and martial arts instructors.

The recent trend indicates New Yorkers' willingness to take matters into their own hands amid an increase in hate crimes in the city. New York Police Department statistics show that these crimes have nearly doubled this year, with a total of 171 between Jan. 1 and April 23, compared with 88 during the same period last year.

Not everyone thinks self-defense and hate-crime intervention training is the correct response. Stephen Davis, a spokesman for the NYPD, urged New Yorkers to focus on "self-awareness" first, and the Anti-Defamation League said the best thing to do is call the police.

Last month's training at P.S. 11 was led by instructors from the Center for Anti-Violence Education, an organization that teaches self-defense, violence prevention, and conflict de-escalation tactics.

Tracy Hobson, executive director of the New York City-based group has seen a 400% increase in requests for training compared with last year. She said the center offered 59 workshops between January and March this year, up from four in the same period last year.

Requests for training mostly have come from organizations representing Muslims, LGBT groups, immigrant populations and women, she said.

Patrick Lockton, head of the Krav Maga Institute in New York City, which teaches an Israeli system of combat designed for the street, said he has a waiting list of six months.

Gabrielle Rubin, who teaches a self-defense course called Female Awareness in Manhattan, said attendance at her sessions has doubled in the last three months.

"It's kind of like drawing a line in the sand," said Nancy Chinhar, a parent at P.S. 11 who organized the recent training.

As she left the P.S. 11 auditorium, Tatiana Sierota, a dog groomer from Brazil who lives in New York, said she took the class because an immigrant friend, also from Brazil, complained that she had been harassed on the street, and told to go back to her country.

"Right now we live in crazy times," Ms. Sierota said. "I want to defend people."

—Zolan Kanno-Youngs contributed to this article.

STEVE REMICH FOR THE WALL STREET JOURNAL

Carol Scott teaches skills such as how to defuse altercations in a workshop organized by the Center for Anti-Violence Education.

For Judges, Drinking Is All in a Day's Work

BY CHARLES PASSY

New Yorkers may enjoy indulging in a glass of wine or two. But how about sipping your way through about 100 different bottles in a single day?

That was the challenge the 18 judges at the New York International Wine Competition faced Sunday. And it was one they met with a certain spunk, savvy and sense of humor.

As Christopher Struck, a judge who works as a sommelier at Manhattan's Union Square Cafe, declared of a Cabernet Sauvignon from California that he said had almost an antiseptic quality: "It tastes like a doctor's office."

The seven-year-old annual competition, held at the 3 West Club in Midtown, has grown considerably, says founder Adam Levy, a computer-security specialist who turned his passion for all things alcoholic—he also runs beer and spirits competitions—into nearly a second full-time job.

The first year the wine event was held, about 300 bottles were submitted for consideration; this year there were 800. Mr. Levy says he barely can keep up with all the entries, which come from wineries throughout the U.S. and Europe, in addition to Australia and South Africa.

Entrants pay a fee for each bottle, starting at $85. In turn, they get graded by the judges, typically wine professionals who work in restaurants or stores, on a scale that ranges from the top double gold to "no medal."

Wineries often use good ratings in their marketing.

Landlord Freebies Are on the Rise

BY KEIKO MORRIS

PETER RYAN

Manhattan office landlords are boosting their use of sweeteners such as free rent and remodeling cash to entice tenants to rent space, according to brokers and market reports.

The average value of free-rent periods and landlord payments for remodeling top-tier office space, known as concessions, hit $173 a square foot in the first quarter in Midtown, up 3.3% from a year earlier and about 2½ times its level a decade ago, according to research by real-estate services firm **Savills Studley**.

PROPERTY

Competition from new office space, especially on the far West Side and downtown, and a long-term trend of tenants packing more people into less square feet are forcing landlords' hands, brokers said. A bevy of new projects opening soon are adding to landlords' stress.

"They are well aware of a whole bunch of space the market knows is available but is not yet in the [vacancy] statistics," said Matthew Barlow, a Savills Studley executive vice president and director. "Landlords are trying to get ahead of those headlines and rent as much space as they can."

A few years ago, owners of office buildings were offering rent abatements between five to seven months, and tenant-improvement contributions of $60 to $70 a square foot, brokers and real-estate executives said. Today, brokers said, tenants get offers of anywhere from 12 to 15 months of free rent and landlord contributions reaching $85 to more than $100 a square foot.

In the first quarter, the average tenant-improvement allowance for Midtown's top-end office space was $87.39 a square foot, with a rent abatement period of 10.25 months, according to Savills Studley.

While concessions have been climbing since the last recession, brokers and analysts caution the increased incentives aren't viewed as a sign of impending doom in the office market. Historically low interest rates, for example, make the concessions more affordable than in past real estate cycles.

"Higher concessions are not always a sign of a weak market," said Tristan Ashby, director of New York research for JLL. "As long as interest rates are low, owners would rather offer larger concessions today for higher face rents going forward."

Among those most aggressive with tenant concessions have been landlords interested in preserving or boosting rent levels to maintain or increase the building's value, brokers and real-estate executives said. These owners can negotiate higher rents with tenants, offering to cover a significant portion of construction costs and sometimes even taking on the complex task of managing an office buildout. They can make their return when they refinance, recapitalize or sell their properties.

Companies are hewing to the conservative approach they adopted after the financial crisis. "No one wanted to spend capital," said Paul Myers, executive vice president at real estate services firm CBRE Group Inc. "We've never 100% gotten away from that mode, so landlords have to give large work letters to keep up with construction costs."

The rise in landlord concessions for office tenants isn't distributed evenly throughout Manhattan's submarkets and often depends on the type of building and its owners' investing goals.

One of New York's biggest landlords, SL Green Realty Corp., said it was holding the line on tenant concessions in the first quarter, averaging $20 a square foot in improvement contributions for renewal deals and about $63 a square foot for new deals, the company's chief executive said in a conference call last month.

Rising concessions in the broader market have had less of an effect in the small-tenant market, said Brian Steinwurtzel, co-chief executive of Newmark Holdings, which caters to small businesses. Many older buildings geared toward smaller tenants have been converted to residential uses, reducing competition for Newmark.

Long Island Tops City Office Design

Companies building out their office interiors spend more in the suburbs of Long Island than businesses outfitting offices in San Francisco and New York City, according to a report for real-estate services firm JLL.

Although both coastal cities recorded higher overall costs to fit out offices, the average out-of-pocket expense for companies on Long Island was $196.18 a square foot, more than $17 higher than the amount spent by tenants in New York City, JLL reported.

Rising construction costs are partly to blame, but landlords offering bigger incentives to lure tenants in pricier markets such as New York City is the main reason, researchers said.

Long Island's proximity to New York City translates into construction costs that are slightly less than those in the city, but Long Island tenants received an average of $35 a square foot in tenant improvement allowances, compared with $65 in New York City, the report said. "New York rents are a lot higher, so in order to entice tenants to pay those kinds of rents, those landlords tend to offer higher concession packages," said Tristan Ashby, director of New York research for JLL.

A labor shortage in the construction industry has plagued the U.S. and led to higher costs, as demand for those services has increased, said Mason Mularoni, a senior research analyst at JLL. Many construction workers left the industry during the last recession, he said.

Moreover, the preferred office design requires higher-end finishes. "The polished concrete floors and the industrial look that people are going for, some of that is more expensive than the more traditional offices," Mr. Ashby said.

—Keiko Morris

PROPERTY WATCH

BRONX

Onetime Rail Station Gets on a New Track

Developers are revamping a former railway station in the Bronx in a bid to attract more dining diversity to the neighborhood.

Urban revitalization adviser and developer Majora Carter is teaming up with Slayton Ventures to restore a building that sits at the gateway of the Hunts Point community. The partners envision creating a hip, affordable dining spot, possibly a food-hall operation with numerous vendors offering various options, Ms. Carter said.

"Variety is something we don't have," Ms. Carter said. "We know dollars leave our community because we don't have the kind of quality that speaks to people of diverse economic profiles."

ABS Partners Real Estate LLC is marketing the $2 million project to revitalize the property, an early 20th-century building designed by Woolworth Building architect Cass Gilbert.

Situated near a subway station, the building's location promises a lot of foot traffic, said Joe Italiaander, an associate at ABS Partners. Despite the large residential and commercial population in the area, the neighborhood lacks food options, he said.

The developers are in the process of selecting architects, and plan to install a new facade and roof, as well bathrooms and kitchens. Work is expected to begin this summer and be completed in the fall.

Neighborhoods to the south of Hunts Point have created buzz recently because of residential projects under way, and brokers are hoping to draw attention north, where commercial and residential projects also are rising. The 4,500-square-foot building, with its high-arched reinforced-concrete ceilings and distinct dormers provide an attractive venue, Ms. Carter said.

The building once served as a railway station, but later was discontinued. Ms. Carter said she remembers her father, a Pullman porter, was able to disembark from the train close to the discontinued station building and walk to their home nearby. Amtrak, the owner, later leased out the building for retail.

Ms. Carter's company, Majora Carter Group LLC, secured a permanent easement agreement from Amtrak for $1.

MANHATTAN

Developers Picked for Far West Side Project

The New York City Economic Development Corp. has tapped a development team to transform a far West Side parking lot into a mixed-use tower with affordable housing, offices and dormitories.

Radson Development and Kingspoint Heights Development were selected for their proposal to build a project with an all-affordable-housing component, a feature for which the community board and the New York City Council member representing the increasingly pricey area strongly advocated. The proposed tower, which is just shy of 500 feet, will rise near West 39th Street at 495 11th Ave., now occupied by a New York Police Department parking lot.

"To get a 100% affordable-housing project on a city-owned site is huge for this district," said New York City Councilman Corey Johnson. "The area has become a lot more expensive and there is not enough affordable housing being produced."

The joint venture was selected for its proposal to build 234 affordable apartments, 200,000 square feet of office space, 80,000 square feet of dorms, a 12,000-square-foot grocery store and amenities including a gym and food court, according to the city and developers.

The proposal also would provide a new parking facility for the police department. The commercial space would subsidize the affordable housing.

The development is just north of the Javits Center and not far from the office and residential towers rising in the Hudson Yards District. Many of the other projects in the area are catering to the high-end sector, said Daniel Rad, a principal at Radson Development.

The development companies, both of which have experience in the affordable sector, wanted to work on a project with 100% affordable housing that would help maintain a mixed-income environment that is traditional to the neighborhood, Mr. Rad said.

The development will have to go through the city's zoning process. Developers hope to break ground in the fall of 2019 and complete the project in the winter of 2022.

—Keiko Morris

LIFE & ARTS

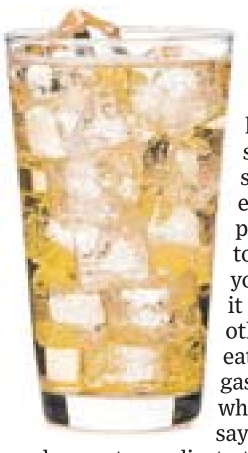
BURNING QUESTION
By Heidi Mitchell

Can Soda Soothe Your Stomach?

FOR MANY PEOPLE who grew up in the 1970s, mom had a quick remedy for an upset stomach: a few sips of soda. Those little bubbles and hit of sugar were said to alleviate the queasy feeling that comes from eating a massive meal or not-too-fresh fish. Is there any science to back up this claim? One expert, Alexandra Gutierrez, a gastroenterologist at **Washington University in St. Louis**, explains how the stomach "feels" upset and the historic significance of the kola bean.

Gut Check

Humans don't have pain receptors in their gastrointestinal (GI) tract. "The only thing your stomach, intestines and colon feel are distention," says Dr. Gutierrez, who specializes in inflammatory bowel disease. The stomach should only hold about 8 oz. of food at one time—though it has the ability to distend to carry a full gallon. After gulfing down a meatball sub, most people become over-full and bloated, which feels like pain or queasiness. A meal high in fat also decreases motility, further enhancing that stuffed, nauseous sensation. "If you eat bad or poorly prepared food with toxic bacteria in it, your body will eject it one way or another. But if you overeat, you'll likely have gas and distention, which can feel awful," says Dr. Gutierrez. The only way to eradicate that feeling is to get the food out of the stomach and into intestinal tract through chemical breakdown and physical movement of the food.



Mom's No-So-Scientific Cure

There is no medical evidence to suggest that drinking a carbonated soda will calm the stomach, says the medical school professor, but the power of persuasion can be strong. Plus, there is anthropological lore buried in the age-old remedy: Coca-Cola was originally made with real kola berries, which some African cultures would chew during celebrations where big meals were served.

"The berries are naturally caffeinated, and caffeine activates the GI tract," says Dr. Gutierrez. These days colas no longer use kola beans, and there are other ways to get GI-tract-jumpstarting caffeine, such as coffee," says Dr. Gutierrez. There may also be an upside to the effervescence: as those tiny bubbles pop, they may encourage motility by triggering the GI tract to move into high gear. Still, she says, the nausea-relieving benefits might be offset by the high volume of sugar in a typical soda.

Nature's Cures

The feeling of an upset stomach can also be caused by bacteria-induced inflammation that might be triggered by various medications, and there are natural anti-inflammatories.

Turmeric or saffron can be boiled and drank as a tea to help bring down distention. Fresh ginger sliced into water or club soda should also soothe the stomach. Ginger ale typically doesn't contain real ginger, though.

ISTOCK

EXHIBITS

The Olympics of the Art World

The Venice Biennale is steering clear of politics this year and exploring light themes

BY KELLY CROW

THE VENICE BIENNALE is trying to lighten up. Organizers of the century-old exhibition of contemporary art, which opens to the public May 13, encouraged artists in its main show to steer clear of geopolitical conflict and focus instead on playful themes—joy, fear, color, time and sexual freedom.

The tenor of the exhibition, which takes place in pavilions and piazzas all over town, is largely determined by the biennial's sprawling main show, "Viva Arte Viva." This roundup of 120 new and established artists was picked by the biennial's artistic director Christine Macel, a former Centre Pompidou curator. Her two predecessors focused on folksy, self-taught artists and political artists from marginalized regions—but Ms. Macel's choices suggest she's projecting a playful tone. She has organized her galleries like a book, with artists' stories unfolding in rooms under headings like "The Pavilion of Time and Infinity."

"In a world full of conflicts and shocks, art bears witness to the most precious part of what makes us human," she said in a statement, adding that she hopes to hold up the rollicking world of the artist's imagination as an antidote to geopolitical ills.

Rising stars this year include Julian Charriere, a Swiss artist based in Berlin whose one-ton coconut cannon for the recent Antarctic Biennial was confiscated by German police. His last project in Venice caused a stir because it involved dousing the city's pigeons in brightly colored powder. This time, he is showing a more sober piece, "Future Fossil Spaces," a room of so-called ruins he's built using striated bricks carved from the world's largest salt flat in Bolivia's Andes mountains.

'Lake Valley,' left, is an example of work by Rachel Rose, whose work will appear at the Venice Biennale. 'The Mountain,' below, by Moataz Nasr, also will be exhibited at the biennial.

Another up-and-comer is Rachel Rose, a New York artist whose haunting video work from 2015, "Everything and More," was inspired by an interview with astronaut David Wolf. Organizers asked Ms. Rose to keep her Venice piece a secret until the biennial opens, said her gallery Pilar Corrias.

Edi Rama, an artist whose day job is prime minister of Albania, is more forthcoming about his contribution: a 62-foot-long sheet of wallpaper he's designed using colorful doodles he first drew on scratchpads and copies of government documents. Mr. Rama, a former art professor who taught art star Anri Sala, said he often draws during phone calls at work because he finds it "calming." "My drawings only became art after they left my office," he said, "so to show them in Venice is a dream."

Along with giving younger artists their breakout moment, Venice gives curators a chance to validate older artists who may have been overlooked. Expect a reassessment of Irma Blank, an artist born in Ger-

Please see VENICE page A14

FROM TOP: GIULIO SQUILLACCIOTTI; RACHEL ROSE/PILAR CORRIAS GALLERY, LONDON; MOATAZ NASR/GALLERIA CONTINUA

HEALTH

TREE THERAPY? 'FOREST BATHERS' SAY IT HELPS

JEREMIE SOUTEYRAT FOR THE WALL STREET JOURNAL

Kazuhiro Kouriki, in green jacket, led hikers, left to right, Tsubasa Funanami, Shota Igarashi and Tomoya Oya on a forest-bathing trek last month in Japan.

BY SURYATAPA BHATTACHARYA

Shinano, Japan

ON A TREK THROUGH a snowy western mountain range, a forest guide points to a grove of evergreen Japanese red cedar trees, and hikers gather around to take deep breaths.

They call themselves forest bathers, part of a growing movement that believes immersing oneself in nature and in the chemicals plants and trees emit has unexpected medical benefits. The trip is part of their orientation as new employees of a maker of power devices.

"Even if you can't smell them, they are there," the guide, Kazuhiro Kouriki, says of phytoncides, or chemicals emitted by some plants to protect themselves from insects and germs. Studies suggest that taking in the air around certain kinds of trees lowers stress and increases focus, Mr. Kouriki says.

The research isn't definitive, but from Japan to Hollywood, forest bathers swear by the therapeutic effects of trees. Justin Bieber is a fan, posting photos of himself on Instagram enjoying nature. Gwyneth Paltrow recommended it in her newsletter, and some resorts in the U.S. have started to offer forest-bathing programs.

Japan's government has spent millions of dollars promoting forest bathing, a term translated from the Japanese *shinrinyoku*, and it funds research into the possible benefits. Some 62 forests and wooded paths have passed a gauntlet of tests to be designated

Please see FORESTS page A15

VENICE

Continued from page A13

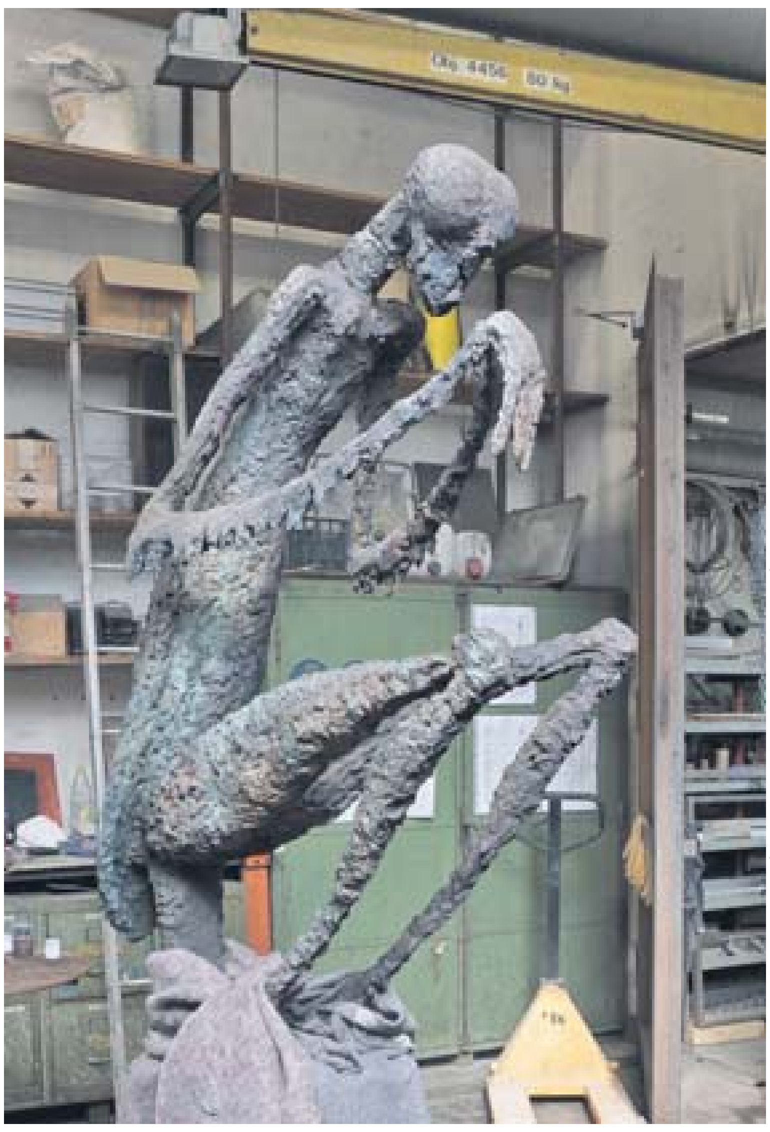
many in 1934 who now lives in Italy and is known for transcribing entire books and newspapers into slender script that's unreadable—a gesture that turns language into line. Her dealer Alison Jacques said Ms. Blank will show some of her earliest pieces from the late 1960s. Sam Gilliam, a Washington-based painter, is also making a return appearance 45 years after he became the second African-American artist to show in the biennial. This time, his dealer Kurt Mueller said Mr. Gilliam is making a "spectacular" new painting that nods to his earlier Color Field breakthroughs.

In addition to the main show, 85 nations are participating with their own shows around town, including first-timers Nigeria and the tiny Pacific island of Kiribati. Malta is back after a 17-year hiatus. Dozens of art foundations, museums and private collectors are also arranging separate exhibits citywide—a collective effort that is expected to draw 300,000 people to Venice over the next seven months, organizers say. Exhibitions run through Nov. 26.

The national pavilions will feature plenty of social critique. Tunisia enlisted a German company known for making most of the world's encoded security papers to design an imitation travel document. Curator Lina Lazaar said Tunisian migrants who had previously been unable to secure their own visas to Italy intend to hand out 100,000 of these "freesas" at kiosks citywide. "Because of Venice, we were able to get them in," Ms. Lazaar said.

James Lee Byars' 65-foot-tall "Golden Tower" structure will also go up along the Grand Canal near the Accademia museum; it was gilded by the same Italian firm that gold-leafed Versailles, and Byars' dealer Gordon Veneklasen said, "It's meant to remind us that art can transform humanity."

Here are some other national highlights.



FROM LEFT: ADMIRE KAMUDZENGERERE/CATINCA TABACARU GALLERY; IACOPO SERI/NATIONAL GALLERY OF CANADA

A bronze sculpture that will be exhibited in the Canadian pavilion by Geoffrey Farmer, right. 'Untitled' by Admire Kamudzengerere, above.

U.S.A.

Los Angeles artist Mark Bradford is already a museum mainstay, but that doesn't mean he took a casual approach to representing the U.S. "The significance of Venice rises up over you like Atlantis in the ocean," Mr. Bradford said. His response: "I started swimming." Pavilion curator Christopher Bedford said the artist, who is known for sanding and layering found paper into abstracts, "wrung himself out" for the occasion with new sculptures like "Spoiled Foot." This red, cellular blob will be suspended from the ceiling in a way that forces viewers to inch around it, an uneasy scenario that Mr. Bradford said matches his current sentiments about his country.

CANADA

Canadian artist Geoffrey Farmer is known for attaching paper cutouts of people and places that fascinate him onto spindly wooden sticks and arranging the multitudes into a sort of sprouted, visual encyclopedia. But for Venice, he wanted to "shift to something new," so he teamed up with a Swiss foundry to help him turn the Canadian pavilion into a "fountain," he said. Mr. Farmer's new bronze sculptures still delve into dense histories: This time he reveals a traumatic secret involving his grandfather.

POLAND

When Los Angeles-based artist Sharon Lockhart went to Poland eight years ago for a show, she fell hard for its people and has since traveled back nearly two dozen times to make films and mentor teenagers she befriended at a home for young women in Rudzienko called the Youth Center for Socio-Therapy. For Venice, she said she enlisted 47 girls from the center to comb through back issues of "Little Review," a popular children's weekly that ran in Poland in the 1920s and 1930s. The girls picked 29 issues to be translated into English, and Ms. Lockhart will distribute them, once a week, at the Polish pavilion. (She and the girls are writing and editing their own new issue of the "Little Review.")

ZIMBABWE

Zimbabwe's artists are gaining major traction among collectors in Africa and beyond right now. They are holding a group show of works by modern master sculptor Sylvester Mubayi and young upstarts like architect Dana Whabira and painters Charles Bhebhe and Admire Kamudzengerere. Mr. Kamudzengerere produced a series of expressive portraits printed on Harare phone book pages in a nod to a belief that people too often get reduced to numbers and statistics.

EGYPT

Egyptian artist Moataz Nasr has carted dirt and bricks from home to build an immersive backdrop for his latest multi-screen video installation, "The Mountain," which chronicles the day—and night—of a fictional Egyptian village. As the hours tick by, its residents appear to grow increasingly suspicious, but the reason seems unclear. His dealer Mario Cristiani said Mr. Nasr wanted to show "fear from a poetic point of view."

EXHIBITION REVIEW

At the Birth of Anthropology

BY EDWARD ROTHSTEIN

PRESIDENT AND FELLOWS OF HARVARD COLLEGE, PEABODY MUSEUM OF ARCHAEOLOGY & ETHNOLOGY (3)

Clockwise from above: Haida Effigy Pipe c. 1840; Innu sealskin hold-all; Hopewell face effigy, 200 B.C.-A.D. 400

Cambridge, Mass.

AMONG THE innovations that Chicago's 1893 World's Columbian Exposition left behind are Cracker Jack, the Ferris Wheel, and American anthropology. The last is only a bit of an exaggeration, since as we learn at a striking new exhibition at Harvard's Peabody Museum of Archaeology & Ethnology, the scholar who oversaw the fair's anthropology pavilion, sent out expeditions to collect artifacts, and gathered its "live exhibits" was the man who turned the Peabody into a major collecting and teaching institution for anthropology—its second director, Frederic W. Putnam.

Anthropology was a joint creation of museum and fair. Typically both offer spectacular displays, though one is meant to be enduring and disciplined, the other evanescent and enticing. Both also left their mark on the nascent field. That is one theme of "All the World Is Here: Harvard's Peabody Museum and the Invention of American Anthropology," which the Peabody is mounting for its 150th anniversary. The exhibition is a nuanced tribute to the museum, to the 1893 fair, and to a discipline whose origins are still riven by political debate.

The key figure is Putnam, Peabody's curator from 1874 to 1909. The first professor of anthropology ("ethnology") at Harvard, he developed the anthropology program at the American Museum of Natural History in New York and was instrumental at Chicago's Field Museum of Natural History and the University of California at Berkeley. His assistant in Chicago was Franz Boas, who later developed cultural anthropology. They treated the fair as the museum's popular counterpart.

This exhibition cites Otis T. Mason in 1893, curator of the Smithsonian's Bureau of American Ethnology: "The World's Columbian Exposition was one vast anthropological revelation. Not all mankind were there, but either in person or pictures their representatives were." The exposition cost $46 million ($1.2 billion today) with some 65,000 wide-ranging exhibits. Open for just six months, it attracted 27 million visitors. Those visitors became aware of anthropology through the displays on the Midway Plaisance. They must have also associated the new discipline with their own superiority, because that attitude was implicit.

There's the rub. The birth of anthropology was accompanied by condescension toward the cultures studied. Putnam exhibited Inuit and American Indian cultures at the exposition, which was celebrating the 400th anniversary of Columbus's "discovery" of America, partly because they showed what might have been without European influence. And we see here calipers and measurement tools like those shown at the fair as instruments of "physical anthropology," a discipline associated with racial differentiation. Another display points out the fair's crude treatment of African-Americans, citing Frederick Douglass: "Why are not the colored people, who constitute so large an element of the American population, and who have contributed so large a share to American greatness, more visibly present?"

Condescension was also mixed in with what the exhibition calls "exoticism, eroticism, and commercialism" in the "live" displays. A book on a touch-screen—"Portrait Types of the Midway Plaisance"—describes cultural "types" that veer into stereotypes.

Such was 1893 anthropology. But had any non-Western culture ever attempted a comparable survey? Had any examined human variation, doing it as much justice as knowledge then allowed? This was a great achievement too often dismissed by politically charged contemporary judgments. Finding a balance is not easy; condescension always is.

In about 3,500 square feet, the exhibition finds that balance. The overall impact is clear as we survey the museum's early decades: A discipline was being born. Putnam studied the "Mound Builders" of the Midwest, cultures that created enormous earthworks still not fully understood. He preserved Ohio's "Serpent Mound," convincing donors to buy its 60 acres and deed them to Ohio in 1890, creating the nation's first state park. Putnam also sponsored Robert Peary on an expedition to Greenland, where a dog sledge on display was used. And in 1890, the museum sent its first expedition to the Maya ruins in the Copan Valley of Honduras. Some plaster casts here are more detailed than the eroding originals.

The fair's spirit also peeks through. Here is P.T. Barnum's 1842 "Feejee mermaid"—a foot-long fish body with a human head. It is made of papier-mâché—ready for examination by some future cultural anthropologist.

All the World Is Here: Harvard's Peabody Museum & the Invention of American Anthropology
Peabody Museum of Archaeology & Ethnology,

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

FORESTS

Continued from page A13

therapeutic by the Forest Therapy Society, a Tokyo-based nonprofit.

Local authorities sometimes organize checkups by medical doctors under a canopy of cedars, while companies send new employees into the woods for a therapeutic stroll ahead of the grinding workload new hires here face.

"At any company, people feel stress and we thought perhaps we could keep our new recruits better and longer if we gave them the opportunity to learn what stress is and how to cope with it," says Chieko Uchiyama, a personnel manager at TDK-Lambda, the TDK Corp. unit that organized the recent mountain trip.

Scientists studying forest bathing focus on the compounds trees emit. They reason that if swallowing certain plants can have medicinal effects—aspirin, for example, is derived from a substance in willow bark—breathing in the compounds may similarly be therapeutic.

A study published last year by Qing Li of Nippon Medical School in Tokyo had a group of 19 middle-aged men walk through an urban area in Tokyo and, a week later, take a forest walk. The men had higher levels of a fat-burning hormone after the walk in the forest.

Earlier studies, including one published in 2008 in the Journal of Biological Regulators and Homeostatic Agents, analyzed findings of forest bathing from 13 female nurses between ages 25 and 43. It showed exposure to phytoncides increased the activity of antimicrobial proteins released by killer cells of the immune system. That could have implications for research into anticancer proteins, Dr. Li says, although little follow-up has been done. In 2018, he will embark on a multiyear study to measure the effect of forest bathing on high blood pressure and mild depression.

"My goal is to get it listed as therapy, so it can be prescribed," Dr. Li says.

For his studies, he has struggled to recruit subjects who are willing to travel several hours from Tokyo and have their blood taken after some time in the mountains. Local volunteers take regular walks in the forest or have some exposure, so the results "are not as dramatic," he says.

Some believe forest bathing was imported to Japan from Europe and adopted by the government in the 1980s, while others trace the practice to Japan's native Shinto religion, which advocates communing with nature.

In Yoshifumi Miyazaki's office at the environmental-science department of Chiba University near Tokyo, a photo shows him speaking with the Crown Prince Naruhito and Princess Masako. The heir to the Japanese throne and his wife stopped by the university last year for a presentation on the physiological effects of flowers, forests and trees, in particular the *hinoki*, a Japanese cypress.

For more than a decade, Dr. Miyazaki has studied measures like heart-rate and cortisol levels to determine whether breathing in compounds from *hinoki* oil can affect stress. His most recent research looks at how to reduce stress in wheelchair-bound seniors in need of rehabilitation so they can do physical therapy better.

He says he wants to re-create the outdoors for people too old or sick to venture out. "It will be a way to raise the quality of life," says Dr. Miyazaki, whose business card is printed on a sliver of *hinoki*.

Back in the mountains, Tsubasa Funanami, a 22-year-old TDK-Lambda new employee, looks up at the 60-foot-tall trees and takes several deep breaths. Before the trip, he had questioned whether there was much point in forest bathing, but now he stares at the cluster of cedars and smiles.

Mr. Kouriki, the guide, then leads the forest bathers to the shore of Lake Nojiri. He pulls out a stethoscope and invites the trekkers to take turns listening to underwater sound. Mr. Funanami places the stethoscope's chestpiece against a rock submerged in the lake and listens. "I've never been there but it sounds like space," he says. Moments later, seated on a rock and staring out at the lake, he adds: "I feel like time is flowing slower than usual."

—Chieko Tsuneoka contributed to this article.

JEREMIE SOUTEYRAT FOR THE WALL STREET JOURNAL

Tomoya Oya, top, took a nap during last month's forest-bathing session; his colleague Shota Igarashi listened to underwater sounds.

SPORTS

HEARD ON THE FIELD

NICK TURCHIARO/USA TODAY/REUTERS

Can Anyone Beat the Warriors and Cavaliers?

The NBA playoffs have only proven what anyone who watches basketball already suspected: The Cleveland Cavaliers are better than they were this season, the Golden State Warriors are better than they were last season, and the two best teams in the league are bound to play each other again in the Finals.

The second round of the NBA postseason is like a juice cleanse. It lasts several weeks, follows something a little too indulgent and precedes something a lot more exciting. It appears increasingly likely that will be the most exciting outcome imaginable: a third consecutive showdown between teams that are still undefeated. That's right. The Warriors and Cavaliers are now 15-0 in the playoffs.

The Warriors won 73 games last year—so all they did this season was get better. They only won 67 games, but win-loss record isn't always the most useful measure of quality in today's NBA. Golden State outscored its opponents by an outrageous 12.1 points per 100 possessions, more than its 11.6 margin last year, with an offense that was even more efficient. Stephen Curry (pictured) and Klay Thompson can still shoot, and now they have Kevin Durant.

The Cavs have LeBron James, whose dominant performance in the playoffs makes it seem like he treats the entire regular season like an 82-game calisthenics session.

The reigning NBA champs were hounded by skepticism when the postseason began. They had fallen back to second place in the East in large part because moths played better defense. Cleveland's defense, in fact, was the worst of any playoff team.

But it has become clear that the Cavs' regular-season performance wasn't indicative of future results. They swept the Indiana Pacers in the first round and then dusted off their brooms Sunday to sweep the Toronto Raptors, too.

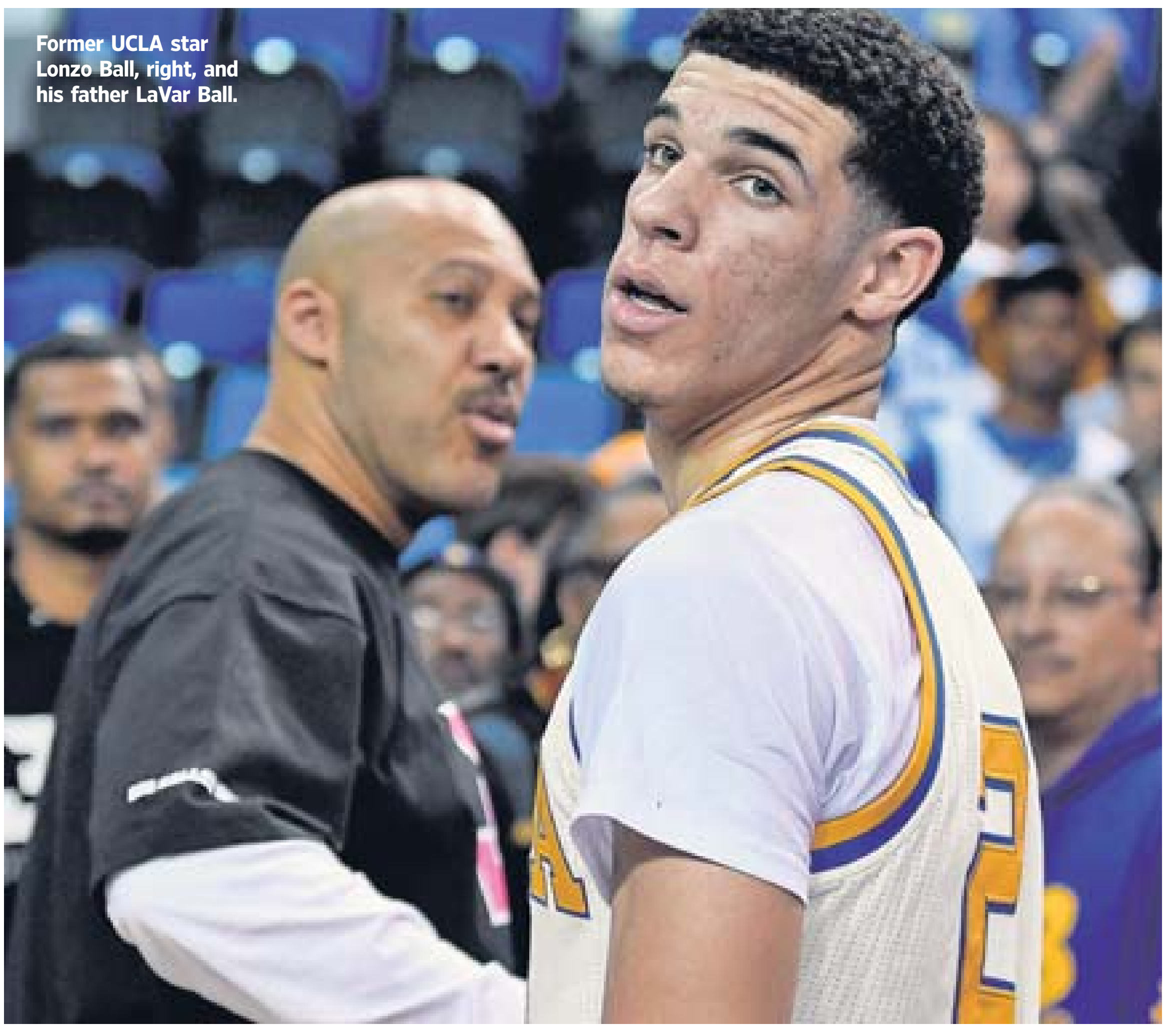
Cleveland has demoralized teams that dared to think the East was there for the taking and reminded the rest of the NBA that only two teams really matter—and those teams still haven't lost in the playoffs.

—Ben Cohen

BASKETBALL | By Jason Gay

LaVar Ball and the NBA's Daddy Issues

An over-the-top sports father has basketball on edge. What does his talented son really want?



Former UCLA star Lonzo Ball, right, and his father LaVar Ball.

MARK J. TERRILL/ASSOCIATED PRESS

By now, you've probably heard about LaVar Ball, the father of Lonzo Ball, the talented and recently departed UCLA college-basketball star who is considered a certain NBA lottery pick this June. Over the last several months, Ball *père* has whirled himself into a one-man media tornado as a spokesperson for his point-guard son and the entire Ball brood. Let's just go over the LaVarlights: Ball claimed 19-year-old Lonzo, who has precisely zero minutes of professional basketball experience, is already a superior player to reigning back-to-back NBA Most Valuable Player Steph Curry; he told USA Today that, in his own playing prime, he (LaVar—not Lonzo) would have crushed Michael Jordan in a one-on-one contest; he picked a bizarre fight with LeBron James over who would prove to be the better basketball dad (Besides Lonzo, Ball has two other hoops-playing sons, LiAngelo and LaMelo, both in high school; James's kids are, uh, 12 and 9). LaVar also appeared as a celebrated guest on sports TV asylums like FS1's "Undisputed" and ESPN's "First Take," where he...well, he fit in perfectly.

The rest of the sports media, it seems, is amid a prolonged and contradictory concern spasm over LaVar Ball, doing that time-honored maneuver in which it blasts someone for craving attention—while lavishing him with more attention. (The college-basketball shouter Dick Vitale recently named Ball to his "All-Wacko Team," which, though I love me some Dickie V., is like having Cap'n Crunch blast your breakfast as unhealthy.) The consensus anxiety is that LaVar's unfiltered talk is damaging Lonzo's potential as a player and a business—that Dad is turning off sponsors, and perhaps even teams. That belief peaked a couple of weeks back with an ESPN report that apparel companies Nike, Adidas and Under Armour passed on signing Lonzo—reportedly because LaVar insisted, among other demands, that the companies enter a licensing agreement with LaVar's own, existing apparel line, Big Baller Brand, which currently makes hats, T-shirts and other casual wear that Turtle would have worn a decade ago on "Entourage."

If you thought the shoe mafia's public rebuke would shame LaVar Ball, think again. Late last week, he grandly announced the upcoming release of Lonzo's own shoe, the ZO2 Prime. Black with gold highlights, low cut, and absent of any noticeable footwear innovation, it is mostly an aesthetic challenger to reigning shoe Ishtar, Curry's Under Armour Chef 2 Lows. If the bland, white Chef 2 Lows were mocked as basketball sneakers for an assisted living home, the ZO2s look like something Frankenstein's monster might wear to a wake.

Oh there's also this: a pair of ZO2s cost $495. Did I mention this is a pair of basketball sneakers named for a player who has yet to play in the NBA? Predictably, social media set upon the ZO2 Prime like a fresh carcass, mocking LaVar's hubris, the shoe's design and its spectacular price. Shaquille O'Neal scolded LaVar for price gouging young consumers. "Real Big Baller Brands don't overcharge kids for shoes," the NBA Hall of Famer wrote on Twitter. When Golden State Warriors interim coach Mike Brown was asked if he'd buy a pair of $500 sneakers for his children, he burst into a fit of gleeful laughter. None of this seemed to bother LaVar, who tweeted "if you can't afford the ZO2's, you're NOT a BIG BALLER."

On and on it will go, presumably at least until Lonzo is picked early in the NBA Draft on June 22—in the tastiest scenario, to Ball's hometown team, the Lakers. Will The LaVar Show impact where Lonzo's picked? Probably not. Both ESPN and the New York Daily News sniffed around; neither found a GM who indicated, even privately, that Dad has turned them off from his son. As for the apparel companies, it's unusual for rookies to get big shoe contracts these days, and it's hard to believe that if Lonzo matures into a star, they won't come running back.

Also: allow me a moment to roll my eyes at the suggestion of the sneaker companies seizing the moral high ground here. While LaVar's approach sounds absurd, is it really a sin to want to hard-line or disrupt Nike or Adidas? As the former NBA player turned Chinese star and apparel maker Stephon Marbury told the Undefeated, creating his own brand equity is exactly what Ball *should* be doing. Let's not ignore that apparel companies are attention-seeking disrupters themselves, whether it's seeding amateur leagues with sponsorships, or dressing college teams like Marvel characters. Didn't Nike just spend the other night trying to shatter the 2-hour barrier in marathon running with a brand-tastic spectacle featuring an automobile test track, pace rabbits, and, of course, new show tech, a stunt that shook up the distance running establishment—and turned out to be brilliantly riveting? There's no need to be holy about an industry that itself is relentless about flouting convention.

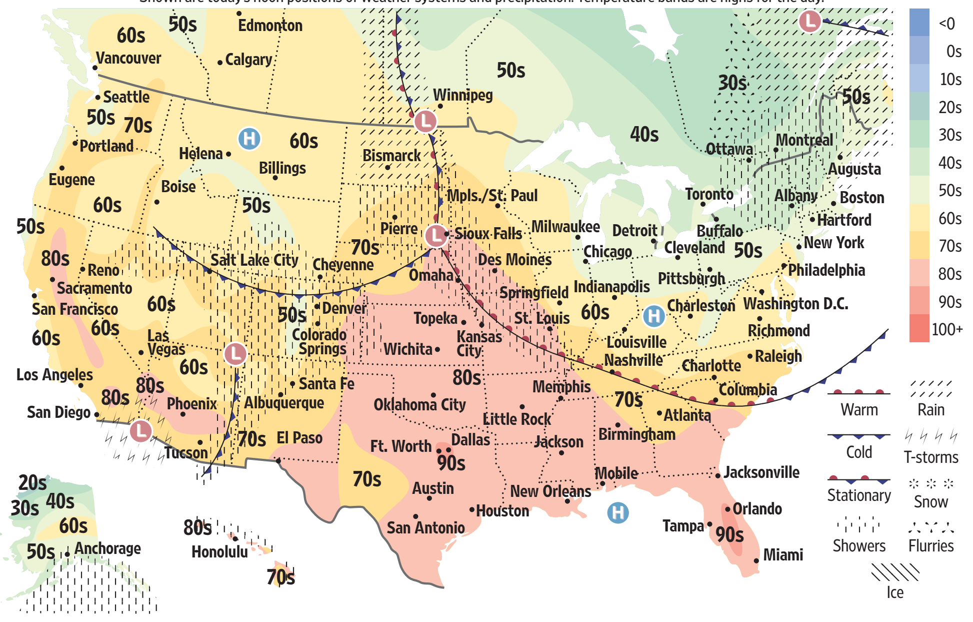
With the Balls, the only thing that should matter here is what Lonzo wants—he's the one who will be playing in the NBA. His father may be over-the-top, but he's far from the first tough negotiator for his athlete son; have we all forgotten how Archie Manning maneuvered Eli Manning out of San Diego, or Jack Elway kept John out of Baltimore? It is indeed possible there will come a time when Lonzo will ask LaVar to step aside—perhaps, within a season or two, Big Baller will be mothballered and Lonzo will be in the comfortable fold of a legacy brand, selling basketball sneakers reasonably priced at...$175. Until then, Lonzo seems content to stick with family.

As for the rest of us, there's a simple option: stop paying attention. Yes, I realize that's a rich thing to say in a newspaper column. But one thing that LaVar Ball—the 21st Century Sports Parent we deserve—knows is that outrageousness is today's strongest currency. His ascension is simply the latest reminder that the modern media culture — no matter how much it claims to dislike it—will happily give a platform and power to a mouth that says ridiculous, indefensible things. That's not a Dad problem. That's ours.

Weather

AccuWeather.com

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



U.S. Forecasts

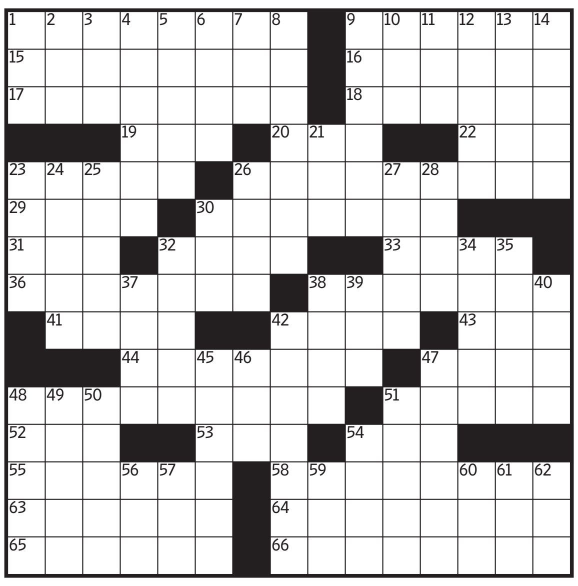
s...sunny; pc... partly cloudy; c...cloudy; sh...showers; t...t'storms; r...rain; sf...snow flurries; sn...snow; i...ice

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Anchorage	54	40	c	54	40	c
Atlanta	78	59	s	86	63	pc
Austin	85	66	pc	84	68	t
Baltimore	61	40	pc	65	43	c
Boise	69	46	pc	74	48	s
Boston	54	41	c	52	41	pc
Burlington	47	36	sh	52	37	r
Charlotte	73	53	s	79	58	pc
Chicago	57	40	s	57	42	sh
Cleveland	53	39	s	58	41	pc
Dallas	90	66	s	84	67	pc
Denver	74	48	t	65	45	t
Detroit	57	35	s	60	41	pc
Honolulu	84	72	sh	85	73	pc
Houston	83	67	pc	83	68	pc
Indianapolis	61	47	s	60	50	t
Kansas City	84	63	s	84	63	s
Las Vegas	78	61	pc	75	58	t
Little Rock	84	59	s	84	61	s
Los Angeles	72	56	pc	69	60	pc
Miami	87	70	s	87	71	s
Milwaukee	52	39	s	57	43	pc
Minneapolis	70	52	pc	68	51	c
Nashville	77	60	pc	86	63	pc
New Orleans	82	62	s	81	62	s
New York City	59	46	pc	61	46	pc
Oklahoma City	87	60	s	82	64	pc
Omaha	88	61	pc	79	58	pc
Orlando	90	61	s	91	64	s
Philadelphia	61	43	pc	64	44	pc
Phoenix	81	58	c	73	60	t
Pittsburgh	57	34	pc	62	41	pc
Portland, Maine	54	37	r	53	37	pc
Portland, Ore.	71	47	s	75	49	s
Sacramento	83	53	s	89	55	s
St. Louis	80	64	t	87	64	pc
Salt Lake City	71	52	c	74	55	pc
San Francisco	70	52	s	71	52	pc
Santa Fe	76	48	pc	68	42	t
Seattle	66	47	s	69	47	s
Sioux Falls	82	55	pc	72	48	pc
Wash., D.C.	63	45	pc	67	51	pc

International

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Amsterdam	58	40	pc	54	40	c
Athens	80	61	s	79	62	pc
Baghdad	98	67	s	101	72	s
Bangkok	93	80	t	93	80	t
Beijing	89	55	c	88	57	s
Berlin	51	31	sh	48	39	c
Brussels	54	37	pc	56	37	c
Buenos Aires	70	49	r	67	46	pc
Dubai	103	86	pc	101	84	pc
Dublin	53	42	s	54	37	pc
Edinburgh	54	38	c	60	41	pc
Frankfurt	59	41	sh	57	38	c
Geneva	59	44	sh	62	41	pc
Havana	86	67	s	88	67	s
Hong Kong	85	76	pc	84	76	c
Istanbul	73	59	pc	73	54	c
Jakarta	89	75	sh	89	76	sh
Jerusalem	82	60	s	89	63	s
Johannesburg	69	50	pc	70	51	pc
London	58	42	c	59	41	c
Madrid	85	55	pc	83	55	pc
Manila	96	80	s	96	81	pc
Melbourne	59	52	sh	62	46	pc
Mexico City	78	55	pc	77	56	pc
Milan	73	51	s	72	49	pc
Moscow	39	31	sh	43	30	c
Mumbai	92	83	pc	94	83	pc
Paris	56	44	c	61	42	pc
Rio de Janeiro	79	68	pc	82	69	s
Riyadh	100	72	pc	100	74	t
Rome	70	50	pc	71	52	pc
San Juan	87	77	sh	84	76	t
Seoul	75	58	pc	75	57	r
Shanghai	71	63	c	78	61	s
Singapore	87	78	c	88	78	c
Sydney	66	55	s	68	57	s
Taipei	88	74	pc	86	73	t
Tokyo	79	61	s	74	61	c
Toronto	53	32	c	53	37	pc
Vancouver	60	45	c	62	48	pc
Warsaw	55	34	sh	46	30	sh
Zurich	54	44	sh	56	38	c

The WSJ Daily Crossword | Edited by Mike Shenk



HMMM... | By Kevin Christian & Andrea Carla Michaels

Across

1 Insurance company employee
9 Desert of southern California
15 Spot for sandcastle builders
16 Old kingdom of Spain
17 Clobbered
18 College-area local
19 Three, on a sundial
20 "How stupid of me!"
22 Tree with toothed leaves
23 Played pitifully
26 "The Sun Also Rises" writer
29 Easter event
30 Participates in the decision-making process
31 Boxing's "Greatest"
32 Beer ingredient
33 Like some vaccines
36 Hamlet's "To be or not to be" addressee
38 Won, for one
41 Bombard
42 Indian attire
43 Sgt., for example
44 Remote powerers, often
47 Microbe
48 Figurative dish for the shamed
51 Big Bend National Park setting
52 California's Santa ___ winds
53 Place to wipe your feet
54 Flying start?
55 Conundrum
58 Choir member's need
63 Funny Wright
64 Get used to gradually
65 Real-life model for Citizen Kane
66 Ivy anchors

Down

1 Fire remnant
2 Justice Dept. agency
3 Tight spot
4 Money-making org.
5 Arab chieftain
6 Spelling of "Beverly Hills, 90210"
7 Before, to a poet
8 Most embarrassed, perhaps
9 "Chances Are" crooner Johnny
10 Gold, in Granada
11 Teeth holder
12 Vice president before Ford
13 Unveiling exclamation
14 Foe
21 "Kill Bill" star Thurman
23 Former Iranian ruler
24 Bell-shaped flower
25 Japanese cartoon genre
26 Partner's share, at times
27 Model Campbell
28 Greek street food
30 "2001" computer
32 Titanium or tungsten
34 Building wing
35 Activewear fabric
37 Paving chunk
38 Robustly healthy
39 Hosp. areas
40 Honorees of a day in May
42 Wriggle like a rattler
45 Concrete component
46 Org. involved with massive cleanups
47 Burrowing rodent
48 Unpleasant to the ear
49 Bring together
50 Title character of Tyler Perry films
51 Fundamental principle
54 "I ___ Proud" ("The Mikado" song)
56 Device used to zap commercials
57 CBS exec Moonves
59 Eight-time NBA All-Star ___ Ming
60 Factor of every prime
61 Mel who played for the Giants for over 20 years
62 Bout enders, briefly

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

Previous Puzzle's Solution

C	U	P	S	■	A	R	U	S	H	■	M	O	P	S
O	R	A	L	■	L	O	R	N	A	■	A	N	A	T
M	A	R	Y	W	I	L	S	O	N	■	N	A	P	A
I	N	A	■	I	K	E	A	■	G	U	I	S	E	S
N	I	B	B	L	E	S	■	■	E	R	A	S	E	S
G	U	L	L	■	■	■	P	A	R	A	S	I	T	E
S	M	E	A	R	■	O	R	L	O	N	■	S	E	N
■	■	■	B	E	T	W	E	E	N	U	S	■	■	■
I	R	A	■	G	E	E	S	E	■	S	U	M	O	S
R	E	S	C	I	N	D	S	■	■	■	V	A	N	E
A	S	T	O	N	E	■	■	C	R	E	S	T	E	D
Q	U	A	S	A	R	■	G	A	O	L	■	T	B	A
W	R	I	T	■	I	L	L	B	U	Y	T	H	A	T
A	G	R	A	■	F	A	U	L	T	■	E	A	S	E
R	E	E	L	■	E	P	E	E	S	■	D	U	E	S

The contest answer is PRIVATE. The central answer BETWEEN US is a clue to look for letters appearing between U and S in the grid, either Across or Down. The seven such letters in top-to-bottom order spell the contest answer.

OPINION

How Deadheads Sped Ahead

By Andy Kessler

Forty years ago Monday the Grateful Dead played in upstate New York at Cornell University's Barton Hall. Memorialized as "5-8-77" on a million cassette tapes, it is considered their best, a legendary show, the band's Holy Grail. A good friend ran the concert commission and assigned me, a lowly freshman, to turn on the house lights when the show ended. Things have changed over the past 40 years, but it took time to make out what was illuminated that night.

The Grateful Dead began playing in 1965 as the Warlocks, right before the flower-power era they ushered in. Their opening gig was a Wednesday night at a pizza joint named Magoo's in downtown Menlo Park, Calif. I'd be surprised if more than 20 people showed up, but they still planted seeds of what you'll recognize as modern innovation in the heart of what is now Silicon Valley.

Eventually a vast army of fans known as Deadheads arose. Though not me, as I didn't look good in tie-dye. Deadheads were nonconformists but amazing trendsetters. As they trucked into the show, I noticed many clumsily hobbling on crutches. It wasn't until the concert started that the audience turned these crutches into makeshift microphone stands, rising high above the crowd to tape the performance. Most of the band's more than 2,000 shows were pirated. From this emerged a peer-to-peer network: bootleg cassettes passed between fans, an early sharing economy.

Networks were a powerful thing, but the recording technology was rudimentary. When a cassette was duplicated, the sound of the tape

> Forty years later, be grateful to the band, which helped pioneer the sharing economy.

moving over the playback head would end up on the recorded copy as an annoying hiss. The further from the original, the worse the hiss. I used to walk into friends' rooms and snark, "Is this Cow Palace '74? Man, the hiss player was really on that night." I haven't changed much since then.

The Grateful Dead could have put a stop to it all, frisking concertgoers as they entered, but the band accepted piracy. A viral marketing campaign started. Free music lured new fans, who practically toured with the band and bought tickets, shirts and posters. They then made more cassettes, enchanting even more fans. This is the power of free that Facebook and Google have since perfected. Also, I'm pretty sure the band's fans invented virtual reality. I heard many at shows say they could see things that weren't really there.

Deadheads taught the world to embrace the weird and eccentric. Just ask basketball legend Bill Walton, who claims to have seen more than 850 shows. There's even a fake news story that 5-8-77 never happened and is simply a CIA mind-control experiment.

In 1977, no one knew where the world was heading. Gas shortages and crushing inflation were around the corner. I was in my room building a "home-brew computer" (definitely not a way to get dates). I carefully soldered a board with 64 slots for 1-kilobit memory chips, a whopping 8 kilobytes—barely enough for a half a second of audio recording, if MP3 had existed at the time. The trick then, as now, was to look into the future and see things that don't yet exist. We're grateful cassette tapes are dead.

Another important lesson is that things peak. Cornell was the Dead's greatest show but that also means they were never that good again. They didn't disappear, but time went on. You can't avoid it. Eras, trends, companies, people—they all peak. But memories should not fade away.

The real surprise on 5-8-77 came after I turned on the house lights—and got booed. Revelers streamed outside to see a fresh blanket of snow covering the campus. In May! You can image the reaction from those practicing better living through chemicals. Things change slowly, a long strange trip, until they change quickly, and when you least expect it.

Deadheads never did live in communes and practice free love, except maybe on weekends. They changed. In fact, they went on to build the world we live in today: Steve Jobs, Larry Page, Bill Clinton, Tony Blair and—wait for it—Steve Bannon. It happened quickly. It was only in 1984 that the ex-Eagle Don Henley "saw a Deadhead sticker on a Cadillac."

These days it's hard to tell who the nonconformists are. Everyone seems to be. There's a finer and finer line between eccentric and establishment. Who will see and create the next future? And turn smartphones into the cassettes of yesteryear?

Mr. Kessler writes on technology and markets for the Journal.

Colombia's Perilous Deal With the FARC

AMERICAS
By Mary Anastasia O'Grady

When Colombian President Juan Manuel Santos unilaterally declared amnesty for the Revolutionary Armed Forces of Colombia, or FARC, as part of a 2016 "peace" deal crafted in Havana, he promised that it meant an end to the group's terrorism and criminality.

It's not turning out that way. Instead the Santos-FARC agreement appears to have legalized the group's thuggery. Among the more alarming aspects of the so-called peace process is the failure of the drug-trafficking rebels to turn in their arms. Neither the United Nations, which is charged with independent verification of the weapons surrender, nor the Santos government seems concerned about the FARC's noncompliance.

Colombia's democracy is being stolen right out from under the nation's nose thanks to an agreement that is as silly and naive as the one Barack Obama made with Iran. Donald Trump may not be able to stop this crime. But he doesn't have to underwrite it. Last week the undemocratic Mr. Santos tweeted that the new U.S. budget includes $450 million to support his FARC deal. This despite the free rein it gives the country's largest drug cartel.

Colombians turned down the FARC agreement in a national plebiscite in October. They did so because they reject key elements of the deal including amnesty for war criminals and drug traffickers, the legalization of FARC leaders as politicians, the designation of unelected seats in Congress for FARC representatives, and putting the Colombian army on the same judicial plane as terrorists.

Mr. Santos refused to accept his defeat. Rather than withdraw the agreement as he had promised to do if he lost, he made cosmetic changes to it. Then he used his majority in Congress to declare it law and to enshrine it above the constitution.

We may never know if Mr. Santos actually believed that the guerrillas were ready to abandon their barbarism and learn to eat with knives and forks. It may be that his personal ambition for international recognition as the progenitor of a FARC deal clouded his judgment. In either case he has unleashed a monster that now threatens to devour the democracy.

The latest proof that Mr. Santos was snookered by FARC is the discovery last week of another cache of FARC arms that were supposed to be handed in. Hidden weapons are like cockroaches. If you discover one, you can be sure there are many others unseen.

On Wednesday the Colombian army found 16 FARC rifles and 39 grenades near the border of the departments of Meta and Guaviare. The army said that the weapons had been used for extortion and to attack government teams eradicating coca. Last month another find in the same area included one M16, six magazines and 1,300 rounds of ammunition.

> The group promised to disarm, but it keeps getting caught with hidden weapons.

On April 20 the minister of defense announced the discovery of a FARC weapons cache in Putumayo. It included 54 rifles, six machine guns, three grenade launchers, 100 kilos of explosives, 200 land mines and 3,600 detonators. Two weeks earlier, the minister said, authorities had found 600 mortar grenades in Tumaco, in the department of Nariño.

As if to show who's in charge, FARC leader Iván Márquez took to Twitter to characterize the discovery of the FARC weapons in Putumayo as an "assault," complaining that it violated the agreement. In fact, according to the deal the FARC was supposed to provide the government with the coordinates of all its stored weapons by Dec. 11, 2016. By Feb. 1, all explosive-material caches were to be destroyed. Now that it has been caught lying, FARC says it needs more time to abide by the agreement.

Hidden FARC weapons in Colombia are not likely to be the only problem. Writing in Colombia's Semana magazine on April 22, former Colombian vice minister of justice Miguel Ceballos Arévalo noted that the governor of the Venezuelan state of Amazonas claims that there are 4,000 FARC rebels in his territory. Mr. Ceballos Arévalo observed: "If there are 4,000 FARC in Venezuela, there are also 4,000 arms," since presumably every guerrilla has a weapon.

The deal also calls for the FARC to return thousands of child soldiers, whose average recruitment age has been estimated at less than 13. Yet this has not happened and no FARC leader is held accountable, though enlisting underage boys and girls is an international crime against humanity. As if to further prove its unrepentant attitude, the FARC kidnapped a United Nations worker in the department of Guaviare last week.

If this is how the FARC behaves during its reconciliation honeymoon with the Colombian people, it's not hard to imagine what the country will look like after a few years of a well-armed, well-funded, drug-trafficking FARC in politics.

Write to O'Grady@wsj.com.

Giving a Kidney Fixed My Jump Shot

By Jim Sollisch

Five years ago, I gave my friend Joanne the gift of my left kidney. There are consequences to giving away an organ at 53. One is that I now have a better jump shot.

For many years I took ibuprofen by the handful—four at a time, often three times a day. I play basketball and tennis, and in the years before I gave away my kidney, I was constantly sore and stiff. The ibuprofen kept me playing. But ibuprofen is processed by the kidneys, and overuse can damage kidney function.

When you offer to donate a kidney, you get a physical as comprehensive as an astronaut's. They make you wear a blood-pressure monitor for 24 hours. They send contrast dye into your kidneys. They take 11 vials of blood. They measure your glomerular filtration rate, or GFR, which is your kidney's blood-cleansing capacity. They take images of your other organs. You get a psych evaluation. But before all those tests, they interview you about your medical history:

Any diabetes in your family? No. Cancer of the kidneys or liver? No. What prescription drugs do you take? None. How about over-the-counter drugs? Some ibuprofen. How often? Most days. How much? Ten or 12.

The nephrology resident doing the interview put down his glasses and said, "That's a boatload of ibuprofen. Your kidneys may be compromised."

> Before, I didn't know my body and masked pain with ibuprofen.

He was wrong. My GFR turned out to be 93%. (Normal is 90% or above.)

After I was approved, the head of the transplant unit at the Cleveland Clinic said to me, "If you do not promise to stop taking ibuprofen, I will cancel this thing. You're going to have one kidney—and taking ibuprofen with one kidney is dangerous."

Funny, I didn't have to give up alcohol (processed by the liver) or other drugs I might need in the future (also processed by the liver). I just had to give up ibuprofen. I didn't have to think long. "Of course," I said.

Six weeks after surgery, I returned to basketball and tennis. I didn't miss my kidney, but I sure missed my ibuprofen. I was sore as hell every time I played. After a year or so, I went to see an orthopedist. Turns out my hip was shot. Bone on bone. He said it had probably been bad for years. Hidden by massive doses of ibuprofen. So I traded a kidney for a new hip.

The new hip required rehab. The first thing the physical therapist said to me was, "You have the hamstring flexibility of a 92-year-old"—and he meant my *good* leg. Over the next year, I got to know my hip flexors and my core. I learned to really stretch. Soon I was doing weight training while balancing on a half ball.

I started waking up pain-free the mornings after I'd played basketball. That hadn't happened in 25 years. I marveled at how my body worked. Here at the upper edge of middle age, after years of taking my body for granted, I was in awe of how it could still renew itself.

My kidney grew in strength and did the work of two. My hamstrings became pliant again. And my jump shot got better. I was more aware of my body than I had been since adolescence. I lost 20 pounds. I began to celebrate every minute on the basketball court. At times I am overcome with a sense of gratitude so profound, I stop at midcourt and take an extra breath.

I have learned that there is a spirituality in the physical, that God can reveal himself between the lines of a court, and that when the systems in your body pump and work, they do so in harmony with nature.

People say if you love something, you should set it free. When I set a part of me free, I learned to love what was left behind.

Mr. Sollisch is a partner at Marcus Thomas, a Cleveland advertising agency.

BOOKSHELF | By Robert W. Merry

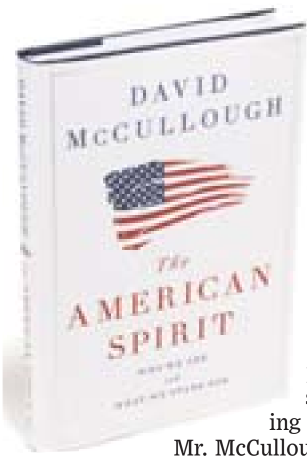
History's Portrait Gallery

The American Spirit

By David McCullough
(Simon & Schuster, 176 pages, $25)

Delivering a speech in 2005 at Michigan's Hillsdale College, David McCullough waxed eloquent on one of his favorite topics: the significance of the past and the imperative for any society to understand its own historical legacy as a means of understanding its soul. There's no great secret to teaching history or making it interesting, Mr. McCullough said, noting that fellow historian Barbara Tuchman once explained it in two words: "Tell stories."

It is fitting that Mr. McCullough should summon this Tuchman quote, since he is one of the great historical storytellers of his generation. His many books have enlightened masses of readers since the first one, on the 1889 Johnstown Flood, appeared in 1968. Hardly does he deliver a speech without extolling the mystical magic of America's story and the compelling men and women who created it. At Hillsdale he also quoted his late friend Daniel Boorstin, the longtime Librarian of Congress, who once said that trying to plan for the future without a sense of the past was "like trying to plant cut flowers." Added Mr. McCullough: "We're raising a lot of cut flowers and trying to plant them."



This digression can be found in "The American Spirit," a collection of 15 speeches given around the country between 1989 and 2016. With no overarching theme, the book amounts to a pleasing melange of observations, admonitions, homilies, and celebrations of events and figures from the American past.

And, yes, stories. Mr. McCullough makes his points largely through profiles of consequential people. There are his favorites among the luminaries—the Adams family, Harry Truman, Sen. Charles Sumner, Theodore Roosevelt. Typical of his cold-eyed assessment is his characterization of Truman as "neither brilliant nor eloquent" but, more significantly, "courageous and principled." The "invisible something he brought to the office," Mr. McCullough explains, "was character.''

But he also summons less well-known figures: Simon Willard, the clockmaker who painstakingly constructed the elaborate timepiece standing over the Capitol Building's Statuary Hall, where the House met when Willard's handiwork was placed there around 1837; Benjamin Rush, the brilliant physician, professor, delegate to the Continental Congress and, notes Mr. McCullough, "vociferous champion of abstinence from hard or spirituous liquors—but then no one's perfect"; and Manasseh Cutler, a minister and physician at the dawn of the republic who was also a leading visionary of America's westward expansion.

> Chester Arthur was well-meaning, well-tailored and ineffective. Truman was neither brilliant nor eloquent but courageous and principled.

What stands out in these portraits is how utterly devoid they are of the cynicism that infuses so much of contemporary culture. Mr. McCullough certainly turns no blind eye to the vicissitudes of human nature. While extolling the "brave and eloquent words'' uttered in the halls of Congress, he acknowledges that "some of the worst of human motivations have been plainly on display" there, as well as "no shortage of self-serving blather."

But fundamentally Mr. McCullough loves the American story and its most illustrious characters. He feels no need for raised eyebrows, for example, in profiling the crusty House speaker "Uncle Joe" Cannon of Danville, Ill., who stood athwart all calls for reform early in the 20th century. "Everything is all right out west and around Danville,'' declared Cannon. "The country don't need any legislation." Mr. McCullough even finds positive things to say about Chester Arthur, who reached the White House in 1881 at the death of James Garfield and left hardly a mark upon the nation—"not one of our best-known presidents," says Mr. McCullough, but "unquestionably one of the tallest and best-tailored, a solid, well-meaning chief executive all-in-all, and the first ever to walk over the Brooklyn Bridge."

A recurrent theme in "The American Spirit" is the folly of judging the figures of history by latter-day standards. As Mr. McCullough admonished students of Dickinson College in 1998, "let us not look down on anyone from the past for not having the benefit of what we know." Indeed, the more he has learned of America's founding generation, he says, "the larger [those figures] become, the more one wonders what we've lost, or are in grave danger of losing."

Though not a social critic by temperament or vocation, Mr. McCullough reveals in his more recent speeches that he is not entirely enamored of some of the country's political and cultural trends. He decries the spectacle of historical ignorance among the young. "Innumerable studies have been made and there's no denying it," he writes, recounting a conversation with a young woman who was astonished to learn that all the original 13 colonies were on the East Coast. He once taught a class at an Ivy League university in which no one could identify George Marshall. One precocious student wondered if perhaps he had something to do with the Marshall Plan.

Mr. McCullough seems no less pessimistic about the state of American textbooks—"dreary, done by committee, often hilariously politically correct.'' And he can't help comparing a stirring John Adams pronouncement with more recent attitudes. "We can't guarantee success [in the American Revolution]," Adams wrote to his wife, Abigail, "but we can do something better. We can deserve it." Observes Mr. McCullough: "Think how different that is from the attitude today when all that matters for far too many is success. . . . However you betray or claw or cheat is immaterial."

But generally Mr. McCullough's speeches are exultations of America and its resilience. Speaking near Schenectady, N.Y., in 1994, as America struggled to define itself in the post-Cold War world, he described the country as "oddly at sea. . . . The old certainties don't serve any longer." But take heart, he said: "I think we will find our course." Valuable encouragement then, even more needed today.

Mr. Merry is editor of the American Conservative. His latest book, "President McKinley: Architect of the American Century," will appear in September from Simon & Schuster.

OPINION

REVIEW & OUTLOOK

Europe's French Reprieve

Macron beats Le Pen, but without growth the extremes will be back.

French voters chose a centrist reformer over the nationalist right on Sunday by electing Emmanuel Macron as their next President. The question now is whether Mr. Macron can deliver on his promise to reform France's sclerotic economy and diminish the Islamist terror threat.

Mr. Macron's decisive victory is as much a rejection of the far-right National Front as an endorsement of his platform. Despite Marine Le Pen's yearslong effort to whitewash her party's reputation for anti-Semitism and Vichy nostalgia, the keys to the Élysée Palace proved as elusive to her as they did to her father, Jean-Marie, in 2002's presidential runoff against Jacques Chirac.

Mr. Macron deserves credit for his initiative. The 39-year-old former investment banker quit the incumbent Socialists to launch his independent centrist movement, En Marche! His outsider status and optimistic vision proved attractive to voters fed up with traditional political parties. He offered a clear if modest reform alternative, with proposals to shrink the bureaucracy, cut corporate taxes and modify the job-killing 35-hour workweek.

He was also lucky. The center-right Republican nominee François Fillon, a self-proclaimed Thatcherite, was felled by allegations of nepotism. Independent, hard-left firebrand Jean-Luc Mélenchon divided the socialist vote. In the runoff Mr. Macron was the default choice of voters who wanted to block the National Front.

This means President Macron will have a fragile mandate and a narrow window to press his agenda. France needs radical reform of a government that in 2015 took 57% of national GDP and an economy with a jobless rate that is still 10% eight years after the financial crisis.

Yet political failure is the recent French norm. Successive Presidents have failed to undo the 1999 35-hour-workweek law amid militant union protests. Mr. Mélenchon and his "Unbowed France" movement are promising chaos if Mr. Macron dares to advance what the socialist calls "neoliberalism." Mr. Macron's best bet is to go big and abolish the 35-hour workweek as Mr. Fillon promised, rather than seek marginal fixes and pay the political price anyway. The same goes for cutting the corporate tax rate to 25% from 33.3%, especially as the U.S. heads toward a 20% rate.

Mr. Macron's ability to push reform will depend on the strength of the parliamentary coalition he can assemble. If En Marche! fails to win a majority in June's parliamentary vote, he should hope the Republicans do. One way to set the tone for the June vote would be to invite Republican heavyweights to join the Macron cabinet.

The new President will also need help on national security, which was his weakest pitch to voters. While he committed to increasing capacity at the security agencies, Ms. Le Pen's vows to fight radical Islam and toughen border controls appealed to voters who witnessed massacres across the country.

The toughest challenge is the self-isolation of too many of France's six million Muslim citizens. French voters understood that Ms. Le Pen's immigration crackdowns would do little to stop self-radicalization among native French Muslims. But Mr. Macron can help by speaking frankly about the threat and encouraging Muslims to see integration as a two-way street.

* * *

Mr. Macron is a French sort of Atlanticist, which means he's wary of looking too pro-American. He accused the West of "constantly" escalating the Ukraine conflict, described Moscow as a "partner" and warned that the U.S. shouldn't "dictate" French foreign policy, as if the latter ever happens. But perhaps the weekend dump of documents from his campaign, which bore the hallmarks of a Russian cyber operation, will open his eyes to the Kremlin threat.

As for European Union elites, the temptation will be to view the Macron triumph as vindication of the status quo, given Ms. Le Pen's vow to leave the EU and ditch the euro. It is at most a reprieve. Ms. Le Pen improved on her father's performance 15 years ago, she and Mr. Mélenchon drew broad support among the young, and France's mainstream parties were repudiated. The EU project is far from secure unless it can provide more economic opportunity and better security, and show more respect for voters who resent dictates from Brussels.

The French center held, barely. If Mr. Macron fails to deliver faster growth, France may not be so lucky the next time.

Your Friends in Public School

The lengths they'll go to deny kids and parents an education choice.

A California appellate court has unanimously rejected an attempt by the Anaheim Elementary School District to throw out a petition by parents to convert a failing school into a charter using the state's parent trigger law. The district wasted two years and hundreds of thousands of dollars fighting parents. Can the parents sue for damages?

California's 2010 parent trigger law allows a majority of parents whose kids attend a failing school to catalyze reforms. In January 2015, Palm Lane Elementary School parents with the help of the law's author Gloria Romero and education activist Alfonso Flores filed a petition with the school district. The teachers' union abetted by district officials then used dirty tricks to thwart parents, including accusations of bribery. When intimidation failed, district officials tried to reject the petition on technical points, every one of which was dismissed by the appellate court.

The district claimed Palm Lane didn't qualify as failing because California had obtained a waiver from the U.S. Department of Education that exempted schools from Adequate Yearly Progress benchmarks for the 2013-2014 school year. Yet Palm Lane had failed to meet those benchmarks for nine of the prior 10 years.

The appellate court affirmed the findings of Orange County Superior Court judge Andrew Banks who in July 2015 ruled in favor of the parents on all counts and blasted the district for being "unreasonable, arbitrary, capricious and unfair." The school district appealed.

Maybe district officials were hoping that parents, who were represented pro bono by Kirkland & Ellis, would drop the case once their kids moved to middle school. But in the two years that the case has sat on appeal, the district and parents have racked up more legal expenses. And students have continued to be deprived of a quality education.

The appellate court ordered the district to cover the parents' legal fees, but that won't make up for the lost education. The district will merely pass on the costs to state and local taxpayers including Palm Lane parents who own homes in the district. The outrage is that this disgrace generates no outrage.

Tax Rates and Professional Losers

A new study says high taxes could cost your team a championship.

The New York Islanders recently rebuffed Connecticut Governor Dannel Malloy, who tried to convince the NHL team to move to Hartford in exchange for a fancy arena and other enticements. Maybe he should try something novel like a big tax cut, because a new study shows how teams in tax havens have a competitive advantage in attracting players.

Erik Hembre, an economist at the University of Illinois-Chicago, looked at the question: Do tax rates affect a team's performance? He analyzed data in professional football, basketball, baseball and hockey between 1977 and 2014. Since the mid-1990s, he writes, "a ten percentage point increase in income tax rates is associated with between a 1.9-3.0 percentage point decrease in winning percentage."

Here's why: Professional athletes are taxed at the highest marginal rate. The average NBA player earned more than $4.8 million in 2013 and the average was $2.3 in the NFL, so athletes who play for the Minnesota Vikings earn less after taxes than do Dallas Cowboys.

The NBA and NFL impose caps on team salaries, but teams do compete for free agents, and high tax rates make some franchises less attractive to some players. Mr. Hembre found that states with hefty taxes also tend to rely more on players who are drafted, and politicians like Mr. Malloy must envy a league's power to force people to remain in a state.

The effect appears strongest in the NBA, "where moving from a high-tax state to a low-tax state has a similar effect on winning as upgrading a bench player to an All-Star." An NBA team that fled Minnesota (top rate: 9.85%) for Florida (0%) could expect to win an additional 4.5 games a season, Mr. Hembre found. The connection is smaller in baseball, as the MLB doesn't impose salary caps on free agents (though teams pay a "competitive balance tax" to the league on salaries above a certain level). This allows, say, the Orioles to compensate players for the misfortune of paying taxes in Baltimore and Maryland.

Mr. Hembre couches his results with the usual academic modesty, and he controlled his data for a franchise's age, local populations and other factors that may influence a team's performance. He also crunched the numbers for college basketball, where players are unpaid and should not be sensitive to tax climates. He found no similar performance connection in college basketball.

Players make free-agent decisions for many reasons, and New York or Los Angeles can offer attractions and endorsement deals that offset their horrendous tax rates. But no one should be surprised that professional athletes respond to incentives like individuals in any industry. Perhaps this evidence will tempt governors and state lawmakers to cut rates now that they know that, along with a growing economy, they might end up with better sports teams and happier fans, also known as voters.

LETTERS TO THE EDITOR

Trump, Monuments and the National Interest

Regarding your editorial "Trump's Monumental Task" (April 28): How is it a land grab when federal land is transferred from one status to another? Why is the Journal so enamored of extracting oil, gas, copper and vanadium? If maintained in a national monument they will be there for future potential use 50, 100 even 250 years down the road, when all the rich mineral or petroleum sites have been exploited and the cost and environmental damage from extracting low-grade sources will be so much higher. Once these resources are extracted they are gone, often forever. Why do you assume the citizens of Utah should have more say on how national land is used than the citizens of Illinois? This is, after all, federal land, not state land, not private property. For years ranchers have overgrazed federal lands while paying minimal grazing fees on land that belongs to all of us, not just to the ranchers. When it comes to protecting ecosystems, we have learned that larger is better than small and is much more effective. Future generations 50 and 100 years from now are going to say: "What were they thinking in 2017 when they extracted the resources, cut the forests, fished out the oceans and burned all the petroleum?" We all should be lobbying for more and larger national monuments and parks.

CURTIS KROCK
Champaign, Ill.

The Journal egregiously conflates the economic value of our public lands with extractive resource development, as if the explosion in the recreational use of the public lands had never occurred. The U.S. Forest Service hosts around 200 million recreationists annually, generating an estimated $100 billion every year.

Since the early 1990s, the annual timber cut on public lands has declined sharply due to the domestic timber industry's migration to more productive private tree farms in the southeastern U.S. states. Because only 3% of the U.S. annual timber harvest takes place on public lands, it is absurd to blame public land-use restrictions for the current state of the U.S. timber industry. The same is true for grazing. Meat produced from public-land forage accounts for 2% of national meat production. Granted, oil and gas revenues from public-land leases remain a major source of federal revenue, but most of these leases don't concern lands affected by the Antiquities Act.

BURKE W. GRIGGS
Topeka, Kan.

President Harry Truman warned us about unscrupulous special interests: "We have to remain constantly vigilant to prevent raids by those who would selfishly exploit our common heritage for their private gain. Such raids on our natural resources are not examples of enterprise and initiative. They are attempts to take from all the people just for the benefit of a few."

GREG LENNES
Las Cruces, N.M.

Puerto Rico Is Approaching a Steep Precipice

Regarding Mary Anastasia O'Grady's "Puerto Rico's Broken Promise" (Americas, May 1): Puerto Rico is facing a dire future. At this stage that bleak prospect isn't only a consequence of decisions made by politicians. More relevant are the actions taken by the members of the Financial Oversight and Management Board, and other people who should know better, who are letting their ideologies and prejudices dictate their behavior instead of a sober reading of the available evidence.

The government of Puerto Rico is facing a liquidity crisis, but it is not insolvent. The logical solution to lack of liquidity is a reasonable reduction in cash outflows together with the use of temporary financing. The board, however, closed the door to any form of short-term financing, requiring the government to solve the problem solely by reducing disbursements. As such, the board is forcing a liquidity crisis to become an insolvency crisis. As part of that process, it is unnecessarily imposing significant losses on the bondholders, who remain the only potential providers of financing for temporary cash needs and for the future investments that the Island so desperately needs.

To provide those investment needs, the board is counting on several projects that it hopes can be developed as public-private partnerships. Unfortunately, most of these projects aren't feasible under that development model, so they will remain unexecuted. As a result, Puerto Rico, strapped for cash and devoid of any urgently needed investment, will see its economy plummet to levels never experienced by regions free of wars or natural disasters.

It is time for the board to reconsider its present course of action.

PROF. CARLOS A. COLÓN DE ARMAS
University of Puerto Rico
San Juan, Puerto Rico

Struggling Against Education, Responsibility

Regarding your editorial "Middlebury Struggle Session" (April 25): The solution is promoting debate through a quick kick to the hornet's nest—expel a small group of students who have clearly committed expulsion-worthy acts, wait for the predictable upwelling of righteous indignation over the suppression of the students' "free speech" (which is the phrase these kids use to describe their physical violence) and then simply return home. Job done. The megaphone chants of "don't suppress our fundamental right to free speech for suppressing others' fundamental right to free speech" lack a certain *je ne sais quoi* persuasive coherence. PC culture come again, but administrators should earn at least a semester off while they work their way out of that paper bag.

ROBERT F. MACINNIS, PH.D.
New York

I should deplore the dire state of liberal arts in American academia detailed in "Liberal Arts Lose Luster" (U.S. News, April 25) as students opt for more career-oriented courses of study. Fact is, I don't—due to the disgraceful conversion of so many liberal arts programs (especially in our elite universities) into agenda-driven circuses (see Middlebury). Obsessed with their radical critique of American society, history and capitalist economy, "progressive" professors and like-minded students have mutated the study of the humanities from free inquiry into something closer to the brainwashing sessions inflicted on American POWs during the Korean War.

EDWARD GRIMES
Springfield, Va.

I suggest that rather than imposing "disciplinary sanctions" against those who participated in the student melee opposing Charles Murray's invitation to speak on campus, and thereby effectively being rendered "voiceless," Middlebury College should instead proudly include that "symbolic speech action" (sic) in the students' official college record and diploma honors, either as an elective-subject achievement or as display of outstanding extracurricular activity. Let those students add that honor to their curriculum vitae as a demonstration of the kind of leadership skills and management abilities that can both win luster for the institution and enable its graduates to get a job and earn a living after graduation.

As the chief executive of a Boston-based labor analytics firm put it: "Go study feminist anthropology but make sure you're picking up some skills on the periphery so that you can get a job when you graduate."

HERB CAPLAN
Chicago

Symbolic Arrest, Real Cost

Regarding the April 28 "Notable & Quotable: Protests" from the Berkeley, Calif., Police Department website: What does a "symbolic arrest" entail for the parties involved? Symbolic DAs, judges, court records and other public expenses? Not to mention the valuable time of the arresting officer. You'd think that the highly taxed citizens of California would like to know.

JIM LANGE
Roanoke, Texas

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Pepper ... And Salt

THE WALL STREET JOURNAL

"In a world of 'froms' and 'tos', I always seem to be a 'cc'."

Trump's Tax Plan Would Spur Growth

By Edward P. Lazear

President Trump's tax plan leaves many details undefined, but there is plenty to evaluate. The administration claims its proposed changes would encourage growth and make the tax system more efficient. History suggests they will.

Less certain is the claim that the tax cuts will pay for themselves. Although budget concerns should always be paramount when cutting taxes, revenue neutrality does little to guarantee that this—or any—administration will exercise fiscal responsibility.

> By moving toward a consumption levy, it could generate a GDP gain of between 2.5% and 4.5%.

Most economists favor moving away from taxing capital and toward taxing consumption through value-added or sales taxes. Taxing capital squelches growth because capital is mobile and can cross borders in search of the highest risk-adjusted, after-tax return. Economists in both parties have scored the effects of eliminating capital taxation in favor of a pure consumption tax. Estimates range from a 5% to 9% total increase in gross domestic product.

There are a number of ways to move toward a consumption tax and reduce taxes on capital without instituting a national sales tax or VAT. One is to lower tax rates on corporate profits and "pass-through" income, as the president proposes. Another is to permit full expensing—to let companies deduct the entire cost of investments immediately.

Expensing creates a positive incentive for corporations because they receive the tax benefit only when they invest in themselves. A Treasury Department analysis done while I was chairman of the Council of Economic Advisers showed that a given dollar of tax cuts through expensing is more powerful than rate cuts in the short run by about a factor of four.

Rate cuts, on the other hand, benefit new and old capital alike and confer tax benefits on companies that have invested in the past. This saves companies money, but provides no direct incentive for new investment. In the long run, the distinction between expensing and rate cutting disappears because all capital is new capital and so is taxed at the lower rate.

Tax-rate cuts on pass-through income will have additional growth effects, but the administration hasn't released enough details to score them. Separating capital income from wage income may add some complexity, but that's not a new problem. Defining income and profit is not straightforward. Tax accountants already struggle to determine true costs, including business owners' implicit wages.

State and local taxes would no longer be deductible under Mr. Trump's plan. Much has been said about the cross-subsidization of high-tax states such as New York and California by low-tax states such as Florida and Texas. Removing this deduction would mean that overall federal personal income-tax rates can be lower and generate the same revenue. Beyond that, there is a subtle and positive growth effect of eliminating state tax deductions.

ASSOCIATED PRESS

Economic adviser Gary Cohn and Treasury Secretary Steven Mnuchin introduce the Trump tax plan, April 26.

The deductibility of state taxes provides incentives to raise overall taxes at the state level. Californians and New Yorkers bear only part of the cost of their tax increases; the rest is passed on to other states' taxpayers through the deduction. This leads state governments to overtax their citizens, resulting in economic distortions and reduced overall growth.

Tax cuts enacted through the Senate's budget-reconciliation process must sunset after 10 years, although this may not be the roadblock to lasting reform that it seems. Recall that the Bush tax cuts of 2001 had the same sunset provisions, but most are still in effect. Congress renewed them in 2010 and again—apart from those on the highest earners' rates—in 2012.

The Trump administration's plan may get the economy about halfway to a pure consumption tax. That could generate a GDP gain of between 2.5% and 4.5%. In 2016, the Congressional Budget Office estimated that corporate income-tax payments were $415 billion, or about 12% of federal tax receipts. Rate cuts that spurred 4% growth would generate total tax revenues of about $120 billion—assuming no other tax reductions—which is not quite enough to offset the loss of income to the government. Cutting individual income taxes makes the revenue-neutrality task more difficult because personal tax-rate cuts do not generate the same growth effect as rate cuts on capital.

The net effect of the proposed corporate tax cuts would be to increase the deficit by about 0.5% of GDP. This is significant, but revenue neutrality should not be the standard by which a tax plan is judged. Even revenue-neutral tax changes do not solve our budgetary problems. The CBO projects growing deficits, exceeding 7% of GDP annually, in two decades. Unless we are willing to accept major tax increases in the future—most likely through the introduction of a VAT—we will need to reduce government spending significantly to narrow the gap. This means re-examining entitlements, particularly Medicare, Medicaid and other health programs. Even a revenue-neutral tax reform plan would not come close to achieving fiscal responsibility.

The strongest argument in favor of the Trump administration's plan is that it moves in the right direction on capital taxation and will achieve growth. Because there is a direct connection among GDP growth, productivity growth and wage growth, the Trump proposals will help raise incomes and thereby benefit Americans overall.

Mr. Lazear, who was chairman of the President's Council of Economic Advisers from 2006-09, is a professor at Stanford University's Graduate School of Business and a Hoover Institution fellow.

Remake the Paris Climate Deal to Promote U.S. Energy

By Kevin Cramer

President Trump will soon decide whether to withdraw the U.S. from the Paris Agreement on climate change. His top advisers are huddling Tuesday, likely for a final time, to consider the decision, which has been promised by the end of the month. I endorsed Mr. Trump last April because I believed in his America First agenda, and I advised him on energy policies during the campaign.

I was wary of Paris and used to favor pulling out, but I've changed my mind for two reasons. First, in future climate talks the U.S. will benefit from having Mr. Trump, an experienced negotiator, at the table. Second, the Trump administration can legally scrap President Obama's emission-reduction pledge without leaving the Paris agreement.

It is abundantly clear that the agreement, which is and will remain legally nonbinding, does not prohibit lowering the American pledge. In a May 1 memo, Sierra Club lawyer Steve Herz wrote that "it would be extremely difficult to prevail" in any lawsuit arguing that the U.S. was bound by its pledge, or by the agreement itself.

Thus any renegotiation would be the easiest deal Mr. Trump has ever made: He would simply submit a new pledge. Then if somehow the U.S. was blocked from changing its commitment, Washington could simply leave the Paris agreement that same day.

Regardless, EPA Administrator Scott Pruitt would be able to rescind the woefully constructed Clean Power Plan and other harmful Obama-era regulations, since they all preceded the climate deal reached in Paris in December 2015. Those regulations and the Paris agreement are legally unrelated.

There has been spirited debate among House Republicans on the best move to make. Several of my colleagues on the House Energy and Commerce Committee—including conservatives from energy-rich states such as Oklahoma, Missouri and Pennsylvania—agree that the smart strategy is to try to work out a more beneficial deal for the U.S. under the Paris agreement rather than walk away and let China and others take over the discussions. Eight of my fellow Republicans joined me in signing a letter to President Trump laying out specific conditions that would turn Paris into a good deal:

First, revise the U.S. pledge so it doesn't harm the economy and comes to reflect America First energy policies.

> A place at the table would let Trump counter Chinese predation and European unrealism.

Second, cease Washington's transfers to the Green Climate Fund, and ensure the existing money isn't spent on wasteful projects.

Third, negotiate through the Paris Agreement to defend American interests, particularly by advancing technology for clean coal and pushing for increased investment and a better regulatory environment—all of which will create more foreign markets for American clean coal technology.

Mr. Obama's Paris pledge was a bad deal, as Mr. Trump explained forcefully during the campaign. But the situation has changed. The new White House can replace those harmful policies with an America First energy vision, and a Paris pledge and negotiations that reflect it.

What could Paris become with President Trump and his negotiators at the table? Energy Secretary Rick Perry has already aggressively touted the virtues of nuclear and clean coal at a recent Group of Seven energy meeting. That view faces stiff opposition from some of America's allies in Europe, who will work hard to promote a radical and unrealistic all-renewables vision for global energy policy. The U.S. needs to take them on in every available forum, Paris included.

Since Paris went into force, many nations in Eastern Europe and the Mediterranean have built clean coal plans into their Paris pledges. The White House can build on these pragmatic approaches, using Paris to help the U.S. energy industry and American workers. If Washington were to up and leave, Beijing would fill the leadership vacuum. It isn't wise to cede that ground.

Neither America nor the world can afford a European energy future, with skyrocketing prices, or a Chinese energy future, with bureaucratic control and unfair dumping of state-subsidized resources.

If Mr. Trump can fix Paris, it will be an example of the emerging Trump Doctrine. He would manage to get international credit for staying in the talks and ensuring they aren't led by China, while at the same time protecting America's economy.

Voters elected Donald Trump because they trusted him to drive hard bargains and help America start winning again. I trust that President Trump can negotiate the Paris Agreement into a good deal and deliver yet another win—for North Dakotans and American workers everywhere.

Mr. Cramer, a Republican, represents North Dakota in the U.S. House.

How a Gawker-Affiliated Website Made ESPN Politically Correct

By Jason Whitlock

ESPN has recently faced public scrutiny beyond its control, an experience that has humbled the cable giant. Late last month the company cut ties with 100 employees, many of them front-facing television talent. The layoffs sparked a deluge of media coverage examining ESPN's decline and future. The consensus opinion blamed the network's woes on overly expensive live-sports contracts and subscriber losses attributed to cable "cord-cutting."

That's accurate but incomplete. What has truly impeded ESPN from overcoming its financial mistakes and inability to adapt to technological advances? The decadelong culture war ESPN lost to Deadspin, a snarky, politically progressive sports blog launched by Gawker's Nick Denton in 2005.

While the mainstream media has failed to document the extent of Deadspin's rout of ESPN, I haven't. I worked at ESPN twice, BD and AD. Before Deadspin (2001-06) and After Deadspin (2013-15).

The Mark Shapiro era defined my initial stint at the network. Mr. Shapiro—a youthful, abrasive, risk-taking senior vice president in charge of programming and production—conceived much of the programming that defines the network to this day. He invented "Pardon the Interruption" and "Around the Horn." He also paired Stephen A. Smith and Skip Bayless, televised "Mike and Mike" and "The World Series of Poker," hired Colin Cowherd, and landed ESPN's NBA package.

"Mark built a culture at ESPN," said former ESPN executive Jim Cohen in an interview. "It's always easy to do the predictable. If the predictable doesn't work, no one is going to question you, because it's what you were supposed to do. A lot of people in that newsroom laughed out loud when we started 'PTI.' They said it had no chance at succeeding."

Mr. Cohen added that since Mr. Shapiro left the network, no one has had the guts to take similar risks. But was it a lack of guts or a lack of opportunity?

Deadspin significantly elevated the price of implementing change at ESPN. The often-caustic blog mastered search-engine optimization and Twitter's ability to gin up faux outrage. Its writers trolled ESPN talent and executives, getting plenty of attention along the way. The site particularly delighted in exposing alleged sexual malfeasance among ESPN employees.

In 2007 Deadspin editor Will Leitch posted a story suggesting popular anchor Stuart Scott attempted to arrange an assignation with a woman at a Super Bowl party. Scott, who died in 2015, was married at the time, and the story was based solely on a Deadspin correspondent looking over Scott's shoulder and seeing a text that read: "Lemme know."

In 2009 Deadspin editor A.J. Daulerio—angered that ESPN PR misled him about "Baseball Tonight" analyst Steve Phillips's dismissal over an affair with an intern—published a string of unconfirmed rumors about sexual misconduct among ESPN employees. A 2011 Deadspin post alleging lewd conduct by a top ESPN executive while seated next to sideline reporter Erin Andrews justifiably spread fear throughout the network's leadership.

On the plus side, Deadspin's exposure helped end ESPN's sexually charged frat-house atmosphere. But it also extinguished the network's risk-taking culture and infused it with strict obedience to progressive political correctness.

> Deadspin ended the sports network's frat-boy culture, but also infused it with a deadening ideology.

During ESPN's presentation to advertisers last year, Deadspin's Kevin Draper wrote a post that all but declared the blog's victory over the media giant. In the piece, "ESPN's Vision of Its Future Is Good for Sports Fans, for Now" the writer celebrated the network's firing of Curt Schilling and the "targeting" of non-white and female viewers.

"The old-school viewers were put in a corner and not appreciated with all these other changes," veteran ESPN anchor Linda Cohn said during an April radio interview when asked if ESPN's liberal bent hurt the network. "If anyone wants to ignore that fact, then they're blind."

Rather than sue Mr. Denton's bullying internet pirates into submission the way tech billionaire Peter Thiel did, ESPN chose to acquiesce and adopt progressive ideology and diversity as groundbreaking business innovations. ESPN is the exact network Deadspin desired. It's diverse on its surface, progressive in its point of view, and more concerned with spinning media narratives than with the quality of its product.

The channel has become too handcuffed by politics to protect its most experienced and loyal employees. It's a massive symbol of everything that fueled Donald Trump's bid for the presidency.

ESPN NFL reporter Ed Werder, one of the most prominent faces among the layoffs last month, said in a podcast that he heard quality of work would not be a consideration when employees were let go. He lamented that "it seemed to me that quality work should be the only consideration." Not in this America, the one ruled by social-media perception and dismissive of the real world.

Mr. Whitlock is a co-host of "Speak for Yourself" on Fox Sports 1.

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Notable & Quotable: Bias Against Squirrels

From the abstract of a paper published April 13 in the academic journal Gender, Place and Culture:

Eastern fox squirrels *(Sciurus niger),* reddish-brown tree squirrels native to the eastern and southeastern United States, were introduced to and now thrive in suburban/urban California. . . . 'Easties,' as they are colloquially referred to in the popular press, are willing to feed on trash and have an 'appetite for everything.' Given that the shift in tree squirrel demographics is a relatively recent phenomenon, this case presents a unique opportunity to question and re-theorize the ontological given of 'otherness' that manifests, in part, through a politics whereby animal food choices '[come] to stand in for *both* compliance and resistance to the dominant forces in [human] culture'. I, therefore, juxtapose feminist posthumanist theories and feminist food studies scholarship to demonstrate how eastern fox squirrels are subjected to gendered, racialized, and speciesist thinking in the popular news media as a result of their feeding/eating practices, their unique and unfixed spatial arrangements in the greater Los Angeles region, and the western, modernist human frame through which humans interpret these actions.

Nicholas Abplanalp, Paige Adkins, Adreanna Albert, Alexandra Alexander, Chad Allen, Callie Ammons, Brandon Anders, Curtis Anderson, Aristotle-Jefferson Aquinde, Hannah Arkie, Elizabeth Arthur, Susan Bachraty, Rebecca Badger, Paul Barker, Dylan Barnes, Katelynn Beall, Richard Becerra, Brittanee Becker, Stephanie Bedortha, Stefanie Bell, Melissa Beminio, Kimberly Benson, Carolyn Beougher, Amanda Bernal, Rachael Bialcak, Sarah Bintory, Elizabeth Bohn, Elainne Bojorquez, Emily Bourne, Raymond Bowles, Andrea Braham, Ada Braswell, Naomi Brown, Carly Brunatti, Katherine Bullington, Amber Burg, Micaela Campagna, Brittany Carpenter, Jasmine Catolico, Nicholas Cirello, Chantel Clynick, Kaleen Coker, Caryssa Condon, Briana Coons, Danielle Courtney, Mark Cris Crisostomo, Amber Cruz, Markelle Cullom-Herbison, Brandon Dasher, Arin Davis, Danielle Davis, Zachary Davis, Kelli Dean, Aimee Denkers, Rebekah Dentino, Travis DeRossett, Symphany Desimone, Rebecca Devereaux, Abigail Devito, Julia Dickinson, Felice Dominguez, Christina Downard, Clara Dunseith, Sarah Ehmann, Danielle Elledge, Brittany Elliott, John Ellis, Rebecca England, Tyler Epp, Jana Erikson, Alyssa Fagan, Justin Farias, Tara Farrell, Kristen Ferrara, Brandon Fisher, Laura Fobes, Brooke Force, Amanda Foreman, Heather Frankeny, Ashley Gent, Nicholas Gomez, Alyssia Gonzalez, Amanda Gonzalez, Jessica Gray, Tania Gutierrez, Victor Gutierrez, Dallas Halsey, Devin Hammill, Michelle Haney, Sunny Harrison, Stephanie Hartman, Rodney Hartwig, Michael Healy, Leah Heinzmann, LeeAnn Hennessy, Mary Hicks, Casey Hirsch, Elisa Hoeks, Hunter Holcomb, Mary Holcomb, Charleigh Hollas, Kimberly Holliman, Courtney Holzhauer, Julianne Horning, Krystle Hushagen, Emily Huskisson, Stefanie Hutson, Bailey Ingegniero, Christina Jackson, Andrea Johnson, Caitlyn Johnson, Belmina Kec, Robert Kennedy, D'Anna Klassen, Hannah Kleiman, Stephanie Korb, Kristina Kreis, Melissa Krueger, Deanna Kuhn, Francesca Kunkel, Lauren Kuripla, Amanda Kutina, Allison Kutz, Mitchell LaCombe, Brittany Lamaide, David Langston, Christian Larin, Kelsey Laubie, Robert Lawrence, Taylor Lee, Nancy Little, Joseph Lopez, Mason Lopez, Nicole Luna, Jennifer Lundin, Heriberto Madrigal, Jessica Manca, Mikaela Mariner, Michelle Marroquin, Shannon Mason, Kathleen McCandless, Elizabeth McCarthy, Shanhan McClure, Tyler McCrea, Brandy McIntosh, Rachel McMahon, Ryan McNulty, Dannielle Megyeri, Cassandra Mendez, Kaitlin Mendez, Stephanie Mendoza, Joseph Meyers, Holly Miller, Breann Miller, Carrie Milster, Susana Mojica, Kimberly Moloney, Melissa Montgomery, Eric Monzelowsky, Christina Mooney, Jaclyn Moyer, Paulina Munoz, Ashley Murphy, Morgan Muse, Alexander Nunes, Rachel Obermiller, Timothy Odaniel, Sherise Onaka, Natalie Paape, Alexandra Papazian, Natalia Pappas, Heather Peebles, Brynn Perez, Candice Fatima Perez, Kristen Pilcher, Stephanie Polmateer, Karol Pomplin, Tre Powers, Julia Pritchard, Rebecca Puckett, Deanna Pusatier, Elizabeth Quintero, Nathan Ragusa, Keeana Reed, Donald Reid, Carly Richter, Serena Rico, Stacie Rihl, Joseph Rodriguez, Kara-Linda Roe, Samantha Rogers, Meg Ross, Geena Ruby, Victor Ruiz, Christel Salas, Danielle Samu, Rinad Sanchez, Analiese Sanchez, Amanda Sanders, China Schauer, Sam Schmidt, Emily Schorr, Rebecca Schott, Blair Schwisow, Troy Scott, Jessika Searles, Amie Shapiro, Serena Sheehan, Lisa Shell, Amber Short, Henry Siddoway, Stephanie Silva, Ryan Sipko, Jennifer Smith, Stephanie Smith, Taylor Souza, Tomi Stapleton, Alexie Stordal, Abigail Stover, Jasmine Tapales, Carmel Thomas, Felicia Thompson, Ashley Tomlinson, Brennan Townsend, Christen Tranchito, Christian Turnage, Cassidy Valencia, Tara Vallimont, Elisa Vazquez, Christine Viduya, Gabrielle Villa, Amanda Villalobos, Irma Villanueva, Anthony Viola, Catherine Voss, John Votel, Jennifer Walczak, Joanna Wang, Amanda Weilbacher, Tamara Weitzel, Rachel Werner, Christina Whitley, Kristin Whonsetler, Blake Williams, Jessica Williams, Sydney Willis, Marissa Wilson, Jawanna Wimberly, Tai Winn, Stephanie Wolsic, Casey Wombough, Allison Wood, Crystal Younger, Victoria Zemla, Krystle Ziegler

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Comcast, Charter in Wireless Pact

Cable giants reach a partnership as they seek a share of cutthroat business

By Dana Mattioli
And Shalini Ramachandran

Comcast Corp. and **Charter Communications** Inc. are striking a wireless partnership, people familiar with the matter said, as the cable giants look to get a piece of the cutthroat business.

As part of the deal, Comcast and Charter have agreed not to make a material merger or acquisition in wireless without the other's consent for one year, one of the people said.

That agreement could stoke Wall Street speculation among investors and analysts that the two largest U.S. cable companies together could decide to make a play for a carrier like **T-Mobile US** Inc. or **Sprint** Corp.

Neither company as a single entity could buy another wireless carrier for that time period as a result of the agreement without the other's blessing or involvement, the person said.

Wireless carriers are fighting it out in a fierce price war, while cable companies like Comcast and Charter are dealing with a saturated pay-TV business under assault from threats like cord-cutting and cheaper online video services.

The cable companies view wireless phone service as an opportunity to create a new product to make their bundles more appealing and better retain existing customers. They

Cable companies are dealing with a saturated pay-TV business.

hope that by offering a "quad play" of cable TV, home internet, landline phone and wireless service, customers will be less likely to drop their service and jump to a rival.

Comcast recently released plans to offer a wireless service to its customers and purchased airwaves that could be used to help offer it in a government spectrum auction.

Charter has said it would offer wireless service as soon as next year. Both plan to rely on a five-year-old agreement with **Verizon Communications** Inc. that allows them to resell Verizon's airwaves to offer cellphone service to their cable customers. Comcast plans to start offering its mobile service to customers as soon as later this month.

The new operational partnership will allow Charter and Comcast to share technology and work together to use their combined scale in vendor negotiations with the likes of Samsung for handsets, for instance, one of the people said. However, the two companies will keep their customer-facing wireless storefronts and mobile plans separate.

The idea is that the partnership will allow the companies to share what they learn about what works and what doesn't in service plans and back-office billing operations, as well as achieve potential cost efficiencies.

It could also help the two advance development on how to take advantage of their network of millions of Wi-Fi hotspots to bolster their wireless service. Today, handing off a voice call between a W-Fi hotspot and cellular re-

Please see CABLE page B4

Sinclair, Tribune Media Near Deal

By Joe Flint

Television-station giant **Sinclair Broadcast Group** Inc. is close to a deal to acquire **Tribune Media** Co. for close to $4 billion, a person familiar with the matter said.

An agreement, which could be announced as early as this week, would combine two of the biggest U.S. operators of local TV stations and comes just weeks after the Federal Communications Commission relaxed its television ownership rules, paving the way for more deals in the industry.

For Sinclair, an acquisition of Tribune would cement its status as the most powerful U.S. station owner. It already has 173 television stations in midsize and small markets. The addition of Tribune's 42 stations would give Sinclair outlets in just about every major market, including New York, Los Angeles and Chicago.

The companies are negotiating a deal that would value Tribune Media at $44 to $45 a share, the person familiar with the matter said. Tribune shares closed Friday at $40.29.

Even with the new relaxed TV-ownership rules, it is likely that Sinclair would have to sell some of its or Tribune's stations to comply with the FCC's rules limiting a company to ownership of television stations that reach 39% of the country. A combination of the two companies would have a 50% reach.

Besides the Tribune TV stations, the deal includes the cable channel WGN America. Sinclair would also likely end up with Tribune's minority stake in the Food Network, which is majority-owned by **Scripps Networks Interactive** Inc. For Sinclair, the motivation to get bigger is being driven, in part, by its desire to expand into cable programming and the wireless business, people close to the company said.

A Sinclair representative couldn't be reached for comment. Reuters earlier reported that the companies were nearing a deal.

Although a three-way bidding war had been expected for Tribune, one of the interested parties, **21st Century Fox** Inc., ended its pursuit of the company, a person familiar with the situation said. 21st Century Fox and Wall Street Journal parent **News Corp** share common ownership.

Options Traders Head For Exits

By Gunjan Banerji

Falling volumes and spiraling costs are pushing trading firms out of U.S. options, raising concerns about fragility in a market that investors rely on to protect portfolios.

Trading has dwindled in most areas of the market, and investors and traders are grappling with increasing fragmentation.

Liquidity has deteriorated, according to interviews with market participants and data reviewed by The Wall Street Journal, making it harder to trade most options without significantly moving prices. Options on key indexes, exchange-traded funds and high-volume stocks dominate trading. but activity has diminished in the rest of the listed U.S. options world.

The stresses, which have made trading riskier and less profitable, prompted at least six prominent options market makers to exit from the business since 2012. Market makers are firms willing to both buy and sell using automated programs.

Thomas Peterffy, a pioneer of electronic options trading, said in March that his firm, **Interactive Brokers Group** Inc., would pull the plug on options market making. **KCG Holdings** announced its exit from retail options market making last year, while **UBS Group** AG and **Credit Suisse Group** AG have also left automated options market making. **J.P. Morgan Chase** & Co. and **Bank of Amer-**

Please see OPTIONS page B9

Buffett Isn't Retiring, His CEOs Are

DANIEL ACKER/BLOOMBERG NEWS

At Berkshire's annual meeting Saturday, Warren Buffett offered no new clues about who would eventually succeed him as CEO.

By Nicole Friedman

OMAHA, Neb.—Warren Buffett is quietly installing a new set of leaders throughout **Berkshire Hathaway** Inc.

Seven Berkshire subsidiaries that collectively employ more than 46,000 people announced changes in chief executive officers in the last year, an unusually high amount of turnover at a company that rarely has top executives leave.

They range from reinsurer **General Re** Corp. and specialty-chemicals company **Lubrizol** Corp. to **MiTek Industries** Inc., which supplies equipment and software to the construction industry. Some of the leadership changes weren't widely reported.

The moves will test the strength of Berkshire's decentralized structure. Berkshire's roughly 60 subsidiaries operate independently, with the CEOs of most Berkshire businesses reporting directly to Mr. Buffett.

"The performance of these units in transition will each be a test of succession planning," said Lawrence Cunningham, a law professor at George Washington University who has written about Berkshire.

At Berkshire's annual meeting Saturday, Mr. Buffett offered no new clues about who would eventually succeed him as CEO, though he did suggest that person could take over while Mr. Buffett is still alive. The 86-year-old, who has headed Berkshire for 52 years, has said that Berkshire's board has agreed on a succession plan but hasn't released the name of his successor.

Mr. Buffett went out of his way Saturday to praise Berkshire's managers, as he usually does. "We have never had more good managers than we have now," Mr. Buffett said. But, he quipped, "that's because we've got more good companies."

Berkshire typically leaves the management team in place when it buys a business, and Berkshire CEOs rarely leave their jobs to take other positions. Some have served for decades.

Most Berkshire CEOs report directly to Mr. Buffett, but some report to one of his investing lieutenants, Ted Weschler or Todd Combs, or to Tracy Britt Cool, Mr. Buffett's

Please see CEO page B2

KEYWORDS | By Christopher Mims

How Self-Driving Cars Could Wipe Out Uber

If **Uber Technologies** Inc. ever collapses, historians may trace its undoing not to its troubles with labor relations, intellectual property, regulatory conflicts or sexual-harassment allegations, but to technological disruption.

This would be the same technological disruption the company itself pledged to use to upend the auto industry and the $2 trillion a year tied to it.

Less than a year ago, Uber Chief Executive Travis Kalanick described self-driving cars as an "existential" threat to his company, saying that his team must get the technology to market before competitors do, or at least at around the same time. Self-driving vehicles would ultimately be much cheaper to operate than ones requiring human drivers—robots work tirelessly and don't demand raises. The first companies to roll out fleets of automated taxis could quickly drive their human-powered competition into oblivion.

Uber's philosophy, both internally and in its pitch to consumers, is that it's a hassle to own a car. The irony is, for the pay-by-the-ride future of transportation to be realized, someone has to own a lot of cars. Chances are, it won't be Uber.

When Mr. Kalanick declared the make-or-break importance of self-driving technology, the company had just acquired the startup Otto, which made Uber a contender in a space dominated by others. Less than a year later, things have changed dramatically. Uber is now embroiled in a court battle with Google-parent **Alphabet** Inc. over the source of Otto's self-driving technology.

Last week, Alphabet subsidiary Waymo presented evidence it says proves Uber's former head of self-driving

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INSIDE

AT DISNEY, ALL EYES ON ESPN

THE WEEK AHEAD, B2

EARNINGS ENJOY HIGH ENERGY

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These indexes cite notable references to most parent companies and businesspeople in today's edition. Articles on regional page inserts aren't cited in these indexes.

INDEX TO PEOPLE

CEO

Continued from the prior page

former financial assistant and current chief executive of the Pampered Chef, a Berkshire subsidiary.

When Tad Montross announced his retirement from Gen Re last year Gen Re said his successor would report to Ajit Jain, who runs Berkshire Hathaway Reinsurance Group, and not to Mr. Buffett as Mr. Montross had. One month later it announced the new CEO would be Kara Raiguel.

Berkshire's board routinely discusses succession at the top but also at the subsidiary level, with a focus on how to maintain Berkshire's culture, said board member Ron Olson, a partner at Munger, Tolles & Olson LLP, at a conference Thursday in Omaha.

Most new managers are hired from within the subsidiaries, he said, a model that has been successful.

One such example is Eric Schnur, who started reporting to Mr. Buffett as chief executive of Lubrizol in January, replacing the retiring James Hambrick. He has worked at the company since he was a student.

"I know the product lines, the customers. I know a lot of the challenges," he said in an interview. "It's clear to me what we need to do" to expand the business.

Many Berkshire managers spent part of last week networking with each other in Omaha, sharing experiences and ideas on shared challenges.

Other recent Berkshire subsidiary CEO turnovers include Cathy Baron Tamraz, who retired as CEO of press-release distributor Business Wire Inc., and was succeeded by Geff Scott. At MiTek, Mark Thom took over as CEO while former CEO Tom Manenti became executive chairman and continues to report to Mr. Buffett.

In December, Melissa Burgess-Taylor took the helm at Fruit of the Loom Inc. after Rick Medlin died at age 68. In April, Texas-based Star Furniture said Chief Executive Bill Kimbrell had resigned and a successor wasn't announced. A spokesman didn't provide an immediate comment.

Starting in June, RC Willey Home Furnishings Chief Executive Scott Hymas is planning to take a three-year religious leave, during which the company's president will be in charge of the Utah furniture chain while Mr. Hymas will take more of a board role, he said.

Berkshire declined to say whether that was a complete list of CEO transitions since 2016's annual meeting.

Mr. Buffett sends CEOs a letter every two years reminding them of the company's values and asking them to recommend in writing who their successors should be, he said in his 2010 shareholder letter.

Mr. Buffett also occasionally replaces top executives. In 2012, he wrote a letter to ousted Benjamin Moore & Co. CEO Denis Abrams explaining his decision to fire him based on "a differing view about distribution channels and brand strategy."

Berkshire Looks to Benefit From Tax Cut

OMAHA, Neb.—**Berkshire Hathaway** Inc. is already examining ways to benefit from the lower corporate tax rate proposed by President Donald Trump, Chairman Warren Buffett said at the company's annual meeting Saturday.

The company had a "slight preference" for taking a tax loss on some of its investments in the first quarter, Mr. Buffett said, because it expects that such a loss would be less valuable to Berkshire in the future if taxes are lower. Berkshire said Friday that its first-quarter net earnings fell 27%, hurt by weaker investment gains.

The Trump administration unveiled a plan last month to lower taxes on all businesses to 15%. Most of Berkshire's revenue comes from the U.S., so it would expect a large benefit from lower taxes.

Some of those benefits would be passed along to the company's customers, especially in its heavily regulated utility businesses and in the more-competitive industries in which it operates, Mr. Buffett said. But shareholders would benefit too, especially due to lower taxes on Berkshire's investment gains.

Mr. Buffett, a longtime Democrat, supported Hillary Clinton in the presidential campaign but has said Berkshire's long-term performance won't depend on who is president.

Mr. Buffett and Berkshire's vice chairman, Charles Munger, answered questions from shareholders, analysts and journalists for hours on Saturday in Omaha, Neb. Tens of thousands of Berkshire fans traveled from around the world to hear Messrs. Buffett and Munger speak and to shop at Berkshire businesses, including See's Candies, Fruit of the Loom and Dairy Queen.

The enthusiastic crowd, many of whom stood outside for hours to get prime seats inside the arena, responded to Messrs. Buffett and Munger's familiar stories and jokes with laughter and applause.

The two men touched on everything from the effect of accounting policies on Berkshire's balance sheet to their regret at not investing in Amazon.com Inc. or Alphabet Inc.'s Google.

—Nicole Friedman, Erik Holm

BUSINESS & FINANCE

Investors Await Disney TV Update

By Ben Fritz

Walt Disney Co. investors will be paying more attention than ever to the media company's huge but challenged television business as the company reports fiscal second-quarter financial results Tuesday.

THE WEEK AHEAD

The future of Disney's TV division, particularly ESPN, has been the focus of anxious Wall Street analysts since its growth started slowing two years ago amid subscription declines for pay-cable packages. Wariness is even higher now, though, after a top executive at Time Warner Inc. last week warned about an advertising slowdown and after the biggest-ever first-quarter decline in pay-TV subscriptions.

Investors will want to know whether the many deals Disney has signed with low-price "slim" internet TV bundles like **YouTube** TV are ameliorating subscriber declines. They also will be looking for an update on the "over-the-top" digital ESPN product Disney has said it would launch by the end of the year.

The company's theme-parks unit is also likely to get attention as the first anniversary of Shanghai Disney Resort approaches in June. Investors will want an update on the park's performance—particularly whether it is on track to meet its goals of 10 million visitors and break-even financial results.

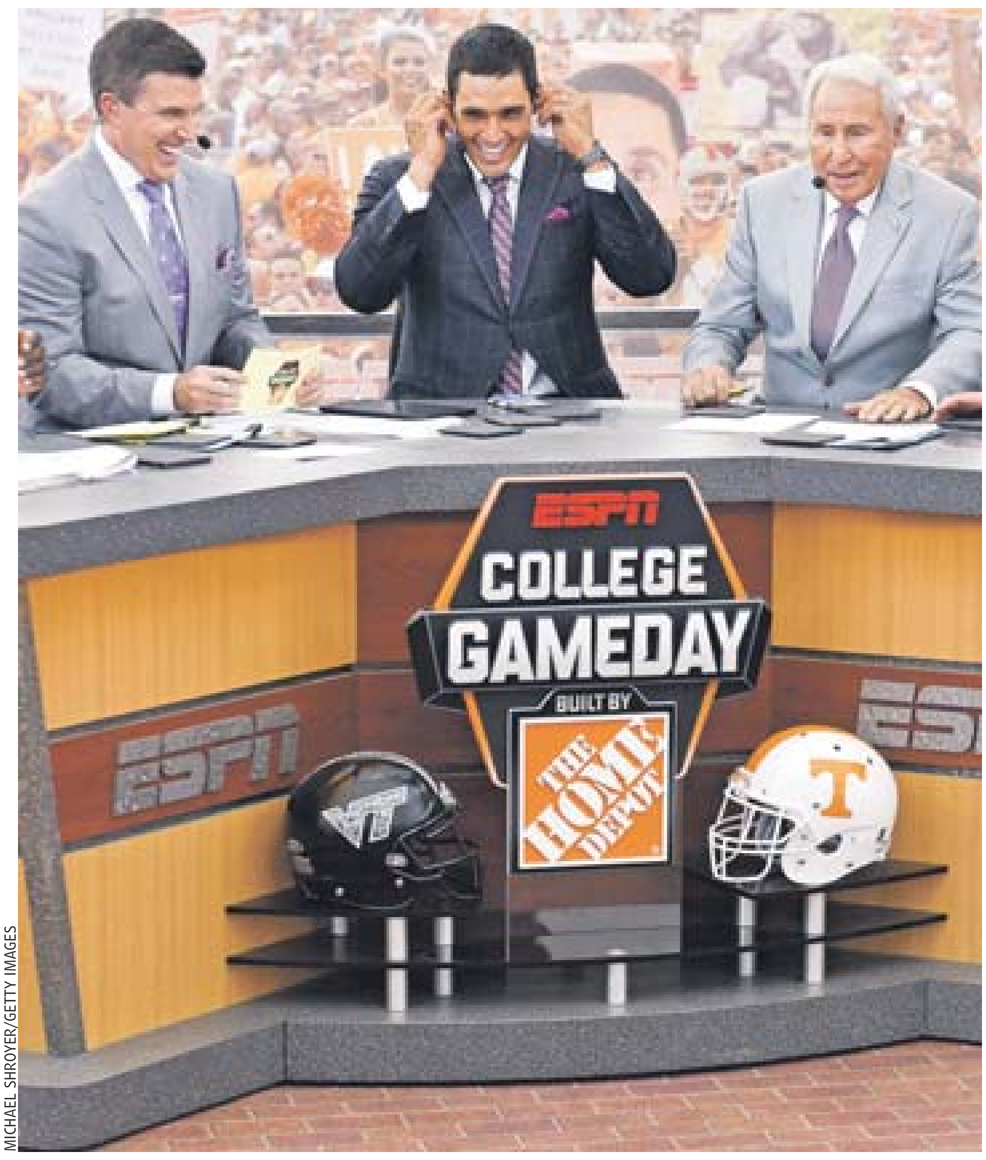
Wall Street may also want to set expectations for the new "Avatar"-themed land opening at the Animal Kingdom park at Walt Disney World in Orlando, Fla., this month and whether it could help maintain growth in the domestic parks business, which has been on a tear recently.

After a monster fiscal 2016, Wall Street has been expecting a comparatively slow 2017 from Disney's film business. It is releasing only eight films, compared with 13 the prior year—two of which were on behalf of partner DreamWorks, under a deal that has expired—and 11 in the next.

But with March's "Beauty and the Beast" grossing $1.1 billion-plus and "Guardians of the Galaxy Vol. 2" on its way to a total nearly that big, declines at the studio could be quite minor after all. Investors will want to know what impact "Beauty" is having on the movie studio and consumer products this year and contemplating what looks like a few blockbuster years to come, with an accelerating pace of Marvel and "Star Wars" films as well as a "Frozen" sequel.

Tuesday will be the first earnings call since Chief Executive Robert Iger in March extended his contract for another year, to July 2019. Though Mr. Iger has previously been tight-lipped on earnings calls about the search for a successor, analysts may nonetheless ask about progress in figuring out who will be running the world's biggest media conglomerate in two years.

Disney is expected to report net income of $1.41 a share for the quarter, according to the consensus of analysts surveyed by Thomson Reuters, compared with $1.30 a share a year earlier. Revenue is expected to be $13.45 billion, up from $12.97 billion a year ago. Disney doesn't provide earnings guidance.



MICHAEL SHROYER/GETTY IMAGES

ESPN's growth started slowing two years ago amid subscription declines for pay-cable packages.

WALT DISNEY/EVERETT COLLECTION

'Guardians' opened to a strong $145 million in the U.S. and Canada.

Estimated Box-Office Figures, Through Sunday

FILM	DISTRIBUTOR	WEEKEND* (SALES, IN MILLIONS)	CUMULATIVE (SALES, IN MILLIONS)	% CHANGE
1. Guardians of the Galaxy Vol. 2	Disney	$145	$145	—
2. Fate of the Furious	Universal	$8.5	$207.1	-57%
3. The Boss Baby	Twentieth Century Fox	$6.2	$156.7	-34%
4. How to Be a Latin Lover	Lions Gate	$5.3	$20.7	-57%
5. Beauty and the Beast	Disney	$4.9	$487.6	-28%

*Friday, Saturday and Sunday Source: comScore

'Guardians' a Marvel Win

By Ben Fritz

Walt Disney Co.'s Marvel Studios continued its winning streak at the box office over the weekend, as "Guardians of the Galaxy Vol. 2" opened to a strong $145 million in the U.S. and Canada, according to studio estimates. It was the second-highest opening of the year so far, behind Disney's own "Beauty and the Beast."

The interstellar action-comedy starring Chris Pratt opened in some foreign markets last week and has grossed a total of $283 million overseas. It has grossed $48 million in China since opening there Friday and its $13.3 million debut in South Korea already exceeds the $11 million total gross of the first "Guardians of the Galaxy" there.

The original "Guardians" looked like Marvel's biggest-ever risk when it was released in 2014, since it was based on one of the company's most obscure comics and featured a foul-mouthed raccoon and a sentient, grunting tree. It also didn't have narrative connections to the rest of Marvel's "cinematic universe," including characters like Thor and Iron Man.

But the movie's $773 million global gross proved the value of the Marvel Studios brand in attracting fans even to superheroes they have never heard of. Now the second "Guardians" appears likely to gross around $1 billion and become one of Marvel Studios' top five films to date, out of 15 it has released.

All of Marvel's movies have been hits save for the second one it released, "The Incredible Hulk," in 2008.

Disney, which acquired Marvel in 2009, spent about $200 million to make the visual effects-heavy "Guardians Vol. 2." It should be another profitable hit for the media company's film studio, which is coming off a string of successes including "Beauty," "Rogue One: A Star Wars Story," "Moana" and Marvel's "Doctor Strange." Disney hasn't released a big-budget disappointment since last summer's "The BFG" and "Alice Through the Looking Glass."

VW Again Says It Is on Cusp of U.S. Turnaround

BY WILLIAM BOSTON

WOLFSBURG, Germany—**Volkswagen** AG says its unprofitable U.S. operation is about to turn a corner and start cashing in on the world's most valuable car market.

But the company has been down this road before.

Herbert Diess, a former **BMW** AG executive who runs Volkswagen's namesake brand, is banking on a new fleet of sport-utility vehicles and a new generation of electric cars targeting **Tesla** Inc. on its home turf to improve VW's fortunes in America.

"The U.S. is too big a market for us to be a niche player," Mr. Diess told reporters on Friday, adding that VW expected to break even in the U.S. market by 2020, for the first time in years.

The brand banks on a new fleet of SUVs and a new generation of electric cars.

VW's push to gain market share in the U.S. comes as the company is gradually emerging from its diesel emissions-cheating scandal. In 2015, Volkswagen admitted to rigging millions of diesel vehicles to cheat on emissions tests. Nearly half a million cars were affected in the U.S., plunging the VW brand into a crisis.

VW's U.S. sales rose 10% in the three months to the end of March from a year earlier, after the launch of its Atlas and Tiguan SUVs. Mr. Diess said VW plans to launch two new models in the U.S. market every year, targeting sedans in 2018 and two more SUVs in both 2019 and 2020.

In 2020, Volkswagen will also begin production of its new family of pure electric vehicles. The first, a sedan, will go into production in Zwickau, eastern Germany, followed by new assembly facilities in China and the U.S.

"We have almost returned to precrisis levels within just 1½ years," Mr. Diess said. "And this is all without the diesel model, which we have completely withdrawn from the U.S. market."

The Volkswagen group, whose lineup includes VW, Porsche, Audi, Bentley and Lamborghini, is the world's biggest auto maker by sales. But the VW brand's share of U.S. auto sales was just 1.9% at the end of April, according to data compiled by Motor Intelligence. Including the Audi and Porsche brands, the market share was 3.6%.

This isn't the first time a senior VW executive has pledged to achieve market share in the U.S. that is more in line with its status as the leading manufacturer in Europe and China.

Martin Winterkorn, who resigned as chief executive in the wake of the diesel crisis, predicted in 2014 that VW would sell a million vehicles a year in the U.S. by 2018. The VW brand sold 322,948 vehicles in the U.S. last year, down 7.6% from the previous year.

But that goal always seemed out of reach to the company's top management in the U.S. Until recently, VW lacked products tailored for the U.S. market, especially SUVs, and development decisions moved slowly at the headquarters in Germany.

Mr. Diess, acknowledging that VW is far from its U.S. goal, declined to give volume targets.

Nike Was Just Off Its Time in Marketing Race

LUCA BRUNO/ASSOCIATED PRESS

Nike Inc.'s attempt to stage the first sub-two-hour marathon fell just short Saturday, a rare marketing miss for the world's largest sportswear maker.

Eliud Kipchoge, the reigning Olympic marathon champion, finished the company-controlled race in two hours, 25 seconds—more than two minutes better than the current world best. Still, his mark likely won't be ratified as a record since Nike didn't obey regulations on pacing and hydrating. Two other runners, Lelisa Desisa of Ethiopia and Zersenay Tadese of Eritrea, fell out of contention early.

Nike invested years of research in the project, dubbed Breaking 2, an effort to engineer technically sophisticated footwear and prepare the three elite runners to break a time barrier. The race was staged on a Formula One racetrack in Monza, Italy, and Nike flew in dozens of world-class runners to set the pace.

Nike didn't respond to questions regarding whether it will continue the project. Chief Executive Mark Parker, who attended the marathon, said "this achievement represents more than a race. It's a moment of global inspiration that will encourage every athlete, in every community, to push the limits of their potential."

Breaking the two-hour marathon has become something of an arms race among top sportswear companies, with rival **Adidas** AG working on a similar project.

—Sara Germano

Hiring Picks Up at Logistics Firms

BY JENNIFER SMITH

Businesses tied to e-commerce fulfillment resumed hiring at a rapid clip in April, bolstering payrolls to meet changes in the consumer economy.

Parcel carriers and delivery firms, which had scaled back hiring in March, added 3,200 courier and messenger positions last month, the U.S. Bureau of Labor Statistics said in its April jobs report. The warehousing and storage sector, which includes sprawling fulfillment centers that process online orders, added 2,500 jobs, accelerating from just 300 job additions in March.

The growth in sectors tied to online consumers came as hiring at other shipping operators more tied to industrial business was mostly flat. Trucking companies followed two strong months of hiring by cutting payrolls by 100, and railroads slashed 500 jobs despite improved freight shipping volumes last month.

Trucking companies have reported largely tepid earnings in the first quarter of this year, with uneven demand and overcapacity making it tough for carriers to raise the prices they charge shippers.

The hiring at courier and logistics companies was part of a robust national report. Overall nonfarm payrolls rose by 211,000 jobs in April and unemployment declined to 4.4%, potentially priming the economy for strong expansion in the second quarter.

Whether that growth produces more shipping demand is an open question, however. Goods-producing industries contributed only about 10% of the new jobs in April and factory hiring slowed, as U.S. manufacturing activity eased for the second month in a row.

The transportation and warehouse sector overall added 3,500 jobs last month, with declining payrolls at transit and ground passenger transportation operations undercutting gains at cargo-focused businesses.

Trump's Policies Stir Change At Indian Outsourcing Firms

BY NEWLEY PURNELL

NEW DELHI—As President Donald Trump tightens restrictions on immigration, Indian outsourcers are applying for fewer U.S. work visas, bringing employees home and trying to automate much of what they do.

Mr. Trump last month said he wants to alter rules for accepting high-skilled foreign workers under the H-1B visa program, which he said is a victim of "widespread abuse," signing an executive order calling for a governmentwide review aimed at stricter immigration enforcement and closing loopholes that undermine his "Buy American" initiatives.

The visas should be granted to the "most-skilled and highest-paid applicants," he said. Indian outsourcing companies are the largest employers of H-1B holders, while U.S. technology companies such as **Microsoft** Corp. and **Alphabet** Inc.'s Google also use the visas but usually to recruit employees with rare skills that attract higher wages.

Indian companies that send tens of thousands of workers to the U.S. annually applied for fewer visas this year "due to the fear and uncertainty surrounding the Trump administration's stance on immigration," said Shanon Stevenson, who works with large Indian information-technology firms as an immigration attorney for Fisher & Phillips, an Atlanta-based law firm.

Some of the firms, which she declined to name, are sending home Indian recruits who are already in America.

The number of H-1B applications fell 16% this year, the first drop in five years. About 85,000 of the visas are allotted each year by U.S. Citizenship and Immigration Services, with many going to Indians in lotteries triggered by overwhelming demand. The visas are good for three years and can be extended, meaning likely over half a million H-1B holders are in the U.S., according to analysts' estimates.

AIJAZ RAHI/ASSOCIATED PRESS

Infosys employees at the firm's headquarters in Bangalore, India.

Meanwhile the volume of applications from U.S. tech companies appears to be holding steady, immigration attorneys said.

In an example of how Indian firms are reacting to potential immigration changes, **Infosys** Ltd., India's second-largest outsourcer by sales, on Tuesday said it is opening a new development center in Indiana in August where it hopes to create some 2,000 jobs for Americans by 2021.

Some Indian firms see opportunities from immigration restrictions. If Indian workers are forced to return home, outsourcing firms "are not going to be able to go out and suddenly replace all those people," so the tech work will be forced offshore to India, said Anand Mahindra, chairman of Tech Mahindra Ltd., one of India's largest IT companies. "It is a chance for Indian software companies to change the model," which has depended on sending armies of Indians to America, he said.

While Indian outsourcers say they can't find the talent they need with the right skills in the U.S., some analysts say they aren't really trying to do so, driven instead by a desire to pay lower wages, and that new restrictions could force them to hire more Americans.

The trend toward doing more offshore and through automation has been emerging slowly in recent years but is accelerating thanks to Mr. Trump's stance, analysts say.

The White House singled out India's two largest IT firms by sales, **Tata Consultancy Services** Ltd. and Infosys, along with Teaneck, N.J.-based **Cognizant Technology Solutions** Corp.—which has most of its employees in India—last month as potential targets of the crackdown.

The companies pay their employees wages that are well below average levels in the U.S. and flood the government with applications to "get the lion's share of visas," said a senior administration official last month in a press briefing.

TCS and Infosys declined to comment on their plans to deal with more onerous visa regulations. A Cognizant spokesman cited comments Friday from company President Rajeev Mehta, who said on a call with analysts that the company is applying for fewer H-1B visas and aiming to ramp up hiring in the U.S.

A Quantum Leap for Computers Looms

VW, IBM and others prepare technologies to solve new classes of problems quickly

By Sara Castellanos

D-WAVE SYSTEMS/VOLKSWAGEN

Companies have started to make use of quantum computing, such as this D-Wave 2000Q System.

CIO JOURNAL

Quantum mechanics has fascinated, confounded and even alarmed scientists for nearly a century with the notion that particles can exist in two states at once and communicate with each other across vast distances. The underlying science that Albert Einstein famously called "spooky" could soon become one of modern computing's core tenets.

Computers that utilize quantum mechanics are moving beyond pure scientific research and edging toward the commercial sector, with companies such as **Volkswagen** AG beginning to harness their unprecedented power to solve complex problems in nanoseconds.

"This technology is not futuristic," said Martin Hofmann, Volkswagen chief information officer, who oversees information technology for the group's 12 brands including **Audi**, Porsche and Bentley. "It's a question of years until it's commercialized, and investing right now in the technology is a big competitive advantage."

Companies including **D-Wave Systems** Inc. and **International Business Machines** Corp. have been pioneering quantum computing, and experts say that within five years the technology could be powerful enough to solve new classes of problems that are currently beyond the grasp of even supercomputers.

While traditional computers use binary digits, or bits, which can either be 0s or 1s, quantum computers use quantum binary digits, or qubits, which represent and store information in both 0s and 1s simultaneously. This means the computers have the potential to sort through a vast number of possibilities within a fraction of a second to come up with a probable solution.

Volkswagen put that speed to use for a recent traffic-optimization project. Working on a $15 million D-Wave quantum computer over the cloud, a team of five in-house data scientists took GPS data from 10,000 taxis in Beijing and simulated specific routes that would allow each car to travel from downtown Beijing to the nearest airport, about 30 kilometers away, in the fastest time possible without creating a traffic jam.

After six months and several attempts, Dr. Hofmann and his team in March came up with an algorithm for the computer that optimized the routes for each taxi within a fraction of a second. A normal computer would have taken about 45 minutes to complete the same task, he said.

Dr. Hofmann's next project is a navigation-based mobile app for drivers in Barcelona that will harness the power of quantum computing and machine learning, a part of artificial intelligence, to predict traffic jams and immediately send alternate routes. The first iteration is expected to make its debut by year-end, though Dr. Hofmann declined to go into more detail about the project. "If our project succeeds and in six to eight years the technology is where it should be, then traffic jams won't happen anymore," he said.

IBM has also developed a cloud-based quantum computing service, which became available in March for commercial business use. A similar service for individual experiments was launched last year. Executives say that in less than five years IBM's system could begin solving a range of computations for businesses related to chemistry and supply-chain optimizations. Those could include the ability to simulate significantly more molecular interactions within the human body than is now possible with traditional computers, which could accelerate new drug discoveries, said Bob Picciano, senior vice president of IBM Cognitive Systems.

But commercializing the technology is a complex task. Qubits can't yet maintain their quantum mechanical state for more than a fraction of a second, said Dario Gil, vice president for science and solutions for IBM Research. They are delicate, easily disrupted by changes in temperature, noise or frequency. The number of qubits created by companies to date remains relatively small, meaning experiments are currently limited to a narrow swath of information. There also isn't yet a programming language for quantum computing like there is for classical computing.

"This is phenomenally difficult from a tech perspective from every aspect," including materials, devices, theory and error correction, Dr. Gil said.

GE, Rivals Turn to Europe For Push Into 3-D Printing

By Daniel Michaels

TURIN, Italy—For **General Electric** Co. and its rivals expanding their manufacturing operations using 3-D printing, Europe is emerging as a dominant source of the latest technologies.

GE is placing Germany's **Concept Laser** GmbH and Sweden's **Arcam** AB, which the U.S. industrial giant bought in November for a combined $1.5 billion, at the core of a new business unit it is spinning out of GE Aviation. Arcam and Concept already are working closely on printed airplane-engine parts with European aviation-component makers that GE bought over the past decade. GE is investing about $100 million to expand Concept's headquarters and plans to double its staff of 200 by early next year.

Last month GE said it would open in Munich the first of several marketing centers it plans world-wide dedicated to the new technology, known formally as metal additive manufacturing, in a nod to the European companies' outsize role in the technique's development. The new hands-on demonstration facility, which will have as many as 10 operational 3-D printers from the two companies, will be built next to GE's existing research center at a cost of roughly $10 million.

Concept, Arcam and other European companies that GE bought over recent years were developed independently "bring great technologies that here," said Riccardo Procacci, a GE veteran previously with the conglomerate's oil-and-gas division. He is now chief executive of plane-part maker Avio Aero, near Milan, which GE bought in 2013. One of Avio's specialties is 3-D metal printing, thanks to a decade of work with Arcam.

GE is considering European locations for the headquarters of its new GE Additive division, now being created. Executives have said they want to generate $1 billion in revenue from 3-D printing by 2020, up from $300 million today.

An early mover into 3-D printing, GE is aggressively expanding its operations in part because rivals are getting more active. **Siemens** AG of Germany last year bought British additive-manufacturer Materials Solutions Ltd. for an undisclosed amount and opened a 3-D printing facility in Sweden. Siemens has focused on parts for gas turbines, an industry in which it competes with GE.

Siemens declined to comment for this article.

Meanwhile, **United Technologies** Corp.'s Pratt & Whitney, which competes with GE in airplane engines, is expanding its use of 3-D printing for making quick prototypes to accelerate engine development.

CABLE

Continued from page B1

mains clunky.

The companies also agreed that they would only work together with respect to other commercial arrangements with the national wireless carriers, such as in wireless airwave reseller deals like the one they already have with Verizon.

The cable companies will also likely explore working closer together to gain scale in wireless and digital advertising as a result of the partnership, another person familiar with the matter said.

Rivals AT&T and Verizon have openly discussed their interest in making a bigger play there, as juggernauts Google Inc. and Facebook Inc. are sucking up the majority of digital ad dollars. Comcast and Charter already collaborate in local cable ad sales.

Comcast and Charter will each still only offer wireless service to customers within their respective cable footprints—not nationwide, the person said. However, their mobile plans' coverage will be nationwide.

The deal is likely to be announced on Monday, people familiar with the matter said.

JARED WICKERHAM/ASSOCIATED PRESS

Uber owns self-driving vehicles, such as this one in Pittsburgh.

MIMS

Continued from page B1

technology stole the technology from Waymo, where he previously worked. If Uber loses, its self-driving technology program could be shut down under trade-secret laws.

Uber declined to comment on the suit. Attorneys haven't disputed the allegation that the employee stole files, but they have denied that Uber knew of, possessed or used those files.

As the two spar, Big Auto is dialing up the competition. Last week Cambridge, Mass.-based automotive software company nuTonomy Inc. announced a partnership with Peugeot, while Samsung Electronics Co. got together with Hyundai Motor Co. General Motors Co. is committed to rolling out self-driving vehicles as part of a ride-sharing service, says a company spokesman.

All of this is part of what auto makers and ride-hailing companies anticipate will be a larger transition to "transportation-as-a-service"—potentially the end of widespread vehicle ownership in developed countries. Subscribing to such a service for all of a person's transportation needs within a typical American city could cost anywhere from 10% to 25% what an average consumer now spends on owning, maintaining and insuring a vehicle, says Tony Seba, cofounder of technology think tank RethinkX.

This disruption hinges on the arrival of dependable autonomous vehicles. It isn't at all clear when they will get here. Tesla's Elon Musk said last week that one of his vehicles will be ready in two years; Uber plans to have its autonomous vehicle available somewhere around 2021.

Uber seems well positioned to take advantage of this disruption. Not only is it working on its own technology, but David Richter, vice president of strategic initiatives at Uber, says that auto makers will benefit from first putting their own self-driving vehicles into service in an existing network—yes, like Uber's.

Daimler AG, maker of Mercedes-Benz, is betting on Uber: It plans to manufacture self-driving cars for Uber's network. GM has bet on Lyft Inc., and is building a complement to Uber called Maven Gig that uses human drivers.

But even if Uber can keep up in terms of autonomous-vehicle technology—or find more willing partners in the established auto industry—there is a much larger problem looming ahead.

The companies that will profit from the transportation-as-a-service revolution will depend on an incredibly costly infrastructure—one that doesn't yet exist. Someone has to buy and maintain all the autonomous vehicles, enough to replace all of the cars driven (and usually owned) by Uber and Lyft drivers, not to mention many of the cars driven by you, me and countless others, too.

To date, Uber's model has been built on it not owning vehicles.

Uber does own its prototype self-driving vehicles, but declined to comment on the extent to which its future would depend on owning vehicles.

Auto makers have a great deal of experience working with the complex web of dealers, financing companies and fleet managers—even car-rental agencies—that

Up until now, Uber's model has been built on it not owning vehicles.

could potentially be repurposed to manage millions of self-driving vehicles.

Owing to all these factors, Uber, Lyft and their imitators will eventually cease to exist as stand-alone companies, either going out of business or being acquired by car makers, says Sam Abuelsamid, a senior analyst with Navigant research who specializes in mobility.

"It's a lot easier for an auto manufacturer to replicate what Uber or Lyft or Gett has done than it is for an Uber or Lyft to get into either manufacturing or even just buying vehicles and having to maintain them," he adds.

A spokesman for Lyft says that it will someday operate its own fleet of self-driving vehicles, but it isn't clear whether it will own them or its auto-maker partners—for example, GM—will.

The future of transportation—cheaper, cleaner, less congested—could be great for consumers. It will also open up new sources of revenue for technology companies, the arms dealers of the autonomous-vehicle war. As for Uber, the company faces a difficult choice: Either figure out a way to buy or at least manage an enormous fleet (possibly by going public to foot the bill), or face annihilation by others who will.

MARKETS DIGEST

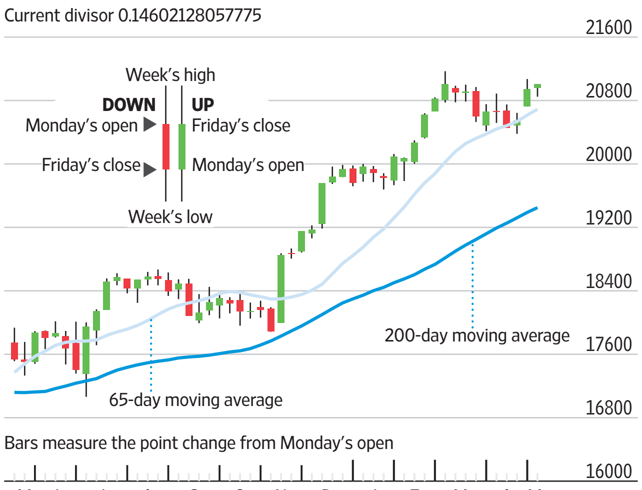
Dow Jones Industrial Average

21006.94 ▲66.43, or 0.32% last week

High, low, open and close for each of the past 52 weeks

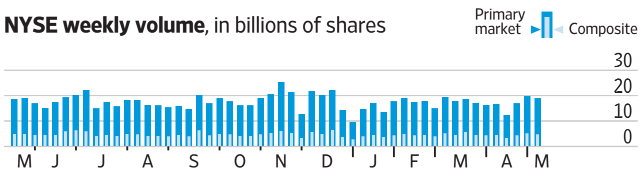
	Last	Year ago
Trailing P/E ratio	20.51	19.01
P/E estimate *	17.78	16.91
Dividend yield	2.32	2.59
All-time high 21115.55, 03/01/17		

Current divisor 0.14602128057775



Bars measure the point change from Monday's open

NYSE weekly volume, in billions of shares



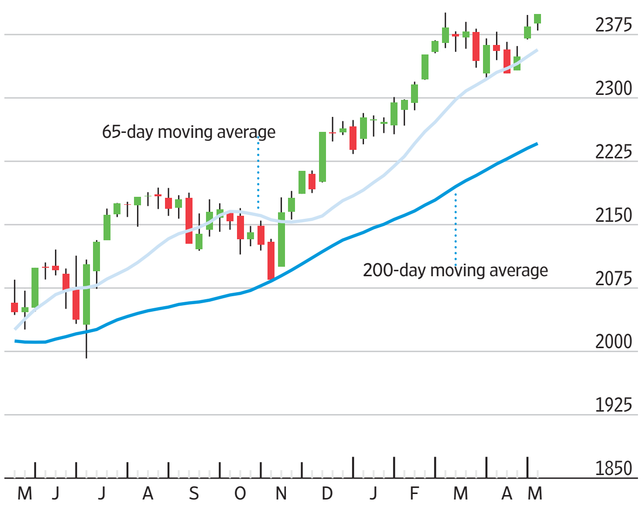
Weekly P/E data based on as-reported earnings from Birinyi Associates Inc.

S&P 500 Index

2399.29 ▲15.09, or 0.63% last week

High, low, open and close for each of the past 52 weeks

	Last	Year ago
Trailing P/E ratio	23.76	23.66
P/E estimate *	18.44	17.59
Dividend yield	1.97	2.20
All-time high: 2399.29, 05/05/17		



Financial Flashback

The Wall Street Journal, May 8, 2009

The Fed announced results of "stress tests," finding that 10 of 19 banks tested would need to raise about $75 billion in anticipation of a worst-case economic scenario.

Major U.S. Stock-Market Indexes

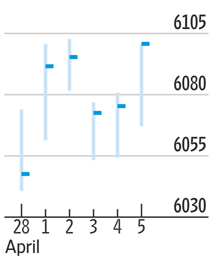
	Latest Week High	Low	Close	Net chg	% chg	52-Week Low	Close (●)	High	% chg	% chg YTD	3-yr. ann.
Dow Jones											
Industrial Average	21006.94	20847.95	**21006.94**	66.43	**0.32**	17140.24		21115.55	**18.4**	6.3	**8.3**
Transportation Avg	9196.81	9062.27	**9189.97**	92.34	**1.01**	7093.40		9593.95	**18.7**	1.6	**6.2**
Utility Average	705.54	694.91	**703.02**	-1.33	**-0.19**	625.44		720.45	**6.6**	6.6	**8.7**
Total Stock Market	24866.14	24643.44	**24865.61**	128.34	**0.52**	20583.16		24868.78	**17.5**	6.8	**8.0**
Barron's 400	643.62	634.03	**641.14**	2.38	**0.37**	491.89		643.82	**25.0**	6.6	**7.7**
Nasdaq Stock Market											
Nasdaq Composite	6102.72	6053.28	**6100.76**	53.15	**0.88**	4594.44		6100.76	**28.8**	13.3	**13.8**
Nasdaq 100	5646.09	5600.31	**5646.09**	62.56	**1.12**	4201.05		5646.09	**30.4**	16.1	**16.1**
Standard & Poor's											
500 Index	2399.29	2379.75	**2399.29**	15.09	**0.63**	2000.54		2399.29	**16.6**	7.2	**8.4**
MidCap 400	1743.93	1713.71	**1738.52**	5.76	**0.33**	1416.66		1758.27	**19.7**	4.7	**8.5**
SmallCap 600	857.71	839.87	**848.96**	-2.40	**-0.28**	670.90		863.08	**23.4**	1.3	**9.3**
Other Indexes											
Russell 2000	1411.04	1380.49	**1397.00**	-3.43	**-0.25**	1089.65		1419.43	**25.3**	2.9	**7.4**
NYSE Composite	11615.59	11490.42	**11615.59**	79.51	**0.69**	9973.54		11661.22	**12.7**	5.1	**3.0**
Value Line	526.03	517.20	**523.96**	-0.09	**-0.02**	435.06		529.13	**15.7**	3.5	**2.6**
NYSE Arca Biotech	3681.34	3604.64	**3651.12**	14.84	**0.41**	2818.70		3675.62	**24.7**	18.7	**12.6**
NYSE Arca Pharma	518.17	511.02	**517.80**	5.82	**1.14**	463.78		554.66	**3.8**	7.5	**0.3**
KBW Bank	93.73	91.15	**92.64**	1.40	**1.54**	60.27		99.33	**38.5**	0.9	**10.8**
PHLX§ Gold/Silver	82.96	77.46	**80.28**	-2.82	**-3.39**	73.03		112.86	**-9.3**	1.8	**-4.7**
PHLX§ Oil Service	153.52	143.99	**151.65**	-1.78	**-1.16**	146.14		192.66	**-10.2**	-17.5	**-19.8**
PHLX§ Semiconductor	1015.80	998.87	**1011.03**	5.51	**0.55**	630.77		1023.29	**58.6**	11.5	**20.6**
CBOE Volatility	11.24	9.90	**10.57**	-0.25	**-2.31**	10.11		25.76	**-28.2**	-24.7	**-7.3**

§Philadelphia Stock Exchange

Sources: SIX Financial Information; WSJ Market Data Group

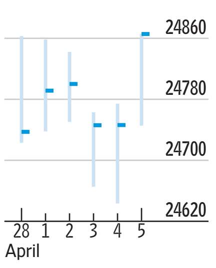
Nasdaq Composite

▲ 53.15, or 0.88% last week



DJ US TSM

▲ 128.33, or 0.52% last week



International Stock Indexes

Region/Country	Index	Latest Week Close	% chg	52-Week Range Low	Close	High	YTD % chg
World	**The Global Dow**	2754.32	**0.89**	2197.91		2754.32	8.8
	DJ Global Index	354.86	**0.82**	293.27		354.86	8.8
	DJ Global ex U.S.	236.86	**1.08**	194.95		236.86	10.7
	Global Dow Euro	2360.38	**–0.01**	1885.53		2398.98	4.4
DJ TSM	**Global**	3652.90	**0.79**	3015.61		3652.90	8.7
	Global ex U.S.	2392.44	**1.07**	1969.71		2392.44	10.7
	Developed ex U.S.	2330.37	**1.45**	1921.04		2330.37	10.2
	Global Small-Cap	4983.92	**0.34**	4057.70		4990.48	7.8
	Global Large-Cap	3464.08	**0.86**	2866.49		3464.08	8.9
Americas	**DJ Americas**	576.84	**0.54**	480.83		577.52	6.7
Brazil	**Sao Paulo Bovespa**	65709.74	**0.47**	48471.71		69052.03	9.1
Canada	**S&P/TSX Comp**	15582.04	**–0.03**	13563.84		15922.37	1.9
Mexico	**IPC All-Share**	49485.67	**0.46**	44282.03		49808.05	8.4
Chile	**Santiago IPSA**	3715.05	**0.72**	3054.30		3782.66	15.3
Europe	**Stoxx Europe 600**	394.54	**1.92**	308.75		394.54	9.2
	Stoxx Europe 50	3244.64	**1.94**	2636.71		3244.64	7.8
Eurozone	**Euro Stoxx**	392.06	**2.81**	288.98		392.06	11.9
	Euro Stoxx 50	3658.79	**2.79**	2697.44		3658.79	11.2
Belgium	**Bel-20**	4037.94	**4.19**	3141.13		4037.94	12.0
France	**CAC 40**	5432.40	**3.13**	3984.72		5432.40	11.7
Germany	**DAX**	12716.89	**2.24**	9268.66		12716.89	10.8
Israel	**Tel Aviv**	1409.95	**0.32**	1378.66		1478.96	–4.1
Italy	**FTSE MIB**	21483.86	**4.24**	15104		21484	11.7
Netherlands	**AEX**	533.27	**2.33**	411.62		533.27	10.4
Spain	**IBEX 35**	11135.40	**3.92**	7645.5		11135.4	19.1
Sweden	**SX All Share**	588.72	**1.03**	445.00		588.72	10.1
Switzerland	**Swiss Market**	9016.66	**2.31**	7593.20		9016.66	9.7
U.K.	**FTSE 100**	7297.43	**1.30**	5923.53		7429.81	2.2
Asia-Pacific	**DJ Asia-Pacific TSM**	1564.27	**–0.19**	1324.15		1578.14	9.9
Australia	**S&P/ASX 200**	5836.60	**–1.48**	5103.3		5956.5	3.0
China	**Shanghai Composite**	3103.04	**–1.64**	2806.91		3288.97	–0.0
Hong Kong	**Hang Seng**	24476.35	**–0.56**	19694.33		24698.48	11.3
India	**S&P BSE Sensex**	29858.80	**–0.20**	25228.50		30133.35	12.1
Japan	**Nikkei Stock Avg**	19445.70	**1.30**	14952.02		19633.75	1.7
Singapore	**Straits Times**	3229.73	**1.71**	2729.85		3237.81	12.1
South Korea	**Kospi**	2241.24	**1.62**	1925.24		2241.24	10.6
Taiwan	**Weighted**	9899.94	**0.28**	8053.69		9972.49	7.0

Source: SIX Financial Information;WSJ Market Data Group

Commodities and Currencies

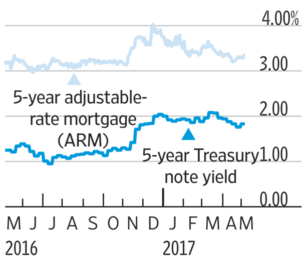
	Last Week Close	Net chg	% Chg	YTD % chg
DJ Commodity	**551.06**	-9.89	**-1.76**	-2.85
TR/CC CRB Index	**177.92**	-3.80	**-2.09**	-7.58
Crude oil, $ per barrel	**46.22**	-3.11	**-6.30**	-13.96
Natural gas, $/MMBtu	**3.266**	-0.010	**-0.31**	-12.30
Gold, $ per troy oz.	**1224.80**	-41.30	**-3.26**	6.50
U.S. Dollar Index	**98.58**	-0.47	**-0.47**	-3.56
WSJ Dollar Index	**89.71**	-0.01	**-0.01**	-3.47
Euro, per dollar	**0.9092**	-0.0085	**-0.93**	-4.36
Yen, per dollar	**112.72**	1.18	**1.06**	-3.66
U.K. pound, in dollars	**1.30**	0.003	**0.23**	5.15

	52-Week Low	Close (●)	High	% Chg
DJ Commodity	498.06		589.81	**8.56**
TR/CC CRB Index	177.01		195.82	**-1.10**
Crude oil, $ per barrel	39.51		54.45	**3.49**
Natural gas, $/MMBtu	1.96		3.93	**55.45**
Gold, $ per troy oz.	1127.80		1364.90	**-5.27**
U.S. Dollar Index	93.21		103.25	**4.99**
WSJ Dollar Index	85.14		93.56	**4.22**
Euro, per dollar	0.88		0.96	**3.69**
Yen, per dollar	99.88		118.18	**5.23**
U.K. pound, in dollars	1.20		1.49	**-10.02**

Consumer Rates and Returns to Investor

U.S. consumer rates

A consumer rate against its benchmark over the past year



Selected rates

Five-year ARM, Rate

Bankrate.com avg†:	3.35%
NBT Bank	2.50%
Canajoharie, NY	800-449-6842
Third Federal Savings and Loan	2.79%
Cleveland, OH	855-369-0996
Foxboro Federal Savings	2.88%
Foxboro, MA	(877) 369-3331
Amalgamated Bank	3.13%
New York, NY	800-622-0860
Pinnacle Mortgage Solutions Inc.	3.13%
Henderson, NV	702-966-8216

Interest rate	Yield/Rate (%) Last (●)	Week ago	52-Week Range (%) Low	High	3-yr chg (pct pts)
Federal-funds rate target	0.75-1.00	0.75-1.00	0.25	1.00	**0.75**
Prime rate*	**4.00**	4.00	3.50	4.00	**0.75**
Libor, 3-month	**1.18**	1.17	0.62	1.18	**0.96**
Money market, annual yield	**0.32**	0.30	0.22	0.34	**-0.08**
Five-year CD, annual yield	**1.30**	1.31	1.17	1.31	**-0.09**
30-year mortgage, fixed†	**4.06**	4.04	3.43	4.33	**-0.32**
15-year mortgage, fixed†	**3.27**	3.24	2.70	3.50	**-0.25**
Jumbo mortgages, $424,100-plus†	**4.60**	4.59	4.02	4.88	**-0.06**
Five-year adj mortgage (ARM)†	**3.35**	3.28	2.97	4.03	**-0.14**
New-car loan, 48-month	**3.11**	3.11	2.87	3.36	**0.18**
HELOC, $30,000	**4.91**	4.93	4.57	4.96	**0.21**

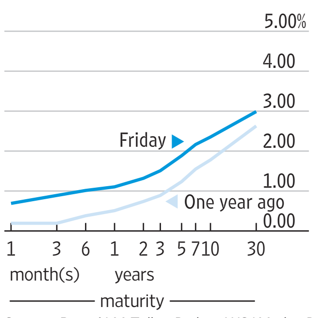
Bankrate.com rates based on survey of over 4,800 online banks. *Base rate posted by 70% of the nation's largest banks.† Excludes closing costs.

Sources: SIX Financial Information; WSJ Market Data Group; Bankrate.com

Benchmark Yields and Rates

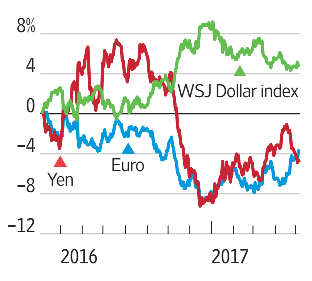
Treasury yield curve

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	**2.352**	2.282				-3.39	2.88
DJ Corporate	**3.139**	3.082				1.62	3.55
Aggregate, Barclays Capital	**2.590**	2.530	43	41	57	0.31	2.51
High Yield 100, Merrill Lynch	**5.374**	5.174	348	316	575	12.534	3.237
Fixed-Rate MBS, Barclays	**2.860**	2.820	26	10	33	0.36	2.47
Muni Master, Merrill	**2.060**	2.044	13	-6	13	-0.374	2.728
EMBI Global, J.P. Morgan	**5.564**	5.511	321	317	435	8.698	5.548

Sources: J.P. Morgan; Ryan ALM; S&P Dow Jones Indices; Barclays Capital; Merrill Lynch

New to the Market
Public Offerings of Stock

IPOs in the U.S. Market

Initial public offerings of stock expected this week; might include some offerings, U.S. and foreign, open to institutional investors only via the Rule 144a market; deal amounts are for the U.S. market only

Expected pricing date	Filed	Issuer/business	Symbol/primary exchange	Shares (mil.)	Pricing Range($) Low/High	Bookrunner(s)
5/8	3/15	Veritone Software company providing a cloud-based platform that can analyze audio and video data.	**VERI** Nq	**1.3**	14.00/ 16.00	Wunderlich Sec, Craig-Hallum Group
5/9	4/7	Five Point Holdings Real estate development company focused in residential and commercial construction projects.	**FPH** N	**21.0**	18.00/ 20.00	Citi, JPM, RBC Cptl Mkts, WFS, DB, Evercore Partnrs, Zelman Partners, JMP Sec
5/9	4/6	Guaranty Bancshares Operates a bank holding company.	**GNTY** Nq	**2.0**	26.00/ 28.00	Sandler O'Neill & Prtnrs, Stephens
5/11	2/28	Gardner Denver Holdings Manufactures stationary air compressors and blowers.	**GDI** N	**41.3**	23.00/ 26.00	GS, Citi, UBS, KKR, Piper Jaffray, DB, R W Baird & Co, Credit Suisse, MS
5/11	3/15	Solaris Oilfield Infrastructure Manufacturer of proppant management systems.	**SOI** N	**10.6**	15.00/ 18.00	Credit Suisse, GS, MS, Evercore Prtnrs, Piper Jaffray, Perella Weinberg Prtnrs, WFS

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
May 12	May 17, '16	Pulse Biosciences	**PLSE**	4.00	23.0	**484.8**	360 days

Sources: Dealogic; WSJ Market Data Group

IPO Scorecard

Performance of IPOs, most-recent listed first

Company **SYMBOL** IPO date/Offer price	Friday's close ($)	% Chg From Offer price	1st-day close	Company **SYMBOL** IPO date/Offer price	Friday's close ($)	% Chg From Offer price	1st-day close
KKR Real Estate Trust **KREF** May 5/$20.50	22.13	**8.0**	...	China Rapid Finance **XRF** April 28/$6.00	7.57	**26.2**	18.3
Ovid Thera **OVID** May 5/$15.00	12.25	**–18.3**	...	Carvana **CVNA** April 28/$15.00	10.92	**–27.2**	–1.6
Antero Midstream GP LP **AMGP** May 4/$23.50	22.28	**–5.2**	1.3	Cloudera **CLDR** April 28/$15.00	19.97	**33.1**	10.3
Biohaven Pharmaceuticals **BHVN** May 4/$17.00	17.91	**5.4**	2.3	Emerald Expositions **EEX** April 28/$17.00	20.37	**19.8**	4.5
UroGen Pharma **URGN** May 4/$13.00	14.00	**7.7**	0.1	NCS Multistage **NCSM** April 28/$17.00	20.04	**17.9**	0.1

Sources: WSJ Market Data Group; FactSet Research Systems

Other Stock Offerings

Secondaries and follow-ons expected this week in the U.S. market

None expected this week

Off the Shelf

"Shelf registrations" allow a company to prepare a stock or bond for sale, without selling the whole issue at once. Corporations sell as conditions become favorable. Here are the shelf sales, or takedowns, over the last week:

Issuer/Industry	Takedown date/ Registration date	Deal value ($ mil.)	Registration (mil.)	Bookrunner(s)
American Superconductor Machinery	May 5 Sept. 19,'14	**$16.0**	$100.0	Oppenheimer Inc
GoDaddy Technology	May 4 April 5,'16	**$927.9**	...	MS, JPM, Barclays, Citi, DB, GS, RBC Cptl Mkts
Planet Fitness Leisure & Recreation	May 4 Dec. 23,'16	**$330.1**	...	JPM
AMAG Pharmaceuticals Healthcare	May 4 Feb. 24,'15	**$300.0**	...	JPM, MS
Urban Edge Properties Real Estate/Property	May 4 Aug. 5,'16	**$194.8**	...	MS
MFA Financial Real Estate/Property	May 4 Nov. 16,'16	**$157.0**	...	Credit Suisse, MS
Ignyta Healthcare	May 4 Dec. 23,'15	**$76.9**	$225.0	JPM, Piper Jaffray
Bank of Commerce Holdings Finance	May 4 March 24,'17	**$25.0**	$50.0	Raymond James & Assoc
Lantheus Holdings Healthcare	May 3 Dec. 12,'16	**$41.4**	$291.5	Credit Suisse
Healthcare Trust of America Real Estate/Property	May 2 Feb. 27,'15	**$1,556.8**	...	WFS, JPM, MS, BMO Cptl Mkts, Jefferies, Raymond James & Assoc
AGNC Investment Real Estate/Property	May 1 June 26,'15	**$507.2**	...	JPM, Citi, Credit Suisse, GS
Blackstone Mortgage Trust Real Estate/Property	May 1 July 26,'16	**$250.0**	...	Citi, MS, BofA ML, Barclays, JPM
Taylor Morrison Home Construction/Building	May 1 March 22,'17	**$233.5**	...	JPM, Citi

Public and Private Borrowing

Treasurys

Monday, May 8

Auction of 13-week bills; announced on May 4; settles on May 11

Auction of 26-week bills; announced on May 4; settles on May 11

Tuesday, May 9

Auction of four-week bills; announced on May 8; settles on May 11

Auction of three-year notes; announced on May 3; settles on May 15

Wednesday, May 10

Auction of 10-year notes; announced on May 3; settles on May 15

Thursday, May 11

Auction of 30-year bonds; announced on May 3; settles on May 15

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)
May 8	prelim.	California City-California	635.6	N.R.	N.R.	N.R.	Preliminary/ Orrick H & S
May 10	July 1, 2027	So California Metro Water Dt	245.2	N.R.	N.R.	N.R.	Preliminary/ Stradling Yocca Carlson
May 12	prelim.	Alameda (Oakland) USD	221.4	N.R.	Aa3	N.R.	Siebert Cisneros Shank & Co
May 12	prelim.	Cuyahoga Co-Ohio	915.0	N.R.	N.R.	N.R.	BoA Merrill/—
May 12	prelim.	Denver City and Co-Colorado	173.0	N.R.	N.R.	N.R.	BoA Merrill/—
May 12	prelim.	Hawaii	811.3	N.R.	Aa1	AA+	BoA Merrill/—
May 12	prelim.	Los Angeles City-California	340.0	N.R.	N.R.	N.R.	M. Stanley/—
May 12	prelim.	Louisiana Public Facs Auth (LPFA)	412.0	A-	A3	N.R.	Citi/—
May 12	prelim.	Metropolitan Transport Auth (MTA)	350.0	N.R.	N.R.	N.R.	Ramirez & Co Inc/—
May 12	prelim.	MoN.R.oe Industrial Dev	152.0	N.R.	N.R.	A-	BoA Merrill/—
May 12	prelim.	NYS Dorm Authority	303.6	N.R.	N.R.	N.R.	RBC Cptl Mkt/—
May 12	prelim.	NYS Dorm Authority	655.0	N.R.	N.R.	N.R.	Wells Fargo & Co/—
May 12	prelim.	New Orleans Aviation Board	154.0	A-	A3	N.R.	Citi/—
May 12	prelim.	New Orleans Aviation Board	220.9	A-	A3	N.R.	Citi/—
May 12	prelim.	San Fran Bay Area Rapid Trans Dt	369.7	N.R.	Aaa	N.R.	Barclays/—

Source:Thomson Reuters/Ipreo

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.
a-The NAV and market price are ex dividend. **b**-The NAV is fully diluted. **c**-NAV is as of Thursday's close. **d**-NAV is as of Wednesday's close. **e**-NAV assumes rights offering is fully subscribed. **f**-Rights offering in process. **g**-Rights offering announced. **h**-Lipper data has been adjusted for rights offering. **j**-Rights offering has expired, but Lipper data not yet adjusted. **l**-NAV as of previous day. o-Tender offer in process. **v**-NAV is converted at the commercial Rand rate. **w**-Convertible Note-NAV (not market) conversion value. **y**-NAV and market price are in Canadian dollars. NA signifies that the information is not available or not applicable. NS signifies fund not in existence of entire period.
12 month yield is computed by dividing income dividends paid (during the previous twelve months for periods ending at month-end or during the previous fifty-two weeks for periods ending at any time other than month-end) by the latest month-end market price adjusted for capital gains distributions.

Source: Lipper

Friday, May 5, 2017

Fund (SYM)	NAV	Close	Prem /Disc	52 wk Ttl Ret
General Equity Funds				
Adams Divers Equity Fd **ADX**	16.77	14.19	-15.4	21.9
Boulder Growth & Income **BIF**	11.45	9.47	-17.3	24.4
Central Securities **CET**	29.57	24.70	-16.5	33.8
CohSteer Opprtnty Fd **FOF**	13.79	13.03	-5.5	27.5
Cornerstone Strategic **CLM**	13.43	16.72	+24.5	28.7
EtnVnc TaxAdvDiv **EVT**	22.43	21.94	-2.2	17.4
Gabelli Dividend & Incm **GDV**	23.06	21.52	-6.7	24.6
Gabelli Equity Trust **GAB**	6.21	6.12	-1.4	24.1
Genl American Investors **GAM**	40.70	34.27	-15.8	23.7
HnckJohn TxAdv **HTD**	26.23	25.66	-2.2	12.5
Liberty All-Star Equity **USA**	6.45	5.55	-14.0	24.9
Royce Micro-Cap **RMT**	9.77	8.65	-11.5	25.0
Royce Value Trust **RVT**	16.37	14.63	-10.6	34.5
Source Capital **SOR**	43.03	38.41	-10.7	8.8
Tri-Continental **TY**	27.39	23.85	-12.9	24.5
Specialized Equity Funds				
Adams Natural Rscs Fd **PEO**	22.24	19.20	-13.7	8.7
AllnzGI NFJ Div Interest **NFJ**	14.58	13.13	-9.9	17.6
AlpnGlblPrProp **AWP**	6.87	5.94	-13.5	17.3
ASA Gold & Prec Metals **ASA**	12.94	11.73	-9.4	-8.4
BlkRk Enh Cap Inco **CII**	15.88	14.87	-6.4	19.4
BlkRk Engy Res Tr **BGR**	14.72	13.62	-7.5	7.7
BlackRock Enh Eq Div Tr **BDJ**	9.41	8.72	-7.3	23.2
Blackrock Global Trust **BOE**	14.27	13.10	-8.2	21.2
BlkRk Health Sci **BME**	34.28	35.41	+3.3	7.1
BlkRk Intl Grwth&Inco **BGY**	6.67	6.13	-8.1	14.8
BlackRck Rscs Comm Str Tr **BCX**	9.38	8.31	-11.4	19.0
BlackRock Science & Tech **BST**	23.50	21.93	-6.7	47.5
BlackRock Utility & Infr **BUI**	20.49	20.65	+0.8	21.2
CBREClarionGlblRlEstIncm **IGR**	8.59	7.61	-11.4	2.6
Central Fund of Canada **CEF**	13.04	12.18	-6.6	-7.1
ClearBridge Amer Engy **CBA**		9.48	NA	32.5
ClearBridge Engy MLP Fd **CEM**		16.58	NA	24.2
Clearbridge Engy MLP Opp **EMO**		13.23	NA	19.9
Clearbridge Engy MLP TR **CTR**		13.36	NA	23.2
Cohen & Steers Infr Fd **UTF**	24.57	22.94	-6.6	24.9
C&S MLP Incm & Engy Opp **MIE**	12.17	11.18	-8.1	31.5
Cohen & Steers Qual Inc **RQI**	13.35	12.76	-4.4	9.3
CohnStrsPfdInco **RNP**	22.28	20.02	-10.1	12.9
Cohen & Steers TR **RFI**	13.33	12.56	-5.8	2.5
CLSeligmn Prem Tech Gr Fd **STK**	20.69	22.96	+11.0	55.0
Divers Real Asset Incm Fd **DRA**	19.16	17.36	-9.4	15.3
Duff & Phelps **DNP**	9.87	10.96	+11.1	15.6
Duff&PhelpsGblUtilIncFd **DPG**	18.58	16.67	-10.3	11.2
Eaton Vance Eqty Inco Fd **EOI**	14.27	13.43	-5.9	14.0
Eaton Vance Eqty Inco II **EOS**	14.94	14.32	-4.1	19.6
EtnVncRskMngd **ETJ**	10.05	9.27	-7.8	5.8
Etn Vnc Tax Mgd Buy-Write **ETB**	15.92	16.53	+3.8	10.4
Eaton Vance BuyWrite Opp **ETV**	14.45	15.54	+7.5	12.7
Eaton Vance Tax-Mng Div **ETY**	11.81	11.26	-4.7	19.7
Eaton Vance Tax-Mngd Opp **ETW**	11.36	11.35	-0.1	22.3
EtnVncTxMngGlDvEqInc **EXG**	9.42	8.95	-5.0	14.4
Fiduciary/Clymr Opp Fd **FMO**	14.73	15.24	+3.5	34.7
FT Energy Inc & Growth Fd **FEN**	25.25	26.37	+4.4	22.2
FstTrEnhEqtIncFd **FFA**	16.05	14.74	-8.2	23.6
First Tr Engy Infr Fd **FIF**	19.71	18.63	-5.5	24.2
First Tr MLP & Engy Incm **FEI**	15.49	15.89	+2.6	21.9
Gabelli Utility Tr **GUT**	5.49	6.74	+22.8	17.8
GAMCOGlblGoldNatRscs&Inc **GGN**	5.56	5.63	+1.3	-2.5
Goldman Sachs MLP Inc Opp **GMZ**	10.85	10.30	-5.1	26.3
Goldman Sachs MLP Energy **GER**	7.97	7.86	-1.4	28.8
John Hancock Finl Opps Fd **BTO**	34.88	35.18	+0.9	50.0
Kayne Anderson Engy TR Fd **KYE**	12.39	11.77	-5.0	37.7
Kayne Anderson MLP Invt **KYN**	19.11	18.93	-0.9	22.6
Kayne Andrsn Midstr Engy **KMF**	16.67	15.43	-7.4	37.3
Macquarie Glbl Infrstrctr **MGU**	27.00	23.67	-12.3	23.2
Neuberger Berman MLP Incm **NML**	10.66	9.74	-8.6	39.9
Neubrgr Brm Rl Est Sec Fd **NRO**	5.82	5.24	-10.0	6.6
Nuveen Dow 30 Dynamic **DIAX**	17.17	16.10	-6.2	22.3
Nuveen Diversified Div **JDD**	12.87	12.16	-5.5	20.2
Nuveen Engy MLP Fd **JMF**	13.22	13.12	-0.8	25.4
Nuv NASDAQ 100 Dyn Over **QQQX**	21.24	21.42	+0.8	30.2
Nuveen Real Est Incm Fd **JRS**	11.34	11.25	-0.8	10.2
Nuv S&P 500 Dyn Overwrite **SPXX**		15.36	NA	22.2
Nuveen S&P 500 Buy-Write **BXMX**	13.98	13.91	-0.5	15.8
Reaves Utility Fund **UTG**	34.07	34.40	+1.0	25.1
Salient Midstream & MLP **SMM**	13.76	12.95	-5.9	42.3
Tekla Hlthcr Investors **HQH**	25.32	25.10	-0.9	13.3
Tekla Healthcare Opps Fd **THQ**	19.01	17.47	-8.1	19.4
Tekla Life Sciences **HQL**	20.73	20.31	-2.0	27.4
Tekla World Hlthcr Fd **THW**	15.42	14.54	-5.7	11.6
Tortoise Engy Ind Fd **NDP**	14.92	15.33	+2.7	33.0
Tortoise Energy **TYG**	29.98	33.75	+12.6	30.4
Tortoise MLP Fund **NTG**	19.75	20.12	+1.9	24.9
Tortoise Pipeline & Engy **TTP**	22.48	21.13	-6.0	36.9
Voya Gl Equity Div **IGD**	8.17	7.41	-9.3	21.9
Income Preferred Stock Funds				
Calamos Strat Fd **CSQ**	12.25	11.67	-4.7	31.6
Cohen & Steers Dur Pfd **LDP**	26.81	26.09	-2.7	19.9
Cohen & Strs Sel Prf Inco **PSF**	27.38	27.75	+1.4	16.7
FT Interm Duration Pfd **FPF**	24.39	23.77	-2.5	13.4
Flaherty & Crumrine Dyn **DFP**	26.01	25.20	-3.1	13.6
Flaherty & Crumrine Pfd **FFC**	20.00	21.15	+5.8	11.1
John Hancock Pfd Income **HPI**	21.81	22.13	+1.5	6.8
John Hancock Pfd II **HPF**	21.55	21.72	+0.8	5.6
John Hancock Pfd Inc III **HPS**	19.21	18.97	-1.2	5.7
JHancock Pr Div **PDT**	16.09	16.54	+2.8	13.4
LMP Cap & Inco Fd **SCD**		14.27	NA	23.9
Nuveen Preferred & Incm **JPI**	25.43	24.83	-2.4	12.1
Nuveen Pfd Incm Opps Fd **JPC**	10.67	10.19	-4.5	9.7
Nuveen Pfd Secs Incm Fd **JPS**	10.15	9.91	-2.4	18.4
TCW Strategic Income Fund **TSI**		5.43	NA	8.0
Virtus Global Dividend **ZTR**	12.74	12.36	-3.0	18.4
Convertible Sec's. Funds				
AdvntClymrFd **AVK**	17.27	16.26	-5.8	28.0
AllianzGI Conv & Incm **NCV**	6.74	7.03	+4.3	34.6
AllianzGI Conv & Incm II **NCZ**	6.04	6.18	+2.3	36.2
AllianzGI Equity & Conv **NIE**	21.98	19.80	-9.9	19.9
Calamos Conv Hi Inco Fd **CHY**	11.75	11.67	-0.7	27.7
Calamos **CHI**	11.15	11.17	+0.2	29.3
World Equity Funds				
Alpine Tot Dyn Div **AOD**	9.70	8.61	-11.2	25.7
Calamos Glbl Dyn Inc **CHW**	8.80	8.19	-6.9	31.0
Cdn Genl Inv **CGI**	29.36	21.25	-27.6	27.6
China Fund **CHN**	19.27	17.47	-9.3	28.9
Clough Global Opp Fd **GLO**		10.58	NA	26.7
EtnVncTxAdvGblDiv **ETG**	17.63	17.00	-3.6	27.4
EatonVance TxAdv Opport **ETO**	23.98	24.04	+0.3	23.0
First Trust Dynamic Eur **FDEU**	19.58	18.29	-6.6	27.7
India Fund **IFN**	29.52	26.48	-10.3	27.2
Japan Sml Cap **JOF**	12.29	11.10	-9.7	27.1
Korea Fund **KF**	43.66	39.22	-10.2	25.3
Mexico Fund **MXF**	18.45	16.56	-10.2	-0.3
MS China a Shr Fd **CAF**	22.87	19.67	-14.0	21.7
MS Emerging Fund **MSF**	17.65	15.56	-11.8	23.0
MS India Invest **IIF**	36.39	33.06	-9.2	36.5
New Germany Fund **GF**	18.05	16.18	-10.4	26.1
Swiss Helvetia Fund **SWZ**	13.66	12.16	-11.0	23.8
Templeton Dragon **TDF**	21.08	18.78	-10.9	22.7
Templeton Emerging **EMF**	16.21	14.43	-11.0	38.8
Voya Infr Indls & Matls **IDE**	15.84	14.91	-5.9	36.5
Wells Fargo Gl Div Opp **EOD**	6.67	6.01	-9.9	10.4

Fund (SYM)	NAV	Close	Prem /Disc	12 Mo Yld
U.S. Mortgage Bond Funds				
BlackRock Income Trust **BKT**	6.76	6.24	-7.7	5.1
Nuveen Mtg Opp Term Fd **JLS**	26.00	25.29	-2.7	5.4
Investment Grade Bond Funds				
Blackrock Core Bond Tr **BHK**	14.57	13.67	-6.2	5.7
BlkRk Credit Alloc Incm **BTZ**	14.67	13.40	-8.7	6.5
John Hancock Income Secs **JHS**	15.37	14.49	-5.7	5.9
MFS Inc Tr **MIN**	4.60	4.32	-6.1	9.0
WstAstClymr InflLnkd Fd **WIW**	NA	11.03	NA	3.2
WstAssetClymr InflLnk Sec **WIA**	NA	11.24	NA	2.6
Loan Participation Funds				
Apollo Sr Fltg Rate Fd **AFT**	18.14	17.34	-4.4	7.0
BlackRock FR Incm Strat **FRA**	15.01	14.37	-4.3	5.6
Blkrk FltRt InTr **BGT**	14.50	14.36	-1.0	5.2
BlackstoneGSO Strat Cred **BGB**	NA	16.27	NA	8.2
Blackstone GSO Sr Float **BSL**	NA	18.24	NA	6.3
Eagle Point Credit **ECC**	NA	19.65	NA	10.0
Eaton Vance FR Incm Tr **EFT**	15.56	14.98	-3.7	5.7
EatonVnc SrFltRate **EFR**	15.22	14.72	-3.3	6.1
Eaton Vance Sr Incm Tr **EVF**	7.18	6.78	-5.6	5.7
First Trust Sr FR Fd II **FCT**	14.20	13.55	-4.6	6.0
Invesco Credit Opps Fund **VTA**	13.16	12.19	-7.4	7.1
Invesco Senior Income Tr **VVR**	4.91	4.68	-4.7	6.1
Nuveen Credit Strt Inc Fd **JQC**	9.37	8.80	-6.1	7.0
NuvFloatRteInco Fd **JFR**	11.80	11.73	-0.6	6.6
Nuv Float Rte Opp Fd **JRO**	11.75	11.81	+0.5	6.7
Nuveen Senior Income Fund **NSL**	6.99	6.89	-1.4	6.4
Pioneer Floating Rate Tr **PHD**	12.57	12.23	-2.7	5.9
Voya Prime Rate Trust **PPR**	5.76	5.42	-5.9	5.8
High Yield Bond Funds				
AllianceBernstein Glbl **AWF**	13.92	12.71	-8.7	7.3
Barings Glbl Short Dur HY **BGH**	21.50	20.07	-6.7	9.2
BlackRock Corp Hi Yd Fd **HYT**	12.21	11.15	-8.7	7.9
BlkRk Debt Strat Fd **DSU**	12.69	11.76	-7.3	6.5
BlackRockDurInco Tr **BLW**	16.96	15.71	-7.4	9.3
Brookfield Real Assets **RA**	25.57	NA	NA	NS
Credit Suisse High Yld **DHY**	2.79	2.80	+0.4	9.96
DoubleLine Incm Solutions **DSL**	NA	20.90	NA	8.7
Dreyfus Hi Yd Strat Fd **DHF**	3.58	3.54	-1.1	9.1
Fst Tr Hi Inc Lg/Shrt Fd **FSD**	18.01	17.04	-5.4	6.6
Guggenheim Strat Opps Fd **GOF**	19.74	21.08	+6.8	10.4
Ivy High Income Opps Fund **IVH**	16.38	15.99	-2.4	9.6
Neuberger Berman HYS **NHS**	13.39	12.04	-10.1	7.9
NexPoint Credit Strat Fd **NHF**	25.22	22.26	-11.7	11.2
Nuveen Gl Hi Incm Fd **JGH**	18.52	16.84	-9.1	8.8
Nuveen High Incm Dec18 **JHA**	10.15	10.16	+0.1	5.8
Nuveen High Incm Dec19 **JHD**	10.30	10.30	0.0	NS
Nuveen Hi Incm Nov 2021 **JHB**	10.15	10.20	+0.5	NS
Pioneer High Income Trust **PHT**	10.74	9.98	-7.1	9.4
Prud Gl Shrt Dur Hi Yd **GHY**	16.60	15.26	-8.1	8.1
Prudentl Sh Dur Hi Yd Fd **ISD**	16.83	15.55	-7.6	8.1
Wells Fargo Incm Opps Fd **EAD**	9.30	8.65	-7.0	9.2
Wstrn Asset Glbl Hi Inco **EHI**	NA	10.28	NA	10.5
Wstrn Asset High Inco II **HIX**	NA	7.40	NA	9.2
Wstrn Asset Opp Fd **HIO**	NA	5.19	NA	7.6
West Asst HY Def Opp Fd **HYI**	NA	15.50	NA	8.2
Other Domestic Taxable Bond Funds				
Apollo Tactical Incm Fd **AIF**	17.49	16.51	-5.6	8.9
Ares Dynamic Credit Alloc **ARDC**	NA	16.14	NA	7.6
Barings Corp Investors **MCI**	NA	15.11	NA	3.8
BlackRock Multi-Sector IT **BIT**	19.24	17.99	-6.5	10.6
BlackRock Taxable Mun Bd **BBN**	22.78	22.65	-0.6	6.9
Doubleline Oppor Credit **DBL**	NA	24.37	NA	8.2
Duff & Phelps Utl & Cp Bd **DUC**	9.89	9.22	-6.8	6.4
EtnVncLtdFd **EVV**	15.20	14.12	-7.1	7.7
Franklin Ltd Duration IT **FTF**	NA	11.96	NA	9.0
Guggenheim Taxable Muni **GBAB**	23.11	22.58	-2.3	6.8
John Hancock Investors **JHI**	18.57	17.58	-5.3	7.6
KKR Income Opps Fund **KIO**	NA	NA	NA	9.1
MFS Charter **MCR**	9.43	8.64	-8.4	8.6
MFS Multimkt **MMT**	6.73	6.17	-8.3	8.6
Nuveen Build Am Bd Fd **NBB**	21.47	20.85	-2.9	6.1
PIMCO Corporate & Incm **PTY**	14.50	16.32	+12.6	10.7
PIMCO Corporate & Incm **PCN**	14.96	16.71	+11.7	10.7
PIMCO HiInco **PHK**	6.83	8.85	+29.6	13.5
PIMCO Inco Str Fd **PFL**	11.36	11.75	+3.4	9.3
PIMCO Incm Strategy Fd II **PFN**	10.15	10.46	+3.1	9.2
Putnam Mas Inco **PIM**	5.06	4.80	-5.1	6.5
Putnam Premier Income Tr **PPT**	5.58	5.20	-6.8	5.9
Wells Fargo Multi-Sector **ERC**	14.41	13.51	-6.2	8.4
World Income Funds				
Aberdeen Asia-Pacific **FAX**	5.43	5.02	-7.6	7.3
Etn Vnc Short Dur Fd **EVG**	NA	14.14	NA	7.4
Legg Mason BW Glbl Incm **BWG**	NA	13.02	NA	4.8
MS EmMktDomDebt **EDD**	8.80	7.94	-9.8	8.9
MS Emerging Mkts Debt **MSD**	10.98	9.73	-11.4	6.4
PIMCO Dynamic Credit **PCI**	NA	22.09	NA	11.8
PIMCO Dynamic Income Fund **PDI**	27.11	29.54	+9.0	14.0
PIMCO Income Opportunity **PKO**	NA	26.08	NA	10.1
PIMCO Strat Income Fund **RCS**	7.76	10.05	+29.5	9.4
Stone Harbor Em Mkts Fd **EDF**	14.92	16.54	+10.9	13.1
Templeton Emerging **TEI**	13.00	11.48	-11.7	6.1
Templeton Global **GIM**	7.56	6.69	-11.5	6.6
Wstrn Asset Gl Def Opp Fd **GDO**	NA	17.67	NA	7.6
National Muni Bond Funds				
AllianceBrnstn NtlMun **AFB**	14.68	13.53	-7.8	4.9
Blackrock Invest **BKN**	15.41	14.66	-4.9	5.7
BlackRock Mun 2030 Target **BTT**	23.35	23.00	-1.5	4.1
BlackRock Municipal Trust **BFK**	14.24	14.13	-0.8	6.0
BlackRockMuni **BLE**	14.94	14.92	-0.1	5.9
BlackRockMuni Tr **BYM**	14.93	14.22	-4.8	5.6
BlkRk MuniAssets Fd **MUA**	14.08	14.83	+5.3	4.6
BlkRk Munienhanced **MEN**	11.78	11.75	-0.3	5.8
BlkRk MuniHldgs Inv **MFL**	14.66	14.69	+0.2	5.9
BlkRk MuniHldgs Qlty II **MUE**	14.07	13.60	-3.3	5.7
BlkRk MuniHldgs **MHD**	16.86	16.69	-1.0	5.8
BlkRk MuniVest **MVF**	9.65	9.69	+0.4	6.1
BlkRk MuniVest II **MVT**	15.20	15.63	+2.8	6.0
BlkRk MuniYield **MYD**	14.72	14.94	+1.5	5.9
BlkRk MuniYld Quality **MQY**	15.57	15.48	-0.6	5.7
BlkRk MuniYld Qlty II **MQT**	13.69	13.05	-4.7	5.8
BlRkMunyldQltyIII **MYI**	14.25	14.24	-0.1	5.8
Deutsche Mun Income Tr **KTF**	12.57	13.47	+7.2	6.3
Dreyfus Mun Bd Infr Fd **DMB**	13.82	12.96	-6.2	5.3
Dreyfus Municipal Income **DMF**	9.29	8.96	-3.6	5.5
Dreyfus Strat Muni Bond **DSM**	8.39	8.49	+1.2	5.9
Dreyfus Strategic Munis **LEO**	8.60	8.84	+2.8	5.9
Eaton Vance Mun Bd Fd **EIM**	13.59	12.55	-7.7	5.3
Eaton Vance Mun Income **EVN**	13.13	12.83	-2.3	5.5
EV National Municipal Opp **EOT**	21.76	21.80	+0.2	4.7
Invesco Adv Mun Incm II **VKI**	12.10	11.39	-5.9	6.1
Invesco Mun Incm Opps Tr **OIA**	7.50	7.93	+5.7	5.2
Invesco Mun Opportunity **VMO**	13.47	13.12	-2.6	6.3
Invesco Municipal Trust **VKQ**	13.45	12.69	-5.7	6.0
Invesco Qlty Mun Inco **IQI**	13.49	12.50	-7.3	5.9
Invesco Inv Grade Muni **VGM**	13.95	13.14	-5.8	6.0
Invesco Value Mun Incm Tr **IIM**	16.05	14.95	-6.9	5.2
MainStay DefinedTerm **MMD**	19.76	19.66	-0.5	5.6
MFS Munl Inco **MFM**	7.31	7.10	-2.9	5.3
Nuveen AMT-Free Mun Value **NUW**	16.79	17.20	+2.4	4.3
Nuveen AMT-Free Quality **NEA**	14.74	13.56	-8.0	5.6
Nuveen AMT-Free Mun **NVG**	15.84	14.79	-6.6	6.0
Nuveen Mun Credit Incm Fd **NZF**	15.55	14.71	-5.4	6.1
Nuveen Enhncd Mun Val Fd **NEV**	14.88	14.35	-3.6	6.1
Nuveen Intermed Dur Mun **NID**	13.56	13.14	-3.1	5.1
NuveenMunilncoOpp Fd **NMZ**	13.12	13.27	+1.1	6.4
Nuveen Muni Value Fund **NUV**	10.15	10.02	-1.3	3.9
Nuveen Qual Mun Incm Fd **NAD**	15.09	13.89	-8.0	5.9
Nuveen Sel Tax Free **NXP**	15.08	14.33	-5.0	3.8
Nuveen Sel TF **NXQ**	14.56	13.74	-5.6	3.7
PIMCO MuniFd **PMF**	12.71	13.41	+5.5	6.7
Pimco Muni Inc II **PML**	12.08	13.00	+7.6	6.0
PIMCO Muni Inc III **PMX**	10.94	11.56	+5.7	6.3
Pioneer Mun Hi Inc Adv Tr **MAV**	11.91	11.33	-4.9	6.3
Pioneer Mun Hi Incm Tr **MHI**	12.74	11.86	-6.9	5.8
Putnam Tr **PMM**	7.81	7.44	-4.7	5.6
Putnam Muni Opportunities **PMO**	13.00	12.31	-5.3	5.5
Wstrn Asset Mngd Muni **MMU**	NA	13.81	NA	5.1
Western Asset Mun Tr Fund **MTT**	NA	22.54	NA	4.4
Single State Muni Bond				
BlackRock CA Municipal Tr **BFZ**	15.14	14.33	-5.4	5.5
BlkRk MuniHldgs CA Qlty **MUC**	15.32	14.33	-6.5	5.2
Blkrck MunHl NJ Qlty **MUJ**	15.31	14.45	-5.6	5.6
BlRk MuHldg NY Qlty **MHN**	14.59	13.72	-6.0	5.1
BlkRk MuniYld CA Fd **MYC**	15.33	15.02	-2.0	5.4
BlkRk MuniYld CA Quality **MCA**	15.48	14.99	-3.2	5.2
BlkRk MuniYld MI Qlty **MIY**	15.24	13.86	-9.1	5.6
BlkRk MuniYld NJ Fd **MYJ**	15.64	15.73	+0.6	5.7
BlRk Muyld NY Qlty **MYN**	14.00	13.07	-6.6	5.0
Eaton Vance CA Mun Bd **EVM**	12.33	11.55	-6.3	5.4
Invesco CA Value Mun Incm **VCV**	13.35	12.57	-5.8	5.3
Invesco PA Value Mun Incm **VPV**	13.89	12.37	-10.9	5.4
Invesco Inv Grade NY Muni **VTN**	14.49	13.57	-6.3	5.4
Nuveen CA AMT-Free Qual **NKX**	15.43	15.04	-2.5	5.4
Nuveen CA Muni Value **NCA**	10.27	10.38	+1.1	4.2
Nuveen CA Quality Muni **NAC**	15.39	14.66	-4.7	5.8
Nuveen MD Qual Muni **NMY**	14.35	12.90	-10.1	5.1
Nuveen MI Qual Muni **NUM**	15.20	13.56	-10.8	5.1
Nuveen NC Qual Muni **NNC**	14.72	13.16	-10.6	4.2
Nuveen NJ Qual Muni **NXJ**	15.36	13.60	-11.5	5.5
Nuveen NY AMT-Free **NRK**	14.33	13.04	-9.0	5.1
Nuveen NY Qual Muni **NAN**	14.95	13.85	-7.4	5.3
Nuveen OH Qual Muni **NUO**	16.41	15.00	-8.6	4.9
Nuveen PA Qual Muni **NQP**	14.91	13.30	-10.8	5.5
Nuveen VA Qual Muni **NPV**	14.21	13.23	-6.9	4.5
PIMCO California Muni **PCQ**	14.08	16.82	+19.5	5.5
PIMCO California Mun II **PCK**	8.58	10.10	+17.7	5.7

Fund (SYM)	NAV	Close	Prem /Disc	52 wk Ttl Ret
General Equity Funds				
Specialized Equity Funds				
Griffin Inst Access RE:M	NA	NA	NA	NS
NexPointRlEstStrat;A	20.79	NA	NA	NS
NexPointRlEstStrat;C	20.74	NA	NA	NS
NexPointRlEstStrat;Z	20.74	NA	NA	NS
SharesPost 100	25.45	NA	NA	0.1
Tot Inc+ RE:A	29.22	NA	NA	6.2
Tot Inc+ RE:C	28.57	NA	NA	5.4
Tot Inc+ RE:I	29.51	NA	NA	6.4
Versus Cap MMgr RE Inc:F	27.32	NA	NA	5.0
Versus Cap MMgr RE Inc:I	27.38	NA	NA	5.3
Wildermuth Endwmnt Str	12.28	NA	NA	12.8
Wildermuth Endwmnt S:C	12.17	NA	NA	11.9
Income Preferred Stock Funds				
MultiStrat Gro & Inc:A	15.58	NA	NA	7.0
MultiStrat Gro & Inc:C	15.30	NA	NA	6.1
MultiStrat Gro & Inc:I	15.75	NA	NA	7.7
MultiStrat Gro & Inc:L	15.39	NA	NA	6.4
Convertible Sec's. Funds				
Calmos Dyn Conv and Inc **CCD**	20.46	19.72	-3.6	17.7
World Equity Funds				
BMO LGM Front ME	9.77	NA	NA	15.4

Fund (SYM)	NAV	Close	Prem /Disc	12 Mo Yld
U.S. Mortgage Bond Funds				
Vertical Capital Income	12.46	NA	NA	2.9
Loan Participation Funds				
504 Fund	9.81	NA	NA	3.3
FedProj&TrFinanceTender	10.05	NA	NA	NS
Invesco Sr Loan A	6.66	NA	NA	4.6
Invesco Sr Loan B	6.66	NA	NA	4.6
Invesco Sr Loan C	6.67	NA	NA	3.9
Invesco Sr Loan IB	6.66	NA	NA	4.9
Invesco Sr Loan IC	6.66	NA	NA	4.7
Invesco Sr Loan Y	6.66	NA	NA	4.9
RiverNorth MP Lending **RMPLX**	25.29	NA	NA	NS
Voya Senior Income:A	12.73	NA	NA	5.4
Voya Senior Income:B	NA	NA	NA	4.9
Voya Senior Income:C	12.71	NA	NA	4.9
Voya Senior Income:I	12.70	NA	NA	5.7
Voya Senior Income:W	12.74	NA	NA	5.7
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:I	NA	NA	NA	NS
PIMCO Flexible Cr I;Inst	NA	NA	NA	NS
PionrILSInterval	10.44	NA	NA	9.7
WA Middle Mkt Dbt	NA	NA	NA	11.2
WA Middle Mkt Inc **WMF**	NA	NA	NA	11.2
Other Domestic Taxable Bond Funds				
Capstone Church Capital	11.78	NA	NA	1.0
CION Ares Dvsfd Crdt Fd	NA	NA	NA	NS
GL Beyond Income	4.05	NA	NA	NE
Palmer Square Opp Income	19.21	NA	NA	6.5
Resource Credit Inc:A	11.18	NA	NA	6.3
Resource Credit Inc:C	11.30	NA	NA	5.6
Resource Credit Inc:D	11.16	NA	NA	5.8
Resource Credit Inc:I	11.21	NA	NA	6.4
Resource Credit Inc:T	11.14	NA	NA	5.6
Resource Credit Inc:U	11.18	NA	NA	6.3
Resource Credit Inc:W	11.17	NA	NA	5.9

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 May 5, 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									
Apr. 27	**Biogen**	**BIIB**	A. Denner	DI	74	278.48-278.58	**20,569**	262.15	0.4
May. 1			M. Vounatsos	CEO	1	271.35	**380**		
Apr. 28	**Twitter**	**TWTR**	J. Dorsey	CEOI	574	16.62	**9,541**	18.69	14.7
Apr. 26	**Eastman Kodak**	**KODK**	G. Karfunkel	D	836	10.75	**8,984**	10.05	-35.2
Apr. 28	**DDR Corp**	**DDR**	A. Otto	DO	500	10.92	**5,458**	9.89	-35.2
Apr. 28-May. 2	**Pulse Biosciences**	**PLSE**	R. Duggan	B	84*	23.40-24.00	**2,014**	23.39	259.8
Apr. 25-27			R. Duggan	B	35	22.95-24.94	**877**		
May. 3	**Cliffs Natural Resources**	**CLF**	L. Goncalves	CEO	200	6.31	**1,263**	6.28	-25.3
May. 4	**Agree Realty**	**ADC**	R. Agree	OD	25	44.73	**1,118**	46.02	-0.1
May. 4			J. Rakolta	D	10	44.82	**448**		
Apr. 28	**FTI Consulting**	**FCN**	S. Gunby	CEO	30	34.51	**1,035**	34.78	-22.8
Apr. 28-May. 1	**Seritage Growth Properties**	**SRG**	B. Berkowitz	BI	21	41.50	**867**	40.58	-5.0
Apr. 27	**United Continental Holdings**	**UAL**	E. Shapiro	D	10	69.35	**694**	75.30	3.3
Apr. 27	**Bank of America**	**BAC**	T. Woods	D	25	23.81	**595**	23.74	7.4
Apr. 27	**Covanta Holding**	**CVA**	M. Ranger	D	40	14.56	**583**	14.30	-8.3
Apr. 27			R. Silberman	D	34	14.60	**489**		
Apr. 28	**Superior Energy Services**	**SPN**	D. Dunlap	CEO	45	12.26	**552**	11.29	-33.1
May. 1	**New Media Investment Group**	**NEWM**	M. Reed	CEO	40	13.25	**530**	13.62	-14.8
Sellers									
May. 2-4	**Amazon.com**	**AMZN**	J. Bezos	CEO	1,000	935.08-950.00	**940,741**	934.15	24.6
Apr. 28	**Facebook**	**FB**	J. Koum	DI	3,200	150.18-151.24	**480,865**	150.24	30.6
Apr. 28	**Six Flags Entertainment**	**SIX**	R. Jaffer	BI	5,061	61.36	**310,520**	63.52	5.9
Apr. 28			U. Nabi	DI	5,061	61.36	**310,520**		
May. 2	**TransUnion**	**TRU**	S. Rajpal	DI	7,502	39.15	**293,705**	41.08	32.8
May. 1	**Microsoft**	**MSFT**	W. Gates	D	3,000	69.22	**207,646**	69.00	11.0
May. 2			W. Gates	D	2,500	69.40	**173,507**		
May. 1	**WEX Inc**	**WEX**	J. Neary	DI	1,284	101.50	**130,286**	99.43	-10.9
May. 3	**Honeywell International**	**HON**	D. Cote	D	970	130.74-131.27	**126,810**	131.41	13.4
May. 2	**Ichor Holdings**	**ICHR**	D. Deb	DOI	5,679	18.53	**105,199**	19.30	78.4
Apr. 28	**Juniper Networks**	**JNPR**	S. Kriens	DI	1,000	30.09	**30,088**	30.55	8.1
May. 2-4	**Apollo Global Management**	**APO**	M. Rowan	HI	1,061	26.08-26.76	**28,207**	26.45	36.6
May. 4	**Humana**	**HUM**	B. Broussard	CEO	118	225.82	**26,699**	229.76	12.6
May. 1-3	**Brink's**	**BCO**	P. Feld	DI	440	60.03-60.84	**26,589**	61.20	48.4
May. 2	**FedEx**	**FDX**	F. Smith	CEO	135	189.02	**25,518**	192.42	3.3
May. 2	**TrueCar**	**TRUE**	S. Dietz	DI	1,321	16.50	**21,791**	17.41	39.3
May. 3	**Mastercard**	**MA**	A. Banga	CEO	162	117.13-117.90	**18,968**	117.50	13.8
Apr. 28	**Vertex Pharmaceuticals**	**VRTX**	J. Leiden	CEO	157	119.50	**18,785**	114.84	55.9

* 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	1,717,720	19,561,676	**Finance**	10,513,658	133,681,902
Business services	1,277,561	36,186,190	**Health care**	743,690	122,520,941
Capital goods	0	0	**Industrial**	599,067	85,294,465
Consumer durables	47,190	22,295,179	**Media**	0	4,432,335
Consumer nondurables	249,050	23,869,041	**Technology**	645,557	202,696,240
Consumer services	379,940	38,959,233	**Transportation**	825,072	57,716,333
Energy	1,134,374	890,692	**Utilities**	6,616	3,904,651

Sources: Thomson Financial; WSJ Market Data Group

Borrowing Benchmarks | WSJ.com/bonds

Money Rates

May 5, 2017

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

	March index level	Chg From (%) Feb. '17	March '16
U.S. consumer price index			
All items	243.801	0.08	2.4
Core	251.290	0.06	2.0

International rates

	Latest	Week ago	52-Week High	52-Week Low
Prime rates				
U.S.	4.00	4.00	4.00	3.50
Canada	2.70	2.70	2.70	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	0.25	0.25	0.50	0.25
Australia	1.50	1.50	1.75	1.50
Overnight repurchase				
U.S.	0.86	0.98	1.30	0.15

U.S. government rates

	Latest	Week ago	52-Week High	52-Week Low
Discount				
	1.50	1.50	1.50	1.00
Federal funds				
Effective rate	0.9300	0.8900	0.9400	0.3200
High	1.0625	1.0625	1.0625	0.5000
Low	0.7500	0.8200	0.9100	0.2000
Bid	0.9100	0.8200	0.9300	0.2000
Offer	1.0000	1.0000	1.0000	0.2600

	Latest	Week ago	52-Week High	52-Week Low
Treasury bill auction				
4 weeks	0.725	0.735	0.770	0.160
13 weeks	0.845	0.820	0.845	0.220
26 weeks	0.975	0.955	0.975	0.340
Secondary market				
Fannie Mae				
30-year mortgage yields				
30 days	3.603	3.568	3.865	2.806
60 days	3.634	3.600	3.899	2.832

Other short-term rates

	Latest	Week ago	52-Week high	52-Week low
Call money				
	2.75	2.75	2.75	2.25
Commercial paper (AA financial)				
90 days	1.06	1.06	1.13	0.47
Libor				
One month	0.99444	0.99500	0.99500	0.43395
Three month	1.18039	1.17233	1.18039	0.62360
Six month	1.43267	1.42628	1.43822	0.88685
One year	1.77900	1.77400	1.82761	1.19570

	Latest	Week ago	52-Week High	52-Week Low
Euro Libor				
One month	-0.401	-0.401	-0.351	-0.401
Three month	-0.363	-0.363	-0.273	-0.363
Six month	-0.269	-0.260	-0.157	-0.269
One year	-0.140	-0.143	-0.026	-0.146
Euro interbank offered rate (Euribor)				
One month	-0.374	-0.374	-0.348	-0.375
Three month	-0.329	-0.329	-0.256	-0.332
Six month	-0.248	-0.249	-0.143	-0.251
One year	-0.124	-0.121	-0.011	-0.126

	Latest	Value Traded	52-Week High	52-Week Low
DTCC GCF Repo Index				
Treasury	0.856	34.450	1.266	0.244
MBS	0.905	87.550	1.328	0.257

	Settle	Change	Open Interest	Implied Rate
DTCC GCF Repo Index Futures				
Treasury May	99.135	-0.005	5324	0.865
Treasury Jun	99.025	-0.005	1267	0.975
Treasury Jly	98.925	-0.010	1024	1.075

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 16, 2017. **Other prime rates** aren't directly comparable; lending practices vary widely by location; **Discount rate** is effective March 16, 2017. **DTCC GCF Repo Index** is Depository Trust & Clearing Corp.'s weighted average for overnight trades in applicable CUSIPs. Value traded is in billions of U.S. dollars. **Federal-funds rates** are Tullett Prebon rates as of 5:30 p.m. ET. **Futures on the DTCC GCF Repo Index** are traded on NYSE Liffe US.
Sources: Federal Reserve; Bureau of Labor Statistics; DTCC; SIX Financial Information; General Electric Capital Corp.; Tullett Prebon Information, Ltd.

DEALPOLITIK | Ronald Barusch

Arconic's Board Spat Is Lesson for Investors

Proxy fights over director elections frequently involve a bit of bait and switch. In the war of words over corporate strategy, activists and the company exchange highly charged accusations and firm positions on corporate strategy. But shareholders are really asked to vote on something very different: which "independent director" nominees should be installed to make their own judgments on how to manage corporate affairs.

Shareholders deserve better information when they're asked to make this decision. And with a bit of self-help, they have the power to get it.

The sometimes bizarre and frequently nasty fight currently going on between activist **Elliott Management** Corp. and **Arconic** Inc. over which four (of five) "independent" directors should be elected is a good example.

Elliott has big ideas about what is wrong with Arconic and how to fix it. But of course shareholders aren't voting on those plans. Since they are independent, Elliott's nominees aren't committed to any program. The hedge fund says it has "no arrangements or understandings" with its nominees other an agreement to compensate them for being its nominees. Elliott says the "nominees, subject to their fiduciary duties as directors, will seek to work with the other members of the Board to position Arconic to maximize shareholder value."

LUKE SHARRETT/BLOOMBERG NEWS

Activist Elliott Management has big ideas about what is wrong with Arconic and how to fix it.

The nominees are up against Arconic's four independent director candidates, who presumably plan to do the same thing. What's more, Arconic recently offered to include two of the Elliott directors on its slate.

So is this just a fight over which nominees have the better resume? Hardly.

Arconic claims that Elliott "is looking for a degree of control and micro-management over the Company." Elliott says the company has made it clear it doesn't have plans to change its strategy. The company responds that regardless of who wins there will be "new perspectives" on the board.

But if both slates are truly independent, how can shareholders really know what they're voting for? Shareholders probably expect that if they choose Elliott's slate, the new directors will be inclined to implement the Elliott platform. But they do not have any assurance of how the nominees would proceed. For example, just last year the company elected three directors suggested by Elliott. And in this year's proxy fight they are supporting the management nominees against Elliott.

What are the nominees' personal, detailed views about Arconic's business and strategy? Shareholders know very little about that. It's safe to assume they have some sympathy for the platform of the entity that nominated them. But unless the nominees have specific plans themselves, they aren't required to reveal more.

The rules permit Elliott and the company to do all the fighting, with individual nominees being almost bystanders. (Institutional shareholders probably get some opportunity to talk to nominees privately, but you can be sure they are going to be well scripted and not reveal anything meaningful since that could trigger new disclosure.)

So, as is so often the case, it's a war fought by surrogates. Shareholders' information about the real decision-makers is largely limited to their resumes and the identity of their escort to the party. It's not a great deal for investors.

Here is how shareholders could easily get a better take on the nominees themselves: Institutional shareholders could refuse to vote for (and proxy advisory firms refuse to recommend) any slate whose members do not appear at multiple public forums in which large shareholders and analysts have the opportunity to question those nominees in detail. That would allow shareholders to have some sense of how the nominees would approach the issues beyond the heated rhetoric of the primary protagonists.

And I would suggest going one step further. Shareholders should insist that any nominees who want their vote participate in independently moderated debates with the opposing nominees over the issues.

That would give shareholders a better window into how the directors will act in the real-world setting of a board meeting. And, just maybe, an open dialogue between competing board slates on substantive issues might cool some of the heated rhetoric of proxy fights.

Mr. Barusch is a retired M&A lawyer who writes about deal making for The Wall Street Journal.

China's Currency Reserves Climbed Again in April

BEIJING—China's foreign-exchange reserves rose for the third straight month in April, edging up on the back of a less-bullish U.S. dollar and Chinese government controls on money moving offshore, economists said.

The foreign-currency reserves increased by $20.45 billion from the previous month to $3.03 trillion, according to data released by the People's Bank of China on Sunday. Economists surveyed by The Wall Street Journal had expected an $11 billion rise following March's $3.96 billion increase.

Some economists attributed April's increase to a dollar that lost some ground after President Donald Trump said the U.S. currency "is getting too strong."

The value of other currencies in China's reserve hoard—including the euro, the British pound and Japan's yen—played a significant role in the rise, said Yan Ling, an economist with China Merchants Securities.

Also contributing to the reserve accumulation are the tight controls on capital outflows that the central bank began ratcheting up late last year to defend a weakening yuan, some economists said. Policy makers have been pushing harder on that lever instead of burning through the foreign-exchange stockpile to prop up the yuan, the economists said.

"The Chinese central bank no longer cares that much about the level of the exchange rate. Rather, they now care more about the basic stability of the foreign-exchange reserve," said Zhou Hao, an economist with Commerzbank AG.

The reserves dipped below the $3 trillion level in January. Foreign-exchange regulators at the time played down the significance of falling below that mark, saying that Beijing's war chest was still ample and could provide sufficient support for the yuan when needed.

China has burned through nearly $1 trillion of its foreign-exchange hoard since its peak in early 2014.

Xia Le, an economist with BBVA, said the stepped-up capital controls are constraining outflows and leading to a change in expectations among some Chinese companies that had thought the yuan would weaken further in the short term. That is likely to keep China's balance of international payments "in a stable phase" in the months ahead, he said.

—Pei Li

EQUITIES

THE TICKER | Market events coming this week

Monday

Earnings expected*

	Estimate/Year Ago($)
EOG Resources	**0.15**/(0.83)
Intl Flavors & Fragrances	**1.51**/1.47
Marriott Intl	**0.91**/0.87
Newell Brands	**0.29**/0.40
Sysco	**0.51**/0.46
Tyson Foods	**1.02**/1.07

Tuesday

Short-selling reports

Ratio, days of trading volume of current position, at April 13

NYSE	5
Nasdaq	4.6

Wholesale inventories

Feb., previous	up 0.4%
Mar., expected	down 0.1%

Earnings expected*

	Estimate/Year Ago($)
Allergen	**3.31**/3.04
Duke Energy	**1.03**/1.13
Electronic Arts	**0.75**/0.50
Nvidia	**0.66**/0.33
Priceline	**8.82**/10.54
Walt Disney	**1.41**/1.36

Wednesday

Mort. bankers indexes

Purch., previous	up 4%
Refinan., previous	down 5%

EIA status report

Previous change in stocks in millions of barrels

Crude oil	down 0.9
Gasoline	up 0.2
Distillates	down 0.6

Import price index

Mar., previous	down 0.2%
Apr., expected	down 0.1%

Treasury budget

Apr. '16	$106 b. surplus
April '17	N.A.

Earnings expected*

	Estimate/Year Ago($)
Coty	**0.12**/0.09
Hologic	**0.46**/0.47
Mylan	**0.92**/0.76
Symantec	**0.28**/0.22
Twenty-First Century Fox	**0.48**/0.47
Vulcan Materials	**0.21**/0.26

Thursday

Initial jobless claims

Previous	238,000
Expected	244,000

EIA report: natural gas

Previous change in stocks in billions of cubic feet

up 67

Producer price index

All items March	down 0.1%
April, expected	up 0.2%
Core, March	0.0%
April, expected	up 0.2%

Earnings expected*

	Estimate/Year Ago($)
CA	**0.49**/0.60
Kohl's	**0.29**/0.31
Macy's	**0.36**/0.40
Nordstrom	**0.28**/0.26
Orbital ATK	1.**37**/1.31

Friday

Business inventories

Feb., prev.	up 0.3%
March, exp.	up 0.1%

Consumer price index

All items March	down 0.3%
April, expected	up 0.2%
Core, Mar.	down 0.1%
April, expected	up 0.2%

U. Mich. consumer index

April, final	97.0
May, prelim.	97.0

Retail sales

Mar., prev.	down 0.2%
Apr., exp.	up 0.5%

Retail sales ex autos

Mar., prev.	0.0%
Apr., exp.	up 0.5%

* FACTSET ESTIMATES EARNINGS-PER-SHARE ESTIMATES DON'T INCLUDE EXTRAORDINARY ITEMS (LOSSES IN PARENTHESES) ◆ ADJUSTED FOR STOCK SPLIT
NOTE: FORECASTS ARE FROM DOW JONES WEEKLY SURVEY OF ECONOMISTS

DANIEL ACKER/BLOOMBERG NEWS

Tyson Foods is expected to report earnings of $1.02 a share on Monday, down from a year earlier.

AHEAD OF THE TAPE | By Steven Russolillo

U.S. Firms Strike an Earnings Gusher

Earnings season has offered plenty of reasons for investors to be optimistic. Even more good news is on the way.

With over 80% of S&P 500 companies having posted quarterly results, the profit engines at the biggest U.S. public companies are humming along. In an environment of elevated valuations, strong earnings growth helps justify record highs for stocks and suggests the bull market still has legs.

First-quarter earnings are on pace to increase 13.5% from the same period a year earlier, according to FactSet. That would be the third consecutive quarter of year-over-year growth and the quickest pace since the third quarter of 2011, when earnings increased 16.7%.

Growth has been broad-based, with energy, financials and technology leading the way. Ten of the S&P 500's 11 sectors are set to post earnings growth, with the telecom sector the only one lagging behind.

Top-line growth has been impressive as well, with revenue, driven by the rebounding energy sector, increasing 7.6% from the prior year. And companies have done a good job exceeding what were elevated expectations heading into earnings season. Two-thirds of companies that have reported have beaten analysts' revenue estimates, exceeding the average beat rate of 53% of the past five years, according to John Butters at FactSet.

SERGEI KARPUKHIN/REUTERS

Revenue growth among U.S. companies is being driven by a rebound in the energy sector.

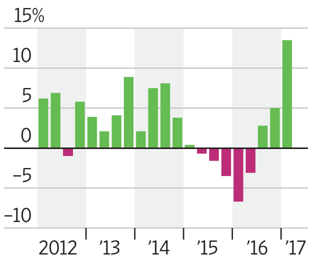
One of the key earnings drivers this season has been overseas growth. Companies with more global exposure are expected to report earnings growth of 14.9%, compared with the 6.8% growth for domestically focused firms, according to RBC Capital Markets, which excluded financial companies from its analysis.

To measure global exposure, the firm divided each S&P 500 sector in half based on how much sales each constituent company generates internationally. That 8.1-percentage-point spread is higher than forecasts of 6.6 points at the beginning of earnings season, and this differential is on track to be the highest in six years.

"People aren't used to seeing this strong growth this late in the economic cycle," said Patrick Palfrey, an equity strategist at RBC. "This improving environment is leading analysts to have strong outlooks for the back half of the year."

Comeback Kid

S&P 500 earnings, change from a year earlier



Source: FactSet

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Sure enough, Wall Street analysts, who normally lower their earnings forecasts throughout a quarter, have cut them for the current quarter at the slowest pace since 2014, according to FactSet. They forecast second-quarter earnings growth of 7.6%, compared with an 8.8% projection at the end of March.

The S&P 500 is up 7.2% this year. Trading at 17.5 times forward earnings, the market's multiple is rich. But the brightening earnings environment suggests a pricey multiple isn't necessarily something to fret over right now.

$776.7 Billion

Apple's market capitalization on Friday, topping the company's high of $774.7 billion hit in February 2015

Apple Continues to Climb

The world's largest public company has never been more valuable.

Shares of **Apple** Inc. rose 3.7% last week and pushed the technology giant's market capitalization to $776.7 billion at Friday's close, a record. The

MONEYBEAT

previous high for Apple's market value was $774.7 billion in February 2015, according to FactSet.

Last week's price gains extended a stellar run for Apple's stock. Better-than-expected earnings reports, revelations of a big investment from Warren Buffett's **Berkshire Hathaway** Inc., and investor enthusiasm for the release of 10th-anniversary iPhone have all helped to push Apple's shares up 29% this year.

Investors have also flocked to the biggest technology companies in recent months as they moderated bets on stocks expected to benefit from policy shifts such as tax cuts and pivoted to those that have provided reliable returns during the eight-year bull market. Last Monday, shares of Apple, Google-parent **Alphabet** Inc., **Microsoft** Corp., **Amazon.com** Inc. and **Facebook** Inc. all closed at records, the first time those companies all reached highs on the same day.

Apple's share price has closed at a record 17 times since Feb. 13, but until Friday, the company's market capitalization had remained below its high notched two years ago. Apple's Friday closing price of $148.96 was nearly $16 higher than where it was in February 2015.

That is because Apple has been an aggressive repurchaser of its shares in recent years, resulting in 610.9 million shares, or 10.5% of them, getting pulled out of the market since March 2015.

Fewer shares can make the remaining ones more valuable, because it drives up per-share earnings. But the stock price must rise further to offset the declining number of shares and keep pushing up the market value. On Friday, it finally did.

ONLINE

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OPTIONS

Continued from page B1

ica Corp. made similar decisions in 2014, according to people familiar with the matter.

"Most market makers congregate in the highly traded products," Mr. Peterffy said in an interview. "It's difficult for a market maker to maintain hundreds of thousands of bids and offers all the time."

It is hard to pinpoint what triggered the trader exodus, but industry experts say as firms leave, liquidity gets further drained, which spurs more market makers to retrench. The dangerous feedback loop could sap appetite for options, key derivative securities that investors use to manage risk in their portfolios.

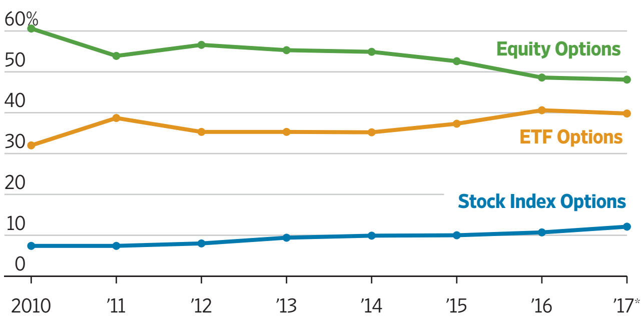
"We could ill afford to lose any more market makers at this junction," said Alan Grigoletto, who previously worked at the Boston Options Exchange, and now runs **Grigoletto Consulting Group** while trading options in his retirement account.

Data show the liquidity bifurcation. Index and exchange traded fund options volume rose in April by 28% and 4%, respectively, data from Options Clearing Corp. show. Meanwhile, total equity options volume shrank by 10% from the prior year. While volume isn't an exact equivalent to liquidity, it is easier for the options market to absorb trades when an individual asset trades more.

Liquidity Starved

Investors are using ETF and index options more, but equity-option trading has dwindled.

Percentage of options traded by year



*Through April 30
Source: OCC (options)

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Ultra-active options include those on the SPDR S&P 500 Trust ETF, the PowerShares QQQ ETF, Apple Inc. and Facebook Inc. On the flip side, on an average day in March, there was zero options activity on about 1,400 individual equities, ETFs or indexes, data from analytics firm Hanweck Associates show.

Ironically, the options industry's willingness to give users more choices is adding to the overall liquidity problem. Investors can trade options for more hours now, and exchanges have boosted the number of products, introducing wider ranges in both expirations and strikes, the prices at which options can be exercised. But this makes it more challenging for market makers who need to continuously provide quotes across an ever-increasing range.

"The existing pool of liquidity has been stretched thinner and thinner across expirations and strike prices and exchanges," said John Kinahan, chief executive of Group One Trading, an options market maker. "We still post markets on a lot of different exchanges, just not as aggressively as we used to."

One barometer of liquidity is the difference between the price buyers would like to purchase an option for and what sellers are willing to exchange at. The measure, known as the bid-ask spread, has grown by 30% in the past five years and peaked in 2014, according to data from Hanweck, which calculated a weighted average of the spread across quotes on all options.

While options market makers are closing shop, the number of options exchanges has ramped up to 15 from nine just five years ago.

Smaller firms sometimes can't afford fees to connect with multiple exchanges alongside the technology costs necessary to keep trading speeds in line with competitors, said Hazem Dawani, chief executive of OptionsCity Software, a trading systems and analytics provider. Some exchanges also have tiered fee structures that favor bigger firms that trade more.

"We've seen customers pulling out of equity options and trying to trade other products," Mr. Dawani said.

For example, customers are shifting to futures contracts, he said. Options Clearing Corp. data show a 42% increase in futures volume during April.

Mr. Peterffy expressed optimism, saying options are still an "excellent vehicle for traders," and that exchanges will eventually consolidate.

"Right now we are in a transition period," he said. "The broken market structure will be fixed."

A lightning-rod issue in options trading has been auctions designed to provide the best prices for investors by redirecting some retail orders into a separate auction process. They have curtailed market makers' ability to interact with retail orders, giving them less incentive to provide quotes, traders say.

Higher volatility could drive volumes and make contracts more expensive, some say. But diminished liquidity signals there is less cushion in the market. A period of severe market stress could scare investors from trading altogether.

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	.0651	15.3533	−3.3
Brazil real	.3147	3.1777	−2.4
Canada dollar	.7325	1.3652	1.6
Chile peso	.001489	671.40	0.2
Colombia peso	.0003396	2944.67	−1.9
Ecuador US dollar	1	1	unch
Mexico peso	.0526	18.9986	−8.4
Peru new sol	.3062	3.266	−2.6
Uruguay peso	.03578	27.9500	−4.8
Venezuela b. fuerte	.098942	10.1070	1.1
Asia-Pacific			
Australian dollar	.7421	1.3475	−3.0
China yuan	.1449	6.9031	−0.6
Hong Kong dollar	.1285	7.7841	0.4
India rupee	.01555	64.315	−5.4
Indonesia rupiah	.0000751	13322	−1.5
Japan yen	.008872	112.72	−3.7
Kazakhstan tenge	.003140	318.44	−4.6
Macau pataca	.1253	7.9786	0.8
Malaysia ringgit	.2305	4.3375	−3.3
New Zealand dollar	.6919	1.4453	0.1
Pakistan rupee	.00955	104.750	0.4
Philippines peso	.0201	49.824	0.4
Singapore dollar	.7118	1.4049	−2.9
South Korea won	.0008805	1135.71	−6.0
Sri Lanka rupee	.0065574	152.50	2.7
Taiwan dollar	.03314	30.176	−7.0
Thailand baht	.02884	34.670	−3.2
Vietnam dong	.00004405	22700	−0.3
Europe			
Czech Rep. koruna	.04112	24.318	−5.3
Denmark krone	.1479	6.7612	−4.4
Euro area euro	1.0999	.9092	−4.4
Hungary forint	.003528	283.41	−3.7
Iceland krona	.009471	105.58	−6.5
Norway krone	.1164	8.5923	−0.6
Poland zloty	.2612	3.8286	−8.6
Russia ruble	.01722	58.060	−5.2
Sweden krona	.1137	8.7945	−3.4
Switzerland franc	1.0129	.9873	−3.1
Turkey lira	.2822	3.5441	0.6
Ukraine hryvnia	.0377	26.5000	−2.2
UK pound	1.2981	.7704	−4.9
Middle East/Africa			
Bahrain dinar	2.6522	.3771	−0.03
Egypt pound	.0553	18.0803	−0.3
Israel shekel	.2785	3.5910	−6.7
Kuwait dinar	3.2871	.3042	−0.5
Oman sul rial	2.5982	.3849	−0.02
Qatar rial	.2746	3.641	0.03
Saudi Arabia riyal	.2666	3.7509	0.01
South Africa rand	.0745	13.4187	−2.0

	Close	Net Chg	% Chg	YTD % Chg
WSJ Dollar Index	89.71	−0.10	−0.12	−3.47

Sources: Tullett Prebon, WSJ Market Data Group

MARKETS

THE DAILY SHOT | By Lev Borodovsky and Gunjan Banerji

Volatility Dries Up

Wall Street is growing alarmed at the sharp decline in volatility indexes that measure expected price swings across markets, a shift that some executives term scary because it suggests investors have grown as complacent as they were just before the financial crisis.

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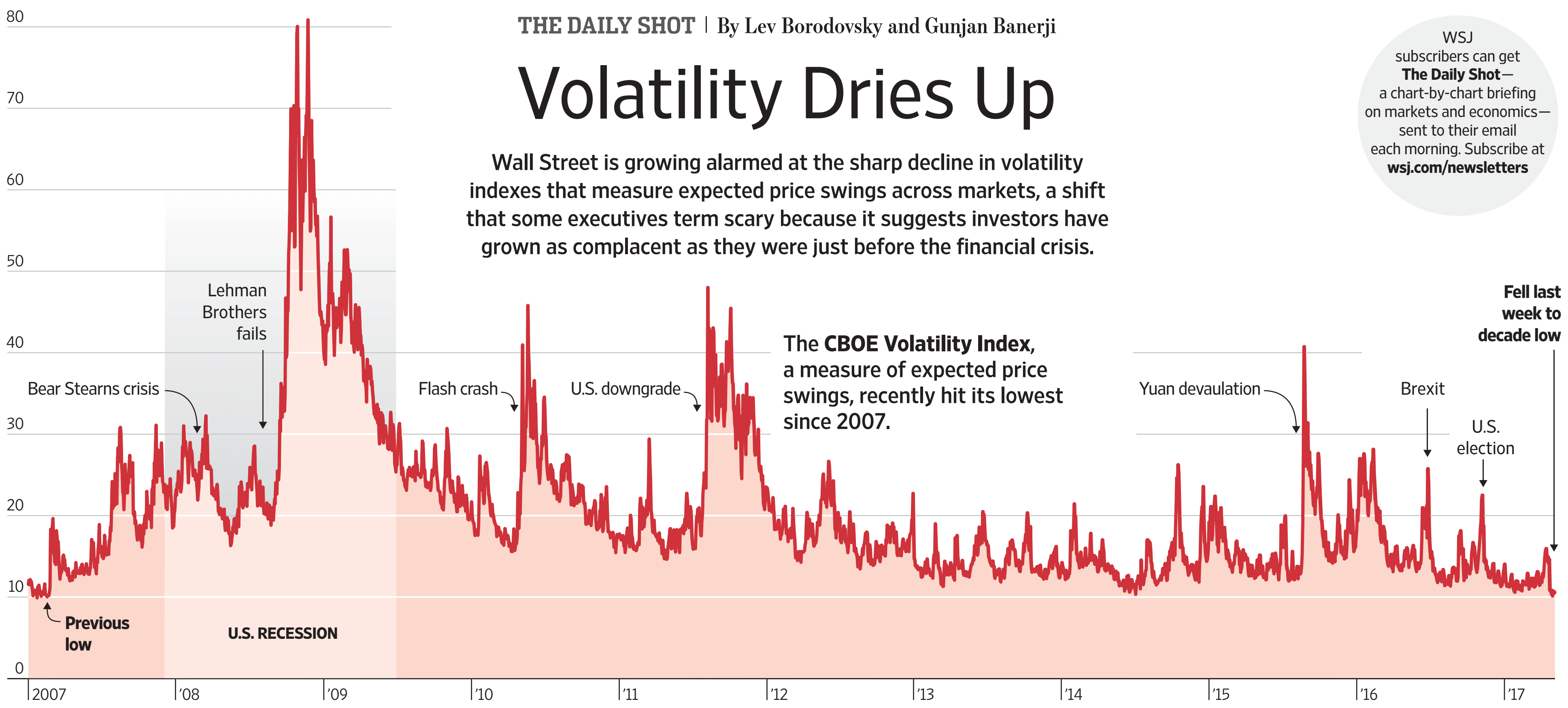
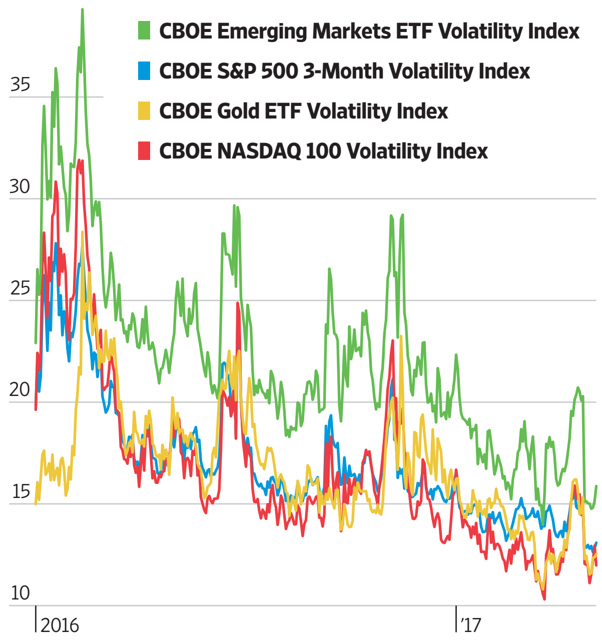
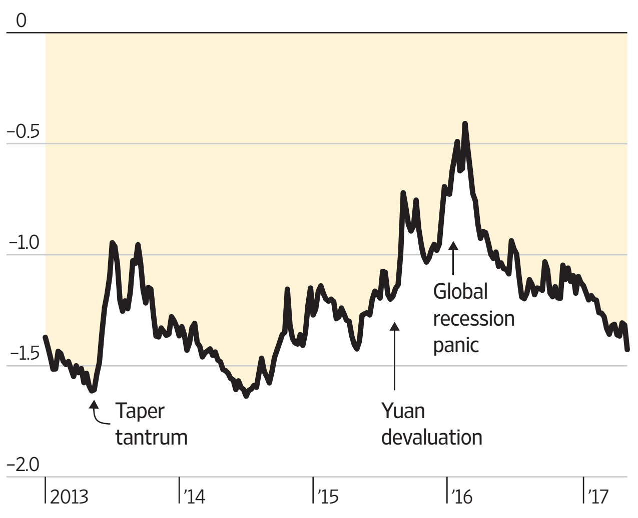


Declining volatility is being broadly replicated in other markets.



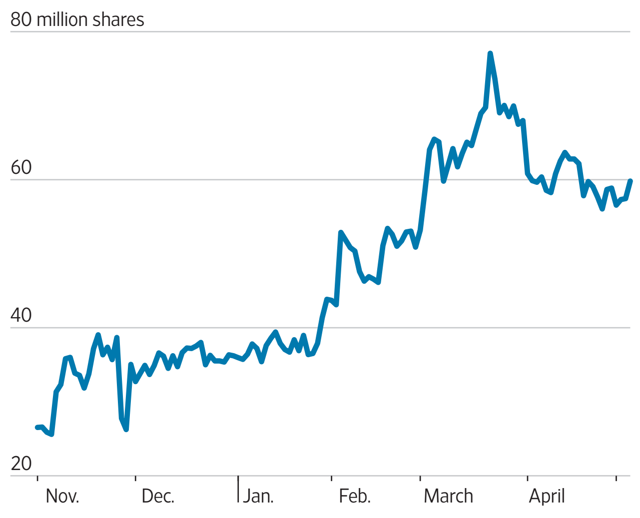
The decline in volatility is one aspect of declining financial market stress, along with high stock and bond prices and narrow credit spreads.

St. Louis Fed Financial Stress Index



Short interest in the VXX exchange-traded product has risen sharply in 2017, highlighting a popular and so far succesful bet that market turbulence will remain low: VXX is down 43% this year.

Daily short interest



Sources: Chicago Board Options Exchange (VIX indexes); Federal Reserve Bank of St. Louis (stress index); S3 Partners (short interest)

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HEARD ON THE STREET

Email: heard@wsj.com FINANCIAL ANALYSIS & COMMENTARY **WSJ.com/Heard**

China Puts Squeeze on Life Insurers

In China, lucrative bets are usually followed by a regulatory clampdown. So it was only a matter of time before China's acquisitive and unlisted life insurers started feeling the pain.

A broader regulatory shake-up in recent weeks has Chinese investors edging away from investments that look primed for attention. Talk of controlling "cross-sector and cross-market" risks in the financial sector is ramping up in the state-backed media. Last week, for instance, stocks of companies related to **Anbang Insurance Group**, such as developers Financial Street Holdings and Gemdale—the insurer had an over-14% stake in each as of September—fell on local-media reports of regulatory violations and on how Anbang was funding its bets.

Anbang was once a high-flying unlisted insurer vacuuming up premiums and recycling them into investments. More recently, it has been humbled by Beijing's strictures. One measure of the change: Anbang Life has seen premium growth go negative after regulators cracked down on their wealth-management investment-type products, which they sold largely through banks. It has dropped the fantastically high interest rates promised on its insurance-cum-investment products to 4% from 6% a year ago. Policyholder deposits fell 54% year-to-year in January.

These cash flows were typically used to finance the insurer's other activities, including large-stake buyouts in property developers.

China let its insurance industry go wild. The cleanup has just begun.

—Anjani Trivedi

After Macron's Win, What's Next?

Centrist Emmanuel Macron's victory in the French presidential race is the most definitive sign yet that Europe has resisted, rather than embraced, the populist political tide embodied by Brexit and Donald Trump. While markets anticipated the win, the next test will be whether the renewed sense of solidarity in European politics leads to progress on issues that have long dogged the economic bloc.

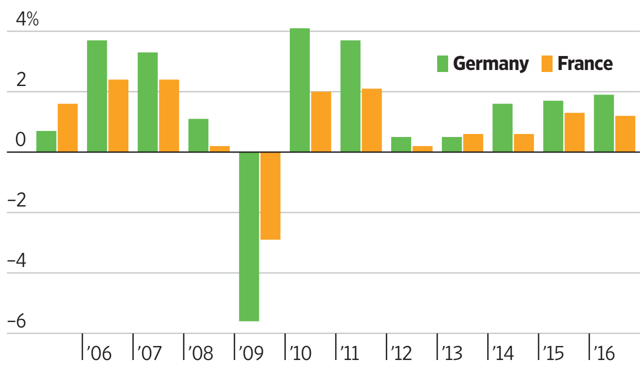
In the near term, markets have already been inspired by the fading of European political risk. Elections in Austria, the Netherlands and now France show Europeans leaning toward repairing the European Union and its common currency, the euro, rather than breaking it apart.

Since the first round of the French presidential elections two weeks ago, European stocks have gained 4.3%, with French stocks up more than 7%. Credit spreads have tightened, French bond yields fallen and the euro is up. That implies some of the relief investors will feel from Mr. Macron's win has already been priced in. Markets have been further buoyed by the relative strength and resilience of eurozone economic data.

How could Mr. Macron's election keep the momentum going for European markets? A focus will be on whether he renews the relationship between France and Germany, a key development in potentially delivering greater European integration, such as strengthening the eurozone's banking union and crisis-response capabilities. Efforts to improve the functioning of capital markets in Europe too would be welcome. That would inspire longer-term confidence about the ability of the euro to thrive, even if ideas like fiscal union remain on the drawing board.

Second Fiddle

Annual change in real gross domestic product



Source: Eurostat

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An important part of that will be Mr. Macron's ability to overhaul France, boosting growth that has lagged behind that of Germany in recent years; to have the two biggest economies in the eurozone moving in tandem will be a powerful force. Vital tasks include making labor markets more flexible to lower French unemployment from 10%, as well as reducing public spending.

Another litmus test for progress will be Greece. A renewed Franco-German axis could perhaps find some way to agree on a restructuring of Greece's debt.

The election of Mr. Macron is a step forward for Europe—but in a system with so many moving parts, it is a necessary, not a sufficient condition for progress. Still, combined with a recovery in corporate profits and decent economic data, the pro-European story has the upper hand. *— Richard Barley*

OVERHEARD

On the spectrum of awful to great, one might place being beaten up near one end and getting a free trip to San Francisco on the other.

In reality, though, **United Airlines** wound up paying undisclosed settlements to passengers who experienced both.

The case of the bloodied doctor David Dao, dragged off a flight, is well-known and forced Chief Executive **Oscar Munoz** to spend two days groveling to Congress this past week.

The latter episode led to a settlement because the passenger, who only speaks French, was supposed to fly from Newark to Paris instead. The airline made a last-minute gate change but only announced it in English. The passenger boarded the wrong flight and wasn't removed, even courteously. That turned what should have been a seven-hour trip into a 28-hour one.

Zut alors!

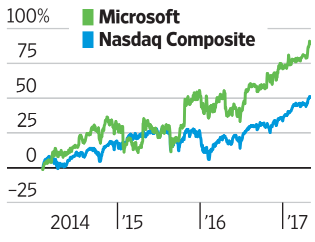
Microsoft's Focus on Cloud Area Should Keep Paying Off

Microsoft may be designing its own personal computers these days, but it has successfully convinced investors that it is past its dependence on them. Now comes the hard part.

Over the past three years, Microsoft appears to have settled the existential crisis of being the company that ushered in the PC era but missed the mobile one. Microsoft's focus on building a large cloud platform to offer its software and services across any device or operating system has resonated with investors. Its stock is up nearly 90% since Satya Nadella took over as CEO in early 2014 to lead that push. The Nasdaq Composite is up about 51% in that time.

Reboot

Share and index performance



Source: WSJ Market Data Group

The addition of about \$230 billion in market cap—more than the total market value of about 97% of the companies in the S&P 500—means Microsoft's cloud now needs to deliver a big silver lining. Mr. Nadella is likely to focus heavily on the cloud come Wednesday, when he kicks off the company's annual Build conference that once served mainly as the showcase for the Windows operating system.

Two of Microsoft's three operating segments contain cloud-related businesses. The good news is those two segments are on track to comprise about 64% of total revenue for the fiscal year ending in June, compared with 54% two years prior. The bad news is Microsoft doesn't disclose enough information to tell just how well its cloud business is performing. Improving that would bolster the company's case for growth.

That is important because the cloud business is expensive to build and to operate and doesn't command the same profitability as Microsoft's past big businesses, such as Windows and Office. Adjusted operating margins have compressed to the low 30% range in the past three years, compared with an average of 37% for the five years prior. And Microsoft's growing efforts at hardware—like the new Surface laptop introduced last week and a new supercharged Xbox coming this fall—also weigh on its margins.

Microsoft has signaled that its margins are on pace to improve, and its capital spending is expected to moderate over the next year. It also needs to add more clarity to its cloud business.

Walter Pritchard of Citigroup estimates Azure, the Microsoft cloud business that competes with Amazon's AWS, will hit about \$3.5 billion in revenue for the fiscal year ending in June, compared with \$1.8 billion the previous year.

That's still a lot smaller than AWS, which is projected to top \$14 billion in revenue for the same period. But Azure's rapid growth rate is helping to close some of that gap. At 22 times forward earnings, Microsoft is fetching its highest multiple in more than a decade. But it is cheaper than Google parent Alphabet and Amazon, making it a reasonable bet for a rising cloud.

—Dan Gallagher

INVESTING IN FUNDS & ETFS

THE WALL STREET JOURNAL. Monday, May 8, 2017 | R1

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6 Questions for Bond Investors

As interest rates rise, finding the right fixed-income strategy is crucial

DOUG CHAYKA

BY MICHAEL A. POLLOCK

THE FEDERAL RESERVE is raising interest rates, and there are several questions that savers and bond investors would like answered.

For example, to be blunt: *Is my savings account going to pay any worthwhile interest at some point?!* (The answer: probably not soon. But there are alternatives.)

If this all sounds familiar, it should: Many bond-market strategists had expected bond yields would be a lot higher by this point in the economic recovery, perhaps even making a savings account desirable. But a climb in rates seems to be getting closer.

With inflation ticking higher, the Fed now anticipates lifting short-term rates more rapidly. Officials also are discussing winding down the Fed's huge bond portfolio, accumulated during the recession to damp yields. Such a move would eliminate a major source of demand for government bonds, whose prices fall as yields rise.

And meanwhile, Washington lawmakers are talking about tax cuts and infrastructure spending that could stoke growth and lift inflation.

Amid such developments, "you need to be really careful about how you invest the fixed-income part of your portfolio," says Terri Spath, chief investment officer at Sierra Investment Management in Santa Monica, Calif.

She and others say there are some smarter ways to play this: Avoid putting any cash that might be needed soon into bonds. Keep additional funds around to invest later, at potentially higher rates. Dial back on rate-sensitive holdings, and further limit risk by owning a range of U.S. and foreign bonds.

Here are six questions for savers and those who own bonds or are considering buying them:

1. What risks do rising rates pose for bonds now?

One threat is to short-maturity bond funds and exchange-traded funds, which some investors may think are immune to rate risk. These commonly have average maturities of around two years and aim to generate 1% to 2% in annualized yield.

After raising rates twice since last fall, Fed officials expect to boost rates another five or six times by the end of 2018, lifting the Federal Reserve's rate target to around 2.25%-2.5% from about 1% now.

Bond yields move the opposite way as prices. Although short-term funds are less affected by yield changes than those that own longer maturities, many have a rate sensitivity of around two. If yields rose by one percentage point, that would result in a 2% decline in principal value—more than an investor would get back in interest paid by such a fund.

"If you are an investor who really can't stomach any losses, you should be in a money-market fund" where principal value would remain steady, says Emory Zink, analyst at fund-trackers Morningstar Inc.

2. Where can investors get reasonable returns on cash?

Although short-term rates are rising, banks—not the market—decide what rate of interest they will pay on savings. The national average rate today is just 0.08%, and banks will raise rates slowly since doing so will boost their profitability.

Some money-market funds yield closer to 1%. Their yields will rise gradually, though lagging behind the Fed's rate increases.

For the best combination of yield and safety,

Please turn to the next page

INSIDE

SCOREBOARD

April 2017 fund performance, total return by fund type. More on R2.

U.S. stocks*	Intl. stocks*	Bonds (intmd.)
1.0%	2.9%	0.8%

*Diversified funds only, excluding sector and regional/country funds

Source: Lipper

WHAT'S MY INVESTING FEE? A FRUSTRATING QUEST

Our reporter thought she had a simple question, but the answers were anything but

BY ANDREA FULLER

GARY HOVLAND

I THOUGHT MY question was simple: How much was I paying my investment adviser in fees?

After a series of phone calls that elicited the kind of confusion and frustration I have rarely experienced outside of interactions with cable-company customer-service representatives, I think I have an idea. Barely.

Describing the fee disclosures of my adviser as opaque would be generous. The experience left me wondering whether someone even less savvy than me, a Wall Street Journal reporter, would be able to navigate this system, to ferret out the good information from the bad.

Getting nowhere

In most offices, I suspect that people try to stay up on sports or television to prime for water-cooler gossip. But at the Journal, I was growing increasingly ashamed of how little I knew about the workings of my own investments. So, I decided to research what fees I paid to invest with my financial-advisory company—one of the largest in the country.

All of my investments are in mutual funds or exchange-traded funds. Though I don't have a finance beat—I am an investigative reporter who specializes in data analysis and computer programming—I am still guided by the Journal's conflict-of-interest policy that aims to prevent conflicts between employees' investments and the subjects we may cover. So I don't do any individual-stock investing.

I assumed the fee information I was looking for would be readily available in the documents section of the company's website. Wrong. I did see a toll-free number for customer support, so I gave them a ring.

I told the man who answered that I wanted to find out what fees I pay. In retrospect, this was a little like asking your spouse how much divorce lawyers cost. As he began to fret, I assured him that, no, I wasn't unhappy, just curious.

There is a $125 annual flat fee, he told me.

Alarm bells went off. That's it? I asked. That can't be it. I assumed there was a percentage charge on my investments.

He laughed. We'd love to charge that, he said. But no, $125.

Was that the *only* fee, I asked? I was increasingly dubious.

Well, he said, each fund in which you're invested has internal fees.

How did I find those?

And so began our journey into the bowels of the investment firm's website. He suggested I click on various pages, only to discover that no, the fees weren't listed there. By the time he suggested that I go to Yahoo Finance and look up various funds to find out about their fees there, I knew I'd had enough.

Twenty minutes into the call, I said I had to go.

I hope this has been helpful, he told me. I assured him: It wasn't.

I went back to my desk to seethe. There is a local financial adviser at the firm whom I meet with periodically for account reviews, and I decided to shoot him an email asking how I could find out all the fees I pay, and where these were documented. I also wrote an email to a colleague with the subject line, "MAY PULL HAIR OUT."

An answer of sorts

But apparently my irritation set the company on alert that we had entered the breakup danger zone. The man I had spoken with left me two voice mails promising that he had the information. I conceded to returning their calls after I received a third from his supervisor suggesting that, really, he could help me.

The man I spoke with this time proceeded to tell me the opposite of what the previous adviser had told me. No, there was no annual $125 fee. That was only for people investing in individual stocks. My portfolio had an annual fee of 0.85% of assets, deducted quarterly.

So what about these internal fees? He said those ranged from 0.4% to 0.8% of assets annually.

Well, then, what was my actual number? He said that I was invested in the "moderate" risk basket, so the expense averaged to 0.55%. Fees would have been higher with more-aggressive investments, lower with conservative ones.

I thanked him and asked where I could see all this online.

He said that he wasn't sure, but that the information would be in whatever packet I received when I enrolled in the program.

I told him this document was either long gone or in the drawer where old IKEA instructions go to die.

He said I could always try looking up the individual fees on Morningstar's website.

I thought that this was about as much as I could stomach of the fee-finding quest. I finally had an answer to what fees I paid, even if I remained in the dark about where they were documented. But about that time, I received a response from the adviser who normally schedules my portfolio reviews.

He also cited me the 0.85% number. And he said the internal expense fees were "around 0.5%."

I wrote him back and told him that I had finally spoken with someone who gave me the right answer, and that the number was 0.55%.

He called me, alarmed. It's actually 0.5%, he told me.

Well, the other guy told me 0.55%, I said.

No, he told me, you're in an account with "moderately conservative" risk, and the figure is 0.5%.

The other guy told me I was in the "moderate" account, I said.

Pause. Oh yes, as it turns out, you *are* in the moderate account, he said. The 0.55% was correct. My combined fee was 1.4%.

And as for those documents?

"I am trying to find a client approved document that provides you with the internal expenses on the portfolio you are invested in," my adviser wrote.

I am still waiting.

* * *

A spokeswoman for Ms. Fuller's investment-management firm later said she was sorry the reporter had a bad experience. She provided instructions and documents with further information on fees—but no documentation of Ms. Fuller's internal fund fees—and said the firm updated its statements in recent months to more clearly detail fees paid.

Ms. Fuller is a reporter for The Wall Street Journal in New York. Email her at andrea.fuller@wsj.com.

◆ How to get a straight answer on investment fees.................. R2

6 Questions for Bond Investors

Continued from the prior page

investors might consider putting money into a high-yielding, federally insured bank savings account, says Bankrate.com chief financial analyst Greg McBride. Such accounts are offered by virtual institutions that are courting depositors. Two such banks, Goldman Sachs Group Inc.'s GS Bank and the CIT Bank unit of CIT Group, are advertising rates above 1%.

3. Which bonds offer some protection against rising rates?

One way to diversify against U.S. rate risk is with bonds issued in other countries whose rate cycles aren't in sync with that in the U.S. Raman Srivastava, managing director for global fixed income at Standish Mellon Asset Management Co., cites emerging-markets bonds as among "the more compelling opportunities" after investors fled such bonds several years ago. Yields can top 5%, offering a bigger offset to the impact of rising yields.

Moving lower on the U.S. credit ladder is another solution. High-yield bonds (or junk bonds) issued by companies with weaker credit ratings can yield more than 6%.

But be cautious about loading up on such securities to the exclusion of higher-quality bonds. While higher-yielding bonds are less vulnerable to rising yields, they are very sensitive to worries about defaults and can be volatile, notes Scott Kimball, portfolio manager of BMO TCH Core Plus Bond Fund (BATCX). In 2015, he says, some high-yield bonds issued by energy companies plunged in price during the oil-market swoon.

4. How can investors lock in better income as rates rise?

Traditionally investors did that by building a ladder of bonds having sequential maturities. As the nearest matured, the proceeds were reinvested in a new bond due to mature several years later, when the investor hoped to reinvest at an even higher yield.

Alternatively, an investor could build a ladder with defined-maturity bond ETFs, says David Berman, chief executive of Baltimore-based wealth manager Berman McAleer. Unlike conventional bond ETFs, which periodically buy new bonds to replace maturing ones, defined-maturity ETFs own bonds with closely bunched maturities. After all the bonds mature, the ETF repays principal and interest.

Mr. Berman uses Guggenheim BulletShares ETFs, which are available in either investment-grade or high-yield corporate versions. BlackRock's iShares unit offers defined-maturity ETFs that own taxable corporate bonds or tax-exempt municipal bonds.

5. What are the alternatives to fixed-rate bond funds?

Floating-rate funds—sometimes called senior-loan or bank-loan funds—can be a good defensive play when rates are rising.

Such funds own loans made by banks to companies with lower credit ratings and yield 4% or more. The rates on the loans periodically adjust up or down, based on changes in a benchmark index such as the London interbank offered rate, or Libor, so a fund's yield moves higher as rates rise.

One concern is that surging demand for such funds is enabling companies now to get much more lenient borrowing terms, says Frank Ossino, who oversees **Virtus Senior Floating Rate Fund** (PSFRX) at Newfleet Asset Management, in Hartford, Conn. Mr. Ossino cautions that another downturn eventually could spark defaults on lower-grade loans, denting a fund's returns. Funds that yield more than peers may own a larger percentage of such loans, he says.

Among senior loan funds that Morningstar rates highly are **Eaton Vance Floating-Rate** (EVBLX), **Lord Abbett Floating Rate** (LFRAX) and **Fidelity Floating Rate High Income** (FFRHX).

6. Are mutual funds or ETFs better at this point in the cycle?

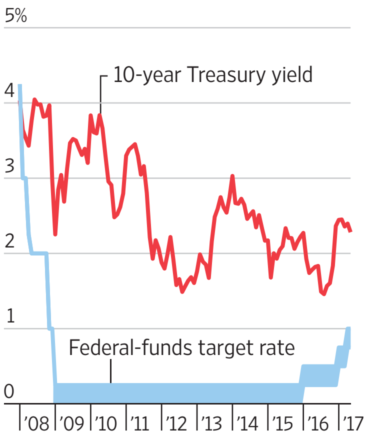
Active managers can reposition a portfolio to trim rate risk, moving to bonds that are less rate-sensitive.

Fed Chairwoman Janet Yellen before she testified on Capitol Hill in February.

JOSHUA ROBERTS/REUTERS

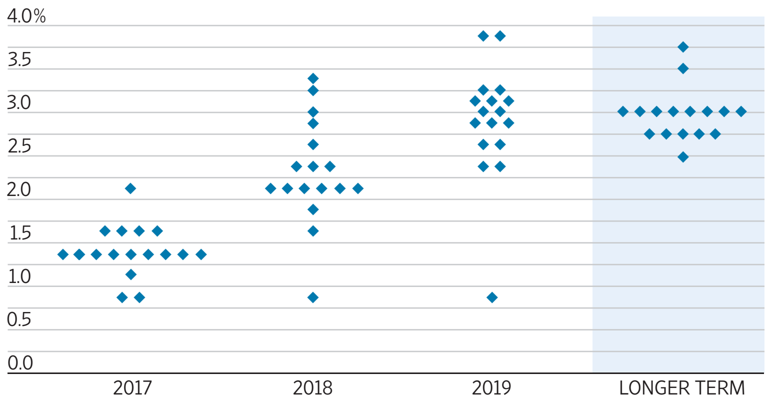
Back From the Depths

The Federal Reserve's rate target compared with the 10-year Treasury yield, monthly data. Yields move opposite to the note's price.



'Dot Plot': Where the Fed Policy Makers Stand

This is the Federal Reserve Board's policy-path chart, nicknamed the Dot Plot. It shows how the Fed policy makers (17 of them including nonvoting members) envision the future path of policy and rates. Each diamond represents one Fed policy maker's view of an appropriate federal-funds target rate.



Note: One participant didn't submit longer-run projections. Each value is rounded to the nearest 1/8 percentage point of an individual's target.

Sources: WSJ Market Data Group, Ryan ALM (bond yield); Federal Reserve

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But ETFs may be a good choice because they charge much lower management fees—a benefit at times when bond returns are slim by historic standards.

Still, people who plan to buy an ETF need to understand what they are getting, says Josh Jalinski, an adviser in Toms River, N.J. ETFs that focus on certain narrower sectors, such as **iShares 20+ Year Treasury Bond** ETF (TLT), can be volatile, posing more risk of mistiming a purchase or sale, he says.

Some ETFs hedge against rising rates. They include **WisdomTree Barclays Interest Rate Hedged U.S. Aggregate Bond Fund** (AGZD), which yields about 2%, and **Deutsche X-trackers Investment Grade Bond Interest Rate Hedged ETF** (IGIH), which recently yielded about 3¼%.

Hedged funds outperform when rates rise, but may underperform when rates are falling, says Todd Rosenbluth, director of ETF and mutual-fund research at CFRA, a New York-based provider of investment research. "By hedging, you protect against something, but also you can miss something," he says.

*Mr. Pollock is a writer in Ridgewood, N.J. He can be reached at **reports@wsj.com**.*

HOW TO GET A STRAIGHT ANSWER ABOUT ADVISER FEES

BY MICHAEL WURSTHORN

Don't know how much you pay your financial adviser? Just ask, wealth-management experts say.

"The very least a financial adviser owes you is a transparent explanation of what's going on," says Terrance Odean, Rudd Family Foundation professor of finance at the University of California, Berkeley's Haas School of Business.

If an adviser offers a complicated explanation, several different figures or flat-out says, "I don't know," Dr. Odean and others say it is time to ditch him or her.

"Some may make it seem like rocket science. But it isn't. They're using complexity to confuse the consumer," Dr. Odean says. "If you're not getting straight answers you understand, go elsewhere."

Most investors don't know how much they are paying their financial adviser, with 60% of investors surveyed by J.D. Power & Associates last year saying as much. But brokerage firms, pushed by new regulations such as the Labor Department's fiduciary rule, are trying to change that.

Bank of America Corp.'s Merrill Lynch, for example, rolled out new monthly client statements earlier this year that more plainly state investment fees, including advisory fees, commissions on purchases of stocks and bonds, and charges related to using automated-teller machines.

Still, account statements can be lengthy, and experts say financial advisers need to be ready to provide a simple explanation of how they are compensated. Here are some questions to ask:

1. How much do you charge me for advice?

Ask your financial adviser if you are charged an annual fee, usually split across each quarter of the year, or pay a commission for each transaction. These charges should also be available on clients' account statements under headings such as "fees and charges," or factored into the overall performance of a given investment.

2. Are there costs tied to individual investments?

Some mutual funds charge so-called 12b-1 fees for marketing or distribution, which are often equal to 0.25% of a fund's assets each year, but can be as much as 1%. Unlike commissions, 12b-1 fees don't appear on transaction confirmations or client account statements.

Again, your financial adviser should be willing and able to explain any underlying investment costs. But investors can also rely on research firm Morningstar or the Financial Industry Regulatory Authority's website (finra.org/fundanalyzer) to determine those costs. Investors in fee-based accounts should also ensure that any 12b-1 fees are rebated against their annual fee; otherwise, the adviser may be getting paid twice for the same investment, Dr. Odean says. These days, most brokerage firms either rebate the 12b-1 fee or offer mutual-fund shares without it.

3. In a managed account, are there any extra costs?

More financial advisers are encouraging their clients to put their money in managed accounts—personalized portfolios of stocks and bonds chosen by a money manager. Such accounts are usually charged a fee by the brokerage firm, similar to your run-of-the-mill fee-based account. But they also tend to come with an added fee of as much as 0.5% charged by the investment firm managing the account. At **Morgan Stanley** and Merrill, those fees, together with what the brokerage firm charges, could push annual costs as high as 2.5% of the portfolio's value.

4. What other services do you provide?

If your adviser has simply put you in a diversified portfolio while charging a fee of as much as 1.5%, be sure to ask if he or she is providing any other services, such as tax or estate planning. After all, advisers earn their fee regardless of how those investments perform. And there are cheaper alternatives for simple asset allocation, such as robo advisers. "An adviser charging that much should be providing more than just a suggested portfolio," Dr. Odean says.

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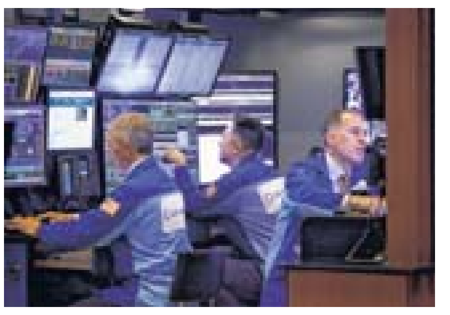
MONTHLY MONITOR | WILLIAM POWER

Steady Gains: U.S.-Stock Funds Rose 1% in the Month, Push This Year's Gain to 5.9%

At this pace, mutual-fund investors are going to feel fine about 2017, though not giddy.

The lukewarm economic expansion continues to boost both stock and bond prices, and with them, U.S.-stock funds and bond funds. In April, U.S.-stock funds registered a total return of 1%, according to Thomson Reuters Lipper data. That has left stock funds sitting on a 5.9% year-to-date return through April.



MICHAEL NAGLE/BLOOMBERG NEWS

Positive glow: The NYSE on May 1.

They aren't dot-com-mania numbers, but steady enough. For all of 2016, in comparison, stock funds gained 10.8%.

Omar Aguilar, chief investment officer for equities at Charles Schwab Investment Management, says Friday's "pretty good" jobs report was the latest sign that the "overall global economic recovery seems to be pretty stable. The U.S. seems to be on the path to slowly but surely growing."

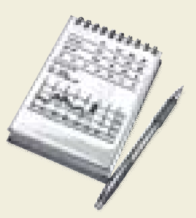
Investors also continued to warm to international-stock funds in April, as nervousness about political developments in the U.K., France and the Netherlands seemed to recede. Such funds, which meandered to only a 0.7% average gain last year, perked up in April with a 2.9% advance—putting their year-to-date rise at 11.1%.

The combination through the end of April of stable commodities, a weaker dollar, economic recoveries in developed markets and a rotation toward growth assets helped investors feel comfortable, says Mr. Aguilar. "We saw a lot of interest by our clients in our international products" in April, he says.

However, May has started out a bit differently for commodities, he notes. Prices are down, and there is a pickup in the dollar (a seesaw relation that reporter Simon Constable writes about in today's report, on page R6).

Bond funds also rose modestly in April, though investors are keeping a wary eye on the Federal Reserve. The Fed has left the door open for an interest-rate increase as soon as June. Funds focused on intermediate-maturity, investment-grade debt, the most commonly held type of bond fund, were up 0.8% for the month, and up 1.7% year-to-date.

*Mr. Power is a Wall Street Journal news editor in South Brunswick, N.J. Email him at **william.power@wsj.com**.*



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NEED TO KNOW

Don't Give Up on Stock Buybacks, At Least Not Yet

The programs are no longer a sure thing—but there's still an effect on value stocks

BY MARK HULBERT

GLORY DAYS Stock buybacks were all the rage, and big news, throughout the 1990s. Now, many investors scoff at them.

STOCK BUYBACKS are no longer considered an unambiguously good thing, for companies or investors. But investors might still be able to profit from them.

As recently as the 1990s, the market typically celebrated a company's announcement that it would be repurchasing its shares in the open market. Numerous studies found that not only would the stock of the average company jump on the announcement of a buyback program, it also would continue to outperform the market for several years.

Today, in contrast, the announcement of a buyback program is often met with cynicism if not outright criticism. Many believe that such programs have become little more than short-term financial engineering that sacrifices a company's long-term growth.

Recent studies have found that the stock of the average company engaged in repurchasing its shares performs no differently than the overall market.

What changed? One big factor is that, starting about 15 years ago, the stock market became more efficient—leaving fewer shares mispriced—for several reasons, including the increasing influence of big, sophisticated institutional investors, more information disclosure by companies because of increased regulation, improved market liquidity due to a decline in trading costs, and an explosion in algorithmic trading, according to research conducted by Fangjian Fu and Sheng Huang, finance professors at Singapore Management University.

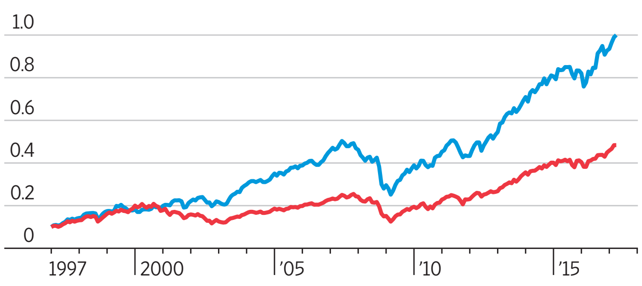
A more-efficient market leaves fewer opportunities for companies to buy back their shares at bargain prices with the goal of profiting from a rebound, so buybacks now tend to be done more for business reasons than purely market reasons, according to a study the professors published last year in the journal Management Science. That makes a jump in share price after a buyback less likely.

The net result of this and other factors, according to the study, is that on average companies have stopped experiencing any boost in the performance of their shares following the announcement of a buyback program. The data the published study was based on ended in 2012, but Dr. Fu says he has updated the study to include data through the end of 2016 and reached the same conclusion.

Still Beating the Market, 20 Years Later

Performance of the Buyback Letter versus the broad market (Wilshire 5000)

■ The Buyback Letter* ■ Wilshire 5000



*Average of model portfolios

Source: Hulbert Financial Digest

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Opportunity knocks

But there is still the possibility that investors can exploit some repurchase announcements, according to Gustavo Grullon, a finance professor at Rice University. He says he has found from his research that among certain stocks the market continues to react favorably to a buyback announcement.

These are so-called value stocks—shares that trade below the level that would be expected given a company's revenue, sales and other financial data—especially those of companies with the smallest market capitalizations. Their performance after buyback announcements gets lost in the aggregate data because their buyback programs are often tiny compared with those of the largest companies, Dr. Grullon says.

One reason these stocks are more likely to get a boost from buybacks is that the market for them is less efficient than the market for bigger stocks, Dr. Grullon says, in part because fewer sophisticated investors and Wall Street analysts follow the smaller companies. That leaves more room for significant price increases. And, Dr. Grullon adds, those increases tend to happen gradually because of that same inattention to these stocks, leaving time for investors to take advantage.

Another factor, he says, is that investors differentiate between companies that appear to be engaging in buybacks for short-term reasons and companies that are adding to their long-term value by repurchasing their shares.

Companies that fall into the first category tend to be so-called growth companies, which have plenty of opportunities to invest cash in their growth. The market frowns on such companies if they decide not to invest in those growth opportunities and instead spend their cash on buybacks, Dr. Grullon says.

Counting on value stocks

The situation is different for value stocks, since they are out of favor and the companies have fewer opportunities to invest in their growth. In such cases, Dr. Grullon says, the action that promises the greatest rate of return may be for these companies to buy their undervalued shares and hope to profit from the market's eventually pricing the shares more fairly.

Share prices won't jump every time a company buys back a small-cap value stock, Dr. Grullon says, but his research has found that on average the price will rise.

Among the investment newsletters I monitor, the Buyback Letter (edited by David Fried) comes closest to pursuing this approach to buyback stocks. And, sure enough, its model portfolios have continued to beat the broad market, even as the average buyback stock has struggled in recent years to keep pace with a simple index fund.

Here are the smallest-cap stocks that Mr. Fried has recommended to clients in recent weeks that have particularly low price-to-book ratios, one of the major criteria for determining which stocks fall into the value category: **Allscripts Healthcare Solutions** (MDRX); **Investors Bancorp** (ISBC); **Kohl's** (KSS); **Myriad Genetics** (MYGN) and **Penny-Mac Mortgage Investment Trust** (PMT).

To be sure, the Buyback Letter hasn't beaten the market in recent years by as much as it has over a longer stretch. Mr. Fried's average model portfolio has beaten the dividend-adjusted Wilshire 5000 index's annualized return by 3.7 percentage points over the 20 years through April 30, but by only 1.6 percentage points over the trailing five years.

But that's still much better than the average buyback stock's performance. And a statistician cannot at the 95% confidence level conclude that the Buyback Letter's deterioration in performance is due to anything more than random fluctuation in the year-by-year results. It's worth noting in this regard that the Buyback Letter over just the past 12 months has beaten the Wilshire 5000 by 4.8 percentage points.

Mr. Hulbert is the founder of the Hulbert Financial Digest and a senior columnist for MarketWatch. He can be reached at ***reports@wsj.com.***

How the Largest Funds Fared

Data provided by LIPPER

Performance numbers are total returns (changes in net asset values with reinvested distributions) as of April 28; assets are as of March 31. All data are final.

The Largest Stock Mutual Funds

Fund	Ticker	Assets ($ billions)	Total Return (%) April	1-year	Annualized 3-year	5-year	10-year
Vanguard TSM Idx;Adm	VTSAX	549.59	1.1	18.6	10.1	13.5	7.4
Vanguard 500 Index;Adm	VFIAX	310.71	1.0	17.9	10.4	13.6	7.2
Vanguard Tot I Stk;Inv	VGTSX	262.53	2.2	13.6	1.3	5.6	1.2
SPDR S&P 500 ETF	SPY	241.04	1.0	17.8	10.4	13.5	7.1
Vanguard Instl Indx;Inst	VINIX	222.54	1.0	17.9	10.5	13.7	7.2
American Funds Gro;A	AGTHX	156.22	2.0	20.7	11.3	14.2	7.4
American Funds EuPc;R-6	RERGX	132.38	3.2	15.1	3.3	7.4	N.A.
Fidelity 500 Idx;Pr	FUSVX	118.07	1.0	17.9	10.4	13.6	7.1
Fidelity Contrafund	FCNTX	108.47	2.8	18.6	11.4	13.1	8.7
American Funds Bal;A	ABALX	107.79	1.0	11.0	7.5	10.1	6.7
American Funds Inc;A	AMECX	104.99	0.2	10.6	5.5	9.0	5.3
American Funds CIB;A	CAIBX	103.07	0.8	7.6	3.9	7.2	4.0
iShares:Core S&P 500	IVV	101.82	1.0	17.9	10.4	13.6	7.1
Vanguard Wellington;Adm	VWENX	98.35	0.8	12.0	7.2	9.9	6.9
American Funds Wash;A	AWSHX	89.59	0.9	15.9	8.8	12.7	6.5
American Funds CWGI;A	CWGIX	86.51	1.9	14.6	4.9	9.8	4.6
American Funds FInv;A	ANCFX	84.93	1.2	18.9	10.8	13.6	7.2
American Funds ICA;A	AIVSX	84.41	0.8	15.8	9.3	13.2	6.5
Vanguard Md-Cp Idx;Adm	VIMAX	83.60	1.2	17.5	9.4	13.3	7.6
Franklin Cust:Inc;A	FKINX	82.94	...	14.2	2.8	7.3	4.9
Vanguard FTSE Dev Mk ETF	VEA	77.71	2.4	12.6	1.5	7.2	N.A.
Vanguard Sm-Cp Idx;Adm	VSMAX	74.88	0.9	20.4	8.6	13.3	8.0
Vanguard FTSE Em Mkt ETF	VWO	70.37	1.4	18.4	2.2	1.5	2.4
iShares:MSCI EAFE ETF	EFA	67.30	2.6	11.2	0.8	6.7	0.8
Dodge & Cox Stock	DODGX	65.21	0.4	26.4	9.8	15.6	6.0
American Funds NPer;A	ANWPX	64.35	2.9	16.5	7.7	11.0	6.4
Vanguard REIT Idx;ETF	VNQ	62.92	0.2	5.8	8.8	9.1	5.0
Vanguard Gro Idx;ETF	VUG	60.25	2.3	19.5	11.5	13.5	8.8
Dodge & Cox Intl Stock	DODFX	58.61	2.5	21.7	1.2	8.4	2.5
Vanguard Ext Mk Id;Adm	VEXAX	55.49	1.1	21.8	8.5	13.0	7.9
Vanguard Value Idx;ETF	VTV	55.30	...	17.0	9.3	13.6	5.8
American Funds AMCP;A	AMCPX	53.72	1.4	15.2	8.9	13.2	7.8
First Eagle:Global;I	SGIIX	53.54	0.2	9.5	5.4	7.9	6.6
Vanguard PRIMECAP;Adm	VPMAX	51.85	1.5	24.6	12.8	17.1	9.9
Vanguard Wellesley;Adm	VWIAX	51.24	0.7	6.3	5.5	7.0	6.7
T Rowe Price Gro Stk	PRGFX	49.52	3.8	24.0	13.6	14.4	8.8
Vanguard Windsor II;Adm	VWNAX	48.24	0.4	16.1	7.5	12.1	5.7
PowerShares QQQ Trust 1	QQQ	47.61	2.7	29.9	17.1	16.7	12.5
Vanguard Health Care;Adm	VGHAX	45.99	1.2	8.9	11.4	17.8	10.7
American Funds Mut;A	AMRMX	43.32	0.3	13.9	8.5	11.8	6.6

The Largest Bond Mutual Funds

Fund	Ticker	Assets ($ Billions)	Total Return (%) April	1-year	Annualized 3-year	5-year	10-year
Vanguard Tot Bd;Adm	VBTLX	177.90	0.8	0.8	2.6	2.2	4.3
Vanguard Tot Bd II;Inv	VTBIX	123.92	0.8	0.6	2.5	2.1	N.A.
PIMCO:Income;Inst	PIMIX	79.08	0.7	9.4	6.0	8.2	9.1
Met West:Total Return;I	MWTIX	78.56	0.8	1.2	2.6	3.6	5.8
Vanguard Tot Itl BI;Adm	VTABX	77.26	0.6	1.9	4.0	N.A.	N.A.
PIMCO:Tot Rtn;Inst	PTTRX	73.58	0.9	2.8	2.8	2.8	5.7
Vanguard Sh-Tm Inv;Adm	VFSUX	59.56	0.4	1.8	2.0	2.1	3.3
DoubleLine:Tot Rtn;I	DBLTX	54.22	0.8	2.0	3.3	3.6	N.A.
Vanguard Int-Tm TxEx;Adm	VWIUX	51.58	0.7	0.1	2.9	2.9	4.1
Dodge & Cox Income	DODIX	48.86	0.7	3.7	3.0	3.4	5.0
Vanguard Sh-Tm Bd;ETF	BSV	48.42	0.4	0.7	1.3	1.2	2.9
iShares:Core US Agg Bd	AGG	43.33	0.8	0.8	2.6	2.2	4.2
Templeton Gl Bond;Adv	TGBAX	40.37	−0.6	10.9	2.4	3.7	6.8
Lord Abbett Sh Dur;F	LDLFX	39.46	0.3	3.1	2.1	2.6	N.A.
T Rowe Price New Inc	PRCIX	33.52	0.8	1.1	2.4	2.3	4.5
American Funds Bond;A	ABNDX	32.43	0.8	1.2	2.5	2.3	3.0
Fidelity Str Adv Cre Inc	FPCIX	30.86	0.8	3.0	3.1	3.0	N.A.
Vanguard Int-Tm Bd;ETF	BIV	30.70	1.1	0.7	3.3	2.8	5.4
iShares:iBoxx $IG Corp	LQD	30.60	1.2	2.2	3.7	4.1	5.5
Fidelity US B Id;IP	FXNAX	28.97	0.7	0.7	2.7	2.2	N.A.

Note: For funds with multiple share classes, only the largest is shown. N.A.: Not applicable; fund is too new or data not available

Mutual-Fund Yardsticks: How Fund Categories Stack Up

All returns are for periods ended April 28. All data are final.

Data provided by LIPPER

Investment objective	Perfomance (%) April	YTD	1-yr	5-yr*
Diversified stock & stock/bond funds				
Large-Cap Core	1.0	**6.7**	16.3	12.2
Large-Cap Growth	2.6	**12.2**	18.1	12.3
Large-Cap Value	0.1	**3.7**	16.5	11.9
Midcap Core	0.5	**4.7**	17.1	11.7
Midcap Growth	1.9	**9.5**	17.4	10.9
Midcap Value	0.03	**3.2**	17.5	12.3
Small-Cap Core	0.9	**2.8**	21.5	11.8
Small-Cap Growth	1.8	**7.7**	22.7	11.1
Small-Cap Value	0.2	**0.4**	21.3	11.5
Multicap Core	1.0	**6.5**	16.6	12.0
Multicap Growth	2.2	**11.2**	17.8	11.7
Multicap Value	0.1	**3.6**	16.3	11.9
Equity Income	0.4	**4.3**	14.3	10.6
S&P 500 Funds	0.4	**6.3**	16.6	12.9
Specialty Divers. Equity	0.9	**3.4**	4.7	−5.0
Balanced	1.0	**4.9**	9.8	7.0
Stock/Bond Blend	1.0	**4.9**	9.7	6.2
Avg. U.S. Stock Fund†	1.0	**5.9**	16.8	10.8
Sector stock funds				
Science & Technology	2.3	**13.4**	29.2	13.7
Telecommunication	1.5	**5.3**	12.9	10.1
Health/Biotechnology	2.1	**13.2**	14.6	17.3
Utility	0.6	**7.1**	9.4	9.6
Natural Resources	−5.0	**−9.4**	2.7	−2.3
Sector	0.04	**0.9**	8.7	7.5
Real Estate	0.2	**1.3**	5.7	8.3

Investment objective	Perfomance (%) April	YTD	1-yr	5-yr*
World stock funds				
Global	2.0	**9.2**	14.4	8.9
International (ex-U.S.)	2.9	**11.1**	11.8	6.0
European Region	4.0	**11.8**	12.2	7.5
Emerging Markets	2.4	**13.9**	17.6	1.8
Latin American	0.7	**13.9**	18.1	−5.7
Pacific Region	1.8	**12.7**	16.9	6.3
Gold Oriented	−3.6	**5.9**	−10.5	−11.4
Global Equity Income	1.1	**6.3**	10.4	7.4
International Equity Income	1.7	**9.2**	10.5	3.9
Taxable-bond funds				
Short-Term	0.3	**0.9**	1.6	1.3
Long-Term	1.0	**2.4**	2.9	3.5
Intermediate Bond	0.8	**1.7**	1.4	2.3
Intermediate U.S.	0.4	**1.4**	1.6	0.4
Short-Term U.S.	0.8	**1.7**	1.4	2.3
Long-Term U.S.	0.8	**1.6**	−1.1	1.4
General U.S. Taxable	0.9	**2.6**	4.2	4.2
High-Yield Taxable	1.0	**3.3**	11.2	5.6
Mortgage	0.6	**1.2**	1.1	1.9
World Bond	0.9	**4.0**	5.0	1.4
Avg. Taxable-Bond Fund**	0.6	**2.1**	4.2	2.5
Municipal-bond funds				
Short-Term Muni	0.2	**0.5**	0.3	0.4
Intermediate Muni	0.7	**2.0**	−0.4	2.0
General & Insured Muni	0.7	**2.1**	−0.14	3.1
High-Yield Muni	0.8	**3.3**	1.0	4.6

Stock & Bond Benchmark Indexes All total return unless noted

Investment objective	Perfomance (%) April	YTD	1-yr	5-yr*
Large-cap stocks				
DJIA	1.5	**6.7**	20.9	12.4
S&P 500	1.0	**7.2**	17.9	13.7
Midcap stocks				
S&P MidCap 400	0.8	**4.8**	20.5	13.6
Small-cap stocks				
Russell 2000	1.1	**3.6**	25.6	12.9
Broad stock market				
DJ U.S. Total Stock Market	1.0	**6.9**	18.6	13.5
Russell 3000	1.1	**6.9**	18.6	13.6

Investment objective	Perfomance (%) April	YTD	1-yr	5-yr*
Stock indexes				
DJ U.S. TSM Growth	2.1	**10.4**	19.9	14.0
DJ U.S. TSM Value	0.1	**3.7**	17.2	13.0
Taxable bonds				
Barclays Agg. Bond	0.8	**1.6**	0.8	2.3
Municipal bonds				
Barclays Muni. Bond	0.7	**2.3**	0.1	3.2
International stocks				
MSCI EAFE†† (price return)	2.3	**8.9**	8.3	3.9
Dow Jones World (ex. U.S.)	2.2	**10.5**	12.8	5.7

*Annualized †Diversified funds only **Excludes money-market funds ††Europe, Australia, Far East

ASK ENCORE | GLENN RUFFENACH

The Pluses and Minuses of Retiring in a College Town

Also: Answering readers' questions on IRAs and health care when retiring abroad

A recent column addressed the idea of moving in retirement. To be more specific: What are the pros and cons of retiring in a college town?

The advantages, at first blush, are clear: a stimulating atmosphere, opportunities for continuing education, a diverse population, a stable economy (for the most part), and, frequently, lots of restaurants, shopping and cultural events. That said, not every college setting will give you the experience you may be seeking.

To start, there are two ways to do this: You can simply settle in the town itself, or you can move into a "university-based retirement community," or UBRC. That term—coined by Andrew Carle, an adjunct professor at George Mason University and chief operating officer at Affinity Living Group, a senior-housing company in Hickory, N.C.—describes real-estate developments that have some type of connection (formal or informal) with an academic institution.

A good example: **Kendal** Corp. (kendal.org) in Kennett Square, Pa., whose popular retirement communities in eight states (primarily in the Northeast and Midwest) are closely integrated with lifelong-learning programs. Residents—who typically live within walking distance or a short drive from a college campus—can audit classes, hear guest lecturers, and attend concerts, plays and athletic events.

If you're considering a move to a college town, keep the following in mind:

◆ **Open arms? Maybe not.** If continuing education is a primary reason for moving to a college town, research carefully just how much access you'll have to classes and services. With budgets tight these days at many schools, administrators might not be as welcoming to nontraditional students as in the past.

◆ **Not all UBRCs are created equal.** Along the same lines…there are no set criteria for a university-based retirement community. Some developments help provide access to classes, campus fitness centers, libraries, special events—the works. Others simply are situated near a college or university with no particular educational benefits. Says Mr. Carle: "There are many communities that claim to be connected [to colleges and universities] but really aren't."

◆ **Health care: a mixed bag.** On the plus side…settling in a college town offers, potentially, access to top-flight medical care. (For instance: the University of Michigan Medical Center in Ann Arbor.) That said, many retirees are attracted to *small* college settings. Here, it might be tougher to find specialists and the care you need.

Note: To get a feel for college towns, as well as some top UBRCs, check out two recent surveys by Bankrate.com, the personal-finance website. Search first for: top 10 college towns for retirees. And second: retirement communities university ties.

* * *

What happens when a person retires overseas and has an extended stay in a hospital and is physically unable to travel to the U.S. for medical treatment? What is the process for medical payment to that hospital?

In short, you're on your own.

Medicare (with limited exceptions) doesn't work outside the U.S. As such, a retiree living overseas needs to have personal insurance, or needs to enroll in a national health plan (if his/her country of residence allows retirees to enroll)—or needs to pay the bills out of his/her own pocket.

We recently received a similar question: "Should I drop Medicare if I plan to retire and live overseas?" It is possible to drop (or "disenroll" from) Medicare and the premiums that come with it. But it's risky to do so. Such coverage can be a nice safety net. And if you drop Medicare but end up returning to the U.S. to live, you likely will pay a stiff penalty to re-enroll.

* * *

My father died in 2000, and my mother inherited his individual retirement account. My mother passed in August 2016, and I inherited a share of this IRA. Going forward, how do I calculate my required minimum distribution? Is the figure based on my life expectancy? And am I the "successor beneficiary" or the "beneficiary"?

You probably are a beneficiary, as opposed to a successor beneficiary—and that's an important distinction. But before we discuss distributions, we have to nail down a few essentials.

First, we'll assume that after your father died, your mother did a "spousal rollover," a direct transfer from a deceased spouse's IRA to a surviving spouse's IRA. (That's what normally happens.) At that point, the original IRA is considered to be your mother's IRA, as if she contributed all the funds, says Ed Slott, an IRA expert in Rockville Centre, N.Y. So, technically—even though your mother inherited the account—she isn't considered a beneficiary; rather, she is the IRA owner. And that would make you (and any siblings) a beneficiary, not a "successor beneficiary."

Second, we'll also assume that you were named as a beneficiary on your mother's IRA beneficiary form and that you didn't inherit the account through your mother's estate. If your name appeared on the form, you can stretch distributions from an inherited IRA over your lifetime, Mr. Slott notes.

Third, we'll assume that you set up a properly titled inherited IRA for your share (your mother's name should remain on the account, and the title should indicate that the account is in an inherited IRA) *and* that the funds were transferred *directly* from your mother's account to the inherited IRA. (If you simply withdrew your share from your mother's IRA, that's a taxable event.)

So…if all that is correct…yes, you will use your life expectancy to calculate your required distribution. Go to Internal Revenue Service Publication 590-B, "Distributions from Individual Retirement Arrangements," and, in Appendix B, see the "Single Life Expectancy" table (Table 1). Find your age in the table and the adjacent life-expectancy figure. Divide the balance of your inherited IRA as of Dec. 31, 2016, by the life-expectancy figure to calculate your required distribution for 2017.

And if you find the math at all intimidating, most IRA custodians are happy to help you determine your RMD.

Again, all of the above is based on the assumption that your mother did, in fact, do a "spousal rollover" when your father died. But your mother wasn't *required* to do so, Mr. Slott notes. She could have opted to remain a beneficiary of your father's account. And if she died as a beneficiary, you (and any siblings) are now a "successor beneficiary."

If that's the case, your RMDs depend on when your mother died, Mr. Slott explains. If she died before her deceased husband would have turned age 70½, then you and any siblings can use your own life expectancies to calculate your distributions. If your mother died after her deceased husband would have reached 70½, then you and any siblings must use your mother's remaining single-life expectancy.

I know: far too complicated.


SONIA PULIDO

*Mr. Ruffenach is a former reporter and editor for The Wall Street Journal. His column examines financial issues for those thinking about, planning and living their retirement. Send questions and comments to **askencore@wsj.com**.*

SPOTLIGHT | U.S. OIL FUND

OIL ETFS DRAW THE BRAVE

When it comes to oil, there are plenty of investors who are eager to play the bounceback game with leveraged ETF products.

One futures-based ETF that has seen huge flows from investors, both out and in, is the $2.8 billion **U.S. Oil Fund** (USO).

From early April to early May, had net outflows of $36 million. Earlier this year, the ETF attracted huge flows. From Feb. 20 to March 20, USO took in $230 million, according to Bloomberg data.

Todd Rosenbluth, director of ETF and mutual-fund research at CFRA, says: "Oil ETFs were highly volatile in April, but investors still like to bet on this space." He says leveraged ETFs will incur greater risks the longer they are held. But what is behind the bull case for oil?

Tamar Essner, head energy analyst at Nasdaq, says, "The single biggest factor underpinning the bull case for oil has been the OPEC cuts and the belief that this would meaningfully reduce global inventories and, critically, that the cuts would be extended for the second half of the year." And that can change at a moment's notice.

Investors can probably continue to expect high short-term volatility in oil ETFs for the rest of 2017.

—Tanzeel Akhtar

FUNDAMENTALS OF INVESTING

In Commodity Investing, Currencies Call the Tune

NATE KITCH

The dollar is an indicator of where commodities prices might be headed—usually the other way

BY SIMON CONSTABLE

INVESTORS WHO want to make money trading commodities would do well to become experts in forecasting currencies.

That's because changes in the value of the U.S. dollar tend to be accompanied by movements in the opposite direction in the prices for most of the materials and foodstuffs traded on global markets. For instance, from September 2012 through February 2016, commodities prices on average halved while the value of the dollar surged.

The dollar's movement isn't a foolproof predictor of the direction of commodities prices, but it's a factor that can't be ignored. For the 10 years through the end of March, the prices of commodities on average show a negative correlation to the dollar's value of more than 0.5, according to an analysis from S&P Dow Jones Indices. In other words, the two move in opposite directions more often than not. (A negative correlation of 1.0 would mean the two always move in opposite directions.)

Some commodities had an even closer relationship to moves in the dollar. Unleaded gasoline, crude oil and heating oil all had negative correlations above 0.8.

Of course, correlation doesn't necessarily mean causation. But in this case, there is an element of causation.

"All commodities are priced in dollars," notes Steve Hanke, professor of applied economics at Johns Hopkins University. "That's why the dollar is so important—if the nominal value of the dollar moves around, then the nominal prices of the commodities have to move around." Other factors can temper or amplify the effect of the dollar's movements, but the dollar will always have some influence on commodities prices.

Which way next?

The trick then for investors is to work out which way the dollar is going.

How do you forecast? A standard joke on Wall Street is that some economists can't forecast *past* events with any accuracy. But accuracy, in terms of the extent of any movements in the dollar, isn't the most important thing in this case. The crucial thing is getting the direction right. If the forecast is for the dollar to weaken, and that forecast proves correct, then investors can have some comfort that the prices of commodities are likely to increase on average.

The easiest way for individual investors to figure out the dollar's direction is to see if their bank publishes exchange-rate forecasts. Such forecasts typically will predict the value of the dollar against currencies including the euro, yen and pound.

Dollar/euro test

To keep things simple, investors may want to focus on just one important exchange rate: the dollar versus the euro. "Most of the time if the dollar is strong against the euro it's because the dollar is strong against all currencies," says William Adams, senior international economist at PNC Financial Services in Pittsburgh.

For those who want to supplement a dollar-euro forecast with some of their own research, the key is what happens in the two economies.

"The outlook for economic growth and inflation is what causes central banks to make the decisions they make, and they fuel a lot of the movements in exchange rates," says Mr. Adams.

When an economy is growing fast and inflation is rising, central banks such as the Federal Reserve and the European Central Bank tend to raise the cost of borrowing money. Higher interest rates, in turn, tend to boost a currency's value by making securities denominated in the currency more attractive to investors.

"Our forecast is that the dollar, which is already quite strong, will get even stronger," says Mr. Adams. "It's a mix of a tighter U.S. job market plus accelerating wage growth and expectations of fiscal stimulus."

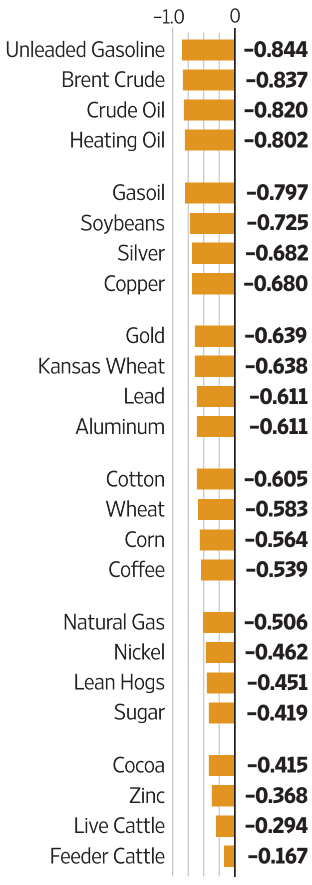
The U.S. economy has recovered faster than that of the eurozone. As a result, it's likely that the Federal Reserve will raise the cost of borrowing faster than the European Central Bank and so propel the dollar higher against the euro.

Clearly, though, that situation won't always be true, so commodity investors will need to keep a watchful eye on economic data from Europe and the U.S.

Mr. Constable is a writer in New York. He can be reached at reports@wsj.com.

Pushed Around

The dollar's rise has usually been associated with a decline in the price of several commodities over the past 10 years. The impact as measured by negative correlation:



Source: S&P GSCI

THE WALL STREET JOURNAL.

INVESTING SOCIAL SECURITY ASSETS IN STOCKS?

Readers weigh in on the debate over putting some of the trust fund in the market

Should the Social Security trust fund, which needs help, be allowed to invest in stocks?

The debate stirs passions, and in April, two experts argued the case for each side in the Investing in Funds & ETFs report. Alicia H. Munnell, director of the Center for Retirement Research at Boston College, and co-author of a paper on the subject, argued that it would reduce the need for benefit cuts or tax increases. Michael D. Tanner of the Cato Institute countered that the government should stay out of stocks.

Both sides agree on one thing: The fund needs shoring up. But experts have long disagreed on the stocks idea (which is separate from the "privatization" idea of letting citizens themselves do the investing).

After the debate was published in April, readers weighed in energetically, as well. Here are edited excerpts of some of the responses:

* * *

Clearly the answer is yes. 95% of an investment's return is based on the diversity of the investment portfolio. Sovereign-wealth funds know this. Why doesn't our government? Place 25-30% of assets into a passive index fund. End of story.

—Scott Smart

* * *

Social Security is tough enough. So, let's now invest it in a crapshoot. So, let's take a bad system and make it really scary.

—Dennis Vidmar

* * *

No! No because bureaucrats wouldn't be able to put together a portfolio that would take into account the many risks in the stock market!

—Peter Casula Jr.

* * *

The risk of retirement should be a collective risk so that no one has to worry about a decent life. That doesn't take much.

And yes, invest in the stock market. Have a board, elected by the members, who hire professionals. They invest the Social Security dollars.

—Neal Fishman

* * *

We could start by having the Social Security money invested in real bonds rather than IOUs that are given prevailing interest rates.

—Richard Tanksley

* * *

No, no, and no. It shouldn't be invested in stocks. That is a terrible idea.

Nice to see the photo [with the article] from the signing of the bill in 1935. My great-grandfather was one of the authors of the bill, but unfortunately he isn't in that picture, as FDR sent him off to do something else.

—Rufus Smith

UNDERWOOD ARCHIVES/GETTY IMAGES

President Franklin D. Roosevelt signing the Social Security bill in 1935.

* * *

If a gradual allotment of a percentage of current Social Security taxes were invested in indexed funds such as Fidelity, T. Rowe Price or Vanguard over a period of 20 years, the unfunded liabilities would be eliminated.

Ms. Munnell's proposals give hope to alleviate a coming financial disaster.

—William W. Dornburgh

* * *

I prefer Tanner's option. Let the young make their own decisions and transition Social Security over the coming decades back to what it was intended to be, a safety net, an insurance policy, not a retirement-funding system.

—Edward Berry

* * *

The government should stop taking my money and pretending it knows better how to invest it than I do.

—Justin Murray

* * *

Increasing exposure to stocks is the only way mathematically for the problem to be resolved while avoiding new taxes or benefit cuts.

—Timothy James

* * *

Bringing in a huge new buyer of stocks into the market will increase the price of stocks without increasing returns. For all other investors, return on equity will drop. The only reason to do it is to make Congress's and the president's job easier. Why do that? Make them solve the problem and take the heat.

—Brian Sims

* * *

If the trust-fund authorities should ever decide to ask for public input (ha!) I would suggest allowing each citizen the choice of a percentage to be invested in the stock market. Most companies that have 401(k)s put a limit on the percentage to be invested.

—Bonnie Fitch

* * *

Excellent idea...with the market near all-time highs. I would imagine it's an excellent time to pitch this concept and the worst time ever to execute it.

—John Hawkins

* * *

ABSOLUTELY POSITIVELY NO. Remember 1929? Remember 2008? How soon we forget.

—John Sieminski

* * *

Of course Social Security should invest its money. There are plenty of sovereign-wealth funds that prove that it's a great idea, as well as state retirement funds.

—Jack Armstrong

* * *

It could become similar to a 401(k), where each person determines how his contributions are invested. Some 401(k)s allow a very wide range of stock, bond and fund alternatives. Why would anyone believe that Treasury bonds are low risk? Stock is ownership in something tangible, whereas government bonds are only backed up by the promises of politicians.

—Richard Hutchings

* * *

I couldn't agree more [with investing in stocks]. If I had been able to invest my Social Security contributions and my company's, as well, oh my, would I have been rich. The government is incapable of doing anything to earn a decent return on an investment. My zero return for 30-plus years is a typical government operation. What a waste of great assets.

—Sam Owens

* * *

The need is to focus on fixing the fundamental problem of Social Security. There are many ways to do this—cut benefits, raise taxes, change to something like a 401(k), etc. While I prefer the latter, we have to do something and this debate only diverts attention from the real problem. And I am terrified of any system where the government can dominate the financial markets.

—Peter Hutzel

* * *

Both sides of the debate advocate buying stocks, one way or another. American life is risky enough in just about every other respect. Protect and shore up Social Security, as is.

—Miles Dudley

* * *

The federal government is already picking common stocks. The Thrift Savings Plan for federal employees has a C Fund that mirrors the S&P 500. The rate of return since inception in 1988 is 10.16%. Why not expand this to a portion of Social Security receipts?

—Dale Brown

* * *

This debate is based on a fallacy. The Social Security trust fund has no liquid assets with which to buy equities.

—Anthony Hewitt

* * *

There is no "trust fund." It's a Ponzi scheme. Just end it.

—Willie Steinhausen


Think Vanguard has the lowest cost?
Think again.
With Schwab, you'll get the lowest costs for market cap index funds in the industry[1], with no minimums. Plus, everyone pays the same regardless of investment amount.
For a $5,000 investment in an S&P 500 index fund:
Schwab SWPPX you pay 0.03%
Lowest in the industry
Fidelity FUSEX you pay 0.09%
3x more expensive
Vanguard VFINX you pay 0.14%
4x more expensive
charles SCHWAB
Own your tomorrow

PORTFOLIO STRATEGY

A Closer Look at a Popular Fund for Yield

Franklin Income Fund has been hard to judge, but now we can try to with ETFs

BY JOHN COUMARIANOS

LLOYD MILLER

SOME MUTUAL FUNDS are harder to judge than others because they have no obvious benchmark to measure them against. But we found a way to evaluate the performance of one such fund, the $80 billion **Franklin Income Fund** (FKINX), by creating a portfolio of exchange-traded funds to act as a benchmark.

The result: The Franklin fund falls short of the benchmark's returns.

The nearly 70-year-old Franklin Income fund hasn't had a clear benchmark for all those years because most of its investments are in five different asset classes—domestic and foreign dividend-paying stocks, investment-grade bonds, high-yield (or junk) bonds and convertible bonds—to generate current income and capital appreciation. The picture is even muddier because the asset mix can shift dramatically over time, and some of the convertibles can be "synthetic"—swaps that give the fund an enhanced yield on a common stock in exchange for forgoing some potential price appreciation but accepting all potential depreciation.

To judge the fund, we compared it with a portfolio of ETFs that mimics the long-term average of the fund's asset weightings. We lumped convertible bonds, synthetic or not, into the high-yield category and boosted the investment-grade corporate bond allocation slightly in lieu of the fund's holdings of small amounts of cash and miscellaneous securities.

Our portfolio consisted of the **iShares iBoxx $ High Yield Corporate Bond** ETF (HYG), at 54% of assets; the **iShares Select Dividend** ETF (DVY) at 30% of assets; the **iShares International Select Dividend** ETF (IDV) at 10%; and the **iShares iBoxx $ Investment Grade Corporate Bond** ETF (LQD) at 6%.

Performance and volatility

Fund sponsor **Franklin Templeton Investments** said, "The Franklin Income Fund has consistently delivered both a strong uninterrupted income stream and long-term growth to investors for over 65 years. A make-shift combination of passive ETFs, selected with the benefit of hindsight, may be able to mimic the total returns of our fund over a specific time period, but it doesn't deliver a comparable income stream in terms of either consistency (monthly) or level (distribution yield), which is the fundamental objective of this actively managed fund. Therefore these ETFs, in isolation, cannot be used as an effective benchmark."

We tested the performance of the Franklin Income fund and our portfolio over nine years (37 quarters), starting in 2008 and ending March 31, 2017. We chose this time frame instead of 10 years because some of the ETFs we thought mimicked the fund best didn't have longer histories. We rebalanced our ETF portfolio annually, although Franklin manages the fund's asset-class weightings more opportunistically.

For the 37 quarters through the end of March 2017, the Franklin Income fund produced a 5.45% total annualized return, while our ETF portfolio produced a 6.21% total annualized return, according to data from fund researcher Morningstar.

A $10,000 investment on Jan. 1, 2008, became $16,355 in Franklin Income on March 31, 2017, and $17,460 in the ETF portfolio, not including taxes for the fund or the ETFs.

Franklin Income dropped 31% in 2008 versus a 24% loss for the ETF portfolio, and 7.8% in 2015 versus a 4.5% loss for the ETF portfolio. But, despite those bigger calendar-year losses, Franklin Income's standard deviation of returns for the period—a measure of volatility—was 12.4% for the entire period versus 12.5% for the ETF portfolio.

While Franklin Income aims to deliver superior income, the total-return approach is valid because emphasizing income only can be myopic if principal is fluctuating.

Still, with data from Bloomberg, we managed to separate the fund's and the ETF portfolio's total returns from their price changes over the 37-quarter period, giving us the portion of the returns representing distributions. The fund delivered a 72% cumulative total return from distributions; for the ETFs, a 69% cumulative total return from distributions. Distributions include both income and capital gains (or losses), so they aren't a perfect measure of income. But one can infer that the income profiles of Franklin Income and the ETF portfolio are at least similar.

Looking at the fees

One reason Franklin Income's overall total return has underperformed the ETF portfolio is because of the fund's 0.61% expense ratio. The ETF portfolio would cost investors 0.45% annually.

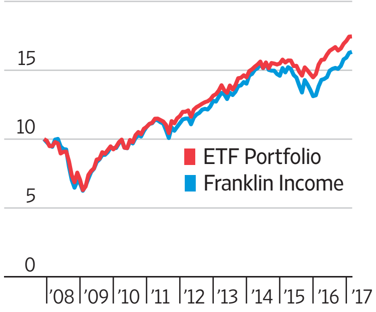
However, that 0.16 percentage point difference doesn't account for all of the 0.76 percentage point difference in annualized return.

It would require some effort and discipline for investors to rebalance a four-fund portfolio annually. But Franklin Income has been highly profitable for its parent with more than $4 billion in revenue over the past decade, based on annual total net-asset statistics provided by Morningstar. Now that ETFs are available to track its underlying asset classes, investors can better gauge its performance.

Mr. Coumarianos, a former Morningstar analyst, is a writer in Laguna Niguel, Calif. He can be reached at ***reports@wsj.com.***

Judging Franklin

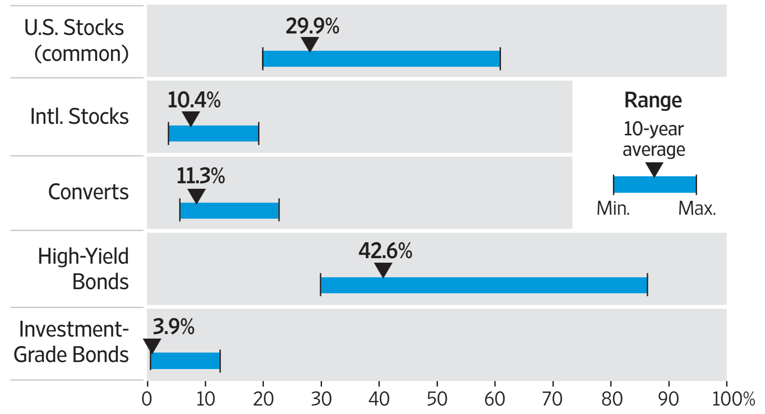
Franklin Income Fund compared with a portfolio of ETFs that mimics its long-term average asset-class weightings. Growth of $10,000 monthly.



Source: Morningstar

Historical Average Allocation

There have been many sources of yield for Franklin Income Fund.



Source: Franklin Templeton

THE WALL STREET JOURNAL.

SPOTLIGHT | ISHARES MSCI FRANCE ETF

FRENCH-STOCKS ETF WAS IN THE RIGHT SPOT

Dramatic events in recent weeks have had the world's attention riveted on France, but the performance of **BlackRock** Inc.'s **iShares MSCI France** (EWQ) exchange-traded fund rests on a much broader story: the direction of European and global economic growth.

The headlines generated as the French presidential election played out and terrorism flared again in Europe have at times shaken the $381 million fund, the only U.S.-listed ETF focused on France. It may be briefly buoyed as centrist President-elect Emmanuel Macron prepares to take office. But over the longer term, it may draw greater support from the outlook for the European economy and the global markets that many of the fund's holdings operate in.

From the beginning of the European debt crisis at the end of 2009, investors have used the ETF—which along with the **iShares MSCI Germany** ETF (EWG) represents core exposure to the eurozone—to express their views on the ups and downs of the crisis, says Tushar Yadava, an investment strategist at iShares. Overall, the France fund has been buffeted; its assets have declined more than 40% from their peak of $649 million in 2008.

As of this time last year, almost all of BlackRock's iShares European ETFs had year-to-date outflows, says Mr. Yadava. But as the eurozone's economy improved toward the end of last year and into this year, investors began dipping their toes back into the European market, he says.

In 2017, through May 2, investors have committed a net $37.3 million to the France ETF, according to FactSet.

The fund has gained 13.6% this year through April, edging out the iShares MSCI Eurozone ETF's (EZU) 13.4% gain, Morningstar says.

—Daisy Maxey

Leaders and Laggards

Data provided by LIPPER

Performance numbers are total returns (changes in net asset values with reinvested distributions) as of April 28; assets are as of March 31. All data are final.

Best-Performing Stock Funds

Fund	Ticker	Assets ($ millions)	Total Return (%) April	YTD	Annualized 1-year	3-year	5-year
Rex VolMAXX SVW Ftrs Str	VMIN	10.8	5.1	66.5	N.A.	N.A.	N.A.
Direxion:MSCI Ind Bull3X	INDL	96.3	5.0	66.4	56.3	6.5	–1.3
Direxion:S&P Btech Bl 3X	LABU	270.5	8.3	65.4	70.7	N.A.	N.A.
Direxion:CSI Ch Int Bl2X	CWEB	2.9	11.9	63.9	N.A.	N.A.	N.A.
VelShs DlyInv VIX ST ETN	XIV	636.0	3.1	60.0	183.4	32.0	44.4
ProShs II:ShVIX STF ETF	SVXY	486.8	3.0	59.4	181.0	31.3	43.5
Direxion:Hbldrs&Sup Bl3X	NAIL	7.8	2.9	58.3	61.9	N.A.	N.A.
Direxion:S Korea Bull 3X	KORU	5.5	0.3	53.5	49.7	–9.3	N.A.
ProShares:UltP QQQ	TQQQ	1,340.6	8.0	50.3	105.9	46.9	46.1
Direxion:S&P OG EP Br 3X	DRIP	23.0	19.4	47.4	–45.3	N.A.	N.A.
Direxion:MSCI EM Bull 3X	EDC	164.7	4.7	46.2	47.3	–10.1	–9.9
VelShs VIX Short Vol Hdg	XIVH	50.6	1.6	44.6	N.A.	N.A.	N.A.
Direxion:Tech Bull 3X	TECL	254.5	5.7	41.9	110.9	43.5	36.4
Direxion:Latin Bull 3X	LBJ	17.5	–4.2	39.1	25.5	–32.5	–30.8
Columbia:India Sm Cp ETF	SCIN	25.6	7.7	38.7	42.3	15.8	8.3
Direxion:FTSE EU Bull 3X	EURL	26.2	11.3	38.6	18.4	–13.9	N.A.
VnEck Vctrs:India SC ETF	SCIF	231.4	8.3	38.1	43.5	18.0	5.7
VelShs DlyInv VIX MT ETN	ZIV	92.3	5.8	38.0	65.6	16.8	32.2
ProShares:UP Nasdaq Bio	UBIO	37.4	3.9	36.9	14.3	N.A.	N.A.
UBS E-TRACS MR2xL ISE Hb	HOML	5.6	1.9	36.2	68.8	N.A.	N.A.
ProShares:Ult MSCI MexCl	UMX	9.3	2.0	36.0	–13.1	–15.4	–9.0
ProFunds:UltraChina;Inv	UGPIX	12.5	4.8	35.5	25.5	5.8	7.6
iShares:MSCI Ind Sm-Cap	SMIN	106.3	6.6	35.0	43.6	23.5	14.5
Direxion:Semicnd Bull 3X	SOXL	234.8	–2.4	33.9	245.3	56.3	54.5
Direxion:China Bull 3X	YINN	129.2	–0.2	33.4	44.5	–2.22	–1.9

Worst-Performing Stock Funds

Fund	Ticker	Assets ($ millions)	Total Return (%) April	YTD	Annualized 1-year	3-year	5-year
VelShs Dly 2x VIX ST ETN	TVIX	202.4	–12.7	–67.5	–96.7	–87.2	–88.4
ProShs II:UltVIX STF ETF	UVXY	360.0	–12.8	–67.5	–96.6	–87.2	–88.4
VelShs 3x Long Nat Gas	UGAZ	461.6	–1.0	–54.8	–25.1	–82.4	–62.3
Direxion:S&P Btech Br 3X	LABD	119.3	–9.8	–50.2	–78.4	N.A.	N.A.
VelShs Dly 2x VIX MT ETN	TVIZ	1.8	–11.8	–49.9	–71.9	–49.7	–59.1
Rex VolMAXX LVW Ftrs Str	VMAX	1.9	–10.5	–49.0	N.A.	N.A.	N.A.
Direxion:Jr Mnr Bear 3X	JDST	166.4	33.9	–44.1	–77.8	–83.4	N.A.
Direxion:S&P OG EP Bl 3X	GUSH	118.6	–19.6	–43.2	–28.8	N.A.	N.A.
Direxion:Hbldrs&Sup Br3X	CLAW	2.8	–3.9	–41.7	–55.0	N.A.	N.A.
ProShs II:VIX ST Fut ETF	VIXY	137.5	–5.4	–41.2	–77.3	–54.7	–57.3
iPath ETN SP500 VIX ST A	VXX	989.4	–5.3	–41.2	–77.5	–54.7	–57.3
VelShs VIX ShTm ETN	VIIX	12.3	–5.3	–41.2	–77.5	–54.7	–57.3
iPath Bloomberg NatGas A	GAZ	4.3	1.8	–37.7	26.2	–49.5	–27.7
VelShs 3x Long Crude	UWT	408.3	–10.4	–36.1	N.A.	N.A.	N.A.
VelShs 3x Long Crude ETN	UWTI	142.6	–10.4	–36.0	–45.7	–82.5	–68.5
Direxion:MSCI EM Bear 3X	EDZ	118.2	–5.4	–35.1	–51.3	–24.6	–24.2
Direxion:Nat Gas Bull 3X	GASL	49.3	–17.5	–34.8	–29.8	–89.6	–72.1
ProShares:UltP Sht QQQ	SQQQ	531.3	–7.9	–34.7	–57.6	–46.1	–45.4
ProShs II:Ult Blm Nat Gs	BOIL	47.2	0.4	–34.6	–1.9	–61.5	–39.3
iPath ETN Glbl Carbon A	GRN	0.8	–3.1	–34.5	–29.7	–8.2	–15.5
Transam:Sm Cp Val;R	TRSLX	42.1	–33.3	–34.0	–21.7	–7.1	2.0
ProShares:UPS Nasdaq Bio	ZBIO	6.7	–4.9	–33.7	–49.6	N.A.	N.A.
Direxion:Gold M Id Br 3X	DUST	248.4	4.6	–33.0	–50.6	–69.8	–51.6
iPath ETN ShEn MSCI EM	EMSA	1.0	–8.0	–32.9	–41.0	–12.0	–10.5
Direxion:Tech Bear 3X	TECS	16.9	–5.8	–31.3	–59.3	–45.4	–42.0

Best-Performing Bond Funds

Fund	Ticker	Assets ($ millions)	Total Return (%) April	YTD	Annualized 1-year	3-year	5-year
Measured Risk Strategy;A	MRPAX	12.2	–1.0	19.8	N.A.	N.A.	N.A.
UBS AG Enh Eur Gl HY ETN	FIHD	644.3	1.3	13.1	19.8	N.A.	N.A.
UBS E-TRACS MP 2xL D HI	DVHL	19.2	1.8	11.3	37.7	9.4	N.A.
Barings:Emer Mkts LCD;I	BXLIX	5.2	0.6	10.2	1.4	N.A.	N.A.
iShares:Curr Hgd Em Mkts	HEEM	278.8	1.9	9.6	14.5	N.A.	N.A.
Dreyfus EMD Local Curr;I	DDBIX	38.5	1.4	9.5	4.6	–4.4	–2.4
Pru EM Debt Loc Curr;Z	EMDZX	31.1	0.9	9.4	4.2	–2.1	–1.3
Barings:EM DB Tot Rtn;Y	BXEYX	10.4	1.1	9.4	13.2	N.A.	N.A.
Hartfd:EM Local Dbt;Y	HLDYX	104.6	1.5	9.1	6.2	–2.0	0.01
Stone Harbor Loc Mk;Inst	SHLMX	935.7	1.2	9.1	4.4	–3.6	–3.3
Frst Tr VIII:CEF Inc Opp	FCEF	17.8	2.7	9.0	N.A.	N.A.	N.A.
PIMCO:Em Local Bd;Inst	PELBX	3,919.5	1.3	9.0	5.7	–2.8	–2.1
PowerShares Eu Curr HLV	FXEU	6.7	2.8	9.0	11.7	N.A.	N.A.
T Rowe Price Int:EM LC	PRELX	282.3	1.2	8.9	6.3	–2.3	–1.5
Goldman:Loc EM Dbt;I	GIMDX	339.7	0.8	8.7	3.8	–3.5	–2.2
Oppenheimer EM Loc Dbt;A	OEMAX	104.5	0.9	8.7	6.5	0.02	–0.1
Eaton Vance EM Loc Inc;I	EEIIX	316.4	1.4	8.6	8.3	–0.04	–0.1
Oppenheimer Ro VA Mu;A	ORVAX	80.1	1.3	8.6	12.1	6.1	3.2
Payden:Em Mkt Lcl Bd;Inv	PYELX	157.5	1.3	8.6	5.4	–2.5	–2.3
PowerShares Dv EP Cu HLV	FXEP	1.4	2.2	8.6	11.7	N.A.	N.A.
Ashmore:EMs LC Bd;Inst	ELBIX	84.7	0.7	8.6	6.1	–2.0	–1.5
ProShs II:Ult Yen	YCL	6.0	–0.4	8.5	–12.9	–8.5	–14.9
Mrkt Vctrs ETN INR/USD	INR	...	1.1	8.4	8.7	3.3	1.8
JPMorgan:Dvs Rtn Euro CH	JPEH	27.9	1.4	8.4	12.6	N.A.	N.A.
TCW:Em Mk Loc Cur Inc;I	TGWIX	119.3	1.0	8.3	7.1	–1.3	–0.7

Worst-Performing Bond Funds

Fund	Ticker	Assets ($ millions)	Total Return (%) April	YTD	Annualized 1-year	3-year	5-year
iPath ETN Trs 10Y Bear A	DTYS	52.2	-8.1	-13.3	16.5	-15.7	-10.7
Direxion:20+Y Trs Br 3X	TMV	440.3	-5.0	-11.1	-0.6	-26.3	-21.1
Barclays Inv US TC ETN	TAPR	17.7	-6.3	-10.4	2.8	N.A.	N.A.
FX Strategy;I	FXFIX	26.9	-1.6	-10.3	15.3	6.8	-0.4
ProShares:UPSh 20+ Trs	TTT	99.1	-4.8	-10.0	1.2	-25.0	-19.8
Transam:Hi Qual Bond;R	TBDRX	156.1	-9.8	-9.5	-9.6	-3.0	-1.6
ProShs II:UlS Yen	YCS	221.2	0.2	-9.4	6.9	3.2	10.8
Transam:Infl Pro Secs;R	TPRRX	176.8	-9.9	-8.9	-9.4	-3.0	-2.2
iPath ETN Trs Lng Bear A	DLBS	21.7	-5.4	-8.8	11.0	-15.9	-10.8
ProShs II:UltSht AUD	CROC	14.7	3.8	-8.4	-2.6	6.6	N.A.
iPath ETN Trs 5Yr Bear	DFVS	2.2	-4.6	-7.4	8.2	-10.2	-6.7
Direxion:7-10Y Trs Br 3X	TYO	29.7	-3.4	-7.2	-0.4	-14.4	-11.4
Rydex:Stg Dlr 2x Str;H	RYSBX	11.0	-2.9	-6.7	12.1	12.7	6.1
Mrkt Vctrs ETN Dbl Sh Eu	DRR	...	-4.1	-6.6	11.7	16.5	6.7
ProShares:UlS 20+ Yr Trs	TBT	2,182.9	-3.2	-6.5	2.1	-16.2	-12.5
ProShs II:UlS Euro	EUO	297.2	-4.0	-6.4	10.7	15.0	5.7
Direxion:M7-10Y B 2x;Inv	DXKSX	5.7	-2.3	-4.5	0.3	-9.2	-7.3
iPath ETN Trs 2Y Bear A	DTUS	7.80	-1.3	-4.3	3.2	-6.9	-5.5
Access One:Fx Br HY;Inv	AFBIX	0.8	-1.4	-4.3	-11.5	-9.2	-11.3
ProShares:UlS 7-10Y Trs	PST	131.3	-2.2	-4.1	1.9	-8.3	-6.2
WisdomTree:Blm USD Bull	USDU	192.6	-0.5	-3.9	5.0	5.7	N.A.
iPath ETN Trs Steepenr A	STPP	3.8	-3.2	-3.7	3.7	-4.8	-2.8
Third Avenue:Foc Cr;Inst	TFCIX	465.9	-0.8	-3.5	12.9	-13.1	-2.0
ProFunds:Rs USD;Inv	RDPIX	22.6	-1.5	-3.4	5.4	5.8	2.6
Direxion:20+Y Trs Br 1X	TYBS	5.4	-1.6	-3.4	1.4	-8.1	-6.1

Note: For funds with multiple share classes, only the largest is shown. N.A.: Not applicable; fund is too new or data not available

SECTOR STRATEGY

Fund Investors Place Big Bets on Infrastructure

The payoff might be years away, and there are risks, but proponents see the trend on their side

LUKE SHARRETT/BLOOMBERG NEWS

Construction crews working on a new highway overpass in Indiana in 2014.

BY BAILEY MCCANN

EMBOLDENED BY President Donald Trump's campaign promise of a $1 trillion infrastructure-spending package, investors have plowed more than $460 million into related U.S. mutual funds and exchange-traded funds so far this year, according to data from Morningstar Inc.

At the end of the first quarter, the amount sitting in such funds stood at $16.1 billion, up 12% from a year earlier, though the euphoria has eased as the market begins to digest just how much stands in the way of an infrastructure package—from shifting priorities in the White House to opposition in Congress.

Still, those who focus on infrastructure investing say things are looking up, even if it takes a few years for Washington to deliver a big spending package.

"For a manager focused on industrials and materials, the environment is about as good as it has been in over a decade," says Tobias Welo, who manages the $960 million **Fidelity Select Industrials Portfolio** (FCYIX) and the $1.6 billion **Fidelity Select Materials Portfolio** (FSDPX). "We've seen the commodities recovery happening in Asia; U.S. residential and nonresidential construction has come back."

Blackstone buys in

The Fixing America's Surface Transportation (FAST) Act, passed by Congress and signed into law by President Barack Obama at the end of 2015, sets up the next five years of spending for federal transportation projects. Meanwhile, voters approved some $200 billion of infrastructure-related ballot initiatives during November's election, Mr. Welo says, adding that such projects are as close to a slam dunk as a government-backed project can get.

So while Washington negotiates its spending plans, investors can position themselves to take advantage of these FAST Act-funded efforts, as well as those at the state and local level, the pros say.

Indeed, last month private-equity firm **Blackstone Group** LP announced that it was preparing to launch a unit that would invest in toll roads, bridges and other infrastructure projects.

The U.S. isn't the only country getting ready to write fat checks. Sectors associated with infrastructure have seen valuations creep up globally as governments seek to expand airports, bridges and road in response to growing populations. Many infrastructure ETFs are constructed with this global view in mind, says Brandon Rakszawski, a New York-based product manager at Van Eck Global who oversees the firm's hard-assets ETF product lines.

"Most infrastructure ETFs are global in nature, so investors need to realize that if they are choosing that option for their portfolios, they may only be getting 40% or so U.S.-specific names," Mr. Rakszawski says. Taking a global approach can help diversify a portfolio, he says.

Beyond geography, the key to succeeding in this sector is knowing what it means to you, says Mr. Rakszawski.

"It is important for investors to decide what they see as infrastructure—is it energy, transportation, utilities, or some combination of those?" he asks. "Once they decide, they can start to target more specific exposures and products that are going to give them what they want."

As investors weigh specific subsectors, they need to be mindful of risk.

If you invest in engineering and construction companies, for example, "you need to factor in a certain amount of commodities risk," because many of the companies also are heavily tied to volatile oil-and-gas or mining-related capital spending, says Andrew J. Wittmann, a Milwaukee-based senior analyst at Robert W. Baird & Co, which manages $171 billion in assets.

Another red flag is turnover within mutual funds and ETFs. Infrastructure projects are large and slow-moving. Once contracts are awarded for projects, it's relatively easy to forecast what the next three to five years will look like. Tayfun Icten, a Chicago-based analyst with Morningstar, says a high level of turnover within a fund could signal a manager or strategy that isn't operating with conviction.

"Investors in infrastructure mutual funds need to be clear about what types of opportunities they are getting access to," Mr. Icten says.

Trillion watch

So, what of Mr. Trump's trillion? Fidelity's Mr. Welo expects to see a more-nuanced approach emerge from Congress. That could mean several billion dollars in project financing annually over the next 10 years, plus changes in tax policy, he says.

"The gas tax could be a key policy area to watch both at the state and federal level as policy makers start looking at ways to pay for these projects."

Meanwhile, municipal-bond investors may also see a rise in new issuance, as the asset class has historically been the go-to place for project financing. State and local governments have been using low interest rates to refinance existing debt, but issuance isn't keeping up with maintenance needs or expansion plans.

Fewer defaults?

John Miller, co-head of fixed income and head of the municipal-bond investing team at Nuveen Asset Management in Chicago, says the muni market is showing signs of recovery and default risk is lower.

"Investors who have been skewed toward short duration and high quality can benefit from considering longer durations or slightly lower credit quality in this environment," he says.

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IN TRANSLATION

NET INTEREST MARGIN

Recently, something good has been happening for banks and other lending institutions: The net interest margin has started to widen.

In simple terms, the net interest margin is a measure of bank profitability, and the wider it is, the more profits are to be had.

More precisely, it is a measure of the difference between what a bank pays to get deposits or other funds, and what it charges to lend money. A bank usually bases what it charges borrowers on long-term interest rates, while the interest it pays to get funds is based on short-term rates.

The margin for all U.S. banks is 3.05 percentage points, up from 2.95 points at the beginning of 2015, according to the Federal Reserve Bank of St. Louis. From the first quarter of 2010 through the first quarter of 2015, the margin had steadily fallen.

The recent increase might not sound like much of a difference, but with $2.1 trillion of commercial and industrial bank loans outstanding, the increase in profits from the change is big. (That total doesn't count personal loans.)

"The movement in yields has been a re-estimation of inflation expectations for the bond market," says Stephen Wood, chief market strategist at Russell Investments in New York. What that means is that fixed-income investors expect inflation to rise, so they are demanding higher yields on longer-term bonds.

That's part of the story. The rest of the story is that rates for shorter-term bonds have risen, too, but not as much. Hence, the widening of margins.

If inflation expectations rise further, then it is likely that net interest margins will widen further also, benefiting bank profitability.

—*Simon Constable*

Category Kings in 22 Realms

Data provided by LIPPER

Top-performing funds in each category, ranked by year-to-date total returns (changes in net asset values with reinvested distributions) as of April 28; assets are as of March 31. All performance numbers are final.

Best and Worst

Total return for the best- and worst-performing stock, bond and mixed mutual-fund categories; for period ended April 30; ranked by monthly returns.

Best Performers

Fund	April	12-month
European Region	4.0%	12.2%
International Stock	2.9	11.8
Large-Cap Growth	2.6	18.1
Emerging Markets	2.4	17.6
Science and Technology	2.3	29.2
MultiCap Growth	2.2	17.8
Health and Biotechnology	2.1	14.6
Global	2.0	14.4

Worst Performers

Fund	April	12-month
Natural Resources	–5.0%	2.7%
Gold Oriented	–3.6	–10.5
Managed Futures	–0.5	–3.5
Financial Services	–0.2	25.1
Mid-Cap Value	0.03	17.5
Sector	0.04	8.7
Large-Cap Value	0.1	16.5
MultiCap Value	0.1	16.3

Source: Lipper

Science and Technology

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Direxion:CSI Ch Int Bl2X	CWEB	2.9	11.9	**63.9**	N.A.	N.A.
EMQQ EM Intrt & Ecom ETF	EMQQ	37.4	7.2	**29.4**	30.8	N.A.
ARK Innovation	ARKK	17.9	5.4	**25.7**	32.9	N.A.
Fidelity Sel Technlgy	FSPTX	4,489.5	4.4	**22.6**	41.6	16.0
Fidelity Adv Tech;A	FADTX	1,289.7	4.3	**22.3**	41.4	15.6
Firsthand Tech Opptys	TEFQX	86.2	4.1	**21.5**	38.3	14.73
ARK Web x.0	ARKW	21.6	5.1	**20.9**	45.1	N.A.
iShares:N Amer Tech-Soft	IGV	815.6	3.3	**20.1**	30.3	15.5
PowerShares NASD Intrt	PNQI	315.9	5.2	**19.9**	29.6	19.3
PureFds Vid Game Tch ETF	GAMR	8.5	5.9	**19.9**	38.5	N.A.
Category Average:		497.4	2.5	**14.9**	32.5	14.52
Fund Count		165.0	181	**180**	168	143

International Funds

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Morg Stan I:Intl Opp;I	MIOIX	100.6	4.8	**22.0**	24.2	11.4
Morg Stan I:Intl Adv;I	MFAIX	69.0	4.6	**20.0**	23.7	10.7
Pru Jenn Intl Opps;Q	PWJQX	47.8	5.7	**19.6**	14.6	N.A.
Baillie Gifford EAFE;2	BGETX	2,458.1	5.1	**19.1**	22.3	N.A.
Aberdeen:Sel Itl Eq;A	BJBIX	214.5	2.8	**18.4**	20.2	3.2
Selected Intl;D	SLSDX	65.2	5.4	**17.7**	14.1	8.78
Vanguard Intl Gro;Adm	VWILX	24,448.8	4.3	**17.5**	19.7	8.0
Marsico Inv Fd:Intl Opp	MIOFX	54.9	4.1	**17.4**	11.4	5.2
Frst Tr II:Internatl IPO	FPXI	1.4	4.4	**17.0**	15.6	N.A.
iPath ETN LgEn MSCI EAFE	MFLA	2.1	4.2	**17.0**	18.0	10.8
Category Average:		884.2	2.9	**11.1**	11.8	6.02
Fund Count		1,569.0	1,659	**1,625**	1,532	1,056

Health and Biotech Funds

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
ETFis BioSh Biotech Clin	BBC	24.3	–2.1	**23.1**	14.9	N.A.
SPDR S&P Biotech	XBI	3,057.4	3.0	**20.8**	32.8	22.0
Alger:Health Sci;A	AHSAX	123.5	3.3	**20.1**	36.4	15.5
Principal Hlthcr Innv Id	BTEC	6.7	2.0	**19.0**	N.A.	N.A.
iShares:US Med Dev ETF	IHI	1,052.4	4.1	**18.7**	23.4	19.5
Fidelity Sel Med Equip	FSMEX	3,258.7	3.2	**18.4**	23.1	20.14
Frst Tr:NYSEArcaBiotech	FBT	911.2	1.9	**18.1**	17.6	19.6
Fidelity Sel Bio Tech	FBIOX	9,399.0	1.2	**17.1**	18.8	21.0
SPDR S&P Hlth Care Equip	XHE	115.3	3.6	**17.0**	32.5	18.1
Pru Jenn Health Sci;Z	PHSZX	2201.2	2.1	**16.9**	20.1	19.0
Category Average:		880.6	2.1	**13.2**	14.6	17.31
Fund Count		92.0	102	**102**	91	74

International Stock

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
BlackRock:EM Div;Inst	BICHX	7.3	2.8	**16.9**	21.7	3.2
WisdomTree:Eu Qual DivGr	EUDG	17.4	5.0	**15.5**	11.2	N.A.
WisdomTree:Eur SC Div	DFE	775.0	6.8	**15.0**	14.5	14.5
iShares:Em Mkts Div	DVYE	275.7	0.5	**14.4**	23.2	–1.3
AMG Mg VP Asia Div;I	AAVPX	8.9	1.3	**14.4**	19.4	N.A.
WisdomTree:EM SmCp Div	DGS	1,106.6	0.8	**13.8**	20.1	2.16
Guinn Atkin:Asia-Pc Dv B	GAADX	5.6	1.3	**13.3**	21.7	6.6
Matthews Asia:Div;Inv	MAPIX	5,305.8	1.0	**12.8**	14.0	8.0
Vanguard Intl Dv App;ETF	VIGI	359.9	3.0	**12.4**	9.8	N.A.
WisdomTree:Intl Hdg QDG	IHDG	479.7	3.6	**12.2**	17.1	N.A.
Category Average:		237.7	1.8	**9.3**	10.5	3.87
Fund Count		107.0	107	**107**	107	53

Large-Cap Core

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Amer Cent:Foc DG;Inv	ACFOX	13.3	4.0	**14.2**	21.6	12.5
BlackRock:LC Gro;A	MDLHX	1,198.5	2.6	**12.2**	22.8	13.0
GMO:Quality;III	GQETX	8,444.8	2.4	**11.9**	19.0	12.5
Pear Tree:Quality;Ord	USBOX	119.1	2.3	**11.8**	17.9	11.8
American Tr Allegiance	ATAFX	23.7	2.3	**11.7**	18.9	8.5
Direxion:iBillionaire Id	IBLN	13.7	1.5	**11.2**	16.6	N.A.
Indep Franch Prtnrs USEq	IFPUX	1,790.1	0.6	**10.5**	19.0	13.4
iPath ETN LgEx S&P	SFLA	2.0	1.4	**10.4**	27.1	24.1
Goldman:Hdg Indus VIP	GVIP	29.6	2.3	**10.3**	N.A.	N.A.
Frst Tr:Capital Strength	FTCS	371.0	2.7	**10.2**	15.4	14.6
Category Average:		925.7	1.0	**6.7**	16.3	12.15
Fund Count		874.0	906	**874**	834	679

Large-Cap Growth

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Transam:Cap Growth;I2		685.3	4.4	**21.7**	25.7	15.4
Morg Stan I:Growth;A	MSEGX	3,362.3	4.4	**21.2**	26.0	15.1
Baron Fifth Ave Gro;Inst	BFTIX	151.7	3.6	**19.3**	24.5	12.9
Columbia:Select LCG;Z	UMLGX	4,628.9	2.5	**18.5**	18.7	12.1
Touchstone Inst:Snd Gr	CISGX	2,215.1	3.5	**17.8**	18.7	10.4
Touchstone:Sel Gro;Y	CFSIX	2,528.3	3.5	**17.8**	18.6	10.23
Value Line Lg Co Fc;Inv	VALLX	236.9	4.2	**17.4**	23.0	14.0
Edgewood Growth;Inst	EGFIX	8,090.9	3.0	**16.8**	26.0	16.6
TCW:Select Equities;I	TGCEX	899.3	3.3	**16.3**	16.2	11.0
JPMorgan:Dyn Gro;R5	DGFRX	340.1	3.4	**15.7**	24.4	13.1
Category Average:		1,134.8	2.7	**12.3**	18.1	12.34
Fund Count		684.0	723	**700**	663	534

Large-Cap Value

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
DoubleLine:Sh Enh CAPE;I	DSEEX	3178.1	2.1	**10.3**	28.1	N.A.
Barclays ETN+ShillerCAPE	CAPE	58.7	1.9	**9.8**	26.7	N.A.
Natixis:VN Select;Y	VNSYX	138.2	1.5	**8.6**	16.5	N.A.
MassMutual Sel:Fc Vl;I	MFVZX	749.8	0.8	**7.1**	25.3	13.6
Deutsche CROCI EqDv;A	KDHAX	1,104.0	0.1	**6.9**	19.1	10.5
BlackRock:USA Sz Fl;K	BKSFX	10.4	0.9	**6.6**	N.A.	N.A.
Amer Cent:Inc&Gro;Inv	BIGRX	2,080.4	0.7	**6.6**	18.0	12.3
Pioneer Disc Val;A	CVFCX	585.7	0.8	**6.3**	20.0	10.7
Fidelity Blue Chip Value	FBCVX	422.8	0.4	**5.9**	15.9	13.0
Cullen:High Div Eqty;I	CHDVX	1912.4	0.3	**5.8**	14.2	11.1
Category Average:		713.1	0.1	**3.7**	16.5	11.85
Fund Count		497.0	525	**517**	495	381

Multicap Core

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Upright Growth Fund	UPUPX	13.2	–3.5	**15.7**	13.7	13.1
TCW:New America Prm Eq;I	TGUSX	9.9	3.2	**14.9**	25.5	N.A.
Schwab Cap:Lg-Cap Gro	SWLSX	231.2	2.0	**11.5**	19.6	12.6
Manning&Napier:PB Max;S	EXHAX	699.1	2.6	**11.2**	12.0	9.2
USA MUTUALS:Vice;Inv	VICEX	230.5	3.5	**11.0**	16.2	11.8
Thornburg Value;A	TVAFX	909.1	2.9	**10.9**	20.9	13.58
First Eagle:Fd Amer;I	FEAIX	2,291.6	2.8	**10.6**	14.0	N.A.
SPDR MFS Sys Gro Eqty	SYG	23.9	1.2	**10.5**	17.1	N.A.
Glbl X Millennials Thmtc	MILN	4.1	4.1	**10.3**	N.A.	N.A.
Aspiration Redwood	REDWX	15.5	0.8	**10.2**	29.5	N.A.
Category Average:		1,392.0	1.0	**6.5**	16.5	11.95
Fund Count		755.0	810	**805**	759	580

Multicap Growth

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Zevenbergen Genea;Inst	ZVGIX	3.8	7.0	**23.9**	34.4	N.A.
Baron Opportunity;Rtl	BIOPX	221.2	5.9	**21.8**	24.6	9.3
Morg Stan MultiCp Gr;A	CPOAX	335.9	4.3	**20.2**	24.6	13.3
Franklin Cust:Dyna;A	FKDNX	3,287.7	4.0	**17.9**	26.3	13.6
Morg Stan I:MCG;A	MACGX	659.8	4.4	**17.3**	11.8	4.9
Berkshire:Focus	BFOCX	57.6	3.0	**17.2**	30.1	11.66
Zevenbergen Growth;Inst	ZVNIX	5.5	3.8	**16.9**	23.7	N.A.
Fidelity OTC	FOCPX	14,229.0	3.3	**16.7**	31.9	17.7
RidgeWorth:Innv Gr St;I	SCATX	28.7	3.6	**16.6**	25.0	13.2
Fidelity Adv Srs Eqty Gr	FMFMX	936.9	3.5	**16.1**	22.3	N.A.
Category Average:		587.5	2.3	**11.3**	17.8	11.76
Fund Count		549.0	582	**574**	556	423

Multicap Value

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Biondo Focus;Inv	BFONX	25.1	2.7	**16.5**	30.3	10.1
AMG Mg Fairpt FcEq;I	AFFEX	8.9	0.9	**8.3**	25.1	N.A.
Fidelity Lvrgd Co Stk	FLVCX	3,182.7	0.4	**7.8**	14.7	11.5
SS Inst Inv:Dsp US Eq;I	SSJIX	3.6	1.4	**7.6**	17.0	N.A.
RvrPrk:Foc Value;Instl	RFVIX	39.5	0.1	**7.4**	10.9	N.A.
Fidelity Value Strat	FSLSX	1,117.5	1.0	**7.3**	16.3	12.30
Monongahela All Cap Val	MCMVX	7.7	0.6	**7.0**	23.2	N.A.
AllianzGI:NFJ MCV;A	PQNAX	651.2	0.7	**6.9**	20.2	12.6
Barrett Opportunity	SAOPX	59.8	1.5	**6.8**	20.6	11.5
Frst Tr ADex:Lg Cap Val	FTA	982.8	0.7	**6.2**	24.2	13.3
Category Average:		614.3	0.1	**3.6**	16.3	11.87
Fund Count		339.0	345	**340**	330	262

Midcap Core

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
CB Select;IS	LCSSX	16.1	2.2	**14.8**	26.1	N.A.
Guggenhm Insider Snt ETF	NFO	69.2	2.8	**11.3**	17.5	11.3
13D Activist;I	DDDIX	267.6	3.8	**10.1**	25.2	14.9
Tarkio	TARKX	64.5	3.5	**9.2**	34.5	15.3
Private Cap Mgmt Value;I	VFPIX	76.7	1.8	**9.0**	21.5	10.9
Guggenhm MC Core ETF	CZA	163.1	1.2	**8.3**	20.1	13.75
Aberdeen:US MdCp Eq;Inst	GUEIX	1.6	0.9	**8.0**	16.3	N.A.
Fidelity Adv SS MC;I	FMCCX	2,146.5	0.7	**8.0**	18.6	11.7
Osterweis Emerg Oppt	OSTGX	43.8	2.2	**7.5**	N.A.	N.A.
JPMorgan:Dv Rtn US MC Eq	JPME	46.0	1.1	**7.5**	N.A.	N.A.
Category Average:		885.5	0.5	**4.7**	17.1	11.72
Fund Count		444.0	466	**458**	418	304

Midcap Growth

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Baron Partners Fund;Rtl	BPTRX	1694.6	7.5	**20.4**	27.5	15.2
BlackRock:MC Gro;A	BMGAX	603.2	4.0	**17.2**	26.1	14.3
Virtus:Mid-Cap Gro;A	PHSKX	90.0	3.3	**15.3**	18.9	9.2
Renaissance IPO ETF	IPO	13.9	3.1	**15.2**	19.7	N.A.
Baron Growth;Inst	BGRIX	5,902.9	4.0	**14.9**	20.5	12.6
Putnam Equity Spectrum;Y	PYSYX	1,319.3	–0.1	**14.2**	22.4	11.20
Baron Focused Gro;Inst	BFGIX	186.9	5.0	**14.0**	14.6	9.5
Baron Asset Fund;Rtl	BARAX	2,686.4	3.1	**13.5**	22.5	13.1
WellsFargo:Discvry;I	WFDSX	2,439.0	2.9	**13.1**	24.5	11.4
Goldman:Sm/Md Cp Gr;I	GSMYX	2250.0	2.5	**13.1**	16.5	12.5
Category Average:		355.4	1.9	**9.5**	17.4	10.95
Fund Count		385.0	414	**408**	398	326

Midcap Value

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Neuberger MC Int V;Inv	NBRVX	93.6	1.2	**7.0**	20.4	13.3
Alambic Mid Cap Val Plus	ALMVX	0.7	1.4	**6.7**	N.A.	N.A.
Vanguard MC Val Idx;ETF	VOE	14,742.2	0.4	**5.8**	18.8	14.6
Transam:Sm/Md Cap V;A	IIVAX	877.3	0.6	**5.5**	24.8	12.5
Hennessy:Crnst MdCp;Inst	HIMDX	1,089.7	1.0	**5.2**	12.6	12.3
AMG Mg Fairpt MC;I	ABMIX	4,160.8	–1.0	**5.1**	25.0	14.99
Am Beacon:MC Val;Inv	AMPAX	622.3	–0.3	**5.0**	19.5	13.2
Nuveen Mid Cp Value;I	FSEIX	110.4	...	**5.0**	17.1	12.6
SPDR Russell 1000 YldFoc	ONEY	397.9	0.1	**4.7**	18.2	N.A.
Transam:MdCp Val Opps;I	MVTIX	1508.3	–0.3	**4.6**	16.6	N.A.
Category Average:		411.4	0.0	**3.2**	17.5	12.32
Fund Count		156.0	170	**166**	159	118

Small-Cap Core

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Highland:Sm-Cp Eqty;A	HSZAX	61.0	1.5	**10.3**	23.2	13.7
AMG SouthernSun SC;I	SSSIX	343.6	2.7	**9.8**	18.4	10.0
B Riley Dvsfd Eq;Instl	BRDZX	10.3	–1.5	**9.8**	31.3	N.A.
Gabelli Eq:Foc Five;I	GWSIX	171.7	1.6	**9.5**	10.4	8.8
AlphaMark Act Mgd SC	SMCP	26.9	–0.3	**9.4**	11.7	N.A.
Bernzott US Sm Cap Val	BSCVX	75.4	1.9	**8.6**	21.5	N.A.
Royce Fd:Premier;Inv	RYPRX	2,323.5	1.6	**8.4**	26.7	9.3
AMG RR Select Val;I	ARIMX	39.6	3.2	**7.8**	27.2	12.9
Vulcan Val Partners SC	VVPSX	1,222.1	3.8	**7.5**	22.0	14.1
Pru Jenn Small Co;Z	PSCZX	3541.9	0.8	**7.2**	19.5	12.0
Category Average:		404.2	0.8	**2.7**	21.5	11.79
Fund Count		939.0	998	**981**	922	668

Small-Cap Growth

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
JPMorgan:Dyn SCG;I	JDSCX	160.7	2.6	**14.7**	33.5	12.5
Baron Discovery;Inst	BDFIX	119.4	2.7	**14.7**	40.7	N.A.
JPMorgan:SmCp Gro;R6	JGSMX	1,225.9	2.5	**14.6**	33.4	12.9
Buffalo:Small Cap	BUFSX	565.1	3.4	**14.3**	28.8	10.3
T Rowe Price New Hzns	PRNHX	18,428.8	3.2	**13.7**	26.3	15.2
Westcore:SmCp Gr II;Rtl	WTSLX	37.0	2.0	**13.3**	12.7	2.73
Federated Kauf SC;A	FKASX	683.9	2.4	**13.0**	31.7	12.5
Westcore:Sm Cp Gr;Inst	WISGX	4.9	2.0	**12.9**	29.2	N.A.
AB Sm Cp Gr;A	QUASX	1,153.5	2.9	**12.9**	27.5	10.7
Victory:Sm Cap Growth;Y	RSYEX	2035.3	1.9	**12.6**	27.1	13.5
Category Average:		240.2	1.8	**7.7**	22.6	11.07
Fund Count		541.0	592	**576**	552	442

Small-Cap Value

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
LMCG Internatl SmCp;Inst	ISMIX	6.2	3.5	**13.0**	13.3	N.A.
Paradigm:Micro-Cap	PVIVX	41.4	1.7	**8.2**	36.1	12.9
Aristotle SmCp Eqty;I	ARSBX	4.2	2.4	**7.1**	25.2	N.A.
Royce Fd:Oppty;Inv	RYPNX	1,487.3	0.8	**6.1**	31.7	12.5
Walthausen:Sel Val;Rtl	WSVRX	85.2	1.2	**5.4**	16.4	12.2
Symons Conc SC Val Inst	SCSVX	1.1	3.6	**5.3**	N.A.	N.A.
RBB:Schneider Sm Cap Val	SCMVX	49.0	–1.6	**5.1**	48.1	11.7
Ancora MicroCap;I	ANCIX	18.1	2.3	**4.6**	18.9	13.1
DGHM MicroCap Val;Inst	DGMIX	23.5	2.1	**4.5**	N.A.	N.A.
Frst Tr Srs:AQA Eqty;C	AQACX	35.1	1.2	**4.3**	19.9	N.A.
Category Average:		421.6	0.5	**0.6**	21.6	11.57
Fund Count		288.0	313	**307**	296	221

Emerging Markets

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
iPath ETN LgEn MSCI EM	EMLB	1.8	4.5	**33.3**	46.5	1.2
VnEck Vctrs:Poland	PLND	15.9	9.4	**28.6**	24.1	0.7
iShares:MSCI Turkey	TUR	408.9	10.9	**22.0**	–11.4	–3.3
Wasatch:Em Mkts Sel;Inst	WIESX	37.1	6.0	**21.6**	12.7	N.A.
TIAA-CREF:EM Eq;Inst	TEMLX	1,126.5	4.4	**21.5**	26.2	1.9
Baillie Gifford Em Mkt;5	BGEDX	1,576.7	3.1	**20.0**	28.8	N.A.
CNR:Emerging Mkt;Y	CNRYX	1,203.3	4.4	**19.9**	N.A.	N.A.
Dreyfus Global Em Mkts;Y	DGEYX	113.2	5.0	**19.8**	20.5	N.A.
Sit Developing Mkts	SDMGX	7.9	3.4	**19.5**	22.1	–0.6
Frst Tr:Chindia	FNI	205.6	3.3	**19.3**	20.0	9.9
Category Average:		523.7	2.4	**13.9**	17.6	1.77
Fund Count		825.0	894	**879**	834	446

Pacific Region Funds

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
PowerShares Gldn DrgnChi	PGJ	146.0	5.1	**24.9**	19.2	12.1
Morg Stan I:Asia Opp;I	MSAQX	8.0	4.6	**24.2**	24.0	N.A.
KraneShs:Zacks New China	KFYP	3.4	3.6	**21.6**	29.2	N.A.
WisdomTree:China x-S-O	CXSE	8.6	3.8	**21.6**	28.2	N.A.
Fidelity China Region	FHKCX	1,037.1	3.4	**19.3**	24.7	8.6
Victory:Sophus China;A	RSCHX	18.7	2.1	**18.6**	26.4	7.78
Neuberger Gr China Eq;Is	NCEIX	91.9	3.9	**18.5**	26.1	N.A.
T Rowe Price Int:Asia	TRAOX	32.1	3.5	**18.4**	23.2	N.A.
Matthews Asia:China;Inv	MCHFX	570.3	2.2	**18.4**	27.5	3.6
JPMorgan:China Rg;I	JCHSX	20.9	3.3	**18.3**	23.6	7.4
Category Average:		298.6	1.8	**12.7**	16.9	6.31
Fund Count		246.0	263	**258**	256	170

Global Stock

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Baillie Gifford LTGGE;2	BGLTX	83.7	6.7	**24.1**	27.7	N.A.
Morg Stan I:Gl Opp;A	MGGPX	827.6	4.2	**20.7**	24.4	15.9
Baron Global Advtg;Rtl	BGAFX	22.0	2.9	**20.4**	26.0	10.7
Oppenheimer Glbl Opp;A	OPGIX	4,500.0	1.5	**20.3**	33.8	14.9
Pru Jenn Global Opps;Z	PRJZX	277.9	5.2	**18.6**	22.8	11.9
Morg Stan I:Gl Adv;I	MIGIX	6.8	5.9	**18.0**	23.0	10.61
Sands Gl Cap Growth;Inst	SCMGX	1,073.7	4.8	**17.9**	23.1	10.3
Columbia:Select Gl Gr;A	COGAX	56.0	3.4	**17.7**	14.0	9.8
Touchstone:Glbl Gro;Inst	DSMGX	23.0	4.0	**17.5**	20.5	12.0
Columbia:Sel Gl Eq;A	IGLGX	377.5	4.1	**16.5**	14.5	9.0
Category Average:		466.8	2.0	**9.2**	14.3	8.85
Fund Count		984.0	1,094	**1,041**	980	623

Latin American Funds

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
VnEck Vctrs:Brazil Sm Cp	BRF	100.6	2.0	**26.2**	56.1	–10.9
iShares:MSCI Brz Sm-Cap	EWZS	57.3	3.0	**24.1**	56.2	–9.5
Glbl X MSCI Argnt ETF	ARGT	134.6	1.7	**24.1**	39.8	9.3
Tierra XP Latin Amer RE	LARE	2.9	1.4	**20.2**	15.0	N.A.
BullMark LatAm SL ETF	BMLA	3.1	1.9	**19.5**	N.A.	N.A.
Fidelity Latin America	FLATX	585.1	2.7	**18.0**	20.0	–7.99
JPMorgan:Latin Am;R6	JLTNX	46.7	2.0	**17.1**	18.5	N.A.
T Rowe Price Int:Lt Am	PRLAX	666.4	1.1	**16.7**	19.9	–3.3
iShares:MSCI Mexico Cap	EWW	1,539.2	0.8	**16.1**	–3.7	–2.1
iShares:MSCI Chile Cap	ECH	475.6	–0.9	**14.9**	16.2	–7.2
Category Average:		264.7	0.7	**13.9**	18.1	–5.72
Fund Count		40.0	41	**40**	39	31

European Region Funds

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
iShares:MSCI Poland Cp	EPOL	251.7	10.1	**30.3**	28.0	1.8
iShares:MSCI Spain Cap	EWP	992.8	4.7	**20.1**	16.2	8.8
iShares:MSCI Austria Cap	EWO	127.0	8.2	**18.5**	23.8	6.4
SPDR MSCI Spain SF	QESP	2.3	4.3	**18.4**	14.8	N.A.
Columbia Acorn Eur;Z	CAEZX	49.5	7.7	**18.1**	12.9	9.4
iShares:MSCI Ger Sm-Cap	EWGS	23.3	5.4	**17.9**	19.0	13.25
Brown Adv WMC St EE;Inst	BAFHX	1,063.0	6.4	**17.6**	14.6	N.A.
iShares:Curr Hgd Spain	HEWP	55.8	3.0	**17.2**	24.2	N.A.
Deutsche MSCI Spain Hdg	DBSP	2.4	2.9	**17.0**	24.2	N.A.
DFA Cont Small Co;I	DFCSX	363.2	6.1	**16.7**	20.0	13.6
Category Average:		489.4	4.0	**11.8**	12.2	7.53
Fund Count		151.0	164	**162**	161	98

Emerging-Market Local-Currency Debt Funds

	Symbol	Assets ($ millions)	April	Total return (%) YTD	1-yr	5-yr*
Barings:Emer Mkts LCD;I	BXLIX	5.2	0.6	**10.2**	1.4	N.A.
Dreyfus EMD Local Curr;I	DDBIX	38.5	1.4	**9.5**	4.6	–2.4
Pru EM Debt Loc Curr;Z	EMDZX	31.1	0.9	**9.4**	4.2	–1.3
Hartfd:EM Local Dbt;Y	HLDYX	104.6	1.5	**9.1**	6.2	0.0
Stone Harbor Loc Mk;Inst	SHLMX	935.7	1.2	**9.1**	4.4	–3.3
PIMCO:Em Local Bd;Inst	PELBX	3,919.5	1.3	**9.0**	5.7	–2.14
Goldman:Loc EM Dbt;I	GIMDX	339.7	0.8	**8.7**	3.8	–2.2
Oppenheimer EM Loc Dbt;A	OEMAX	104.5	0.9	**8.7**	6.5	–0.1
Eaton Vance EM Loc Inc;I	EEIIX	316.4	1.4	**8.6**	8.3	–0.1
Payden:Em Mkt Lcl Bd;Inv	PYELX	157.5	1.3	**8.6**	5.4	–2.3
Category Average:		132.5	1.0	**7.9**	4.5	–1.60
Fund Count		84.0	84	**84**	84	53

N.A.: Not applicable; fund is too new

* Annualized Note: For funds with multiple share classes, only the largest is shown.

SPOTLIGHT | ETF INDUSTRY EXPOSURE

THE ETF OF THE ETF BUSINESS

The ETF industry has secured that hallmark of a growing market sector: its own ETF.

The **ETF Industry Exposure & Financial Services** (TETF) exchange-traded fund was launched April 20. It tracks the Toroso ETF Industry Index, which includes a range of companies from index and data providers to fund issuers and exchanges.

The index was set up by New York-based Toroso Investments with the aim of providing investors with exposure to the industry as a whole, says Toroso's chief investment officer, Mike Venuto.

"We thought of the industry as not just being the issuers, but the ecosystem making money off of ETFs," he says.

The index is made up of four tiers. Tier One, which accounts for half of its exposure, includes companies with substantial participation in ETFs that provides a direct financial impact to their shareholders. It includes such names as **BlackRock**, **Invesco** and **WisdomTree**.

A quarter of the index is in Tier Two; this comprises companies with a substantial participation in the industry that provides an indirect financial impact to shareholders, including Nasdaq and Intercontinental Exchange. Tier Three takes up 15% of exposure, and includes companies with a moderate level of exposure to ETFs, such as FactSet and Bank of New York Mellon. The remaining 10%, in Tier Four, covers companies that are new to the industry or participate in a smaller way relative to their overall business. This tier features names like Eaton Vance and Goldman Sachs.

Many of the companies have much broader focuses than the ETF sector alone, even in Tier One. However, ETFs often represent a large and growing chunk of their business, Mr. Venuto says. He also expects more companies that are more narrowly focused on ETFs to enter the index as the industry matures, with more ETF-focused companies going public and more smaller firms growing enough to meet the minimum $200 million market capitalization required to be included in the index.

The index currently focuses on U.S.-listed companies, though Mr. Venuto says Toroso is open to including foreign companies in the future, depending on currency or geopolitical risks.

"There are definitely a few non-U.S. names that we have on our watch list," he says.

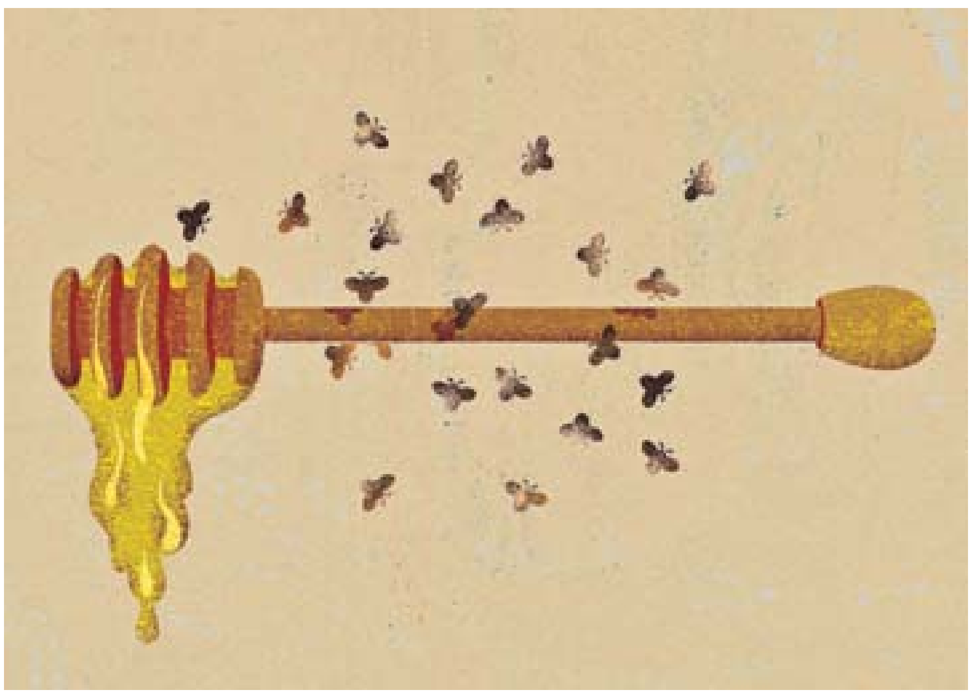
—Gerrard Cowan

CORPORATE FINANCE

A 'Delaware Trap' for Companies

Where firms incorporate, says a study, might not be based on what's best for shareholders

BY DAISY MAXEY



BEPPE GIACOBBE

WHAT INCORPORATES in Delaware stays in Delaware.

More than half of publicly traded U.S. companies incorporate in the small state, regardless of their headquarters location, and once there they rarely leave. That is generally because once incorporated, it is difficult to get shareholders and management to agree on a new state of incorporation, says Robert Anderson IV, an associate professor of law at Pepperdine University School of Law.

In a new study, Dr. Anderson examines why so many companies land in what he dubs "the Delaware Trap."

There have long been two competing theories on what motivates companies' incorporation decisions. The "race to the bottom" theory holds that states compete by making rules that favor company insiders at the expense of corporations and their shareholders.

The "race to the top" theory, in contrast, suggests that market constraints prevent such favoritism, and that states instead compete to provide efficient legal rules that enhance shareholder value.

But Dr. Anderson examined regulatory filings related to raising private capital, and concluded that it is all about the company's choice of law firm near the time of founding.

He found that some larger, elite law firms may steer businesses toward a Delaware incorporation with their own needs in mind, rather than because of any superior quality of the state's legal system or the companies' needs. Perhaps, he speculates, it is easier and less expensive for them to focus on Delaware, rather than having to master the laws of many states.

In contrast, other firms—such as smaller, regional firms—are likely inherently focused on their state's law, and therefore might be expected to disproportionately recommend in-state incorporation, he says.

Because it is difficult for companies to reincorporate,

There is little incentive for other states to compete for the business.

there is little incentive for states to compete for incorporation business and the franchise fees it generates by offering robust alternatives to Delaware law, Dr. Anderson says.

"The consequence is a stagnant menu of relatively homogeneous state corporate law with little innovation, even though innovation might benefit shareholders," he says.

Dr. Anderson's research doesn't take into account various factors that prior research has shown to influence incorporation decisions, such as the antitakeover statutes of a business's state of headquarters, says Lucian Bebchuk, the James Barr professor of law, economics and finance at Harvard Law School and the director of its program on corporate governance.

A study by Dr. Bebchuk and Alma Cohen, a professor of empirical practice at Harvard Law School, found that companies are more likely to incorporate in Delaware rather than their state of headquarters when they have more employees or sales, when they're based in the Northeast or South or when their state of headquarters has fewer antitakeover statutes.

But Dr. Anderson says he's confident that weighing states' antitakeover statutes wouldn't undermine his results.

Ms. Maxey is a reporter for The Wall Street Journal in New York. Email her at daisy.maxey@wsj.com.

FUND RESULTS

WSJ .COM **Lipper's A-to-Z monthly mutual-fund and ETF performance listings and other tables are available free at WSJ.com/FundsETFs.**

Tracking Exchange-Traded Portfolios

Performance figures are total returns for periods ended April. 28; for largest exchange-traded funds and other portfolios, ranked by asset size.

Fund	Symbol	Assets ($ billions)	Volume (000s)	Expense ratio	Launch date	Performance (%) April	YTD	1-year
SPDR S&P 500 ETF	SPY	**237.26**	60,845.1	0.09	01/22/93	1.0	7.1	17.8
iShares Core S&P 500 ETF	IVV	**109.20**	2,589.7	0.07	05/15/00	1.0	7.2	17.9
Vanguard Tot Stk Mkt Idx ETF	VTI	**77.41**	1,794.7	0.04	05/24/01	1.1	6.9	18.6
iShares MSCI EAFE ETF	EFA	**69.42**	24,439.8	0.33	08/14/01	2.6	10.0	11.2
Vanguard 500 Index ETF	VOO	**65.93**	253.2	0.04	09/07/10	1.0	7.1	17.9
Vanguard FTSE Emerging Markets ETF	VWO	**52.68**	11,072.6	0.14	03/04/05	1.4	12.5	18.4
Vanguard FTSE Developed Markets ETF	VEA	**50.26**	8,718.4	0.07	07/20/07	2.4	10.3	12.6
PowerShares QQQ Nasdaq 100	QQQ	**49.23**	20,252.1	0.20	03/10/99	2.7	15.1	29.9
iShares Core US Aggregate Bond ETF	AGG	**44.13**	5,718.7	0.07	09/22/03	0.8	1.6	0.8
iShares Russell 2000 ETF	IWM	**40.56**	29,957.4	0.20	05/22/00	1.1	3.6	25.7
iShares Core S&P Mid-Cap ETF	IJH	**39.73**	2,620.0	0.12	05/22/00	0.8	4.8	20.3
iShares Russell 1000 Value ETF	IWD	**37.01**	3,997.8	0.20	05/22/00	−0.2	3.0	16.3
iShares Russell 1000 Growth ETF	IWF	**35.36**	1,209.5	0.20	05/22/00	2.3	11.3	19.3
SPDR Gold Shares	GLD	**34.74**	9,091.2	0.40	11/18/04	1.7	9.1	−1.9
Vanguard REIT ETF	VNQ	**33.89**	5,982.3	0.12	09/23/04	0.2	1.1	5.8
Vanguard Total Bond Market ETF	BND	**33.66**	2,100.0	0.05	04/03/07	0.8	1.7	0.7
iShares iBoxx $ Inv Grade Cor B ETF	LQD	**31.41**	4,475.0	0.15	07/22/02	1.2	2.4	2.2
Vanguard Value ETF	VTV	**30.40**	984.5	0.06	01/26/04	unch.	3.3	17.0
iShares MSCI Emerging Markets Index Fund	EEM	**30.39**	55,343.1	0.72	04/07/03	2.1	13.7	18.5
iShares Core S&P Small-Cap ETF	IJR	**29.99**	2,841.5	0.12	05/22/00	0.9	2.0	24.2
iShares Core MSCI Emerging Markets	IEMG	**28.51**	4,933.0	0.17	10/18/12	2.0	14.0	18.5
Vanguard Growth ETF	VUG	**26.33**	735.7	0.06	01/26/04	2.3	12.1	19.5
Vanguard Div Appreciation ETF	VIG	**23.94**	568.4	0.08	04/21/06	1.7	8.0	15.4
iShares Core MSCI EAFE	IEFA	**23.92**	3,380.4	0.12	10/18/12	2.8	10.5	11.8
Financial Select Sector SPDR	XLF	**22.97**	62,483.3	0.14	12/16/98	−0.9	1.6	27.3
iShares TIPS Bond ETF	TIP	**22.91**	2,350.8	0.20	12/04/03	0.6	1.8	1.6
Vanguard Short-Term Bd Idx ETF	BSV	**21.61**	1,178.4	0.07	04/03/07	0.4	0.9	0.7
iShares iBoxx $ Hi Yld Corp Bd ETF	HYG	**19.38**	7,400.8	0.50	04/04/07	1.0	3.3	10.9
SPDR S&P MidCap 400 ETF	MDY	**19.29**	1,742.0	0.25	04/28/95	0.8	4.7	20.1
Vanguard Mid Cap ETF	VO	**19.04**	276.1	0.06	01/26/04	1.2	7.4	17.5
Vanguard Short-Term Crp Bd Idx ETF	VCSH	**18.48**	784.4	0.07	11/19/09	0.5	1.4	1.8
Vanguard Small Cap ETF	VB	**18.30**	1,002.3	0.06	01/26/04	0.9	4.6	20.5
iShares Russell 1000 ETF	IWB	**17.83**	720.7	0.15	05/15/00	1.1	7.1	17.9
Vanguard High Dividend Yield ETF	VYM	**17.76**	534.4	0.08	11/10/06	−0.1	3.3	15.1
Vanguard FTSE All-World ex-US ETF	VEU	**17.68**	1,245.1	0.11	03/02/07	2.2	10.8	13.9
iShares US Preferred Stock	PFF	**17.55**	1,937.4	0.47	03/26/07	1.1	6.3	5.5
iShares S&P 500 Growth Index Fund	IVW	**17.47**	467.6	0.18	05/22/00	1.9	10.6	19.0
Technology Select Sector SPDR	XLK	**17.22**	11,252.2	0.14	12/16/98	2.0	13.0	31.3
iShares Select Dividend ETF	DVY	**17.16**	1,089.9	0.39	11/03/03	0.4	4.3	15.1
Energy Select Sector SPDR	XLE	**16.51**	14,250.8	0.14	12/16/98	−3.0	−9.4	3.0
SPDR Dow Jones Industrial Average	DIA	**16.25**	1,867.1	0.17	01/14/98	1.4	6.7	20.7
Health Care Select Sector SPDR	XLV	**16.11**	5,781.1	0.14	12/16/98	1.6	10.0	9.9
iShares MSCI Japan Index Fund	EWJ	**15.81**	6,285.1	0.48	03/12/96	1.1	5.5	10.2
iShares Russell Mid Cap Value Index Fund	IWR	**15.66**	358.1	0.20	07/17/01	0.8	5.9	16.5
SPDR S&P Dividend ETF	SDY	**15.54**	532.2	0.35	11/08/05	0.6	4.3	13.6
Vanguard Intm-Term Corp Bd Idx ETF	VCIT	**13.73**	724.2	0.07	11/19/09	1.2	2.7	2.7
iShares S&P 500 Value Index Fund	IVE	**13.60**	417.4	0.18	05/22/00	−0.1	3.2	15.9
Guggenheim S&P 500 Equal Wght	RSP	**13.30**	632.9	0.40	04/24/03	0.7	6.0	16.4
Vanguard Intermediate Term Bond ETF	BIV	**13.07**	406.8	0.07	04/03/07	1.1	2.4	0.7
iShares Edge MSCI Min Vol USA ETF	USMV	**12.72**	1,223.0	0.15	10/18/11	1.5	7.5	13.0
Vanguard Info Tech Ind ETF	VGT	**12.55**	469.9	0.10	01/26/04	2.4	14.6	34.7
Consumer Discretionary Sel Sec SPDR	XLY	**12.37**	5,016.1	0.14	12/16/98	2.4	11.0	15.6
Vanguard FTSE Europe ETF	VGK	**12.18**	4,565.4	0.10	03/04/05	4.1	12.4	11.3
SPDR Bbg Barclays High Yield Bd ETF	JNK	**11.62**	6,184.1	0.40	11/28/07	1.1	3.4	11.9
iShares 1-3 Yr Credit Bd ETF	CSJ	**11.54**	577.4	0.20	01/05/07	0.2	0.8	1.2
Vanguard Small Cap Value ETF	VBR	**11.22**	376.9	0.07	01/26/04	0.4	2.4	21.0
Industrial Select Sector SPDR	XLI	**11.19**	10,297.8	0.14	12/16/98	1.9	7.1	20.6
iShares 1-3 Yr Treasury Bd ETF	SHY	**11.02**	1,708.2	0.15	07/22/02	0.1	0.4	0.2
iShares JPMorgan USD Emg Mkts B ETF	EMB	**10.79**	1,998.6	0.40	12/17/07	1.6	5.5	7.9
Alps Alerian MLP ETF	AMLP	**10.75**	2,403.5	0.85	08/25/10	−1.1	1.4	10.9
iShares MBS ETF	MBB	**10.54**	498.6	0.25	03/13/07	0.7	1.1	0.3
iShares MSCI Eurozone	EZU	**10.38**	11,050.8	0.48	07/25/00	4.1	13.0	15.0
VanEck Vectors Gold Miners ETF	GDX	**10.35**	67,264.9	0.51	05/16/06	−1.8	6.8	−12.8
WisdomTree Europe Hedged Equity	HEDJ	**9.65**	296.0	0.58	12/31/09	3.2	12.8	27.6
iShares Russell Mid Cap Value Index Fund	IWS	**9.46**	803.4	0.25	07/17/01	0.2	3.9	17.2
PowerShares Senior Loan	BKLN	**9.38**	523.2	0.64	03/01/11	0.3	0.9	5.4
Vanguard Large Cap ETF	VV	**9.29**	222.7	0.06	01/27/04	1.1	7.3	18.1
Schwab International Equity ETF	SCHF	**9.14**	183.2	0.08	10/30/09	2.3	9.7	11.6
Consumer Staples Select Sector SPDR	XLP	**8.94**	6,988.8	0.14	12/16/98	1.1	7.2	8.1
iShares Russell 2000 Value ETF	IWN	**8.82**	1,462.8	0.25	07/24/00	0.4	0.3	27.1
Schwab US Broad Market ETF	SCHB	**8.79**	133.3	0.03	10/30/09	1.1	6.9	18.5
Schwab US Large-Cap ETF	SCHX	**8.56**	120.3	0.03	10/30/09	1.1	7.3	18.2
iShares Core S&P Tot US Stk Mkt ETF	ITOT	**8.44**	509.3	0.05	01/20/04	1.0	6.9	18.5
Deutsche X-trackers MSCI EAFE Hdg	DBEF	**8.42**	1,250.3	0.35	06/09/11	1.5	6.6	18.8
iShares Gold Trust	IAU	**8.32**	7,476.3	0.25	01/21/05	1.7	9.1	−1.8
iShares Nasdaq Biotechnology Index Fund	IBB	**8.21**	569.6	0.47	02/05/01	1.5	12.4	11.2

*Expense charge is a maximum of 8 cents a share †Assets are estimated N.A.= Not applicable, fund is too new.
Note: Total returns are based on the change in the net asset values, not changes in market prices. Net asset values can vary from market prices, which therefore can reflect a premium or discount to the net asset values.
Source: Thomson Reuters

Q&A

Inspired by Mom's ETFs

Morningstar's Phillips reflects on fund changes

BY CHUCK JAFFE

WYCKOFF-TWEEDIE

Don Phillips at the annual funds conference in Chicago in April.

DON PHILLIPS HAS been through it all at **Morningstar** Inc., starting as the firm's first mutual-fund analyst and rising to become the face of the company as it transformed into the most powerful data/analytical firm in the mutual-fund business.

Today, as managing director, the 55-year-old Mr. Phillips is an elder statesman, with decades of experience and institutional memory.

At the end of April, he presided over his 29th Morningstar Investment Conference, an annual gathering of the financial industry's biggest minds. Afterward, he took time out to reflect.

Here are excerpts from that interview:

WSJ: *Over all of the years of the Morningstar Investment Conference, what's the biggest change you have seen in the fund world?*

MR. PHILLIPS: Funds used to be sold. There was someone pushing you to buy funds. Today, people know they need to invest in funds. They're seeking out the information and looking for the right characteristics, and so the vast majority of the fund world now resembles those traits. It has made all funds, on the whole, better.

It means there's a much higher chance you will end up in a good fund, satisfied with the results. Twenty years ago, the odds of a fund with above-average expenses getting assets were a little [worse] than a cheap fund, but they were still pretty good. Today, almost no money goes into funds with above-average expenses.

WSJ: *Have regulators done a good job overseeing the evolution of funds and ETFs?*

MR. PHILLIPS: In the aggregate, they have done a very good job....We now track funds in 30 different countries, and the U.S. is far and away the cleanest and best-lit playing field in all of global finance. Investors in mutual funds—and equities, too—get a far better shake here than anywhere else in the world.

There's no other market in the world where you know if your mutual-fund manager invests in his or her own mutual fund, which is absurd because as a stock investor you know to a penny what the CEO is paid, exactly how many shares they own, and changes in that information are passed to you almost instantaneously. For decades, in mutual funds, that was not the case; any manager could say they ate their own cooking, but none had to prove it....They were creating things they were glad to offer to you but not buy themselves. The U.S. is the one market where that transparency now exists.

WSJ: *What has changed most about the audience for funds as witnessed by your years at the Morningstar conference?*

MR. PHILLIPS: It used to be very much that active managers would get grilled about the stocks they were picking. It felt like people were just there looking for stock tips, because when a manager would mention a stock, you'd see all these pens move.

Today, it's very different. People are talking much more about the process of assembling portfolios. A lot more talk about passive investments.

The game has moved away from star managers picking individual stocks and has become much more about creating a repeatable process that can be deployed to help people meet their long-term goals.

WSJ: *What hasn't changed over all these years that you think needs to?*

MR. PHILLIPS: What hasn't changed is that an awful lot of people still aren't participating in the investment process, not using the great low-cost funds and investment vehicles that are available to them. Half of American workers don't participate in any kind of a retirement plan, so there are huge communities that feel the financial-services industry has turned its back on them. Somehow the financial-services industry has not reached out to them as effectively as they need to, because we live in an era where the responsibility of saving for your retirement has been transferred from your employer or the government to the individual.

WSJ: *When asked, you have always disclosed your fund holdings; you currently own more than 50 funds, including six small positions in ETFs you inherited from your mother. Why did you hang on to those funds?*

MR. PHILLIPS: The funds I inherited from my mother were an important lesson; they made me realize that there are multiple reasons why people invest.

In her last days, [my mother] asked if I would take over paying most of her financial bills—I was happy to do it—because she did not want to keep selling down her investment portfolio to meet her near-term expenses.

The ability to have these ETFs and trade them made her feel like she was still in the game, that she was participating in the investment discussion. She would read the newspaper and watch television and say, "These things are happening in the world. Are rates likely to go up or down? Is there the threat of war or something in various markets? Will the market be upset by current events?"

It was her connection to what was happening in the world.

When I inherited these positions—which aren't a significant part of my portfolio and I might have sold for simplicity's sake—it reminded me that she came to the investment world with a different point of view. She got a different utility and a different satisfaction. which was very important to her, out of the investment process.

To me it was an important lesson that we invest for a lot of reasons, and having that connection to your fellow people, to the geopolitical situation, is one of those reasons. Investing is a connection, it is reaching out and taking your money and deploying it in ways that have social consequences. So I keep the funds for sentimental reasons more than pure investment reasons, but they're important to me.

Mr. Jaffe is a writer in Boston. He can be reached at reports@wsj.com.

SAVING FOR COLLEGE | CHANA R. SCHOENBERGER

How Parents Err With Fafsa

The biggest mistake may be not filling out the application for student aid in the first place

Readers continually send us questions about how best to handle saving for and paying for higher education. This month we focus on the Free Application for Federal Student Aid, known as the Fafsa, as well as "529" accounts, the tax-advantaged savings vehicles that allow after-tax contributions to grow tax-free in mutual funds when used for qualified education expenses. We asked experts to help answer the questions.

What are the biggest mistakes people make when filling out a Fafsa? What tips should parents know about this application?

One common mistake is not filing the form at all, says Mike Brown, managing director of Nitro College, a student-loan and scholarship site. Families that earn significant income and have many assets might feel they won't receive any assistance. But it's worth trying, he says: "Many upper-middle-class families are eligible for some type of aid, and therefore need to file the Fafsa."

Another error: not filing the form quickly enough. Money is often given out on a first-come, first-served basis, he says. So fill out the form as early as possible—it is now available on Oct. 1 instead of January—and repeat the process every year your student is in college. Otherwise, you won't be eligible to receive aid such as Pell grants (if you qualify), which don't need to be repaid, he says.

Prioritize speed over perfection when filling the form, which can be done either online or on paper.

"Don't stress too much over making sure everything is perfect; you can file a correction if need be," Mr. Brown says.

Contrary to popular misconception, Fafsa isn't an entity that gives out student aid. The form itself is used to establish how much your family can afford to pay for your student to go to college. Once you submit the form, colleges will send you a letter detailing aid packages, which can include money from the school itself or from the government.

Don't let the form intimidate you, Mr. Brown says. It's relatively easy to fill out, and you won't need to hire a professional to help. If you want a step-by-step guide, there are free resources available online, including from his firm.

Also note, Mr. Brown says, that when you and your child sit down to complete the Fafsa, you will have to share your salary.

"It can be an awkward and potentially eye-opening conversation, so be prepared," he says.

Take this as an opportunity to discuss with your child how your family plans to pay for college. Discuss how much the family will contribute, whether your child can apply for grants or scholarships, and how much your child is prepared to pay every month in student-loan payments after graduation, he says.

Be aware the Fafsa recently changed some of its procedures. For this application season, families reported 2015 tax information, not 2016 data. The new "prior-prior-year" model has many benefits. One is that families no longer have to estimate their tax information and then go back and correct the form after their taxes are done, says Marcos Cordero, the chief executive of Gradvisor, which helps companies provide 529 plans as an employee benefit. The fact that the Fafsa is now available in October, meanwhile, means families can get financial-aid information further in advance of certain college-decision deadlines, he says.

* * *

We have about $225,000 in a 529 plan for our three children. Is it worth it to fill out a financial-aid form when our oldest applies to college next year, or do we not have a chance of getting aid with this much in savings?

Yes, you should fill out the forms. There's no official income cutoff for receiving aid, and factors such as the size of your family and the age of the oldest parent will be taken into account, says Graddvisor's Mr. Cordero.

As for your 529, don't forget that it, along with your other nonretirement investment assets, is considered at a 5.64% rate when your expected family contribution is calculated, he says. So don't assume that having saved this money automatically disqualifies you from receiving aid.

Also, if you have three children, you should have three 529 plans, not just one, he says.

"It's always more prudent to have one for each child, especially if you are going to be investing in age-based portfolios," Mr. Cordero says.

* * *

What are the mechanics of making a payment from my 529 plan?

Plans typically allow you to have withdrawals sent to the account owner, the beneficiary or the school, either by electronic transfer or by mailed check. Mr. Cordero says. For some plans, it's possible to have a payment sent to an off-campus landlord.

Making the check out to the beneficiary may be the best practice, however, says Mr. Cordero. That way, the Form 1099-Q reporting the distribution will be in the student's name. And if there happens to be an unqualified withdrawal, and thus reportable, children are usually in the lowest tax bracket, he says.

* * *

Are musical instruments an eligible 529 expense for a music major?

"The IRS still hasn't given complete guidance on exactly what 'qualified expenses' are, so it can be a difficult one to answer," Mr. Cordero says. Aside from tuition, room and board, textbooks and computers, a 529 plan can pay for anything "required" by a class, so if you need the instrument to take the class, then it likely would qualify, he says.

* * *

How do state and federal tax deductions work for 529 contributions? What are the limits on what you can contribute and still get a tax deduction? How about the gift tax? If you contribute more than this in one year, can you roll it over tax-wise to the next year?

The federal tax benefits of a 529 come when you withdraw money for qualified education expenses and don't have to pay income tax on the portion that represents your gains. As for state taxes, 35 states and the District of Columbia offer tax deductions or credits on 529 contributions, Mr. Cordero says. Typically you have to open an account with your own state's 529 plan, except in six states where you are allowed to open an account anywhere. Some states are generous (Illinois offers up to a $20,000 deduction for joint filers), while others are more frugal (Maine offers up to a $250 deduction), he says.

The gift-tax rules allow an individual to contribute up to $14,000 each year to any other individual (or to a 529 benefiting any individual) without gift-tax filing consequences. Above that level, you'll reduce your lifetime gift-tax exclusion, which is currently $5.49 million. One of the special features of 529s is the ability to "superfund" an account by contributing five years of gifts in one year, "essentially raising that $14,000 figure to $70,000, without reducing their lifetime exemption," Mr. Cordero says.

HAVE A COLLEGE-FINANCE QUESTION IN GENERAL? We'll be answering them in future Investing in Funds & ETFs reports. Write to reports@wsj.com.

MONEY MANAGEMENT

Some Stock Pickers Pick a Political Party, Too

BY JEFF BROWN

MUTUAL-FUND MANAGERS are paid to ferret out the best stocks with hardheaded analysis. But a new study suggests that their judgment can be clouded by politics.

A paper by University of Kansas researchers finds that fund managers are more inclined to buy shares in companies where a preponderance of board members and executives share their political views, and that this bias undercuts the funds' returns.

"Funds with more partisan bias suffer from higher levels of idiosyncratic volatility than those with less bias," the researchers say in their study. "Partisan bias is more evident when the fund manager is less experienced, in firms with more opaque information environments, and when the president of the U.S. comes from the fund manager's own party."

The authors, Associate Professor Jide Wintoki and graduate student Yaoyi Xi, looked at 1,298 actively managed mutual funds' holdings in 16,655 U.S. stocks from 2000 to 2015, and determined political affiliations by looking at contribution records of fund managers and of top executives at the firms they invested in.

Bias at play

The research found that "the typical share of total net assets invested in Republican-leaning firms by Republican-leaning managers is about 8% higher than that invested by Democratic-leaning fund managers [in Republican-leaning firms]," though there should be no difference if bias were not at play.

"In contrast," the study says, "the typical share of total net assets invested in Democratic-leaning firms by Republican-leaning managers is about 3% lower than that invested by Democratic-leaning fund managers." Overall, the study says, managers invest 7% more of their assets in companies with a preponderance of leaders who share their political leanings.

Managers' stock picks should be free of issues unrelated to stock performance, the authors write. Bias related to political views could reflect "in-group favoritism," with people believing others of like views "are superior to outsiders," their study says. Or it could mean that fund managers have better access, professionally and socially, to executives of like political views, and thus obtain better information. But if that were the case, political bias would improve fund performance, and the authors found that it did the opposite. Favoritism, rather than better information, therefore explains the biased investments, they conclude.

In an email response to questions, the authors say, "It was a bit of a surprise that such biases may affect the decisions of managers that are paid, at least in part, to avoid such personal bias in their portfolio allocation."

Index approach

They say their results also add weight to arguments favoring passive, index-style investing over actively managed funds. Index-fund managers simply buy stocks in the underlying index like the S&P 500 and thus do not have the opportunity to let political bias influence their picks.

"These [bias effects] are costs that investors do not face when investing in passive funds, and may be another one of the many reasons for investors to carefully think about investing in actively managed funds," they say.

Mr. Brown is a writer in Livingston, Mont. Email him at reports@wsj.com.

VENTURE INVESTING

When Funds Invest in Startups

The business can be lucrative for mutual funds. And problematic.

MARTIN HAAKE

BY CHANA R. SCHOENBERGER

ARE YOU A startup investor? Perhaps—but you may not know it.

That's because your mutual funds may have bought private shares in early-stage companies, including those nicknamed unicorns (startups valued at $1 billion or higher, like Uber Technologies). As a fund shareholder, you own a piece of these stakes—and the profits or losses that the fund eventually realizes.

This increasingly common practice comes with some regulatory red flags, says Jeff Schwartz, a law professor at the University of Utah. In a new paper that will be published this year in the North Carolina Law Review, Prof. Schwartz looked at **Fidelity Investments**' flagship **Magellan Fund**, which has some $15 billion in assets and is a leader in startup investing. Magellan has invested about $134 million since 2012 in 12 startups, including DocuSign, Hubspot, Roku and Uber.

Jeff Schwartz

Although startup investing can be exciting, Prof. Schwartz's paper cites these potential problems with the practice: "lack of awareness among mutual-fund investors, lack of liquidity for mutual-fund shares, lack of venture-capital expertise among mutual-fund management, and lack of accountability over how funds value their ownership stakes in startups for purposes of calculating their net asset values, which creates an opportunity for management to manipulate such estimates."

Fidelity says that it invests in private companies that would have gone public a decade or two ago, when companies hit the public markets earlier in their life cycle, and that it chooses those it thinks are likely to go public in the future. "We like to look for companies we think are going to be long-term winners, companies that we will be able to invest in, and they will appreciate over a long period of time for the benefit of our shareholders," says Andrew Boyd, head of global equity capital markets at Fidelity.

The Wall Street Journal spoke with Prof. Schwartz about mutual funds' startup investments and what regulators can do to protect investors. Edited excerpts:

WSJ: *Why are fund managers making startup investments?*

PROF. SCHWARTZ: The main reason is actively managed funds are looking for ways to distinguish themselves. Index funds can't copy this. It's an exciting area. They want to be a part of it. They can control the valuations. It's a little bit of a loophole. They are allowed to do this. There's nothing that restricts them. They just can't invest more than 15% of their assets in illiquid securities such as private companies. But right now, most funds are well below that. When you have such huge assets under management, you can invest billions and billions of dollars—and still invest hundreds of millions in startups. Magellan invests around $170 million in these kinds of companies, around 1% of its assets.

WSJ: *How can you find out if your mutual funds hold startup stakes?*

PROF. SCHWARTZ: You have to look at their quarterly filings through the SEC website [www.sec.gov] and scroll through the schedule of investments. Within that, there's a category for preferred shares. That's where these investments are typically found.

You'd have to look up the companies to see what they do and whether they are public or private; you may not have heard about them. There are also disclosures if the shares are restricted, which means that they're usually private shares.

WSJ: *What are the effects of startup investing on mutual-fund performance?*

PROF. SCHWARTZ: It's too early to tell. Don't automatically sell your mutual-fund shares, if you discover it is investing in startups. It depends on investors' opinion of whether we're in a bubble with respect to unicorns and other startups. If you think we're in a bubble, it may be a good time to sell if your fund has a large percentage of startups. If you're concerned about the valuation of the fund managers because they have latitude in how they assess the value of assets under management, you may also want to sell. There's a dual risk: could be a bad investment, or the valuations could be biased.

WSJ: *Private shares are often illiquid and can have whatever value the company and the fund managers decide. When a fund manager can choose to invest in private companies that have huge valuations, like Uber, how does that affect how he or she gets paid?*

PROF. SCHWARTZ: Based on assets under management, they get a percentage. The AUM is calculated each day. This would lead to higher compensation for fund managers, because it inflates the value of the mutual fund.

WSJ: *What can investors learn from this?*

PROF. SCHWARTZ: These investments in young private companies are actually in their mutual funds. It's not easy for investors to tell by reading the prospectus or the website that these investments are present. They are present, and they pose these obvious risks in terms of how they're valued. The mutual-fund managers don't necessarily have incentives aligned with shareholders in terms of how they're valued.

WSJ: *Should the practice of funds investing in startups be regulated differently? What could the government do to make this practice more friendly to investors, or to bring more transparency?*

PROF. SCHWARTZ: Yes, regulations could be improved to better protect investors. Currently, they give broad discretion to fund management with respect to valuing startups. Funds also may disclose little about the valuation process. Instead, the laws could require that funds change the value of their startup holdings when, and only when, justified by publicly available information, and that funds disclose the information that leads to any such changes.

The limitation on the valuation process would enhance the credibility of the valuations, and the additional transparency would incentivize funds to provide more careful and conservative estimates.

Also, under current rules, it can be difficult for investors to find out whether their funds hold startups. I recommend that funds be required to explicitly disclose that they invest in these companies and discuss the risks that doing so entails.

Ms. Schoenberger is a writer in New York. She can be reached at reports@wsj.com.

NEWS CHALLENGE: FUNDS AND INVESTING

Test Your Smarts on...Gold Investing

BY VICTOR REKLAITIS

THERE IS NOTHING QUITE like gold, especially if you want to start an argument among financial advisers.

The debate never stops over what role the precious metal should play in investment portfolios. The commodity also tends to grab the spotlight whenever a geopolitical shock hits and helps send gold futures higher.

Gold bugs enjoy highlighting this famous line from Wall Street legend Gerald Loeb: "The desire for gold is the most universal and deeply rooted commercial instinct of the human race." Skeptics favor quotes on the metal like this one from Warren Buffett: "I have no views as to where it will be, but the one thing I can tell you is it won't do anything between now and then except look at you."

For the year to date, through April, gold-oriented mutual funds have a 5.9% total return on average, despite a 3.6% decline in April.

Regardless of where you stand on the gold-bug-to-hater spectrum, how much do you know about the commodity? Let's find out:


MARIYA GORDEYEVA/REUTERS

How have gold prices performed since Election Day? See Question No. 8.

1. *When did gold prices hit their all-time high? We mean their highest nominal value in dollars.*

A. 1980
B. 2001
C. 2011
D. 2016

ANSWER: C. Gold futures peaked in 2011, when they traded above $1,900 an ounce, according to FactSet. Looking at inflation-adjusted data, the peak came in 1980.

2. *True or false: All of the gold ever mined still exists as aboveground stock, and there are no signs of that changing.*

ANSWER: False. Gold may be getting "consumed" for the first time. The metal is now used in such small quantities by the technology sector that it may no longer be economical to recycle it, according to British Geological Survey findings that the BBC has highlighted.

3. *True or false: Gold is the rarest precious metal.*

ANSWER: False. Rhodium, iridium and ruthenium count among the precious metals that are more rare than gold, according to the U.K.'s Royal Mint.

4. *How much have gold futures wiped away from their value in retreating from their all-time high?*

A. Less than 1%
B. Around 10%
C. About a third
D. Roughly half

ANSWER: C. Gold futures are trading at $1,224.80 an ounce, as of Friday's settlement. That represents a drop of 36% from their peak of $1,923.70 an ounce reached in intraday trading Sept. 6, 2011, according to FactSet data.

5. *True or false: The SPDR Gold Trust (ticker symbol: GLD), the largest gold ETF, is a top 10 ETF in terms of assets under management.*

ANSWER: False. GLD had more assets under management than any other ETF at one point in 2011, but it now is no longer in the top 10, according to ETF.com data. It ranks 13th with $35.4 billion in assets under management.

6. *Which of the following isn't an often-given reason for owning gold?*

A. It tends to move independently of other asset classes.
B. Its price could rise thanks to growing demand from China and India's middle classes.
C. It can help hedge against inflation.
D. It has consistently paid interest.

ANSWER: D. Gold doesn't pay interest like bonds do, and analysts tend to turn bearish on the metal when interest rates are rising.

7. *Fill in the blank: Wall Street Journal columnist Jason Zweig once got many gold enthusiasts buzzing by likening the commodity to __________.*

A. A rare Beanie Baby
B. A must-have bobblehead
C. An unwanted Chia Pet
D. A pet rock

ANSWER: D. Mr. Zweig suggested in a July 2015 Intelligent Investor column that gold shouldn't have a big role in any investment portfolio, then doubled down a year later even though gold had gained 20%, saying "it's still a pet rock."

8. *How have gold prices and U.S. stocks performed from Election Day through early May?*

A. Gold is up 9%, while the S&P 500 is down 3%.
B. Gold is roughly flat, while the S&P is up 7%.
C. Gold is down 4%, while the S&P is up 12%.
D. Gold is down 4%, while the S&P is up 16%.

ANSWER: C. Gold futures, at $1,224.80 an ounce currently, are down nearly 4% from their settlement on Election Day at $1,274.50. The S&P 500 has climbed to about 2399 from around 2140 on Nov. 8.

9. *How much have gold prices increased over the past 20 years?*

A. Nearly quadrupled
B. Almost tripled
C. Roughly doubled
D. About 40%

ANSWER: A. Gold prices are about 3.6 times higher, according to FactSet data, rising to around $1,224.80 an ounce from $343 two decades ago.

10. *Fill in the blank: Gold is so malleable that an ounce of it (about the size of a quarter) can be beaten into a thin sheet covering _________.*

A. 270 square feet (about the size of a micro-apartment)
B. 100 square feet (a large office cubicle)
C. 30 square feet
D. 5 square feet

ANSWER: B. A single ounce can yield a continuous sheet measuring about 100 square feet, according to the American Museum of Natural History in New York.

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