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THE WALL STREET JOURNAL.

DOW JONES | News Corp ****** MONDAY, OCTOBER 9, 2017 ~ VOL. CCLXX NO. 84 WSJ.com ★★★★ $4.00

Last week: DJIA 22773.67 ▲ 368.58 1.65% NASDAQ 6590.18 ▲ 1.5% STOXX 600 389.47 ▲ 0.3% 10-YR. TREASURY ▼ 12/32, yield 2.370% OIL $49.29 ▼ $2.38 EURO $1.1732 YEN 112.64

What's News

Business & Finance

Weinstein Co.'s board fired the studio's co-chairman, following accusations of sexual harassment. **A1**

◆ **Several top** Democrats, including potential presidential candidates, distanced themselves from the movie producer. **A4**

◆ **Deutsche Bank's** Cryan is shunning HNA, the company's largest shareholder, raising eyebrows among the bank's board members and clients. **A1**

◆ **OneMain is in** talks with a number of interested parties, both rival lenders and private-equity firms, to sell itself. **B1**

◆ **Panama's** investment to expand its canal is paying off, as shipping lines send more cargo through the passage instead of using the Suez Canal. **B1**

◆ **Oil prices** posted their first weekly losses in a month as investors held out for signs that global crude supplies are tightening. **B9**

◆ **The Pentagon** has taken over an effort to cut the cost of the F-35 combat jet, after rejecting Lockheed Martin proposals. **B3**

◆ **Marvel dropped** a joint venture with Northrop Grumman after fans attacked the company via social media for its ties with the contractor. **B5**

◆ **Luxury home** purchases have rankled employees at Guggenheim and spurred questions from clients. **B8**

◆ **Blade Runner** fizzled at the box office, opening to an estimated $31.5 million in the U.S. and Canada. **B5**

World-Wide

◆ **The U.S. stepped up** behind-the-scenes pressure on nations around the world to curb dealings with North Korea. **A1**

◆ **The White House** laid out its border-enforcement demands in exchange for a deal to back new "Dreamers" legislation. **A1**

◆ **The Army** is preparing to unveil an approach for fighting wars that combines space, cyberspace and traditional combat. **A3**

◆ **Pence attended** and then left the Indianapolis Colts game in response to players protesting during the national anthem. **A14**

◆ **Hurricane Nate** weakened to a tropical depression as it moved inland, bringing heavy rains to Mississippi and Alabama. **A3**

◆ **The U.S. and Turkey** stopped issuing nonimmigrant visas to each others' citizens as differences between the NATO allies escalated into measures that could affect travelers. **A7**

◆ **The son of** a man who died in the Las Vegas massacre is asking a Nevada court to freeze the gunman's assets so that he and other victims can pursue claims. **A3**

◆ **Trump will sign** an executive order to start lifting some insurance rules set by the ACA, in the aftermath of failed efforts to repeal the law. **A2**

◆ **Hundreds of** thousands of Spaniards gathered in Barcelona to decry Catalonia's secessionist push. **A6**

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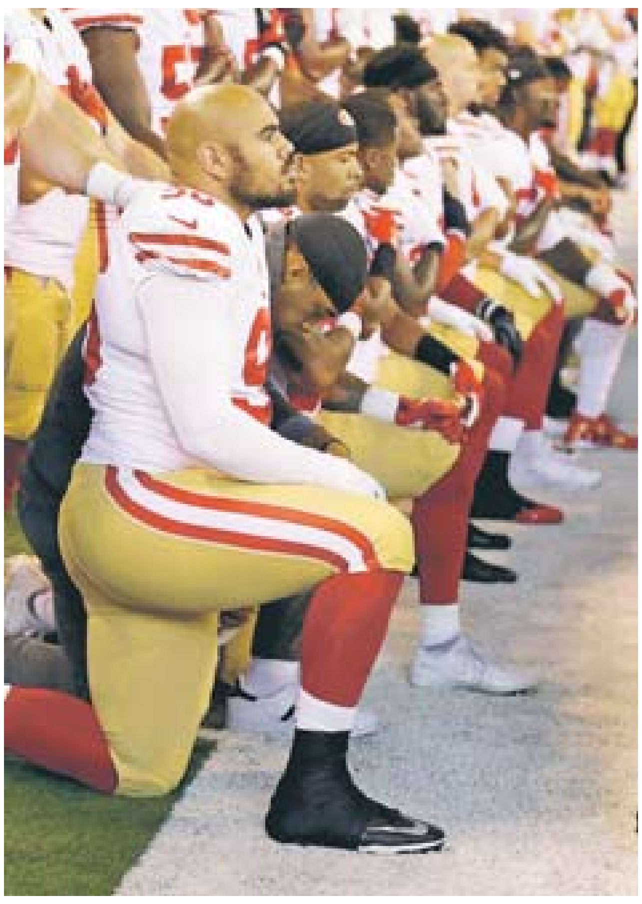
Vice President Takes a Stand as Players Kneel in Protest



MICHAEL CONROY/ASSOCIATED PRESS (LEFT); MICHAEL CONROY/ASSOCIATED PRESS

WALKOUT: Vice President Mike Pence and his wife attended, and then left, Sunday's Indianapolis Colts football game against the San Francisco 49ers after some players knelt during the national anthem as a protest against racial injustice. **A14**

Deutsche CEO Shuns Investor

John Cryan is avoiding German bank's biggest shareholder, creating tension at top

By JENNY STRASBURG

Most CEOs are zealous about meeting and courting their largest shareholder. Deutsche Bank AG's John Cryan has made a point of avoiding his.

Mr. Cryan has told associates he wanted nothing to do with Chinese conglomerate HNA Group Co., an aspiring but opaque actor on the global scene, which in the spring built its stake in the German lender to nearly 10%.

The iciness has raised eyebrows among Deutsche Bank supervisory-board members and clients, say people close to the bank. And it has irked Paul Achleitner, the company chairman who helped woo HNA. Mr. Achleitner doesn't like executives airing negative views of individual shareholders, people close to the bank say.

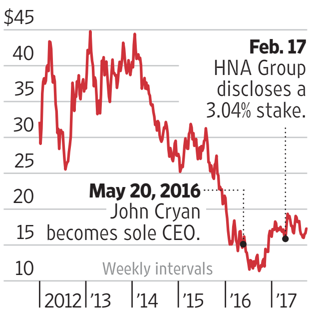
The tensions between HNA, Mr. Cryan and Mr. Achleitner come as Deutsche Bank has struggled for most of a decade to revive profits and bring stability in its upper ranks. Undermining those rebuilding efforts are a slow turnaround and internal clashes over style and strategy that have spilled into meetings with clients and regulators, according to people close to the bank.

At the center is Deutsche Bank's chief executive, Mr. Cryan, a Briton overseeing Germany's largest lender. Mr.

Please see BANK page A8

Uptick

Deutsche Bank stock price



Source: WSJ Market Data Group

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U.S. Asks Allies to Cut Off North Korea

By PAUL SONNE And FELICIA SCHWARTZ

WASHINGTON—Over 20 nations have curbed diplomatic or business operations of the North Korean government following a more-than-yearlong effort by the State Department, an indication of the kind of behind-the-scenes pressure the U.S. is using to tackle an emerging nuclear standoff.

U.S. officials have asked countries to shut down businesses owned by the North Korean government, remove North Korean vessels from ship registries, end flights by the country's national air carrier and expel its ambassadors. At the Association of Southeast Asian Nations summit earlier this year, U.S. diplomats made sure North Korea couldn't secure any bilateral meetings.

Mexico, Peru, Spain and Kuwait all expelled their North Korean ambassadors after the U.S. warned that Pyongyang was using its embassies to ship contraband and possibly weapons components in diplomatic pouches and earn currency for the regime. Italy became the latest country to do so on Oct. 1.

Kuwait and Qatar, among other countries, have agreed to reduce the presence of North Korean guest workers, according to U.S. officials and people familiar with the matter.

The campaign abroad is in-

Please see KOREA page A8

◆ Army paper set to broaden definition of battlefield........ A3

Harvey Weinstein Fired After Allegations

Weinstein Co.'s board of directors fired co-chairman Harvey Weinstein from the independent movie and television studio on Sunday, citing allegations of sexual misconduct by one of the highest-profile producers in Hollywood.

By Ben Fritz, Keach Hagey and Erich Schwartzel

In multiple conversations over the past few days, board members had been furious not just over revelations about Mr. Weinstein's previously undisclosed financial settlements with women who accused him of sexual harassment, but his public attempts to defend himself, according to a person with knowledge of the board's deliberations.

Board members had hoped Mr. Weinstein would resign before they decided to fire him and concluded with attorneys they had the grounds to do so, this person said.

Mr. Weinstein on Friday began an indefinite leave of absence.

In a brief statement, the board, which includes Harvey's brother Bob, the company's co-chairman, cited "new information about misconduct by Harvey Weinstein that has emerged in the past few days."

A spokesman for the Weinstein Co. board members didn't immediately return a request for comment, and a representative for Harvey Weinstein couldn't immediately be reached for comment.

The independent studio is being run by Bob Weinstein and its president, David Glasser. Though they have long held senior leadership roles, Weinstein Co. and a pre-

Please see STUDIO page A4

◆ Politicians distance themselves from Weinstein........ A4

At Heart of P&G vs. Peltz: The Future of Big Brands

Activist investor wants niche while consumer giant says big is best

By SHARON TERLEP

CINCINNATI—Procter & Gamble Co., which has suffered through a decade of market-share losses and stagnating profits, hopes its redemption lies in a koala-shaped maxi pad.

Called the "Koala HuHu," the extra-long overnight pad launched this spring in China. Part of P&G's Whisper brand—which is called Always in the U.S. and elsewhere—it targets teenage girls with cartoon marsupials snoozing on the box, and is beating rivals despite commanding higher prices. To develop the product, the consumer-products giant abandoned its traditional global formula, and for the first time created a major new line for a single overseas market.

"I had to change things," said Fama Francisco, who runs P&G's feminine-care division. For P&G, Koala is proof it can adapt within the world of its cornerstone brands such as Whisper, Crest toothpaste and Pampers diapers.

Activist investor Nelson Peltz, who wants P&G to radically revise its strategy, argues the success of Ms. Francisco's unit is the exception. He says the Cincinnati giant, hopelessly mired in the past, should shift to smaller, niche brands disconnected from its marquee products, pull in talent from the outside and split into three independent units.

"All the action today is local. It's these small brands. It's what the millennials want," the 75-year-old investor said. "They want a brand with emotion, a brand that's got a story behind it, a brand that brings value to the environment or is organic."

Please see PELTZ page A10

Trump Sets Demands For 'Dreamers' Bill

By LAURA MECKLER

WASHINGTON—The White House sent Congress an expansive set of principles that would sharply increase immigration enforcement at the border and inside the U.S. and significantly cut the number of new legal arrivals, demanding a high price for legislation under consideration to help "Dreamers."

The documents arrive as lawmakers begin an emotional and contentious debate over whether to legalize young people brought to the U.S. illegally as children, often called Dreamers. These young migrants will lose work permits and protection from deportation starting in March under a six-month phaseout ordered by President Donald Trump.

The White House documents, sent to congressional leaders in both parties on Sunday, amount to a lengthy wish list of longstanding conservative immigration goals. White House officials told reporters that they want these to be included in any immigration deal, but stopped short of saying the White House will insist on them.

"Without these reforms, illegal immigration and chain migration, which severely and unfairly burden American workers and taxpayers, will continue without end," Mr. Trump said in a letter to congressional leaders that outlined some 70 separate principles.

Many of these measures are nonstarters for Democrats and some Republicans and insisting on them could put the congressional effort to legalize the young immigrants into jeopardy. A White House official said the president isn't issuing any veto threats but declined to detail which of the ideas

Please see BORDER page A4

Standoff Hits Turkish Lira

How many dollars one lira buys

*Through 8:40 p.m. ET

Source: WSJ Market Data Group

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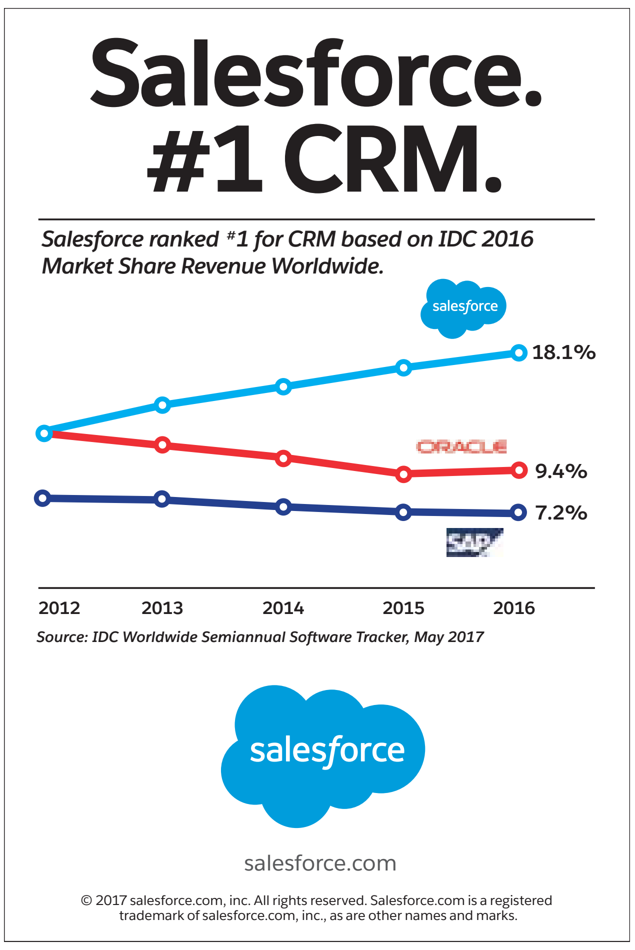
Tensions between U.S. and Turkey escalated, sending the Turkish lira lower in early Asia trading Monday. A7



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U.S. NEWS

THE OUTLOOK | By Josh Zumbrun

Central Banks Pull Back in Unison

A synchronized global economic expansion is leading to a big shift in monetary policy around the world—toward central banks shrinking rather than growing—with implications for markets, inflation and the outlook for growth.

Following the financial crisis from 2007-2009, the world's big central banks had been net buyers of financial assets in global markets, expanding their portfolios of government bonds, mortgage debt and corporate securities by 1% to 3% of global economic output per year for much of the past six years.

Now that's changing. The Bank of England announced in February it would mostly end its bond purchases, the Federal Reserve stopped buying bonds at the end of 2014 and announced in September it would move ahead with a plan to gradually shrink its holdings, and the European Central Bank is expected to announce at the end of October it will slow its pace of purchases.

All told, net purchases are on track to drop to 2.4% of global gross domestic product by the end of this year, 0.8% of global GDP at the end of next year, and by mid-2019 the central banks of advanced economies will be shrinking, according to estimates by the Institute of International Finance, a Washington, D.C., organization that represents the global financial industry.

Interest rates are ticking up as well, another form of more restrictive monetary policy. The Fed has raised interest rates four times since 2015 and is expected to do so again in December. The Bank of Canada raised rates in July and September and could move again this year. Meantime the Reserve Bank of Australia and Bank of Korea are laying the groundwork for higher rates next year.

Behind the global central bank shift is a more alluring economic backdrop. All 45 countries tracked by the Organization for Economic Cooperation and Development are set to grow this year, a synchronicity that has been uncommon in the past 50 years. During earlier phases of the present expansion, stumbles in places including Europe, Japan and China marred the global economic outlook.

"This feels sounder than any of the other false dawns we've had before," said Kristin Forbes, a professor at the Massachusetts Institute of Technology and former member of the Bank of England's monetary policy committee.

For now, the central bank retreat has been given an enthusiastic "all clear" by investors. The DJ Global stock index is up 17% this year, with double-digit percentage gains in the U.S., much of Europe and some Asian markets.

Still, the central bank retreat could become an unwelcome stumble. Central bank purchases of bonds were designed to boost markets by pushing investors into riskier asset classes, like stocks. A pullback, in theory, ought to have the opposite effect.

Leaders like Janet Yellen of the Fed and Mario Draghi of the ECB hope they've telegraphed their moves so proactively that market responses will be benign. But market surprises have a long record of disrupting the best-laid plans of central bankers.

"There is no prior experience of rolling back [bond purchases], so it is very tricky to know how markets will react," said Peter Nagle, a global macro economist at the IIF.

Some analysts also doubt whether this is the right time for a pullback. The International Monetary Fund, which begins semiannual meetings in Washington this week, has warned that central banks may be moving too soon given the still-subdued pace of inflation globally.

According to OECD data, the average inflation rate across the G-20 fell to 2% in June and July, which was the lowest since the global financial crisis, before rising slightly to 2.3% in August. Many advanced countries are running underneath their inflation targets. The U.S. posted 1.4% inflation on the Fed's target gauge in August. Japan's inflation was at 0.7%. The central banks of both nations target 2% inflation.

Among research papers released in advance of the meeting, economists at the IMF cautioned that slow wage growth and tepid inflation are unlikely to go away, calling into question the need for more restrictive monetary policy.

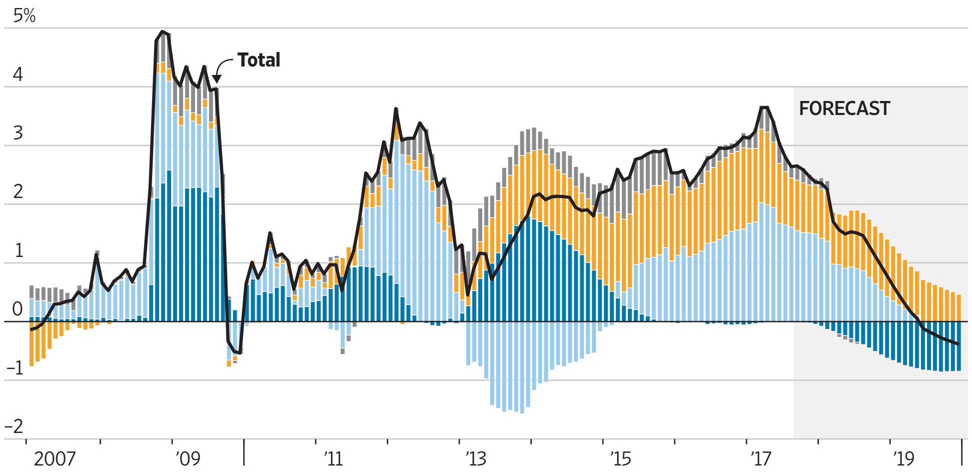
Adam Posen, president of the Peterson Institute for International Economics, said the global expansion was sustainable for the next couple of years. "With synchronized growth," he added, "it's hard to argue central banks are going to make a major mistake if they tighten a little bit."

Investors and the central banks themselves are counting on the wisdom of that logic. If it's off, they could find themselves painfully out of position to deal with the consequences.

The Great Unwind

The era of massive expansion of global central bank balance sheets is coming to an end.
Total change in central bank assets as a share of GDP

Federal Reserve | European Central Bank | Bank of Japan | Other advanced economies



Note: Changes in balance sheets are calculated as a 12-month rolling sum
Source: Institute of International Finance
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ECONOMIC CALENDAR

TUESDAY: The International Monetary Fund releases its **World Economic Outlook** as policy makers stream into the U.S. capital for a week of meetings. The world's top central bankers are scheduled to make appearances in Washington, including the European Central Bank's Mario Draghi on Thursday and the Federal Reserve's Janet Yellen, the People's Bank of China's Zhou Xiaochuan and the Bank of Japan's Haruhiko Kuroda next Sunday.

WEDNESDAY: The **Federal Reserve** releases minutes from its September meeting, when it said it would begin shrinking its portfolio of bonds this month and indicated it remained on track to raise short-term rates later this year. Markets are now pricing in around a 90% chance that the Fed raises its benchmark federal-funds rate by year-end, according to CME Group data. Economists will be looking to see whether the minutes help back that expectation.

FRIDAY: The U.S. Commerce Department releases data on September **retail sales**. Spending at U.S. retailers fell in August, with consumers buying fewer goods at home-improvement stores, car dealerships and online. Economists surveyed by The Wall Street Journal forecast retail sales will rise 1.7% in September.

The U.S. Labor Department releases September **consumer-price index** data. CPI, which measures what Americans pay for everything from medicine to cars, rose 0.4% in August from a month earlier, the biggest jump since January. The new inflation reading will offer the latest snapshot of potential hurricane effects on economic data, as tight inventory could cause prices to rise. Economists surveyed by The Wall Street Journal forecast CPI rose 0.6% in September.

Trump Health-Insurance Order Could Divide Market

WASHINGTON—President Donald Trump's executive order on health insurance, the most significant step so far to put his stamp on health policy, is designed to give more options to healthy consumers. It also could divide the insurance market in two.

By Louise Radnofsky, Anna Wilde Mathews and Stephanie Armour

The order, to be signed this week, will begin rolling back some requirements of the Affordable Care Act and could allow insurers to offer the kinds of lower-cost, less-comprehensive plans that were restricted by the 2010 health law.

A Trump administration official who previewed the order said it was aimed at promoting competition and choice. One result, analysts said, could be that healthy people are drawn to the expanded, less-expensive plans, leaving sicker and higher-risk people in a dwindling pool that sees higher costs.

Together, if executed in an expansive way, Mr. Trump's changes could "cause a bifurcation of the market," said Cori Uccello, senior health fellow at the American Academy of Actuaries. Insurers that offer plans under the ACA could face new difficulties, but companies also might find opportunities in offering new types of insurance.

Mr. Trump's order, described by a senior administration official, will include broad instructions for federal agencies to loosen rules on health plans that the administration says have driven up premiums and reduced insurance offerings available to people who buy coverage on their own or who work for a small employer.

The order also will direct the Health and Human Services, Labor and Treasury Departments to lay groundwork for the growth of association health plans, coverage that would have fewer mandated benefits than many current plans available to small employers and individuals.

The departments, in addition, will be told to take steps to expand the availability of short-term medical plans that had been curbed by the Obama administration.

The order will begin the reversal of the Obama administration's stance that health insurance sold to people who don't get coverage through a large employer had to be more tightly regulated.

"It could amount to effective deregulation of the individual and small-business insurance markets," said Larry Levitt, a senior vice president at Kaiser Family Foundation.

Some key details remained undefined by Sunday, ahead of the signing of any final version of the order.

President Barack Obama and fellow Democrats saw the ACA as a way to guarantee that people with prior health conditions could buy coverage and that health plans would cover a broad set of benefits, including maternity care and hospitalization, thus protecting consumers from unwittingly buying shoddy products.

But Republicans have said the insurance rules have driven up premiums for healthier Americans especially.

The most consequential aspect of Mr. Trump's order likely will be the moves toward expanding the use of association health plans, which would be treated more like the policies now offered by large employers with workers in different states.

Health analysts have said that such plans likely would be attractive to employers and workers with limited health needs, leaving workers with costlier conditions to seek insurance in a pool with other, sicker people. Such a pool would have few healthy customers to offset costs; prices would likely rise.

The president also is set to order federal agencies to start winding back an Obama-era rule curbing coverage known as "short-term medical insurance," a low-cost but limited-protection option, and to allow people to once again buy plans in that category that could last for almost a year.

Such plans, which can now only be carried for 90 days, often are sold only to people who qualify as healthy and don't cover costs related to enrollees' pre-existing conditions. They also can cap payouts and often don't include benefits required of ACA plans.

CAITLIN O'HARA/REUTERS

Maria Losoya, right, provided information on affordable health insurance in Tucson, Ariz., last month.

CORRECTIONS & AMPLIFICATIONS

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Washington Standoff Puts Focus on States

By Stephanie Armour

WASHINGTON—The collapse of the Republican effort to overhaul the health-care system and the resulting standoff in Washington has pushed the fight to the states, where a brewing conflict over Medicaid is shaping up as the next battleground.

The Trump administration is expected to rule soon on Kentucky's push to impose work requirements and other rules on Medicaid enrollees, as other states line up to follow suit. Democrats say that would weaken the program.

This issue could be the next step in transforming a large swatch of the American health-care system, as Congress remains deadlocked between Democrats who back the Affordable Care Act, some of whom say it could be improved, and Republicans who want to uproot it but lack the votes.

If states succeed in attaching tougher requirements to Medicaid, which covers one in five Americans, experts say it could become less of a traditional entitlement program and more of an arrangement where many participants earn the right to benefits only if they take certain actions.

"It is easier to take coverage away in below-the-radar, bureaucratic ways," said Benjamin Sommers, a physician and health economist at Harvard University. "If you ask people if people on Medicaid should have to work, that's popular, but if you ask people if they should cut Medicaid, it's not."

Republicans argue that Medicaid, which provides benefits to about 75 million Americans, has become far more than a safety net. Its growth, they argue, has fostered dependence by participants and threatened to swallow state budgets.

Democrats defend Medicaid as a vital form of public assistance for low-income and disabled Americans. The proposed waivers, they say, endanger those social benefits.

Kentucky is likely to be a test case. Under the state's waiver request, even lower-income beneficiaries would have to pay premiums based on a sliding scale, a requirement not found in most states. Many enrollees who failed to pay would be locked out of coverage for six months unless they took a financial- or health-literacy course and paid what they owed. In addition, most adults would have to perform weekly job-related activities, potentially including training or volunteer work.

The proposal "is a plan tailored to meet the unique needs of Kentuckians," said Doug Hogan, a spokesman for the governor. "It is a consumer-oriented health plan that in many ways mirrors commercial insurance coverage."

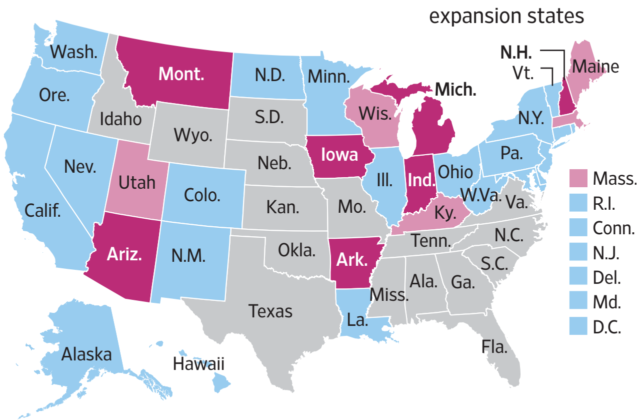
Others say the requirements are impractical for struggling Americans who might be juggling child care, medical costs and other expenses. Health coverage is a right, they say, not a privilege to be earned by following government-imposed requirements.

State Powers

The stalemate over the Affordable Care Act in Washington has put new focus on states' varying Medicaid approaches. Here are the states considering changing their waiver status.

Medicaid change waivers

Waivers approved | Waivers in progress | Other Medicaid expansion states



Select pending provisions

Work requirement	Ark. Ariz. Ind. Ky. Maine Utah Wis.
Time limits on coverage	Ariz. Utah Wis.
Lockout for failure to timely renew eligibility	Ind. Ky.

Sources: FamiliesUSA; Kaiser Family Foundation
THE WALL STREET JOURNAL

THE WALL STREET JOURNAL
(USPS 664-880)
(Eastern Edition ISSN 0099-9660)
(Central Edition ISSN 1092-0935)
(Western Edition ISSN 0193-2241)

Editorial and publication headquarters:
1211 Avenue of the Americas,
New York, N.Y. 10036

Published daily except Sundays and general legal holidays. Periodicals postage paid at New York, N.Y., and other mailing offices.

Postmaster:
Send address changes to The Wall Street Journal, 200 Burnett Rd., Chicopee, MA 01020.

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Vegas Begins to Assess Tourism Impact

City, business leaders are optimistic the key industry won't suffer long-term damage

By Chris Kirkham

LAS VEGAS—More people visit this glittering entertainment mecca every month than live here year-round. There are 34% more hotel rooms than in New York City, far outpacing any other market in the country.

To say tourism is the lifeblood of the economy here is an epic understatement: Leisure and hospitality accounted for nearly a third of regional employment in 2015, compared with a national average of about 11%, according to consulting firm Applied Analysis.

Las Vegas business and tourism leaders have been hesitant to discuss how last week's mass shooting—among the bloodiest in America in at least 50 years—could affect outside perception of the nation's gambling capital, amid an outpouring of grief, but it is certainly top of mind.

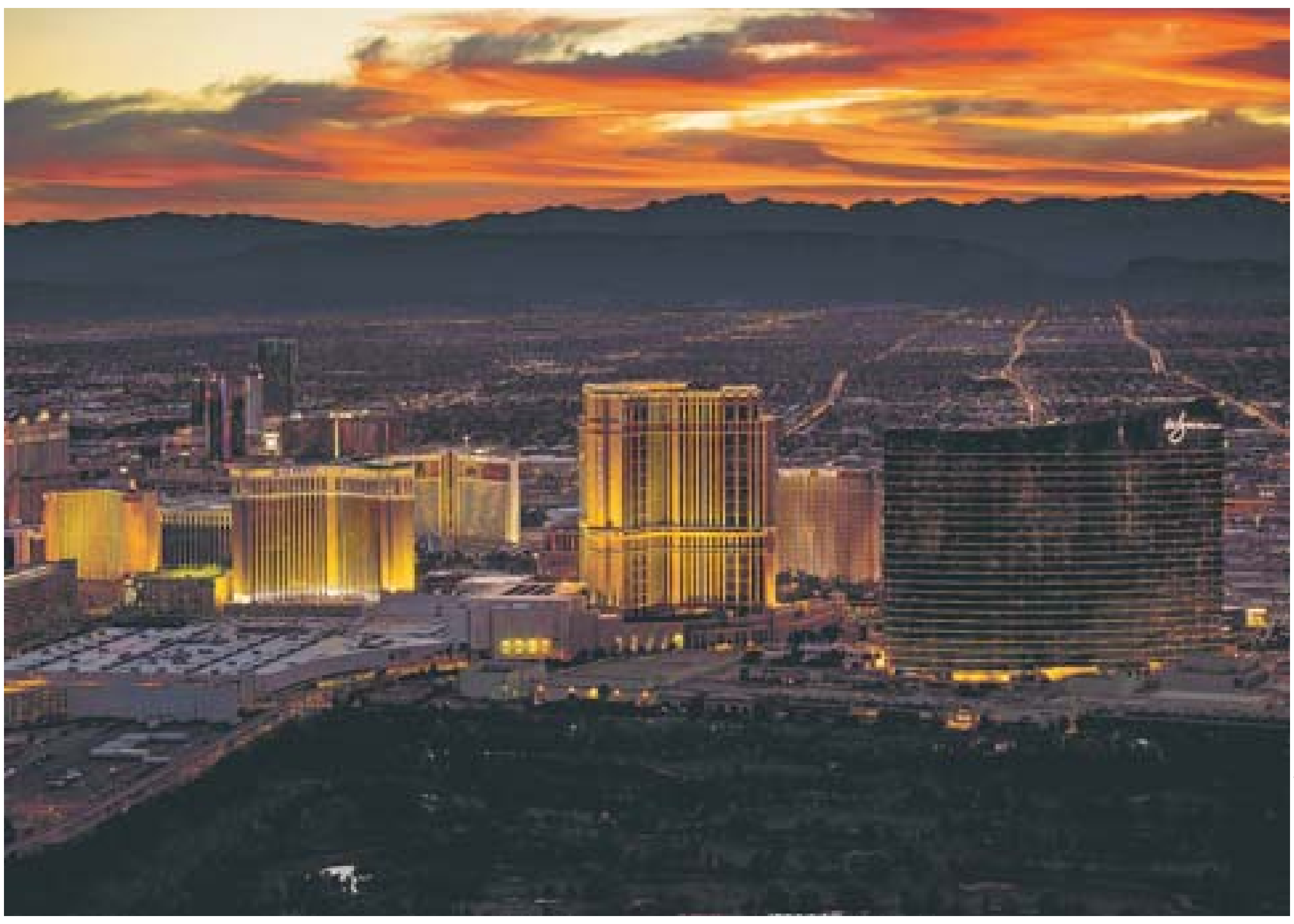
Mayor Carolyn Goodman sounded a confident note in an interview last week, saying she had "not a qualm" about people's continued desire to visit the city.

"I'm totally confident," she said, adding that the Oct. 1 tragedy involving a "deranged individual" is "something that could happen anywhere, any time."

"They're not going to define us that way," she said.

It is still too soon to gauge any impact, but the experience of other cities that have dealt with mass shootings or terrorist attacks indicates there is likely to be some short-term fall in visitation. Orlando, Fla., saw some declines in hotel occupancy in the months after the 2016 Pulse nightclub shooting, according to hotel industry tracker STR Inc., though its overall visitation numbers last year were still higher than 2015.

After two terrorist attacks in Paris in 2015, hotel occupancy in the city fell by more than 12% last year and visits plummeted. Tourism has since rebounded and visitation for the first half of this year was at its highest in a decade, according to tourism officials.



DAVID PAUL MORRIS/BLOOMBERG

While Las Vegas mourns from the shooting, the mood lifted last week. Nearly one-third of the region's jobs depend on visitors.

ForwardKeys, which analyzes millions of flight reservation transactions each day, said it was too early to determine any change in air reservations to Las Vegas.

The company's chief executive, Olivier Jager, said that based on past events he expects there could be an initial wave of cancellations and a drop in bookings. But he added that customer behavior is different in a "terrorist incident, where a threat could be ongoing, and an assault by a lone individual who is shot dead [such as happened here], where the threat is eliminated."

October is typically one of the more popular months in Las Vegas, with football season in full swing, luring bettors and fans who watch games on big screens. November and December tend to be quieter because many people travel elsewhere for the holidays.

Last year, Las Vegas posted a record of nearly 43 million tourists, and a record for those attending conventions in the city.

Rossi Ralenkotter, president and chief executive of the Las Vegas Convention and Visitors Authority, said at a press conference last week the city "will move ahead and we will get back to the business of promoting the greatest travel destination in the world—when the time is right."

Seth Schorr, chairman of the Downtown Grand Hotel & Casino, said he is hopeful there will be no drop in visits in coming months. He said he has noticed no uptick in cancellations and no decline in the pace of new reservations.

"I think we're learning as a nation to not allow these things to impact our daily lives," Mr. Schorr said. "Especially the things that we cannot control."

Even as the city mourns and investigators scour clues for a motive behind Stephen Paddock's shooting rampage that left 58 people dead, the mood on the Las Vegas Strip lifted as the week progressed.

Monday evening, the day after the attack, was eerily quiet, with festive public displays such as the Fountains of Bellagio turned off out of respect for the victims. But by Thursday night, boisterous crowds were back. Groups of revelers strolled with 3-foot-tall daiquiris strapped to their necks. Scantily clad women in police costumes were handcuffing passersby, angling for paid photos. Beer pong tables were full at O'Shea's Casino close to the Strip.

Kevin Riley had been in town since last Sunday, part of a two-week motorcycle excursion from Chicago to Los Angeles. Standing in front of the Bellagio fountains, the Australian marveled at how the Strip felt no different than other times he has visited.

"The way it came back the night after the event, that said, 'Nothing's going to dampen this town,' " Mr. Riley said.

Tonyia Mitchell arrived Tuesday night from Lexington, Ky., for a hair-products conference. She said some of her coworkers chose not to come in light of the shooting, but she hasn't regretted her decision.

"You can't quit living life," she said. "I'll definitely be back."

Weakened Nate Pulls Its Punch In South

By Peter Grant And Douglas Belkin

Hurricane Nate weakened to a tropical depression Sunday as it brought heavy rain to Mississippi and Alabama, hours after making a second U.S. landfall near Biloxi, Miss., as a Category 1 storm.

The National Hurricane Center said Sunday that Nate was "rapidly weakening" but heavy rainfall was spreading over the southeastern U.S.

Nate's center "will continue to move inland across the Deep South, Tennessee Valley and central Appalachian Mountains through Monday," according to the hurricane center. "Little change in strength is predicted during the next couple of days, but Nate is forecast to become posttropical on Monday or Tuesday."

The storm, which made its first U.S. landfall Saturday evening in Louisiana near the mouth of the Mississippi River, brought stinging rain to the U.S. Gulf Coast as its powerful winds pushed water onto roads, but no deaths or injuries in the U.S. were immediately reported, according to the Associated Press. The storm killed at least 21 people in Central America.

Before Nate came ashore in the U.S., officials in Alabama, Florida, Louisiana and Mississippi declared states of emergency as they girded for possible storm surges as high as 11 feet along with power outages. Some residents of New Orleans and Mississippi were evacuated.

More than 100,000 homes in the hardest-hit areas of Alabama, Mississippi and northwest Florida lost power, but utility companies said Sunday they were moving quickly to restore service.

Nate's maximum sustained winds decreased to 35 miles an hour, according to the most recent advisory. Earlier Sunday, the storm had maximum sustained winds near 70 mph.

Nate, the first significant tropical cyclone to hit eastern Louisiana and Mississippi this year, comes after Hurricanes Harvey, Irma and Maria caused billions of dollars in damage in Texas, Florida and Puerto Rico.

Victim Seeks to Freeze Gunman's Assets

By Chris Kirkham And Zusha Elinson

LAS VEGAS—The son of a Southern California man who died in the Las Vegas massacre last week is asking a Nevada court to freeze the assets of gunman Stephen Paddock so that he and other victims can pursue claims.

The petition filed Friday by Travis Phippen is believed to be the first civil legal action filed on behalf of victims since the Oct. 1 attack.

Mr. Phippen, 24 years old, was at the Route 91 Harvest music festival in Las Vegas with his father, John Phippen, when Paddock began firing on the crowd from a suite at the Mandalay Bay Resort and Casino. Before he killed himself, Paddock fatally shot 58 people. Nearly 500 others were injured.

The legal action aims to prevent Paddock's assets from being transferred to his girlfriend, his brother or any other potential heirs.

It asks that John Cahill, the public administrator of Clark County, Nev., be appointed to oversee Paddock's estate.

The filing argues the move "is necessary to allow one or more lawsuits to be pursued" by Mr. Phippen and "others who have suffered loss, distress and injuries" by Paddock's rampage. "The last thing we want to do is have these clients and victims be emotionally damaged twice if that money disappears," said Richard A. Patterson, the lawyer representing Mr. Phippen.

MIKAYLA WHITMORE/ASSOCIATED PRESS

In Las Vegas, 58 crosses display the names of those killed in last week's shooting.

Mr. Patterson said he has been in touch with other victims and their families.

Authorities announced Sunday that they would begin to release some of the thousands of items left in the concert venue by survivors of the attack, such as cellphones, purses and clothing.

Some churches in Las Vegas planned candlelight vigils Sunday to recognize the one-week mark since the massacre occurred. Marquees along the Las Vegas Strip were to go dark for 11 minutes at 10:05 p.m. local time in tribute to the victims and their families.

Also on Sunday, casino mogul Steve Wynn told Fox News that Paddock and his girlfriend were well known to the staff at his properties. Paddock had "the most vanilla profile one could possibly imagine" and was "a modest gambler, at least by our standards," who "never owed money anywhere in Las Vegas," said Mr. Wynn, who heads Wynn Resorts Ltd.

Meanwhile, investigators have yet to identify a motive in the massacre, but they are focusing on Paddock's preparations. Paddock may have practiced shooting in the desert days before the attack, a law-enforcement official said.

Undersheriff Kevin McMahill of the Las Vegas Metropolitan Police Department said Friday that investigators recovered a piece of paper with numbers on it from Paddock's hotel suite. He said the numbers may have been calculations on the distance from the 32nd-floor suite to his target, the outdoor concert venue below.

John Phippen, 56, ran a remodeling and repair company in Santa Clarita, Calif. He was fatally shot while attempting to shield others from the gunfire, said Thomas Polucki, a friend who spoke with the family.

His son, Travis, is a medic who helped treat injured concertgoers and was himself wounded by a gunshot, according to Mr. Polucki.

—Jennifer Levitz contributed to this article.

Army Set to Broaden Battlefield Definition

The Army is preparing to unveil a new approach for fighting future wars that combines space, cyberspace and traditional combat, in preparation for conflicts short of all-out war that require attacks or counterstrikes in uncertain situations, officials said.

By Ben Kesling in Washington and Julian E. Barnes in Brussels

A document on the new approach being released on Monday also will caution that decisive victory in such a so-called hybrid war may not be possible and warns that policy makers will need to re-evaluate existing constraints and more quickly green light military action.

Adding urgency to the effort, Army officials suggested that other major powers, such as Russia, have outpaced the Pentagon in honing the use of hybrid warfare, also known as multidomain battle—combining cyberattacks and social-media exploitation with special forces and conventional military units. The Army's new warfighting concept seeks to narrow that gap.

US ARMY SERVICES/REUTERS

Cyberdefense operations at a U.S. Army center in Maryland in 2014

"They have studied us and our vulnerabilities, fielding capabilities that contest us in all domains," said Maj. Gen. Bo Dyess, in charge of the office that created the new concept. "We need a new concept to address these peer adversaries."

While the U.S. has used cyberwarfare offensively in the past, that was done often via secret means. While secret efforts would continue, this concept allows the conventional army to acknowledge similar efforts.

The new Army approach was developed with advice from experts in special operations, space and cyberspace, Gen. Dyess said.

Russia has emerged as a focus of the strategy because of its alleged interference in U.S. elections and social-media networks, but also because of its military operations in places like Ukraine and Eastern Europe. The Army document doesn't directly cite Russia as the prime adversary, though multiple footnotes refer to increased Russian capabilities.

Russian officials in the past have said that the U.S. and its allies are pursuing aggressive policies and Kremlin military actions represent its response.

Gen. Dyess said the conventional military has lacked guidance about how to fight wars where an adversary uses a range of capabilities, some overt and some covert, to win a conflict.

The concept paper, slated for release at the beginning of the Army's weeklong professional gathering in Washington, should change the military's thinking about when and how the Army fights, what tools it uses and how it can best counter adversaries, said Gen. Dyess. While the concept applies only to the Army, other branches have been part of the discussion and could sign on as the concept moves to become established doctrine.

The concept paper isn't official military doctrine, but represents a first step toward codifying Army thinking and changing how the military develops its strategy and its field manuals.

Until recently, unclassified U.S. strategy has focused on deterring hybrid warfare in large part by positioning forces along national borders or preparing to reinforce forces rapidly in a conflict. Putting forces forward in a country that could be subject to hybrid attack makes a military intervention by an adversary more risky. But there has been less discussion of how to fight once such deterrence has failed, and hardly any discussion of pre-emptive and early action by the U.S. and its allies.

Gen. Dyess said the paper was "the first time we have put together a series of ideas to deter and, if needed, defeat their 'lightning' military campaigns, such as we saw in Crimea," he said, referring to Russian aggression but without mentioning the country by name.

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Democrats Seek Distance From Weinstein

Producer was a major fundraiser for the Clintons, Obama and others in the party

BY JOHN D. MCKINNON AND JOSHUA JAMERSON

Harvey Weinstein, the Hollywood movie producer accused of sexual misconduct, donated hundreds of thousands of dollars to Democrats over the years, including to some 2020 presidential contenders.

Now they're scrambling to give it back.

Many top Democrats have sought to distance themselves from Mr. Weinstein in recent days, after a New York Times investigation found he had paid settlements to at least eight women who accused him of sexual harassment. Mr. Weinstein, who has been a major fundraiser for Democrats for decades, apologized for his past behavior.

The Democratic National Committee said in a statement that it would donate more than $30,000 to various causes, including Emily's List, a political-action committee funding Democratic women candidates who support abortion rights. Some Democrats noted privately that sum represented a fraction of the nearly $500,000 that federal campaign finance records show Mr. Weinstein has given to Democratic Party organizations.

SUSAN WALSH/ASSOCIATED PRESS

Movie mogul Harvey Weinstein and Whoopi Goldberg listen to first lady Michelle Obama in 2013.

Sens. Cory Booker of New Jersey, Al Franken of Minnesota, Kirsten Gillibrand of New York and Elizabeth Warren of Massachusetts, all viewed as possible candidates to lead the ticket in 2020, have said they would donate the value of Mr. Weinstein's contributions to charities.

On CNN on Sunday, Sen. Chris Murphy (D., Conn.) suggested that all of Mr. Weinstein's contributions over the years should be returned by Democratic organizations or donated to charity.

"This is a pretty bad guy who did some really awful things," Mr. Murphy said. "If people need for that money to be returned in order to make it clear that the entities that received them want nothing to do with him and his behavior, then it is probably a smart move."

The Democrats' moves come as Mr. Weinstein becomes increasingly isolated in Hollywood. He initially took an indefinite leave of absence from his role as co-chairman of Weinstein Co., but the board fired him on Sunday. The lawyer who had been advising Mr. Weinstein resigned over the weekend.

A spokesman for Mr. Booker said the senator's campaign has donated the $7,800 received from Mr. Weinstein to the New Jersey Coalition Against Sexual Assault, a nonprofit organization. Mr. Weinstein donated $5,000 to Ms. Warren in 2012. Her campaign said she has donated that money to a nonprofit in Boston.

Mrs. Gillibrand's office said in a statement that she would be donating the $11,800 she had received from Mr. Weinstein to charity. Mr. Franken's office said his campaign will donate $19,600 to charity. Mr. Weinstein has previously donated $10,000 to Mr. Franken's campaign and has also contributed to the senator's political-action committee.

Senate Minority Leader Chuck Schumer also is donating $16,200 in contributions from Mr. Weinstein to charity, according to spokesman Matt House.

Mr. Weinstein has been close to past Democratic presidents, as well as presidential aspirants. He seldom appeared to push particular policy positions, according to several Democrats interviewed, although he has broadly supported the party agenda on issues such as gun control. Instead, Mr. Weinstein mostly has appeared to enjoy mingling with the politically powerful, even offering help in securing internships or getting scripts into the right hands, the Democrats said.

"You could say there was a certain amount of ego involved," said one Democratic fundraiser.

He was a close ally and friend of both former President Bill Clinton and his wife, Hillary Clinton, the 2016 Democratic presidential nominee. He helped organize a 50th birthday party for then-President Clinton in New York in 1996.

Later, during Mr. Clinton's impeachment process, Mr. Weinstein was a major donor to the president's legal defense fund. He also helped spearhead fundraising for Mrs. Clinton's successful run for the Senate in New York.

Representatives for the Clintons didn't immediately respond to a request for comment.

Mr. Weinstein also supported former President Barack Obama, hosting a dinner in 2012 at his Connecticut home that raised $2.4 million for Mr. Obama. A representative for Mr. Obama didn't immediately respond to a request for comment.

—Peter Nicholas contributed to this article.

STUDIO

Continued from Page One

decessor studio, Miramax, in many ways have been inseparable from Harvey Weinstein's larger-than-life personality and his talent relationships.

In the years leading up to a New York Times article last week about Harvey Weinstein's alleged sexual misconduct stretching over nearly three decades, tensions at the studio have routinely left Hollywood insiders wondering about Weinstein Co.'s future.

In a statement to the Times, Mr. Weinstein said he apologized about how he had "behaved with colleagues in the past" and said he was working with therapists and would "deal with this issue head on."

Bob Weinstein, who shares 42% of the company with Harvey, doesn't have the same relationships with top actors and directors. He has focused on low-budget horror movies and thrillers, which often made more money than Harvey's more prestigious titles.

One producer working with Weinstein Co. on a coming movie said the scandal hasn't affected his dealings with the company. "I don't think it's something we're concerned about," said Gary Hamilton, the founder of Arclight Films and a producer on "Hotel Mumbai," a scheduled 2018 release about the 2008 Mumbai terrorist attacks that Weinstein Co. is distributing in North America.

Though the revelations prompted Democratic politicians to say they would donate Mr. Weinstein's campaign contributions to charity, the public response among Hollywood elite has been far more muted, making it more difficult to assess the level of long-term damage, if any, done to Mr. Weinstein and his studio among talent. Public pledges to stop working with Mr. Weinstein from his roster of A-list talent haven't emerged.

The studio, once known as an Oscar factory capable of winning awards and generating robust ticket sales, has struggled in recent years to find box office hits. Repeated attempts to sell its television arm were unsuccessful. Through it all, Mr. Weinstein's reputation as a volcanic and demanding personality was hurting his chances at winning the hottest scripts in town or retaining key executives, according to people who do business with the studio.

The tensions had even extended to Mr. Weinstein's relationship with his brother, who

> *A rift between the Weinstein brothers would have once been unthinkable.*

had built Miramax with him and helped create the playbook that had produced cultural touchstones like the 1990s films "Pulp Fiction" and "The English Patient."

The Weinstein brothers have been feuding for a number of years, according to people who knew them, and they long had a tense relationship.

Problems at Weinstein Co. erupted further since the New York Times published an article on Thursday alleging Mr. Weinstein has paid confidential settlements to at least eight women who accused him of sexual harassment. Mr. Weinstein, the women said, had requested massages, took meetings in the nude and offered to trade career advancement in exchange for sexual favors, according to the article.

The allegations of Mr. Weinstein's sexual misconduct have cast doubt on film and television projects in the Weinstein Co. pipeline, and left Hollywood wondering what exactly Weinstein Co. looks like going forward. Despite his infamous temper, Harvey Weinstein was among the most skilled executives in Hollywood at charming A-list talent and convincing them to work with his studio—a pull that may explain the muted response from show-business elite since the revelations.

On Friday, three Weinstein Co. board members resigned because they felt blindsided and betrayed by the allegations in the New York Times article, according to a person with knowledge of their decision. A fourth board member resigned on Saturday.

The three directors who resigned Friday first learned that the settlements existed about 48 hours before the article published, when Mr. Glasser alerted the board that the piece was coming. But they didn't know how damaging the allegations would be until they read the article for themselves, according to a person familiar with their discussions.

The board was kept in the dark because it was Mr. Weinstein personally, not his company, who was threatened with lawsuits and ultimately settled with accusers, the person said.

Producers who have worked with Mr. Weinstein said his explosive temper and demands for creative control often made his company a second choice to other studios.

But Mr. Weinstein's track record at the Academy Awards and his ability to elevate undiscovered talent gave him incredible power in Hollywood.

—Joe Flint and Jeffrey A. Trachtenberg contributed to this article.

Trump, Corker Trade Jabs On Twitter

BY JOSHUA JAMERSON

WASHINGTON—President Donald Trump and a senior Republican senator traded personal barbs on Twitter Sunday, the latest example of tensions between the president and senators in his party.

Mr. Trump criticized Sen. Bob Corker, the chairman of the Senate Foreign Relations Committee, who had recently suggested there is "chaos" in the White House and said he wouldn't back the GOP tax bill, a top party priority, if it added to the deficit.

Mr. Trump wrote on Sunday that Mr. Corker had announced last month that he wouldn't seek re-election because he "didn't have the guts to run" for office without the president's endorsement.

"Senator Bob Corker 'begged' me to endorse him for re-election in Tennessee. I said 'NO' and he dropped out (said he could not win without my endorsement)," Mr. Trump wrote on Twitter.

Mr. Trump also wrote that

ASSOCIATED PRESS

'It's a shame the White House has become an adult day-care center,' Sen. Corker wrote.

Mr. Corker wanted to be secretary of state but that Mr. Trump declined to offer the position. "Hence, I would fully expect Corker to be a negative voice" regarding Mr. Trump's agenda, he wrote.

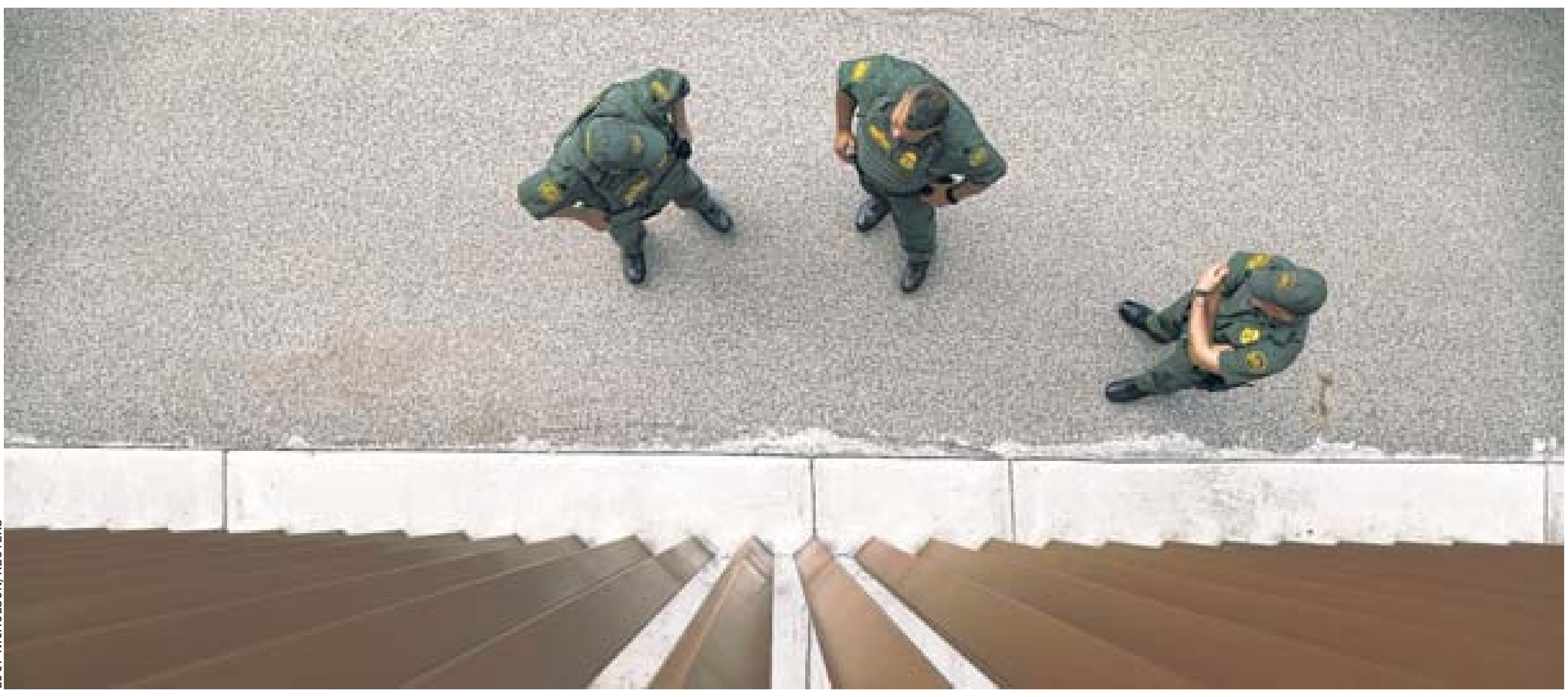
Mr. Corker responded shortly after, writing: "It's a shame the White House has become an adult day-care center. Someone obviously missed their shift this morning."

Mr. Corker's staff also disputed the president's account of his decision to not seek re-election.

Todd Womack, Mr. Corker's chief of staff, said on Sunday that Mr. Trump "called Sen. Corker on Monday afternoon and asked him to reconsider his decision to not seek re-election and reaffirmed that he would have endorsed him, as he has said many times."

Amid reports of tensions between Mr. Trump and Secretary of State Rex Tillerson, Mr. Corker told reporters recently that he hoped Mr. Tillerson would stay on.

"I think Secretary Tillerson, Mattis and Kelly are those people that help separate our country from chaos," Mr. Corker said, referring to Defense Secretary Jim Mattis and White House Chief of Staff John Kelly.



LUCY NICHOLSON/REUTERS

A fence used for training at the U.S. Border Patrol Academy in New Mexico. The White House wants to increase border enforcement as part of any 'Dreamers' bill.

BORDER

Continued from Page One

were the highest priority, saying the administration didn't care to negotiate with itself.

Among the principles is a call for funding sufficient to "complete construction" of a Southern border wall. The White House wants to end legal protections for unaccompanied minors who arrive without authorization and allow them to wait inside the country while their cases are considered. The administration also wants to make it harder for people to qualify for asylum and detain asylum applicants while their cases are being considered. In most cases applicants currently are allowed to live freely inside the U.S. during what can be a lengthy wait for a decision on their status.

The document also calls for punishing jurisdictions that don't cooperate with federal immigration enforcement—so-called "sanctuary cities"—by withholding federal grant money. And it wants Congress to mandate the use of E-Verify by employers to check the immigration status of prospective workers. The system is currently voluntary.

The principles also lay out changes to the legal immigration system that Mr. Trump has already endorsed, including large cuts to green cards issued for family members and shifting existing employment-based green cards to a skills-based system.

Democrats are opposed to some of these ideas outright and don't support others unless they are part of a comprehensive package that includes a path to citizenship for almost all of the estimated 11 million people living in the U.S. illegally.

"The administration can't be serious about compromise or helping the Dreamers if they begin with a list that is anathema to the Dreamers, to the immigrant community and to the vast majority of Americans," Senate Minority Leader Chuck Schumer (D., N.Y.) and House Minority Leader Nancy Pelosi (D., Calif.) said in a joint statement Sunday.

Last month, Mr. Trump met with the pair for dinner and, afterward, it seemed that a deal to legalize Dreamers might be at hand. All three of them suggested that they had agreed to pair protections for the young migrants with border security provisions that didn't include the proposal for a wall along the U.S. border with Mexico.

But after that, many congressional Republicans said they would seek to extract more significant enforcement provisions as part of any deal. And on Sunday, a White House official said the only agreement was that dealing with Dreamers was a priority.

None of the White House goals is surprising in and of itself, with the president and his aides having articulated most if not all of them in the past. But it was unexpected that the administration would suggest trading such a sweeping enforcement agenda for legalization affecting only a slice of the undocumented population.

While the principles went into detail on some matters, other questions remained, including details of the border wall. Administration officials declined to say how many miles of barrier it wants or how much it would cost.

Many of the proposals outlined are included in legislation that has passed the GOP-controlled House but wasn't considered in the Senate.

Another contentious question is what sort of protections Congress might enshrine for the young people who had been protected by the Obama-era Deferred Action for Childhood Arrivals program.

A White House official said that the administration wasn't interested in providing these people with a path to citizenship, as the Dream Act provides. But last week, two administration officials told a Senate committee young people should have the opportunity for citizenship.

—Rebecca Ballhaus contributed to this article.

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WORLD NEWS

Big Barcelona March Backs Government

Hundreds of thousands of unionists make rare show of strength in capital of Catalonia

By Jeannette Neumann And Giovanni Legorano

Protesters waved Spanish flags in Barcelona on Sunday during a demonstration in the Catalan capital supporting national unity.

LUIS GENE/AGENCE FRANCE-PRESSE/GETTY IMAGES

BARCELONA—Hundreds of thousands of Spaniards gathered here to decry Catalonia's secessionist push, a bid by pro-union groups to build momentum against a unilateral declaration of independence that could come as soon as this week.

The demonstration in central Barcelona, the capital of Spain's Catalonia region, is a rare show of strength for the pro-union movement, whose gatherings have typically attracted several thousand protesters in recent years, compared with the hundreds of thousands routinely mobilized by pro-independence groups.

On Sunday, though, Barcelona's streets were filled with an atypical sight: people waving red-and-yellow Spanish flags, unfurled alongside Catalan regional flags.

"For some time now, nationalism has been wreaking havoc in Catalonia and that's why we're here, to stop it," Nobel Literature Prize laureate Mario Vargas Llosa told the 930,000 people gathered, organizers said. Barcelona police put that figure at closer to 350,000. Such discrepancies are common.

"We are fed up with this situation. We haven't been out on the street until now, but this time around has been so surreal, so unfair, that we had to do something," said Juan Maldonado, a 52-year-old electrician from Barcelona, as people chanted "here are the other Catalans."

Polls by the region's survey agency indicate that more than a third of Catalans support an independent Catalonia, although sentiment could have shifted following the Oct. 1 independence referendum, which was marred by clashes between police and voters and declared illegal by Spanish Prime Minister Mariano Rajoy.

Catalan President Carles Puigdemont is expected to address Catalonia's regional parliament on Tuesday and could make a declaration of independence.

"We will prevent independence from materializing," Mr. Rajoy said in an interview published on Sunday by top Spanish daily El País. "I can say with absolute frankness that it won't happen." He said he didn't rule out invoking constitutional powers that would allow him to seize control of the regional Catalan government.

Lawmakers who led Sunday's demonstration were mainly from Mr. Rajoy's center-right Popular Party and from centrist Ciudadanos.

Tens of thousands of people had also gathered across Spain on Saturday, many dressed in white, to call for talks between political leaders to resolve the country's greatest political crisis in decades.

The pro-union march on Sunday adds to building momentum against secession, putting additional pressure on moderate separatists to seek another route, such as pulling back and focusing on talks with the central government or calling new regional elections.

Some lawmakers in Catalonia's parliament, where separatists have a majority of seats, say new elections could increase their representation in the assembly and strengthen their hand in potential talks with Madrid.

Last week, several flagship Catalan companies, such as **CaixaBank** SA and **Gas Natural SDG** SA, said they were shifting their legal headquarters outside of Catalonia on fears of a declaration of independence.

Region's Push for Independence Fuels Divisions Among Residents

By Jeannette Neumann

SAN CUGAT DEL VALLES, Spain—Every night at 10 p.m., José Domingo's building becomes a microcosm of the divide that has riven Catalonia, pitting those who want independence for the region against those who believe it should remain united with Spain.

Each evening, around a dozen neighbors step onto their balconies in this well-heeled town outside Barcelona and bang pots and pans to show their support for the independence of the wealthy region in northeastern Spain.

The cacophony, called *caceroladas*, "feels like an assault" to Mr. Domingo, who opposes independence and has hung a red-and-yellow Spanish flag and a Catalan one on his balcony.

In recent days, other neighbors have unfurled about half a dozen Spanish flags on their balconies, while around a dozen separatist *esteladas* adorn others, transforming his courtyard into a canvas depicting a divided Catalonia.

"The separatist movement has decided to put in motion its [independence] process without taking into account at least half of the population," said Mr. Domingo, a lawyer. "The main problem that Catalans have isn't with Spain. It's with fellow Catalans."

The deeply divided feelings that have marked the aftermath of Britain's Brexit referendum and the U.S. presidential election have now come to Catalonia, where discussion of the independence issue is so fraught that it is off limits for many gatherings of family, friends and colleagues.

Weeks of *caceroladas* and massive protests in favor of secession have exacerbated fault lines between those who want Catalonia to remain a part of Spain and those who support its hurtle toward a declaration of independence, which could come as soon as this week.

Such divisions highlight the difficulty of finding a path out of the current standoff between Catalonia and Madrid.

In June, 35% of Catalans supported independence, down from a peak of 49% in autumn 2013, according to the region's survey agency. Those figures were published before the Oct. 1 independence referendum.

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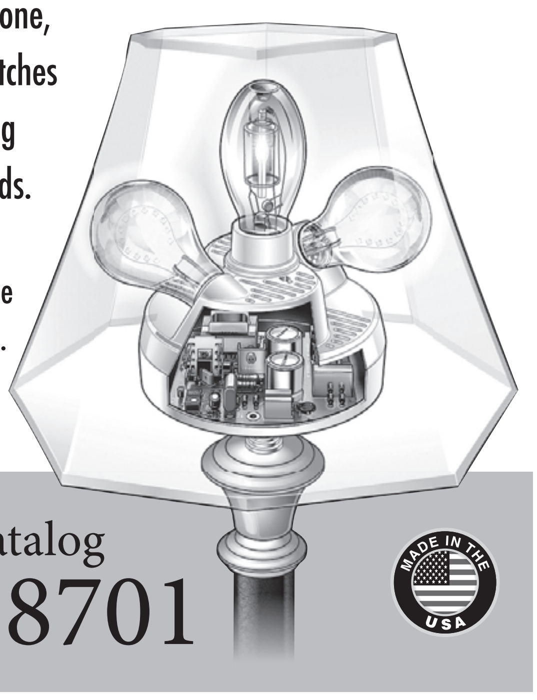

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Turkey, U.S. Curb Visas as Rift Grows

By Felicia Schwartz

The U.S. and Turkey on Sunday stopped issuing nonimmigrant visas to each others' citizens on Sunday as differences between the NATO allies escalated into measures that could affect thousands of travelers.

The U.S. Embassy in Ankara made the first move, saying that "recent events have forced the United States government to reassess" Turkey's commitment to securing U.S. diplomatic personnel and property. Processing of nonimmigrant visas would be halted to minimize the number of visitors to its facilities while it completed the review, the embassy said.

Several hours later, Turkey's embassy in Washington issued a nearly identical statement that it would suspend nonimmigrant visa services at its missions in the U.S. while it reassesses security.

In 2016, the U.S. Embassy in Ankara and consulate in Istanbul issued 113,240 nonimmigrant visas and 4,834 immigrant visas.

The Turkish lira lost as much as 4.1% of its value against the dollar in early Monday trading in Asia, though it later pared some losses to trade at 3.7453 per dollar.

IBRAHIM LALELI/ZUMA PRESS

Turkish President Erdogan addressed his party on Sunday.

Risk of Iraqi-Kurdish Clash Rises

By Isabel Coles And Ali A. Nabhan

DAQUQ, Iraq—For more than three years, the weapons along a front line held by Kurdish forces in northern Iraq have been aimed at Islamic State militants occupying the nearby city of Hawija.

Now, they are pointed toward Iraqi forces who have just routed the militants from Hawija—the latest in a series of victories that have brought Islamic State to the verge of defeat in Iraq.

Islamic State's loss of Hawija removed the last buffer between Kurdish and Iraqi forces just as tensions between their respective leaders are intensifying over last month's referendum in which Kurds voted overwhelmingly for independence.

The two forces cooperated for years to oust Islamic State, sharing intelligence and coordinating troop movements.

"We used to have a common enemy, but now things are changing," said Col. Aso Ali Ahmed, a deputy commander of a brigade of Kurdish Peshmerga forces stationed near Hawija. "There may be war or there may not."

As the threat of Islamic State recedes and the alliance between Kurdish and Iraqi forces weakens, the risk that the one-time partners will turn their guns on each other in future is growing, though leaders on both sides say they want to avoid conflict.

In the wake of the referendum, Iraq's parliament authorized Prime Minister Haider al-Abadi to deploy troops to retake areas outside the official boundary of the semiautonomous Kurdistan region that have come under Kurdish control in recent years, including during the fight against Islamic State.

Mr. Abadi also accused the Kurds of seeking to delay the Hawija operation, which was launched four days before the Kurdish independence referendum, which took place Sept. 25. A Peshmerga official denied that.

The central government in Baghdad and the Kurds—backed by the U.S.-led coalition fighting Islamic State—came together to fight the terror group after it overran about a third of Iraq in 2014, setting aside differences over land and resources that have strained relations for more than a decade.

The areas taken over by the Kurds during the war on Islamic State include the oil-rich province of Kirkuk. Kurdish leaders vow that they won't relinquish the territory they seized or protected from Islamic State—especially Kirkuk, which is economically and symbolically indispensable to the state the Kurds dream of declaring.

Iraq is the second-largest oil producer in the Organization of the Petroleum Exporting Countries, and its economy is heavily dependent on oil. A significant portion of those resources are in the north, some within the Kurdistan region and some in territory controlled by Kurdish forces.

The most controversial aspect of the Kurdish referendum was the decision to conduct the vote in areas controlled by Kurdish forces outside the official boundary of the semiautonomous region of Kurdistan.

Masoud Barzani, the Kurdish regional president, visited Peshmerga commanders in Kirkuk last week and instructed them to fortify their positions as Iraqi forces advanced in Hawija.

At one outpost on this front line, Peshmerga fighters surveyed the changing landscape on Friday, picking out the flags of Iraqi security forces and assorted government-backed paramilitary groups on the other side of the berm. The mood was relaxed but wary.

"We don't know what their intention is, where they are going, or what they want to do," said Capt. Beevan Mohammed. "We won't attack anyone, but we won't accept anyone attacking us."

A makeshift shrine at another outpost commemorates 21 Peshmerga fighters killed defending a stretch along the front.

"We paid for this with blood and it will take blood to make us leave," said Cpl. Hiwa Ahmed.

So far, Mr. Abadi has eschewed force, instead imposing a ban on international flights to and from the landlocked Kurdistan region. "We don't want armed confrontation. We don't want clashes. But federal authority must prevail," Mr. Abadi said Thursday.

Although the referendum doesn't automatically confer statehood, the government in Baghdad opposed it, as did the U.S.

The Kurdish leadership also says it doesn't want conflict, and has called for dialogue with Baghdad.

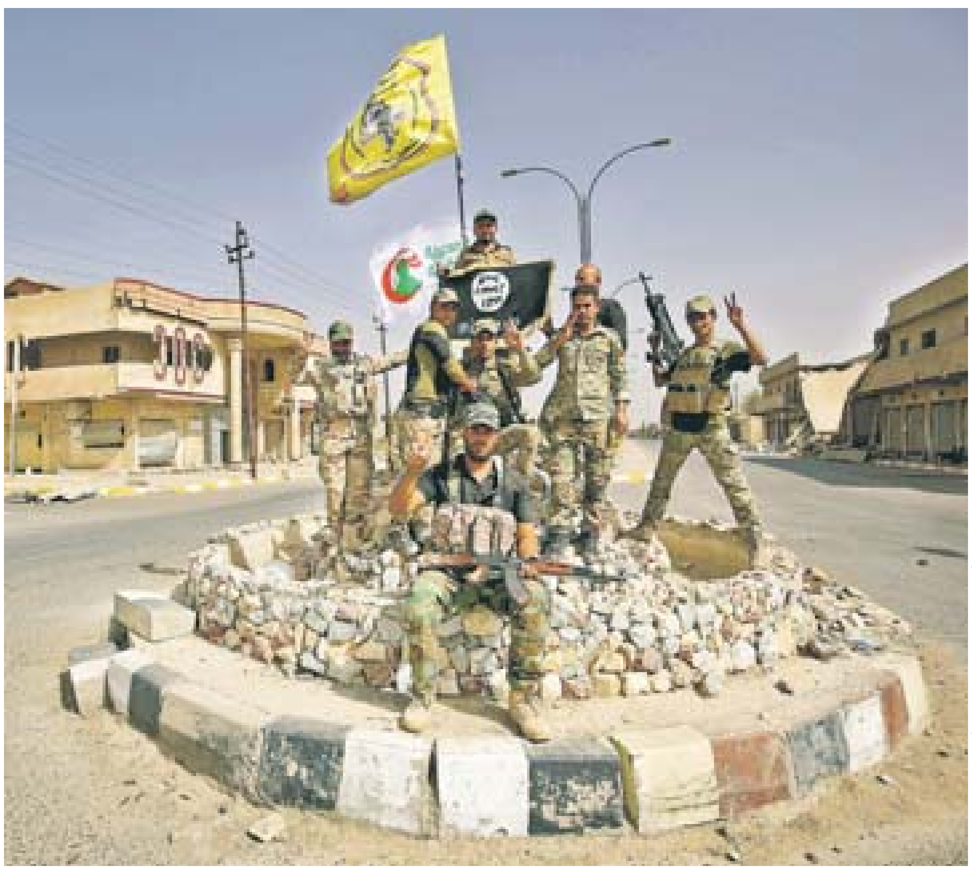
But there has also been aggressive rhetoric, including from leaders of some government-backed Shiite paramilitary groups known collectively as the Popular Mobilization Forces, which have fought Islamic State alongside the Iraqi military.

Some of the militias within the Popular Mobilization Forces are loyal to Iran, which has been one of the staunchest opponents of the referendum and could mobilize its allies in Iraq against the Kurds.

Both sides have recruited local residents from the disputed territories in northern Iraq. It took an intervention by senior Kurdish, Iraqi and Iranian officials to end clashes last year between members of the local ethnic Turkmen minority who have joined Shiite paramilitary groups, and Kurdish forces in a town south of Kirkuk.

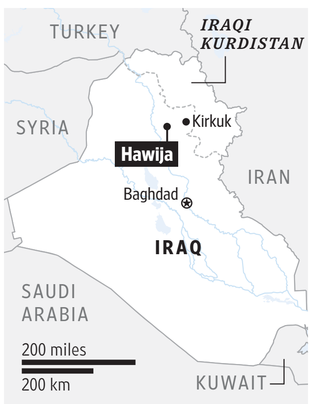
Among those who fought in the Hawija operation was Arab tribal leader Sheikh Burhan al-Assi, who assembled a small militia of 75 fighters to recapture his own village just yards from the new front line with the Kurds. Mr. Assi, who is also a member of the Kirkuk provincial council, said he hoped Baghdad and the Kurds would reach an agreement. "I am not against self-determination for the Kurdish people as long as it does not infringe upon the rights of others," he said.

—Ghassan Adnan contributed to this article.



AHMAD AL-RUBAYE/AGENCE FRANCE-PRESSE/GETTY IMAGES

Iraqi forces posed on Oct. 5 after recapturing Hawija from Islamic State fighters. The ISIS loss removed the last buffer between Kurdish and Iraqi forces amid tensions over last month's referendum.



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WORLD NEWS

KOREA

Continued from Page One

tensifying as the Trump administration adopts stricter sanctions at home, and the United Nations pursues enforcement of its tightest sanctions on Pyongyang yet. Despite the State Department's efforts, Mr. Trump has signaled he doesn't think the crisis can be resolved through diplomatic channels, and has repeatedly raised the prospect of military action.

Mr. Trump's latest threat came in a Twitter message Saturday from the president. "Sorry, but only one thing will work," Mr. Trump wrote. On Thursday, he said a White House meeting with military leaders represented "the calm before the storm." The White House refused to clarify either remark.

The previous weekend, Mr. Trump tweeted that Secretary of State Rex Tillerson was "wasting his time" by exploring the possibility of negotiations with North Korea. Mr. Tillerson days later held an unusual, unscheduled news conference to deny reports that he had considered resigning.

The U.S. diplomats, pursuing a quieter campaign alongside U.N. sanctions and talks with China, have been approaching nations as big as Germany and as small as Fiji with highly specific requests, sometimes based on U.S. intelligence, to shut down North Korea's foreign links.

For example, a U.S. official said, the State Department flagged a North Korean hostel operating in the center of Berlin that they said was sending currency back to the Kim Jong Un regime. In May, Germany announced it was closing the hostel.

U.S. diplomats asked Fiji to inform the U.N. that as many as 12 North Korean vessels were operating under the Fijian flag without permission, a State Department spokesman said.

The idea, according to U.S. officials, is to show Mr. Kim that, so long as he seeks missiles capable of carrying nuclear warheads, he will find no refuge from Washington's pursuit.

U.S. policy makers, led by Mr. Tillerson, have said they hope that Mr. Kim eventually will conclude his program comes at too high a cost to his regime and his nation and enter disarmament talks.

The likelihood of success has become a matter of debate. The U.S. intelligence community has concluded that no amount of pressure would convince Mr. Kim to disarm because the North Korean leader sees the nuclear and missile program as his regime's ticket to survival, Senate Foreign Relations Committee Chairman Bob Corker, a Tennessee Republican, said at a recent hearing.

"Tillerson's working against—I applaud what he's done, but he's working against the unified view of our intelligence agencies, which say there's no amount of pressure that can be put on them to stop," Mr. Corker said.

Susan Thornton, the State Department's top diplomat overseeing the pressure campaign, said at the hearing that the department's efforts were testing the intelligence community's assessment and added China's position was slowly shifting, viewing North Korea as more of a liability than an asset. "I think Secretary Tillerson has made a lot of progress on that front," she said.

Many U.S. officials believe Washington must pursue a pressure campaign, even if it ultimately fails, because it represents the best chance of a peaceful solution. The White House has said it backs State Department efforts to squeeze Pyongyang, while opposing negotiations.

The pressure campaign has become a cornerstone of Mr. Tillerson's policy on North Korea. He often requests that his staff provide him with "specific asks" he can make on North Korea when meeting with counterparts from around the world, according to U.S. officials. Mr. Tillerson has made those requests in nearly all bilateral meetings in recent months and has received weekly updates.

Mr. Tillerson has elevated the campaign, which began in early 2016 after the Obama administration saw Mr. Kim make a significant advance in his drive for an intercontinental nuclear weapon, according to current and former U.S. officials.

State Department officials then drew up a detailed spreadsheet that listed all of North Korea's known political, economic and military interests around the world—diplomatic missions, cargo ships, guest worker contingents, military relationships and more, a former U.S. official said. The document functioned as a "to do" list of entities to target for closure.

KCNA/AGENCE FRANCE-PRESSE/GETTY IMAGES

FABRIZIO BENSCH/REUTERS

Germany in May said it would close the City Hostel Berlin, which U.S. officials claim was sending currency back to the Kim regime.

WORLD WATCH

RUSSIA

Opposition Protests On Putin's Birthday

Supporters of opposition leader Alexei Navalny rallied across Russia on Saturday, heeding his call to put pressure on the authorities to allow him to take part in the presidential campaign.

The wave of demonstrations on the 65th birthday of President Vladimir Putin comes as Mr. Navalny is serving a 20-day jail term for calling for an unsanctioned protest.

Mr. Navalny's headquarters said protests were to be held in nearly 80 Russian cities.

Rallies numbering from a few dozen to a few hundred people were held in cities across Russia. Most of the demonstrations haven't been sanctioned by authorities, and police detained a few protesters and activists in some cities.

In Moscow, several hundred protesters, most of them young, gathered on Moscow's downtown Pushkinskaya Square, waving Russian flags and chanting "Russia will be free!" and "Free Navalny!" *—Associated Press*

UNITED KINGDOM

Terrorism Ruled Out In Vehicle Injuries

Eleven people were injured and police detained a man after a car collided with pedestrians near central London's Natural History Museum on Saturday, authorities said.

Police said the incident wasn't being treated as terrorism.

At about 2:20 p.m. local time, a car mounted a sidewalk in South Kensington, an area popular with tourists on weekends, with several nearby museums, restaurants and other attractions.

Of the 11 people injured, nine were taken to the hospital, including the man who was detained, police said. They added that the injuries weren't believed to be life-threatening or life-changing.

The U.K. capital has been on edge after a series of vehicle attacks this year.

—Michael Wright

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FROM PAGE ONE

BANK

Continued from Page One

Cryan has had to mediate between German and U.K. managers vying for money and staffing in the bank's reconfiguration for a post-Brexit world. He is under pressure from investors to cut costs, update technology and resuscitate investment-bank profits. And in the background, he has shunned HNA.

Mr. Achleitner was the primary architect of Deutsche Bank's existing executive suite and is known as a hands-on chairman. Some senior executives at times have bypassed Mr. Cryan to appeal to Mr. Achleitner for support on high-level decisions, people close to the bank say.

Early on, this muddied the management waters for Mr. Cryan, people close to the two men say. A bank spokesman says it is normal for a German chairman to have "regular interaction with all management board members." Mr. Achleitner supports Mr. Cryan, and it is good for them to disagree at times, people close to them say.

Over the past year, Deutsche Bank has survived legal battles that threatened its stability in the eyes of investors and clients, and raised $8.5 billion in capital. It also has flip-flopped on major strategy decisions, such as splitting and then recombining its trading unit and investment bank.

But this year brought other, fresh complications. Mr. Achleitner helped Deutsche Bank court HNA, before and during the German lender's capital increase in March and April, people close to the bank say.

Mr. Cryan and HNA CEO Adam Tan haven't met, the people close to the bank say. Mr. Achleitner and HNA representatives tried to bring the two together, but Mr. Cryan prefers to focus on clients and regulators, people close to the Deutsche Bank CEO say.

"Yes, he hasn't met him, but of course he will," a Deutsche Bank spokesman said.

SEPP SPIEGL/ROPI/ZUMA PRESS

Deutsche CEO John Cryan, left, and Chairman Paul Achleitner

HNA has drawn scrutiny well beyond Deutsche Bank. German and European regulators are reviewing the company, its funding and its Deutsche Bank holding, including what influence HNA might have over the bank as its largest shareholder. The closely held company had faced mounting questions about its ownership and potential ties to the Chinese government as it has ramped up overseas investment.

HNA uses derivatives to limit losses and gains on its Deutsche Bank holding. Mr. Cryan views the structure

The iciness has raised eyebrows among supervisory-board members.

HNA used to invest in the lender as speculative, saying it creates risks for the lender and investors, people close to the bank say.

HNA said through a spokesman that it "continues to view Deutsche Bank as an attractive investment opportunity" and is "committed to supporting Deutsche Bank's long-term success." The company said it complies and cooperates with regulatory authorities and its relationship with banks remains strong. HNA has taken steps to restructure its ownership, including by setting up a New York foundation intended to be its biggest shareholder. The company spokesman said the foundation "looks forward to sharing more about its activities and ambitions in time." A person familiar with HNA said the Chinese government doesn't own a stake in HNA and none of its shareholders hold shares for any Chinese government officials.

HNA first disclosed in mid-February that it held a 3.04% stake in Deutsche Bank through Austrian asset manager C-Quadrat Investment AG. On March 5, Deutsche Bank announced plans to raise $8.5 billion through a share sale. HNA's widely known interest in increasing its stake helped the capital increase go smoothly, by signaling support from a big new shareholder, bankers and investors say.

In early May, HNA disclosed details of its nearly 10% Deutsche Bank holding in a regulatory filing. It showed that HNA used more than $2.8 billion in financing, mainly from UBS Group AG, to help purchase shares worth about $3.8 billion at the time. It also did a derivative deal with UBS. One portion of that deal protected HNA if the shares fell below €15 ($17.60). They have been below €15 since early August and closed Friday at €14.72.

Mr. Cryan, a former UBS finance chief, told some people close to the bank that it couldn't be certain how HNA is funded and that he didn't like that the investor bought the bank's shares and effectively bet against them.

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IN DEPTH

Oh, Scrap! China, Big U.S. Trash Buyer, Wants No More

Piles of recycled bottles and boxes are backing up; 'It's going to be very ugly for probably three to six months'

By Erica E. Phillips

There's one economic activity the U.S. does better than anyone. We're world champs in throwing stuff away.

We are pretty good at getting other people to buy it, too, at least when it comes to all those newspapers, Amazon.com boxes and two-liter bottles Americans toss in the recycling.

The U.S. enjoys a giant trade surplus in scrap, including household recycling, says the Institute of Scrap Recycling Industries Inc. According to the trade group's chief economist, Joe Pickard: "We're like the Saudi Arabia of scrap."

Now there's a heap of trouble confronting America's separators of paper and plastic: The biggest buyer of the stuff doesn't want it anymore.

In July, China filed a notice with the World Trade Organization about its plans to limit the entry of "foreign waste." Even before that, starting this spring, scrap shippers say, some Chinese customers hadn't been able to renew their import licenses.

BASTIAAN SLABBERS/NURPHOTO/ZUMA PRESS

Scrap collected for recycling in South Philadelphia.

That explains the piles that have been building since summer in Southern California at Allan Co., a shipper of recycled scrap materials.

Mountains of scrunched plastic bottles abound at Allan's facilities. Inside a warehouse, stacks of baled office paper and smashed cardboard boxes loom.

"It's going to be very ugly for probably three to six months," says Chief Executive Jason Young. "It's backing up right now as we speak."

The U.S. is the top producer of waste, according to the World Bank, and Americans have been doing a pretty good job recycling some of that. Curbside-recycling volumes have tripled since the late 1980s, surpassing 89 million tons in 2014, according to the Environmental Protection Agency's latest figures.

What most Americans don't know is that after workers pick up and sort their recycling, a good deal travels halfway around the world. The U.S. exported $16.5 billion in scrap last year, the scrap institute says, more than any other country. Paper and plastic were about $3.9 billion of that.

Over two-thirds of America's wastepaper exports and more than 40% of its discarded-plastic exports ended up in China last year, the scrap institute says. Paper and plastic scrap exports to mainland China topped $2.2 billion—more than exports to China of wheat, rice, corn, meat, dairy and vegetables combined, U.S. census data show.

The scrap gains new life in China, and sometimes comes back to America reincarnated after factories break it down and use it as raw material to make new boxes, toys and other goods.

Under the new rules, China by year's end would ban imports of used plastics and require paper-scrap imports to meet a strict 0.3% standard for "carried waste"—the staples, glue, sticky residue and smelly garbage bits that are nearly impossible to eliminate.

Chinese officials said the ban would help crack down on contaminated scrap while promoting a more "ecological civilization," including development of recycling collection domestically.

Some experts in the U.S. say the scrap move could also be a negotiating tactic in China's trade relationship with the U.S.

Global prices have tanked since the biggest customer effectively pulled out of the market, says Brent Bell, vice president of recycling at Waste Management Inc.

The company is working with buyers in India, Vietnam and South Korea to pick up the slack, he says, but "with China having such a large appetite over the last few years, for them to cut it off means movement is going to be a very large issue."

Allan's Mr. Young says he normally sends more than 1,000 containers of scrap a month to China. Without Chinese customers, he has to lease a 60,000-square-foot warehouse to temporarily store bales as he looks for buyers elsewhere, including in Southeast Asia and Latin America. "Everyone's just kind of limping along."

America's recycled glass is largely processed domestically. Metal scrap, including aluminum, will also likely face the 0.3% contaminant rule in China next year.

Widespread curbside recycling has created a generation of committed trash sorters such as Laura Winterstein, a 36-year-old volunteer manager in Minneapolis who says that "pretty much anything I can recycle, I do."

She wasn't aware of the global chain that carries recycled paper and plastic to China. "I know the basic premise of recycling, but not the extent of where it ends up."

American recyclers haven't given up hope. "The Chinese infrastructure for paper mills is pretty robust; it's a big part of their economy," says Waste Management's Mr. Bell. "We know they need that material."

The scrap institute's Mr. Pickard says he expects other markets will develop to take China's place. "Scrap tends to find a home somewhere."

PELTZ

Continued from Page One

On Tuesday, shareholders will get to chose from these competing visions in a proxy fight over whether Mr. Peltz, whose fund owns 1.5% of the company, should have a seat on the P&G board. In an era in which such battles have become common, P&G stands out as the largest company to face off against an activist investor.

Many the world's leading consumer-products companies, which once made the goods that stocked supermarket shelves the world over, have found it hard to adapt to rapidly shifting consumer tastes and the rise of smaller brands. The outcome of the Peltz-P&G battle will help determine the industry's future direction.

JESSICA EBELHAR FOR THE WALL STREET JOURNAL

P&G's Brandon Dunphy observes product tester Jamie Reynolds; the firm faces activist-investor pressure to alter its brand strategy.

Company executives say P&G has learned from past mistakes and transformed itself into a leaner organization. They say the future lies in the same fundamentals that guided the company for 180 years: giant brands like Tide and Gillette that spin off products so effective they dominate their category.

"Declaring big brands dead and buried just because there is new media and a new generation is wrong," said P&G's lead independent director, Jim McNerney, the ex-chief executive of Boeing Co. and 3M Co. "Our new world is big brands presented in different ways through different media."

Different from food?

Mr. McNerney argues that Mr. Peltz, who has had directorships at H.J. Heinz Co. and Oreo maker Mondelez International Inc., is trying to apply a formula that works in food, which is more susceptible to shifting consumer whims, but not for packaged goods such as diapers and dish soap.

"Either your dishes are clean or they aren't," said Mr. McNerney, who started his career as a P&G brand manager and has served on the board since 2003. "Or your car is fresh or it isn't. You win because you have a better-functioning brand because of R&D and chemicals."

Mr. Peltz, whose Trian Fund Management LP is one P&G's largest investors with a $3.5 billion stake, said he knows what shoppers want. "We are in a lot of companies and, whether it's Wendy's or Mondelez, we are living with what the consumer is thinking and doing." Mr. Peltz added he doesn't want the company to abandon big brands altogether.

P&G's biggest rivals, by contrast, have been snapping up independent brands. Unilever PLC last year bought online razor seller Dollar Shave Club and cleaning-products maker Seventh Generation Inc., and said last month it was paying $2.7 billion for one of South Korea's biggest cosmetics companies. S.C. Johnson & Son Inc., maker of Windex and Glade, agreed last month to acquire cleaning-product brands Method and Ecover.

David Taylor, P&G's chief executive, said P&G is open to creating or acquiring new brands but believes the better strategy is to develop new products within the company's existing brands, such as Downy scented beads for laundry or Febreze air fresheners for cars. By adding to established brands, P&G says, it is able to leverage name-recognition and distribution channels already in place.

The two biggest proxy advisory firms have endorsed Mr. Peltz's bid for a board seat over the company's objections. As much as 40% of the vote will be by individuals stockholders, many of them retirees. P&G faces some investors and investment firms skeptical and frustrated after years of underperformance.

Stephen Yacktman, chief investment officer of Yacktman Asset Management, which has a $1.3 billion stake, said he was convinced P&G needs a big shareholder on the board. "The argument that we've heard from P&G doesn't have a good ring to it," he said.

P&G's shares have lagged behind the S&P 500 and competitors for a decade while rivals stole share in categories P&G dominated. Long revered for an ability to meet consumers' desires with blockbuster products such as the Swiffer mop, P&G hasn't had a game-changing new hit since Tide Pods laundry packs in 2012.

The weak results attracted an earlier activist, Bill Ackman, in 2012, leading to a CEO departure the following year. Mr. Ackman, whose Pershing Square Capital Management LP owned as much as 2% as he pushed for change, sold the last of his stake in 2014.

Need for an overhaul

Sales growth was tepid when Mr. Taylor took over in November 2015. The 36-year P&G veteran soon admitted the company was in need of a global overhaul. An electrical engineer by training, the soft-spoken executive pledged to cut $10 billion in costs, mostly by streamlining its supply chain and bureaucracy, and to focus efforts on top brands.

"There is no question that we were losing share" in part because of missing big trends in China and in the Gillette business, said Mr. Taylor, 59. "We've been very transparent about the issues." He and his team argue those problems are in the past.

The same month he assumed the CEO job, Ms. Francisco took over P&G's feminine-care unit, a division that oversees huge brands such as Tampax.

In her first weeks, the 28-year P&G veteran replaced nearly all of her unit's leaders with new managers, mainly from within P&G.

In China, P&G was losing share to regional brands.

> *Investor Nelson Peltz favors less big-brand focus at P&G's and seeks a board seat.*

There, she said, P&G's Whisper brand was viewed as dowdy, and its marketing focused almost entirely on functionality. Online sales were a low priority, and store displays were cluttered and bland. "This is what we were selling," Ms. Francisco said, grimacing as she held up a nondescript box. "This is a really boring pad."

P&G had missed China's exploding middle class. Consumers were also shifting rapidly to online shopping.

Her team came up with a new pad for Whisper, the Koala HuHu, which isn't sold in the U.S. Previously all new P&G products had to be global. The Koala, the longest pad on the market, is imprinted with a koala cartoon with ears and paws folding over to become adhesives, which required reengineering production. HuHu in Chinese is equivalent to Zzzzz. The pads were meant to be used while sleeping.

To get to market quickly, P&G used a local Chinese supplier, another practice the company disliked in an effort to capitalize on its global scale. A P&G team of designers and engineers worked with the supplier, which had never developed a major product for the company, to retool its machinery and set up its factory for the Koala HuHu.

P&G also started selling organic cotton pads as well as Tampax tampons, which are rarely used in China but were just starting to take off. In the U.S., P&G added higher-end products including extra-compact tampons and fashionable incontinence underwear.

The efforts stopped P&G's share losses both in China and at home. Its global share of the feminine-care market is up 0.3% in six months after losses in 2015 and 2016, according to Nielsen data supplied by P&G.

Ms. Francisco said she made use of a new organizational structure P&G has implemented over two years. At first, she had to share sales teams with other P&G units selling unrelated products.

Unilateral decisions

Across P&G, global unit leaders now have control over sales teams and can unilaterally make decisions on product investments and supplier contracts, executives say. Previously, such decisions required a nod from layers of management—a corporate structure nicknamed "the thicket" by frustrated executives.

"When something went wrong, it wasn't clear who or where" was responsible, said finance chief Jon Moeller. "Now, there is no place to hide."

Trian says P&G still has too many executives making decisions at the corporate level. Several retailers and suppliers say doing business with P&G often takes longer and more bureaucratic finesse.

In dealing with Boxed, an online bulk seller of grocery and consumer goods, P&G was slower than Unilever and S.C. Johnson to agree to switch to lower-cost packaging designed for e-commerce, people familiar with the situation said. The P&G team was eager to make the change, but it took more than a year to get approval from higher ups.

"When you are not No. 1, you are willing to make the bigger and bolder bets," said Boxed founder and Chief Executive Chieh Huang. "I think that might be a reason they haven't moved as fast as some other companies."

P&G lost market share globally in all its reporting segments for the fiscal year ended June 30. In each segment, the losses narrowed from the previous year, but trouble spots remain.

Mr. Taylor said it would take time for some of his efforts to bear fruit. Meanwhile, he has made fighting off Mr. Peltz a personal mission. When discussing the activist's criticisms at his office in downtown Cincinnati, Mr. Taylor kept his voice even while restlessly bouncing his knee. "I'm getting fired up," he said. "I'm not mad, though. I'm determined."

Famous Names

P&G's brands often dominate their markets, but some have underperformed.

U.S. MARKET SIZE

CHANGE IN SALES FOR 52 WEEKS ENDED SEPT. 9

Procter & Gamble change

Total market change

Source: Nielsen via Wells Fargo

Photos: Bloomberg News; Getty Images

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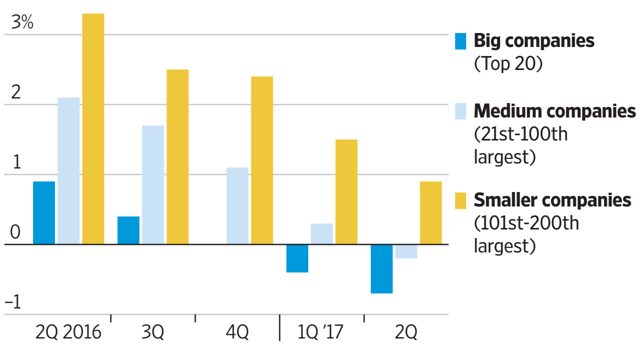
Sluggish Giants

Procter & Gamble and other big consumer-goods companies have slower growth than their smaller rivals.

Change in dollar sales from the previous year



Note: Categories based on revenue

Source: Nielsen

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GREATER NEW YORK

Yankees Stay Alive With 1-0 Win

ANTHONY GRUPPUSO/REUTERS

BIG BIRD: The Yankees' Greg Bird is greeted at home plate after hitting decisive homer. Indians still lead series 2-1.

Bus Crash Reveals a Broken System

By Melanie Grayce West And Paul Berger

Raymond Mong shouldn't have been able to drive a New York City bus after being arrested for drunken-driving and leaving the scene of a crash in Connecticut.

But due to a weaknesses in communication between Connecticut and New York, the Metropolitan Transportation Authority didn't remove Mr. Mong from duty until a week after his arrest—and then only after he reported the incident to the MTA, according to people familiar with the matter.

That was in April 2015. Mr. Mong later got work as a charter-bus driver.

Last month, Mr. Mong, 49 years old, was behind the wheel of an empty charter bus that plowed into an MTA bus in Flushing, Queens, killing himself and two other people, and injuring more than a dozen. Federal investigators say Mr. Mong was driving about 60 miles an hour in a 30-mile-per-hour zone.

The new detail in Mr. Mong's history comes as investigators probe the cause of the crash, which has raised questions about Mr. Mong's driving record, the practices of Dahlia Group—which operated the bus he drove in the fatal crash—and oversight of the state's charter bus companies.

The chief executive of Dahlia Group, and attorneys who recently represented the company, didn't respond to requests for comment. A National Transportation Safety Board official has said Mr. Mong was properly licensed at the time of the accident in Queens.

But Mr. Mong's past highlights the limitations faced by New York state's Department of Motor Vehicles, the MTA and other bus companies in monitoring drivers arrested for and even convicted of violations out of state.

Drunken-driving victims' advocates, court advocates and criminal defense attorneys in both New York and Connecticut say there are gaps in the complicated system of sharing arrest and conviction information across state lines. The process hinges on correct information flowing from the point of arrest to the courts, and involves multiple state agencies and differing state laws.

"State to state to state, it gets very tricky," said Tom Kimball, director of the National Traffic Law Center, part of the National District Attorney's Association. "That's where the gap is—in communication between systems."

According to MTA regulations, employees have 24 hours to report an arrest to a supervisor. In addition, the MTA receives daily alerts from local law enforcement.

As a final backstop, the agency also pays a private company, License Monitor, to provide daily updates on the licenses of its drivers. Stephen Vidal, the acting president of the MTA's bus operations, said: "If there's any change in their license from the previous day it's uploaded in the morning and we take action to keep them from operating a bus."

Michael Garvey, the founder of License Monitor, said his service is only as good as the data held by the New York state DMV. He said DUI and DWI convictions, and arrests in New York state are updated to the New York state DMV within a couple of days at most, but out-of-state convictions, even for DUI, often don't make it to New York because states do such a poor job of sharing information.

"Will the New York state DMV be told about a DWI conviction in the majority of states nationwide?" Mr. Garvey said. "Unfortunately, chances are, in 2017, the answer is no."

In the case of Mr. Mong, he was arrested in Connecticut for driving a personal car under the influence and leaving the scene of an accident in April 2015. But during the initial arrest, a police officer failed to note Mr. Mong's New York commercial driver's license.

Even while in a personal car, a commercial-driver's-license holder faces tougher penalties than a regular driver for offenses like drunken driving, which in New York, and other states, would carry an automatic one-year revocation of a commercial license, experts say.

The paperwork error, which flowed through New Haven Superior Court, according to an official for the state's Superior Court operations, continued on to the Connecticut DMV, which electronically received the probation details of Mr. Mong's October 2015 guilty plea to the DUI and hit and run six months before.

It was only in late October that an employee at the Connecticut DMV noted the commercial driver's license and then mailed paper copies of the pertinent conviction de-

Please see CRASH page A10B

Timeline of Arrest To Deadly Accident

April 10, 2015 Raymond Mong's vehicle collides with another in Connecticut. He is charged with operating a motor vehicle under the influence of alcohol or drugs, and hit and run. His New York commercial driver's license isn't noted on the arrest.

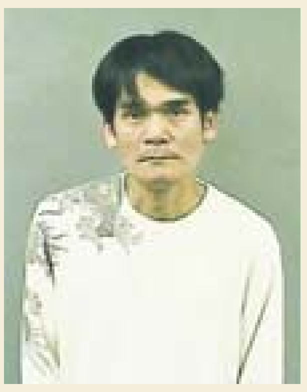
April 17, 2015 Mr. Mong informs his employer, the MTA, about the arrest. He is subsequently fired.

Oct. 20, 2015 Mr. Mong pleads guilty to a DUI and evading responsibility for injury or property damage. He is given probation for 18 months, and his license is suspended for 90 days. The DUI carries an automatic one-year revocation of his commercial driver's license, which New York state must carry out.

Oct. 30, 2015 Officials at the Connecticut DMV notice that Mr. Mong wasn't noted as a commercial driver on the electronic records from the court. They mail a report detailing his conviction to the New York state DMV.

Feb. 23, 2016 Mr. Mong's regular driving privileges are restored in Connecticut.

Sept. 18, 2017 Mr. Mong drives a Dahlia Group Inc. charter bus into an MTA bus, killing himself and two others.



Raymond Mong's 2015 mugshot of his arrest in New Haven.

FROM TOP: CONNECTICUT STATE POLICE; CLAUDIO PAPAPIETRO FOR THE WALL STREET JOURNAL

The Sept. 18 Queens bus crash in which three people died. The bus driver, who was killed, had pleaded guilty to DUI in Connecticut.

New Plan to Let Charter Schools Certify Teachers

By Leslie Brody

A state body that oversees New York charter schools has overhauled a proposal to let some charters certify their own teachers, after fierce opposition from critics who said it watered down standards.

A new draft beefs up requirements for training these prospective teachers, just days before the SUNY Board of Trustees Charter Schools Committee is scheduled to vote on whether to approve it Wednesday.

New York State United Teachers balked at the new proposal, calling it 'fake certification.'

The updated version would require a candidate to get 160 hours of instruction in behavior management, lesson planning, subject area content and other skills, and 40 hours of experience in the field under a supervisor's eye. An established charter that wants to certify its teachers would need approval of its plan for training them from the SUNY Charter Schools Institute.

For months, teachers unions and top state education officials have lambasted an earlier proposal that would let charter schools certify their own teachers who had 30 hours of coursework in teaching methods and 100 hours of experience running classrooms, under a mentor's supervision.

Critics of the original proposal included State Education Commissioner MaryEllen Elia and Board of Regents Chancellor Betty Rosa. They issued a joint letter last month saying the proposal would erode standards, cut the number of effective teachers in New York and hurt poor and disabled students of color in charters.

But supporters of the plan say high-performing charters deserve more freedom to train their teachers as they see fit, and they need more flexibility to hire due to shortages in some teaching fields, especially math, science and special education. Officials at Success Academy Charter Schools, which will need more staff to meet its expansion plans, are among the backers.

Joseph Belluck, chair of the SUNY charter committee, said the new proposal was similar to a pathway already in use in New York for members of Teach for America, a nonprofit that sends college graduates to help in high-need schools. "Part of our goal with this is to encourage more diversity in the teaching profession by allowing candidates that might not be able to afford a master's degree to have a pathway," he said.

New York State United Teachers balked at the new plan, calling it "fake certification."

"Nothing short of the complete withdrawal of these proposed sub-standard, lower-tier certification requirements is acceptable," said union President Andrew Pallotta in a statement.

If approved, the new teacher certification plan would apply only to successful charters open at least three years and authorized by SUNY, which oversees 179 charters—the largest share of those statewide. Others are authorized by the New York City Department of Education and the New York State Board of Regents.

Charters are taxpayer-funded and usually not unionized. Supporters see them as havens for children seeking to escape failing district schools. Opponents say they drain resources from traditional schools and some charters don't serve a fair share of the most challenging students.

Big Firms Gobble Up Midtown Office Space

By Keiko Morris

Manhattan office leasing kicked into high gear in the third quarter as financial-services jobs surpassed prerecession levels in August, but new construction kept rental increases low, according to statistics released by real-estate services firm JLL.

Leasing activity, which includes new deals and renewal transactions, reached 9.85 million square feet in the third quarter, a 35% increase from the 7.3 million square feet of leasing in the same period of 2016, JLL said.

Eight of the largest office-leasing deals were located in Midtown Manhattan, and seven of eight were for space west of Fifth Avenue, continuing the westward movement that has been taking place since the beginning of the year, JLL said.

During the quarter, big firms such as money manager BlackRock Inc., tech giant Amazon.com Inc. and global professional services firm Accenture signed deals, each for hundreds of thousands of square feet in new developments rising on the far West Side, JLL noted.

"Those collective deals are game-changers," said Cynthia Wasserberger, executive managing director.

Those large deals have helped raise interest in the far West Side and played a part in pushing rents into the $100-a-square-foot range, Ms. Wasserberger said.

But while this past quarter's vacancy rate in Midtown Manhattan, which includes the far West Side, dropped to 10.4% from 11.7% in the previous year, average asking rents in that submarket dropped by 0.7% to $75.19 a square foot.

Overall vacancy in Manhattan rose 0.2 percentage point to 10.2%, while average asking rents for the island rose 0.7% to $71.12 a square foot, JLL said. The virtually flat rents are a result of landlords trying to maintain rent levels in the face of new office construction adding space in Midtown and downtown.

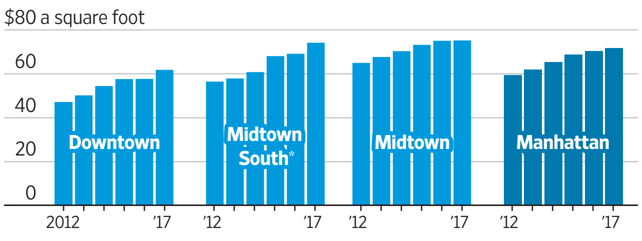
"Asking rents are pretty stable, and landlords are trying to hold to those numbers, but concession dollars—free rent, [tenant space improvement] allowances—have really increased substantially," Ms. Wasserberger said.

The financial-services sector, a critical part of Manhattan's office market, also recouped the jobs lost during the recession, reaching 477,800 in August, JLL said. Although the job count for the sector remains below its record of 525,000 in 1990, the August numbers surpassed the 472,900 positions recorded in December 2007.

The finance, insurance and real-estate industries together remained dominant players in Manhattan office leasing, accounting for a third of all office leasing so far this year, JLL said.

Slight Uptick

New office space has kept average asking rents steady despite firms such as Amazon, BlackRock and Accenture leasing large offices.



*Midtown South spans from Canal Street to 30th Street.
Source: JLL Research

THE WALL STREET JOURNAL.

States Have Long Struggled To Share Conviction Data

The way in which drunken driving and other convictions are reported between states is something regulators, courts and advocates have tried to improve for years.

It is unknown how many out-of-state convictions aren't reported to a home state or through the Commercial Driver's License Information System, a federal database for commercial drivers. But experts say the problem is widespread.

According to a 2016 report from the National Center for State Courts, there are some 14,500 courts in the U.S. with jurisdiction over traffic cases. There is wide variation in the way courts share information about cases, with some relying solely on paper records.

The Commercial Driver's License Information System has 15 million records. State driver's-license authorities or employers are required to use this system to find basic information about a driver, and then are pointed to the individual state where a driver's records are maintained. Each state maintains its own records.

State driver's-license agencies have 10 days to update a commercial driver's record after a conviction, per federal rules. The American Association of Motor Vehicle Administrators, which manages the commercial license database for the federal government, reports on the timeliness of state-to-state transmission of data.

According to the report by the National Center for State Courts, as of June 2016, 22 states, including New Jersey, were in compliance with the 10-day rule. Compliance in New York and Connecticut, as of June 2016, was at least 80% but less than 90% of the time. Two states in 2016 weren't able to send messages electronically, and another 11 were in compliance less than 70% of the time.

—Melanie Grayce West

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Edgy Buildings Lure Companies That Want It All

By Keiko Morris

The niche market of small, upscale office developments has lured some high-end tenants willing to pay up for an amenity-packed floor or two.

PROPERTY

Now some developers are seeing another potential opportunity for these so-called boutique buildings: as headquarters for big firms looking to lease entire buildings.

These office buildings, often stamped with edgy or historic architecture and located in neighborhoods such as Chelsea or the Meatpacking District, are attracting established companies that in many cases are looking to use real estate to recast their image in an economy where "disrupters" like Amazon.com Inc. are in vogue.

One of the more recent high-profile leases was Aetna Inc.'s deal earlier this year to establish new headquarters and take all the office space at 61 Ninth Ave., a $152 million West Chelsea development of Vornado Realty Trust and Aurora Capital Associates.

Aetna, which will keep thousands of jobs at its current Hartford headquarters, plans to move 250 jobs to the nine-story building next year.

Vornado has two others in the works, including one at 512 W. 22nd St. adjacent to the High Line Park that has been fielding interest from companies with similar intentions, the company said.

"If you had asked me my expectations, it would be that these boutique buildings would be leased on a floor-by-floor basis or two-floor basis, not that a tenant would take the entire building," said David Greenbaum, president of Vornado's New York division. "What we're seeing realistically are companies thinking much more of these buildings as truly headquarters office buildings."

As many Midtown South neighborhoods such as Chelsea, SoHo and the Flatiron District have matured as cool office destinations, so too has the inventory of upper-tier, new or redeveloped office space.

Although opportunities to develop ground-up office buildings in the submarket is limited, developers have found space, working within smaller lots, height limits and frequently landmark restrictions, eyeing potential rents that stretch well above $100 a square foot and are comparable to pricing at the big skyscrapers in Midtown's Plaza District neighborhood.

Vornado's underwriting for its boutique buildings in the Chelsea area anticipated rents in the triple-digits, Mr. Greenbaum said.

Four new boutique buildings dotted the Midtown South area between 2007 and 2012 totaling 340,000 square feet, according to Jonathan Mazur, senior managing director of national research at Newmark Knight Frank. Rents then ranged from $70 to $125 a square foot. From 2015 through 2019, developers are expected to have completed at least 11 new buildings with 1.4 million square feet of space, Newmark estimated. Rents for completed deals and asking rents for these buildings are all above $125 a square foot.

Asking rents for 300 Lafayette, an 80,000-square-foot retail and office building in SoHo, are between $150 and $200 a square foot, according to Related Cos., which is partners with LargaVista Cos. on the seven-story development located across from the historic Puck Building.

"We're talking to big brands that want to plant their flag and want a presence there," said Stephen Winter, vice president of commercial leasing at Related Cos. "You're seeing big corporates that may not have their headquarters here."

Midtown South's boutique office buildings are also tapping into a broader demand for better quality office space in the office submarket, said Peter Turchin, vice chairman at CBRE Group Inc. The upper end of the market, consisting of higher quality, upgraded office space, has had more leasing activity, he said.

"If you're an owner and you are in the middle of the market, you want to invest capital to be in the top of the market," Mr. Turchin said.


RM DESIGN

A rendering of the building at 61 Ninth Ave. in Manhattan, where Aetna will establish its headquarters and lease all the office space.

GREATER NEW YORK WATCH

CONNECTICUT

Man Is Hit by Vehicle And Dies at Hospital

A pedestrian was struck and killed by a vehicle early Sunday in New Hartford, but his identity remains unknown, Connecticut State Police said.

The victim was taken to a hospital, where he died of his injuries. Police said he was hit on a roadway by a driver traveling westbound.

The pedestrian is being described as a 30-year-old man with brown hair and a cross tattoo on one arm.

Police are asking anyone who may know the identity of the pedestrian to contact them.

—Associated Press

NEW JERSEY

Bear Hunt Is Set To Begin Monday

The state's six-day bear hunt will start at sunrise Monday in eight counties.

There are an estimated 2,400 to 2,800 bears in the hunting areas, and permits are required.

—Associated Press

CRASH

Continued from page A10A

tails to the New York state DMV, according to an official for the Connecticut DMV.

Typically such details are transmitted via the Commercial Driver's License Information System, a federal database, which automatically transfers a driver's information to a home state, according to the Connecticut DMV official.

That same database is used by bus companies, and the MTA, to check a driver's background and convictions.

"Since New York wasn't notified one way, we ensured New York was notified another," said Bill Seymour, the official for the Connecticut DMV.

New York's DMV declined to confirm whether it received notification from Connecticut or whether it logged the DUI on Mr. Mong's driving record. "This is an ongoing state and federal investigation and DMV cannot comment further," a DMV spokesman, Rich Meddaugh, said via email.

The state DMV also repeatedly declined to respond to general questions regarding driver disqualifications and how the department gathers information on out-of-state infractions and convictions, citing the ongoing investigation.

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November 13–14, 2017
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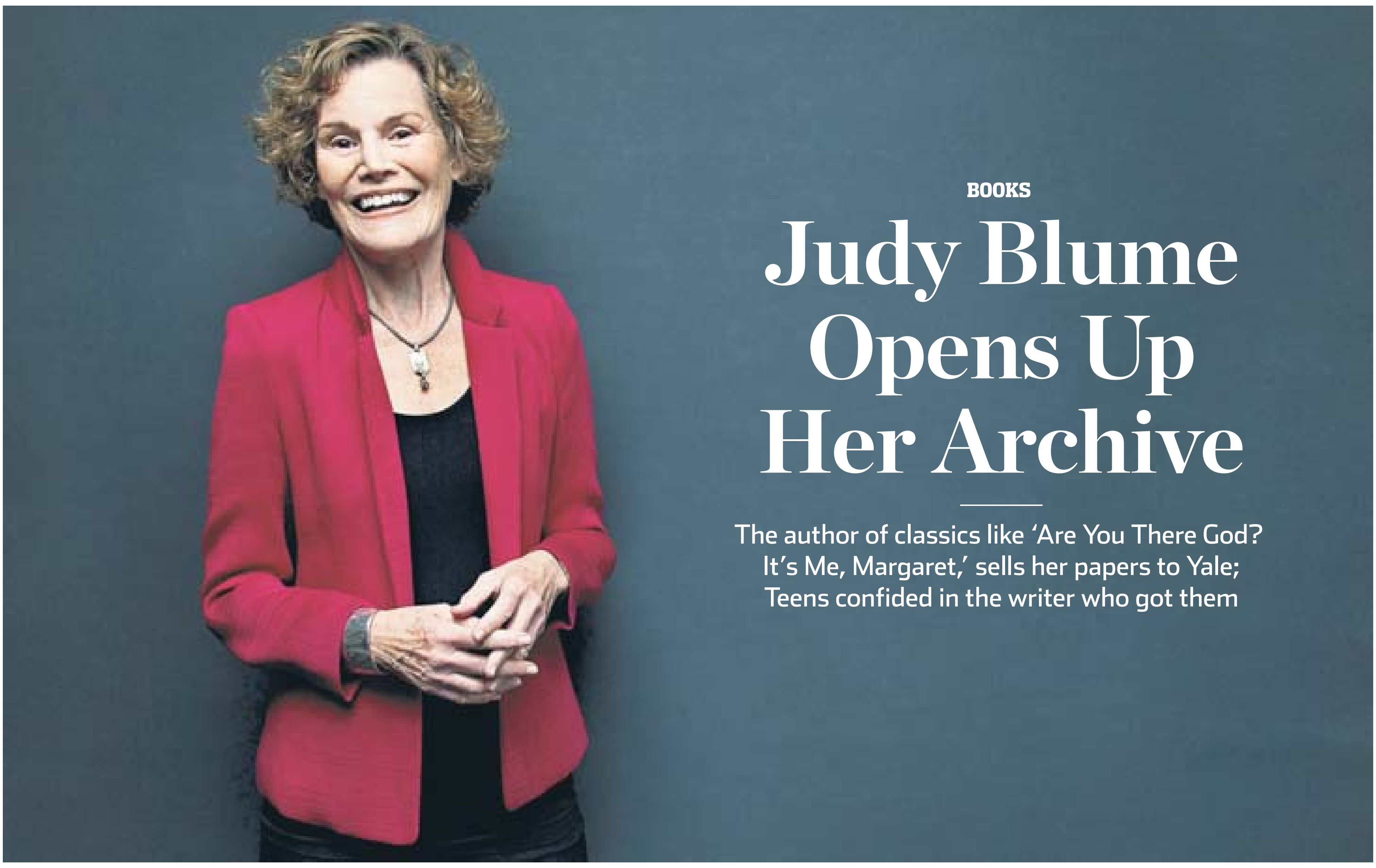
LIFE & ARTS



BOOKS

Judy Blume Opens Up Her Archive

The author of classics like 'Are You There God? It's Me, Margaret,' sells her papers to Yale; Teens confided in the writer who got them

CLOCKWISE FROM TOP: JESSE DITTMAR/REDUX; GLENN HOROWITZ BOOKSELLER (2)

BY BRENDA CRONIN

ONCE UPON A TIME, there were lots of picture books for children but not many stories for young-adult readers. Then along came Judy Blume. In the 1970s, the author of "Are You There, God? It's Me, Margaret," spun pitch-perfect prose for adolescents and middle-schoolers, detonating a genre that exploded with wizards, babysitters, vampires and the junior-high drama of BFFs and frenemies.

The author, who will turn 80 in February, said, "50 years of writing…could be enough." She is selling her literary archive to Yale University's Beinecke Rare Book & Manuscript Library later this month.

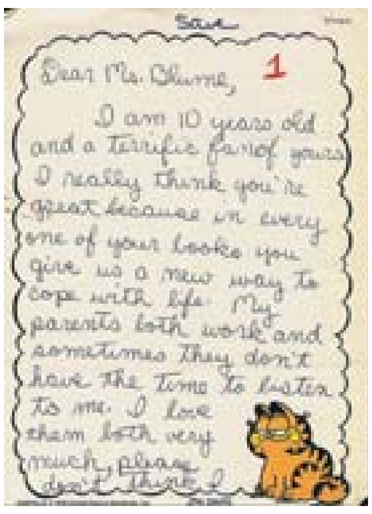
Ms. Blume has published dozens of books, ranging from humorous children's tales (a second-grader's quixotic quest in "Freckle Juice") to grown-up novels (enduring friendship in "Summer Sisters"). But she made her name with stories that resonated with pre-teens. She also took on subjects, including divorce and sexuality, that at the time were taboo for young readers. Ms. Blume's candor drew fire from some quarters but earned her a world-wide following.

The Beinecke, home to the papers of Gertrude Stein, James Joyce and others, also has a rich collection of children's literature. Timothy Young, curator of modern books and manuscripts at the library, said the acquisition will turbocharge its growing young-adult holdings.

For some readers, Ms. Blume defines the genre. "If you ask anybody on the street to name a young-adult writer," Mr. Young said, the response often is Judy Blume: "She is the iconic person that you've read and you loved or you didn't love but you knew her work."

Young-adult literature is a largely unexamined area of archival study, Mr. Young said, and one likely to attract faculty, researchers and visitors to Yale. Although Ms. Blume's papers were atop Mr. Young's list of dream acquisitions, he had warned himself, "I can't even think about Judy Blume because she is the Stephen King" of young-adult fiction.

Ms. Blume said she is no pack rat—in part because she moved house often—but from the start she held on to the rejection letters that met many of her early efforts for very young children.

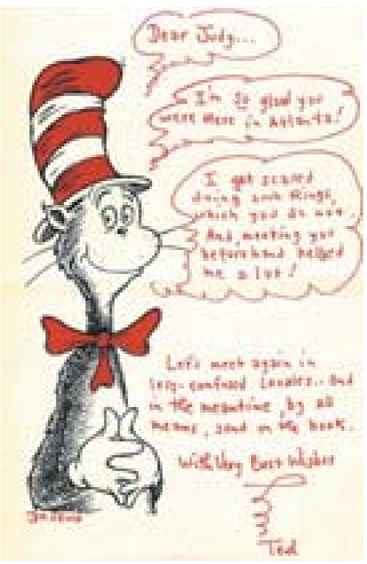


Save

Dear Ms. Blume, 1

I am 10 years old and a terrific fan of yours. I really think you're great because in every one of your books you give us a new way to cope with life. My parents both work and sometimes they don't have the time to listen to me. I love them both very much, please don't think I

Judy Blume, above, took on taboo topics like divorce and sexuality in the 1970s. Letters from Theodor Geisel (Dr. Seuss), below, and a young fan, left.



Dear Judy...

I'm so glad you were here in Atlanta!

I get scared doing such things, which you do not. And meeting you beforehand helped me a lot!

Let's meet again in less-confused Locales.. And in the meantime, by all means, send on the book.

With Very Best Wishes

Ted

She also kept the mockups of books that she submitted to publishers in her twenties. For those early attempts, she wrote rhyming verses, illustrated them with colored pencils and used brass fasteners to hold the manuscript together. Her creations "would come back rejected and every now and then I'd get a really nice rejection letter," she recalled.

Ms. Blume also saved boxes of fan mail in which some readers revealed their hopes and fears. One 10-year-old wrote in ballpoint pen on a sheet of Garfield the Cat stationery "in every one of your books you give us a new way to cope with life." Ms. Blume and Mr. Young said they are working with Yale's legal advisers to allow access to the letters while preserving the young writers' privacy.

Mr. Young imagines the archive introducing undergraduates to original material or sparking ideas for dissertations. Ms. Blume said that Dick Jackson, her longtime editor at Bradbury Press who plucked her from the slush pile, used to joke that "someday, some Ph.D. student is going to write a thesis on teeth in Judy Blume books." The author's father was a dentist and apparently, Ms. Blume said, "I'm always describing people by teeth and talking about teeth."

In addition, the collection bears out how Ms. Blume calibrated her prose as her readers—and characters—grew up. "One of the great things you can see is how she was writing to a specific age and a specific reader," Mr. Young said. For example, one character, a toddling dervish nicknamed Fudge, was inspired in part by Ms. Blume's son and then grandson. Fudge's mischief mortifies his older brother, Peter, who moves from fourth grade to seventh during a five-book series, which was written between 1972 and 2002.

"We start as readers and get more sophisticated as we go along but we can't forget what we were reading when we were five years old, 10 years old, 15 years old," Mr. Young said. "I see Judy's papers…. as part of a stream that connects to Gertrude Stein and James Joyce. They're not in this other part of the library that is sectioned off."

The archive's journey to Yale began in mid-2015, when Glenn Horowitz, a New York book dealer, read a profile of Ms. Blume. At the time, she was about to publish "In the Unlikely Event," her fourth novel for adults. Mr. Horowitz has placed dozens of archives, including those of Don DeLillo and William Faulkner, with institutions. Last year, he arranged the sale of Bob Dylan's collection in a deal with a reported value between $15 million and $20 million.

While reading about Ms. Blume, Mr. Horowitz said, "a thunderbolt struck me that this was a person whose stature in American letters was at the very highest level." He learned that Ms. Blume had almost 50 boxes of manuscripts, pictures, scrapbooks and other material.

Last December, when the Beinecke's Mr. Young proposed the acquisition, his colleagues thought the notion was too good to be true. They said, " 'Tim, quit kidding us,' " he recalled. "So I said, 'No, no, no, really! Judy Blume's papers!'"

Ms. Blume said the $500,000 Yale is paying for the archive will go to the Kids Fund, her foundation through which she makes charitable contributions. The Beinecke's holdings are open to anyone with a serious interest in them and aren't restricted to students and scholars. "There are some rules, of course," Mr. Young said. "You have to have clean hands" and "take notes with pencil and paper—or with a laptop."

ART & AUCTION

IN LONDON, A CHOPPY START TO THE SELLING SEASON

BY KELLY CROW

A SERIES OF ART auctions in London had more fizzle than sizzle after Christie's failed to find a buyer for a Francis Bacon painting it expected to sell for around $80 million.

The portrait of the artist's lover squaring off with a pope was supposed to cap a week of auctions at Christie's, Sotheby's and Phillips, but Bacon's "Study of Red Pope 1962. 2nd Version 1971" garnered no bids, drawing gasps in Christie's packed King Street sale room on Friday.

Its failure could rattle collectors who look to these mid-season sales in London to set the tone for next month's higher-stakes auctions in New York. Until now, global demand for blue-chip art had been building since the spring; even without the Bacon, the overall series topped $342 million.

After the Christie's sale, spokeswoman Catherine Manson called the Bacon a "masterpiece" and said its reception shouldn't slow the market's momentum. "There just wasn't the bidding on the night," Ms. Manson said, adding that she expects the house to find a buyer soon.

Christie's had bet heavily on this contemporary art sale, having taken the unusual step of skipping London's summer series in June to beef up its offerings for October to coincide with the Frieze Art Fair.

Sotheby's had a high-profile casualty of its own when it failed to sell a mostly beige painting by Jean-Michel Basquiat, "Bronze," that it had estimated would fetch at least $6.6 million. Collectors prefer Basquiat's colorful works, but the house salvaged the gaffe by offering the work again in another sale the next day and finding a buyer willing to pay its low estimate.

It remains to be seen whether

Please see AUCTIONS page A13

FROM LEFT: SOTHEBY'S; CHRISTIE'S IMAGES LTD.

A Francis Bacon painting, above, failed to sell Friday, while a work by Jean-Michel Basquiat, left, ultimately found a buyer at its low estimate.

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WHAT'S YOUR WORKOUT?

Revved Up by an E-Bike

AT 70, Bruce Austin switched to a motor-aided ride to power up mountain trails

BY JEN MURPHY

WHEN TEENAGERS tease Bruce Austin for powering up a mountain trail on his electric mountain bike, his comeback is: "Didn't you hear California passed a law that people 70 or older can ride an e-bike?"

"Their attitude instantly changes from, 'you're cheating' to 'good for you, dude'," jokes the 70-year-old. Mr. Austin, a semiretired film cameraman who has worked with Disney, TBS, and Twentieth Century Fox, took up mountain biking in his mid-30s. When he started a family, he kept in shape by pedaling after his children.

One year ago, his two sons, now in their 40s, started to joke that their father was slowing down. The real problem was that he was exercising too hard. "My heart rate would be way out of range," he says. "After a three-hour ride I'd be wiped out." Mr. Austin lives in Camarillo, Calif., surrounded by great trails. A particularly long, hilly ride with his eldest son, Brian, 48, whom he describes as a "super triathlete," left Mr. Austin dizzy and with shaky legs. "I'd heard about the e-bike and knew it was time to try one," he says.

Electric mountain bikes allow the rider to use different levels of assistance thanks to a motor-powered boost. Mr. Austin's bike at level 0 allows him to ride normally, while levels 1 to 4 deliver proportional assistance based on how hard he pedals. Level 5 provides full power. His bike also has a throttle, which gives him the option to not pedal at all.

Mr. Austin says he turns off the assistance on flat grounds but will use it to help him stay in his heart rate range on hills. "When I'm going up a steep climb I'm pedaling with about the same effort I would on a regular bike, but going faster," he says. Riding his e-bike has helped bridge a generation, he says, allowing him to ride regularly with his sons, as well as his two daughters, both in their 20s.

Another benefit is the time savings. A hilly ride that would usually take him three hours on a standard bike now takes 90 minutes, he says, and burns nearly the same amount of calories per hour, around 500. "I can get in a hard ride before my 7 a.m. train to work," he says. Mr. Austin bought a second e-bike so he can ride with his wife, Rhonda, his daughters, and friends his age. "In the past, my daughters found mountain biking stressful," he says. "Now, they'll be full-throttle on the e-bike and they have so much fun. They haven't yet refused a ride."

While many purists disapprove of e-bikes, Mr. Austin says the assistance has allowed him to skip the stationary bike in the gym. "There's nothing more motivational than climbing to the top of the Santa Monica Mountains and breathing in the fresh air as you look out to the Channel Islands," he says.

Clockwise from top, Mr. Austin on his e-bike in California's Hill Canyon; a Pedego Ridge Rider; and stretching after a trail ride.

The Workout

Mr. Austin rides a minimum of 50 miles a week. Three days a week he rides 17 miles using the lowest possible assist. One day a week he does a "killer ride" of 30 miles with a 1,200-foot incline up Big Sycamore Canyon, which he can complete in 90 minutes using more assistance. He adjusts his pedal assistance based on his heart rate. He tries to maintain around 130 beats a minute. "If I see I'm at 110, I know I need to work a little harder," he says.

Three years ago he started swimming. "The only downfall of the bike is that it doesn't work your upper body," he says. Three days a week he swims a half mile at a high intensity and uses a mask and snorkel. "I don't like turning my head," he explains. He finishes by lifting weights in the deep end of the pool and does exercises based on the PBS program "Classical Stretch by Essentrics."

The Diet

"My father died of diabetes when I was in my mid-30s and that made me get serious about my diet," he says. He juices each morning, adding a protein supplement to his drink. He and his wife eat mostly organic food and limit red meat and dairy. Lunch, usually a salad or chicken and vegetables, is his biggest meal of the day. The couple cook dinner at home. "Restaurants always get me with the bread basket," he says. When he works late, rather than eat a big meal, he makes a veggie smoothie. "I throw the equivalent of a salad in my Vitamix—broccoli, kale, spinach, celery," he says. Six months ago his doctor suggested he cut back on sugar. "It was a wake-up call to see how much sugar is in drinks," he says. "It was hard to give up Arnold Palmers."

The Gear & Cost

Mr. Austin owns two Pedego Ridge Rider electric mountain bikes, which cost $3,600 each, as well as a Pedego City Commuter electric bike, which costs $2,560. He wears a BERN FL-1 MIPS helmet ($125) and Shimano MT 33 mountain bike shoes ($150). He purchased a fat, cushioned SERFAS RX seat ($60) to guard against tailbone injury. "I'm too old for Spandex," he jokes. He prefers Trayl casual bike pants ($135) and Nike DryFit tops. He wears a shell for sun protection. His Garmin Forerunner 610 heart rate monitor cost $245. He pays $75 a month in gym fees.

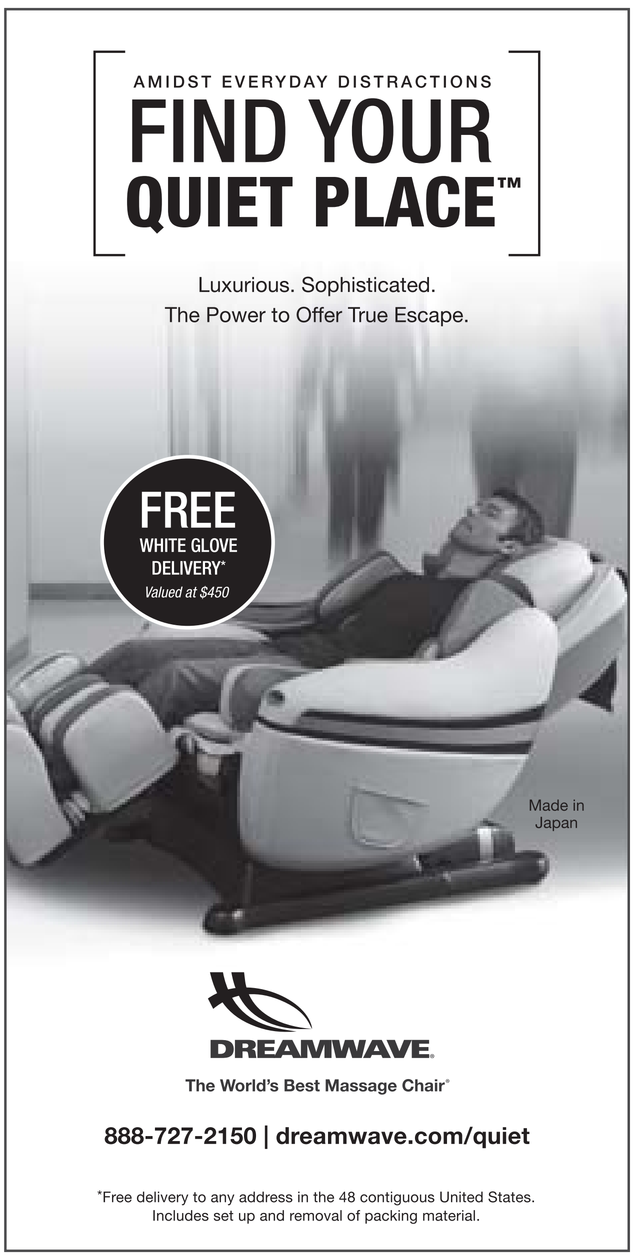
The Playlist

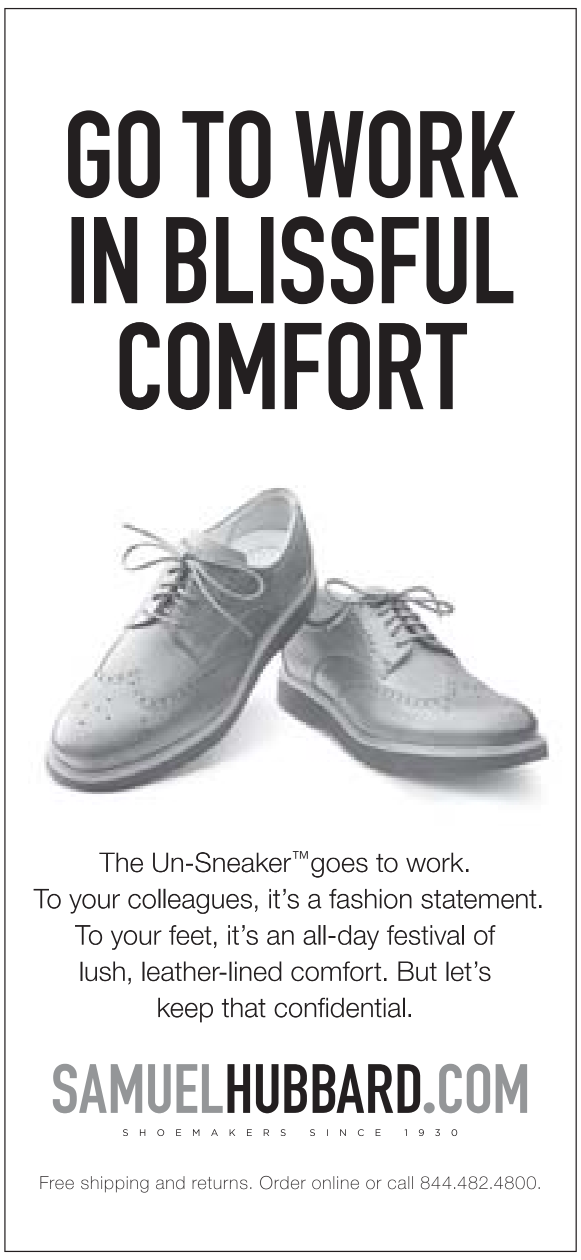
"Nature is my music when I bike," he says. "I'd rather listen to the wind and the birds than rock or pop music." Mr. Austin finds swimming boring and wears a headset so he can listen to meditation recordings in the pool.

MICHAL CZERWONKA FOR THE WALL STREET JOURNAL

Do You Get a Workout On an E-Bike?

Purists dismiss electric bikes, or e-bikes, as "cheating" and even refer to their riders as lazy. But really, riding an e-bike is akin to doing push-ups on your knees or using a weight-assisted pull-up machine. "You're still getting a workout," says Adam Mills, an exercise physiologist and owner of Source Endurance, a San Diego, Calif.-based coaching company that trains endurance athletes. "You just have a little help." While some electric bikes have a throttle and require no effort, the majority use a small electric motor to boost the power created by your own pedaling. Mr. Mills estimates that a mountain bike might weigh between 18 and 20 pounds, but an electric bike can be anywhere from 30 to 50 pounds. "That's a lot of extra weight when you're not using assistance," he says. "It requires a lot more core engagement, especially if you're on mountain trails and making tight turns." He says electric bikes are a great option for people who are time-crunched, intimidated by cycling or looking for a mellower workout. "Not everyone wants to race bikes," he says. "E-bikes make the sport more accessible to a broader demographic." E-bikes are also great options for cyclists recovering from injury, he says. "A big draw of cycling for many people is the social aspect," he says. "If you've lost fitness while coming back from an injury, an e-bike lets you ride for 90 minutes with your buddies without overdoing it," he says.





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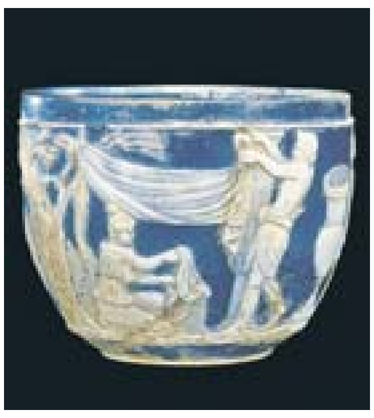
ART REVIEW

A Mogul's Voracious Appetite for Art



Clockwise from top: Triptych with the Coronation of the Virgin (1325-50); Edward J. Steichen's portrait of J. Pierpont Morgan (1903); Rembrandt's 'Self-Portrait Leaning on a Stone Sill' (1639); The Morgan Cup (c. 1–99); Jean Barbet's 'Angel' (1475); The Great Ruby Watch (c. 1670)

BY JUDITH H. DOBRZYNSKI

Hartford, Conn.

LEGENDARY FINANCIER J. Pierpont Morgan was also a renowned collector. In the 23 years before his death in 1913, a few weeks shy of his 76th birthday, he acquired more than 20,000 items. But what kind of collector was he?

"Morgan: Mind of the Collector," a display of about 110 of those objects, attempts to answer that question. Pegged to the 100th anniversary of a gift of 1,350 items to the Wadsworth Atheneum here, arranged by his son Jack in fulfillment of Morgan's will, the exhibition wisely goes beyond that donation. It borrows many works from Morgan's other main beneficiaries, the Metropolitan Museum of Art and the Morgan Library and Museum, and adds some other objects he once owned.

Morgan chased after certain categories avidly, sometimes buying entire collections as well as individual items. But he also exercised restraint. Once he felt he was finished in an area, he commissioned a limited-edition, leather-bound catalog for it and circulated copies to museums, dealers, scholars and friends. Some examples are shown here.

As they reveal, he would take up an interest with laser-beam focus, making purchases that astonish in sheer number: 1,157 ancient Near East cylinder seals; 3,000 cuneiform tablets; 600 rare Medieval manuscripts; more than 800 portrait miniatures; 250 watches and clocks; the largest collection of Rembrandt etchings in the U.S.; nearly 250 Renaissance and Baroque bronze sculptures; the "most complete" collection of painted Renaissance enamels extant during his lifetime; more than 1,500 pieces of Chinese, Meissen, Sèvres and other porcelain; and about 130 snuff boxes. He bought paintings, glass, tapestries, on and on.

To make sense of these many pursuits, curator Linda Roth has focused mostly on decorative arts and on three often overlapping themes: antiquities, sacred treasures and historical objects. His interest in ancient civilizations shines through in objects like a stately bronze cat (third to first century B.C.) alluding to the Egyptian goddess Bastet; a Coptic manuscript on God's mercifulness (c. 465-538), one of more than 50 he purchased in 1911; and a Greek silver drinking cup (second century B.C.).

His religiosity—Morgan was an Episcopalian who went to church every Sunday, Ms. Roth says—is amply demonstrated with an ornate Italian gilded reliquary (14th and 15th centuries) holding a tooth of Mary Magdalene and a 14th-century German tapestry fragment depicting the Crucifixion, to name just two.

As for history, Morgan bought a seemingly simple silver tankard (1673/74) that is engraved with scenes of the Great Fire of London and the Great Plague and happens to be one of six such mugs commissioned by Sir Edmund Berry Godfrey known to exist. He owned an autograph letter from George Washington to James Madison dated May 20, 1792, an ornamental case thought to have been once owned by Marie Antoinette, and a gold-and-diamond snuff box commissioned by Frederick the Great (1745-55).

But even this small sampling of Morgan's possessions frequently bursts its categorical boundaries, and might be analyzed in other ways. Morgan clearly had an eye for beauty, for instance, as seen in many dazzling examples. An intricately carved German ivory triptych (1325-50), still tinged with traces of gilt and polychrome decoration, depicts an angel crowning Mary, who beams a smile as she makes eye contact with the baby Jesus resting in her arm. The "Great Ruby Watch" (c. 1670), by German watchmaker Nicolaus Rugendas the Younger and adorned with 85 rubies, seems a little gaudy for such a small object (less than two inches in diameter), but it is redeemed by exquisite gold and enamel work. And a brilliantly colored Limoges enamel-on-copper scene (c. 1530-35), "Helenus and Andromache Give Presents to Aeneas" from Book III of the Aeneid, is sensational.

Morgan also appreciated importance. He bought a rare Bible (1663) translated into the Native American Massachusett language as well as what was then (1902) the only version of St. Augustine's "City of God" (printed 1486/87) in America.

Morgan frequently sought expert advice, but at times exerted his independent judgment. One scene-stealing object is a rare Roman cup (c. A.D. 1-99), just 2.5 inches tall. It's a white-on-blue cameo glass depicting a woman making an offering to Silenus in hopes of becoming pregnant, and Morgan bought it at auction in Paris (outbidding the Petit Palais and Baron Edmond de Rothschild) against the advice of curators from the Metropolitan Museum, who questioned its authenticity. But Morgan was right, and "the Morgan Cup" is now in the collection of the Corning Museum of Glass.

On the other hand, he purchased a graceful bronze angel (1475) by Jean Barbet partly because he thought it was from a weather vane at Sainte-Chapelle in Paris. Actually, it was (probably) part of a fountain or altar, but Morgan loved it anyway and "always kept it close to him." Ordinarily, you can see it at the Frick Collection.

Such a capacious collecting "mind" as Morgan's, with so many rooms, nooks and crannies, cannot possibly be communicated fully in 110 objects. But give the Wadsworth credit for undertaking it in a captivating exhibition nonetheless.

Morgan: Mind of the Collector
Wadsworth Atheneum, through Dec. 31

Ms. Dobrzynski writes about culture for many publications and blogs at www.artsjournal.com/realcleararts.

CLOCKWISE FROM TOP RIGHT: LAURENCE MILLER GALLERY, NY; THE MORGAN LIBRARY & MUSEUM; CORNING MUSEUM OF GLASS; THE FRICK COLLECTION; THE METROPOLITAN MUSEUM OF ART (2)

AUCTIONS

Continued from page A11

these misfires were flukes—or a hint that big-league art does better in New York, where a painting in May sold for $110 million. If New York's coming sales prove similarly choppy, collectors could start bracing for a market downturn.

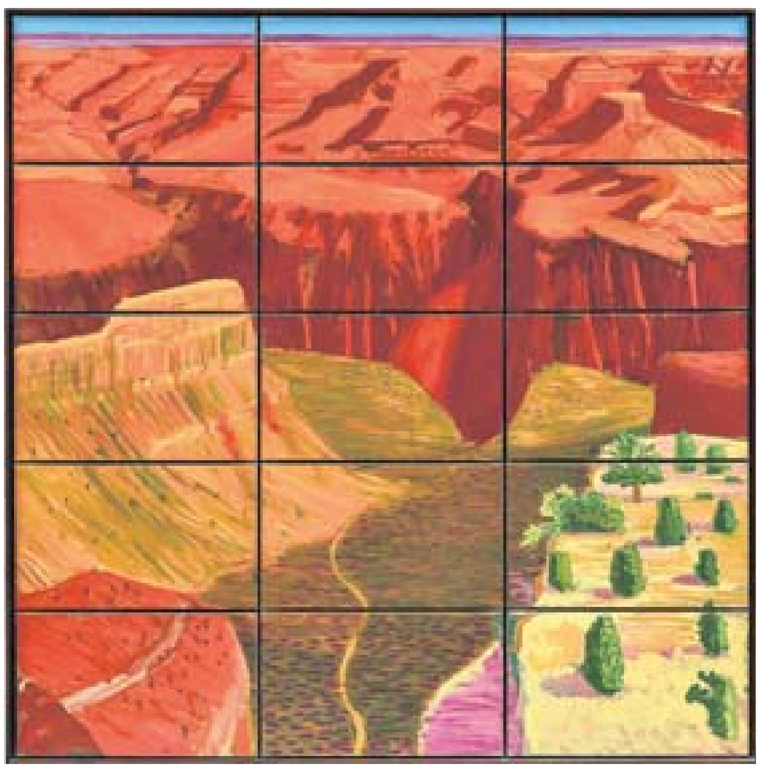
The week's heavyweights included Basquiat's "Red Skull," which Christie's sold for $21.6 million; the house also fared well with Peter Doig's 1996 "Camp Forestia," selling it for $20 million. Sotheby's sold a Cy Twombly untitled abstract from 1962 for $8.5 million, and Phillips sold Sigmar Polke's "Dancer" for $4.4 million.

Bacon aside, British artists like David Hockney and Howard Hodgkin enjoyed a homegrown boost in the series. At Sotheby's, at least five bidders chased after Mr. Hockney's sunset-hue "15 Canvas Study of the Grand Canyon" from 1998, with the chairman of its fine-art division, Amy Cappellazzo, winning it on behalf of an anonymous client for $7.9 million, well over its $4.9 million low estimate. Christie's reset the auction record for Howard Hodgkin, a London abstract painter who died in March, when it sold his "Goodbye to the Bay of Naples" abstract for $2.2 million on Friday.

Demand also continued to climb for London's Hurvin Anderson, this year's Turner Prize nominee, whose barbershop scene, "Peter's Series: Back" sold for $2.4 million at Phillips on Friday.

Elsewhere in the series, Christie's came up with the idea to offer a group of smaller works in a sale called "Up Close"—a move that paid off. The $19.3 million sale on Tuesday found buyers for a robust 94% of its tiny offerings, including $4.6 million for Alberto Giacometti's 15-inch sculpture cast in 1954, "Man (Apollo)," tripling its high estimate. The house also sold Andy Warhol's 2-liter-size painting of a glass "Coke Bottle" from 1962 for $2.6 million—or roughly $39,400 per square inch.

Sotheby's also experimented—but disappointed—with a $1.8 million Friday sale of works centered on the 1920s-era German art school, Bauhaus. The Bauhaus sale fell short of its $2.4 million expectations, and a third of its 32 pieces went unsold, including abstract pieces by László Moholy-Nagy and a chess set designed by Josef Hartwig and Joost Schmidt. But Bauhaus artist Josef Albers saw one of his signature square abstracts from 1957, "Homage to the Square: Temperate," sell for a record-breaking $3 million at Sotheby's contemporary evening sale on Thursday.



In-demand works at the auctions included David Hockney's '15 Canvas Study of the Grand Canyon,' above, and Hurvin Anderson's 'Peter's Series: Back.'

FROM LEFT: SOTHEBY'S; PHILLIPS

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SPORTS

Vice President Mike Pence greets fans prior to the Colts-49ers game.

NFL

PENCE LEAVES AFTER PROTEST

BY ANDREW BEATON

VICE PRESIDENT Mike Pence attended and then left Sunday's Indianapolis Colts game in response to players protesting during the national anthem, he explained in a string of tweets Sunday afternoon.

"I left today's Colts game because President Trump and I will not dignify any event that disrespects our soldiers, our Flag, or our National Anthem," he said in a tweeted statement. "While everyone is entitled to their own opinions, I don't think it's too much to ask NFL players to respect the Flag and our National Anthem."

Pence's decision furthers the feud between the country's most popular sport and the executive branch of the government just as the back-and-forth looked like it might be quieting down. Later, President Donald Trump tweeted that he asked Pence before the game to leave if players knelt.

"I asked @VP Pence to leave stadium if any players kneeled, disrespecting our country. I am proud of him and @SecondLady Karen," Trump tweeted.

The NFL declined to comment on Pence's comments and decision to leave. Pence, who previously served as governor of Indiana, was in Indianapolis for the Colts game against the San Francisco 49ers, who have been at the center of the protests since then-49ers quarterback Colin Kaepernick took a knee last year to draw attention to racial injustice and police inequality.

Even as league-wide protests dwindled a week ago, more than 20 San Francisco players took a knee before last week's game and again this Sunday.

Across the NFL, player demonstrations peaked two weeks ago after Trump blasted players who knelt and encouraged owners to punish or fire those who did. Some teams did not even take the field at all for the national anthem that week, in what amounted to a direct response to the president.

MLB

Kershaw's 'Playoff Problem'

The Dodgers ace has yet to put together a postseason that matches his regular-season numbers

BY JARED DIAMOND

Los Angeles

CLAYTON KERSHAW needs no more validation from April through September. With three Cy Young awards to his name, a fourth potentially on the way and a lifetime 2.36 ERA, the Dodgers' ace is almost indisputably the best pitcher on the planet. He has lived up to and perhaps even transcended the inevitable comparisons to Sandy Koufax and has a chance to retire as one of the greatest ever to climb atop a mound.

In other words, when it comes to the regular season, Kershaw has nothing left to prove.

But the specter of October continues to loom over Kershaw like an inescapable fog, threatening to tarnish his legacy and once again derail the Dodgers' championship dreams. Pitching in the seventh and most pressure-packed postseason of his sparkling career, Kershaw is still searching for his "Bumgarner moment."

The phrase refers to sterling Giants left-hander Madison Bumgarner, who in 2014 delivered a playoff performance for the ages, allowing just six earned runs in a whopping 52 2/3 innings. He threw five frames of scoreless relief on two-days' rest to save the Giants' victory in Game 7 of the World Series. It has become synonymous in the baseball universe with dominance in the clutch.

For all of his brilliance, Kershaw has yet to put together an October of that caliber. He owns a 4.63 ERA in 19 appearances, the worst ever among pitchers with at least 12 postseason starts. That includes a disappointing outing in Game 1 of the NLDS on Friday, where even in a winning effort, he tied a major-league playoff record by surrendering four home runs.

Afterward, even though they lost, it became clear that the Arizona Diamondbacks, the Dodgers' NLDS opponent, aren't afraid of the possibility of facing Kershaw again during this series.

"Our group of guys right now are feeling OK about their approach off him, and the results are there," Diamondbacks manager Torey Lovullo said. "You score some runs off of him the way we did, it helps build a little confidence."

Kershaw's significance to the Dodgers cannot be overstated. Los Angeles has won five consecutive NL West titles but has yet to reach a World Series in that span.

For sure, as the man holding the ball in his hand, Kershaw deserves a chunk of the blame. While he has pitched some outstanding games—he gave up two hits over seven shutout frames in Game 2 of last year's NLCS—he has had his fair share of clunkers: In Game 6 of that series against the Chicago Cubs, Kershaw conceded five runs in five innings.

The raw numbers, however, don't tell the entire story. A closer look at Kershaw's history in October reveals patterns that could make the difference between the Dodgers winning their first title since 1988 and yet another early-round exit. After finishing with a regular-season record of 104-58—the best for any MLB team since 2004—the Dodgers, fairly or unfairly, are saddled with the expectations of World Series or bust.

To call Kershaw's issues a "playoff problem" is a bit of a misnomer. It could be more accurately described as a "seventh-inning problem." From the first inning through the sixth of postseason starts, Kershaw more or less looks like his usual self: He has a 3.08 ERA in the first six frames. In the seventh, that number balloons to 25.50 (17 earned runs in six innings), resulting in Kershaw's disappointing statistics overall.

That was certainly the case Friday. Through six, Kershaw had allowed two runs on just three hits—a solid start, if unspectacular by Kershaw's lofty standards. At that point, with 92 pitches thrown, Kershaw admitted he "just didn't have much left."

By that point, his average fastball velocity had dropped from nearly 95 mph in the first inning to just over 92 mph. Even worse, Los Angeles manager Dave Roberts said that Kershaw's slider "just wasn't there" after the third inning. Nonetheless, Roberts sent Kershaw back out for the seventh, and it proved costly. After a flyout, the next two Diamondbacks batters homered. Afterward, Roberts said he "felt good with [Kershaw] going back out there" because of Kershaw's low pitch count.

> 'The intensity of playoff games,' Clayton Kershaw said, 'can be taxing for sure.'

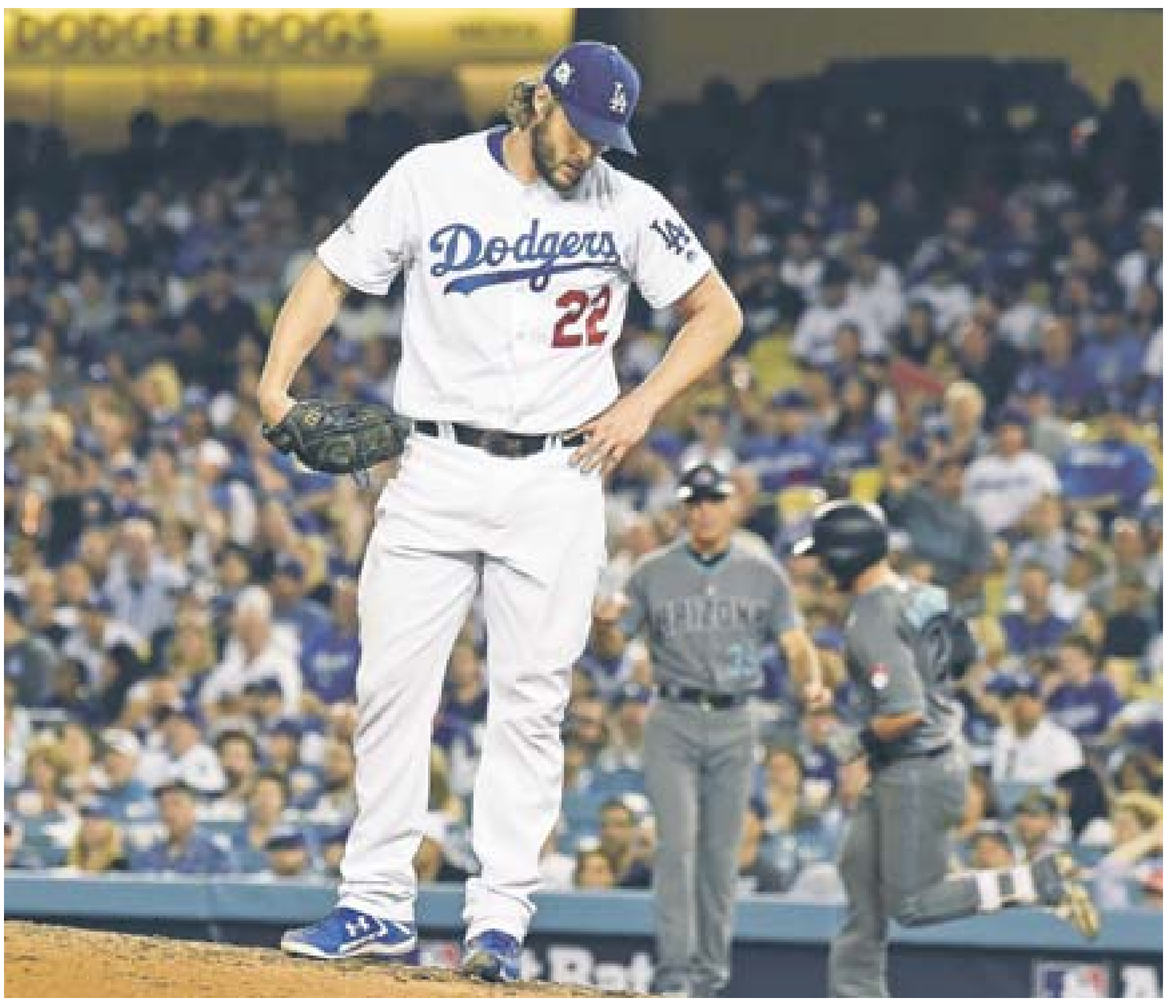
It's understandable that Roberts would have confidence in Kershaw; pitchers with his track record deserve that kind of respect. But given Kershaw's past, it might be time for Roberts to reconsider.

Kershaw, like most pitchers, gets worse the later in the game he goes. During the regular season, opposing hitters had a .189 batting average and .524 on-base-plus-slugging percentage the second time through the order, jumping to .242 and .707, respectively, the third time. In the postseason, that's exacerbated even further.

"Definitely the intensity of playoff games, there is more riding on each pitch," Kershaw said. "That can be taxing for sure."

In Kershaw's postseason starts, the Dodgers bullpen has let eight of his 11 inherited runners score (72.7%). Across MLB this season, 30.3% of inherited runners ended up scoring. On paper, the Dodgers have a better bullpen than in years past, which should help.

Whatever the case, the next time Kershaw pitches, it would seem to behoove Roberts to be more aggressive in removing him. Because from here, the games will only become more important: With the Dodgers up 2-0 over the Diamondbacks, Kershaw's next start will come either in Game 1 of the NLCS—or in a do-or-die NLDS Game 5.



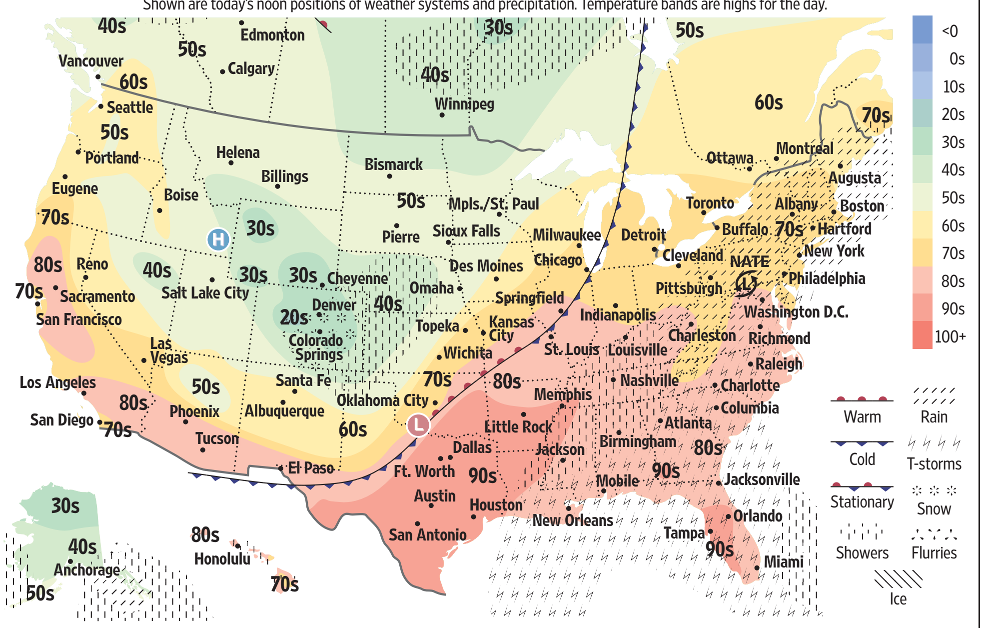
Clayton Kershaw gave up four home runs in Game 1 of the NLDS. He owns a 4.63 ERA in 19 playoff appearances.

FROM LEFT: MICHAEL CONROY/ASSOCIATED PRESS; MICHAEL CONROY/ASSOCIATED PRESS

Weather

AccuWeather.com

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



U.S. Forecasts

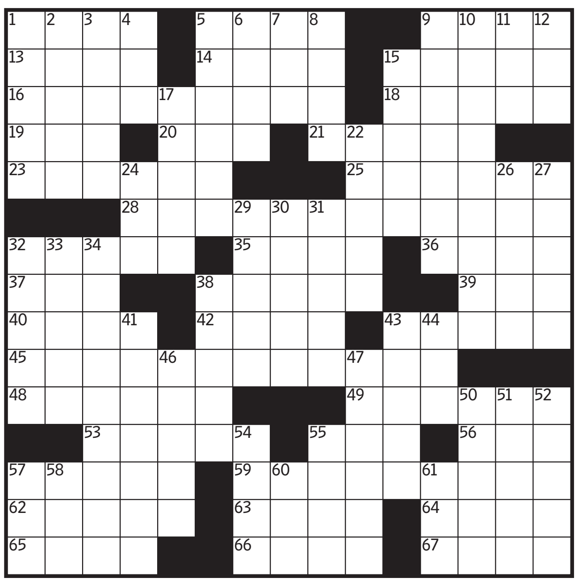
s...sunny; pc... partly cloudy; c...cloudy; sh...showers; t...t'storms; r...rain; sf...snow flurries; sn...snow; i...ice

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Anchorage	47	38	s	51	44	c
Atlanta	82	73	t	85	71	t
Austin	94	60	s	75	58	s
Baltimore	79	65	r	84	63	c
Boise	60	44	pc	69	43	pc
Boston	74	67	r	80	57	pc
Burlington	70	59	r	74	48	pc
Charlotte	83	72	t	84	69	c
Chicago	79	59	s	69	57	pc
Cleveland	77	59	sh	77	60	pc
Dallas	96	55	s	74	53	pc
Denver	37	22	sn	52	31	s
Detroit	78	58	pc	73	53	pc
Honolulu	87	73	pc	87	75	sh
Houston	94	70	pc	81	65	pc
Indianapolis	79	60	pc	77	63	pc
Kansas City	74	46	pc	52	42	r
Las Vegas	76	55	s	78	59	s
Little Rock	90	66	c	79	53	pc
Los Angeles	88	61	s	83	59	s
Miami	89	81	t	89	80	t
Milwaukee	72	55	s	65	55	pc
Minneapolis	58	37	pc	57	39	s
Nashville	87	70	sh	83	67	r
New Orleans	86	76	c	87	74	pc
New York City	77	68	r	82	63	pc
Oklahoma City	79	45	pc	62	41	s
Omaha	58	40	pc	50	39	r
Orlando	90	74	t	89	74	pc
Philadelphia	79	69	r	83	64	pc
Phoenix	89	65	s	93	70	s
Pittsburgh	79	62	r	77	58	c
Portland, Maine	68	60	r	77	51	pc
Portland, Ore.	69	44	pc	58	43	sh
Sacramento	82	48	s	82	46	s
St. Louis	87	64	pc	74	55	t
Salt Lake City	58	38	pc	68	47	s
San Francisco	79	56	s	72	51	s
Santa Fe	62	29	pc	57	35	s
Seattle	65	47	pc	58	44	sh
Sioux Falls	54	29	c	55	34	s
Wash., D.C.	82	71	r	86	69	c

International

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Amsterdam	60	53	c	61	55	r
Athens	73	59	s	74	58	pc
Baghdad	98	70	s	98	69	s
Bangkok	90	78	t	88	77	t
Beijing	62	50	r	55	41	sh
Berlin	56	45	c	55	50	r
Brussels	59	52	c	60	54	r
Buenos Aires	71	49	s	69	51	pc
Dubai	99	82	s	98	82	s
Dublin	59	49	c	56	51	pc
Edinburgh	60	48	c	56	52	c
Frankfurt	58	48	c	59	52	r
Geneva	61	44	c	64	44	pc
Havana	88	74	pc	87	72	pc
Hong Kong	93	83	r	92	80	t
Istanbul	67	55	c	68	56	s
Jakarta	91	76	sh	91	77	t
Jerusalem	73	61	sh	71	60	s
Johannesburg	70	45	r	67	43	s
London	62	54	c	65	56	pc
Madrid	83	50	s	84	51	s
Manila	84	79	t	84	79	t
Melbourne	65	44	pc	71	54	s
Mexico City	75	56	pc	74	56	pc
Milan	71	49	pc	71	51	pc
Moscow	56	41	r	48	40	c
Mumbai	90	79	t	91	81	t
Paris	64	51	c	64	52	sh
Rio de Janeiro	87	72	pc	90	73	s
Riyadh	100	70	s	100	69	s
Rome	73	55	pc	73	54	pc
San Juan	86	75	t	85	77	sh
Seoul	77	62	pc	75	59	c
Shanghai	84	72	pc	85	71	pc
Singapore	85	79	t	88	77	c
Sydney	85	60	t	70	62	c
Taipei	93	81	pc	94	81	pc
Tokyo	75	68	pc	78	69	s
Toronto	73	54	r	72	50	s
Vancouver	58	45	pc	55	39	sh
Warsaw	52	44	pc	54	48	pc
Zurich	60	44	c	61	45	pc

The WSJ Daily Crossword | Edited by Mike Shenk



COUNT OF ITALY | By Sergio Fanali

Across

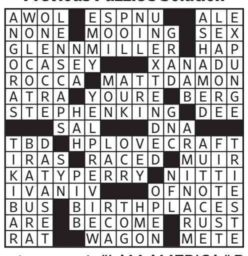
1 Surreptitious attention-getter
5 Carry
9 Glasgow native
13 ___ Lang (Clark Kent's Smallville girlfriend)
14 "___ appetito!" (alternative to "Mangia!")
15 Darling, in France
16 *Like candidates in some easy races
18 Pines (for)
19 Early Beatle Sutcliffe
20 Decay
21 Softball or soccer
23 Millinery accessory
25 Says
28 *1946 Gregory Peck western
32 Insects between larvas and adults
35 "Don't bet ___!"
36 One of three historic ships
37 "Give ___ rest!"
38 Graceful waterfowl
39 Deface
40 Sisters with habits
42 Cooped (up)
43 David did it to Goliath
45 *Game with a series of clues
48 Hart's horn
49 Cry from a stereotypical damsel in distress
53 Choppers
55 Football field figure
56 Chemist's workplace
57 Combination of notes
59 Start of an Italian count, and the start of the starred answers
62 Piggy bank insert
63 Become liquid
64 Film ___ (movie genre)
65 Creme-filled cookie
66 Italian traveler Marco
67 Pesky insect

Down

1 Luxurious
2 With 51-Down, one of three historic ships
3 Hog's nose
4 Bar fixture
5 Business magnate Pickens
6 Boot from power
7 Sock part
8 Wraps up
9 Abbreviate, say
10 Hundredth of an Italian lira
11 Assn.
12 "My country, ___ of thee..."
15 Tailor's need
17 Toyota hybrid
22 Finishes a hole
24 Kissing in public, for example, in brief
26 Charge
27 Trap
29 Subordinate
30 Preposterous
31 Last inning, usually
32 One of three historic ships
33 Motorist's about-face
34 Italian sweet bread popular at Christmastime
38 Sudden growth
41 Italian port southeast of Naples
43 Major mix-up
44 "Teen Wolf" network
46 Like a dive bar
47 Familiar with
50 Rocker John
51 See 2-Down
52 Film critic Roger
54 Dromedary feature
55 Paper towel unit
57 Navy noncom
58 That lady
60 Prefix for classical or conservative
61 An official U.N. lang.

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

Previous Puzzle's Solution



The contest answer is "I AM AMERICA." By combining the abbreviations for the states that are the birthplaces of the first five long answers (Miller in Iowa, Damon in Massachusetts, King in Maine, Lovecraft in Rhode Island and Perry in California), you get IA/MA/ME/RI/CA, suggesting "I Am America (And So Can You!)," Stephen Colbert's 2007 bestseller.

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OPINION

'Saving Face' Has a New Meaning

By Andy Kessler

Stop me if you've heard this one: A horse walks into a Genius bar and buys an iPhone X. Siri asks, "Why the long face?"

Apple's newest iPhone includes a 3-D facial recognition system that floods your face with 30,000 infrared dots. The A11 Bionic Chip, which runs 600 billion operations a second, analyzes the data. This enables Face ID to unlock the phone or create animated emojis in your likeness.

This is already pretty cool, but it doesn't take much imagination to envision apps way beyond this. By recognizing a long face, or an otherwise troubled one, it could help diagnose and treat the millions of Americans who suffer from depression or bipolar disorder. It could even be part of the treatment, reminding them to take medication or to reduce stress. And this is only scratching the surface of what the new iPhone could do for health care—if allowed.

Facial recognition has other fascinating uses. Last month, Stanford professors Michal Kosinski and Yilun Wang published a study involving 35,000 dating-site images of white people between 18 and 40, all of whom had disclosed their sexual orientation. They ran these through a recognition program called Face++ and came up with a model that accurately predicted whether a man in a photo was straight or gay 81% of the time. They could do the same for 71% of females.

Right on cue, the hyperventilation began. A Bloomberg headline screamed, " 'Gaydar' Shows How Creepy Algorithms Can Get." The Verge fretted, "The invention of AI 'gaydar' could be the start of something much worse." But is this even new? Jewish mothers have deployed J-Dar for centuries.

New smartphones know what you look like. That's not as scary as it sounds.

My bedrock rule of innovation: Every new technology instantly inspires dystopian fever dreams. Television encourages passivity and square eyeballs. Social networks cause anxiety disorder. Videogames create violent deviants, much as Tipper Gore claimed of explicit music lyrics. Alexander Graham Bell even worried about interruptions from phones! All these fears proved hysterical.

Neural networks—that is, code that mimics the human brain—have also shown a similarly high but not 100% ability to identify someone's intelligence, politics and criminal record. They can even predict if a relationship is doomed based on the tone of one partner's voice. Does this mean the crime-predicting movie "Minority Report" is now real? No, and neither is "Blade Runner 2049," retina scans, memory implants and all.

The benefits of new technology take a back seat to these night sweats. Google has joined with the National Alliance on Mental Illness to help diagnose depression. Snapchat might be used the same way. But that's nothing compared with smartphone cameras warning family and friends of potential health issues. Similar apps could identify strokes or heart attacks. But Elon Musk keeps whining that artificial intelligence will cause World War III.

If society is going to break this hope-vs.-fear paradox, it needs to view technological advancement as a property-rights issue. All users horse-trade their personal information for free stuff: email, searches and maps from Google; connections to long-lost friends from Facebook; product recommendations from Amazon. Each company has built powerful cash-generating engines to exploit this data. It's hard to tell if it's a fair trade, since there is no price signal.

Already there are calls to break up the Silicon Valley tech titans. I disagree. Instead, a natural evolution will take place as consumers wake up and realize they have the power. Democracy and capital markets are built on individualism and property rights. New technology enhances these rights.

Here's a potential scenario: One blatant misuse of facial recognition and we'll hear the screams from the mountaintop—much like the fake-news or election-meddling mess going on today. Then the conversation will start to focus on who owns the data. Maybe it will prompt a class-action suit. (Yes, there are bottom-feeding lawyers waiting to take your call.) Or maybe the Supreme Court will decide that consumers themselves own the data. Then the business model of Silicon Valley would flip to a negotiation on what service providers are willing to pay for data. This is the looming risk for today's tech titans.

Want a view into what this future looks like? In response to their massive hacking breach, the new chief executive officer of credit-reporting company Equifax said on these very pages that by Jan. 31 consumers will have "the option of controlling access to their personal credit data." That's the first step. The next is pay to play when it comes to your information, including your face. Then and only then will we get the innovation that we deserve, rather than be cut off because of techno-nightmares.

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

Anatomy of the Brazilian Mania

AMERICAS
By Mary Anastasia O'Grady

On Friday Brazil's central bank reported September inflation of 0.16%, putting the annual rate for the first nine months of the year at 2.54% and raising the likelihood that the central bank may undershoot its 2017 inflation-target range of 3% to 6%. It would be the fourth time in 20 years that the bank missed its target, but its first time missing on the low side.

Brazilians can breathe a little easier after seven years of inflation near or above 6%. Inflation topped out at 10.67% in 2015. To tame the monster, the central bank more than doubled its benchmark overnight lending rate to 14.25% and held it there for 13 months. As inflation has backed off, the overnight rate is now down to 8.25%. Brazil's economy is now growing again after 12 consecutive quarters of contraction (measured year over year) and a net real GDP loss of 7.7%.

Yet Brazilians are looking at growth of 0.7% this year and 2.2% next year—still paltry for a large underdeveloped country. Whether Brazil gets its mojo back or remains the international poster child of mediocrity depends on the right diagnosis of what went wrong and a new policy mix.

In New York last month I asked Ilan Goldfajn, who has headed the central bank since June 2016, about the mistakes made during the go-go years. The MIT-trained economist blames "too much spending, too much credit by public banks" and, more generally, an expansionary fiscal policy.

Government can get away with big spending in an economic upturn, Mr. Goldfajn told me. But that didn't work to pull Brazil out of its downturn. "Instead of leading to a recovery in the economy, the deceleration became a big recession."

Brazil's giant state-owned oil company, Petrobras, also took on too much debt, as did many other companies and households. "So you asked me what we inherited: We inherited excesses."

Those excesses were not only on the spending side, he says. There was also too much regulatory intervention. The government was "deciding what was going to be the gasoline price, what energy prices would be," and "defining how much public banks should lend. The system basically collapsed with the recession."

Mr. Goldfajn maintains that the central bank's institutional integrity held up during the boom years. Thanks to quality supervision of the banking system, Brazil avoided a banking crisis. But in the face of an aggressive expansionary fiscal policy the central bank "had to work by itself to contain the excesses."

I asked Mr. Goldfajn if the central bank should have raised its voice during the mania. He called it an important "institutional" question because the bank is, by law, independent. Informally it is considered "de facto" independent, but when things go awry "people start questioning whether the de facto rules" are still in place. Brazilian central bankers for some years now have been saying that "we need to put the de jure into the de facto."

Central bank boss Ilan Goldfajn says excesses led to the deep recession.

Mr. Goldfajn said "maybe this is the moment." Brazilians know that independence "is not enough" but "if we have it de facto and de jure, this is the best combination."

Brazil's former finance minister Guido Mantega coined the term "currency war" in 2010 when the Federal Reserve's easy-money policies caused a flood of portfolio capital looking for yield and pushed up the value of the *real*.

But the answers were on the fiscal side, Mr. Goldfajn said: "If savings want to come to Brazil, it is important to take [advantage of] the opportunity of capital coming into the country." But, he adds, this should not be allowed to drive a highly expansionary policy. Instead government should pull back on the fiscal reins in good times.

"There are cases in the world when fiscal policy is OK and still you have a problem. Then you have to talk about looking at the banking system to make sure you have the right prudential measures."

The Fraser Institute's Economic Freedom of the World Index ranked Brazil, in 2015, 137th out of 159 countries, below even Russia at 100. But Mr. Goldfajn told me that Brazil's economic team has now reoriented it policy agenda, "I would say 180 degrees."

It knows the "benign international environment will not be here forever" and it has to seize the day. "The good environment that holds assets up for emerging markets and for Brazil is the exact moment when you have to do all your homework in terms of reforms."

Some reforms have been passed by Brazil's Congress. It has partially deregulated labor markets and passed a constitutional amendment that freezes real spending for 20 years. The national development bank now must link lending rates to the market, vastly reducing the government subsidy.

Brazil's political crisis makes further reform very difficult. But much more needs to be done. "We need to push it as far as we can."

Write to O'Grady@wsj.com.

Christopher Columbus, Great American

By Angela Rocco DeCarlo

Christopher Columbus was an American-style entrepreneur. He conceived his project alone, suffering in poverty for nearly a decade while raising the money to sail west in search of a backdoor route to the Indies of the East. Most of us can't begin to grasp the scope of Columbus's insatiable curiosity, intellectual drive and accomplishments of navigation. Most of us couldn't find the hamper without a GPS.

Leaving dry land in August 1492 Columbus depended entirely on his brilliant mind, experience and research to guide him. It was common knowledge no one had ventured into that vast expanse of water—lately called the Atlantic—and lived to tell the tale.

Columbus believed he could do it. He read Ptolemy and Marco Polo. His copy of Cardinal Pierre d'Ailly's "Imago Mundi" contained 898 margin notes in Columbus's own hand.

Europeans had been accustomed to traveling over land to China, Japan and India to trade for goods. After the fall of Constantinople to the Muslims of the expanding Ottoman Empire in 1453, those ventures became dangerous. The sea became the salvation of European trade.

After three months at sea Columbus disembarked in a place no European knew existed. He believed he had reached the Indies, when in fact he was in the Caribbean. He never set foot on the North American continent. It was a monumental achievement, just not the one he was hoping for.

Today when everything is instantly known—or we think it is—it is impossible to understand how 15th-century European attitudes shaped Columbus. He hoped the profits from his voyage could finance the liberation of the Holy Land from Muslim domination. He also hoped to spread the word of God.

It's intellectually dicey to judge those who lived hundreds of years ago according to modern norms. Doctors who routinely infected women during childbirth out of ignorance of the germ theory of disease are not reviled today.

Attacks on the explorer are aimed at Western civilization.

But European explorers who were similarly ignorant about how diseases are spread are routinely abused for the illnesses that befell inhabitants of the New World from lack of natural immunity.

The Columbian exchange benefited Old World and New by spreading knowledge of science, agriculture and nutrition. Without Columbus, the Renaissance may not have succeeded. Without his discoveries, Italians wouldn't have marinara sauce, the Irish wouldn't have mashed potatoes, and the Swiss wouldn't have chocolate. Because America and its freedoms exist, children no longer contract polio and many other diseases. America saved the world from totalitarianism twice in the last century.

Today Columbus's reputation is under siege. But those seeking to delegitimize the Genoan explorer's legacy may actually have a larger target in mind. Statues of Columbus and tributes to his achievements are in many ways proxies for the Western tradition of freedom, liberty and the rule of law. America had better protect Columbus and win this war. There is no one else to save the world next time around.

Ms. DeCarlo formerly covered culture, travel and entertainment for the Chicago Tribune and the Las Vegas Review-Journal.

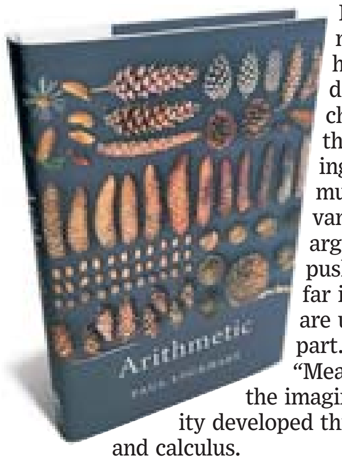
BOOKSHELF | By Jane Gleeson-White

Add, Subtract, Multiply & Divide

Arithmetic
By Paul Lockhart
(Harvard, 223 pages, $22.95)

We live in a world written in number, from the binary code that drives the information age to the dollar, euro and yuan figures that shape the behavior of nations, corporations and individuals. For the first time in history, nearly everyone can make a calculation at the touch of a screen or a button at hand. Yet core computational skills are languishing, and studies continue to show American students struggling with mathematics.

"Arithmetic" is Paul Lockhart's most recent effort to redeem math by getting the public enthused about its wonderful possibilities. He has been pushing this agenda for a while: He left a brilliant career as a research mathematician to become a private-school math teacher, believing that much of the problem with his beloved subject is the way it is taught.



In 2002 he wrote "A Mathematician's Lament," in which he imagines a world of mandatory music education where children learn the subject through notation alone; singing, playing and composing music are reserved for advanced college classes. This, he argues, is how we teach math: pushing its joys and rewards so far into the future that children are unlikely to persist to the fun part. He followed up in 2012 with "Measurement," which celebrated the imagination, intuition and ingenuity developed through the study of geometry and calculus.

In "Arithmetic," Mr. Lockhart continues to draw readers into his world of numbers, choosing as his entry point math's foundational arrangements, comparisons and operations. Here Mr. Lockhart seeks to explore three main points: the arbitrariness of the symbols we humans have devised to represent numbers; the extraordinary beauty of the numbers themselves; and the fun we can have playing with them.

"Arithmetic," Mr. Lockhart explains, "is the skillful arrangement of numerical information for ease of communication and comparison. It is a fun and enjoyable activity of the mind and a relaxing and amusing pastime—a kind of 'symbol knitting' if you will." He introduces us to this symbol knitting with a skip through its history, laying the conceptual foundation with three imaginary prehistorical tribes who trade with one another. They are the preverbal "Hand People," who communicate using claps and thumps and whose main unit of quantitative grouping is five; the "Banana People," who group in fours and use the sound "na" to mean one, "nana" for two and so on; and the "Tree People," whose grouping size is seven and who communicate their numbers by scratches in bark. The point of this hypothetical, Mr. Lockhart says, "is that the artful rearrangement of numerical information—in particular, *the translation among different grouping sizes*—is the soul and essence of arithmetic."

Students may better grasp division by thinking of it as the opposite of multiplication—or, in the author's words, as 'unmultiplication.'

Readers who make it past this mind-expanding prelude will discover chapters of real history, exploring different civilizations' approaches to representing and calculating numbers. Mr. Lockhart begins with the Egyptians, who in 3000 B.C. developed one of the earliest "marked-value" number systems, in which each word or symbol has a fixed meaning. The Romans and Chinese used a marked-value written system to represent their numbers, together with a place-value abacus to calculate them. In the sixth century, Hindu mathematicians effectively combined the best features of the Roman and Chinese approaches, using a place-value written system from the start. Arab traders were introduced to the Hindu system around A.D. 700 and adapted it to their own alphabet—yielding the Hindu-Arabic numerals we use today.

This history is followed by chapters devoted to each of the operations of arithmetic—addition, subtraction, multiplication and division—and to the various counting machines we have invented. Mr. Lockhart is particularly transported by one of the simplest of these devices, the odometer, which for him is alive and possesses a soul: "Odometer and I have a beautiful relationship, and when she rolls over, I go to pieces." In chapters on fractions and negative numbers, he seeks to clarify these concepts by demonstrating, for example, that division is a reciprocal multiplication or "unmultiplication." As he says, "to undo multiplication by 7, we divide by 7. Or, as we've seen, we can multiply by 1/7. This means we get to make an interesting trade: instead of undoing the multiplication activity with division (i.e., the inverse activity), we undo multiplication with another multiplication! . . . Instead of unmultiplying by seven, we are multiplying by *unseven*."

Like all good stories, these chapters create the groundwork for the attentive reader to crest at the climax. Mr. Lockhart shows us the "breathtakingly beautiful" possibilities of arithmetic with accessible examples—using the question of how many automobile license plates there are, for instance, to illustrate the concept of factorials.

"Arithmetic" is like a textbook designed for the curriculum of Mr. Lockhart's dreams, where math is presented as fun and abstract. He speaks directly to the reader in idiosyncratic prose peppered with colloquialisms, yet writes with didactic intent. But "Arithmetic" is neither a scholarly history of the development of mathematics, nor a work of theory in any real sense. Mr. Lockhart wrote it to show that arithmetic, like knitting, is an enjoyable craft—and his continued insistence on this point tends to override his demonstrations of how it might actually be so, especially for those not already versed in mathematics. Readers who will gain the most from Mr. Lockhart's work are probably math teachers, math enthusiasts and those who enjoy a good puzzle: The book is liberally sprinkled with brain teasers such as "Can you invent a way to represent the numbers one through twenty using only the fingers of one hand?" But it provides no solutions. Like real mathematicians, we must venture into the unknown.

In Paul Lockhart, though, we have an excellent guide. "Arithmetic" is inspiring and informative, and deserves to be widely read. Those who explore the fascinating stories within its pages will agree with mathematician Keith Devlin: "I will tell you this. I would have loved to have had Paul Lockhart as my school mathematics teacher."

Ms. Gleeson-White is the author of "Double Entry" and "Six Capitals, or Can Accountants Save the Planet?"

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OPINION

REVIEW & OUTLOOK

Defying Betsy DeVos

Universities refuse to reform their policies on sexual assault.

Not to be overshadowed by their students, administrators at several universities are apparently launching their own protest movement. Secretary Betsy DeVos recently rescinded the Department of Education's flawed 2011 Title IX guidance, issuing an interim directive on how colleges and universities should more fairly adjudicate sexual assault. At least a dozen schools have responded with defiance.

"Regardless of this new DOE action and interim guidance . . . we will not waver in our commitment to Title IX and its protections," said California State University, Northridge President Dianne Harrison in a statement. She added that current policies adhere to the state law and executive orders and will remain in place.

"It's business as usual, nothing has changed on this campus," St. Edward's University Title IX Coordinator Lisa Kirkpatrick told the student newspaper. Mrs. DeVos's interim guidance "is just that—guidance," explained Danica Myers, Occidental College's interim Title IX coordinator, in a campus-wide email. "It's not the law."

Yet there's no legal difference between Mrs. DeVos's new guidance and the 2011 "Dear Colleague" letter, which the Obama Administration used to impose far-reaching new Title IX regime. Higher education embraced the Obama-era directive, creating a system that routinely violated due-process and free-speech rights. Mrs. DeVos's guidance and its accompanying Q&A seek to end some of these abuses, directing universities to avoid gender bias, weigh evidence fairly, and afford the same rights and opportunities to the accuser and accused, among other basic equity provisions.

It's revealing that several campuses have responded with animus. But administrators don't get to pick and choose which Department of Education guidance to follow, and schools in violation could lose federal funding or face Office of Civil Rights scrutiny.

Some recalcitrant universities are easy targets for Department of Education sanction. For instance, the University of Oregon insists that it already fairly and impartially adjudicates Title IX cases, so Mrs. DeVos's guidance should have "very little, if any, impact on our current policies and procedures." But last December the Lane County Circuit Court overturned the university's suspension of a student accused of sexual assault. That student is now also suing in federal court in Eugene, saying the university denied him due process and took "arbitrary, discriminatory and illegal actions designed to reach a predetermined action" against him.

Kathleen Salvaty, the administrator who presides over Title IX adjudication across all nine University of California campuses, says the system-wide practices "will remain in full effect." She also claims the university's Title IX policy already requires "equal rights for complainants and respondents."

But this past summer, a federal judge in central California acknowledged plausible concerns that the university may have acted with gender bias and denied due process to an accused male student. Allowing the case against the UC Regents to proceed, Judge Stephen Wilson wrote that the unnamed student's complaint "depicts the disciplinary proceedings as one-sided and against the weight of significant evidence" and "cast doubt on the accuracy of the outcome of the disciplinary proceedings."

Mrs. DeVos's interim guidelines permit campuses to continue using the controversial "preponderance of evidence" standard for now, albeit only if that lesser measure of proof is also applied in non-Title IX misconduct cases. We'd have preferred a mandated "clear and convincing evidence" standard, but Mrs. DeVos tried to give schools as much discretion and flexibility as possible.

Clearly the respect isn't mutual. Unlike the Obama Administration, Mrs. DeVos intends to abide by the Administrative Procedure Act, going through the required rule-making process to issue the final Title IX regulation. The insubordination of administrators invites a tougher approach to restoring due process on campus.

A Nun's Right to Choose

Poor women will still have easy access to contraceptives.

The Trump Administration on Friday eased ObamaCare's contraception mandate, the now infamous regulation that coerced Americans (even Catholic nuns) to pay for forms of birth control that violate their religious beliefs. This is welcome news for American tolerance and pluralism, not a scene from "The Handmaid's Tale."

The Health and Human Services Department issued interim final rules that will allow moral and religious exemptions to the contraception mandate, which currently requires employer insurance to cover all forms of birth control approved by the Food and Drug Administration at no cost to individuals. The Obama Administration threatened the Little Sisters of the Poor, a group of nuns who care for the elderly poor, with up to $75 million in fines for refusing to pay for types of contraceptives the nuns view as abortifacients.

After years of legal challenges, the Supreme Court last year told the government to try again to work out a solution that would accommodate all parties. The Trump Administration has followed through in good faith, unlike the Obama Administration, which originally offered the Little Sisters a phony exemption that still required the nuns to subsidize birth control.

The left is treating this modest regulatory relief as a GOP effort to ban birth control, claiming millions of women will no longer have access to oral contraceptives. But HHS says the tweak won't affect 99.9% of women, and that number could probably have a few more 9s at the end. Left untouched are "the multiple other Federal programs that provide free or subsidized contraceptives" for women, the rule notes, and birth control is available through Medicaid and community health centers.

The overwhelming majority of affected employers have complied for years with the mandate, and there is no incentive to change. Contraception is not the type of expensive care that drains insurers, and companies will not be eager to face the left's wrath for even minor coverage alterations.

The Little Sisters still need relief in court, which the new rule should make easier, but the regulatory change will launch a crush of new lawsuits from groups like the ACLU. That so many resources in government and so much litigation are necessary to allow nuns to practice their faith is a testament to the toxic identity politics that corrodes American life.

Pruitt's Clean Power Break

Dismantling Obama's regulatory attempt to kill fossil fuels.

The Trump Administration is giving the economy a boost with its deregulatory agenda, and the latest example comes Tuesday when Environmental Protection Agency chief Scott Pruitt will propose to repeal the Obama Administration's Clean Power Plan. Ending this power grab will uphold the letter of the law and restore co-operative federalism with the states.

The Obama EPA imposed the rule in 2015 to regulate carbon emissions nationwide and force the retirement of coal-fired electric power plants. Former EPA chief Gina McCarthy took creative license by reinterpreting Section 111 of the Clean Air Act, which directs the agency to implement the "best system of emission reduction" for pollutants.

EPA had previously applied this provision narrowly to single sources of emissions (e.g., individual power plants), but Ms. McCarthy broke with decades of precedent to dictate a systemic shift in power generation. The Clean Power Plan initially requires new efficiency at coal-fired plants, but over time it impels states to substitute coal with natural gas and ultimately solar and wind.

This usurped the regulatory role of states and contradicted the Clean Air Act text, which says that "air pollution control at its source is the primary responsibility of States and local governments." The Clean Power Plan would have forced states to scramble to alter their electric-power mix, shutting down coal plants long before the end of their useful life regardless of whether substitutes were on hand and affordable. Higher electricity costs and brownouts were likely.

The Supreme Court stayed the rule in February 2016 after 27 states and 37 electric co-ops sued. In March Mr. Pruitt launched a formal review of the rule, and a draft of the EPA's new analysis that we've seen estimates that rescinding the carbon rule would save $33 billion in compliance costs by 2030.

It also finds that the Obama EPA rigged the cost-benefit calculations. For example, the McCarthy EPA claimed tangential benefits from reductions of other emissions like particulate matter that could have been achieved with less heavy-handed regulation. U.S. social costs were compared against *global* climate benefits.

Ms. McCarthy also assumed linear health benefits from emissions reductions notwithstanding diminishing returns. In violation of the Office and Management and Budget's longstanding practice, energy efficiency was cited as an avoided cost rather than as a benefit. This allowed the Obama Administration to low-ball the rule's cost estimate.

Mr. Pruitt's proposed rule-making starts the 60-day window for public comments. EPA notes that it hasn't decided whether it will follow its repeal of the Clean Power Plan with a new rule that regulates greenhouse gases from existing power plants and is considering "whether it is appropriate to propose such a rule." The decision in part will depend on how well Mr. Pruitt thinks EPA can defend any new rule under the inevitable legal challenges from the environmental left.

But repealing the regulatory overreach of the Obama Administration is the first crucial step that is already paying dividends in less economic uncertainty and more confidence in the reliability of the future electric grid.

LETTERS TO THE EDITOR

Can't Afford Tax Cuts; How About Spending?

Regarding Jason Furman's "The U.S. Can No Longer Afford Deficit-Increasing Tax Cuts" (op-ed, Oct. 2): It is very difficult to believe that the current corporate and individual income-tax rates happen to be set at the ideal levels to promote the maximum growth and best overall economic tax-revenue rate. Is the tax code now returning the maximum percentage of revenue as diagramed by the Laffer curve? Unlikely.

From my personal experience in the Kennedy-Johnson expansion and in the Reagan expansion, this current economy seems much weaker than those two periods of robust growth. By way of comparison, there is far more pent-up demand in the current economy. In days past you could see the growth around town and in your place of work.

The Republicans have been overly concerned about cuts in government spending in the early post-World War II years. They voted against defense spending cuts until the "bring the boys home" outcry won the day. Spending decreased and the growth of the private sector in the 1950s boomed.

Let's hope today's Republicans don't fall for the fear of change trap.

LARRY DEVRIES
Vancouver, Wash.

The current tax system isn't depriving the government of revenue. Federal receipts as a percentage of gross domestic product data clearly show an upward trajectory in the second half of the 20th century. The average for 1950-59 was 16.21% and 17.68% for 1990-99. Compare these numbers with the collections from 2000-08 and 2013-16, which were 17.20% and 17.36% respectively. The main reason for our burgeoning federal debt, which will hurt future generations for years to come, is our much higher and out of control government spending, a problem that politicians on both sides refuse to confront. Sharp cuts in government spending is the solution because any increase in tax revenue will most likely be used by politicians to increase government spending even further.

PROF. PATRICK NEWMAN
Florida Southern College
Lakeland, Fla.

Prof. Furman informs us that tax cuts never generate enough growth to pay for themselves, yet federal receipts doubled in the 1980s in the wake of the Reagan-era tax cuts. Either these tax cuts were an apparition or they stimulated more growth than Prof. Furman remembers. It seems to be business as usual in Washington, where fiscal restraint is always the responsibility of the other party, and every new idea is subject to a red-state/blue-state litmus test.

JOHN CARLSON, CFA
Boulder, Colo.

The headline reads: "The U.S. Can No Longer Afford Deficit-Increasing Tax Cuts." I eagerly await the logically equivalent: "The U.S. Can No Longer Afford Deficit-Increasing Spending."

KEVIN CLARK
Franklin, Tenn.

A Better Plan Than Paying College Athletes

Big football and basketball have been increasingly corrupting higher education for years, but allowing colleges to have their own professional athletic subsidiaries on campus is only going to make the problem worse ("College Basketball Is a Big Mess; Let's Pay Players," Sports, Sept. 29). By all means, force pro football and basketball to have their own minor leagues for athletically talented players who value playing more than a college education.

Instead of paying players, take away the bloated college recruiting budgets and the labyrinthine recruiting rules for those sports. Players who want to earn an education and play sports will find the right school as they used to without the lure and corruption caused by the interface with big-time sports. Those who really don't want to go to college should go to the new minor leagues and get paid. The colleges and the players will be the better for it.

THOMAS WIECKOWSKI
Wyncote, Pa.

Athletes in major sports already are the most pampered students on campus. They receive full-tuition scholarships, free books, sumptuous meals, often separate housing, academic counseling, personalized backpacks, free shoes, jackets and other athletic apparel, specially selected courses and majors, lighter course loads and more, all of which lead to enhanced arrogance and elitism on the part of many athletes. Athletic departments, including the athletes, regard themselves as separate from, and superior to, other units of the university. The proposal to pay cash stipends to athletes would elevate the most pampered students even higher above the plane where other students reside.

PROF. DOUGLAS M. BRANSON
University of Pittsburgh

NFL Must Like Distraction Of the National Anthem

The Journal is awash with opinion pieces and letters (Sept. 29) about the NFL players' protests. The NFL must be delighted to field this distraction; it pulls attention away from the 800-lb. gorilla in the room—chronic traumatic encephalopathy (CTE). An autopsy on the disgraced Patriot star Aaron Hernandez, who recently committed suicide in prison, revealed significantly advanced CTE. That finding goes a long way in explaining why a young player, making millions of dollars and appearing to have it all, would senselessly murder two people and easily get caught. Coverage for his autopsy is available, but you must search for it.

Ten years from now, when we have a tsunami of ex-players who cannot finish a sentence or remember their children's names, the national anthem protests will be long forgotten. The real challenge for the NFL isn't free speech, it is CTE and it knows it.

MICHAEL CUMMINGS, M.D.
New Smyrna Beach, Fla.

It's Time to End Ineffective And Cruel Animal Testing

Regarding Matthew R. Bailey's "Love Your Dog, Support Animal Research" (op-ed, Sept. 18): Testing drugs on animals is notoriously ineffective. Not only do laboratory animals suffer from confinement and research procedures, but because they present different biologies and physiologies, different species (and even breeds within a species) respond differently to various substances. Making the jump from testing a substance in one species of animal to predicting safety and effectiveness in another is effectively a shot in the dark. Fortunately, technological advances have revolutionized chemical testing. The most notable innovations are organs-on-chips, stem-cell methods and CRISPR-cas9 genetics research. Organ chips can even be linked together to simulate organ systems. Animal lovers favor research that saves animals lives without the cruelty to and deaths of the animals tested.

JOHN PIPPIN, M.D., F.A.C.C.
Physicians Committee for Responsible Medicine
Dallas

SIFI Designations Need Clear and Transparent Rules

Your editorial "Trump's Too-Big-to-Fail Punt" (Sept. 27) reports that the Financial Stability Oversight Council voted to remove AIG from the designation as a systemically important financial institution (SIFI). You also note ("U.S. Drops AIG's Federal Oversight," Business & Finance, Sept. 30) this action may have limited practical impact as the Federal Reserve's "rules for insurance companies have yet to be written." Presumably AIG was initially designated a SIFI without any rules in place. It is eye opening that without any regulations, rules or laws in place, a company can still be placed in bureaucratic jeopardy. If anyone is looking for a place to start draining the swamp, a good start would be at the out-of-control FSOC.

JOSEPH C. HUNTER
Colorado Springs, Colo.

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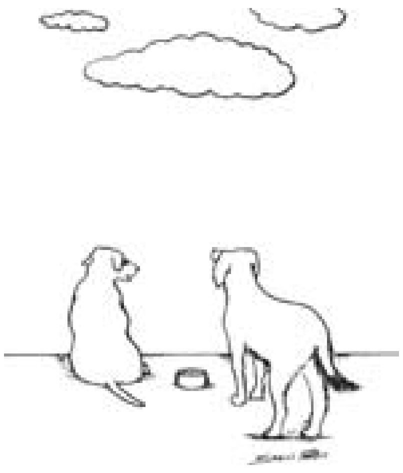
Pepper ... And Salt

THE WALL STREET JOURNAL



"Can you believe, there's not a single dog biscuit in the Cloud."

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The GOP's 'Tax the Rich' Temptation

By Phil Gramm

Given that the top 10% of income earners in America pay more than 71% of federal income taxes and do most of the saving, investing and innovating that fuel America's economic growth, it's hardly surprising that a tax reform proposal to stimulate growth would reduce the marginal tax rates of high-income Americans. What is astonishing, however, is the difficulty advocates of tax reform seem to have in defending their proposal against the attack that it benefits the rich.

> The top 10% of earners already pay 71% of federal taxes on income—highest in the developed world.

When is the last time you heard a tax-reform advocate point out that today the top 10% of income earners in America pay a larger share of the overall tax burden than anywhere else in the developed world? The most recent study on the distribution of the tax burden among nations was conducted by the Organization for Economic Cooperation and Development in 2008, and covered all forms of taxes on income, including social-insurance taxes and state and local taxes. The top 10% of earners in the U.S. paid more than 45% of all taxes on income. In Sweden the top 10% of earners paid less than 27%; in France, less than 25%. Since Sweden and France both have large value-added taxes, a regressive levy, their top-10% earners bear an even smaller share of the total tax burden. The next time Bernie Sanders demands that the rich pay their fair share, somebody should ask him if he would be satisfied if the American rich paid the same share as their counterparts in Sweden and France.

The imbalance got even worse in January 2013, when President Obama increased taxes on high-income Americans. He raised the top rate on ordinary income by 13%, increased the tax on dividends and capital gains by 59%, and imposed a 40% death tax. Combined with a smothering regulatory burden, these increases helped reduce economic growth to only 43% of the postwar norm. Yet advocates of tax reform today scramble to prove their reform preserves the post-Obama tax-burden distribution. Why would Republicans commit to make the punitive Obama tax increases a perpetual feature of the distribution of the tax burden?

For that matter, when did America become so hostile to the successful? Henry Ford, Andrew Carnegie, Thomas Edison, Sam Walton and Bill Gates all became rich by producing goods and services we chose to buy because they enriched our lives. They received only a small share of the bounty that their drive and genius created. Come to think of it, when was the last time you were hired by somebody poorer than you?

It does not necessarily follow that higher tax rates increase revenue. By raising taxes on top income earners, the Obama administration planned to raise $620 billion over 10 years. Redistributionists should be a little sobered by the fact that in the 10 years following the Obama tax increases the government is now on track to lose $3.2 trillion in revenue due to a decline in economic growth.

DAVID KLEIN

Despite Sweden's and France's willingness to impose higher marginal rates on the rich, it would appear that there are limits in the real world to how much tax blood can be extracted from wealthy turnips. The experience of OECD countries strongly suggests that in high-spending countries with high marginal tax rates and low economic growth, an increasing share of the tax burden is actually shifted from high-income individuals to the middle class.

It is equally clear that by stimulating growth, the Reagan tax cuts produced more revenue and increased the share of taxes paid by the rich. The share of income taxes paid by the top 10% of earners, which had been falling prior to the Reagan tax cuts, increased 20% during Reagan's presidency. The U.S. government collected 19% more real revenues the day Reagan left office than the day he came into office, even though inflation had been broken, bracket creep repealed, and tax rates reduced dramatically.

Which brings us to the death tax. Americans work their whole lives, pay taxes on every penny they earn, build a farm, a business or an estate—and when they die, the government takes another 40% of everything they have accumulated. To escape this fate, the most talented people in our society squander massive amounts of time and resources trying to beat the death tax. The very rich often succeed, but at what cost?

Because of the death tax, older investors hold assets that they would like to sell, keeping them from buyers who could put them to better use. They know that if they sell the farm or business, pay the capital-gains tax and then die, they will end up paying out some two-thirds of the value of their life's work to the government.

How many baby boomers who retire early and squander their accumulated wealth would continue to work, create and accumulate if government did not prevent them from transferring the benefits of their efforts to their family? Comparing the estimated static cost of repealing the death tax with the potential economic benefits from its repeal, it seems clear that repealing the death tax is one of the most cost-effective pro-growth tax reform policies.

One has to marvel at how anybody can find it difficult to defend repealing the death tax. Everything about the tax is wrong and the economics of repealing it are right. Republicans should let the Democrats keep their monopoly on redistributing wealth and seize the monopoly on creating it.

Mr. Gramm, a former chairman of the Senate Banking Committee, is a visiting scholar at the American Enterprise Institute.

Reverse Patent Trolls Are Harming Drug Innovation—and Patients

By Brent Saunders

Allergan's agreement with the Saint Regis Mohawk Tribe has inspired a lot of commentary. Under the deal, my company transferred the patents for Restasis, a prescription eyedrop, to the Native American tribe as a way of protecting the intellectual property from unfair challenges. The agreement was intended to address the disadvantage that "inter partes review" creates for biopharma innovators and the patients they serve.

Research and development, protected by intellectual property, is the lifeblood of the biopharmaceutical industry. Every year, companies like Allergan invest billions of dollars in developing life-enhancing medicines, with the understanding that successful innovations will be granted strong patent protection. This is an extremely risky process, often met at every step with setbacks or failure. But we take on this risk knowing that success could greatly improve patients' lives.

Investing in R&D is integral to Allergan's social contract with patients. We uphold our end of the bargain by committing significant resources to R&D and by pricing medicines so that they are accessible to the public. On the other end, patent protections allow us to recoup our investment, reward the shareholders and inventors who played a role in these discoveries, employ thousands of people, and reinvest in developing new drugs.

This social contract has come under stress recently. In 2011, as part of the America Invents Act, Congress created a way to challenge a patent's validity through a new process called inter partes review. The intent was to prevent "patent trolls" from gaming the patent system, especially in high tech. But a host of unintended consequences soon became clear. Most notably, the IPR process is stacked against biopharmaceutical patents, providing deep disincentives for innovation.

Previously, biopharma companies had a stable and predictable patent-challenge process under the Hatch-Waxman Act of 1984. That law struck a delicate balance between encouraging biopharmaceutical innovation and facilitating generic drugs' access to the market. For innovators, it streamlined the regulatory approval process and addressed the loss of intellectual-property protection. For generic manufacturers, it established an advantaged development pathway and then provided a way to challenge brand-name patents in federal district court. Hatch-Waxman has been a resounding success: Today, generics hold nearly 90% market share in the U.S., up from 19% when the law was passed. After more than three decades of success, we know the Hatch-Waxman system works.

> Generic competition is good, but the law Congress passed in 2011 puts unfair burdens on innovators.

The new IPR process undermines the successful Hatch-Waxman framework. Under IPR, patents can be thrown out even if they already survived a Hatch-Waxman challenge in the federal courts. This double jeopardy is made worse because the IPR process does not accord patents the strong presumption of validity that exists under Hatch-Waxman.

Paul R. Michel, a former chief judge of the U.S. Court of Appeals for the Federal Circuit, told Congress last month that the America Invents Act "has caused more harm than good." Judge Michel explained that the Supreme Court has held, in a 2011 case, that patent litigation must use the "clear and convincing" standard of proof. But the IPR process uses the lower "preponderance of the evidence" standard, which Mr. Michel said the justices had ruled "was too 'dubious' a basis to deem a patent invalid." Allergan could not agree more with Judge Michel's statement that "too many patent owners feel that the deck is stacked against them and that they have the burden to prove their patents valid." The IPR process expressly undermines the legitimacy of approved patents.

Worse yet, IPR's flaws have been exploited by generic manufacturers and a new breed of "reverse trolls." There have been many cases of hedge funds that demanded cash from branded biopharma companies as a payoff for not filing IPR challenges. Allergan has been the target of one of these extortion-like attacks. Hedge funds have also taken short positions in companies and then filed IPR challenges to drive down their stock value.

The IPR system is discouraging biopharmaceutical innovation and putting new medicines in jeopardy, along with the jobs they support and the lives they save. Without the stability and predictability provided by strong patent protection, innovation will suffer. That means patients will suffer.

Another question is whether it is even lawful to subject the owners of issued patents to the IPR process. The Supreme Court is expected to rule on the constitutionality of IPR now that it has taken up the case *Oil States v. Greene's Energy Group*. Meanwhile, Congress should act to fix IPR's flawed treatment of biopharmaceutical patents.

We at Allergan fully support generic competition for our medicines. Hatch-Waxman has created an effective balance between investment in innovation and the need to ensure affordable access to medicines. What we cannot support, however, is a system that creates an unfair burden on owners of intellectual property, while empowering hedge funds and patent trolls.

Mr. Saunders is chairman and CEO of Allergan PLC.

Are There Really 'More Mass Shootings Than Days in the Year'?

By David Kopel

Sen. Chris Murphy of Connecticut responded to last week's Las Vegas massacre by issuing a statement in which he claimed: "Already this year there have been more mass shootings than days in the year." That was last Monday, the 275th day of 2017. Can Mr. Murphy possibly be right?

Certainly not by the ordinary definition of "mass shootings," which includes attacks such as the one in Las Vegas this month, at the Pulse nightclub in Orlando, Fla., in 2016, and at Colorado's Columbine High School in 1999. Of late such infamous crimes have hit the national news several times a year—nowhere near a daily basis. Gun-control advocates like Mr. Murphy seek to alarm the public by exaggerating the scale of the problem.

The FBI defines "mass murder" as "four or more victims slain, in one event, in one location." Starting with the FBI's definition of four or more fatalities, the Congressional Research Service reported that from 1999 through 2013 there were an average of 20 to 22 mass shootings in the U.S. annually. In an average year, four of these would be "mass public shootings"—the kind that often get national media attention. Of the rest, about half were "familicides"—killings within a family or estranged family, usually taking place in a private residence. The other half were "attributable to an underlying criminal activity or commonplace circumstance," such as armed robbery, gang activity, insurance fraud or romantic triangles.

The website Mass Shooting Tracker, by contrast, counted 340 mass shootings in the U.S. between New Year's Day and last Monday—consistent with Mr. Murphy's claim of more than one a day. The site uses a much broader definition of mass shooting: "an incident where four or more people are shot in a single shooting spree. This may include the gunman himself, or police shootings of civilians around the gunman." Under this definition, the shootings needn't be fatal.

It's not surprising that people who favor gun confiscation would prefer an inclusive criminal methodology. But it's not helpful in actually reducing violence. Different solutions are needed for different types of crimes.

Bump stocks, such as the one the Las Vegas shooter used, are irrelevant for ordinary crimes because they degrade a firearm's accuracy. To reduce fatalities in mass public attacks, it would be sensible to require that anyone who buys a device that makes a normal gun fire as fast as a machine gun go through the same arduous federal process as those who buy an actual machine gun. Unfortunately, a bill introduced by Sen. Dianne Feinstein is so overbroad that it outlaws normal modifications to standard firearms—such as changing a spring to reduce the trigger pull weight from six pounds to five.

The good news is that for gun crime in general the U.S. has had a quarter-century of success. The robberies, domestic violence and other crimes that comprise nearly all "mass shootings" broadly defined are simply the worst examples of ordinary gun crime. Since peaking in the early 1990s, gun homicide has declined by half nationwide. Overall gun crime victimization is down by three-fourths. In this same period, the American gun supply grew by 80 million, so that there is now slightly more than one gun per person in the U.S.

> Advocates of gun control cite figures that conflate Las Vegas with gang crime and domestic violence.

Scholars suggest diverse causes for the crime decline. To the extent that gun policy has made a difference, Americans in the past quarter-century have made their gun laws both stricter and more permissive. Today, unlike in 1992, there are many laws against gun possession by persons with domestic-violence records, whether misdemeanor convictions or restraining orders. Extensive and uncontradicted social-science indicates that such persons are much likelier to commit gun crimes, especially domestic ones.

Improved interstate data-sharing has facilitated laws against gun possession by prohibited persons. Tougher sentencing for criminals who use firearms in a violent crime has been an important cause of mass incarceration, and those longer sentences have helped reduce gun violence of all types.

On the other hand, unlike in 1992, right-to-carry is now the national norm. In all but a few states, adults with safety training and a fingerprint background check have a legal right to bear a firearm for lawful defense. State pre-emption laws have eliminated many local antigun restrictions.

Although gun crime has been way down, 56% of Americans in a 2013 Pew Research survey thought gun crime was higher than 20 years earlier. Only 12% realized that such crime was lower, and fewer still realized how much lower it was. One cause of public misunderstanding is the widespread repetition of inflated figures about mass shootings.

Dubious statistics to terrify the American public are not new to the gun-control debate. The truth is that the U.S. has made tremendous gains in gun safety since the 1990s, and has done so without adopting the confiscatory and other extreme proposals some gun-control advocates demand.

Mr. Kopel is research director of the Independence Institute.

THE WALL STREET JOURNAL.
PUBLISHED SINCE 1889 BY DOW JONES & COMPANY

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Executive Chairman, News Corp

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Mexico Berry Farming Fuels U.S. Dispute

American growers cry foul ahead of new talks to renegotiate Nafta trade agreement

By Robbie Whelan

ROBBIE WHELAN/THE WALL STREET JOURNAL

After years growing mostly vegetables, Héctor Gómez, manager of a farm in Sayula, Mexico, that exports raspberries to the U.S., says, 'Now, all we grow is berries.'

SAYULA, Mexico—An explosion in berry farming here, fed by a growing American obsession with breakfast smoothies and antioxidant-rich fruits, is fueling one of the thorniest disagreements in the talks to redo the North American Free Trade Agreement that resume this week.

"Ten years ago, all the fields were for vegetables," said Héctor Gómez, production manager for a raspberry farm here. "Now, all we grow is berries....It's just much more profitable."

The value of Mexico's berry crops has jumped in dollar terms over the past decade, to an estimated $1.26 billion in 2017, according to Mexico City-based agricultural consultant GCMA. The amount of land planted for berry crops has more than tripled over the period to 88,000 acres.

American farmers, however, complain that their Mexican rivals enjoy unfair advantages, including low-cost farm labor, state subsidies and a year-round growing season that lets them dump cheap berries on the U.S. market when the two countries' growing seasons overlap in the late spring.

The issue has emerged as a key bone of contention in Nafta renegotiations, which enter their fourth round on Wednesday in Washington. President Donald Trump has highlighted agriculture as a crucial area where the 1994 free-trade accord needs to be improved.

American farmers in Florida, Georgia, the Carolinas, Texas and California say the Mexicans often sell berries in the U.S. at discounts of as much as 25% below production cost.

"Nafta has hurt me a lot more than it's helped me, by allowing Mexico to dump cheap berries here, much more than I've been able to sell to them," said Steve McMillan, a 64-year-old grower from Enigma, Ga., who has about 60 acres of blackberries on his farm.

Mr. McMillan said Mexican-produced berries sell for between $5 and $10 per case in the early summertime. "We have to sell them for $12 just to break even," Mr. McMillan said, mainly because of farm labor, which can cost about $200 per picker per day. Farm workers in Mexico typically make about one-tenth what workers in the U.S. earn.

During Nafta talks last month in Ottawa, the U.S. team introduced a proposal to make it easier for American producers to bring antidumping cases in the perishable and seasonal fruit-and-vegetable sector.

Under current law, farmers have to prove that unfair competitive practices hurt them over the course of a full calendar year. The U.S. proposal would let growers bring an antidumping case before mediators based on a single, monthslong growing season.

"This would be a tool for these industries suffering an injury or damage to assert their rights under the trade law," said Reggie Brown, executive vice president of the Florida Tomato Growers Exchange, a farmers' and shippers' group.

Mexico's Nafta negotiators rejected the proposal, people familiar with their thinking said. Mexico's lead Nafta negotiator, Kenneth Smith Ramos, said the U.S. wanted to "focus in an arbitrary manner only on the months when Mexico exports the most." Senators from Mexico's ruling party said last week they would reject any deal that made it easier for U.S. farmers to launch antidumping investigations for seasonal produce.

The berry dispute also highlights divisions between small and large U.S. growers. In July, after the U.S. Trade Representative called to eliminate third-party mediation panels to resolve trade disputes in favor of adjudicating them in domestic courts, many large American fruit and vegetable produce suppliers objected.

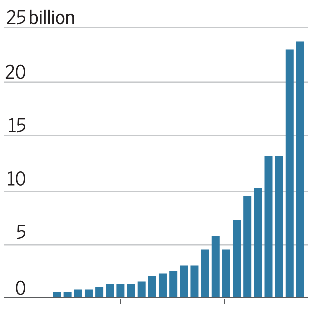
Such producers worry that U.S. protectionist measures would hurt their cheap Mexican production and could spark retaliatory duties by Mexico and Canada.

Without the panels, the U.S. "can close the border to our products with only a decision from a U.S. court," said Mario Andrade, president of Splendor Produce, a large Mexican berry grower, where Mr. Gómez, the production manager, works. "For that reason, it's really important to maintain clearly defined rules on disputes."

—William Mauldin in Washington and Juan Montes in Mexico City contributed to this article.

Bountiful Berries

Production value of the berry industry in Mexico since Nafta began in 1994, in pesos



Note: Includes strawberries, raspberries, blackberries and blueberries
Source: GCMA
THE WALL STREET JOURNAL.

Liberians to Vote for Next President

By Nicholas Bariyo

TIKSA NEGERI/REUTERS

Ellen Johnson Sirleaf reviews a guard of honor during a visit to Ethiopia's capital, Addis Ababa.

Liberians go to the polls on Tuesday to pick a leader to succeed Ellen Johnson Sirleaf, the Nobel Peace Prize-winning economist who is about to become Liberia's first president ever to peacefully relinquish power. But the country's faltering economy and slower-than-expected recovery from the 2014 Ebola outbreak have raised questions about Ms. Sirleaf's legacy as she prepares to retire.

Some 20 candidates are jostling to replace Ms. Sirleaf, a Harvard-educated technocrat known to Liberians as Ma Ellen or Iron Lady, who has shepherded this West African nation of 4.6 million people from a brutal cycle of civil war and an Ebola pandemic toward a peaceful and democratic transition of power.

The 78-year-old president has remained above the fray, offering no visible support to any of the slates, including the one led by her own vice president. Other candidates for high office reflect the country's potential and its grim history, including the country's greatest soccer star and the estranged wife of a now imprisoned former president convicted of aiding and abetting atrocities in neighboring Sierra Leone in the 1990s.

Ms. Sirleaf, Africa's first elected female leader, is stepping down after serving her second and final six-year term in line with the country's constitution. That act alone bolsters democracy in Africa, where leaders in Rwanda, Burundi, Zimbabwe and the Democratic Republic of Congo have all defied term limits to retain their grip on power.

Candidates seeking to succeed her include seasoned politicians such as current Vice President Joseph Nyumah Boakai and opposition leader Charles Brumskine as well as former soccer superstar George Weah.

Nearly 2.2 million people are registered to vote in Tuesday's election, in which the winner must get at least 50% of the vote to avoid a runoff between the top two finishers two weeks later. The U.S. and other Western donors will be watching the vote closely, as it will be the first organized and overseen solely by Liberian institutions since the civil war.

In the crowded race, a runoff is very likely, with Mr. Boakai tipped to face one of the two leading opposition contenders, Mr. Weah or Mr. Brumskine, observers say.

Mr. Boakai, who is currently leading in the polls, is seeking to align himself to Ms. Sirleaf's achievements, touting the country's hard-won peace and stability and pledging to continue a program to rebuild key infrastructure. But his campaign has been dogged by accusations of corruption, which he denies, and the faltering supply of electricity and water in many parts of the impoverished nation.

Mr. Boakai's campaign has also at times appeared in disarray, with the candidate having skipped several scheduled televised debates. The vice president also faces a conspicuous lack of support from Ms. Sirleaf, who hasn't attended any of his campaign rallies despite the two being in the same party.

"The ruling party is facing scrutiny for its record on the management of the economy," said Ibrahim Al-bakri Nyei, a Monrovia-based analyst with Africa Research Institute. "Boakai has deployed a propaganda machinery to divert attention away from the economy, but it remains a thorny issue."

The departing leader hasn't backed a candidate in a race likely to see a runoff.

Mr. Weah, whom FIFA declared world player of the year in 1995, is leading the Coalition for Democratic Change with running-mate Jewel Howard Taylor, the estranged wife of former President Charles Taylor, who is serving a 50-year jail sentence in the U.K. for his role in the atrocities in neighboring Sierra Leone.

A senator, Mr. Weah lost to Ms. Sirleaf in 2005 and failed to win as a vice presidential candidate in 2011. His choice of Mrs. Taylor is seen as tactical because Mr. Taylor still has important followers whose support she is expected to draw despite her having declared her distance from her husband. Mr. Weah has campaigned to improve education and mend the country's ailing health-care system.

Economic Setbacks Dimmed Last Part Of Admired Tenure

The first years of President Ellen Johnson Sirleaf's time in office coincided with the height of the global commodity boom, which helped Liberia's war-ravaged mining industry recover.

But recent years have seen the country pummeled by the commodity price crash and the devastating effects of the Ebola pandemic. Liberia's economy has registered zero growth over the past three years, according to the World Bank, presenting Ms. Sirleaf with a stern challenge in the final years of her presidency.

Many suburbs of Monrovia, the nation's capital, have no electricity and running water due to a combination of war effects and rapid urbanization. That lack of progress has left many voters frustrated.

"I am happy there is peace, but I wish the economy was better," said Metrice Ziamo, who runs a fruit stall in one of downtown Monrovia's beachside markets. "I work seven days a week but I struggle to look after my family. It's that bad."

Observers of the country say Ms. Sirleaf's failure to rapidly raise living standards complicates her otherwise exemplary political record. "There are fewer jobs more difficult than [being] a public servant in an under-resourced country," said Efosa Ojomo, research fellow at the Clayton Christensen Institute for Disruptive Innovation, a U.S.-based nonpartisan think tank. "Sirleaf's legacy is likely to be mixed, because while the country has made progress, some argue it has not made progress fast enough."

—Nicholas Bariyo

Merkel Agrees to Cap Number of Refugees Allowed in Germany

By Andrea Thomas

BERLIN—Chancellor Angela Merkel's conservative bloc agreed to limit the number of refugees allowed to enter Germany annually, in an attempt to bridge differences on migration and form a much-needed united front in coalition talks.

Sunday's agreement comes two weeks after national elections brought a victory but also the worst turnout in nearly 70 years for Ms. Merkel's Christian Democrats and their Bavarian Christian Social Union allies, who are also the most vocal in-house critic of her migration policy.

The bloc agreed to limit to 200,000 annually the number of people allowed into Germany for humanitarian reasons. The conservatives pledged at the same time that people wouldn't be turned back at the German border, expressing their support for the right to seek asylum in Germany and for the Geneva refugee convention.

"We continue with our efforts to permanently reduce the number of people fleeing to Germany and Europe," the draft agreement seen by The Wall Street Journal said. "We want to ensure that the total number of admissions out of humanitarian reasons...doesn't exceed 200,000 people a year."

This limit would be amended if an international crisis warrants it, the paper said.

Roughly 890,000 asylum seekers entered Germany in 2015 alone, followed by 280,000 in 2016. An annual upper limit of 200,000 is unlikely to be reached this year, according to recent estimates from the interior ministry, because fewer than 125,000 asylum seekers entered Germany this year through the end of August.

"We have a common understanding that we have to set a limit because we are otherwise overburdening a society," Jens Spahn, a prominent critic of Ms. Merkel's migration policy and member of her party's executive committee, told public broadcaster ARD on Sunday.

The deal appears to be, however, a largely symbolic concession to Ms. Merkel's Bavaria allies that may change little in practice, partly because the right to asylum is enshrined in Germany's constitution.

Such an upper limit will also likely be hard to push through in talks to forge a nationally yet untested coalition government with both potential partners, the pro-business Free Democrats and the Greens.

The Free Democrats and Greens have over the past sharply rejected demands to set any explicit restriction on refugee numbers, saying this would be in violation of the constitution. Ms. Merkel has previously been skeptical of setting a fixed upper limit.

For the past two years, Ms. Merkel's Bavarian allies insisted, however, on setting an annual upper limit of 200,000, following the chancellor's decision to open the borders in autumn 2015.

FABRIZIO BENSCH/REUTERS

A migrant taking a selfie with Chancellor Angela Merkel in 2015.

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TECHNOLOGY: LUXURY BRANDS SNIFF AT AMAZON B4

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THE WALL STREET JOURNAL. Monday, October 9, 2017 | B1

Last Week: **S&P** 2549.33 ▲1.19% **S&P FIN** ▲1.90% **S&P IT** ▲1.50% **DJ TRANS** ▼0.28% **WSJ $IDX** ▲0.76% **LIBOR 3M** 1.350 **NIKKEI** 20690.71 ▲1.64% **See more at WSJMarkets.com**

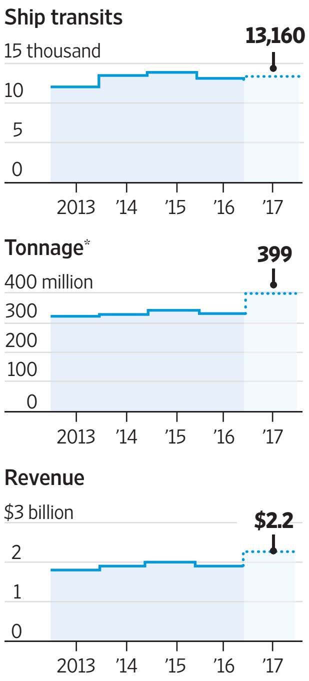
Panama Canal's Big Bet Pays Off

CARLOS LEMOS/REUTERS

The Panama Canal is experiencing a surge since $5.4 billion was spent to expand its locks, allowing much larger ships to pass through.

Setting Sail

The Panama Canal's bigger locks are forecast to boost crossings this year.



*Panama Canal is measured in gross tonnes. A gross tonne is 1,016 kilograms.
Source: Panama Canal Authority
THE WALL STREET JOURNAL.

By Costas Paris

LONDON—Panama's $5 billion investment to expand its century-old canal is paying off as shipping lines send more U.S.-bound cargoes through the passage instead of the Suez Canal.

Ships nearly three times as large as the ones crossing before the expanded locks opened in June 2016 are bringing tens of millions of additional dollars in tolls and a trading boom to U.S. East Coast ports, allaying some fears that investments to cater to the bigger vessels wouldn't see enough returns.

Since the start of the year, transiting tonnage at the Panama Canal has increased by nearly 23%, canal executives say. Last week marked the 2,000th transit of a ship that wouldn't have fit through the old locks.

"It's an unprecedented increase and demand is driven by the expanded East Coast and U.S. Gulf ports that have been preparing for the new locks," said Manuel Benitez, the Panama Canal Authority's deputy administrator.

The widened waterway means importers as far inland as Tennessee could find it cheaper to bring in Asian goods to ports like New York, Savannah, Ga., and Charleston, S.C., rather than move them by rail and truck from West Coast ports, which handle about two-thirds of Asia-to-Americas trade.

The Panama Canal is also helping U.S. exporters of natural gas send bigger loads to Asian markets.

"We are very big users of the Panama Canal," said Anatol Feygin, chief commercial officer of **Cheniere Energy** Inc., a major U.S. LNG exporter. "It's a tool in our arsenal that improves the efficiency of our...deliveries from the Atlantic to the Pacific basin."

Houston-based Cheniere began exporting liquefied natural gas in February from its Sabine Pass terminal in Louisiana. Before the opening of the new Panama locks, its tankers had to go around the tip of South America to deliver gas to South Korean, Chinese and Japanese clients. It now sends around 42% of Sabine Pass cargoes through the Panama Canal, with the remainder going to other markets.

The new locks took nine years and cost $5.4 billion, paid for with government-backed bank loans.

The locks allow vessels moving up to 14,800 containers to cross, while the old locks, which still operate, can only handle ships carrying up to 5,000 containers.

Before the opening of the locks, the isthmus handled a weekly average volume of 53,000 containers, according to marine data provider PR News Service, which is closely followed by the industry. The weekly average in September was 58,000 and much of the increase was from ship diversions from the Suez in Egypt, where weekly capacity from Asia to the U.S. East Coast fell by nearly 18% in September since the locks opened to about 30,400 containers.

Total weekly container volume at East Coast ports is expected to be up 29% at the end

Please see PANAMA page B2

Subprime Lender OneMain Is for Sale

By Liz Hoffman And Rachel Louise Ensign

Subprime lender **OneMain Financial Holdings** Inc. is in talks to sell itself, according to people familiar with the matter.

OneMain is in advanced discussions with a number of interested parties, both rival lenders and private-equity firms, the people said. The value of the bids couldn't be learned, but given OneMain's market value of $3.9 billion and adding a takeover premium, a deal could be worth around $4 billion or more.

There is no guarantee the auction will produce a deal, however. If it does, it would be one of the biggest financial-industry transactions at a time when the bank mergers-and-acquisitions sector is relatively muted.

A postcrisis castoff from **Citigroup** Inc., OneMain makes car and other personal loans, mostly to people who have trouble borrowing elsewhere. Three-quarters of its $14 billion portfolio is loans to people with credit scores under 660—the bottom third of U.S. borrowers, according to Fair Isaac Corp., or FICO, data.

With some 1,700 branches nationwide and 2.2 million customers, it is one of the larger players in the nation's shadow-banking system, a network of nonbank firms that has advanced against more heavily regulated counterparts following the financial crisis. Big banks have pulled back from making riskier loans, the raw material for the noxious securities whose failures fueled the 2008 meltdown.

Citigroup sold OneMain in 2015 to Springleaf, a rival lender backed by **Fortress Investment Group** Inc., the large alternative-asset manager.

Fortress today owns about 55% of OneMain's shares. The rest trade publicly and closed Friday at $28.88, giving the firm a market capitalization of about $3.9 billion.

There has been relatively little deal making among nationwide lenders since the financial crisis. Large banks that might be natural fits to acquire niche loan businesses are often restricted by regulators from doing deals that would make them much bigger.

Meanwhile, Silicon Valley online upstarts such as **LendingClub** Corp. and **Social Finance** Inc. have skimmed

Please see SALE page B2

Luxury-Home Purchases Jolt Guggenheim

By Justin Baer, Margot Patrick and Gregory Zuckerman

Two multimillion-dollar house purchases have rankled employees at **Guggenheim Partners** LLC and spurred questions from clients concerned about possible distractions at the investment firm's core money-management operations, according to clients and people familiar with the firm.

One home purchased in May was an $85 million mansion in Malibu, Calif., with Guggenheim Chief Executive Mark Walter as a co-investor in the purchase. A second $13 million home was bought last year in nearby Pacific Palisades, and Guggenheim distribution executive Alexandra Court subsequently moved in, according to people familiar with the matter.

Both properties were purchased by a Miami company called **ABS Capital** Co. LLC, which is owned by two former Guggenheim managers, according to Guggenheim and ABS.

The real-estate deals weren't funded by Guggenheim Partners, according to a spokesman for Guggenheim and Mr. Walter, as well as an ABS spokesman. Mr. Walter was among a "small group of partners" buying the Malibu home with ABS, they said. Mr. Walter "is not an owner of ABS," the Guggenheim spokesman said.

News of the home purchases in June deepened some employees' resentment over an alleged personal relationship between Mr. Walter and Ms. Court, according to people at the firm. Ms. Court, who was a rising star after building out the firm's European business, also had laid off staff and imposed new limits on contacts with clients after a promotion last year.

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ICTOMETRY

A home in Pacific Palisades, Calif., that was bought last year by a Miami company owned by two former Guggenheim managers.

KEYWORDS | By Christopher Mims

Office Buildings Imitate Spaceships

If you have ever yearned to work aboard the Starship Enterprise, take comfort: The newest office buildings have more in common with spaceships than you realize.

It isn't just Apple's new campus, either. As work takes an ever more central place in our lives, engineers, architects and scientists are beginning to view our workplaces as sealed structures that must actively manage their internal environments, while mitigating pollution and other hazards that are the cost of doing business in many of the world's most economically productive cities.

Big cities such as Beijing, Los Angeles, London and Nairobi regularly experience air so bad their citizens are warned to stay indoors. Office buildings with sealed windows are now the norm, but that can lead to other health hazards. For instance, volatile organic compounds, emitted from furniture and carpets, combine with the carbon dioxide we exhale to create an environment that has the potential to make us sleepy and dimwitted.

Scientists have been trying for decades to figure out how to help humans survive long-haul missions in orbit and to Mars. They take into account light levels, temperature, humidity and dozens of other factors including working styles. The biggest difference between that research and what's happening here on Earth is that office optimization isn't about survival, but productivity—getting the most out of every worker.

As environmental sensors become widely available, indoor air quality is no longer an academic pursuit, but something building managers can track and manage.

Benjamin Kott, chief executive of U.K.-based building-monitoring startup Ener-

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INSIDE

SAUDI DECREE CREATES NEW CAR MARKET

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INDEX TO BUSINESSES

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

INDEX TO PEOPLE

BUSINESS & FINANCE


GENE J. PUSKAR/ASSOCIATED PRESS

Congestion and other disruptions that slowed CSX have eased. The railroad faces a postponed hearing on the issues this week.

CSX Benefits From Delay in Hearing

By Paul Ziobro

CSX Corp. executives this week will face shippers who criticized the railroad over the summer for widespread congestion and disruptions as the company's new chief executive put his operational strategy in place.

The Surface Transportation Board hearing, scheduled for Wednesday in Washington, D.C., was postponed a month because of Hurricane Irma, and in a twist, several shippers are now citing signs of a turnaround.

THE WEEK AHEAD

CSX says it has gotten its tracks in order over the past few weeks. Transit times have improved, and congestion in parts of the Midwest and Southeast has cleared since the company reopened a so-called hump yard that is used to sort railcars.

Chief Executive Hunter Harrison said in a written statement last week that "the previous transitional issues are resolved."

It isn't just CSX saying it has turned a corner. Over the past two weeks, eight of its customers filed upbeat letters with the Surface Transportation Board, a federal body that oversees rail service, saying that they, too, have seen improvements.

Randy Willingham, who runs two companies in Georgia that use CSX to deliver concrete sand, said he was exasperated by the problems this summer, when cars were sent on circuitous routes that added days to transit times. "I thought there was no hope for us," he said.

But cars are now being shipped and returned more frequently, giving him an opportunity to sell more sand to customers. "It's hard to believe because in 30 years, I've never seen it as good as this," Mr. Willingham said.

CSX solicited at least some of the complimentary letters, people familiar with the matter said, and a spokesman for the company said it "is very appreciative of the effort extended by customers to share their recent service experiences."

CSX, based in Jacksonville, Fla., has apologized for the service delays, which began in May. In September, it lowered its financial outlook for the year, in part because of the problems.

Other submissions to the board still contain some of the delays and communication issues that had been raised by shippers.

Plastics company **ISOFlex Packaging** Corp. said it ran out of resin several times and had to idle some production at a Nashville plant, sending some workers home without pay. "The problem continues," said site manager L.J. Edwards.

CSX's problems also weighed on J.M. Smucker Co., maker of Jif peanut butter, which incurred $3 million in additional freight charges because of CSX service failures, said Bryan Tolar, president of the Georgia Agribusiness Council.

With CSX, "what we're trying to recover from is an issue of trust" Mr. Tolar said. "It's just unacceptable." J.M. Smucker didn't respond to a request for comment.

Some of the letters led to prompt action. Furman Brodie, vice president of the **Charles Ingram Lumber** Co. in Effingham, S.C., says the sawmill started getting more railcars for lumber shipments shortly after filing a letter on Sept. 26. For weeks before that, subpar service meant it had to scramble to find trucks or storage space, delaying some orders.

"Once that letter hit, they increased our allocation like we requested," Mr. Brodie said. "They seem to have fixed it, at least for now."

PANAMA

Continued from the prior page

of October since the start of the year, because of increasing traffic through Panama and the Suez, according to PR News Service.

Officials at the Suez Canal didn't respond to requests for comment.

Savannah—the East Coast's No. 2 container gateway after New York—expects to handle around 10% more cargo this year, double the average growth rate in previous years. Much of the gains have come from bigger ships crossing the Panama Canal, officials said. The ports of New York, Baltimore, Charleston, Virginia and Georgia also have seen a boost in container traffic.

Officials are pumping $1 billion into dredging and other work around Savannah's port. The South Carolina Ports Authority is putting $2 billion to upgrade the Charleston port, where container volume rose 10% in the fiscal year ended June from the previous year. New York spent more than $4 billion for expansion works including raising the Bayonne Bridge for the bigger ships to clear it, while the Virginia Port Authority recently disclosed plans to dredge a channel deeper than the Port of Los Angeles, the busiest in the nation.

Maersk Line, the world's biggest container operator, is using Panama for three out of four weekly services between Asia and the U.S. East Coast, with the fourth crossing the Suez. Before the new Panama locks, Maersk, a unit of Danish conglomerate **A.P. Moller Maersk** A/S, operated two weekly services, both of which went through the Suez.

"With the new locks, Panama is preferable for sailings from Shanghai and further north like Korea to ports south of New York," said Anders Boenaes, head of Maersk Line's network. "It's up to 12 weeks for a round voyage through Panama, one week less than through the Suez."

The widened waterway could shift as much as 10% of Asian container imports to the East Coast from the West Coast by 2020, according to a 2015 study by the Boston Consulting Group and C.H. Robinson Worldwide Inc., a freight-forwarding company.

That doesn't mean ports like Los Angeles and Long Beach, Calif., the nation's two biggest gateways, will shrink anytime soon. Western ports are deep enough and bridges high enough to allow behemoths moving more than 18,000 containers to cross along with crude supertankers—too big even for the new Panama Canal.

—Summer Said contributed to this article.


ARNULFO FRANCO/ASSOCIATED PRESS

Since the start of the year, transiting tonnage at the Panama Canal has increased by nearly 23%, according to canal executives.

SALE

Continued from the prior page

higher-quality borrowers from the pool and the postmerger run for OneMain has been rocky. Its shares have fallen from a peak of $53 in 2015, and the company cut guidance last year after a slowdown in loan growth and an uptick in delinquencies.

OneMain has been reducing debt and pivoting toward loans that are backed by cars and other collateral, which are less risky than unsecured loans. About half of its $3 billion in loans issued last quarter had collateral.

That has helped make it one of the best-performing specialty-finance stocks this year, up 30% and outpacing peers such as **Santander Consumer USA** Inc., the subprime auto-loan subsidiary of the Spanish banking giant, and **Synchrony Financial**, the big retail credit-card issuer.

But threats still loom. For one, the customer set is shrinking. An improving economy, lower unemployment, and the falling away of old bankruptcies and foreclosures from thousands of credit histories have cut the share of U.S. adults with subprime credit scores to postcrisis lows.

Fortress is in the process of being sold to **SoftBank Group** Corp. and has been shedding assets.

Wi-Fi Balloon Network Advances

By John D. McKinnon
And Drew FitzGerald

WASHINGTON—Aiming to restore wireless phone service to hurricane-battered Puerto Rico, the Federal Communications Commission on Friday night granted an experimental license for **Alphabet** Inc.'s Project Loon to create a network of balloons that could provide connectivity.

Before it can initiate service, though, Loon has to clear a few more hurdles, officials said—notably, finding a wireless carrier to serve as its partner.

Libby Leahy, a spokeswoman for X, the Alphabet unit that oversees Project Loon, said in a statement that Loon "needs to be integrated with a telco partner's [cellular] network—the balloons can't do it alone." She added that "we've been making solid progress" on that next step.

It remained unclear when Loon might be able to start providing service.

Loon's networks of balloons appeared to work well earlier this year when parts of Peru suffered severe flooding. But Loon already had been working on network integration with a carrier there, **Telefónica**.

Project Loon said the effort in Peru marked the first time

Alphabet Inc.'s technology promises to bring connectivity back to Puerto Rico.

that an internet system using balloons had connected tens of thousands of people.

In the case of Puerto Rico, **AT&T** Inc. and **T-Mobile** handsets should be able to operate on the frequencies covered by the experimental license, according to people familiar with the matter.

However, it is possible some would need a software update, which might have to be delivered over the air in Puerto Rico.

A T-Mobile spokeswoman declined to comment on the experiment. A Sprint spokesman said the carrier is in touch with Alphabet and exploring the idea.

"More than two weeks after Hurricane Maria struck, millions of Puerto Ricans are still without access to much-needed communications services," FCC Chairman Ajit Pai said in a statement Saturday. "That's why we need to take innovative approaches to help restore connectivity on the island. Project Loon is one such approach."

Mr. Pai urged wireless carriers to cooperate with Project Loon "to maximize this effort's chances of success."

Loon was developed at X, Alphabet's innovation lab. Alphabet also is the parent of search engine **Google**.

—Jack Nicas contributed to this article.

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Pentagon in Push to Cut Cost of Jet

By Doug Cameron

The Pentagon has taken over an effort to cut the cost of the F-35 combat jet, after rejecting plans proposed by **Lockheed Martin** Corp. and its partners, as it attempts to make a program estimated to cost $400 billion more affordable.

The U.S. plans to buy more than 2,400 of the jets over the next three decades to replace much of its combat fleet.

But after years of delays and overruns drew flak from lawmakers and President Donald Trump, the military has been pressing suppliers to reduce the cost of producing and flying the F-35.

The aircraft's sticker price has fallen in recent sales to the U.S. and other countries, in part because of a contractor-led effort launched in 2014 called the Blueprint for Affordability that invested $170 million to make the jets cheaper to produce.

Lockheed and the Pentagon announced plans in July 2016 to continue the program, with the company and partners **Northrop Grumman** Corp. and **BAE Systems** PLC investing another $170 million over three years in cost-saving measures. The contractors said the initial plan saved $230 million and could be worth $4 billion over the life of the program.

Some military chiefs, however, have expressed concern about the pace and source of savings. In January, Defense Secretary Jim Mattis also ordered a review of the high-profile program.

The Pentagon opted this summer not to press ahead with the extension and instead last month gave Maryland-based Lockheed a $60 million contract to pursue further efficiency measures, with more oversight of how the money was spent.

"Using a contract vehicle instead of an agreement with industry provides the government with greater insights into the cost savings efforts," said the F-35 program office, led since May by Navy Rear Adm. Mat Winter.

The F-35 leadership say they want more of the cost-saving effort directed at smaller suppliers that haven't been pressured enough. A quarter of the initial $60 million is earmarked for projects outside the main three contractors.

The Pentagon said it may boost its investment to $170 million if the initial efforts yield enough savings.

Pratt & Whitney, a unit of **United Technologies** Corp. that makes the engines for the F-35, is continuing a separate effort to reduce costs.

The Pentagon has also yet to approve a plan announced last year for the three main companies to spend $250 million over five years to shave 10% off the running costs of the F-35 fleet over its lifetime, which are estimated to be more than $1.1 trillion for the U.S. aircraft.

Allies plan to buy another 500 jets.


CHRISTINE GROENING/PLANET PIX/ZUMA PRESS

After years of delays and overruns drew criticism, the military has been pushing suppliers to lower the cost of the F-35 combat jet.

German Grocer Lidl Falters on U.S. Debut

By Heather Haddon

Since opening its first U.S. store in June, **Lidl**, the German grocery giant, hasn't exactly upset the American grocery cart.

The deep-discount store chain plotted its U.S. entry for years, spotting an opening in a vast market that was served mainly by conventional supermarkets, price cutters such as **Wal-Mart Stores** Inc. and Lidl's main German rival, **Aldi**. Lidl had been gaining market share across Europe with affordable products that have lured thrifty shoppers.

When Lidl's first nine U.S. stores opened June 15 in Virginia and the Carolinas, they lured customers away from other grocers, according to an analysis by inMarket, a location-based data firm.

But Lidl hasn't been able to sustain that level of traffic, and grocers including Kroger Co. and Wal-Mart have recovered much of their lost market share, according to inMarket.

"This is designed for us to learn and adapt and be nimble," said Will Harwood, a Lidl spokesman based at the company's U.S. headquarters in Arlington, Va. "It's not about whether our model works in a market, but what we do to adapt to that market."

In June, Lidl was drawing 11% of consumer visits to traditional grocers in nine markets in Virginia, North Carolina and South Carolina, according to inMarket. By August, Lidl's share of that traffic had dropped below 8%.

"With the quick falloff, I'd be concerned if I was them," said Cameron Peebles, chief marketing officer at inMarket.

Lidl's share of grocery visits declined in that period even as it was opening more stores in those states. Lidl has opened 37 stores in five states and plans to operate as many as 100 in total, from New Jersey to Georgia, by next summer.

When more-diversified food sellers such as Wal-Mart and Target Corp. are included, inMarket says Lidl's share of shopping trips in those states peaked at nearly 3% in June before falling in July and August. Lidl recovered some traffic in September, reaching 2% of the market.

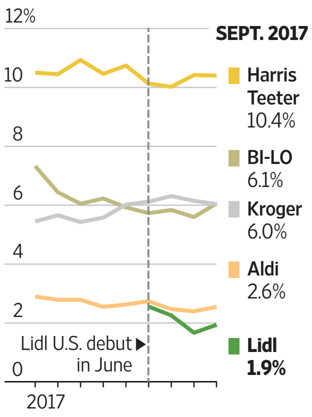
Executives at Wal-Mart, Kroger and other food sellers have been bracing for years for the German discounter's arrival. Both Lidl and Aldi have disrupted Europe's supermarket sector by offering limited selections of inexpensive store-brand goods in small, easy-to-shop stores.

The timing of Lidl's U.S. arrival wasn't ideal. It opened its first stores the day before Amazon.com Inc. surprised the industry by announcing it would buy Whole Foods Market. Supermarkets responded, slashing prices to keep up with growing competition on many fronts while investing in online ordering and delivery. Lidl doesn't currently have an online grocery-shopping operation in the U.S.

Retail analysts say that it will take several more months to prove whether Lidl is catching on in the U.S. "It takes time for people's shopping behavior to adapt to a new routine, particularly something that is routinized as shopping," said Kent Knudson, a partner at Bain & Co.

Slow Start

Share of traffic for selected grocery stores*



*In nine Virginia, North Carolina and South Carolina markets

Source: inMarket

THE WALL STREET JOURNAL.


REEM BAESHEN/AGENCE FRANCE-PRESSE/GETTY IMAGES

The decree allowing Saudi women to drive as of mid-2018 has auto makers gearing up for sales.

Saudi Car Market Gets Jolt

By Nicolas Parasie And Margherita Stancati

Saudi Arabia's decision last week to allow women to drive has opened up a large market for automobile companies searching for growth, and the competition has already begun.

Within days of King Salman's decree announcing what will be one of the deeply conservative kingdom's most profound social reforms, Western and Asian car makers were tweeting out their welcome to woo new customers among the eight million adult Saudi women.

Volkswagen AG's tweet showed two hands decorated with henna and positioned as if clutching a steering wheel, with the words "My turn."

BMW AG's Mini Cooper released a video showing a car pulling out of a parking lot that is "reserved for women."

Ford Motor Co. tweeted a photo of a woman looking into a rearview mirror against a black backdrop, an image that resembled a woman in a niqab, the face-covering veil that many Saudi women wear.

"We look forward to a new generation of women in the driving seat," said Thierry Sabbagh, managing director of Ford Middle East.

The early battle to attract potential buyers reflects intense competition among car makers for market share in the Middle East's biggest economy. Asian car makers have dominated what is the region's second-biggest market for automobiles after Iran.

New car sales in Saudi Arabia have slowed, however, as low oil prices took a toll on the economy and consumer spending. Sales of new vehicles tumbled 21% to 655,500 in 2016, according to the International Organization of Motor Vehicle Manufacturers, a trade association.

Not all women in Saudi Arabia want to become drivers. The stigma attached to women driving in the ultraconservative country, and persistent traffic congestion in cities, could lead many to continue to rely on male relatives or taxis. Car-hailing apps Uber and local rival Careem have said they plan to hire female chauffeurs. And many women who can afford to retain foreign drivers will likely continue to do so.

The emergence of women driving is likely to boost the kingdom's car market.

But industry experts said the emergence of women driving will boost Saudi Arabia's struggling car market.

"The [Saudi] auto market has a very positive outlook" for the second half of 2018 after the new rules take affect in June, said Mr. Sabbagh of Ford Middle East.

Mr. Sabbagh said large sport-utility vehicles and sedans dominate car sales in the region, but Ford may make the smaller models that are popular among women buyers more widely available.

Up to 150,000 women will get driver's licenses in the kingdom each year, according to market-research firm Frost & Sullivan, which said the number could be higher in the first year as many women, particularly younger ones, rush to get behind the wheel. Many of them will want to buy their own cars, according to Frost & Sullivan.

Right after King Salman's decree, some women in Saudi Arabia started debating which car to buy.

After activist Sahar Nasif said she wanted to buy a Mustang, Ford offered to give her one—an offer she accepted.

The early push from some European and American car makers to attract women comes as they figh the dominant Asian brands for market share.

"Car companies see a new opportunity to position themselves," said Marco Binenti, a Riyadh-based retail expert with Oxford Business Group, a research and consultancy firm. "Players that have been outpaced by Asian car deals will try to gain a bigger share, and players that are already big in Saudi Arabia will try to consolidate their position."

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Why Amazon Still Has a Luxury Problem

Swatch Group executives earlier this year were planning to sell some of the Swiss conglomerate's higher-end watches through **Amazon.com** Inc.

But after months of talks, the

By Matthew Dalton in Paris and Laura Stevens in San Francisco

two companies hit a wall. Swatch, whose brands include Longines, Omega and Blancpain, demanded a commitment that Amazon proactively police its site for counterfeits and unauthorized retailers. Amazon refused, according to Swatch Chief Executive Nick Hayek, putting a deal between the two on ice.

"We add value to them," Mr. Hayek said. "But they should also add value to the brand."

Amazon declined to comment on Swatch.

Amazon is courting companies across the retail spectrum, but one sector is still mostly holding out: the world's club of luxury brands. Swatch and others in the luxury industry say Amazon's online marketplace undermines the strict control they say is key to maintaining a sense of exclusivity—and keeping prices high. While some makers of luxury products have decided to join Amazon, many of the industry's biggest players—including Swatch, Gucci owner Kering, luxury-watch maker Cie. **Financière Richemont** SA and **LVMH Moët Hennessy Louis Vuitton** SE—are staying away for now.

The absence of high-end products has hampered Amazon's push to be a force in the fashion industry, despite years of working to expand the merchandise it sells officially though its website. Adding luxury goods would help Amazon boost margins and build loyalty among customers of Amazon Prime, its premium service favored by higher-income shoppers that offers faster delivery and other perks, according to former executives familiar with the company's shopper base.

Amazon has been investing heavily in the fashion industry in recent years. It opened a large fashion photo studio in Brooklyn, started its own private-label brands and sponsored glittering events such as the Met Ball at the Metropolitan Museum of Art. The company also has introduced a "luxury beauty storefront" within its site to draw customers looking for high-end brands.

Amazon has won over some of the world's biggest lifestyle companies by pledging action against unauthorized retailers and knockoffs. Earlier this year, **Nike** Inc. agreed to make some of its products available for sale directly from Amazon in exchange for a promise of limited policing. But Amazon typically only does that for the biggest brands, people familiar with the arrangements say. Nike sales the last fiscal year were $34 billion, nearly five times Swatch's annual revenue.

Amazon is concerned about counterfeit goods, but it is also reluctant to help brands stop legitimate products from being sold outside approved distribution channels, said James Thomson, a former senior manager in business development at Amazon and now partner at brand consultancy Buy Box Experts. A multitude of third-party sellers—which often sell at discounts—helps keep prices low on the site with legitimate merchandise, too.

An Amazon spokeswoman said it works with brands and manufacturers to improve its counterfeit-detection systems. She said the company has automated systems in place that constantly scan for and block potential counterfeiters. "We take this fight very seriously," she said.

Amazon does have programs to help protect brands, such as one introduced last year requiring fees from third-party sellers and invoices proving goods are legitimate. (The fees have since been discontinued.) But many sellers were grandfathered in under the old rules, and the programs offer brands varying levels of protection against unauthorized merchandise.

The Amazon spokeswoman said a different program, called the Amazon Brand Registry, provides rights owners access to tools including proprietary text and image search and more authority over product listings.

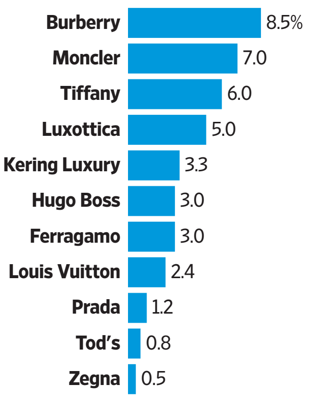
Luxury brands want more. Swatch, in its talks with Amazon, demanded a written commitment from Amazon to deploy its "best efforts" to fight knockoffs. Amazon's approach, former employees and analysts say, is often reactive, depending on brands to complain first before a listing is removed.

◆ Seattle property will suffer from Amazon's decision...... B8


RICHARD B. LEVINE/LEVINE ROBERTS/NEWSCOM/ZUMA PRESS
The absence of high-end products has hampered Amazon's push to be a force in the fashion industry.

In Fashion

Estimated e-commerce revenue as a percentage of total 2016 revenue.



Source: Exane BNP Paribas
THE WALL STREET JOURNAL.

Designer Brands Differ on Strategies

Some of the more affordable designer brands, including Nicole Miller and Calvin Klein, have moved to Amazon. Kate Spade had, too, before shifting course in February, according to a spokeswoman, stopping the sale of handbags and small leather goods though the site. Joshua Schulman, a senior executive at Coach Inc., which bought Kate Spade in July, has said the company wants to focus on selling through its own e-commerce channels, rather than Amazon.

Representatives for Nicole Miller and Calvin Klein didn't respond to requests for comment.

LVMH, which owns Louis Vuitton and Christian Dior, said it sees little opportunity for dealing with Amazon.

"We believe the business of Amazon does not fit with LVMH, full stop," LVMH's chief financial officer told analysts last October. Kering, owner of Gucci and Yves Saint Laurent, says it has no relationship with Amazon and declined to comment further.

One of the biggest worries for these luxury companies is the difficulty of segregating their product listings from the rest of the goods sold through the site. That means a $5,000 suit from luxury Italian menswear company Brioni, a subsidiary of Kering, can appear next to a $200 suit from Kenneth Cole.


ALI KATE CHERKIS FOR THE WALL STREET JOURNAL (2)
Employees at Zaha Hadid Architects in London. Sensors, such as the one below, are helping to monitor the work environment.

MIMS

Continued from page B1

gyDeck, faces problems typical of startup founders everywhere: funding, morale and employees who get sleepy after lunch. But at least he has a handle on that last issue, because he's testing his own technology in the 670-square-foot office where his 15-person team is jammed.

"By 2 p.m., the CO_2 level in the office is like 1,000 parts per million," says Mr. Kott. That's about 2½ times the current level of carbon dioxide in Earth's atmosphere.

According to a recent study from researchers at Harvard University, Syracuse University and SUNY Upstate Medical University, that level is high enough to decrease cognitive performance in knowledge workers by 15%. Many offices have high levels of carbon dioxide, but the worst offenders are meeting rooms, where carbon-dioxide levels can reach 3,000 ppm.

Engineers and architects are looking at other measures to assess the environment of office buildings. Temperature, humidity, light—even noise and odors—are within reach of a profusion of cheap sensors, says Arjun Kaicker, head of user parametrics at Zaha Hadid Architects in London.

ZHA, which has 36 projects under way in 21 countries, has set up a test facility in its central London offices that uses sensors to

provide a stream of data that can be correlated with self-reported levels of productivity and satisfaction.

In the past, Mr. Kaicker says, architects designed buildings based on this experience, which could only take them so far. "We can now with sensors just see what works well and what works badly," he said.

The result is called "evidence-based design," says Yodit Stanton, founder and chief executive of OpenSensors.io, which provides underlying technology for ZHA's test facility.

Beyond air quality, research has discovered that getting the office temperature wrong also can have consequences for worker productivity. Some offices have taken to employing new technology to create individualized "thermal bubbles" for each employee.

When it comes to light, it isn't only about having enough, but also the right kind. A nice window view increases productivity and the exposure to daylight boosts happiness, says research from Northwestern Medicine and the University of Illinois at Urbana-Champaign.

If views and sunlight are in short supply, there are alternatives. Shifting the color "temperature" of office LED lights from yellow to blue can boost workers' ability to concentrate.

In many ways, this research is still preliminary, cautions Ben Waber, founder and CEO of Humanyze, a Boston-based company that uses wearable and embedded sensors to evaluate worker productivity.

It can be hard to correlate environmental tweaks to changes in actual productivity, Mr. Waber says. Even the novelty of a new office space can elicit a boost in self-reported worker satisfaction.

Nevertheless, new building standards based on the research are becoming selling points for landlords seeking to differentiate their buildings, and for tenants looking to attract top talent, says Leeson Medhurst, head of workplace consultancy 360 Workplace.

In China, for example, a building certification standard called the Reset Standard is focused on air quality, allowing workers and employers to report in real time on the breathability of air inside buildings.

The Well building standard, invented in the U.S., includes air, water and light quality within buildings, as well as noise, temperature and even the availability of healthy food and fitness facilities.

These standards are modeled on green building standards like Leadership in Energy and Environmental Design (LEED), which in turn has been adopted into actual building codes by some cities. Baltimore, for instance, mandates that all new buildings meet the International Green Construction Code. Cities have yet to mandate anything like Well, but they might eventually follow as more builders adopt the standards.

Meanwhile, in central London, Mr. Kott faces a dilemma. His office's hip neighborhood—known as the Silicon Roundabout—suffers from bad air pollution. Opening windows to vent the midafternoon carbon-dioxide buildup lets in too much toxic smog.

The solution, he says, is an HVAC system that dynamically responds to both carbon-dioxide levels and levels of airborne particulate matter, pumping in fresh air while filtering out pollutants. It's remarkably similar to the kind of air-circulation systems that NASA uses—on spaceships.

PERSONAL TECHNOLOGY | By Wilson Rothman

AOL's Chat Buddy, Once Cool, Logs Off

AOL Instant Messenger is ending its two-decade run on Dec. 15.

Chances are, you stopped using it years ago. But reading those words, you might feel a nostalgic pang. AIM, as it is known, laid the foundation for the abrupt, instantaneous, chat-centric communication we now take for granted. It was also the coolest thing AOL ever did.

The late 1990s was a period of technological growing pains. Cellphones weren't smart. People dialed up the internet through beige boxes with squawking 56K modems. The only glimmer of an always-on future came from shiny "America Online" discs that arrived in the mail. It wasn't cool, but it was the Facebook of its time. Family and friends signed up, mostly because loved ones were there.

One AOL feature did induce envy: a window where you could type anything you wanted, and your "buddy" could reply immediately. This was instant messaging. AOL might not be the inventor—it actually acquired IM pioneer ICQ in 1998—but by adopting it, the company changed the world.

Email was too much like regular mail: You needed a purpose for writing. You started each missive with "Dear So and So" and closed with "Sincerely Yours, etc. etc." Clicking Send meant, eventually, contacts would receive your notes—later on, that is, when they sat down to check their email.

With instant messaging, you and your buddies could type as little as you wanted. Formality fell away. "Are you there?" quickly became "u there"—and, for better or worse, a whole now-all-too-familiar shorthand was born.

You started thinking of lifelong friends by their new handles. (Why shouldn't Fred go by tacoking4000?) Curating your "buddy list" was a chore akin to arranging seating at a wedding reception. Heaven forbid having to scroll to reach someone you really cared about.

AOL clearly saw a breakaway feature. In 1997, it broke AIM off through stand-alone software that allowed people to get a screen name even if they weren't on AOL. You could chat with people from other countries without a $1,000 phone bill. You could keep a constant line to your beloved open through the day.

New features made Instant Messenger even more addictive. It would tell you when someone was replying, so there you would sit, with bated breath, until the message appeared. You could set clever away messages.

Overnight, millions of people began to funnel their planning, conniving, flirting and even work through this tiny, low-bandwidth communications platform.

It didn't take long for schisms to form. Yahoo and Microsoft's MSN were giant "portals" in their own right and wanted in on the chat action.

People started losing friends to other platforms. An arms race of cartoon faces, web links and other features ensued. Pleas to AOL to open up chat, like a phone network, didn't amount to much.

While AIM remained in the mainstream for a decade, AOL itself lost out to the big telecoms in the competition for broadband internet service, and cellphone adoption reached a saturation point.

A new set of internet titans emerged. Apple, Facebook and Google rolled out communications platforms and spawned a multibillion-dollar chat-app industry that owes more than a little debt of gratitude to AIM.

Even in the workplace, where security concerns have curbed the free-for-all use of chat clients, desktop texting has thrived. But companies aren't choosing AOL; they are choosing services like Slack, which at its core is an evolved version of AIM.

So on Dec. 15, as you pound away at the virtual keyboard of your smartphone and grouse when a message takes more than 0.8 second to reach a friend halfway around the world, take that time to reflect on the messaging client that got us all hooked.

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Superhero Fans Stop A Northrop Venture

By Doug Cameron

Marvel Entertainment dropped a planned joint venture with **Northrop Grumman** Corp. on Saturday after fans of its superheroes attacked the company via social media for its potential ties with the defense contractor.

The **Walt Disney** Co. unit, best known for franchises including Spider-Man and the Avengers, had planned to launch the venture at the New York Comic Con event with a self-produced film on space exploration featuring Northrop employees and a magazine tie-in aimed at promoting science education.

The launch was flagged in a tweet on Friday, but fans quickly attacked an online teaser promoting the first issue of a new Avengers comic featuring NGENs—short for Northrop Grumman Elite Nexus—that was subsequently pulled from its website. On Saturday, Marvel canceled the launch.

Northrop Grumman, the nation's fifth-largest defense company by sales, was left considering its options.

"This was part of our broader effort to reach new audiences and bring attention to the value of science and technology," Northrop Grumman said. "We are disappointed that Marvel chose not to proceed with the partnership."

Northrop is involved in some of the most classified U.S. programs, including the new B-21 Raider long-range bomber and space systems for the intelligence community.

Its products were enough for critics on social media to make comparisons with Marvel's Tony Stark character—also known as Iron Man—who closed his fictional family defense company after deciding it did more harm than good.

The planned partnership developed rapidly over the past two months, according to people familiar with the discussions, with two more short films planned. Aerospace and defense companies have invested in activities related to science, technology, engineering and math—or STEM.

Lockheed Martin Corp. has sponsored a school bus with internal video screens to recreate traveling on the surface of Mars.

Marvel said education was its prime motivation but that "spirit" hadn't come across. "The activation with Northrop Grumman at New York Comic Con was meant to focus on aerospace technology and exploration in a positive way," the company said. "Marvel and Northrop Grumman continue to be committed to elevating and introducing STEM to a broad audience." Marvel and Walt Disney didn't respond to a request for additional comment.


WALT DISNEY/EVERETT COLLECTION

Critics of Marvel's Northrop tie-up cited character Tony Stark.


©WARNER BROS/EVERETT COLLECTION

'Blade Runner 2049' logged a $31.5 million opening in the U.S. and Canada this weekend, short of backers' goal of over $40 million.

Sci-Fi Sequel Opens Softly

By Ben Fritz

"Blade Runner" might not be Hollywood's next big franchise after all.

A highly touted, long-in-the works sequel to the 1982 science-fiction classic fizzled at the box office this weekend, as "Blade Runner 2049" opened to an estimated $31.5 million in the U.S. and Canada.

The $150 million production did well in upscale theaters in big cities such as Los Angeles, said Warner Bros. domestic-distribution chief Jeff Goldstein, but sold few tickets in smaller cities and towns.

Much of the audience was older men who were likely fans of the original movie, exit polling indicated.

Based on advance ticket sales and prerelease surveys, the backers of "Blade Runner 2049" had expected a bigger opening of over $40 million.

But despite positive reviews, a broad audience didn't turn out for a 2½-hour-plus exploration of what it means to be human. Though it is packed with extravagant sets and effects alongside stars Ryan Gosling and Harrison Ford, the "Blade Runner" sequel is relatively light on action compared with most big-budget films. "I'm disappointed we didn't get a bigger audience," Mr. Goldstein said.

The movie did better overseas, though it wasn't a huge hit. "Blade Runner 2049" grossed $50.2 million in 63 foreign markets. It did particularly well in the U.K., grossing $8 million, and has yet to open in Asian countries including Japan, South Korea and China.

"Blade Runner 2049" was developed and co-financed by Alcon Entertainment, an independent company financially backed by FedEx Corp. Chief Executive Officer Fred Smith that was previously best known for megahit "The Blind Side" and a failed remake of "Point Break."

Alcon's co-CEOs, Broderick Johnson and Andrew Kosove, hoped that if they made a worthy follow-up, they could relaunch "Blade Runner" as a major new entertainment property for the 21st century.

A spokeswoman for the company said the sequel's opening wouldn't affect those plans. Virtual-reality and mobile videogames are already in the works.

Alcon co-financed "Blade Runner 2049" with **Sony Pictures Entertainment**, which released the movie overseas. **Time Warner** Inc.'s Warner Bros. released it domestically for Alcon, but had no financial investment.

Word-of-mouth for the film is likely to be strong, as opening-night audiences in the U.S. gave "Blade Runner 2049" an average grade of A-, according to market-research firm CinemaScore. Those crowds were 71% male and 63% over 35 years old.

Two other new movies had soft openings as well. Thriller "The Mountain Between Us," released by **21st Century Fox** Inc.'s Twentieth Century Fox, made its debut to $10.1 million. The animated "My Little Pony," from **Lions Gate Entertainment** Corp. and **Hasbro** Inc., opened with $8.8 million.

Estimated Box-Office Figures, Through Sunday

FILM	DISTRIBUTOR	WEEKEND* (SALES, IN MILLIONS)	CUMULATIVE (SALES, IN MILLIONS)	% CHANGE
1. Blade Runner 2049	Warner Bros.	$31.5	$31.5	--
2. The Mountain Between Us	Twentieth Century Fox	$10.1	$10.1	--
3. It	Warner Bros.	$9.7	$304.9	-43
4. My Little Pony: The Movie	Lions Gate	$8.8	$8.8	--
5. Kingsman: The Golden Circle	Twentieth Century Fox	$8.1	$80	-52

*Friday, Saturday and Sunday Source: comScore

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CLOSED-END FUNDS

Listed are the 300 largest closed-end funds as measured by assets.

Closed-end funds sell a limited number of shares and invest the proceeds in securities. Unlike open-end funds, closed-ends generally do not buy their shares back from investors who wish to cash in their holdings. Instead, fund shares trade on a stock exchange.

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, October 6, 2017

Fund (SYM)	NAV	Close	Prem /Disc	52 wk Ttl Ret
General Equity Funds				
Adams Divers Equity Fd **ADX**	17.87	15.33	-14.2	26.8
Boulder Growth & Income **BIF**	12.26	10.36	-15.5	31.2
Central Securities **CET**	31.63	26.15	-17.3	29.9
CohSteer Opprtnty Fd **FOF**	14.01	13.36	-4.6	20.6
Cornerstone Strategic **CLM**	13.58	15.08	+11.0	26.4
EtnVnc TaxAdvDiv **EVT**	22.93	22.27	-2.9	21.2
Gabelli Dividend & Incm **GDV**	24.19	22.63	-6.4	25.5
Gabelli Equity Trust **GAB**	6.51	6.50	-0.2	29.7
Genl American Investors **GAM**	42.40	36.01	-15.1	23.3
Guggenheim Enh Fd **GPM**	8.80	8.56	-2.7	22.8
HnckJohn TxAdv **HTD**	26.09	25.67	-1.6	16.2
Liberty All-Star Equity **USA**	6.73	6.08	-9.7	28.8
Royce Micro-Cap **RMT**	10.54	9.37	-11.1	31.7
Royce Value Trust **RVT**	17.43	15.78	-9.5	35.0
Source Capital **SOR**	44.77	40.56	-9.4	16.2
Tri-Continental **TY**	28.96	25.70	-11.3	26.4
Specialized Equity Funds				
Adams Natural Rscs Fd **PEO**	22.86	19.57	-14.4	4.2
AllnzGI NFJ Div Interest **NFJ**	14.55	13.35	-8.2	17.8
AlpnGlblPrProp **AWP**	7.28	6.69	-8.1	36.4
ASA Gold & Prec Metals **ASA**	NA	12.07	NA	-9.4
BlkRk Enh Cap Inco **CII**	16.65	15.72	-5.6	23.5
BlkRk Engy Res Tr **BGR**	15.06	13.55	-10.0	1.3
BlackRock Enh Eq Div Tr **BDJ**	9.80	9.15	-6.6	24.7
BlackRock Enh Gl Div Tr **BOE**	14.44	13.56	-6.1	20.6
BlkRk Intl Grwth&Inco **BGY**	6.99	6.58	-5.9	21.9
BlkRk Health Sci **BME**	36.02	36.82	+2.2	17.0
BlackRck Rscs Comm Str Tr **BCX**	10.13	8.96	-11.5	21.6
BlackRock Science & Tech **BST**	26.66	24.92	-6.5	39.1
BlackRock Utility & Infr **BUI**	21.06	20.99	-0.3	18.2
CBREClarionGlblRlEstIncm **IGR**	8.78	7.81	-11.0	4.8
Central Fund of Canada **CEF**	NA	13.15	NA	0.3
ClearBridge Amer Engy **CBA**	NA	8.65	NA	6.1
ClearBridge Engy MLP Fd **CEM**	NA	14.80	NA	-1.1
Clearbridge Engy MLP Opp **EMO**	NA	12.15	NA	2.3
Clearbridge Engy MLP TR **CTR**	NA	12.52	NA	7.9
Cohen & Steers Infr Fd **UTF**	25.29	22.99	-9.1	22.4
C&S MLP Incm & Engy Opp **MIE**	11.21	10.57	-5.7	11.5
Cohen & Steers Qual Inc **RQI**	13.54	12.64	-6.6	9.9
CohnStrsPfdInco **RNP**	22.75	21.50	-5.5	19.6
Cohen & Steers TR **RFI**	13.39	12.58	-6.0	8.1
CLSeligmn Prem Tech Gr Fd **STK**	21.78	22.45	+3.1	36.6
Duff & Phelps **DNP**	9.96	11.40	+14.4	23.0
Duff&PhelpsGblUtilIncFd **DPG**	17.78	16.07	-9.6	7.9
Eaton Vance Eqty Inco Fd **EOI**	14.59	14.31	-1.9	23.4
Eaton Vance Eqty Inco II **EOS**	15.40	15.16	-1.6	19.3
EtnVncRskMngd **ETJ**	9.94	9.41	-5.3	10.5
Etn Vnc Tax Mgd Buy-Write **ETB**	16.30	16.81	+3.1	11.8
Eaton Vance BuyWrite Opp **ETV**	14.77	15.28	+3.5	12.6
Eaton Vance Tax-Mng Div **ETY**	11.96	11.70	-2.2	19.1
Eaton Vance Tax-Mngd Opp **ETW**	11.47	11.78	+2.7	18.7
EtnVncTxMngGlDvEqInc **EXG**	9.38	9.38	0.0	19.4
Fiduciary/Clymr Opp Fd **FMO**	12.89	12.87	-0.2	-6.6
FT Energy Inc & Growth Fd **FEN**	24.40	24.71	+1.3	3.6
FstTrEnhEqtIncFd **FFA**	16.33	15.08	-7.7	20.6
First Tr Engy Infr Fd **FIF**	19.39	19.00	-2.0	11.1
First Tr MLP & Engy Incm **FEI**	14.82	15.20	+2.6	4.8
Gabelli Hlthcr & Well **GRX**	11.60	10.27	-11.5	6.2
Gabelli Utility Tr **GUT**	5.48	7.11	+29.7	19.0
GAMCOGlblGoldNatRscs&Inc **GGN**	5.51	5.63	+2.2	8.1
Goldman Sachs MLP Inc Opp **GMZ**	9.82	9.38	-4.5	9.1
Goldman Sachs MLP Energy **GER**	7.05	6.98	-1.0	7.6
John Hancock Finl Opps Fd **BTO**	36.41	37.30	+2.4	42.3
Macquarie Glbl Infrstrctr **MGU**	27.71	26.08	-5.9	32.7
Neuberger Berman MLP Incm **NML**	10.32	9.55	-7.5	14.2
Neubrgr Brm Rl Est Sec Fd **NRO**	5.89	5.64	-4.2	13.8
Nuveen Dow 30 Dynamic **DIAX**	NA	17.08	NA	27.0
Nuveen Core Eq Alpha **JCE**	NA	15.43	NA	24.2
Nuveen Diversified Div **JDD**	NA	12.80	NA	21.1
Nuveen Engy MLP Fd **JMF**	NA	12.29	NA	2.3
Nuv NASDAQ 100 Dyn Over **QQQX**	NA	22.60	NA	29.1
Nuveen Real Est Incm Fd **JRS**	NA	11.14	NA	8.2
Nuv S&P 500 Dyn Overwrite **SPXX**	NA	15.66	NA	23.1
Nuveen S&P 500 Buy-Write **BXMX**	NA	13.92	NA	15.2
Reaves Utility Fund **UTG**	34.73	31.62	-9.0	16.5
Tekla Hlthcr Investors **HQH**	26.47	25.67	-3.0	18.8
Tekla Healthcare Opps Fd **THQ**	20.31	18.81	-7.4	18.6
Tekla Life Sciences **HQL**	21.98	22.08	+0.5	31.0
Tekla World Hlthcr Fd **THW**	15.71	14.68	-6.6	11.0
Tortoise Energy **TYG**	NA	29.36	NA	8.1
Tortoise MLP Fund **NTG**	NA	18.25	NA	3.0
Voya GI Equity Div **IGD**	8.27	8.01	-3.1	24.1
Income Preferred Stock Funds				
Calamos Strat Fd **CSQ**	12.75	12.37	-3.0	31.7
Cohen & Steers Dur Pfd **LDP**	27.37	27.05	-1.2	17.8
Cohen & Strs Sel Prf Inco **PSF**	27.90	28.24	+1.2	15.7
FT Interm Duration Pfd **FPF**	24.93	24.62	-1.2	16.3
Flaherty & Crumrine Dyn **DFP**	26.34	26.41	+0.3	13.9
Flaherty & Crumrine Pfd **FFC**	20.34	21.32	+4.8	12.2
John Hancock Pfd Income **HPI**	21.45	21.92	+2.2	8.5
John Hancock Pfd II **HPF**	21.22	21.78	+2.6	6.5
John Hancock Pfd Inc III **HPS**	18.92	18.71	-1.1	7.2
JHancock Pr Div **PDT**	15.85	16.96	+7.0	16.2
LMP Cap & Inco Fd **SCD**	NA	14.68	NA	21.8
Nuveen Pfd & Incm Opps Fd **JPC**	NA	10.54	NA	14.5
Nuveen Pfd & Incm Secs Fd **JPS**	NA	10.40	NA	16.7
Nuveen Preferred & Incm **JPI**	NA	25.20	NA	11.0
TCW Strategic Income Fund **TSI**	NA	5.77	NA	14.1
Virtus Global Dividend **ZTR**	12.88	13.23	+2.7	28.0
Convertible Sec's. Funds				
AdvntClymrFd **AVK**	17.84	16.31	-8.6	22.5
AllianzGI Conv & Incm **NCV**	6.71	7.16	+6.7	18.9
AllianzGI Conv & Incm II **NCZ**	6.02	6.26	+4.0	18.4
AllianzGI Div Incm **ACV**	22.65	21.82	-3.7	28.3
AllianzGI Equity & Conv **NIE**	22.48	20.61	-8.3	20.0
Calamos Conv Hi Inco Fd **CHY**	12.02	12.02	0.0	22.3
Calamos **CHI**	11.40	11.69	+2.5	27.4
World Equity Funds				
Alpine Tot Dyn Div **AOD**	9.93	9.09	-8.5	30.3
Cdn Genl Inv **CGI**	30.86	21.55	-30.2	23.2
China Fund **CHN**	22.93	20.77	-9.4	30.4
Clough Global Opp Fd **GLO**	11.97	11.30	-5.6	31.4
EtnVncTxAdvGblDiv **ETG**	18.05	17.18	-4.8	25.1
EatonVance TxAdv Opport **ETO**	24.38	24.96	+2.4	27.1
First Trust Dynamic Eur **FDEU**	19.56	19.30	-1.3	35.4
Gabelli Glbl Multimedia **GGT**	9.30	9.66	+3.9	39.1
GDL Fund **GDL**	11.68	10.20	-12.7	12.0
India Fund **IFN**	30.33	27.48	-9.4	19.4
Japan Sml Cap **JOF**	14.11	12.65	-10.3	33.2
Korea Fund **KF**	45.84	41.46	-9.6	17.9
Mexico Fund **MXF**	19.19	16.85	-12.2	8.5
Morgan-Stanley Asia-Pac **APF**	19.93	17.83	-10.5	19.8
MS China a Shr Fd **CAF**	27.16	24.03	-11.5	31.2
MS Emerging Fund **MSF**	19.64	17.65	-10.2	21.9
MS India Invest **IIF**	39.32	35.53	-9.6	28.1
New Germany Fund **GF**	20.49	18.51	-9.7	39.1
Swiss Helvetia Fund **SWZ**	14.05	12.75	-9.3	20.9
Templeton Dragon **TDF**	23.88	21.26	-11.0	31.3
Templeton Emerging **EMF**	18.83	17.01	-9.7	38.7
Virtus Total Return Fund **ZF**	13.56	13.10	-3.4	22.4
Voya Infr Indls & Matls **IDE**	16.34	15.99	-2.1	36.1
Wells Fargo Gl Div Opp **EOD**	NA	6.29	NA	23.5

Fund (SYM)	NAV	Close	Prem /Disc	12 Mo Yld
U.S. Mortgage Bond Funds				
BlackRock Income Trust **BKT**	6.68	6.26	-6.3	5.0
Nuveen Mtg Opp Term Fd **JLS**	NA	25.76	NA	5.3
Investment Grade Bond Funds				
Blackrock Core Bond Tr **BHK**	14.86	14.04	-5.5	5.5
BlkRk Credit Alloc Incm **BTZ**	14.86	13.47	-9.4	6.2
John Hancock Income Secs **JHS**	15.51	14.60	-5.9	5.4
MFS Inc Tr **MIN**	4.49	4.25	-5.3	9.2
WstAstClymr InflLnkd Fd **WIW**	NA	11.22	NA	3.5
WstAssetClymr InflLnk Sec **WIA**	NA	11.43	NA	3.2
Loan Participation Funds				
Apollo Sr Fltg Rate Fd **AFT**	18.08	16.74	-7.4	7.3
BlkRk Debt Strat Fd **DSU**	12.77	11.76	-7.9	6.9
BlackRock FR Incm Strat **FRA**	14.98	14.25	-4.9	5.6
Blkrk FltRt InTr **BGT**	14.46	14.00	-3.2	5.4
BlackstoneGSO Strat Cred **BGB**	NA	16.10	NA	8.4
Blackstone GSO Sr Float **BSL**	NA	17.53	NA	6.6
Eagle Point Credit **ECC**	NA	21.15	NA	7.7
Eaton Vance FR Incm Tr **EFT**	15.54	14.62	-5.9	5.8
EatonVnc SrFltRate **EFR**	15.20	14.81	-2.6	5.9
Eaton Vance Sr Incm Tr **EVF**	7.17	6.58	-8.2	5.6
First Trust Sr FR Fd II **FCT**	14.06	13.24	-5.8	6.0
FT Sr Floating Rate 2022 **FIV**	9.74	9.68	-0.6	NS
Invesco Credit Opps Fund **VTA**	13.08	11.90	-9.0	7.1
Invesco Senior Income Tr **VVR**	4.90	4.46	-9.0	6.0
Nuveen Credit Strt Inc Fd **JQC**	NA	8.50	NA	7.3
NuvFloatRteIncoFd **JFR**	NA	11.71	NA	6.8
Nuv Float Rte Opp Fd **JRO**	NA	11.79	NA	7.0
Nuveen Senior Income Fund **NSL**	NA	6.75	NA	7.0
Pioneer Floating Rate Tr **PHD**	12.49	11.93	-4.5	6.1
Voya Prime Rate Trust **PPR**	5.64	5.18	-8.2	5.9
High Yield Bond Funds				
AllianceBernstein Glbl **AWF**	14.01	12.97	-7.4	6.7
Barings Glbl Short Dur HY **BGH**	21.28	20.49	-3.7	8.9
BlackRock Corp Hi Yd Fd **HYT**	12.36	11.33	-8.3	7.8
BlackRockDurInco Tr **BLW**	17.12	16.13	-5.8	7.8
Brookfield Real Assets **RA**	25.59	23.87	-6.7	NS
Credit Suisse High Yld **DHY**	2.81	2.86	+1.8	9.3
DoubleLine Incm Solutions **DSL**	NA	21.41	NA	8.4
Dreyfus Hi Yd Strat Fd **DHF**	3.59	3.54	-1.4	8.8
Fst Tr Hi Inc Lg/Shrt Fd **FSD**	18.17	16.92	-6.9	8.0
Guggenheim Strat Opps Fd **GOF**	19.76	21.30	+7.8	10.2
Ivy High Income Opps Fund **IVH**	16.35	15.99	-2.2	9.2
Neuberger Berman HYS **NHS**	13.48	12.22	-9.3	7.5
NexPoint Credit Strat Fd **NHF**	25.11	23.50	-6.4	10.5
Nuveen Credit Opps 2022 **JCO**	NA	10.01	NA	NS
Nuveen Gl Hi Incm Fd **JGH**	NA	17.36	NA	8.2
Nuveen High Incm Dec18 **JHA**	NA	10.02	NA	5.3
Nuveen High Incm Dec19 **JHD**	NA	10.13	NA	5.9
Nuveen Hi Incm Nov 2021 **JHB**	NA	10.09	NA	5.9
Pioneer High Income Trust **PHT**	10.88	10.03	-7.8	8.4
Prud Gl Shrt Dur Hi Yd **GHY**	16.53	14.86	-10.1	7.7
Prudentl Sh Dur Hi Yd Fd **ISD**	16.74	15.19	-9.3	7.8
Wells Fargo Incm Opps Fd **EAD**	NA	8.68	NA	8.6
Wstrn Asset Glbl Hi Inco **EHI**	NA	10.28	NA	9.0
Wstrn Asset High Inco II **HIX**	NA	7.19	NA	8.7
Wstrn Asset Opp Fd **HIO**	NA	5.14	NA	7.2
West Asst HY Def Opp Fd **HYI**	NA	15.51	NA	7.8
Other Domestic Taxable Bond Funds				
Apollo Tactical Incm Fd **AIF**	17.47	16.21	-7.2	8.8
Ares Dynamic Credit Alloc **ARDC**	NA	16.43	NA	7.5
Barings Corp Investors **MCI**	NA	16.06	NA	3.8
BlackRock Multi-Sector IT **BIT**	20.03	18.66	-6.8	9.4
BlackRock Taxable Mun Bd **BBN**	23.59	23.35	-1.0	6.7
Doubleline Oppor Credit **DBL**	21.97	23.85	+8.5	8.3
Duff & Phelps Utl & Cp Bd **DUC**	9.77	9.21	-5.7	6.4
EtnVncLtdFd **EVV**	15.19	14.02	-7.7	7.1
Franklin Ltd Duration IT **FTF**	NA	11.95	NA	10.9
Guggenheim Taxable Muni **GBAB**	23.27	22.65	-2.7	6.6
Invesco High Incm 2023 **IHIT**	10.14	10.06	-0.8	NS
John Hancock Investors **JHI**	18.74	18.12	-3.3	7.1
KKR Income Opps Fund **KIO**	NA	18.10	NA	8.8
MFS Charter **MCR**	9.35	8.68	-7.2	8.6
MFS Multimkt **MMT**	6.70	6.23	-7.0	8.6
Nuveen Build Am Bd Fd **NBB**	NA	21.39	NA	5.8
PIMCO Corporate & Incm **PTY**	NA	16.94	NA	10.3
PIMCO Corporate & Incm **PCN**	NA	17.22	NA	10.1
PIMCO HiIncо **PHK**	NA	8.30	NA	12.7
PIMCO Inco Str Fd **PFL**	NA	12.28	NA	8.9
PIMCO Incm Strategy Fd II **PFN**	NA	10.81	NA	8.9
Putnam Mas Inco **PIM**	5.05	4.79	-5.1	6.6
Putnam Premier Income Tr **PPT**	5.59	5.34	-4.5	5.8
Wells Fargo Multi-Sector **ERC**	NA	13.35	NA	9.0
World Income Funds				
Abeerden Asia-Pacific **FAX**	5.46	5.10	-6.6	8.1
Etn Vnc Short Dur Fd **EVG**	NA	14.26	NA	7.0
Legg Mason BW Glbl Incm **BWG**	NA	13.33	NA	7.3
MS EmMktDomDebt **EDD**	8.91	7.94	-10.9	8.2
PIMCO Dynamic Credit **PCI**	NA	23.26	NA	11.2
PIMCO Dynamic Income Fund **PDI**	NA	31.01	NA	13.2
PIMCO Income Opportunity **PKO**	NA	26.62	NA	9.9
PIMCO Strat Income Fund **RCS**	NA	9.72	NA	9.2
Templeton Emerging **TEI**	13.06	11.53	-11.7	4.5
Templeton Global **GIM**	7.49	6.74	-10.0	6.2
Wstrn Asset Emerg Mkts **EMD**	NA	15.66	NA	7.3
Wstrn Asset Gl Def Opp Fd **GDO**	NA	18.28	NA	7.4
National Muni Bond Funds				
AllianceBrnstn NtlMun **AFB**	14.90	13.86	-7.0	4.5
Blackrock Invest **BKN**	15.91	14.99	-5.8	5.3
BlackRock Mun 2030 Target **BTT**	24.10	22.62	-6.1	4.1
BlackRock Municipal Trust **BFK**	14.50	14.25	-1.7	5.6
BlackRockMuni **BLE**	15.11	15.07	-0.3	5.8
BlackRockMuni Tr **BYM**	15.24	14.65	-3.9	5.2
BlkRk MuniAssets Fd **MUA**	14.20	15.23	+7.3	4.5
BlkRk Munienhanced **MEN**	11.98	11.92	-0.5	5.7
BlkRk MuniHldgs Inv **MFL**	14.79	14.94	+1.0	5.7
BlkRk MuniHldgs Qlty II **MUE**	14.14	13.81	-2.3	5.5
BlkRk MuniVest **MVF**	9.69	9.72	+0.3	5.8
BlkRk MuniVest II **MVT**	15.33	15.50	+1.1	5.8
BlkRk MuniYield **MYD**	14.92	14.86	-0.4	5.7
BlkRk MuniYld Quality **MQY**	15.87	15.50	-2.3	5.6
BlkRk MuniYld Qlty II **MQT**	13.93	13.32	-4.4	5.5
BlRkMunyldQltyIII **MYI**	14.50	14.34	-1.1	5.7
Deutsche Mun Income Tr **KTF**	12.65	12.76	+0.9	6.3
Dreyfus Mun Bd Infr Fd **DMB**	14.21	13.39	-5.8	4.8
Dreyfus Strat Muni Bond **DSM**	8.42	8.54	+1.4	5.8
Dreyfus Strategic Munis **LEO**	8.63	8.79	+1.9	5.8
Eaton Vance Mun Bd Fd **EIM**	13.76	12.66	-8.0	5.0
Eaton Vance Mun Income **EVN**	13.48	12.85	-4.7	5.2
EV National Municipal Opp **EOT**	21.95	22.44	+2.2	4.5
Invesco Adv Mun Incm II **VKI**	12.21	11.51	-5.7	5.7
Invesco Mun Incm Opps Tr **OIA**	7.58	7.93	+4.6	5.2
Invesco Mun Opportunity **VMO**	13.58	13.00	-4.3	5.9
Invesco Municipal Trust **VKQ**	13.57	12.72	-6.3	5.7
Invesco Qlty Mun Inco **IQI**	13.69	12.77	-6.7	5.4
Invesco Inv Grade Muni **VGM**	14.07	13.43	-4.5	5.7
Invesco Value Mun Incm Tr **IIM**	16.33	14.87	-8.9	4.9
MainStay DefinedTerm **MMD**	20.29	20.07	-1.1	5.3
MFS Munl Inco **MFM**	7.40	7.11	-3.9	5.3
Nuveen AMT-Free Quality **NEA**	NA	13.79	NA	5.4
Nuveen AMT-Free Mun **NVG**	NA	15.43	NA	5.7
Nuveen Mun Credit Incm Fd **NZF**	NA	15.21	NA	5.8
Nuveen Enhncd Mun Val Fd **NEV**	NA	14.83	NA	5.6
Nuveen Intermed Dur Mun **NID**	NA	13.33	NA	4.8
NuveenMuniIncoOppFd **NMZ**	NA	13.66	NA	6.0
Nuveen Muni Value Fund **NUV**	NA	10.27	NA	3.8
Nuveen Qual Mun Incm Fd **NAD**	NA	14.16	NA	5.5
Nuveen Sel Tax Free **NXP**	NA	15.03	NA	3.6
Nuveen Sel TF **NXQ**	NA	14.18	NA	3.5
PIMCO MuniFd **PMF**	NA	13.62	NA	5.8
Pimco Muni Inc II **PML**	NA	13.19	NA	5.9
PIMCO Muni Inc III **PMX**	NA	11.91	NA	5.8
Pioneer Mun Hi Inc Adv Tr **MAV**	11.93	11.49	-3.7	5.4
Pioneer Mun Hi Incm Tr **MHI**	12.83	11.94	-6.9	5.0
Putnam Tr **PMM**	7.96	7.60	-4.5	5.3
Putnam Muni Opportunities **PMO**	13.32	12.65	-5.0	5.1
Wstrn Asset Mngd Muni **MMU**	NA	14.05	NA	5.4
Western Asset Mun Tr Fund **MTT**	NA	22.92	NA	4.7
Single State Muni Bond				
BlackRock CA Municipal Tr **BFZ**	15.31	14.44	-5.7	5.1
BlkRk MuniHldgs CA Qlty **MUC**	15.52	14.81	-4.6	4.9
Blkrck MunHI NJ Qlty **MUJ**	15.67	14.53	-7.3	5.5
BlRk MuHldg NY Qlty **MHN**	14.87	14.10	-5.2	4.9
BlkRk MuniYld CA Fd **MYC**	15.61	15.34	-1.7	5.0
BlkRk MuniYld CA Quality **MCA**	15.73	15.41	-2.0	5.0
BlkRk MuniYld MI Qlty **MIY**	15.46	13.95	-9.8	5.5
BlRk Muyld NY Qlty **MYN**	14.26	13.25	-7.1	4.9
Eaton Vance CA Mun Bd **EVM**	12.46	12.10	-2.9	4.8
Invesco CA Value Mun Incm **VCV**	13.48	13.08	-3.0	4.8
Invesco PA Value Mun Incm **VPV**	14.07	12.27	-12.8	5.1
Invesco Inv Grade NY Muni **VTN**	14.66	13.69	-6.6	5.0
Nuveen CA AMT-Free Qual **NKX**	NA	15.67	NA	5.0
Nuveen CA Muni Value **NCA**	NA	10.45	NA	3.9
Nuveen CA Quality Muni **NAC**	NA	14.82	NA	5.4
Nuveen MD Qual Muni **NMY**	NA	12.80	NA	5.0
Nuveen MI Qual Muni **NUM**	NA	13.63	NA	4.8
Nuveen NJ Qual Muni **NXJ**	NA	13.78	NA	5.1
Nuveen NY AMT-Free **NRK**	NA	13.14	NA	4.8
Nuveen NY Qual Muni **NAN**	NA	14.06	NA	5.0
Nuveen OH Qual Muni **NUO**	NA	15.11	NA	4.6
Nuveen PA Qual Muni **NQP**	NA	13.57	NA	5.2
Nuveen VA Qual Muni **NPV**	NA	13.20	NA	4.2
PIMCO California Muni **PCQ**	NA	17.24	NA	5.3
PIMCO California Mun II **PCK**	NA	10.14	NA	5.6

Fund (SYM)	NAV	Close	Prem /Disc	52 wk Ttl Ret
General Equity Funds				
Specialized Equity Funds				
Griffin Inst Access RE:A	26.63	NA	NA	5.9
Griffin Inst Access RE:C	26.22	NA	NA	5.1
Griffin Inst Access RE:I	26.78	NA	NA	6.2
Griffin Inst Access RE:L	26.62	NA	NA	NS
Griffin Inst Access RE:M	26.52	NA	NA	NS
NexPointRlEstStrat;A	19.92	NA	NA	7.2
NexPointRlEstStrat;C	19.86	NA	NA	6.4
NexPointRlEstStrat;Z	19.87	NA	NA	7.6
Resource RE Div Inc:A	10.16	NA	NA	6.7
Resource RE Div Inc:C	10.16	NA	NA	6.0
Resource RE Div Inc:D	10.32	NA	NA	6.2
Resource RE Div Inc:I	10.59	NA	NA	6.5
Resource RE Div Inc:L	10.16	NA	NA	NS
Resource RE Div Inc:T	10.14	NA	NA	5.9
Resource RE Div Inc:U	10.17	NA	NA	6.8
Resource RE Div Inc:W	10.32	NA	NA	6.6
SharesPost 100	25.78	NA	NA	-4.1
Tot Inc+ RE:L	NA	NA	NA	NS
USQ Core Real Estate:I **USQIX**	25.02	NA	NA	NS
USQ Core Real Estate:IS **USQSX**	25.02	NA	NA	NS
Versus Cap MMgr RE Inc:F	27.61	NA	NA	5.1
Versus Cap MMgr RE Inc:I	27.68	NA	NA	5.4
Versus Capital Real Asst **VCRRX**	24.99	NA	NA	NS
Wildermuth Endwmnt Str	12.75	NA	NA	11.0
Wildermuth Endwmnt S:C	12.59	NA	NA	10.2
Wildermuth Endwmnt S:I	12.80	NA	NA	NS
Income Preferred Stock Funds				
The Relative Value:CIA **VFLEX**	25.41	NA	NA	NS
Convertible Sec's. Funds				
Calmos Dyn Conv and Inc **CCD**	21.12	20.75	-1.8	15.3
World Equity Funds				
BMO LGM Front ME	10.26	NA	NA	12.2
CalamosGlbTotRet **CGO**	13.25	13.62	+2.8	16.6

Fund (SYM)	NAV	Close	Prem /Disc	12 Mo Yld
U.S. Mortgage Bond Funds				
Vertical Capital Income	12.37	NA	NA	3.2
Loan Participation Funds				
504 Fund	9.74	NA	NA	3.7
FedProj&TrFinanceTender	10.03	NA	NA	NS
Invesco Sr Loan A	6.69	NA	NA	4.3
Invesco Sr Loan B	6.69	NA	NA	4.3
Invesco Sr Loan C	6.70	NA	NA	3.5
Invesco Sr Loan IB	6.69	NA	NA	4.5
Invesco Sr Loan IC	6.69	NA	NA	4.4
Invesco Sr Loan Y	6.69	NA	NA	4.5
RiverNorth MP Lending **RMPLX**	24.99	NA	NA	6.6
Sierra Total Return:T **SRNTX**	25.06	NA	NA	NS
Voya Senior Income:A	12.52	NA	NA	5.4
Voya Senior Income:C	12.49	NA	NA	4.9
Voya Senior Income:I	12.48	NA	NA	5.7
Voya Senior Income:W	12.52	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	9.72	NA	NA	10.4
WA Middle Mkt Dbt	NA	NA	NA	8.6
WA Middle Mkt Inc **WMF**	NA	NA	NA	8.5
Other Domestic Taxable Bond Funds				
Capstone Church Capital	11.34	NA	NA	1.5
CION Ares Dvsfd Crdt;A	NA	NA	NA	NS
CION Ares Dvsfd Crdt;C	NA	NA	NA	NS
CION Ares Dvsfd Crdt;I	NA	NA	NA	NS
CNR Select Strategies	7.81	NA	NA	NS
GL Beyond Income	3.67	NA	NA	NE
Palmer Square Opp Income	NA	NA	NA	5.1
Resource Credit Inc:A	11.14	NA	NA	6.4
Resource Credit Inc:C	11.27	NA	NA	5.7
Resource Credit Inc:I	11.17	NA	NA	6.7
Resource Credit Inc:L	11.14	NA	NA	NS
Resource Credit Inc:W	11.14	NA	NA	6.3

Borrowing Benchmarks | WSJ.com/bonds

Money Rates

October 6, 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

	Aug. index level	Chg From (%) July '17	Aug. '16
U.S. consumer price index			
All items	**245.519**	0.30	1.9
Core	**252.460**	0.21	1.7

International rates

	Latest	Week ago	52-Week High	52-Week Low
Prime rates				
U.S.	**4.25**	4.25	4.25	3.50
Canada	**3.20**	3.20	3.20	2.70
Japan	**1.475**	1.475	1.475	1.475
Policy Rates				
Euro zone	**0.00**	0.00	0.00	0.00
Switzerland	**0.50**	0.50	0.50	0.50
Britain	**0.25**	0.25	0.25	0.25
Australia	**1.50**	1.50	1.50	1.50
Overnight repurchase				
U.S.	**1.13**	1.16	1.38	0.15

U.S. government rates

	Latest	Week ago	52-Week High	52-Week Low
Discount				
	1.75	1.75	1.75	1.00
Federal funds				
Effective rate	**1.1700**	1.0700	1.2000	0.3500
High	**1.3125**	1.3125	1.3125	0.5625
Low	**1.0500**	1.0300	1.1600	0.2400
Bid	**1.1600**	1.0600	1.1700	0.3000
Offer	**1.1700**	1.0700	1.1900	0.3200

	Latest	Week ago	—52-WEEK— High	Low
Treasury bill auction				
4 weeks	**0.980**	0.970	1.300	0.240
13 weeks	**1.050**	1.050	1.180	0.310
26 weeks	**1.190**	1.170	1.190	0.470
Secondary market				
Fannie Mae				
30-year mortgage yields				
30 days	**3.461**	3.429	3.865	2.960
60 days	**3.483**	3.455	3.899	2.990

Other short-term rates

	Latest	Week ago	52-Week high	low
Call money				
	3.00	3.00	3.00	2.25
Commercial paper (AA financial)				
90 days	**1.21**	1.26	1.30	0.62
Libor				
One month	**1.23500**	1.23222	1.23889	0.52400
Three month	**1.35028**	1.33389	1.35028	0.87389
Six month	**1.51878**	1.50600	1.51878	1.24267
One year	**1.80456**	1.78233	1.82761	1.55622
Euro Libor				
One month	**-0.405**	-0.404	-0.376	-0.405
Three month	**-0.376**	-0.379	-0.319	-0.381
Six month	**-0.309**	-0.309	-0.212	-0.309
One year	**-0.223**	-0.221	-0.071	-0.223
Euro interbank offered rate (Euribor)				
One month	**-0.373**	-0.372	-0.366	-0.375
Three month	**-0.329**	-0.329	-0.304	-0.332
Six month	**-0.273**	-0.273	-0.203	-0.275
One year	**-0.173**	-0.172	-0.063	-0.173

	Latest	Value Traded	52-Week High	52-Week Low
DTCC GCF Repo Index				
Treasury	**1.127**	22.950	1.366	0.244
MBS	**1.193**	79.210	1.506	0.257

	Settle	Change	Open Interest	Implied Rate
DTCC GCF Repo Index Futures				
Treasury Oct	**98.880**	-0.010	5035	1.120
Treasury Nov	**98.885**	unch.	5568	1.115
Treasury Dec	**98.735**	unch.	1947	1.265

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 June 15, 2017. **Other prime rates** aren't directly comparable; lending practices vary widely by location; **Discount rate** is effective June 15, 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.

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MARKETS DIGEST

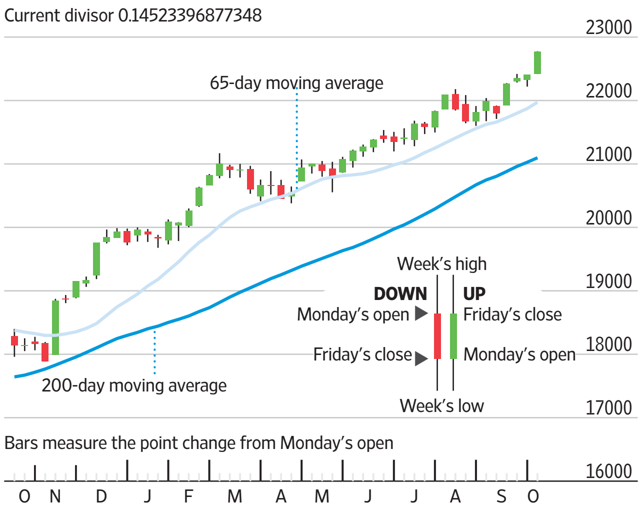
Dow Jones Industrial Average

22773.67 ▲368.58, or 1.65% last week

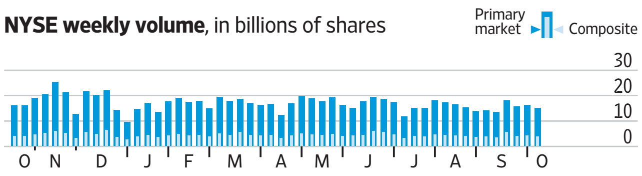
High, low, open and close for each of the past 52 weeks

	Last	Year ago
Trailing P/E ratio	20.86	20.21
P/E estimate *	19.30	17.61
Dividend yield	2.24	2.61
All-time high 22775.39, 10/05/17		

Current divisor 0.14523396877348



NYSE weekly volume, in billions of shares



Weekly P/E data based on as-reported earnings from Birinyi Associates Inc.

S&P 500 Index

2549.33 ▲29.97, or 1.19% last week

High, low, open and close for each of the past 52 weeks

	Last	Year ago
Trailing P/E ratio	24.70	24.59
P/E estimate *	19.27	18.42
Dividend yield	1.96	2.13
All-time high: 2552.07, 10/05/17		

Financial Flashback

The Wall Street Journal, October 9, 1987

National Semiconductor Corp. said it completed its acquisition of Schlumberger Ltd.'s Fairchild Semiconductor Corp. for $122 million in common stock and warrants.

Major U.S. Stock-Market Indexes

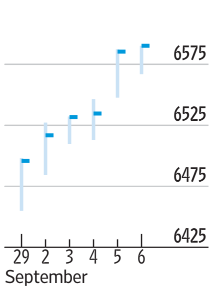
	Latest Week High	Low	Close	Net chg	% chg	52-Week Low	Close (●)	High	% chg	% chg YTD	3-yr. ann.
Dow Jones											
Industrial Average	22777.04	22416.00	22773.67	368.58	1.65	17888.28		22775.39	24.9	15.2	10.3
Transportation Avg	10010.44	9842.02	9886.88	-27.47	-0.28	7967.02		9973.8	22.7	9.3	5.6
Utility Average	732.81	718.96	731.15	7.55	1.04	625.44		754.8	13.6	10.8	9.6
Total Stock Market	26500.96	26159.40	26467.35	318.81	1.22	21514.15		26496.16	18.7	13.7	9.1
Barron's 400	687.96	678.27	687.05	8.78	1.30	521.59		687.05	25.1	14.2	10.3
Nasdaq Stock Market											
Nasdaq Composite	6590.18	6484.14	6590.18	94.22	1.45	5046.37		6590.18	24.5	22.4	13.9
Nasdaq 100	6064.67	5955.83	6064.57	85.27	1.43	4660.46		6064.57	24.7	24.7	14.7
Standard & Poor's											
500 Index	2552.51	2520.40	2549.33	29.97	1.19	2085.18		2552.07	18.4	13.9	9.1
MidCap 400	1823.16	1795.73	1818.43	22.49	1.25	1476.68		1819.96	18.5	9.5	10.2
SmallCap 600	919.56	903.63	915.10	11.12	1.23	703.64		918.72	22.2	9.2	13.2
Other Indexes											
Russell 2000	1514.94	1491.05	1510.22	19.36	1.30	1156.89		1512.09	22.1	11.3	11.3
NYSE Composite	12351.14	12200.13	12317.69	108.53	0.89	10289.35		12338.93	15.9	11.4	5.0
Value Line	546.66	539.05	544.61	5.30	0.98	455.65		545.78	13.7	7.6	4.7
NYSE Arca Biotech	4317.00	4214.43	4282.48	79.16	1.88	2834.14		4304.77	30.8	39.3	12.0
NYSE Arca Pharma	553.08	545.81	552.55	7.65	1.40	463.78		552.55	7.9	14.7	1.4
KBW Bank	101.32	98.85	100.75	1.48	1.49	70.90		100.75	38.3	9.8	12.1
PHLX§ Gold/Silver	87.05	84.08	86.90	2.24	2.65	73.03		96.72	6.9	10.2	2.9
PHLX§ Oil Service	140.81	137.21	138.33	-3.84	-2.70	117.79		192.66	-16.8	-24.7	-18.5
PHLX§ Semiconductor	1191.47	1170.74	1191.45	19.71	1.68	802.88		1191.45	42.3	31.4	24.5
CBOE Volatility	10.27	9.11	9.65	0.14	1.47	9.19		22.51	-28.4	-31.3	-14.5

§Philadelphia Stock Exchange

Sources: SIX Financial Information; WSJ Market Data Group

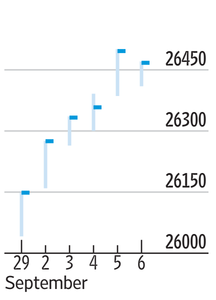
Nasdaq Composite

▲ 94.22, or 1.45% last week



DJ US TSM

▲ 318.81, or 1.22% last week



International Stock Indexes

Region/Country	Index	Latest Week Close	% chg	52-Week Range Low	Close	High	YTD % chg
32	The Global Dow	2929.76	0.76	2390.11		2933.30	15.7
	DJ Global Index	379.68	0.82	311.55		380.02	16.5
	DJ Global ex U.S.	255.25	0.44	206.73		256.54	19.3
Americas	DJ Americas	615.28	1.16	503.67		616.28	13.9
Brazil	Sao Paulo Bovespa	76054.72	2.37	57110.99		76762.91	26.3
Canada	S&P/TSX Comp	15728.32	0.60	14509.25		15922.37	2.9
Mexico	S&P/BMV IPC	50302.96	-0.09	44364.17		51713.38	10.2
Chile	Santiago IPSA	4164.28	2.69	3137.71		4164.28	29.2
EMEA	Stoxx Europe 600	389.47	0.34	328.80		396.45	7.8
	Stoxx Europe 50	3189.97	0.54	2730.05		3276.11	6.0
Eurozone	Euro Stoxx	389.84	0.22	317.93		392.06	11.3
	Euro Stoxx 50	3603.32	0.24	2954.53		3658.79	9.5
Austria	ATX	3324.41	0.25	2383.39		3345.50	27.0
Belgium	Bel-20	4047.37	0.74	3426.21		4064.18	12.2
France	CAC 40	5359.90	0.56	4377.46		5432.40	10.2
Germany	DAX	12955.94	0.99	10259.13		12970.52	12.8
Greece	Athex Composite	745.55	-1.33	573.92		858.08	15.8
Israel	Tel Aviv	1432.90	0.83	1363.50		1478.96	-2.6
Italy	FTSE MIB	22392.31	-1.34	16217		22811	16.4
Netherlands	AEX	539.90	0.53	440.51		542.88	11.7
Portugal	PSI 20	5395.27	-0.26	4370.84		5439.99	15.3
Russia	RTS Index	1134.30	-0.22	960.32		1195.61	-1.6
South Africa	FTSE/JSE All-Share	57231.87	2.97	48935.90		57231.87	13.0
Spain	IBEX 35	10185.50	-1.89	8607.1		11135.4	8.9
Sweden	SX All Share	587.71	0.35	496.66		596.72	9.9
Switzerland	Swiss Market	9252.12	1.03	7593.20		9283.97	12.6
U.K.	FTSE 100	7522.87	2.04	6693.26		7547.63	5.3
Asia-Pacific							
Australia	S&P/ASX 200	5710.70	0.51	5156.6		5956.5	0.8
China	Shanghai Composite	3348.94	Closed	3004.70		3385.39	7.9
Hong Kong	Hang Seng	28458.04	3.28	21574.76		28458.04	29.4
India	S&P BSE Sensex	31814.22	1.70	25765.14		32575.17	19.5
Japan	Nikkei Stock Avg	20690.71	1.64	16251.54		20690.71	8.2
Malaysia	FTSE Bursa Malaysia KLCI	1764.00	0.48	1616.64		1792.35	7.4
Singapore	Straits Times	3291.29	2.22	2787.27		3354.71	14.3
South Korea	Kospi	2394.47	Closed	1958.38		2451.53	18.2
Taiwan	Weighted	10532.81	1.96	8931.03		10631.57	13.8

Source: SIX Financial Information; WSJ Market Data Group

Commodities and Currencies

	Last Week Close	Net chg	% Chg	YTD % chg
DJ Commodity	581.31	-4.43	-0.76	2.48
TR/CC CRB Index	180.95	-2.13	-1.17	-6.00
Crude oil, $ per barrel	49.29	-2.38	-4.61	-8.25
Natural gas, $/MMBtu	2.863	-0.14	-4.79	-23.12
Gold, $ per troy oz.	1271.60	-9.90	-0.77	10.57
U.S. Dollar Index	93.80	0.72	0.77	-8.23
WSJ Dollar Index	86.95	0.65	0.76	-6.44
Euro, per dollar	0.8524	0.0059	0.70	-10.33
Yen, per dollar	112.64	0.14	0.13	-3.73
U.K. pound, in dollars	1.31	-0.0330	-2.46	5.86

	52-Week Low	Close (●)	High	% Chg
DJ Commodity	527.06		591.05	8.38
TR/CC CRB Index	166.50		195.14	-3.91
Crude oil, $ per barrel	42.53		54.45	-1.04
Natural gas, $/MMBtu	2.56		3.93	-10.34
Gold, $ per troy oz.	1127.80		1346.00	1.82
U.S. Dollar Index	91.35		103.25	-2.94
WSJ Dollar Index	84.49		93.56	-0.48
Euro, per dollar	0.83		0.96	-4.51
Yen, per dollar	102.96		118.18	9.40
U.K. pound, in dollars	1.20		1.36	5.10

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New to the Market

IPO Scorecard on page B8

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)
10/11	9/15	CarGurus Software-E-Commerce company providing automotive services.	CARG Nq	9.4	13.00/ 15.00	GS, Allen & Co, RBC Cptl Mkts
10/11	6/16 2016	OrthoPediatrics Provider of medical equipments.	KIDS Nq	4.0	12.00/ 14.00	Piper Jaffray, Stifel
10/11	9/1	Restoration Robotics Medical device company.	HAIR Nq	3.1	7.00/ 9.00	Fortress Biotech
10/12	9/18	OptiNose Specialty pharmaceutical company.	OPTN Nq	6.3	15.00/ 17.00	Jefferies, Piper Jaffray, BMO Cptl Mkts, RBC Cptl Mkts

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
Oct. 9	April 12, '17	Cadence Bancorp	CADE	20.00	172.5	13.3	180 days
	April 12, '17	Tocagen	TOCA	10.00	97.8	4.4	180 days
	April 12, '17	Warrior Met Coal	HCC	19.00	316.7	24.3	180 days
	April 12, '17	Yext	YEXT	11.00	132.8	19.5	180 days
Oct. 10	July 12, '17	Co-Diagnostics	CODX	6.00	7.1	–5.3	90 days

Sources: Dealogic; WSJ Market Data Group

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)
Annaly Capital Management Real Estate/Property	Oct. 5 Sept. 2,'16	$780.0	...	Credit Suisse, BofA ML, GS, WFS
Globalstar Telecommunications	Oct. 5 Oct. 4,'17	$121.1	...	MS
ImmunoGen Healthcare	Oct. 5 March 3,'17	$94.3	$200.0	Jefferies, Leerink Prtnrs, RBC Cptl Mkts
US Gold Mining	Oct. 5 May 10,'17	$2.5	$20.0	Laidlaw & Co
Tronox Chemicals	Oct. 4 Oct. 2,'17	$429.0	...	JPM, Barclays, MS
Matador Resources Oil & Gas	Oct. 4 Aug. 11,'17	$210.8	...	BMO Cptl Mkts
Strongbridge Biopharma Healthcare	Oct. 4 April 28,'17	$25.0	$150.0	Cantor Fitzgerald & Co
Paramount Gold Nevada Mining	Oct. 4 May 26,'17	$4.5	$12.0	Canaccord Genuity, Cantor Fitzgerald & Co
NewLink Genetics Healthcare	Oct. 3 June 25,'15	$58.9	$250.0	BofA ML, Stifel
Zogenix Healthcare	Oct. 2 Oct. 2,'17	$288.9	...	Leerink Prtnrs, Stifel

Public and Private Borrowing

Treasurys

Tuesday, October 10

Auction of 13 and 26 week bills; announced on October 5; settles on October 12

Auction of 4 and 52 week bill; announced on October 5; settles on October 12

Wednesday, October 11

Auction of 3 year note; announced on October 5; settles on October 16

Auction of 10 year note; announced on October 5; settles on October 16

Thursday, October 12

Auction of 30 year bond; announced on October 5; settles on October 16

Public and Municipal Finance

Deals of $ 150 million or more expected this week

Sale	Final maturity	Issuer	Total ($mil.)	Rating Fitch	Moody's	S&P	Bookrunner/ Bond Counsel(s)
Oct. 9	prelim.	Massachusetts	200.0	N.R.	N.R.	N.R.	Barclays/—
Oct. 11	Nov. 12, 2018	Louisville-Jefferson Metro Swr Dt	226.3	N.R.	N.R.	N.R.	Preliminary/ Dinsmore & Shohl
Oct. 11	Sept. 1, 2037	Ohio	175.0	N.R.	N.R.	N.R.	Preliminary/ Thompson Hine LLP
Oct. 12	July 1, 2042	Los Angeles Metro Trans Auth	479.7	N.R.	N.R.	N.R.	Preliminary/ Kutak Rock
Oct. 13	prelim.	Nevada Dept of Business & Indus	153.0	N.R.	N.R.	N.R.	M. Stanley/—
Oct. 13	prelim.	North Texas Tollway Auth (NTTA)	2,569.5	N.R.	N.R.	N.R.	BoA Merrill/—

Source: Thomson Reuters/Ipreo

A Week in the Life of the DJIA

A look at how the Dow Jones Industrial Average component stocks did in the past week and how much each moved the index. The DJIA gained 368.58 points, or 1.65%, on the week. A $1 change in the price of any DJIA stock = 6.89-point change in the average. To date, a $1,000 investment on Dec. 31 in each current DJIA stock component would have returned $34,807, or a gain of 16.00%, on the $30,000 investment, including reinvested dividends.

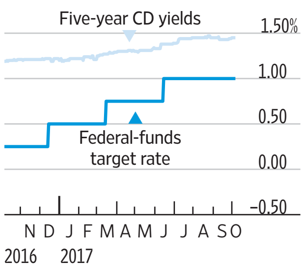
The Week's Action Pct chg (%)	Stock price change	Point chg in average	Company	Symbol	Close	$1,000 Invested (year-end '16)
4.07	1.55	10.67	Intel	INTC	$39.63	$1,117
3.72	8.83	60.80	Goldman Sachs	GS	246.02	1,037
3.15	6.62	45.58	3M	MMM	216.52	1,237
2.87	1.99	13.70	DowDuPont	DWDP	71.22	1,275
2.47	3.21	22.10	Johnson & Johnson	JNJ	133.22	1,182
2.08	2.55	17.56	Travelers	TRV	125.07	1,039
2.03	1.51	10.40	Microsoft	MSFT	76.00	1,246
1.86	2.92	20.11	McDonald's	MCD	159.60	1,342
1.85	2.15	14.80	United Technologies	UTX	118.23	1,099
1.78	2.22	15.29	Caterpillar	CAT	126.93	1,403
1.72	4.37	30.09	Boeing	BA	258.58	1,707
1.52	1.50	10.33	Walt Disney	DIS	100.07	967
1.48	1.35	9.30	Procter & Gamble	PG	92.33	1,125
1.48	1.41	9.71	J.P. Morgan Chase	JPM	96.92	1,150
1.42	1.49	10.26	Visa	V	106.73	1,377
1.40	2.29	15.77	Home Depot	HD	165.85	1,262
1.20	1.09	7.51	American Express	AXP	91.55	1,258
1.13	2.21	15.22	UnitedHealth Group	UNH	198.06	1,254
1.10	0.86	5.92	Wal-Mart Stores	WMT	79.00	1,169
1.10	0.57	3.92	Nike	NKE	52.42	1,042
1.07	0.48	3.31	Coca-Cola	KO	45.49	1,127
0.98	0.35	2.41	Pfizer	PFE	36.05	1,143
0.96	1.40	9.64	IBM	IBM	146.48	906
0.87	0.21	1.45	General Electric	GE	24.39	790
0.81	0.52	3.58	Merck	MRK	64.55	1,123
0.77	1.18	8.12	Apple	AAPL	155.30	1,362
0.36	0.12	0.83	Cisco Systems	CSCO	33.75	1,160
-0.33	-0.27	-1.86	Exxon Mobil	XOM	81.71	929
-0.40	-0.47	-3.24	Chevron	CVX	117.03	1,022
-1.37	-0.68	-4.68	Verizon	VZ	48.81	955

Sources: WSJ Market Data Group; S&P Dow Jones Indices. For more information on the Dow Jones Industrial Average and the 30 industrials, please visit www.djindexes.com

Consumer Rates and Returns to Investor

U.S. consumer rates

A consumer rate against its benchmark over the past year



Selected rates

5-year CDs

Bankrate.com avg†:	1.45%
EverBank Jacksonville, FL 855-228-6755	2.30%
First Internet Bank of Indiana Indianapolis, IN 888-873-3424	2.30%
Barclays Wilmington, DE 888-720-8756	2.35%
Synchrony Bank Morristown, NJ 800-903-8154	2.35%
Goldman Sachs Bank USA New York, NY 855-730-7283	2.40%

Interest rate	Yield/Rate (%) Last (●)	Week ago	52-Week Range (%) Low	High	3-yr chg (pct pts)
Federal-funds rate target	1.00-1.25	1.00-1.25	0.25	1.25	1.00
Prime rate*	4.25	4.25	3.50	4.25	1.00
Libor, 3-month	1.35	1.33	0.87	1.35	1.12
Money market, annual yield	0.35	0.27	0.26	0.36	-0.07
Five-year CD, annual yield	1.45	1.44	1.19	1.47	-0.07
30-year mortgage, fixed†	3.90	3.90	3.54	4.33	-0.29
15-year mortgage, fixed†	3.16	3.16	2.78	3.50	-0.18
Jumbo mortgages, $424,100-plus†	4.39	4.41	4.23	4.88	-0.17
Five-year adj mortgage (ARM)†	3.39	3.41	3.13	4.03	-0.36
New-car loan, 48-month	3.06	3.05	2.85	3.36	-0.17
HELOC, $30,000	5.23	4.74	4.57	5.30	0.82

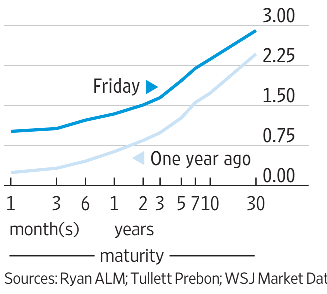
Bankrate.com rates based on survey of over 4,800 online banks. *Base rate posted by 70% of the nation's largest banks. † Excludes closing costs.

Sources: SIX Financial Information; WSJ Market Data Group; Bankrate.com

Benchmark Yields and Rates

Treasury yield curve

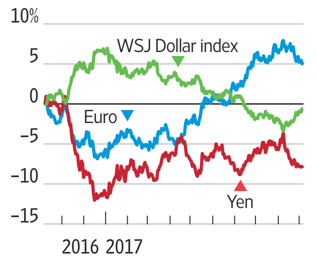
Yield to maturity of current bills, notes and bonds



Sources: Ryan ALM; Tullett Prebon; WSJ Market Data Group

Forex Race

Yen, euro vs. dollar; dollar vs. major U.S. trading partners



Corporate Borrowing Rates and Yields

Bond total return index	Yield (%) Last	Wk ago	Spread +/- Treasurys, in basis pts, 52-wk Range Last	Low	High	Total Return 52-wk	3-yr
10-yr Treasury, Ryan ALM	2.370	2.328				-3.52	2.10
DJ Corporate	3.015	2.973				2.26	4.00
Aggregate, Barclays Capital	2.590	2.550	37	37	47	0.45	2.48
High Yield 100, Merrill Lynch	5.106	4.977	315	309	490	7.559	4.186
Fixed-Rate MBS, Barclays	2.850	2.810	22	11	34	0.32	2.24
Muni Master, Merrill	1.934	1.917	9	-4	18	1.483	2.692
EMBI Global, J.P. Morgan	5.441	5.422	305	304	407	4.459	5.999

Sources: J.P. Morgan; Ryan ALM; S&P Dow Jones Indices; Barclays Capital; Merrill Lynch

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Amazon's Plans to Hurt Seattle Property

New headquarters is likely to divert growth away from the online retailer's hometown

By Peter Grant

Amazon.com is responsible for as many as one-third of the jobs created in Seattle since 2010, according to Green Street Advisors.

ELAINE THOMPSON/ASSOCIATED PRESS

Amazon.com Inc.'s decision to establish a second corporate headquarters is going to make some North American city very happy once the online retail behemoth announces its choice next year.

But it will likely be bad news for Seattle, Amazon's longtime home, which has benefited enormously from the company's rapid growth. Analysts predict that much of the company's future expansion will be in its second headquarters.

"It had generally been assumed that [Amazon's] growth would be concentrated in Seattle," said Dave Bragg, an analyst with **Green Street Advisors**, a real-estate research firm. "That now needs to be adjusted."

Green Street, in a new report titled "Sleepless in Seattle," lowered its 2018-21 growth estimate for the city's office sector by an average of 1.5 percentage points. In the near-term, growth is expected to be "modestly" slower in the apartment, industrial and strip-center sectors, the report says.

When Amazon announced its search for a second headquarters last month, the company said it expects to invest more than $5 billion in the new location and create up to 50,000 high-paying jobs.

Amazon hasn't said how the move will affect its plans for growth in the Seattle area. Before the announcement, the company had said it expected to add an additional 2 million square feet of office space to the 8.1 million square feet it currently occupies across 33 buildings in the city.

"Uncertainty surrounds Amazon's previously reported leasing and construction plans," Green Street noted in its report.

Real-estate experts believe Amazon's decision might inflict more harm to Seattle area growth than **Boeing** Co. did when it moved its corporate headquarters to Chicago in 2001. Boeing moved "a few hundred headquarters jobs" but maintained most of its manufacturing operations in the Seattle area, noted Simon Stevenson, chairman of the real estate department at the University of Washington.

Amazon is responsible for as many as one-third of the jobs created there since 2010, according to Green Street. About 40,000 people worked for Amazon in the Seattle area at the end of 2016, Mr. Bragg said, up from 4,000 in 2010.

An additional 53,000 jobs can be indirectly tied to the company, he added.

That growth has had a multiplier effect throughout the regional economy, boosting residential prices, retail rents and demand for other property. "Amazon has had a massive impact on Seattle's outperformance," Mr. Bragg said.

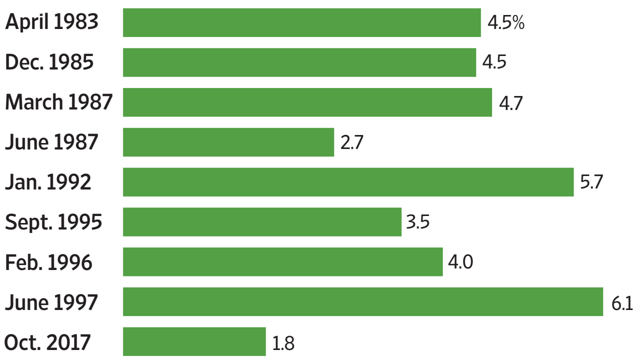
The Seattle economy is now being stoked by demand from a range of other companies like technology firm F5 Networks Inc., which leased more than 500,000 square feet in the city in the second quarter. The Puget Sound's office vacancy rate was 11.3% at the end of the quarter, compared with around 16% in 2012, according CBRE Group Inc.

Amazon hasn't said why it is expanding its growth beyond Seattle.

But the Green Street report speculates that a shift in the city's regulatory climate might have played a role in the company's decision to expand elsewhere. For example, Seattle recently approved an income tax on wealthy households, a move that is being challenged in court.

Big Streak, Small Gains

The S&P 500's latest run of six straight record highs produced smaller gains than other such streaks.



Note: Streaks of six or more consecutive record highs since 1975
Source: WSJ Market Data Group THE WALL STREET JOURNAL.

Daily Gains Small in S&P Win Streak

By Ben Eisen

The S&P 500 on Friday ended a streak that had a particularly bullish ring to it.

The benchmark finished at a record for six straight sessions through Thursday, the first time in more than two decades that has happened.

The S&P 500's 0.1% fall Friday closed out the run.

During those six days, the index was only up 1.8%, inching higher by no more than 0.6% on any given day. Of the 21 times since 1928 that the index has closed at six or more consecutive highs, the current one has produced the fourth-smallest gain, and the tiniest since 1965, according to The Wall Street Journal's Market Data Group.

Despite persistent calls for a big market reversal, the S&P 500 has set 43 records in 2017. But behind the bullish stats is a slow, plodding march higher.

The S&P has only had eight daily moves of 1% or more this year, the least for any comparable period since 1965. The slow gains have added up to a 14% rise in the S&P 500 so far in 2017.

Despite calls for a big market reversal, the S&P 500 has set 43 records in 2017.

The last such streak, the S&P 500's run of eight straight records in 1997, produced a gain of 6.1%. The streak before that, six sessions in 1996, offered up gains of 4%. Both were during the long rally of the 1990s that would end years later with the popping of the tech bubble.

In 1987, a March streak of six records resulted in gains of 4.7%, and then a June streak of six more records pushed the index up an additional 2.7%. In October of that year, the market took a nosedive.

—Douglas Kobin contributed to this article.

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 October 6, 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									
Sept. 18	**Workhorse Group**	**WKHS**	J. Lukens	**BI**	6,970	2.86-3.20	**20,201**	2.79	-60.5
Oct. 4	**Great Elm Capital Group**	**GEC**	M. Drapkin	**DI**	1,266	3.61	**4,572**	3.80	1.3
Oct. 2	**Intra-Cellular Therapies**	**ITCI**	M. Alafi	**BI**	258	15.50	**4,000**	16.49	9.3
Oct. 2			C. Alafi	**DOI**	258	15.50	**4,000**		
Sept. 29	**Conifer Holdings**	**CNFR**	J. Petcoff	**CEO**	216	6.25	**1,350**	7.15	-12.3
Sept. 29			R. Williams	**D**	160	6.25	**1,000**		
Sept. 29			J. Sarafa	**D**	24	6.25	**150**		
Sept. 29	**Mercer International**	**MERC**	.	**BI**	75	11.89	**892**	11.95	12.2
Sept. 29	**Bellerophon Therapeutics**	**BLPH**	N. Amin	**D**	456	1.42	**648**	1.55	198.0
Sept. 29			J. Peacock	**D**	249	1.42	**354**		
Sept. 29	**Gran Tierra Energy**	**GTE**	B. Wade	**D**	243	2.31	**560**	2.14	-29.1
Sept. 29	**Shoe Carnival**	**SCVL**	C. Tomm	**D**	11	22.69	**254**	22.20	-17.7
Oct. 4	**Ambac Financial Group**	**AMBC**	C. Leblanc	**CEO**	15	16.62-16.64	**250**	16.92	-24.8
Sept. 29	**HEICO**	**HEIA**	T. Culligan	**DI**	2	76.08	**114**	88.88	44.0
Sept. 29			A. Henriques	**DI**	2	76.08	**114**		
Sept. 29			M. Hildebrandt	**DI**	2	76.08	**114**		
Sept. 29			V. Mendelson	**P**	2*	76.08	**114**		
Sept. 29			L. Mendelson	**CEO**	2	76.08	**114**		
Sellers									
Oct. 2	**Cloudera**	**CLDR**	P. Li	**DOI**	6,529	15.79	**103,104**	16.80	-7.2
Oct. 2			M. Olson	**OI**	587	15.79	**9,274**		
Oct. 2	**Newell Brands**	**NWL**	M. Franklin	**DI**	2,047	42.93	**87,879**	43.90	-1.7
Oct. 2			I. Ashken	**DI**	511	42.93	**21,951**		
Oct. 2	**Platform Specialty Products**	**PAH**	M. Franklin	**DI**	6,479	11.15	**72,239**	11.59	18.1
Sept. 29-Oct. 2	**Facebook**	**FB**	M. Zuckerberg	**CEOI**	250	169.44-171.83	**42,499**	172.23	49.7
Sept. 28	**Nexstar Media Group**	**NXST**	J. Muse	**D**	641*	60.10	**38,539**	62.70	-0.9
Oct. 2-3	**Marvell Technology Group**	**MRVL**	S. Sutardja	**BI**	1,843	18.50-18.52	**34,119**	18.20	31.2
Sept. 28-29	**McKesson**	**MCK**	J. Hammergren	**CEO**	199	153.51-153.89	**30,586**	151.29	7.7
Sept. 18	**Workhorse Group**	**WKHS**	J. Lukens	**B**	6189*	2.86	**17,701**	2.79	-60.5
Oct. 2	**ServiceNow**	**NOW**	F. Slootman	**D**	150	116.77-118.40	**17,576**	121.75	63.8
Oct. 3-4	**Global Blood Therapeutics**	**GBT**	C. Homcy	**DI**	532	30.00-30.86	**16,245**	32.35	123.9
Oct. 2	**TE Connectivity**	**TEL**	T. Lynch	**OD**	131	83.37	**10,889**	86.23	24.5
Oct. 2	**Alnylam Pharmaceuticals**	**ALNY**	B. Greene	**P**	85	125.00	**10,665**	122.65	227.6
Oct. 3-4	**Boston Scientific**	**BSX**	S. Bose	**O**	347	29.08-29.18	**10,110**	29.50	36.4
Sept. 20	**Ametek**	**AME**	F. Hermance	**OD**	151	66.38	**10,013**	66.99	37.8
Oct. 3-5	**Apple**	**AAPL**	A. Ahrendts	**O**	63	153.41-155.23	**9,775**	155.30	34.1
Oct. 3			P. Schiller	**OI**	57	154.70	**8,788**		

* 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	0	20,866,290	**Finance**	443,906	36,342,862
Business services	14,160	18,462,190	**Health care**	7,986	121,953,135
Capital goods	0	0	**Industrial**	1,026,809	38,182,287
Consumer durables	0	3,933,008	**Media**	0	59,526,782
Consumer nondurables	0	26,517,314	**Technology**	4,592,223	117,996,299
Consumer services	339,108	31,863,180	**Transportation**	4,137	4,042,146
Energy	689,863	5,270,559	**Utilities**	118,091	4,258,060

Sources: Thomson Financial; WSJ Market Data Group

HOMES

Continued from page B1

Mark Walter was a co-investor in this mansion in Malibu, Calif.

PICTOMETRY

Ms. Court went on sabbatical in June and is now negotiating her potential departure, according to people familiar with the matter. Guggenheim declined to comment on her status with the firm. Ms. Court didn't reply to a request for comment.

Guggenheim's board reviewed the relationship between Mr. Walter and Ms. Court, people familiar with the matter said. It was unclear if the board took any action as a result.

The spokesman for Guggenheim and Mr. Walter said that "if there were a relationship, the prospect of a nonbusiness relationship would have been fully and promptly disclosed to the appropriate parties at Guggenheim in accordance with established processes and procedures, which then would have been fully implemented, to avoid improper influence or favor."

Some clients, concerned about Ms. Court's status, the homes and staff departures, have asked for reassurances from Guggenheim's money-management arm. The firm has met with dozens of clients since June to discuss these issues, according to people familiar with the matter.

The firm also is facing a regulatory review from the Securities and Exchange Commission over certain investments and disclosures, The Wall Street Journal reported in September. A firm official said at the time that "we are working very closely with the SEC to bring to a close" the matter.

Jack Chee, a senior research analyst at Litman Gregory Asset Management, said he has asked his contacts at Guggenheim about the house purchases and Ms. Court's current status. One of his main concerns: "A key risk is a deteriorating culture," he wrote to Litman clients in a July research note.

"We definitely called them," said Mr. Chee, whose firm manages $1.6 billion on behalf of wealthy individuals. "Our biggest concern was around the turnover."

In August, Mr. Chee made an on-site visit to Guggenheim, where he spent eight hours with the firm's investment team. He said he came away still confident in the team and hasn't pulled any money from Guggenheim.

A pension-fund manager who invests with Guggenheim said he was awaiting clarity from the firm. Last week, consultant RVK Inc. had its own visit with the money manager, people familiar with the matter said.

"Clients choose us because of our strong investment process, which leads to industry-leading performance, and our high level of customer service and communication," said Scott Minerd, Guggenheim's investment chief, in a statement. "We are extremely grateful for the ongoing loyalty of our clients, and we will continue to do everything in our power that is necessary to deserve that loyalty."

None of the clients or consultants with whom The Wall Street Journal spoke have moved to pull money from the firm based on their concerns.

News of the two property deals first swept through Guggenheim in June after a luxury real-estate website, Yolanda's Little Black Book, disclosed that related companies had purchased the two homes. Morale already was low at the investment-management division coming into this year, people familiar with the matter said. Some investment-management employees received smaller annual bonuses earlier this year, those people said.

Also hitting morale was a January letter to staff from Mr. Walter and Andy Rosenfield, a Guggenheim managing partner. The letter warned portfolio managers and other senior staff at the money-management division to follow new rules issued by Ms. Court in 2016 that restricted how they could interact with clients. Messrs. Walter and Rosenfield wrote that violations would affect annual bonuses. "We regard this behavior as insubordinate," they wrote.

A Guggenheim spokesman said the firm benchmarks its pay policies annually to ensure they are competitive, and its total head count is higher now than it was at the start of 2017.

ABS, the purchaser of the homes, is owned by Juan Ball and Pablo Stalman. The pair had built a private client business within Guggenheim Partners before buying it from the firm in transactions between 2009 and 2016. Mr. Walter was on the board of the main advisory business, Guggenheim Partners Latin America, until 2013, according to a company filing in Florida.

IPO Scorecard

Performance of IPOs, most-recent listed first

Company SYMBOL IPO date/Offer price	Friday's close ($)	% Chg From Offer price	% Chg From 1st-day close	Company SYMBOL IPO date/Offer price	Friday's close ($)	% Chg From Offer price	% Chg From 1st-day close
Switch **SWCH** Oct. 6/$17.00	20.84	**22.6**	...	NuCana **NCNA** Sept. 28/$15.00	17.00	**13.3**	5.3
Rhythm Pharmaceuticals **RYTM** Oct. 5/$17.00	25.25	**48.5**	–15.8	Roku **ROKU** Sept. 28/$14.00	23.20	**65.7**	–1.3
PQ Grp Hldgs **PQG** Sept. 29/$17.50	17.30	**–1.1**	0.3	RYB Edu **RYB** Sept. 27/$18.50	27.94	**51.0**	7.9
Deciphera Pharmaceutical **DCPH** Sept. 28/$17.00	22.91	**34.8**	29.8	Secoo **SECO** Sept. 22/$13.00	8.91	**–31.5**	–10.9
Nightstar Thera **NITE** Sept. 28/$14.00	16.75	**19.6**	–30.2	Oasis Midstream LP **OMP** Sept. 21/$17.00	17.24	**1.4**	2.9

Sources: WSJ Market Data Group; FactSet Research Systems

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Crude Prices Fall on Worries Hurricane Will Curb Refineries

By Alison Sider
And Christopher Alessi

COMMODITIES

Oil prices posted their first weekly losses in a month as investors held out for signs that global crude supplies are tightening, and many anticipated that Tropical Storm Nate would curb refiners' demand for crude.

On Friday, U.S. crude futures dropped $1.50, or 2.95%, to $49.29 a barrel on the New York Mercantile Exchange. Brent, the global benchmark, fell $1.38, or 2.42%, to $55.62 a barrel on ICE Futures Europe.

The U.S. benchmark ended the week down 4.61%, snapping a four-week streak of gains and posting its largest weekly decline since early May. Brent ended the week down 2.06% and snapped a five-week streak of gains.

About 92.61% of oil production located in the Gulf of Mexico had been shut in.

Hurricane Nate weakened to a tropical depression Sunday as it brought heavy rains to the U.S. Gulf Coast. The storm made its first U.S. landfall Saturday evening in Louisiana near the mouth of the Mississippi River, with no deaths or injuries immediately reported.

The Bureau of Safety and Environmental Enforcement said Sunday that about 92.61% of oil production in the Gulf of Mexico had been shut in. Production can be restarted once operators inspect their facilities for damage. BSEE said no damage to offshore oil facilities had been reported as of Sunday afternoon.

But market participants focused more on the storm's potential impact on refiners. As with Hurricane Harvey in August, the "tendency is for the focus to be more on refinery shutdowns, which is probably more positive for product prices and probably a little bearish for crude prices," said Richard Mallinson, an analyst at consultancy Energy Aspects.

Refiners said they were monitoring the storm, but some analysts said Nate wasn't likely to have as dramatic an impact as Harvey, which took as much as one-quarter of U.S. refining capacity offline. Phillips 66 shut its refinery in Belle Chasse, La., ahead of Nate. A spokesman said Sunday that the refinery didn't sustain damage and said the refinery would be up and running in days.

The storm's approach came at a moment when oil markets already have been vulnerable to a selloff, said John Saucer, vice president of research and analysis at Mobius Risk Group. U.S. crude futures hit a five-month high last week but haven't made significant gains since.

"We had a big rally and didn't follow through—the market may be more receptive to negative news," Mr. Saucer said.

The move reversed gains Thursday after Saudi Arabia's King Salman and Russian President Vladimir Putin met in Moscow and discussed extending Russia's participation in a pact with the Organization of the Petroleum Exporting Countries to curtail output.

"You had a lot of emotion on the headlines Thursday," said Donald Morton, senior vice president at Herbert J. Sims & Co., who oversees an energy trading desk. "When you took the apron off and looked into the real numbers, it was all headlines and there was nothing really supportive today—they gave it all back."

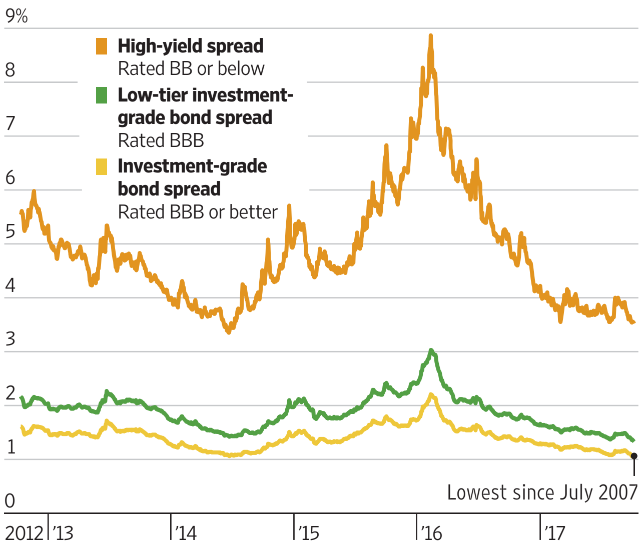
The original deal, struck nearly a year ago between OPEC and 10 other non-OPEC countries, was to cut production by 1.8 million barrels a day for six months. The agreement was extended in May of this year to continue through the first quarter of 2018.

Gasoline futures fell 5.26 cents, or 3.26%, to $1.5588 a gallon on Friday. Diesel futures fell 4.24 cents, or 2.37%, to $1.7439 a gallon.

Corporate Spreads Narrow

High and Tight

Corporate bond prices are rising as the yield demanded by investors to own them sinks to multiyear lows



Source: Bank of America Merrill Lynch via Federal Reserve Bank of St. Louis

THE WALL STREET JOURNAL.

By Chris Dieterich

CREDIT MARKETS

Investors continue to shovel money into corporate bonds, squeezing the yield earned over Treasury bonds to fresh multiyear lows.

The voracious buying of corporate bond funds has coincided with the latest risk-on rally for U.S. stocks, as investors judge the U.S. economy to be sturdy and corporate health to be sound.

Some $5.4 billion rolled into U.S. investment-grade corporate-bond mutual and exchange-traded funds in the week ended Oct. 4, the second-biggest weekly draw of the year, according to Bank of America Merrill Lynch and fund tracker EPFR Global. A week earlier, $3.2 billion moved into investment-grade corporate bonds.

Investors are pouring money into riskier junk bonds as well.

Some $1.3 billion moved into junk-bond funds last week. This group has taken money for three straight weeks.

Heavy buying continues to pressure the yield earned by investors owning corporate bonds instead of safer Treasurys.

The "spread" between investment-grade corporate bond yields and those on government debt dropped to 1.04 percentage points Thursday, the lowest since July 2007, measured by the BofA Merrill Lynch US Corporate Master Index.

The spread between speculative-grade bonds and government debt declined to 3.52 percentage points on Thursday, the lowest since July 2014.

Hong Kong Pact on Listing Policy

By Gregor Stuart Hunter

EQUITIES

Hong Kong's financial regulator and the city's stock market will jointly establish an advisory panel on listings policy, where the exchange currently takes the lead.

The panel will handle discussions on listing matters "with broader regulatory or market implications," the Securities and Futures Commission of Hong Kong said. The agreement between the regulator and exchange operator **Hong Kong Exchanges & Clearing** Ltd. followed a five-month consultation with market participants last year.

VINCENT YU/ASSOCIATED PRESS

A trader in Hong Kong. Companies have raised $8.8 billion via new listings in the city this year.

"The role of the SFC as a statutory regulator has evolved to have a more direct presence in more serious areas of listing regulation," the SFC said.

The vetting of new listings will continue to be in the hands of the exchange's listing committee, HKEX Chairman C.K. Chow said.

"Under the enhanced structure, the exchange will remain listed issuers' primary frontline regulator, and its listing committee will continue to make decisions under the listing rules," he said.

Companies have raised $8.8 billion through new listings in Hong Kong this year, putting the city in fourth place globally, according to data from Dealogic. Hong Kong led the world in both 2015 and 2016.

Critics such as local shareholder-rights activist David Webb says allowing the for-profit exchange operator to decide which companies may list puts its interests above investors'. In other developed markets, the vetting body sits under market regulators. In the U.S., companies must register initial public offerings with the Securities and Exchange Commission.

The exchange is weighing proposals to create a board on which companies that limit some shareholders' voting rights could list. Hong Kong's unwillingness to admit such companies cost it the IPO of e-commerce giant **Alibaba Group Holding** Ltd., which listed in New York in 2014.

Hong Kong's market has suffered several dramatic share plunges this year, often with no apparent cause. One in June involved the small-cap stocks of a number of companies that appeared linked by a network of cross-shareholdings.

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	.0573	17.4390	**9.9**
Brazil real	.3169	3.1555	**–3.1**
Canada dollar	.7979	1.2533	**–6.8**
Chile peso	.001579	633.20	**–5.5**
Colombia peso	.0003404	2937.83	**–2.1**
Ecuador US dollar	1	1	**unch**
Mexico peso	.0540	18.5325	**–10.6**
Peru new sol	.3060	3.268	**–2.5**
Uruguay peso	.03427	29.1800	**–0.6**
Venezuela b. fuerte	.100050	9.9951	**unch**
Asia-Pacific			
Australian dollar	.7768	1.2873	**–7.3**
China yuan	.1503	6.6534	**–4.2**
Hong Kong dollar	.1281	7.8060	**0.7**
India rupee	.01528	65.441	**–3.7**
Indonesia rupiah	.0000741	13504	**–0.2**
Japan yen	.008878	112.64	**–3.7**
Kazakhstan tenge	.002912	343.44	**2.9**
Macau pataca	.1240	8.0624	**1.8**
Malaysia ringgit	.2360	4.2375	**–5.5**
New Zealand dollar	.7088	1.4108	**–2.3**
Pakistan rupee	.00950	105.255	**0.8**
Philippines peso	.0195	51.224	**3.3**
Singapore dollar	.7328	1.3646	**–5.7**
South Korea won	.0008731	1145.33	**–5.2**
Sri Lanka rupee	.0065236	153.29	**3.3**
Taiwan dollar	.03292	30.374	**–6.4**
Thailand baht	.02992	33.420	**–6.7**
Vietnam dong	.00004400	22725	**–0.2**
Europe			
Czech Rep. koruna	.04532	22.067	**–14.1**
Denmark krone	.1576	6.3434	**–10.3**
Euro area euro	1.1732	.8524	**–10.3**
Hungary forint	.003759	266.01	**–9.6**
Iceland krona	.009480	105.49	**–6.6**
Norway krone	.1251	7.9919	**–7.5**
Poland zloty	.2721	3.6745	**–12.2**
Russia ruble	.01719	58.158	**–5.1**
Sweden krona	.1232	8.1177	**–10.9**
Switzerland franc	1.0260	.9747	**–4.3**
Turkey lira	.2766	3.6149	**2.6**
Ukraine hryvnia	.0374	26.7600	**–1.2**
UK pound	1.3069	.7652	**–5.5**
Middle East/Africa			
Bahrain dinar	2.6518	.3771	**–0.02**
Egypt pound	.0566	17.6780	**–2.5**
Israel shekel	.2841	3.5200	**–8.5**
Kuwait dinar	3.3084	.3023	**–1.1**
Oman sul rial	2.5976	.3850	**unch**
Qatar rial	.2688	3.720	**2.2**
Saudi Arabia riyal	.2666	3.7506	**...**
South Africa rand	.0729	13.7209	**0.2**

	Close	Net Chg	% Chg	YTD % Chg
WSJ Dollar Index	86.95	–0.004	–0.004	**–6.44**

Sources: Tullett Prebon, WSJ Market Data Group

2.8%

The estimate for S&P 500 earnings growth during the July-to-September period, according to FactSet, down from 5% a month ago

Profits Are Storm-Tossed

The coming earnings season is quickly looking weaker than many had expected just weeks ago.

S&P 500 companies are expected to report profits grew by 2.8% during the third quarter, down from 5% a month ago, according to FactSet. Companies in the benchmark are now estimated to have earned $287 billion for the July-through-September period, down by $6.3 billion over the past month.

While analysts typically lower their forecasts as earnings season approaches, much of the drop is due to the expected

MONEYBEAT

impact of hurricanes Irma and Harvey on insurance companies.

Analysts have lowered their profit estimates for insurers and reinsurers by $4.8 billion over the past month. That is easily the biggest drop of any group of companies in the index.

Airlines accounted for the next biggest drag on the index's expected earnings growth with a $534 million drop, according to FactSet.

In Florida, where Hurricane Irma hit last month, much of the property is insured by small-time insurers that are required to buy reinsurance.

Everest Re Group Ltd. and **XL Group** Ltd., two reinsurers, were the biggest contributors to the group's drag on S&P 500 earnings. **Chubb** Ltd., **American International Group**, and **Allstate** Corp. also had big revisions

—Ben Eisen

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ROBYN BECK/AGENCE FRANCE-PRESSE/GETTY IMAGES

Delta Air Lines is scheduled to post quarterly results on Wednesday. Analysts expect the carrier to log profit of $1.54 a share.

THE TICKER | Market events coming this week

Monday

Columbus Day
Bond market closed; stocks remain open

Tuesday

Short-selling reports
Ratio, days of trading volume of current position, at Sept. 15

NYSE	5
Nasdaq	4.5

Wednesday

Mort. bankers indexes

Purch., prev.	up 1%
Refinan., prev.	down 2%

EIA status report
Previous change in stocks in millions of barrels

Crude oil	down 6
Gasoline	up 1.6
Distillates	down 2.6

Earnings expected*

	Estimate/Year Ago($)
Bank of the Ozarks	**0.74**/0.66
BlackRock	**5.54**/5.14
Delta Air Lines	**1.54**/1.70
Fastenal	**0.50**/0.44

Thursday

Initial jobless claims

Previous	260,000
Expected	258,000

EIA report: natural gas
Previous change in stocks in billions of cubic feet

up 42

Producer price index

All items, Aug.	up 0.2%
Sept., expected	up 0.4%
Core, Aug.	up 0.1%
Sept., expected	up 0.2%

Earnings expected*

	Estimate/Year Ago($)
Citigroup	**1.31**/1.24
Domino's Pizza	**1.22**/0.96
J.P. Morgan	**1.66**/1.58

Friday

Business inventories

July, previous	up 0.2%
Aug., expected	up 0.6%

Consumer price index

All items, Aug.	up 0.4%
Sept., expected	up 0.6%
Core, Aug.	up 0.2%
Sept., expected	up 0.2%

U.Mich. consumer index

Sept., final	95.1
Oct., prelim.	95.3

Retail sales

Aug., previous	down 0.2%
Sept., expected	up 1.7%

Retail sales, ex. autos

Aug., previous	up 0.2%
Sept., expected	up 0.9%

Earnings expected*

	Estimate/Year Ago($)
BofA	**0.46**/0.41
First Republic Bank	**1.16**/1.00
J.B. Hunt	**0.97**/0.97
PNC Financial	**2.13**/1.84
Wells Fargo	**1.03**/1.03

* FACTSET ESTIMATES EARNINGS-PER-SHARE ESTIMATES DON'T INCLUDE EXTRAORDINARY ITEMS (LOSSES IN PARENTHESES) ◆ ADJUSTED FOR STOCK SPLITNOTE: FORECASTS ARE FROM DOW JONES WEEKLY SURVEY OF ECONOMISTS

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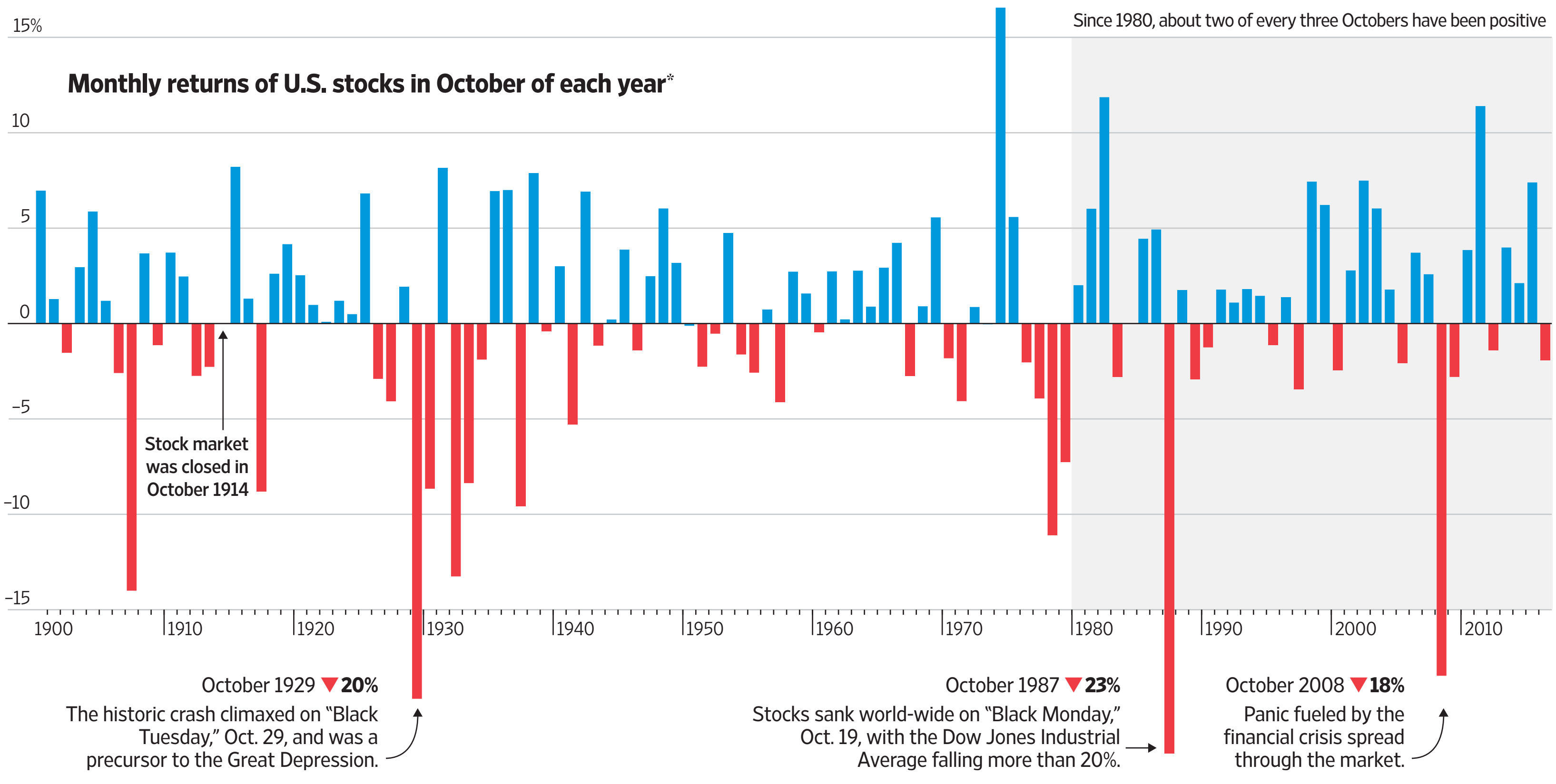
MARKETS

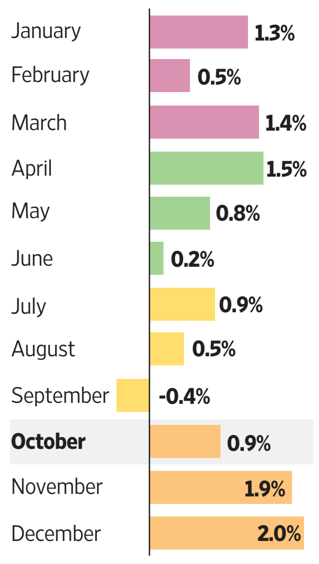
October Not as Bleak as Its Reputation

Some of the stock market's most memorable downturns have occurred in October, including historic crashes in 1929, 1987 and 2008. But in most other years, the month has been surprisingly calm.

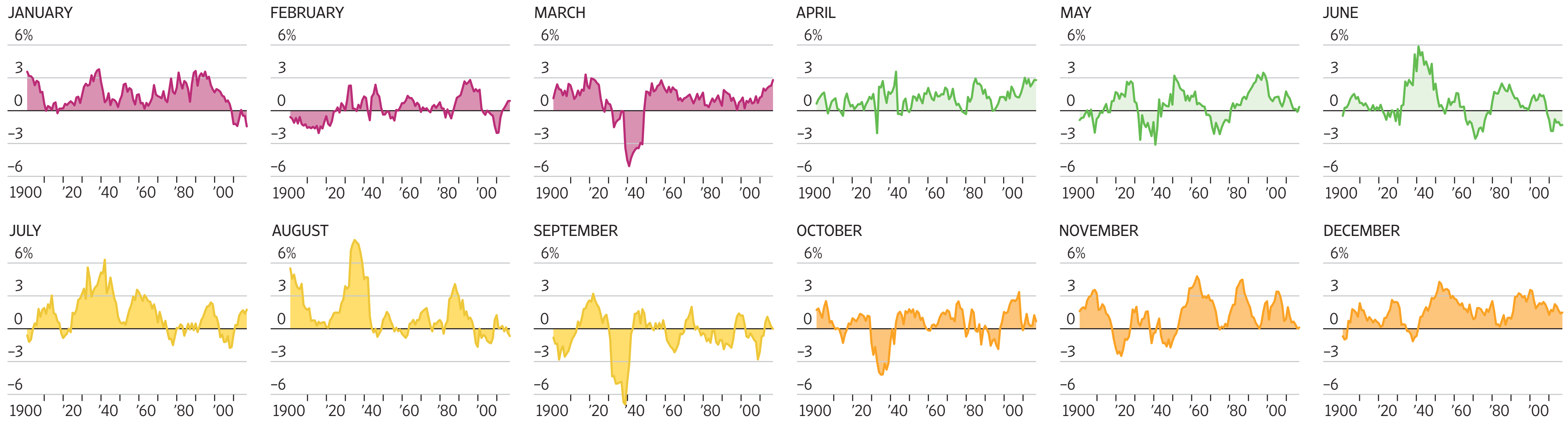


Average returns by month, 1946-2016

Since 1946, October's average return ranks sixth out of 12 months. November and December occupy the top two spots.



Returns by month, 10-year rolling averages†



*Average of monthly returns, including dividends, on broadest available index of U.S. stocks. †Averages are adjusted to account for market closure in 1914.
Source: Prof. G. William Schwert, University of Rochester

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HEARD ON THE STREET

Email: heard@wsj.com FINANCIAL ANALYSIS & COMMENTARY **WSJ.com/Heard**

Truth Is Catching Up With Tesla

New revelations about **Tesla** Inc.'s production of the highly anticipated Model 3 sedan should shock, but not surprise, investors.

The Wall Street Journal reported Friday that Tesla has recently been building major portions of the Model 3 by hand. This comes less than a week after Tesla announced it fell short of its third-quarter production guidance of 1,500 cars by more than 80%.

At the time, Tesla attributed the shortfall to "production bottlenecks." On Friday, Tesla said it would postpone its launch event for a new truck to November to deal with Model 3 issues and to help provide assistance to Puerto Rico.

Tesla Chief Executive Elon Musk is known as a risk-taker, which has endeared him to Wall Street analysts and investors alike. There is a fine line, however, between setting aggressive goals and misleading shareholders.

Tesla is inching closer to that line. Tesla was making three Model 3s on an average day in the third quarter. Mr. Musk should have known in August, when production guidance was reiterated, that the company wasn't going to produce 1,500 Model 3s by the end of September.

Joyride

Tesla's market value

Source: FactSet

THE WALL STREET JOURNAL.

There are other examples. At the Model 3 launch event in July, he told reporters that Tesla had received more than 500,000 customer deposits for the car. Five days later, after a series of questions from The Wall Street Journal, Mr. Musk revised that to 455,000 on a conference call with investors. The earlier figure he quoted had been "just a guess."

Investors approved Tesla's decision to pay about $8 billion in stock and assumed debt to acquire Mr. Musk's struggling SolarCity last fall, after Mr. Musk demonstrated roofs that could generate solar power for homes and promised production would begin in the spring. A year later, those roofs are conspicuously absent, beyond some installations for Tesla executives.

Last, but certainly not least, Mr. Musk told investors in May 2016 that he expected Tesla to produce between 100,000 and 200,000 Model 3s in the second half of 2017.

Investors have bid Tesla to a nearly $60 billion equity valuation on expectations the company will dominate the automobile market. That will be a fantasy if Tesla can't produce enough cars profitably. Tesla doesn't have the financial wherewithal for investors to be patient. It burned more than $1 billion of cash in the second quarter and has nearly $20 billion in liabilities on its balance sheet.

At 67 times 2019's expected earnings, Tesla stock is valued as though the company can execute on its vision flawlessly. The facts suggest the opposite.

It is high time for Tesla—and Wall Street—to acknowledge reality. *—Charley Grant*

OVERHEARD

Every red-blooded American politician says he or she wants more jobs, but some of them go further than others.

The city council of Stonecrest, Ga, said it is willing to change its name to **Amazon** if it is chosen as the site of the online retailer's second headquarters.

It wouldn't be the first time such as offer was made.

A town in Texas actually renamed itself **DISH** in 2005 in order to get its citizens free satellite TV service from the provider.

Some are probably glad they didn't make a permanent change.

Topeka, Kan., once unofficially changed its name to Google for a brief time in order to grab a fiber optic investment from the company. Imagine if it had actually made a permanent and official change.

A few years later, Topeka's burghers would have been debating whether or not they should call themselves Alphabet City.

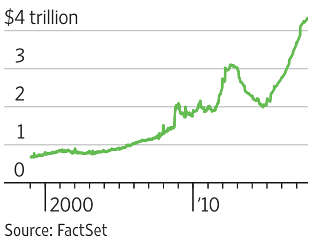
ECB May Choose Slow Goodbye to Extraordinary Stimulus

The European Central Bank's October date with destiny—a vital event for markets this year—is looming. Investors are wondering by how much the central bank's monthly bond purchases, currently running at €60 billion ($70.4 billion), will be scaled back. But how long purchases run matters as much as how big they are.

The challenge the ECB faces is complex. While eurozone growth has picked up to well above trend levels, helping to narrow the output gap, inflation is adrift of its target of "below, but close to" 2%; the ECB forecasts the rate at 1.5% in 2019. But its bond-purchase program faces constraints due to the limits the ECB has set on how much government debt it can own from each eurozone country.

Bank Balance

Size of European Central Bank balance sheet



Source: FactSet

A recent speech by ECB executive board member Peter Praet points to another possible path: smaller purchases over a longer period. In particular, Mr. Praet noted that market conditions matter. In times of higher stress, a bigger monthly number carries more power in terms of easing conditions. But if markets are less tense, as they are now, investors can focus more on the persistence of the policy. The account of the ECB's latest meeting also suggests that policy makers are eager to retain flexibility. This might be one way of achieving that aim.

The ECB, after all, surprised markets when it changed the settings of its bond-purchase program at the end of 2016. Many had expected the ECB to extend purchases at the then-prevailing pace of €80 billion a month, perhaps for six months. Instead, the ECB opted for nine months at €60 billion a month. The extension helped smooth the sticker shock of the reduction in pace, while also buying more time for the ECB.

Equally, markets need to think about the policy settings that aren't changing for now. The ECB has stuck to its guns on its guidance that rates won't be raised until after bond purchases stop, despite criticism from some of its negative deposit rate of minus-0.4%. A longer extension to the purchase program would underpin that guidance and the ECB's commitment to persistence and prudence on policy. Meanwhile, the ECB's continued presence in markets might further support eurozone equities and southern European government bonds.

Analysts at **J.P. Morgan** now expect the ECB to slow purchases to €20 billion a month but extend them over nine months to September 2018. Even after active purchases stop, there will be reinvestments, too. It might yet be a long, slow goodbye to quantitative easing in the eurozone. *—Richard Barley*

Big Tech Tunes In To Speakers

The world's largest tech companies are pumping up the volume on home speakers. They have good reason.

Amazon.com, which established the smart-speaker market, redesigned and cut the price of its main Echo speaker and added new devices to the family of products using its Alexa personal digital assistant software. Premium home-audio player **Sonos** also is adding an Alexa-powered speaker.

Alphabet Inc.'s Google added more speakers to its Home lineup last week. This includes a $400 monster that will compete with **Apple** Inc.'s first speaker, which is due out in December. **Microsoft** has enlisted **Harman Kardon** to make a speaker for its Cortana software, also arriving this fall. Even **Facebook** is rumored to be working on a device.

So far it is a two-horse race, with Amazon accounting for about three-quarters of smart-speaker sales and Google the rest, according to Consumer Intelligence Research Partners.

But it is also a young market. According to NPD, sales of voice-activated speakers tripled in the past year but are now in just 10% of U.S. homes connected to the internet.

A survey of consumers by Cowen & Co. in August found that 84% of Amazon Echo owners used the device at least once a day, with 78% of Google Homeowners reporting the same. While music is still the most common reason, a growing number are using their devices to make purchases, seek information and control home automation products.

That is music to Big Tech's ears.

—Dan Gallagher

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INVESTING IN FUNDS & ETFS

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DETAILS, R2

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Why Bitcoin's Bubble Matters

If there's a price crash in the cryptocurrency, it could hit the tech sector—and more

DANIEL DOWNEY

BY ROB CURRAN

ASK MOST PEOPLE about the bitcoin bubble, and they'll probably have the same reaction: It's interesting, but it won't affect *me*. After all, they'll figure, *they* aren't investing in bitcoin, so if there is a bubble, and it does burst, they'll be just fine.

Well, maybe they should start worrying.

The market for cryptocurrencies—digital tokens used to transfer money between individuals' computers with minimal fees—has grown in stature in recent years and is increasingly entwined with broader financial markets as well, a trend that is likely to continue. Bitcoin is now traded by some of the institutional investors around which bond and stock markets revolve. The Wall Street Journal has reported that **Goldman Sachs Group** Inc. is considering opening bitcoin-trading operations. Cryptocurrencies also are being used to raise capital by more companies.

As the bubble grows, analysts say, a crash has a greater chance of affecting investor sentiment about stocks, especially in the technology and financial sectors.

"Any product that blows up, there's always collateral damage," says Joe Kinahan, chief market strategist at brokerage TD Ameritrade. Tech and financial "companies who are relying on it for business, and those who have put a significant investment into the [blockchain] infrastructure would be the first" to suffer collateral damage, Mr. Kinahan says.

What has some market observers concerned is that in less than six months, bitcoin went from around $1,000 a token to $5,000. It is back now to $4,400. But in early 2016, bitcoin was trading at less than $400, bringing its 18-month gain to 1,000%. Consider that the math-based currency has yet to find a widespread use outside of speculation, and warnings of an implosion from **J.P. Morgan Chase** Chief Executive James Dimon and others in the financial establishment sound like more than curmudgeonry.

At around $150 billion, the market capitalization of bitcoin and other cryptocurrencies is up by a factor of roughly eight this year, according to the Cointelegraph website. If this growth rate continues, what's now a relatively small part of global investible assets could become a significant one, says Lorenzo Di Mattia, manager of hedge fund Sibilla Global Fund and a student of the history of speculation. By next year, Mr. Di Mattia expects the bubble to have inflated to the point where a pop could send a shock wave through the stock market.

Another analyst says bitcoin is at a similar stage in its development as the internet was in 1994, early in the speculative bubble. "What

Please turn to page R4

INSIDE

SCOREBOARD

Third-quarter 2017 fund performance, total return by fund type. More on R2.

U.S. stocks*	Intl. stocks*	Bonds (intmd.)
4.2%	5.9%	0.8%

*Diversified funds only, excluding sector and regional/country funds

Source: Lipper

LEGACY OF THE 1987 CRASH: THE ETF

BY JOHN A. PRESTBO

IT WAS ONE of those beautiful autumn days in New York, where a bright, warm sun melted away the morning chill well before lunchtime. The stock market, however, was melting down.

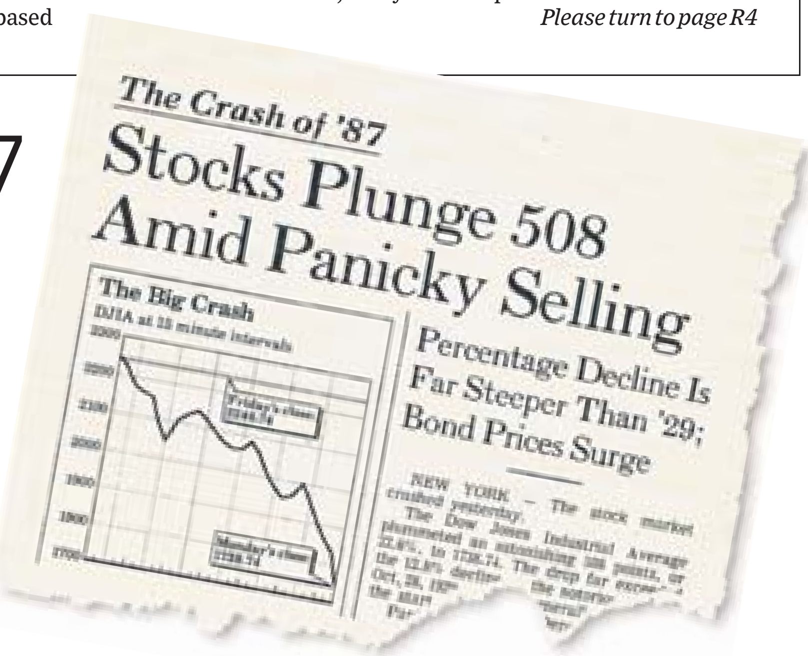
30 YEARS LATER:
One lesson of 1987's Black Monday is that crashes are inevitable, **R2**

Thirty years ago this month, on Monday, Oct. 19, 1987, the Dow Jones Industrial Average plunged 508 points—the equivalent of a 5,100-point drop today. As The Wall Street Journal, where I was the markets editor, would report the next day under a then-rare two-column Page One headline, it was a stunningly unprecedented nose dive of 22.6%—cementing "Black Monday" as the worst day in stock-market history.

Gut-clenching panic spread as rapidly as was possible in those pre-internet times. Each punch on the keys of our Quotron machines—the clunky stock-quote devices that were considered high-tech at the time—produced a lower Dow number than seconds before.

There had been signs that the market might be due for a correction, but nothing like the debacle that unfolded that day. Indeed, there appeared to be an immediate consensus among investors that it had been overdone. The Dow rebounded 6% the next day, and jumped 10% the day after that. It took nearly two years, though, for the index to regain its precrash levels.

Still, in many ways the biggest impact of that day wasn't on investors who were in the market then or the records broken. Eventually, when the dust from what happened settled, a new kind of security would emerge, and it would radically transform how investors trade equities.


The Crash of '87
Stocks Plunge 508 Amid Panicky Selling
The Big Crash
DJIA at 15 minute intervals
Percentage Decline Is Far Steeper Than '29; Bond Prices Surge
NEW YORK — The stock market crashed yesterday.

The Wall Street Journal's lead headline, Oct. 20, 1987

Blame the computers

But first, back to that day 30 years ago. The speed and severity of the one-day bear market demanded answers. An investigatory commission concluded that institutional investors were the culprits. Their computers executed a rapid-fire choreography of trades involving stock-index futures and stocks themselves in an effort to protect the values of their portfolios.

The strategy backfired, probably because too many institutions were doing the same thing at more or less the same time. They pushed stock prices into free fall and individual investors under the bus. Brokerage houses struggled to cope with all the calls from anxious investors, and some of them took their phones off the hook.

This was perhaps the first time that people beyond Wall Street noticed the effects of computerized trading. It was by no means the last, as the 36-minute "flash crash" in May 2010 demonstrated. To cope with the dizzying speed of trading done by machines, institutional traders have placed computer banks close to exchanges so as to benefit from millisecond advantages in receiving stock-price data.

But the 1987 crash also brought another important realization—one that has dramatically changed investing for individuals as well as institutions.

It was during the postmortem for that day that the Securities and Exchange Commission noticed an imbalance that, if corrected, may have helped alleviate the trauma of Oct. 19: The stock market didn't have a single security representing the broad market, like the futures mar-

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30 YEARS LATER

Crashes Are Inevitable—but That Doesn't Mean Now

The odds are small of a 1987-type crash right now, but nothing will be able to prevent another one, someday

BY MARK HULBERT

MARIA BASTONE/GETTY IMAGES

Yes, it could happen again (but this time, traders will have smartphones). The scene at the NYSE during 1987's crash.

In Perspective

What a **22.6% decline** means in Dow points, then and now

Oct. 19, 1987, crash

▼ **508** points

Same percentage decline if it had happened on Oct. 6, 2017

▼ **5,100** points

THE WALL STREET JOURNAL.

BE ON YOUR GUARD in coming days against those drawing the wrong investment lessons from the 1987 stock-market crash—the 30th anniversary of which we "celebrate" on Oct. 19.

Many will no doubt overstate the likelihood of another crash, citing the longevity of the current bull market and equities' overvaluation. Others will exaggerate in the opposite direction, arguing that market and regulatory reforms over the past 30 years will prevent another crash from happening.

Both extremes are wrong. While the likelihood of another stock-market crash is small, by no means is it negligible.

That's a sobering thought, given that the Dow Jones Industrial Average fell 22.6% on what came to be known as 1987's Black Monday. An equivalent drop today would be a single-session decline of more than 5,100 points. It was the worst one-day crash by far in U.S. stock-market history; the next-worst was Oct. 28, 1929, when the Dow fell "just" 12.8% (followed by nearly as bad a drop the next day).

It's easy to understand why some would use the anniversary of 1987's crash to warn of another one. If we assume that the current bull market began in March 2009, it is the second-longest in U.S. history. By many valuation measures, the current market is more overvalued than at almost any other time in U.S. history.

It is little wonder, then, that according to a survey conducted by Yale's School of Management, investors currently believe there is a 20.8% probability of a 1929- or 1987-magnitude crash in the next six months.

The good news...

"The actual probability is surely much lower than this," according to William Goetzmann, a Yale finance professor and director of its International Center for Finance. Researchers have been unable to find that either bull-market length or high valuations are significantly correlated with the probability of a crash. After all, the 1987 crash occurred when that decade's bull market was just five years old, and when the S&P 500's price/earnings ratio was only moderately higher than the historical average.

To be sure, three researchers at Harvard have found that a sharp price run up—independent of valuations or the length of a bull market—does increase the odds of a subsequent crash. But the stock market's rise in recent years, impressive though it has been, isn't nearly large enough to satisfy the preconditions laid out in the researchers' study.

The researchers—Robin Greenwood, a finance and banking professor and chair of Harvard's Behavioral Finance and Financial Stability project; Andrei Shleifer, an economics professor; and Yang You, a Ph.D. candidate—found that, following a 100% increase over the trailing two years, there was a 53% chance of what they defined to be a crash: a 40% decline over the subsequent two years. The S&P 500 over the past two years has risen "just" 30.2%.

The sobering news...

Just because there doesn't appear to be a significantly elevated risk of an imminent crash, however, doesn't mean another 1987-magnitude plunge will never occur. On the contrary, according to Xavier Gabaix, a professor of economics and finance at Harvard, one certainly will—someday. According to a complex model he has devised, the stock market will suffer a 22.6% one-day decline every 150 years, on average. A one-day decline as deep as 1929's—12.8%—should occur every 27 years, on average.

Note carefully that this doesn't mean we will not have another 1987-magnitude crash until 150 years have passed since 1987 (until 2137, in other words). That's because Prof. Gabaix's model predicts the average frequency of crashes over centuries. It could be, for example, that no 22.6% decline occurs in a given 150-year period—or that several do so.

And scary 'tail risk'

Crashes are inevitable, Prof. Gabaix says, because they occur whenever many large institutional investors decide to get out of stocks more or less in unison. We are kidding ourselves that crashes can be prevented by regulatory reforms instituted since 1987, such as circuit breakers, trading halts and the like. That's because, he says, institutional investors inevitably can find ways of getting out of stocks when they want to—by selling on markets outside the U.S., for example.

Asked about the investment lesson that investors should be drawing on this 30th anniversary of the 1987 crash, Prof. Gabaix says: "Keeping in mind the high probability of a crash at some point in our lifetimes seems as important as ever. This is particularly true as the market currently seems to be underpricing tail risk"—a particularly terrible outcome—"given the very real tail risks, geopolitical and economic, that loom over the market and the world."

Mr. Hulbert is the founder of the Hulbert Financial Digest and a senior columnist for MarketWatch. He can be reached at ***reports@wsj.com.***

Legacy of the Crash: ETFs

Continued from the prior page

ket did in futures contracts on the S&P 500 index.

The SEC let it be known that it was interested in such an instrument, should anyone try to devise one. Wall Street's financial engineers eagerly went to work. Who wouldn't want to invent a new kind of security blessed by the SEC? Alas, their wastebaskets filled fast.

Futures were relatively simple because all they needed to work was an index number for investors to bet on. A stock-market version, on the other hand, had to contend with many complexities—particularly if it was traded in real time while the individual stocks it represented were being traded simultaneously.

Iteration upon iteration was trotted past the regulators, failing one test or another. Keeping the price of the stock basket in line with the summed prices of component equities was troublesome. Also, some legal hurdles established by Depression-era securities laws had to be cleared.

Finally, a structure began to emerge that seemed to resolve many of the issues. While it, too, was subject to countless back-and-forth negotiations with the SEC, it had strong champions: the American Stock Exchange, State Street Global Advisors (then the investment arm of State Street Bank in Boston) and the index unit of Standard & Poor's.

Enter, the spiders

On Jan. 22, 1993, more than five years after Black Monday, Standard & Poor's Depositary Receipts (dubbed "spiders" because of the SPDR abbreviation) were listed on the Amex. They represented the S&P 500 and were managed by State Street Global Advisors. They were shares in the first exchange-traded fund in the U.S.

$3 trillion and counting

ETFs didn't explode into popularity right away. It took more than two years for the next one to be listed—based on the S&P MidCap 400 Index—and almost three more years for the third, based on the Dow, to appear. Then the floodgates opened, and today there are about 2,000 ETFs on U.S. markets with combined assets around $3 trillion, and some 3,500 elsewhere in the world with total assets of about $3.2 trillion.

Initially, all the U.S. ETFs were based on established stock-market indexes as the SEC stuck to its original preferences. Eventually, other asset classes, investing strategies and even actively managed ETFs got the green light from regulators. Some indexes are created for the sole purpose of providing a foundation for ETFs.

ETFs aren't called disruptive innovation for nothing. Their number is growing rapidly, while individual stock listings are declining. ETFs top the most-active lists daily. They attract far larger asset flows than mutual funds (though mutual funds still hold far more total assets). Their sponsors cut fees to compete, putting increasing pressure on traditional money managers.

These changes and more are an impressive legacy for a one-day stock-market crash 30 years ago.

Mr. Prestbo, a former Wall Street Journal and Dow Jones Indexes editor, is an adviser to MarketGrader Capital, which chooses components of the Barron's 400 Index. He can be reached at ***reports@wsj.com.***

IN TRANSLATION

U.S. HOUSEHOLD ECONOMIC STRESS INDEX

The PNC U.S. Household Economic Stress Index is something that smart investors might want to watch. As the name suggests, it is a measure of how stressed U.S. consumers are on an aggregate basis.

"It's a variation on the misery index," says Stuart G. Hoffman, senior economic adviser at PNC Financial Services Group in Pittsburgh.

The so-called misery index, around since the 1970s, is the percentage inflation rate plus the percentage unemployment rate. Any increase in either adds to the average level of household misery. The PNC stress index, or HESI, brings in another factor. From the sum of the percentage unemployment and inflation rates, it subtracts the percentage move in home prices as measured by the Case-Shiller home-price index.

Real estate is often the largest asset of households, so an increase in home prices indicates a rise in wealth, explains Mr. Hoffman. He says the sweet spot is when the stress index is between 0 and 10. The index measured 1.1 in the third quarter, based on estimates of inflation and house prices.

A move above 10 indicates significantly higher inflation, and/or unemployment and possibly falling home prices, all of which would add to stress levels. But if the index moves below zero—which is possible if housing-price increases accelerate from the recent rate of around 6% a year—there could be a different problem.

That could mean the housing market is overheating, he says, something last seen in the bubble before the financial crisis.

—Simon Constable

QUARTERLY MONITOR | WILLIAM POWER

U.S.-Stock Funds Rose 4.2% During the Third Quarter But Cash Flowed Overseas

It's October, and investors don't seem overly worried about ghosts in the stock market.

But just in case, they are increasingly taking a peek overseas, where valuations might be more friendly.

In the third quarter, U.S. stocks and stock funds rose once again, on the back of solid corporate earnings and hope for tax overhaul in Washington. It is far from a frenzy—instead, trading has been slow and relatively calm. The average diversified U.S.-stock fund had a total return of 3% in September to complete a 4.2% advance for the quarter and push the year-to-date gain to 12.3%, according to Thomson Reuters Lipper data.

FOLLOW THE MONEY

Third-quarter 2017 flow of investor cash by fund type, in billions*

U.S. stocks	Intl. stocks	Bonds
▼ –$47.6	▲ $48.3	▲ $95.1

*estimated mutual-fund/ETF flows through 9/27
Source: Investment Company Institute

International-stock funds once again did even better—up 2.2% in the month, 5.9% in the quarter and now boasting a 21.9% advance so far this year. Emerging-markets funds in particular are hot, up 26.5% for the year. (More on that rally, page R11.)

The reason for the global bent: With U.S. stocks at highs, overseas markets are offering more-attractive prices, many fund managers and strategists say.

"When we look at the economic cycle in the U.S., it looks good. It looks remarkably similar to the previous eight years," says Stephen P. Wood, chief market strategist for Russell Investments in New York. However, "our continuing concern is [stock] valuations in the U.S."

"For many U.S.-dollar-based investors, after an 8½-year run, this typically may be a good opportunity to rebalance and do some rigorous global work," he says.

And that is exactly what many fund investors have been doing, judging by fund-flow numbers.

Investors in the third quarter pulled a net $47.65 billion from long-term mutual funds and exchange-traded funds focused on U.S. stocks, while adding $48.25 billion to international-stock funds and $95.14 billion to bond funds, according to Investment Company Institute estimates.

Bond-fund performance was positive in the quarter, even after some weakness in September as investors anticipate another interest-rate increase by the Federal Reserve. Funds focused on intermediate-maturity, investment-grade debt, were off 0.4% in September but up 0.8% in the quarter. They remain up 3.2% for the year to date.

Not bad. Still, "our view would be similar for fixed-income investors," says Mr. Wood. "A global approach, we think, is called for."

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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◆ "Four Exercises to Help Spouses Talk About Money," by Ted Jenkin, co-CEO and founder of oXYGen Financial and blogger at yoursmartmoneymoves.com.

◆ "Why Adjustable-Rate Mortgages Aren't as Risky as You Think," by Benjamin Harris, a visiting associate professor at the Kellogg School of Management at Northwestern University and previously the chief economist to former Vice President Joe Biden.

And on page R13 of this report, you can read excerpts of some earlier online discussions. The Experts offer views on the ethics of socially responsible investing, leaving a 401(k) with a former employer and the downside of alternative investments.

The Journal Report welcomes your comments—by mail, fax or email. Letters should be addressed to Lawrence Rout, The Wall Street Journal, 4300 Route 1 North, South Brunswick, N.J. 08852. The fax number is 609-520-7256, and the email address is reports@wsj.com.

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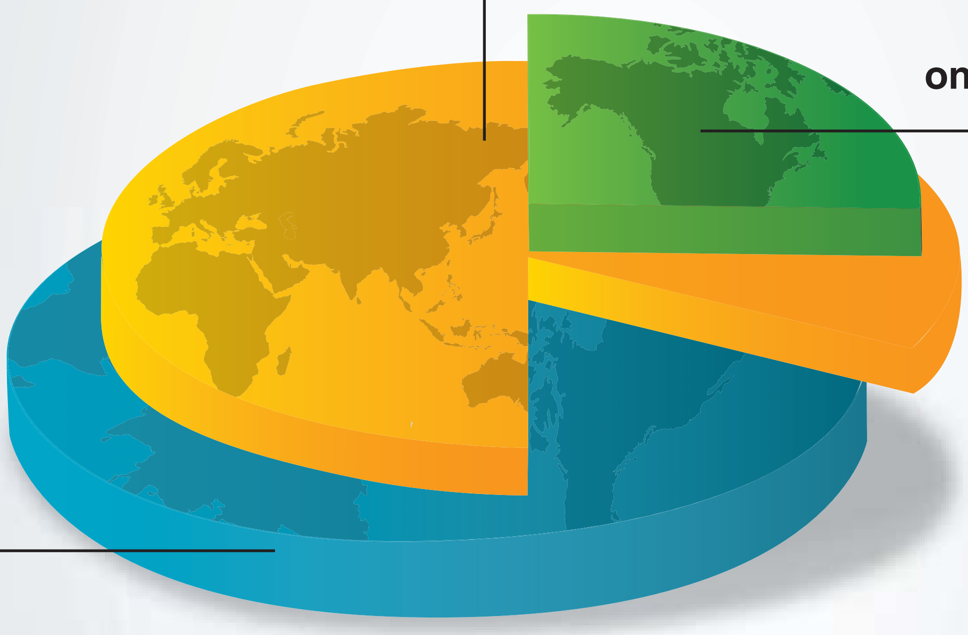
Is your portfolio TOO LOCAL for a GLOBAL ECONOMY?

100% of the time, over the past 30 years, the top-performing equity market has been outside the U.S.[1]

78% of global GDP comes from non-U.S. countries.[2]

only **26%** of the world's publicly traded companies are based in the U.S.[3]



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[1]Source: MSCI All Country benchmark returns 1986–2015.
[2]Source: Nominal GDP in current U.S. Dollars via the IMF World Economic Outlook Database—April 2016.
[3]Source: FactSet as of 03/31/2016. Data presented for the MSCI AC World Index, which represents 23 developed and 23 emerging market countries and contains 2,480 constituents, covering approximately 85% of the global investable equity opportunity set. The index is not intended to represent the entire global universe of tradable securities.
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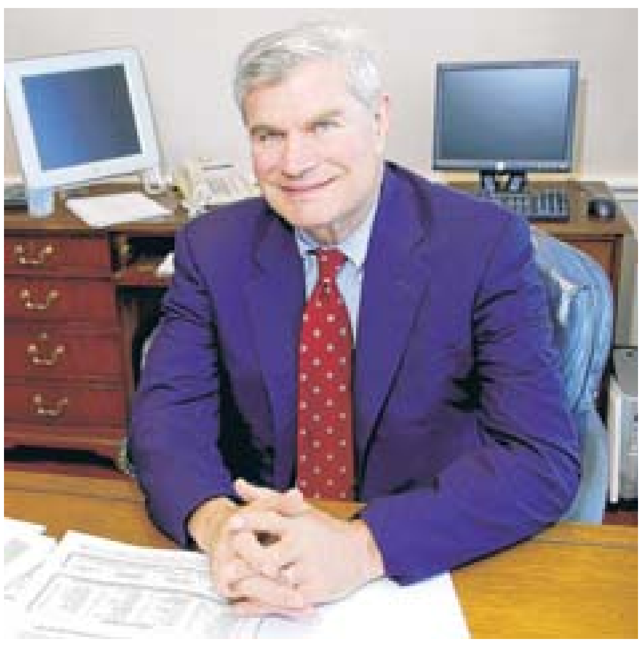
WINNERS' CIRCLE

And the No. 1 Stock-Fund Manager This Time Is...

CGM Focus Fund's Ken Heebner is back, winning the stock-fund manager title with a 45.6% gain

BY SUZANNE MCGEE



RUBY ARGUILLA-TULL/BLOOMBERG NEWS

G. Kenneth Heebner's bet on big banks finally paid off.

PATIENCE, patience, patience.

That—and a willingness to make concentrated bets on core holdings—was the critical factor in determining the winners of The Wall Street Journal's most recent Winners' Circle competition to determine the best stock-fund managers.

Leading the pack, by a wide margin, was **CGM Focus Fund** (CGMFX), run by well-known mutual-fund manager G. Kenneth Heebner in Boston. He delivered a barn-burning return of 45.6% for the past 12 months, handily capturing the Winners' Circle laurels and beating his nearest rival by 9 percentage points.

A star of the 1990s, Mr. Heebner lost some of his luster in the more choppy and difficult markets that have characterized the past decade or so, and investor returns haven't always matched the posted returns of the fund, which has $991 million in assets. But patient investors who have hung on through the turbulence have certainly been rewarded.

The rules

Although our contest is quarterly, its goal is to identify the U.S.-stock fund that posted the best performance over the past 12 months. To be considered, funds must have at least $50 million in assets and a track record of more than three years. Index funds and exchange-traded funds don't qualify, because they aren't actively managed. We also disqualify leveraged funds, since they don't measure a manager's stock-picking prowess.

Anyone looking for funds to add to their portfolio likely will want to consider the impact of fees—and the sustainability of returns—before making any investment decisions. But fees aren't factored into the results of this contest. Our goal here is to identify skilled mutual-fund managers.

Those who rise to the top of our list of several thousand candidates in Morningstar's universe of diversified U.S.-equity funds often do so when investments that they have been nurturing patiently finally begin to deliver the kinds of returns they had anticipated.

That was the case with Mr. Heebner, who has been waiting for three or four years for his holdings in large global banks—**Citigroup**, **Bank of America**, **Morgan Stanley** and **J.P. Morgan Chase**—to reward him. (He finally sold his J.P. Morgan Chase shares in September, but says he still likes the stock.)

"We believed they were (and are) undervalued relative to earnings growth driven by higher interest rates, share buybacks and less onerous regulation," Mr. Heebner said, in an email interview. As a result, he and his team added to their positions in the banks until they represented the largest position in the fund's holdings, a total of 24%.

It took the stock market several years to begin to share his optimism, however. For instance, at the end of September 2016, shares of Citigroup were changing hands at $49.81; at the end of the third quarter of 2017, they had soared 46% to $72.65 apiece. But that was just the beginning: Bank of America's shares climbed 56% in the previous 12 months, while those of Morgan Stanley and J.P. Morgan Chase were 77% and 50% higher, respectively.

In line with the fund's objective of directing capital into sectors that it thinks have an outsize chance of outperforming (and away from those that Mr. Heebner believes possess a less favorable risk-reward trade-off), CGM Focus began last year to acquire stakes in some cyclical companies that already have begun to reward investors. The fund took its first stake in **Micron Technology**, a semiconductor maker, in August 2016 at only $16 a share, believing that cloud data centers would drive demand for its products. (Micron shares now trade for $38.)

Mr. Heebner said he expects to see global growth continue, and has sought out "potentially underappreciated opportunities" that will benefit from that trend, including **Vale** SA, a Brazilian multinational company that is one of the world's largest producers of iron ore and nickel. The fund acquired its initial stake at $6.19 a share in the fourth quarter; the stock recently traded at $9.94, although Mr. Heebner described it as remaining "undervalued."

Another mining giant in the portfolio, **Freeport McMoRan**, didn't pay off as expected. "We purchased in the first quarter of 2017 in anticipation of higher copper prices," Mr. Heebner explained. "However, we sold it at a loss in the subsequent quarter of 2017 after Indonesian government policies began to raise questions about future earnings growth."

Runner-Up: Matthew 25

Patience was a virtue for this quarter's runner-up, Mark Mulholland at **Matthew 25 Fund** (MXXVX), too. Most of the holdings that helped his concentrated portfolio turn in a 36.58% return for the 12-month period are positions he has held for nearly a decade, including financial stocks he purchased in the throes of the financial crisis of 2008.

"I just knew that **Goldman Sachs** wasn't going to collapse," he says of the stock that is the fund's largest holding, with a 10.7% weight in the portfolio. Mr. Mulholland's fund, in the Philadelphia suburb of Dresher, began purchasing Goldman on Sept. 15, 2008, right at the point that Lehman Brothers collapsed and the country's top political leaders were trying to avoid a cataclysm. The fund continued adding stock all the way down to its lows, in November 2008, and has ridden it back up.

Another big holding is J.P. Morgan, which Mr. Mulholland began to buy after the "London Whale" trading losses at the bank's chief investment office surfaced in 2012. That debacle put a dent in the bank's profits and triggered fines and investigations. But Mr. Mulholland argues that the bank "is still very good value, trading at less than 20% above book value and only 13 times this year's earnings." The scandal, he adds, gave him the opportunity to swap out of Citigroup shares for a position in J.P. Morgan, which he considered to be a better value.

Other big financial holdings for Matthew 25 include a range of preferred-stock holdings in **Fannie Mae**, which Mr. Mulholland began buying in 2013 after concluding that under any one of various scenarios, shareholders would receive virtually all of the par value of their holdings over the long term.

"I don't mind waiting, if the average annual compound return is 22%," he says. "It's a unique opportunity, and the price of these stocks is already recognizing that," contributing to the fund's big gains over the past 12 months.

Home-builder bet

It wasn't until recently that Mr. Mulholland returned to another victim of the financial crisis: home builders.

"Inventory had to be worked off, but early last year I could see the cycle had turned and construction was beginning again," he said. In January 2016 he snapped up stock in **Toll Brothers**, which has jumped about 60% since then, and which he believes could do even better as credit conditions improve.

If Mr. Heebner is optimistic looking forward, Mr. Mulholland is less so. He says he finds great values a little scarce right now and is prepared to just stick with his current holdings for longer. Patience has worked so far, hasn't it, and moreover, "it's getting harder to buy stuff."

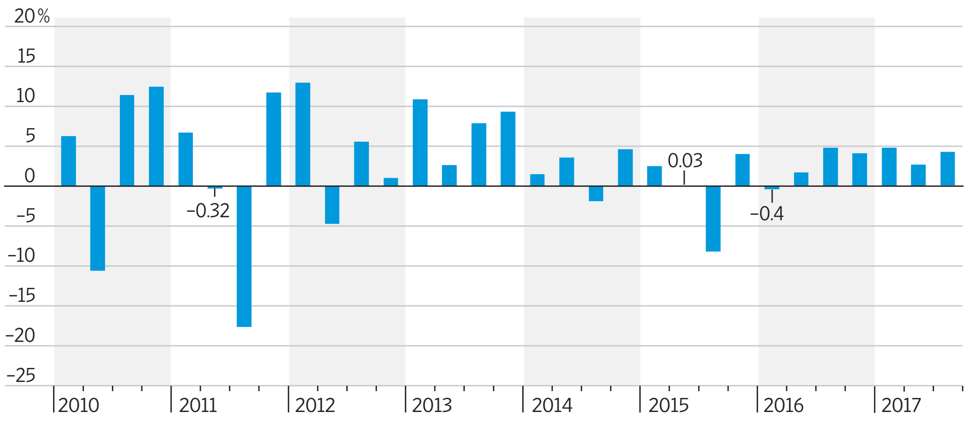
Mr. Mulholland's $397.5 million fund isn't experiencing much in the way of inflows.

For that reason, "If I want to buy something, I have to sell something first," he said. "It keeps me disciplined."

*Ms. McGee is a writer in New England. She can be reached at **reports@wsj.com**.*

The Score at the Quarter

U.S.-stock funds extended their winning streak to six quarters, measured by average total return for diversified funds.



Source: Lipper

THE WALL STREET JOURNAL.

Bitcoin's Bubble Matters

Continued from page R1

we're looking at is a new technology that people are still trying to understand," says Matthew Gertler, senior analyst and counsel at Digital Asset Research, which provides research to institutional investors on cryptocurrency issues.

Give bitcoin its due: Most people in finance agree that bitcoin and the blockchain, the open-access ledger that underpins the currency, were great inventions; even as J.P. Morgan's Mr. Dimon derides bitcoin as a "fraud," his bank is working on its own blockchain technology.

The bitcoin invention goes back to a 2008 blueprint signed by Satoshi Nakamoto and circulated on the internet. When a bitcoin owner transfers a token to another person, he or she posts the transaction to the blockchain, a simple account book floating on the internet, signing it with a unique string of numbers and letters. Bitcoin "miners" verify the transaction by running those numbers through formulas on high-powered computers, work for which they are paid mostly in newly minted bitcoin. For the users, fees are relatively low and transactions are—in theory—fraud-proof.

Clever as it is, however, bitcoin has shown no signs of replacing the dollar and other "fiat" currencies.

"For bitcoin to be a success, it needs to take a large part of various markets—remittances, payments, stored value," says Mr. Gertler.

Meanwhile, speculation in bitcoin—driven by hopes of its wider adoption—actually has diminished its usefulness as a means of exchange.

"Say you agree to buy a car [in bitcoin] and the price on Saturday is $32,000 and because of a bitcoin move, on Monday it's $41,000—people just can't live their lives like that," says Mr. Kinahan.

Nvidia vulnerable

A crash in the price of leading cryptocurrencies would almost certainly hurt shares of **Nvidia** Corp., the chip maker that was the biggest percentage gainer on the S&P 500 in 2016, and its rival **Advanced Micro Devices** Inc., at least temporarily. Both have noted in quarterly filings that cryptocurrency miners are a key source of demand for their graphic chips. Sales of chips to cryptocurrency sources represented 6.7% of Nvidia's fiscal second-quarter revenue of $2.23 billion.

"Anybody getting more than 5% of their business from crypto, it's starting to become significant and you could see their stock prices very quickly collapse" in the event of a bubble bursting, says Mr. Kinahan.

Spokesmen for Nvidia and AMD declined to comment.

Other companies at risk include those in financial technology, or "fintech," one of the hottest parts of the tech sector. Shares of the exchange-traded fund **Global X FinTech** (FINX), a basket of such stocks, are up 43% in 2017.

"A lot of the innovation around financial tech has to do with blockchain these days," says Gil Luria, director of institutional equity research at brokerage DA Davidson. "So if the crypto asset values decline and that's associated with the blockchain innovations, there could be some carry-over effect." That possibility has some observers worried about the broader tech sector, as well, where investors are already uneasy about elevated valuations.

Feverish

Price of a bitcoin token, in U.S. dollars

Source: CoinDesk

THE WALL STREET JOURNAL.

Another concern is the use of cryptocurrencies by some startups as a funding mechanism. Companies such as teen-oriented chat application **Kik Interactive** are using bitcoin-like systems to raise hundreds of millions of dollars from crowdsourced investors overnight, skirting initial-public-offering regulations and avoiding tough questions from venture capitalists. In many ICOs, or initial coin offerings, companies don't have a product yet when they sell those stakes.

Shares of the online retailer **Overstock.com** shot up recently after it said it was exploring a trading platform for ICOs. "To the extent there's any negative changes [in the value of cryptocurrencies], that could be to their detriment," Mr. Luria says.

Fears about fraudulent ICOs, meanwhile, caused Chinese regulators to shut down local bitcoin exchanges recently, causing a 20% retreat in bitcoin prices.

In 18 months, however, a new bitcoin crash could have wider ramifications.

That is when Spencer Bogart, head of research with cryptocurrency investment firm Blockchain Capital, estimates that the first bitcoin ETF will reach the market. The Securities and Exchange Commission rejected a high-profile ETF proposal from Cameron and Tyler Winklevoss earlier this year, citing the lack of regulation and transparency on underlying bitcoin exchanges. But **LedgerX** LLC recently received Commodity Futures Trading Commission permission to trade and clear bitcoin options and futures. ETF firm **ProShares** filed an application for long and short funds that would track bitcoin futures on the Chicago Board Options Exchange, which has said it would apply for approval of these derivatives.

An ETF's effect?

The appearance of an ETF would result in another surge in speculative activity as small investors wary of the high-tech bitcoin markets and institutional investors obliged to trade only registered securities finally have a way in, say Mr. Bogart and others.

"We see it on our desk every day," said Bobby Cho, at Cumberland Mining, a bitcoin-focused unit of Chicago trading firm **DRW Investments** LLC that works with institutions. "Many just go ahead and trade the underlying [tokens], but many more are just sitting on the sidelines waiting for a product.... There's a lot of pent-up demand for such a product."

One sign of that demand is the wild behavior of the closest thing to an ETF on the market, the over-the-counter-traded **Bitcoin Investment Trust**. Owing to the trust's design, where shares must be owned by wealthy investors for a year before they can sell, there is a limited supply. This shortage became acute when fund manager **Grayscale Investments** LLC suspended creation of new shares in January while it sought SEC approval for an exchange listing (it abandoned that particular effort in late September). For four months, the fund traded at nearly a 100% premium to its bitcoin holdings. Usually spreads between ETFs and the underlying indexes are fractions of percentage points.

Currently, bitcoin markets have very limited links to stocks, bonds and commodities, allowing for some quarantine. An ETF would allow for the kind of "contagion"—the forced selling of seemingly unrelated assets—that bring on financial crises.

Joe Saluzzi, co-founder of agency brokerage Themis Trading, says that if the SEC approves an ETF based on bitcoin futures, it would sow the seeds for a market crisis.

"You're going to put a derivative on a derivative of an unregulated asset?" says Mr. Saluzzi. "That, to me, is a recipe for disaster."

*Mr. Curran, a writer in Denton, Texas, is a regular contributor to Dow Jones Newswires and The Wall Street Journal. Email him at **rob.curran@dowjones.com**.*

Mutual-Fund Yardsticks: How Fund Categories Stack Up

Includes mutual funds and ETFs for periods ended Sept. 29. All data are final.

Data provided by LIPPER

Investment objective	Perfomance (%) September	3rd-qtr	1-yr	5-yr*
Diversified stock & stock/bond funds				
Large-Cap Core	2.2	**4.3**	17.7	12.9
Large-Cap Growth	0.9	**5.5**	20.1	13.9
Large-Cap Value	3.3	**3.7**	17.2	12.4
Midcap Core	3.5	**3.5**	15.6	12.8
Midcap Growth	2.5	**4.3**	18.4	12.8
Midcap Value	3.3	**2.6**	14.9	12.8
Small-Cap Core	5.8	**4.9**	18.6	12.8
Small-Cap Growth	4.6	**5.5**	19.9	12.6
Small-Cap Value	6.9	**4.7**	18.4	11.9
Multicap Core	2.5	**4.0**	17.1	12.8
Multicap Growth	1.7	**5.4**	19.9	13.5
Multicap Value	3.4	**3.7**	16.9	12.5
Equity Income	2.9	**3.5**	14.3	11.1
S&P 500 Funds	2.0	**4.4**	18.0	13.6
Specialty Divers. Equity	0.1	**1.7**	5.1	−3.9
Balanced	1.3	**3.0**	10.3	7.6
Stock/Bond Blend	1.1	**3.0**	10.1	6.7
Avg. U.S. Stock Fund†	3.0	**4.2**	16.8	11.8
Sector stock funds				
Science & Technology	1.3	**7.9**	24.8	15.8
Telecommunication	−1.1	**2.6**	8.9	8.9
Health/Biotechnology	1.4	**5.0**	16.7	17.5
Utility	−2.0	**3.5**	11.8	9.9
Natural Resources	10.8	**6.6**	−2.5	−2.0
Sector	0.9	**1.4**	6.9	7.9
Real Estate	−0.4	**0.7**	1.1	8.5

Investment objective	Performance (%) September	3rd-qtr	1-yr	5-yr*
World stock funds				
Global	2.0	**4.8**	17.6	10.4
International (ex-U.S.)	2.2	**5.9**	18.5	7.9
European Region	3.1	**6.1**	21.8	9.1
Emerging Markets	0.01	**7.4**	20.1	4.2
Latin American	2.8	**15.3**	23.7	−2.3
Pacific Region	0.9	**7.0**	20.0	9.3
Gold Oriented	−6.1	**1.7**	−15.4	−13.1
Global Equity Income	2.0	**3.4**	12.7	8.3
International Equity Income	1.3	**4.6**	15.3	5.4
Taxable-bond funds				
Short-Term	-0.03	**0.5**	1.3	1.1
Long-Term	−0.2	**1.2**	1.8	3.1
Intermediate Bond	−0.4	**0.8**	0.5	2.0
Intermediate U.S.	−0.4	**0.7**	−0.3	-0.01
Short-Term U.S.	−0.4	**0.8**	0.5	2.0
Long-Term U.S.	−0.9	**0.4**	−2.4	1.1
General U.S. Taxable	−0.1	**1.2**	2.9	3.4
High-Yield Taxable	0.8	**1.8**	7.7	5.2
Mortgage	−0.2	**0.8**	0.5	1.6
World Bond	-0.01	**2.0**	4.5	1.3
Avg. Taxable-Bond Fund**	0.03	**1.1**	2.9	2.2
Municipal-bond funds				
Short-Term Muni	-0.2	**0.3**	0.3	0.3
Intermediate Muni	−0.4	**0.9**	0.3	2.0
General & Insured Muni	−0.3	**1.2**	0.5	2.8
High-Yield Muni	−0.1	**1.6**	1.0	4.2

Stock & Bond Benchmark Indexes All total return unless noted

Investment objective	Perfomance (%) September	3rd-qtr	1-yr	5-yr*
Large-cap stocks				
DJIA	2.2	**5.6**	25.5	13.6
S&P 500	2.1	**4.5**	18.6	14.2
Midcap stocks				
S&P MidCap 400	3.9	**3.2**	17.5	14.4
Small-cap stocks				
Russell 2000	6.2	**5.7**	20.7	13.8
Broad stock market				
DJ U.S. Total Stock Market	2.4	**4.6**	18.7	14.2
Russell 3000	2.4	**4.6**	18.7	14.2

Investment objective	Performance (%) September	3rd-qtr	1-yr	5-yr*
Stock indexes				
DJ U.S. TSM Growth	1.7	**5.1**	20.4	15.1
DJ U.S. TSM Value	3.1	**4.0**	16.9	13.2
Taxable bonds				
Barclays Agg. Bond	−0.5	**0.8**	0.1	2.1
Municipal bonds				
Barclays Muni. Bond	−0.5	**1.1**	0.9	3.0
International stocks				
MSCI EAFE†† (price return)	2.2	**4.8**	16.0	5.5
Dow Jones World (ex. U.S.)	1.8	**6.1**	19.3	7.5

*Annualized †Diversified funds only **Excludes money-market funds ††Europe, Australia, Far East

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EXCHANGE-TRADED FUNDS

Four Reasons to Avoid the Lowest-Cost ETFs

Unlike the case for mutual funds, the expense ratio isn't the end and be-all

BY SIMON CONSTABLE


IZHAR COHEN

IT HAS BECOME something of a given that when investors are trying to choose between two fairly similar funds, they should pick the one with the lowest expense ratio. While that may be good advice when it comes to many types of funds, it isn't always the case with exchange-traded funds and notes.

Here are four cases where the lowest-cost ETF might not be the best choice:

1. If one fund has a much wider bid-ask spread

VanEck Vectors Gold Miners ETF (GDX), which tracks a basket of precious-metals mining stocks, has annual expenses of 0.51%. **IShares MSCI Global Gold Miners** ETF (RING), which tracks a basket of similar mining stocks, has annual expenses of just 0.39%.

This is a case where investors opting for the lower-cost fund might find themselves financially worse off because of the cheaper fund's wider bid-ask spread, which is the difference between the price at which market makers are willing to buy a security and the price at which they are willing to sell it.

At one point on Sept. 27, the spread for the iShares fund was 0.32% of the share price, versus 0.04% for the Van Eck fund, according to data from Morningstar Inc. (Spreads usually vary during the day, depending on trading flows, and the spread for the iShares fund wasn't that wide all day.)

Another way to look at the bid-ask spread is that it measures the cost of a round-trip trade—the buying and then selling of a security—excluding any commissions. Because the only way to realize profits (or losses) is to complete a round-trip trade, the costs of completing both purchase and sale must be included in the cost of ownership, along with the fund's annual expenses.

Based on the Morningstar data above, the cost of ownership for the VanEck fund for one year including a round-trip trade would be 0.55% (0.51% plus 0.04%) versus 0.71% for the iShares fund.

Why do some funds have wider bid-ask spreads? One common reason is that there are fewer competing market makers for that security.

IShares says that while the spread for its fund is wider than that of the VanEck fund, it isn't nearly as wide as the Morningstar data indicate. Based on national data, the spread for the iShares fund averages about three times that of the VanEck fund, not eight times, the firm says.

Morningstar acknowledges that the quotes it uses are from the ETF's primary exchange, rather than the national best bid and offer, so the spreads it displays do tend to be wider than those shown elsewhere.

IShares also says two funds aren't that similar, with only a 66% overlap in securities, and that some investors use the Van Eck fund as a hedging tool, resulting in far greater volume and tighter bid-ask spreads.

2. When you desire liquidity over anything else

Exchange-traded funds can be an efficient way to invest in gold mining, but don't lose sight of the true costs.

A liquid market is one in which a buyer and seller can trade a reasonable volume of securities without affecting the price of those securities unfavorably. In an illiquid market, there are fewer buyers and sellers, so a larger order could potentially move the prices quoted by market makers in an unfavorable direction.

This is an issue that affects institutions, which may trade in tens of thousands of shares, more than small investors looking to buy, say, a block of 100. Still, even a small order can affect an ETF's price negatively.

One trick is to look for ETFs that track big-name indexes. "If it tracks an MSCI index, then we know there is money there," says Bill Stone, global chief investment strategist for PNC Asset Management Group. "But some ETFs target really small segments of the market."

Consider **Guggenheim Solar** ETF (TAN) and **VanEck Vectors Solar Energy** ETF (KWT), both of which were designed to track the solar-energy industry. The first has annual expenses of 0.71% versus 0.65% for the second.

Although the Guggenheim fund has the higher expense ratio, it's average daily volume is 174,565 versus 1,358 for the VanEck fund, according to Morningstar. A trade of 100 shares would represent a meaningful portion of the average daily volume in the VanEck fund, potentially affecting the price in a negative way.

VanEck closed the fund at the end of September.

3. When a higher-cost fund is closer to what you desire

Consider the case of an investor who wants to profit from the rising price of silver, but also is willing to take on additional risk in the hopes of raking in bigger profits.

This is a situation where **Global X Silver Miners** ETF (SIL) might be more appropriate than **iShares Silver Trust** (SLV) even though the former has annual expenses of 0.65% compared with 0.5% for the latter. The Global X fund tracks an index of silver-mining companies, whereas the iShares fund focuses on the price of the physical metal.

Mining stocks tend to be more volatile than the physical metal, partly because there are risks associated with owning companies, especially those involved in the metals-extraction business. Still, that risk is exactly what some investors are seeking because of the potential for a bigger reward.

On the other hand, "if an investor is looking to express her bullish view on metals, we would recommend the most direct path, using a metals fund that performs in line with that particular metal," says Tushar Yadava, iShares investment strategist at BlackRock.

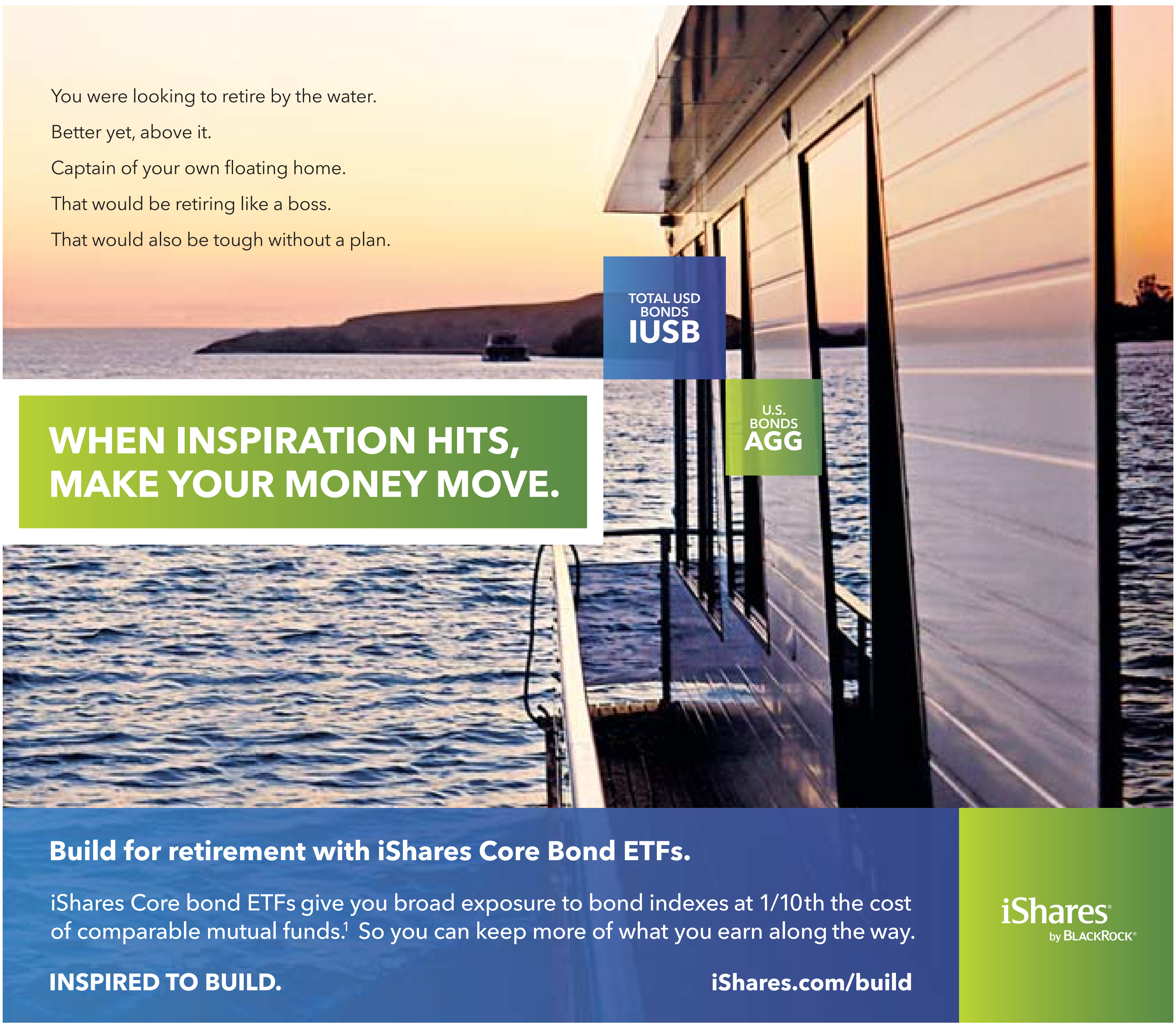
4. When the financial health of the plan sponsor is in doubt

This is particularly important when buying exchange-traded notes, which have an added level of uncertainty in addition to the price fluctuations of the index they are designed to track. "The problem here is the credit risk of the issuer," says Steve Hanke, professor of applied economics at Johns Hopkins University in Baltimore. In the simplest terms, an ETN is a promise by the issuer to pay the investor. That pledge may not get fulfilled if the institution runs into financial difficulty.

So not only do investors have the risk of the fluctuating price of the ETN, there also is the risk that an issuer will disappear. In that context, whether or not an ETN has the lowest expenses seems less important.

Mr. Constable is a writer in Edinburgh, Scotland. He can be reached at reports@wsj.com.

◆ ETF performance table.................. R16



1. Source: BlackRock and Morningstar, as of 4/30/17. Comparison is between the average Prospectus Net Expense Ratio for the iShares Core Series Bond ETFs (0.08%) and the average Prospectus Net Expense Ratio of active open-end mutual funds in comparable Morningstar categories (0.84%) available in the U.S. on 4/30/17. **Visit www.iShares.com to view a prospectus, which includes investment objectives, risks, fees, expenses and other information that you should read and consider carefully before investing. Investing involves risk, including possible loss of principal**. Fixed income risks include interest-rate and credit risk. Typically, when interest rates rise, there is a corresponding decline in bond values. Credit risk refers to the possibility that the bond issuer will not be able to make principal and interest payments. Buying and selling shares of ETFs will result in brokerage commissions. The iShares funds are distributed by BlackRock Investments, LLC. © 2017 BlackRock, Inc. All rights reserved. **iSHARES** and **BLACKROCK** are registered trademarks of BlackRock. 247208

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SAVING FOR RETIREMENT

New Target-Date Funds Focus on the Payouts

CARLO GIAMBARRESSI

Fund companies' twist: Funds that help you manage those tricky withdrawals called RMDs

BY MICHAEL A. POLLOCK

TARGET-DATE retirement funds, which are designed to automatically shift to more-conservative investments as an investor grows older, have become a popular way for working Americans to save for retirement.

But the same firms that created these all-in-one funds have struggled to provide a solution to the next dilemma many people face: how to prudently manage a nest egg while drawing it down in retirement. So far, the industry hasn't managed to attract much interest for "managed payout funds," which make steady cash payments to fundholders while continuing to invest the remaining assets.

Now two big industry stalwarts, **Fidelity Investments** and **T. Rowe Price Group** Inc., are offering new approaches to the problem.

The RMD issue

Fidelity this summer launched a series of new funds that aim to make payouts without exhausting the investor's assets during his or her lifetime.

For people who buy such a fund with pretax dollars within a traditional individual retirement account, the payouts can be calculated to satisfy the minimum withdrawals savers must make starting at age 70½ under Internal Revenue Service rules—known as the required minimum distributions, or RMDs. T. Rowe Price's new fund has some similar features.

(More on RMDs and other retirement-fund rules in our monthly quiz, page R18.)

Fidelity is targeting the millions of people entering retirement who must cope with complex issues surrounding payouts, says Ken Hevert, senior vice president for retirement: "It's time to take a distribution—what should I sell? When should I sell it? And now, is my portfolio still set up the right way?"

Will they catch on?

Investment firms, however, face formidable barriers in gaining acceptance for these new offerings, experts say.

People may hesitate to trust money they have accumulated over a lifetime to a fund with unique features that doesn't have a long record, says Jeff Holt, associate director of manager research at Morningstar Research Services. And while people may have similar financial circumstances early in their careers, their situations can be vastly different later on.

That's why "it's difficult to find an all-in-one solution that meets the needs of everybody," he says.

Meanwhile, tailoring investments and distributions to individual circumstances is basically what financial advisers do, so it's unlikely that many of them would recommend a standardized solution to clients, says Tim Courtney, chief investment officer at Exencial Wealth Advisors in Oklahoma City.

Even fund giant **Vanguard Group**, which is a dominant force in other fund categories, has found a less-enthusiastic response than expected to its managed-payout funds, says John Ameriks, who heads quantitative equity and is co-creator and a manager of Vanguard Managed Payout Fund (VPGDX).

The fund has about $2 billion in assets under management currently. While that represents about half of all assets in managed-payout funds, it is a minuscule portion of the trillions of dollars Americans hold in retirement savings.

Although Vanguard Managed Payout offers a straightforward, low-cost strategy, "it isn't clear what the future will hold for this type of product," says Mr. Ameriks. "Will it get a lot more interest, or will we gradually see more of a shift to something like our personal-advisory services or to people working one-on-one with a financial adviser to handle retirement income?"

The new funds' approach

T. Rowe Price is betting it can make a mark in the category with its new **Retirement Income 2020 Fund** (TRLAX), which aims to strike a balance between maintaining a certain stream of income and not dipping too deeply into assets if market returns decline.

Every year, the fund calculates a payout of about 5%, based on the average of the net asset value for the previous five years. (Since the fund is new, it initially will base payouts on the five-year NAV history of T. Rowe Price Retirement 2020 Fund, a 15-year-old target-date fund that uses the same underlying strategy.)

"If markets have tended to be down, the payout is going to tend to go down in response, which is prudent," says Jerome Clark, who helps manage retirement funds at the firm. "But you don't tend to have big moves up or down in the payout, because it is based on a five-year moving average. So [when the payout drops] you aren't significantly affecting someone's lifestyle in the short-term."

Fidelity's Simplicity RMD funds, meanwhile, maintain a slightly higher equity exposure than its target-date funds. When comparing the two, Fidelity says, investors should keep in mind that target-date funds are based on the expected year of retirement, while the RMD funds' approach is based on when a person begins taking the required distributions.

The higher stock allocation in the RMD funds increases the likelihood that fundholders will see their assets continue to grow in retirement, Mr. Hevert says, so they won't deplete their nest eggs by taking payouts.

"The risk for some people is that they are so afraid of running out of money that they hoard their money and compromise their lifestyle," he adds. "We are attempting to bring people to a place of equilibrium between those goals."

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FUND RESULTS

WSJ .COM

Lipper's A-to-Z quarterly fund listings are free at WSJ.com/FundsETFs.

VENTURE INVESTING

Those Startup Valuations Might Be Way Off

The price of shares sold in later financing rounds distort values, a study says

A. RICHARD ALLEN

BY CHANA R. SCHOENBERGER

HOW MUCH are startups worth? Perhaps not what you think.

Misuse of a common valuation method may be distorting the widely reported market values of startups, most noticeably so-called unicorns, or companies backed by venture capital that are valued at more than $1 billion.

That is the conclusion of a new working paper published by the Stanford Graduate School of Business.

The paper spotlights the problem of "post-money valuation," which is a calculation performed by many analysts, venture capitalists, company employees, the media and often the companies themselves, after a company completes a round of fundraising. Shares issued in later rounds tend to carry higher valuations than shares issued in earlier rounds because the founders and their VC backers tend to award increasingly valuable benefits to later-round investors, such as the ability to cash out at a certain value after an initial public offering. Those increasing benefits can push up the value of shares in the later rounds.

Inaccurate gauge

Thus it isn't always accurate to take the amount of money raised in the most recent fundraising round and use it to calculate the entire value of the company.

But that is what many companies, their backers, their employees and industry watchers do. They adopt a standard valuation method that is applied to companies that have already gone public, in which the market valuation is determined by the number of shares outstanding multiplied by the current price of one share.

"Overvaluation arises because the reported valuations assume all of a company's shares have the same price as the most recently issued shares," the researchers write. To calculate the real value of one of these private companies, it is crucial to look at the terms of each round, the researchers say.

The researchers looked at 135 U.S. unicorns and found that more than half granted special terms giving their most recent investors advantages that earlier investors lacked, such as a guaranteed return, ability to block the IPO if it doesn't promise to return most of their investment, and seniority over all other investors.

The frequency with which such features appeared led the researchers to suspect they were affecting the valuations, says Will Gornall, an assistant professor of finance at the University of British Columbia's Sauder School of Business and one of the study's authors.

Different figures

Indeed, when the researchers calculated the companies' valuations by taking into account the different financing terms that accompanied each financing round, in many cases they came up with very different figures from what was reported to be the company's value in corporate press releases, news articles, interviews with founders and elsewhere.

"The average highly valued venture-capital-backed company [in the study] reports a valuation 50% above its fair value, with common shares overvalued by 58%," the researchers wrote. Nearly half were not valued at more than $1 billion using the researchers' method, and 15 companies saw their value drop by half, the paper found.

"I'm surprised the SEC hasn't started exploring the way these companies should be valued," says Ilya Strebulaev, a professor of finance at Stanford's Graduate School of Business who is also one of the study's authors.

'In the unicorn context, there is a worry that the tail may wag the horn.'

MARY JO WHITE, SEC CHAIRMAN IN 2016

One startup that is cited in the paper, software company **Zscaler**, for example, raised $100 million in August 2015.

"We are excited to join an elite group of security companies valued in excess of $1 billion," CEO Jay Chaudhry said in a press release about the fundraising round. But Profs. Gornall and Strebulaev calculated Zscaler was actually worth $700 million at the time.

For IT-security company **Tanium**, which announced this May that it was worth $3.75 billion, the researchers looked at a December 2015 round that had a post-money valuation of $3.7 billion and determined that the company's fair value at that point was $2.8 billion.

Both Zscaler and Tanium declined to comment on their valuations and the research.

When she was Securities and Exchange Commission chairman, Mary Jo White expressed concern about possible overvaluation of shares in privately held startups in a March 2016 speech in which she pointed at valuation as one of the problems facing Silicon Valley.

"In the unicorn context, there is a worry that the tail may wag the horn, so to speak, on valuation disclosures," Ms. White said. "The concern is whether the prestige associated with reaching a sky-high valuation fast drives companies to try to appear more valuable than they actually are."

Most venture capitalists and founders who sign such financing agreements likely do understand what they're signing, says David Wessels, an adjunct professor in finance at the University of Pennsylvania's Wharton School who teaches courses on corporate valuation and venture capital. And at the time the company goes public, the shares usually convert to common stock, so public-market investors are buying shares that have a transparent value. All of the shares are worth the same amount as the different financing terms are subsumed into the common stock.

Employees, however, may not realize that the hefty valuation they hear cited might not be the company's true value. This makes it difficult for them to decide whether or how long to work for a company when much of their compensation is in stock, Dr. Wessels says.

"They might be taking a real hit in salary, half the wage they would be able to garner on the open marketplace to work for this company," he says.

Ms. Schoenberger is a writer in New York. She can be reached at ***reports@wsj.com.***

Monitoring Money-Market Funds

Performance figures for these consumer-oriented funds are estimated annualized yields, which include earnings from the funds' investments and the effects of compounding. Funds open only to institutions, special-purpose and tax-exempt funds are excluded from these tables.

Largest Funds

Fund Name	Assets ($millions)	Performance (%) 3rd-qtr	Performance (%) 12-mos	Compound 7-day yield (%)
Fidelity Govt Cash Resrvs	133,996.6	0.69	**0.40**	0.71
Vanguard Prime MMF/Inv	84,647.6	1.11	**0.88**	1.13
Vanguard Federal MMF	82,464.8	0.94	**0.63**	0.98
Fidelity Government MMF	79,886.9	0.64	**0.34**	0.66
Schwab Cash Reserves	36,937.9	0.68	**0.46**	0.68
Schwab Govt MF/Sweep	26,087.8	0.37	**0.14**	0.38
Schwab US Treasury MF	16,177.6	0.41	**0.17**	0.43
Vanguard Treasury MMF	15,697.2	0.93	**0.60**	0.96
Edward Jones/Inv Class	15,531.5	0.36	**0.14**	0.38
Northern US Govt MMF	15,327.2	0.70	**0.39**	0.73

Highest 12-Month Yield

Fund Name	Assets ($millions)	Performance (%) 3rd-qtr	Performance (%) 12-mos	Compound 7-day yield (%)
Fidelity Inv MM/Instit	11,782.4	1.26	**1.03**	1.28
BlackRock MMP/Instit	775.9	1.17	**0.95**	1.20
JPMorgan Liq Assets/Cap	1.4	1.19	**0.95**	1.22
Federated Prime Cash/Wealth	3,285.4	1.18	**0.89**	1.21
Vanguard Prime MMF/Inv	84,647.6	1.11	**0.88**	1.13
Schwab Value Adv MF/Ultra	3,855.5	1.10	**0.87**	1.12
Dreyfus Prime MMF/Cl A	142.9	1.12	**0.86**	1.15
Invesco Prem Port/Inst	697.7	1.17	**0.86**	1.18
First Amer Ret Prime/Z	273.3	1.14	**0.85**	1.16
Fidelity MMF	2,642.9	0.97	**0.76**	0.98

Highest Seven-Day Yield

Fund Name	Assets ($millions)	Performance (%) 3rd-qtr	Performance (%) 12-mos	Compound 7-day yield (%)
Fidelity Inv MM/Instit	11,782.4	1.26	1.03	**1.28**
JPMorgan Liq Assets/Cap	1.4	1.19	0.95	**1.22**
Federated Prime Cash/Wealth	3,285.4	1.18	0.89	**1.21**
BlackRock MMP/Instit	775.9	1.17	0.95	**1.20**
Invesco Prem Port/Inst	697.7	1.17	0.86	**1.18**
First Amer Ret Prime/Z	273.3	1.14	0.85	**1.16**
Dreyfus Prime MMF/Cl A	142.9	1.12	0.86	**1.15**
Vanguard Prime MMF/Inv	84,647.6	1.11	0.88	**1.13**
Schwab Value Adv MF/Ultra	3,855.5	1.10	0.87	**1.12**
BMO Prime MMF/Premier	173.6	1.04	0.73	**1.05**

Lowest 12-Month Yield*

Fund Name	Assets ($millions)	Performance (%) 3rd-qtr	Performance (%) 12-mos	Compound 7-day yield (%)
Federated Tr/UST Ob/Cash	660.0	0.01	**0.00**	0.03
AZL Government MMF	519.7	0.00	**0.00**	0.00
The US Treasury Trust/S	56.3	0.00	**0.00**	0.00
Federated Govt Res/Cl P	10,369.1	0.04	**0.01**	0.05
Transamerica Govt/A	195.9	0.01	**0.01**	0.01
Federated Govt Oblig/Cash	175.1	0.01	**0.01**	0.02
BlackRock Liq:T-Fd Select	87.8	0.05	**0.01**	0.07
BlackRock Liq:Treas Tr S	44.5	0.03	**0.01**	0.06
RBC US Govt/Investor	2,136.3	0.04	**0.02**	0.06
Ready Assets USA Govt MF	45.2	0.08	**0.02**	0.06
Average Yields (all retail taxable funds)		**0.51%**	**0.28%**	

Source: Money Fund Report (iMoneyNet.com)

* - Ranked by assets.

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FUNDAMENTALS OF INVESTING

Investors Should Rethink Their Approach to REITs

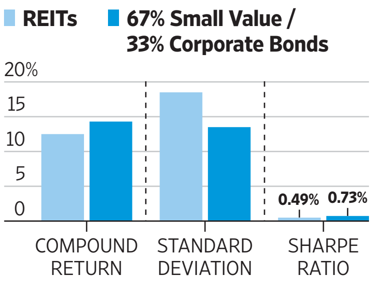
Do we overdo it on real-estate stocks? A study says REITs might deserve only about 3% of a typical portfolio

BY JOHN COUMARIANOS

LONG BEFORE investors fell in love with Facebook and Amazon.com or even the hot stocks of past generations such as utilities and railroads, real estate inspired dreams of wealth. "They aren't making any more of it," say proponents, as if to end all argument.

Tastes Great, Less Filling

Comparing a REIT portfolio to a portfolio of 67% small-cap stocks and 33% corporate bonds. The latter portfolio has a better return and lower volatility. The two portfolios have a correlation of 0.72.



Source: Jared Kizer and Sean Grover
THE WALL STREET JOURNAL.

Some financial advisers and pundits helped fuel the love affair, suggesting that investors could reduce volatility and boost returns by adding real-estate investment trusts, or REITs, to portfolios in an amount exceeding their representation in broad market indexes. REITs behaved differently enough, zigging when other investments zagged, and provided solid enough returns to warrant the extra exposure, they said.

But a new study by Jared Kizer and Sean Grover of **Buckingham Asset Management** in St. Louis disputes the old claim about REITs. It argues that REITs deserve a portfolio weighting that reflects their own weighting in broader indexes (around 3%), but not necessarily an additional weighting that a separate asset class with different return and volatility characteristics would.

Sharpe analysis

To understand the authors' argument, it helps to consider the Sharpe ratio, a basic metric of modern finance theory that divides return by volatility. The object is to create portfolios that exhibit the highest Sharpe ratio—that is, they provide the biggest return for the lowest volatility. That means the best return doesn't always win in the game. The best return per unit of volatility wins, so reducing volatility is as important as increasing return. It turns out that adding REITs to a portfolio above the weighting they already have in broad indexes may not do much of either.

Messrs. Kizer and Grover set out to determine whether REITs are a separate and distinct asset class, as many investors believe, and thus deserving of a heavier portfolio weighting.

They established four criteria for defining an asset class. First, the group of stocks in question has to have low correlation with other established asset classes, such as stocks and bonds. Assets with low correlation to each other tend to move in different directions at the same times, potentially reducing volatility.

Second, an asset class has to have statistically significant outperformance that is unrelated to "factors" or characteristics already established as adding return to an index. Those are things like value—low price relative to book value or earnings—momentum or small size. In other words, a group of stocks would have to attribute its outperformance to something other than, say, value, which is a factor or characteristic already agreed to give a stock an edge over a broad index.

Third, an asset class has to be unique enough so that a combination of other securities can't mimic its return and volatility characteristics.

DANIEL ACKER/BLOOMBERG NEWS

Roosevelt Field Mall in Garden City, N.Y., owned by a giant REIT, Simon Property Group.

Fourth, it has to improve the volatility-adjusted performance of the portfolio when it's added in an amount exceeding its weighting in broad indexes.

Results of the study

Messrs. Kizer and Grover discovered that REITs do, indeed, have low correlation to both broad stock and bond indexes. So they meet the first criteria of being a separate asset class. However, REITs didn't produce any significant outperformance that couldn't be explained by factors already known to produce outperformance. It turned out that REITs' performance can be explained by characteristics known as the momentum, term and credit premiums.

Although there are disagreements about the definition, the momentum premium is sometimes viewed as compensation for bearing risk that an appreciating asset won't continue to rise. The term premium is compensation for risk that short-term rates will be higher than future estimates. And the credit premium is compensation for assuming credit risk. (REITs typically operate with a lot of borrowed money, and they deliver high current dividend yield to investors, giving them corporate-bond-like characteristics.) All of this means any outperformance REITs deliver can be explained by these already understood risk premiums. Messrs. Kizer and Grover discovered that other sectors have similar characteristics that also can be explained by known premiums. REITs just aren't that special when analyzed in light of these premiums.

Not only can known factors explain REIT performance, but combinations of those factors can replicate that performance. It turns out that a combination of 67% small cap value stocks and 33% long-term corporate bonds produces a security that has a 0.72 correlation to REITs. A correlation of 1 is perfect. That high correlation means REITs fail the third part of the Kizer-Grover asset-class definition.

Finally, adding REITs to the classic balanced portfolio of 60% stocks and 40% bonds didn't improve the portfolio's volatility-adjusted returns—what modern finance calls "efficiency." The authors conclude that REITs shouldn't be excluded from portfolios, but also that they shouldn't be included in doses that exceed their representation in broad indexes.

Investors should note that there are times when REITs have done wonders for portfolios. When the technology-stock bubble peaked in early 2000, for example, REITs and small-cap value stocks in general had been left for dead by investors. Consequently, they were priced to deliver massive returns when investors were finally disillusioned with profitless "dot-coms" and regained their affection for hard assets in 2000-02.

Adding groups of stocks to portfolios based on valuation metrics is the more old-fashioned view of the world than Messrs. Kizer's and Grover's emphasis on historical price action and correlation, but that doesn't mean it can't be effective.

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FAMILY FINANCE

Military Hopes to Spur Retirement Saving

BENEDETTO CRISTOFANI

BY CHERYL WINOKUR MUNK

SAVING FOR RETIREMENT is hard for most people. The government is trying to make it easier for members of the U.S. military.

A new military retirement system that takes effect Jan. 1 will cover all new recruits and will be available for nearly two million current active military personnel and reservists. The hope is that it encourages military members, especially new recruits, to save for retirement early on. And for the first time, the government will give them money to help them do that.

The new system is the first major redo since World War II. Like the current system, it has a pension element and also allows service members to participate in the government's Thrift Savings Plan, akin to a 401(k) plan.

What's different is that the pension element has been reduced and the TSP part enhanced: The government will contribute an amount equal to 1% of participants' basic pay to their retirement accounts—and it will add up to 4% of pay in matching contributions. Government contributions vest after two years of service for new recruits, and immediately for current members provided they meet length-of-service requirements.

The new system also aims to prevent saving from becoming an afterthought or being put off indefinitely. All new recruits—about 150,000 a year in recent years—will be automatically enrolled in the new system. Current active military members and reservists will still be covered under the existing retirement plan but can switch into the new one at any time next year if they meet certain criteria such as length of service. Retired veterans aren't eligible for the new plan.

For new recruits, 3% of their pay will automatically go into their TSP accounts, in addition to the 1% automatically contributed by the government, starting after 60 days of service, and matching funds from the government starting after two years of service. If a service member changes the automatic contribution to 0%, he or she will be re-enrolled the following year at 3%. If he or she changes the contribution to some other amount, say 1% or 5%, it stays at that level.

Marching orders

"It's critical because of the time value of money and the importance of saving early in life and developing those habits," says retired Brig. Gen. Michael Meese, chief operating officer of the American Armed Forces Mutual Aid Association, which provides life insurance, financial and survivor services to military members and their families.

While service members have the option to participate in the Thrift Savings Plan in the current retirement program, many don't, Gen. Meese says. Experts say the low participation is a function of the plan being optional and not heavily promoted, as well as the lack of an automatic contribution from the government or matching contributions.

"When I was there, nobody ever once talked about the Thrift Savings Plan," says Army veteran Galen Bargerstock, who was stationed in Bamberg, Germany, in 2002-05. He is now a financial adviser who helps federal and state employees understand and optimize their federal and state benefits and retirement plans.

Mr. Bargerstock says mandatory TSP for new recruits is an improvement because even those who don't stay in the military long enough to qualify for a pension will have some funds set aside for retirement, especially since the government contributions vest quickly. "I think it's absolutely fantastic what they're doing," he says.

The pension provisions in the new retirement plan are less generous than those in the existing program.

Today, a service member's monthly pension is 2.5% of the average of his or her 36 highest-paid months, times the number of years of service. So, for instance, veterans with 20 years receive monthly pensions equaling 50% of their highest average salary. In the new system, the factor is reduced to 2% from 2.5% for each year of service, so 20-year veterans will now receive only 40% of their highest average salary upon retirement.

In both plans, military personnel who don't complete 20 years of service receive no pension. That's why the new mandatory TSP for new recruits and the government contributions to those accounts are important, ensuring that the many service members who don't make the military a long-term career get some retirement benefit for their service.

To switch or not?

For those now covered under the existing retirement plan, the decision on whether to switch to the new plan can be complicated.

Hans E. Scheil, a certified financial planner and chief executive of Cardinal Retirement Planning Inc., based in Cary, N.C., says anyone thinking about opting in to the new plan should consider, among other things, whether they plan to stay in the military long enough to qualify for a pension, and how disciplined they are at putting their own savings into a retirement account, which will determine whether they can maximize the benefit of the government's contributions in the new plan. "It's a very personal decision," he says.

Asa Leveaux, a former National Guardsman who is a captain in the Army Reserve, is sticking with his old plan because he's only five years away from being fully vested for a pension, which will pay him more than it would under the new plan.

"If this had been an option 10 years ago, it wouldn't have been a second thought," says Mr. Leveaux, an entrepreneur in Oklahoma City. "It's so much better because of the matching provisions."

The government is providing various resources to help service members better understand their options. Members of the military can also go online to militarypay.defense.gov/BlendedRetirement to learn more about the new program.

*Ms. Winokur Munk is a writer in West Orange, N.J. She can be reached at **reports@wsj.com.***

SPOTLIGHT | CURRENCY

MULTICURRENCY FUNDS GAIN TRACTION

This time last year, dollar bulls were having a heyday, but sentiment has since changed. The dollar has declined for most of 2017, giving a boost to global currency markets and creating a possible new opportunity for investors.

"We have been having more conversations with investors about multicurrency funds," says Marina Gross, executive vice president of the Portfolio Research and Consulting Group at Paris-based Natixis Global Asset Management. These are actively managed mutual funds that line up currency "pair" trades—buying one currency and selling another. Ms. Gross calls it an "option for investors who want to add exposure to currency markets with less risk than trying to do it on their own."

Investors can get multicurrency exposure through mutual funds in a variety of ways.

ProFunds Falling US Dollar Fund (FDPIX), for example, replicates the returns of the basket of non-U.S. currencies included in the U.S. Dollar Index, which measures dollar performance against six foreign currencies. The fund has declined 5% annually over the three years through September as the dollar peaked, but it is up 7.75% in 2017 through September.

For investors with specific return targets over a certain period, there is another way.

Eaton Vance Diversified Currency Income Fund (EAIIX) invests in a mix of currencies, foreign bonds and foreign derivatives in both developed and emerging markets outside of the U.S. EAIIX's total-return approach has yielded annualized returns of 1.77% over the three years through September, but the fund is up significantly—9.12%—so far in 2017.

—Bailey McCann

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ASK ENCORE | GLENN RUFFENACH

The Best Resources for Understanding Medicare

Also: We answer a reader's question about doing a Roth IRA conversion

I'm considering making changes in my Medicare coverage during the open-enrollment period. Can you recommend any resources that can help with my choices?

The fact that you're even considering this is to be applauded.

Each year, from Oct. 15 through Dec. 7, Medicare beneficiaries can change their coverage without penalty. Doing so, given that insurers are forever tweaking their plans and offerings, could help lower your premiums and/or give you access to better care. Most people, though, stand pat. For instance, research by the Kaiser Family Foundation, a nonprofit that specializes in health-policy analysis, shows that, on average, only about 10% of enrollees in Medicare Advantage programs voluntarily switch plans each year.

To start…if you need a refresher on the primary pieces of the puzzle—traditional Medicare, Medicare Advantage, "Medigap" policies and prescription-drug coverage—Medicare itself publishes an excellent guide, "Medicare & You." (Go to medicare.gov and search for the title.) If you are already enrolled in Medicare Advantage or a Medicare Part D prescription-drug plan, it is critical that you read and understand your "Annual Notice of Changes" and "Evidence of Coverage," which should have arrived in your (real) mailbox by now. These documents explain how your existing coverage will change in 2018 and how much you'll pay for that coverage.

Next, go the Medicare Plan Finder, a terrific service on the Medicare website. Enter some basic information—your Medicare number and prescription drugs (name and dosage)—and this tool will produce a list of possible health-care plans in your area, the costs involved, drug coverage and customer-satisfaction ratings.

Still, few options can top a discussion or face-to-face meeting with a knowledgeable guide, which is where the Medicare Rights Center and the State Health Insurance Assistance Programs, or SHIPs, come in. The former, a nonprofit group (medicarerights.org), offers a national helpline (800-333-4114) where staff members answer questions about Medicare, including enrollment issues, at no charge. The latter (shiptacenter.org), also free, operate in all 50 states and counsel Medicare beneficiaries, their families and/or caregivers about health benefits. Simply invaluable.

No, none of this is easy. It takes time and effort—and no small amount of courage. (Walking away from coverage you might have had for several years can be unnerving.) But again, at the very least, spend some time with your Annual Notice of Changes and Evidence of Coverage and ask yourself: Will my current insurance continue to meet my needs, and fit my budget, in the coming year?

* * *

My question is about Roth IRA conversions. I am not working regularly and just started collecting Social Security at age 70. In early 2017, I bought an electric vehicle. (Simply had to have it.) I am eligible for a $7,500 federal tax credit for the purchase. My problem is that I don't think I'll have enough income to take advantage of it. What's more, I would like to postpone my first required minimum distributions from some individual retirement accounts until April 2018.

So, if I go ahead and postpone the RMDs, could I transfer enough IRA money to my Roth in 2017 such that the new total income would generate a federal tax liability of $7,500, against which I could apply the electric-vehicle EV credit? That way, I could use the credit and still defer the RMDs.

I like this question for two reasons. First, it gives me the chance to talk about Roth conversions and how they can benefit new retirees. And second, this idea of using a conversion to take advantage of a tax credit is pretty clever—and just might work.

Many people early in retirement—roughly, the period after leaving the workforce and before required distributions from retirement accounts kick in—find themselves in a low tax bracket. (Or lower than they think.) After all, a new retiree's income is likely to drop, at least somewhat. And the sources of that income are likely to change. For instance, long-term capital gains and qualified dividends are taxed at a lower rate than a paycheck from work.

All this presents an opportunity: a partial Roth conversion. Each year, move a portion of your traditional IRA into a Roth IRA—just enough to fill your tax bracket and not a dollar more. (Otherwise, you're pushed into a higher tax bracket.) A conversion, of course, is taxable and will show up (as the question above indicates) as income on your tax return. But the upside is considerable: Your money, once inside the Roth, will grow tax-free.

In short, don't waste the available room in a low (or lower) tax bracket if you happen to be in one.

No, such maneuvers aren't for everyone. A Roth conversion always works best when you pay the tax with funds from outside the IRA itself. If all (or almost all) of your money is in tax-deferred accounts, this plan might not work. But it is certainly worth exploring. Michael Kitces, director of wealth management at Pinnacle Advisory Group in Columbia, Md., clearly explains the mechanics and benefits in an article on his blog. Go to kitces.com and search for: Tax-Efficient Spending Strategies from Retirement Portfolios.

Now, getting back to the electric vehicle and tax credit. "I would think [the Roth conversion] would work," says Jeffrey A. Porter, a certified public accountant with Porter & Associates in Huntington, W.Va. The credit, he explains, "is used to offset the tax on Form 1040, line 47, which is the total tax liability. If the tax liability exceeds $7,500 and there are no other personal credits, they could use the electric-vehicle credit."

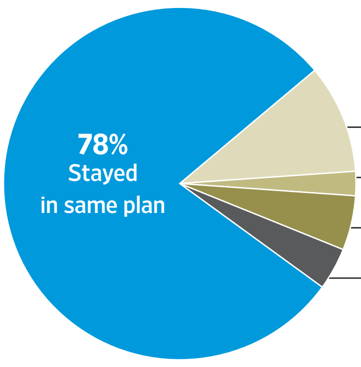
One caveat, Mr. Porter notes: If you do, in fact, delay your first RMD until the first three months of 2018, you will need to take two withdrawals (with two tax bites) in 2018: the required withdrawal for tax year 2017 and the required withdrawal for tax year 2018. The latter must be taken by Dec. 31, 2018.

Other than that, "by converting enough of the IRA to a Roth to use the credit, they are basically getting that amount out of the IRA tax-free," he says. That's "pretty good planning."

SONIA PULIDO

Time to Switch?

During Medicare's annual open-enrollment period, about 10% of enrollees in Medicare Advantage plans, on average, voluntarily switched plans each year between 2007 and 2014:



*Beneficiary's health plan left the market.
Numbers don't total 100% due to rounding.
Source: Kaiser Family Foundation
THE WALL STREET JOURNAL.

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.

PRUDENTIAL FUNDS: HIGHLY RATED BY MORNINGSTAR.
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Intermediate-Term Bond Category
PDBZX
★★★★★
856 Overall Rating
For the 3-, 5-, and 10-year periods, the Fund was rated 5 stars out of 856 funds, 5 stars out of 767 funds, and 5 stars out of 540 funds, respectively.

PRUDENTIAL SHORT-TERM CORPORATE BOND FUND, INC.
Short-Term Bond Category
PIFZX
★★★★★
450 Overall Rating
For the 3-, 5-, and 10-year periods, the Fund was rated 4 stars out of 450 funds, 4 stars out of 376 funds, and 5 stars out of 261 funds, respectively.

PRUDENTIAL HIGH-YIELD FUND
High Yield Bond Category
PHYZX
★★★★★
590 Overall Rating
For the 3-, 5-, and 10-year periods, the Fund was rated 5 stars out of 590 funds, 4 stars out of 474 funds, and 5 stars out of 317 funds, respectively.

PRUDENTIAL JENNISON GLOBAL OPPORTUNITIES FUND
World Large Stock Category
PRJZX
★★★★★
714 Overall Rating
For the 3- and 5-year periods, the Fund was rated 5 stars out of 714 funds and 5 stars out of 590 funds, respectively.

PRUDENTIAL GLOBAL REAL ESTATE FUND
Global Real Estate Category
PURZX
★★★★
181 Overall Rating
For the 3-, 5-, and 10-year periods, the Fund was rated 3 stars out of 181 funds, 3 stars out of 148 funds, and 4 stars out of 85 funds, respectively.

PRUDENTIAL INCOME BUILDER FUND
Tactical Allocation Category
PDCZX
★★★★
249 Overall Rating
For the 3-, 5-, and 10-year periods, the Fund was rated 4 stars out of 249 funds, 4 stars out of 176 funds, and 4 stars out of 66 funds, respectively.

Performance by share class may vary.

Morningstar Overall Rating™ for Class Z shares as of 6/30/2017. Morningstar measures risk-adjusted returns. The overall rating is a weighted average based on a fund's 3-, 5-, and 10-year star rating.

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Consider a fund's investment objectives, risks, charges, and expenses carefully before investing. The prospectus and summary prospectus contain this and other information about the fund. Contact your financial professional for a prospectus or summary prospectus. Read them carefully before investing.

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Star ratings shown are for Class Z shares, which are available to individual investors through certain retirement and wrap fee programs, and to institutions at an investment minimum of $5,000,000.

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0306639-00003-00

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Category Kings in 22 Realms

Data provided by LIPPER

Top-performing funds in each category, ranked by one-year total returns (changes in net asset values with reinvested distributions) as of Sept. 29; assets are as of Aug. 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 September 29; ranked by 3rd-quarter returns.

Best Performers

Fund	Third-quarter	12-month
Latin American	15.3%	23.7%
Science & Technology	7.9	24.8
Emerging Markets	7.4	20.1
Pacific Region	7.0	20.0
Natural Resources	6.6	–2.5
European Region	6.1	21.8
International Stock	5.9	18.5
Small-Cap Growth	5.5	19.9

Worst Performers

Fund	Third-quarter	12-month
Managed Futures	–0.1%	–5.3%
Short-Term Muni	0.3	0.3
Long-Term U.S.	0.4	–2.4
Short-Term Bond	0.5	1.3
Real Estate	0.7	1.1
Intermediate U.S.	0.7	–0.3
Intermediate Bond	0.8	0.5
Short-Term U.S.	0.8	0.5

Source: Lipper

Latin American Funds

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
VnEck Vctrs:Brazil Sm Cp	BRF	106.5	26.7	53.7	51.8	–6.6	N.A.
iShares:MSCI Brz Sm-Cap	EWZS	62.3	31.4	53.3	51.4	–5.9	N.A.
iShares:MSCI Chile Cap	ECH	484.4	16.4	31.9	34.5	–3.3	N.A.
Glbl X MSCI Argnt ETF	ARGT	155.4	8.0	36.9	33.6	13.0	N.A.
Frst Tr ADex:Brazil	FBZ	13.5	24.9	28.4	30.3	–1.8	N.A.
Frst Tr ADex:Lat America	FLN	24.1	18.2	23.0	28.6	–0.2	N.A.
iShares:Lat Amer 40	ILF	1,174.3	15.6	28.0	28.0	–1.5	–0.6
iShares:MSCI Brazil Cap	EWZ	6,328.0	22.0	24.7	26.5	–2.5	–2.5
Fidelity Latin America	FLATX	635.8	19.6	36.6	26.5	–3.9	–3.0
T Rowe Price Intl:Lt Am		698.1	15.8	32.7	26.2	–0.4	–1.0
Category Average:		327.5	15.3	29.0	23.7	–2.3	–1.5
Number of Funds:		37.0	39	37	37	30	15

International Funds

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
AdvisorShs DorsWr ADR	AADR	87.7	19.1	38.4	37.8	14.0	N.A.
Morg Stan I:Intl Opp;I	MIOIX	328.9	11.7	45.2	36.7	16.9	N.A.
Oakmark Internatl;Inv	OAKIX	38,283.8	9.1	26.7	34.9	12.9	6.2
Natixis:Oakmark Intl;A	NOIAX	1,020.8	9.1	27.3	34.8	12.2	N.A.
Morg Stan I:Intl Adv;I	MFAIX	201.6	8.9	38.6	32.7	14.3	N.A.
Bail Giff EAFE;5	BGEVX	2,875.9	13.3	42.1	32.5	N.A.	N.A.
ValShs Intl Qnt Val	IVAL	62.9	6.5	24.9	31.8	N.A.	N.A.
iPath ETN LgEn MSCI EAFE	MFLA	2.5	8.3	33.7	31.3	13.3	N.A.
Third Avenue:I Val;Ins	TAVIX	132.8	12.5	22.9	30.5	6.6	1.9
PIMCO:RAE Fnd+ Intl;Inst	PTSIX	1,206.7	8.4	23.2	30.0	9.5	N.A.
Category Average:		1,026.8	5.9	21.9	18.5	7.9	1.4
Number of Funds:		1,554.0	1,654	1,575	1,514	1,059	701

European Region

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
iShares:MSCI Poland Cp	EPOL	363.5	9.1	46.2	49.9	2.8	N.A.
iShares:MSCI Italy Cap	EWI	840.6	13.5	31.2	46.0	8.1	–4.4
iShares:MSCI Austria Cap	EWO	233.3	10.4	43.1	45.7	11.2	–1.9
iShares:Curr Hgd Italy	HEWI	5.9	9.6	19.0	41.1	N.A.	N.A.
Xtrackers MSCI Italy Hdg	DBIT	2.3	10.1	18.7	41.1	N.A.	N.A.
iShares:MSCI Ger Sm-Cap	EWGS	42.9	16.5	46.4	38.3	18.7	N.A.
WisdomTree:Euro Dom Eco	EDOM	5.9	9.8	32.6	36.7	N.A.	N.A.
SPDR EURO STOXX Sm Cap	SMEZ	15.1	10.4	35.4	34.3	N.A.	N.A.
Xtrackers MSCI Sth Eu Hd	DBSE	2.4	4.8	17.5	31.9	N.A.	N.A.
Frst Tr ADex:Eurozone	FEUZ	14.3	9.6	31.3	31.9	N.A.	N.A.
Category Average:		615.6	6.0	22.1	21.8	9.1	1.4
Number of Funds:		14.3	165	158	157	98	70

Balanced Funds

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
CGM Tr:Mutual Fund	LOMMX	401.6	5.7	10.6	23.6	8.8	3.9
Value Line Inc & Gr;Inv	VALIX	387.4	6.1	21.3	18.8	10.5	6.6
Wisconsin:Plumb Balanced	PLBBX	36.2	2.8	16.4	17.1	10.2	4.8
Dodge & Cox Balanced	DODBX	15,844.5	3.1	8.7	16.1	12.0	6.4
Jns Hndsn:Balanced;T	JABAX	13,172.8	3.8	12.5	15.6	9.1	7.2
Oakmark Eqty & Inc;Inv	OAKBX	15,866.5	3.7	9.8	15.3	9.4	6.5
BlackRock:Bal Cap;A	MDCPX	1,045.3	3.6	10.6	14.5	9.9	5.4
Advantus Dyn Mgd V;Inst	VVMIX	36.0	3.7	11.5	14.4	N.A.	#
Sterling:Str All Gr;A	BCMAX	23.7	4.9	13.0	14.2	8.4	3.7
Columbia:CA Mod Agg;A	NBIAX	2,185.0	4.3	13.7	14.1	8.8	6.0
Category Average:		1,035.8	3.0	9.7	10.3	7.6	4.8
Number of Funds:		585.0	623	602	600	520	438

Large-Cap Core

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
BNY Mellon:Foc Eq Op;M	MFOMX	490.5	4.1	22.0	28.7	15.3	N.A.
iPath ETN LgEx S&P	SFLA	2.1	6.2	20.6	27.3	24.2	N.A.
SPDR Dow Jones Indus Avg	DIA	17,724.6	5.6	15.4	25.3	13.4	7.6
BlackRock:LC Foc Gr;A	MDLHX	1,175.4	5.0	20.5	24.6	14.4	7.6
Pioneer Core Eqty;A	PIOTX	1,598.8	6.2	17.8	24.5	12.5	6.9
Wright Major Blue Chip E	WQCEX	12.6	6.5	18.0	24.4	13.6	5.4
BlackRock:Adv LCG;A	BMCAX	436.5	5.8	15.7	24.0	9.5	4.9
Nuveen Lg Cap Select;I	FLRYX	64.3	5.4	15.5	23.9	15.0	6.9
Vanguard PRIMECAP;Adm	VPMAX	56,380.9	5.4	20.8	23.8	18.5	10.2
Rydex:DJ Indus Avg;H	RYDHX	116.3	5.2	14.2	23.5	N.A.	N.A.
Category Average:		1,033.0	4.3	13.5	17.7	12.9	6.6
Number of Funds:		838.0	860	807	790	640	492

Large-Cap Growth

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
T Rowe Price I LgCp Gro	TRLGX	14622.2	7.4	28.5	30.7	17.8	10.4
Homestead:Growth	HNASX	156.9	7.3	28.4	30.5	17.3	10.3
SunAmerica:AIG FA LCF;A	SFLAX	623.4	8.9	25.6	29.2	15.5	8.6
Edgewood Growth;Inst	EGFIX	10,439.4	5.5	29.8	28.0	18.7	10.1
PowerShares Russ T200 PG	PXLG	179.3	7.4	27.5	27.6	14.5	N.A.
iPath ETN LgEx Rus 1000	ROLA	1.4	6.2	20.5	27.2	24.3	N.A.
T Rowe Price I LC Cor Gr	TPLGX	2,972.2	6.9	27.6	27.2	17.1	9.6
T Rowe Price BC Gro	TRBCX	41,640.4	6.9	27.6	27.2	17.1	9.6
JPMorgan:LgCp Gro;R6	JLGMX	11,958.2	5.6	28.0	26.9	N.A.	N.A.
J Hancock II:BC Gro;1	JIBCX	2,632.1	6.9	27.4	26.9	16.9	9.4
Category Average:		1,231.8	5.5	21.8	20.1	13.9	7.8
Number of Funds:		672.0	711	677	658	532	387

Large-Cap Value

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
PowerShares S&P500 EV	SPVU	50.6	3.3	10.2	26.1	N.A.	N.A.
MassMutual Sel:Fc VI;I	MFVZX	$697.9	7.3	14.3	25.9	15.0	N.A.
Pioneer Disc Val;A	CVFCX	571.7	5.1	15.8	24.4	12.0	5.6
Dodge & Cox Stock	DODGX	66,062.1	4.8	11.9	23.9	15.7	6.6
Oakmark Fund;Inv	OAKMX	18,123.4	5.8	14.3	23.8	15.4	9.6
AllianzGI:NFJ LCV;A	PNBAX	355.3	4.1	12.9	23.3	12.2	4.2
Hotchkis:Lg Cap Val;I	HWLIX	424.5	3.5	11.8	23.2	15.1	5.8
Hotchkis:Dvsfd Value;I	HWCIX	109.1	3.7	11.6	23.0	14.5	5.7
Columbia:Select LCV;Z	CSVZX	876.8	3.9	8.8	22.5	15.4	N.A.
SPDR MFS Sys Value Eqty	SYV	6.0	4.8	11.9	22.2	N.A.	N.A.
Category Average:		804.0	3.7	9.6	17.2	12.4	5.4
Number of Funds:		461.0	491	469	457	363	253

Multicap Core

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
CGM Tr:Focus Fund	CGMFX	978.2	10.1	20.3	43.3	13.6	1.0
Matthew 25 Fund	MXXVX	390.9	7.4	13.3	35.2	12.9	10.0
TCW:New America Prm Eq;I	TGUSX	15.1	4.1	27.3	28.4	N.A.	N.A.
Toreador Core;Rtl	TORLX	142.5	9.1	17.0	26.9	16.2	7.2
Marshfield Concntrd Opp	MRFOX	12.8	6.2	16.8	26.0	N.A.	N.A.
Aspiration Redwood	REDWX	32.8	6.6	20.0	24.7	N.A.	N.A.
Putnam Multi-Cap Core;Y	PMYYX	529.0	6.7	15.7	24.5	16.1	N.A.
WellsFargo:LC Core;I	EGOIX	1,034.7	6.3	14.9	24.3	15.1	N.A.
Neuberger Mlt-Cp Opps;I	NMULX	1,922.0	4.4	16.7	24.1	15.4	8.1
WBI Tactical LCV	WBIF	78.9	2.3	10.3	23.8	N.A.	N.A.
Category Average:		1,391.2	4.0	12.7	17.1	12.8	6.2
Number of Funds:		825.0	820	797	773	569	389

Multicap Growth

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
Zevenbergen Genea;Inst	ZVGIX	6.6	5.6	45.5	39.6	N.A.	N.A.
Biondo Focus;Inv	BFONX	26.5	5.8	27.1	39.4	16.3	N.A.
ICON:ICON;S	ICNZX	49.8	5.1	21.1	32.8	10.6	2.3
Berkshire:Focus	BFOCX	67.4	9.2	33.4	31.8	14.3	11.7
Fidelity Srs Gro Co	FCGSX	11,209.5	7.7	28.4	31.1	N.A.	N.A.
Fidelity Gro Company	FDGRX	40,257.8	7.6	27.9	30.4	17.6	10.8
HCM Tactical Growth;A	HCMGX	78.9	6.7	22.1	30.3	N.A.	N.A.
Fidelity OTC	FOCPX	16,251.5	5.8	30.7	29.1	20.3	11.8
Cav Fundamental Gro;Inst	CAFGX	69.2	14.5	27.9	27.7	N.A.	N.A.
Fidelity Adv Srs Eqty Gr	FMFMX	924.9	7.0	29.3	27.4	N.A.	N.A.
Category Average:		627.6	5.4	20.4	19.9	13.5	7.4
Number of Funds:		521.0	558	537	532	411	292

Multicap Value

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
AllianzGI:NFJ MCV;A	PQNAX	827.5	4.2	20.7	30.4	14.9	7.5
Barrett Opportunity	SAOPX	62.8	5.3	16.8	25.7	12.9	3.6
Mt Lucas US Focus Eq;I	BMLEX	11.2	5.2	13.7	24.9	14.1	6.1
JPMorgan:LgCp Val;R6	JLVMX	1,114.4	3.5	10.0	24.9	16.3	N.A.
Invesco Val Opps;A	VVOAX	798.5	4.6	11.1	24.0	10.8	4.2
O'Shaughnessy Mkt Ld V;I	OFVIX	57.0	6.2	14.9	23.8	N.A.	N.A.
Vanguard Sel Value;Inv	VASVX	10,183.9	5.0	13.5	23.5	14.5	8.4
J Hancock Clsc Val;I	JCVIX	2,083.5	3.9	8.8	22.8	14.8	4.4
Hotchkis:Value Opps;I	HWAIX	539.7	3.2	8.2	22.7	14.9	10.4
Oakmark Select;Inv	OAKLX	5,910.9	5.9	11.2	22.6	15.5	8.8
Category Average:		604.8	3.7	9.0	16.9	12.5	5.6
Number of Funds:		384.0	392	374	370	286	231

Midcap Core

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
Tarkio	TARKX	87.3	6.4	22.4	34.6	18.2	N.A.
Frst Tr Srs:AQA Eqty;A	AQAAX	40.5	6.9	15.4	27.2	N.A.	N.A.
CB Select;IS	LCSSX	24.4	4.6	28.1	24.5	N.A.	N.A.
Pac Fds:MdCp Eq;P		65.4	5.9	15.7	24.5	15.1	N.A.
Scout Mid Cap	UMBMX	1,486.9	5.7	15.4	24.2	14.9	10.5
Thrivent Fds:MC Stk;A	AASCX	1,611.3	3.2	10.5	23.6	17.3	8.5
Mutual Amer Inst:MCE Idx	MAMQX	22.8	3.2	9.2	23.4	15.4	9.5
Private Cap Mgmt Value;I	VFPIX	75.0	4.3	12.7	21.9	11.6	N.A.
Meridian Contrarian;Leg	MVALX	598.8	8.4	16.0	21.6	14.0	7.6
RBB:Mtly Great Amer;Inv	TMFGX	230.8	5.6	15.6	21.3	13.1	N.A.
Category Average:		1,038.6	3.5	9.9	15.7	12.8	6.8
Number of Funds:		417.0	416	402	390	266	184

Midcap Growth

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
Baron Partners Fund;Rtl	BPTRX	2060.3	1.3	30.1	30.1	17.1	7.1
PowerShares DWA NASDAQ	DWAQ	38.2	8.9	25.7	27.7	15.3	6.1
Kinetics:Paradigm;NL	WWNPX	740.9	11.4	19.1	26.8	13.9	4.3
Renaissance IPO ETF	IPO	14.4	6.4	29.1	26.5	N.A.	N.A.
WM Blair:Sm-Md Cp Gr;I	WSMDX	1,722.3	5.1	22.1	25.3	16.1	9.7
AB Discovery Gr;Adv	CHCYX	1,974.9	5.9	21.7	24.4	12.8	8.2
Eagle:Mid Cap Growth;I	HAGIX	2,079.0	5.0	21.9	24.1	15.8	9.6
WellsFargo:Discvry;I	WFDSX	2,451.6	5.5	22.0	23.9	13.4	8.8
ALPS Barron's 400 ETF	BFOR	198.0	5.1	13.3	23.8	N.A.	N.A.
BlackRock:MC Gro;A	BMGAX	844.1	5.4	27.4	23.5	16.9	8.0
Category Average:		407.8	4.3	17.7	18.4	12.8	6.9
Number of Funds:		366.0	396	385	377	310	226

Midcap Value

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
TCW:Rel Value MC;I	TGVOX	97.1	6.5	12.8	25.1	13.2	6.7
Pzena Mid Cap Value;Inst	PZIMX	5.8	4.3	7.8	21.3	N.A.	N.A.
Am Beacon:MC Val;Inv	AMPAX	637.2	3.9	11.2	20.6	14.2	8.3
Transam:Sm/Md Cap V;A	IIVAX	857.9	1.9	9.1	20.2	13.1	8.5
Neuberger MC Int V;Inv	NBRVX	92.8	3.5	13.2	20.1	14.3	7.2
AMG Mg Fairpt MC;I	ABMIX	3,839.1	0.8	6.1	20.1	14.2	9.4
Frst Tr ADex:MidCap Val	FAB	103.5	3.3	7.5	19.8	12.7	8.3
Nuance Mid Cap Val;Inst	NMVLX	411.2	3.0	9.7	19.4	N.A.	N.A.
Franklin Val:Bal;A	FRBSX	975.4	4.1	6.2	18.8	11.0	4.4
ValShs US Qnt Val	QVAL	69.2	6.8	10.3	18.7	N.A.	N.A.
Category Average:		620.3	2.6	7.3	14.9	12.8	6.9
Number of Funds:		182.0	198	187	181	138	102

Small-Cap Core

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
ICON:Opportunities	ICONX	18.1	7.1	18.7	29.8	14.7	N.A.
Auer Growth	AUERX	27.7	11.4	19.6	29.5	7.9	N.A.
Zacks Sm-Cap Core;Inv	ZSCCX	125.1	9.5	14.0	29.3	16.1	N.A.
Fuller & Thaler BSC;Inst	FTHSX	178.8	7.1	13.6	28.2	16.6	N.A.
AlphaOne Sm Cap Opps;I	AOMCX	153.7	6.6	8.6	28.0	14.8	N.A.
TH & B MicroCap;Inst	THBIX	73.2	4.9	8.8	27.4	13.4	N.A.
Thrivent Fds:SC Stk;A	AASMX	550.0	6.3	15.0	27.2	14.6	6.1
RHJ Micro Cap;Inst	RHJSX	47.0	7.9	14.6	26.7	14.1	7.4
AMG Mg Emerg Opps;N	MMCFX	159.8	10.1	19.1	26.6	15.3	8.6
RBC Enterprise;I	TETIX	84.2	9.5	13.6	26.5	11.9	6.1
Category Average:		420.2	4.9	8.5	18.6	12.8	7.3
Number of Funds:		1,045.0	1,065	1,028	1,007	707	511

Small-Cap Growth

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
Oberweis:Micro-Cap;Inv	OBMCX	82.6	10.0	23.6	33.1	19.2	6.7
Virtus:KAR Sm-Cap Gro;I	PXSGX	1,259.2	9.8	27.7	33.1	19.3	11.5
Victory:RS Sm Cap Eqty;A	GPSCX	66.2	9.7	29.0	32.5	16.0	9.7
Victory:Sm Cap Growth;Y	RSYEX	2,223.7	9.6	29.0	32.3	15.8	9.2
JPMorgan:SmCp Gro;R6	JGSMX	1,354.7	9.3	31.2	31.3	15.5	N.A.
Scout Small Cap	UMBHX	247.4	7.6	24.1	31.2	16.4	7.4
JPMorgan:Dyn SCG;I	JDSCX	182.2	9.1	31.3	31.1	15.1	7.7
Baron Discovery;Inst	BDFFX	226.9	5.3	31.1	31.0	N.A.	N.A.
Virtus:KAR Sm-Cap Cr;I	PKSFX	603.9	8.7	22.7	30.9	14.9	9.7
Conestoga Small Cap;Inv	CCASX	1,209.5	9.8	24.0	30.2	16.2	10.6
Category Average:		257.4	5.5	17.1	19.9	12.6	7.4
Number of Funds:		549.0	586	558	550	448	337

Small-Cap Value

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
Small Cap Value Fund	SCAPX	N.A.	10.7	16.2	35.5	13.9	7.3
Towle Deep Value	TDVFX	103.1	12.5	9.5	31.7	19.8	N.A.
Royce Fd:Oppty;Inv	RYPNX	1,485.6	8.9	17.7	31.0	14.8	8.2
DGHM MicroCap Val;Inst	DGMIX	24.4	8.2	15.5	30.2	N.A.	N.A.
RBB:Schneider Sm Cap Val	SCMVX	41.7	6.3	7.4	29.7	11.1	5.0
Frst Tr:DJ Sel MicroCap	FDM	79.8	5.3	6.0	28.7	17.2	7.8
Aristotle SmCp Eqty;I	ARSBX	3.6	7.1	17.1	28.1	N.A.	N.A.
Walthausen:SC Value	WSCVX	600.1	6.4	8.9	27.8	13.4	N.A.
Pacific Adv:Sm Cap Val;A	PASMX	21.8	11.5	5.6	27.3	3.9	2.1
Hotchkis:SC Dvs Val;I	HWVIX	20.3	6.1	9.4	26.6	N.A.	N.A.
Category Average:		423.7	4.7	5.3	18.4	11.9	6.8
Number of Funds:		283.0	287	280	276	214	137

Financial Services

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
PowerShares KBW Bank	KBWB	866.1	4.3	9.5	42.4	16.9	N.A.
iShares:US BD & SE ETF	IAI	160.8	7.5	16.9	40.0	22.8	2.5
Frst Tr IV:NASDAQ Bank	FTXO	1,012.7	5.0	7.0	38.6	N.A.	N.A.
iShares:US Fnl Svc ETF	IYG	1,276.4	6.2	14.0	38.4	18.1	1.3
Emerald:Bank&Finance;Ins	HSSIX	473.2	5.5	7.9	37.8	20.2	N.A.
J Hancock Reg Bank;A	FRBAX	1,714.5	4.7	6.2	37.1	19.0	7.5
SPDR S&P Bank ETF	KBE	3,180.5	3.8	4.7	36.9	15.8	0.5
SPDR S&P Reg Banking ETF	KRE	3,188.1	3.6	3.3	36.3	16.7	4.8
iShares:US Rgnl Bnks ETF	IAT	657.1	4.1	5.3	36.3	15.1	2.5
Sel Sector:Finl S SPDR	XLF	24,991.6	5.2	12.4	36.0	17.5	1.3
Category Average:		661.0	4.5	9.4	28.4	15.2	3.3
Number of Funds:		94.0	94	91	90	72	58

Emerging Markets

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
VnEck Vctrs:Poland	PLND	20.9	9.7	49.7	53.6	2.9	N.A.
iPath ETN LgEn MSCI EM	EMLB	2.4	15.4	66.1	48.9	6.3	N.A.
VnEck Vctrs:Russia SmCp	RSXJ	55.3	8.8	12.1	37.5	0.6	N.A.
Ashmore:EMs Value;Inst	EMFIX	12.3	9.6	34.7	36.1	5.3	N.A.
Frst Tr ADex:Em Mkts	FEM	368.2	17.4	35.0	34.6	5.3	N.A.
Glbl X MSCI Greece	GREK	428.9	–7.0	19.5	33.7	–7.5	N.A.
iShares:MSCI SA Capped	KSA	18.3	–1.7	6.0	32.9	N.A.	N.A.
Bail Giff Em Mkt;5	BGEDX	1,951.5	12.1	42.5	32.1	N.A.	N.A.
Delaware Em Mkt;Inst	DEMIX	4,247.8	13.4	38.4	31.8	9.7	4.1
Delaware Pld:Mac EmMk II	DPEGX	46.1	13.1	40.0	31.4	7.4	N.A.
Category Average:		620.7	7.4	26.5	20.1	4.2	1.1
Number of Funds:		821.0	871	845	811	457	187

Telecommunication Funds

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
Frst Tr II:NASDAQ Sm Ph	FONE	17.3	3.7	23.5	23.7	18.3	N.A.
T Rowe Price Md/Tele	PRMTX	4,718.3	5.7	26.7	22.6	16.9	11.9
Wireless Fund	WIREX	4.1	7.2	21.9	20.8	12.6	4.2
Fidelity Sel Wireless	FWRLX	282.3	4.7	18.6	18.8	11.3	5.0
iShares:N Amer T-M Net	IGN	61.5	1.0	6.2	13.3	12.3	3.0
Putnam Gl Telecomm;A	PGBZX	27.2	3.1	11.7	10.9	9.6	N.A.
Fidelity MSCI Telecom Sv	FCOM	114.5	2.3	3.4	10.5	N.A.	N.A.
GAMCO Gl:Telecom;AAA	GABTX	100.1	2.6	11.3	10.4	6.3	1.4
SPDR S&P Telecom	XTL	70.4	–0.6	1.7	7.8	10.8	N.A.
Fidelity Sel Telecomm	FSTCX	420.1	2.7	0.6	6.3	9.5	4.1
Category Average:		98.8	2.6	7.5	8.9	8.9	2.6
Number of Funds:		33.0	34	34	34	32	23

Science & Technology

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
ARK Web x.0	ARKW	86.4	15.8	62.0	58.4	N.A.	N.A.
ARK Innovation	ARKK	121.2	18.3	70.6	54.3	N.A.	N.A.
PowerShares Dyn Smcnd	PSI	280.2	18.5	37.1	51.8	29.9	10.8
Glbl X Rob & Art Intel	BOTZ	378.9	16.7	45.2	43.1	N.A.	N.A.
iShares:PHLX Semicon	SOXX	1,089.2	13.5	30.4	41.8	26.7	10.2
Fidelity Sel Technlgy	FSPTX	5,988.4	10.3	41.0	38.0	19.1	11.7
ETFMG Video Game Tech	GAMR	32.9	8.4	48.1	37.7	N.A.	N.A.
Frst Tr IV:NASD Semicnd	FTXL	22.4	16.5	24.0	37.7	N.A.	N.A.
Fidelity Adv Tech;A	FADTX	1,621.1	10.2	40.7	37.5	18.7	11.3
ETFMG Drone Econ Strat	IFLY	28.3	16.0	34.8	36.4	N.A.	N.A.
Category Average:		568.6	8.9	29.2	28.0	17.4	9.4
Number of Funds:		163.0	177	177	174	143	127

Health & Biotech

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
Alger:Health Sci;A	AHSAX	151.0	4.5	34.7	37.9	16.7	10.6
SPDR S&P Biotech	XBI	4,147.1	12.2	46.5	30.9	23.3	16.7
ETFis Virtus LS Bio Clin	BBC	27.6	21.3	57.9	28.5	N.A.	N.A.
PowerShares DWA Health	PTH	124.9	9.4	40.8	28.4	15.1	8.9
Eventide Hlthcare & LS;I	ETIHX	386.4	18.6	39.1	25.5	N.A.	N.A.
PowerShares Dyn Phrm	PJP	233.4	5.8	26.7	25.2	21.1	N.A.
ETFis Virtus LS Bio Prod	BBP	41.0	5.0	26.6	24.5	N.A.	N.A.
Frst Tr:NYSEArcaBiotech	FBT	1,142.7	8.8	36.4	24.4	21.8	17.3
Delaware Healthcare;A	DLHAX	394.3	9.5	30.3	24.2	20.3	17.5
Pru Jenn Health Sci;Z	PHSZX	2,341.4	5.3	28.8	21.6	18.6	14.8
Category Average:		958.3	4.9	24.6	16.6	17.5	12.5
Number of Funds:		95.0	101	101	101	74	63

Sector Funds Overall

Fund	Symbol	Assets ($ millions)	3rd-qtr (%)	YTD	Total return (%) 1-yr	5-yr*	10-yr*
Crdt Suis XL MP 2L MREIT	REML	31.4	5.6	38.3	43.9	N.A.	N.A.
PowerShares KBW Bank	KBWB	866.1	4.3	9.5	42.4	16.9	N.A.
iShares:US BD & SE ETF	IAI	160.8	7.5	16.9	40.0	22.8	2.5
Frst Tr IV:NASDAQ Bank	FTXO	1,012.7	5.0	7.0	38.6	N.A.	N.A.
iShares:US Fnl Svc ETF	IYG	1,276.4	6.2	14.0	38.4	18.1	1.3
Emerald:Bank&Finance;Ins	HSSIX	473.2	5.5	7.9	37.8	20.2	N.A.
J Hancock Reg Bank;A	FRBAX	1,714.5	4.7	6.2	37.1	19.0	7.5
SPDR S&P Bank ETF	KBE	3,180.5	3.8	4.7	36.9	15.8	0.5
SPDR S&P Reg Banking ETF	KRE	3,188.1	3.6	3.3	36.3	16.7	4.8
iShares:US Rgnl Bnks ETF	IAT	657.1	4.1	5.3	36.3	15.1	2.5
Category Average:		507.5	1.4	4.5	6.9	7.9	4.6
Number of Funds:		410.0	432	412	406	300	199

N.A.: Not applicable; fund is too new * Annualized Note: For funds with multiple share classes, only the largest is shown.

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INTERNATIONAL INVESTING

How Much Is Left in the Emerging-Markets Rally?

After a 26%-plus advance so far this year, some managers say the stocks are still worth it

A shopkeeper in September in Chennai, India, where stocks are up 19% so far this year.

ARUN SANKAR/AFP/GETTY IMAGES

BY BAILEY MCCANN

AFTER A LOST decade, emerging markets are having a banner year.

The MSCI Emerging Markets Index is up more than 26% year-to-date, and most emerging-markets mutual funds are posting returns in the high teens or better.

Emerging markets have sold off abruptly at times in the past, leaving some investors to wonder if this rally can last. But money managers in the sector are finally having their day, and many are betting that the rally will at least stretch over the next one to three years.

Popular Now

MSCI Emerging Markets Index since the start of 2016

Source: FactSet

THE WALL STREET JOURNAL.

"Broadly, emerging markets are still cheap," says Robert Marshall-Lee, London-based portfolio manager at Newton Investment Management. He oversees the $247 million **Dreyfus Global Emerging Markets** fund (DGIEX), which was up more than 34% in 2017 through September. He compares concerns about a reversal in emerging markets to the worries of investors who mistakenly thought they had missed out on the opportunity for big gains in Amazon.com shares three years ago. "If you look at our holdings, many of our companies have gone up 100%, 200% or more in the past five years," he says. "Just because something is growing doesn't mean the opportunity is over."

Another emerging-markets fund thriving this year is the $1.7 billion **VanEck Emerging Markets** fund (GBFAX), up more than 37% for the first nine months of this year. Both Mr. Marshall-Lee of Dreyfus and Angus Shillington, deputy portfolio manager of the VanEck fund, like social-infrastructure sectors such as health care, education, internet services and consumer staples for their portfolios.

Staying active

Such stock picking has gone out of favor for U.S. shares, in favor of index funds, but many investors still value it when trying to navigate the foreign-stock landscape.

"We are very actively managed; our active share is higher than most funds in our peer group," says Mr. Marshall-Lee. "We think it is important to take a due-diligence-driven approach to emerging markets."

Both managers invest in companies of all sizes, to avoid depending too much on the large-capitalization stocks that dominate emerging-market stock indexes. With most of the largest emerging-markets companies either owned by government or under heavy government influence, the political risk is high, they say. "The potential for value destruction is significant," says Mr. Shillington.

That said, the $36 billion **iShares MSCI Emerging Markets ETF** (EEM), which tracks the pre-eminent broad emerging-markets index by investing in a market-cap-weighted portfolio of stocks, was up more than 27% in 2017 through September.

Another look at Russia

When it comes to investing in the emerging-market BRIC economies of Brazil, Russia, India and China, investors in recent years have given Russia the least regard, opting more for funds with exposure to high-profile companies like China's **Tencent Holdings** or those that offer exposure to the growing middle class in India and Brazil.

But Rajiv Jain, founder and chief investment officer at Fort Lauderdale, Fla.-based GQG Partners, says that could be a mistake. Mr. Jain was an early bull on India, when he led the emerging-markets equities strategy at Vontobel Asset Management, but he has pulled back from that country, citing what he considers frothy valuations, and turned his attention toward Russia. At GQG, he's taking a long look at Russian banks for the **GQG Partners Emerging Markets Equity** fund (GQGPX).

On the surface, investing in Russian banks might surprise risk-averse investors, but Mr. Jain contends that the Russian central bank has been effective at managing the country's recent recession and subsequent consolidation in the financial sector. "They've been able to pull this off even with sanctions," he says, referring to the international sanctions imposed on Russia after its annexation of Crimea and involvement in unrest in Ukraine. "We think there is an emerging growth story in Russia, not just in financials but broadly," Mr. Jain says.

The emerging-markets story isn't limited to stocks. Bond investors resigned to stubbornly low yields in Europe, Japan and the U.S. may find opportunities for higher returns—if they can tolerate greater risk—in bonds issued to finance local projects in emerging markets. Prices have been rising on these bonds, which generally have higher interest rates than their developed-market counterparts, and the dollar's weakness for most of 2017 boosted the value of many securities denominated in foreign currencies for U.S. investors.

"It can be hard to put together a high-quality, global fixed-income portfolio that generates more than a 2% return right now," says Brendan Murphy, senior portfolio manager at Boston-based Standish Mellon Asset Management. Mr. Murphy's team oversees several fixed-income funds and is positive on local emerging-markets bonds. He says investors can add 3 to four percentage points to their gains when the market allows them to "take advantage of the currency component," though currency movements can work against investors in these bonds when the dollar strengthens, as it has in recent weeks.

Ms. McCann is a writer in New York. She can be reached at reports@wsj.com.

Largest Taxable-Bond Funds

Data provided by LIPPER

Total returns are for periods ended Sept. 29 and are preliminary; assets are through Aug. 31, and include all share classes.

Fund Name	Symbol	Assets ($ millions)	Performance (%) Sept.	3rd-qtr	1-yr	3-yr*	5-yr*
Vanguard Tot Bd;Adm	VBTLX	188,816.3	–0.5	0.7	–0.1	2.6	2.0
Vanguard Tot Bd II;Inv	VTBIX	135,100.1	–0.5	0.8	–0.3	2.5	1.9
PIMCO:Income;Inst	PIMIX	95,900.8	0.5	2.1	8.9	6.2	6.9
Vanguard Tot Itl Bl;Adm	VTABX	90,606.5	–0.5	0.6	–0.8	3.2	N.A.
Met West:Total Return;I	MWTIX	80,598.4	–0.5	0.8	0.3	2.5	2.7
PIMCO:Tot Rtn;Inst	PTTRX	74,529.9	–0.3	1.5	2.4	3.2	2.4
Vanguard Sh-Tm Inv;Adm	VFSUX	62,849.7	–0.1	0.6	1.3	2.1	1.9
DoubleLine:Tot Rtn;I	DBLTX	53,854.1	–0.4	1.1	1.7	3.2	3.1
Dodge & Cox Income	DODIX	51,607.8	0.03	1.1	2.6	3.2	3.2
Vanguard Sh-Tm Bd;ETF	BSV	50,177.1	–0.3	0.4	0.4	1.4	1.1
iShares:Core US Agg Bd	AGG	50,176.2	–0.5	0.8	0.1	2.7	2.0
Lord Abbett Sh Dur;F	LDLFX	41,837.5	0.1	0.7	2.2	2.3	2.3
Templeton Gl Bond;Adv	TGBAX	39,297.2	1.7	1.2	13.2	1.7	3.0
iShares:iBoxx $IG Corp	LQD	38,632.1	–0.1	1.4	1.8	4.2	3.5
T Rowe Price New Inc	PRCIX	36,002.3	–0.4	0.9	0.3	2.5	2.0
American Funds Bond;A	ABNDX	35,734.0	–0.4	0.8	0.6	2.6	2.0
Vanguard Int-Tm Bd;ETF	BIV	33,750.4	–0.9	0.8	–0.5	3.3	2.3
Fidelity Str Adv Cre Inc	FPCIX	33,662.9	–0.4	1.1	1.9	3.3	2.6
Fidelity US B Id;IP	FXNAX	32,842.6	–0.5	0.9	–0.1	2.7	2.0
Fidelity Total Bond	FTBFX	30,613.2	–0.3	1.1	1.6	3.5	2.9
BlackRock:Str Inc Opp;I	BSIIX	30,065.5	0.5	1.5	5.2	2.6	3.3
Vanguard Int-Tm Inv;Adm	VFIDX	28,818.1	–0.5	1.1	1.0	3.6	3.0
Vanguard Infl-Prot;Adm	VAIPX	27,575.6	–0.7	0.8	–1.0	1.6	–0.1
Pru Tot Rtn Bond;Z	PDBZX	26,574.4	–0.4	1.4	2.3	4.0	3.6
JPMorgan:Core Bond;R6	JCBUX	26,338.2	–0.5	0.9	0.3	2.8	2.2

*Annualized N.A.=not applicable, fund is too new

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Winners and Losers

Data provided by LIPPER

Best- and worst-performing stock funds for the periods ended Sept. 29; assets as of Aug. 31 and include all share classes. Performance data are final and include share prices and reinvested dividends.

Third-Quarter Best Performers

Fund Name	Assets ($ millions)	Performance (%) Sept.	3rd-qtr	1-year
Direxion:MSCI Bra Bull3X	117.2	11.9	**76.4**	34.3
Direxion:Russia Bull 3x	160.9	13.3	**53.5**	50.1
Direxion:Latin Bull 3X	15.9	4.0	**51.6**	65.0
iPath ETN Glbl Carbon A	1.1	22.0	**48.4**	50.5
ProShares:Ult MSCI Braz	16.6	8.2	**47.1**	39.4
VnEck Vctrs:Rare E/SM	60.8	10.4	**45.4**	62.7
Direxion:Aero & Def Bl3X	20.4	13.6	**44.0**	N.A.
Direxion:Semicnd Bull 3X	365.3	15.2	**41.5**	150.5
VelShs 1x Dly Inv VSTOXX	31.5	21.3	**39.1**	N.A.
Direxion:CSI Ch Int Bl2X	51.6	2.0	**38.4**	N.A.
Direxion:S&P Btech Bl 3X	380.6	8.9	**35.4**	74.8
Direxion:China Bull 3X	203.7	-2.1	**33.1**	52.1
ProFunds:UltraLatin;Inv	36.2	2.7	**31.8**	47.3
iShares:MSCI Brz Sm-Cap	62.3	4.6	**31.4**	51.4
Glbl X Brzil Cnsmr ETF	6.7	3.6	**31.1**	32.4
UBS PS Daily 3x Lng Crd	12.9	23.6	**29.7**	N.A.
ProShs II:UltPro 3x CO	20.4	23.6	**29.4**	N.A.
ProFunds:UltraChina;Inv	35.3	3.7	**28.8**	57.8
Global X Lith & Bat Tech	391.3	11.0	**28.6**	55.4
VelShs 3x Long Crude ETN	96.2	25.3	**27.2**	-33.2
VelShs 3x Long Crude	474.6	25.2	**27.1**	N.A.
ProShares:Ult Semicond	41.0	11.4	**26.9**	65.1
VnEck Vctrs:Brazil Sm Cp	106.5	4.5	**26.7**	51.8
Frst Tr ADex:Brazil	13.5	2.4	**24.9**	30.3
Direxion:Tech Bull 3X	343.0	2.0	**24.8**	84.5
Direxion:MSCI EM Bull 3X	238.0	-0.8	**24.3**	63.7
Glbl X China Mtrls ETF	3.1	2.4	**22.9**	56.5
Guggenhm China Tech ETF	209.0	3.6	**22.5**	42.2
Direxion:Hbldrs&Sup Bl3X	6.8	22.8	**22.4**	113.8
iShares:MSCI Brazil Cap	6,328.0	3.9	**22.0**	26.5
US Diesel-Heating Oil	4.1	4.4	**22.0**	9.8
DB Base Met Db Long ETN	5.4	-3.2	**21.9**	62.1
ProShares:Ult FTSE Ch 50	52.6	-1.2	**21.8**	37.0
ProShares:UP Nasdaq Bio	52.3	-0.2	**21.6**	33.2
Frst Tr ADex:China	10.8	7.1	**21.6**	43.2
ETFis Virtus LS Bio Clin	27.6	5.4	**21.3**	28.5
ProShs II:Ult Blm CrO	726.9	15.6	**20.9**	-14.9
Deutsche Latin Am Eq;S	294.6	4.6	**20.8**	18.5
Rex VolMAXX SVW Ftrs Str	21.0	20.6	**20.8**	187.5
Rydex:Emg Mk 2x Str;H	23.2	-0.6	**20.8**	44.3
ProFunds:UltraEM;Inv	59.6	-0.6	**20.7**	44.7
Glbl X Brazil MdCp ETF	5.0	2.6	**19.7**	26.0
WisdomTree:China x-S-O	31.9	4.2	**19.7**	50.7
ProFunds:Semiconduct;Inv	183.4	8.5	**19.6**	46.5
Direxion:EnergyBull 3X	517.7	32.6	**19.6**	-9.8
Fidelity Latin America	635.8	4.3	**19.6**	26.5
AdvisorShs DorsWr ADR	87.7	5.9	**19.1**	37.8
Eventide Hlthcare & LS;I	386.4	8.1	**18.6**	25.5
KraneShs:CSI China Intrt	894.2	1.1	**18.5**	39.3
PowerShares Dyn Smcnd	280.2	8.5	**18.5**	51.8
Glbl X Copper Miners ETF	52.6	-5.7	**18.4**	49.0
ProFunds:Biotech;Inv	361.6	3.8	**18.3**	31.4
ARK Innovation	121.2	0.1	**18.3**	54.3
Frst Tr ADex:Lat America	24.1	2.7	**18.2**	28.6
US Glbl:China Region	26.2	4.2	**18.0**	43.1
Oberweis:China Opps;Inv	116.7	4.3	**18.0**	32.7
Direxion:FTSE EU Bull 3X	62.0	9.3	**17.9**	73.5
Loncar Cancer Immuno	41.1	5.6	**17.8**	5.3
iShares:MSCI Nrwy Cp	32.6	3.4	**17.8**	25.0
Glbl X MSCI Norway ETF	133.0	3.5	**17.7**	25.1
GMO:GMO Resources;IV	248.3	3.4	**17.7**	31.4
ARK Genomic Rev Mlti-Sec	27.8	4.2	**17.5**	31.6
VelShs DlyInv VIX ST ETN	1,273.8	16.6	**17.4**	161.6
Frst Tr ADex:Em Mkts	368.2	3.0	**17.4**	34.6
Guggenhm China RE ETF	58.0	4.3	**17.3**	33.2

Third-Quarter Worst Performers

Fund Name	Assets ($ millions)	Performance (%) Sept.	3rd-qtr	1-year
ProShs II:UltVIX STF ETF	364.7	-28.5	**-47.5**	-93.9
VelShs Dly 2x VIX ST ETN	257.0	-28.5	**-47.4**	-93.9
Direxion:Russia Bear 3x	27.7	-13.2	**-37.9**	-54.9
Rex VolMAXX LVW Ftrs Str	3.1	-21.0	**-35.0**	-82.1
Direxion:Semicnd Bear 3X	43.8	-15.3	**-34.7**	-71.6
ProShares:UlS MSCI Brz	25.6	-8.6	**-34.4**	-53.7
ProShs II:UltPro 3x SCO	12.3	-21.9	**-33.8**	N.A.
UBS PS Daily 3x Inv Crd	31.9	-21.9	**-33.7**	N.A.
Direxion:S&P Btech Br 3X	97.2	-9.6	**-33.5**	-73.4
VelShs 3x Inv Crude	89.4	-23.2	**-32.6**	N.A.
VelShs 3x Inv Crude ETN	23.5	-23.2	**-32.6**	-29.5
VelShs 1x Long VSTOXX	20.4	-20.1	**-30.7**	N.A.
Direxion:China Bear 3X	42.7	0.3	**-29.1**	-47.4
ProFunds:UltSh Latin;Inv	14.7	-3.5	**-26.0**	-48.7
Direxion:S&P OG EP Br 3X	17.2	-33.0	**-25.5**	-14.8
ProFunds:UlSh China;Inv	2.2	-4.7	**-25.2**	-45.4
Upright Growth Fund	12.7	7.3	**-24.6**	-10.0
ProShares:UlS Semicond	5.5	-11.2	**-23.8**	-47.2
ProShs II:VIX ST Fut ETF	187.9	-15.0	**-23.7**	-71.5
VelShs VIX ShTm ETN	15.3	-15.0	**-23.6**	-71.4
iPath ETN SP500 VIX ST A	1,212.3	-15.0	**-23.6**	-71.4
ProShares:UPS Nasdaq Bio	4.2	-0.6	**-22.8**	-50.8
Direxion:Ntrl Gs Rl Br3X	3.2	-31.1	**-22.7**	12.7
Nvgtr Sentry Mgd Vol;I	14.0	-11.6	**-22.7**	-52.7
ProShs II:UlS Blm CrO	200.8	-14.8	**-22.6**	-16.0
Direxion:Tech Bear 3X	19.9	-2.9	**-22.6**	-52.8
Direxion:MSCI EM Bear 3X	101.8	-0.4	**-22.5**	-50.5
DB Crude Oil Db Sht ETN	47.4	-16.5	**-22.2**	-0.6
DB Base Metals Db Sh ETN	0.7	3.3	**-21.2**	-45.4
ProShares:UlS FTSE Ch 50	35.1	0.4	**-20.2**	-34.1
Direxion:EnergyBear 3X	43.0	-25.5	**-19.7**	-11.9
ProFunds:UltSh EM;Inv	2.9	-0.2	**-19.2**	-38.7
Rydex:Inv EM 2x Str;H	0.6	0.1	**-18.4**	-38.1
VelShs 3x Long Nat Gas	654.6	-11.5	**-17.5**	-68.5
VelShs Dly 2x VIX MT ETN	1.5	-7.6	**-17.4**	-71.1
ProShares:UltP Sht QQQ	589.5	0.3	**-17.2**	-49.9
Direxion:Gold M Id Br 3X	389.6	21.9	**-16.7**	-23.6
iPath Bloomberg NatGas A	2.9	-12.1	**-16.6**	-46.4
ProShares:UltPSh Rus2000	96.1	-16.9	**-16.5**	-48.9
Direxion:Sm Cap Bear 3X	631.9	-16.8	**-16.3**	-49.0
Teucrium:Wheat	65.5	1.8	**-16.2**	-8.6
ProShares:UIPS Fin Sel	1.8	-14.8	**-15.6**	-64.8
ProShares:UlS MSCI EM	35.4	-0.1	**-15.3**	-36.2
ProShares:UlS Nasdaq Bio	41.0	-0.3	**-15.2**	-34.6
ProShares:UltP Sht Dow30	190.0	-6.1	**-14.7**	-49.7
ProShares:UlS Tech	3.1	-1.0	**-14.5**	-41.1
ProShares:UlS Bas Mat	8.1	-7.5	**-14.1**	-37.0
Direxion:Reg Bnk Bear 3X	4.9	-25.5	**-14.1**	-67.1
Direxion:Finl Bear 3X	186.8	-10.1	**-14.1**	-54.2
Direxion:MSCI DM Bear 3X	4.2	-6.7	**-13.7**	-42.1
ProShares:UlS Oil Gas	26.5	-17.7	**-12.9**	-4.2
VelShs VIX Tail Risk ETN	21.2	-3.0	**-12.5**	-25.2
DB Agri Double Long ETN	7.1	-0.8	**-12.3**	-20.4
Direxion:S&P 500 Bear 3X	421.9	-5.8	**-12.1**	-40.8
ProShares:Ul PrSh S&P500	693.8	-5.8	**-12.0**	-40.4
Glbl X MSCI Pakistan ETF	38.2	2.2	**-11.8**	-4.6
DB Commodity Db Sht ETN	0.6	-7.1	**-11.7**	-5.9
ProFunds:UltSh NAS;Inv	18.6	0.2	**-11.7**	-36.9
ProShares:UlS FTSE Euro	28.9	-6.2	**-11.7**	-36.2
ProShares:UlS SC600	2.5	-14.0	**-11.6**	-35.4
Direxion:Jr Mnr Bear 3X	170.0	19.5	**-11.6**	-41.3
ProShares:UlS QQQ	330.3	0.2	**-11.6**	-36.3
Rydex:Inv NAS 2x;H	17.9	0.2	**-11.5**	-36.5
ProFunds:UltSh Sm-Cp;Inv	9.9	-11.7	**-11.3**	-35.7
Direxion:M SC Br 2x;Inv	5.9	-12.4	**-11.3**	-36.6

Five-Year Best Performers

Fund Name	Assets ($ millions)	Performance (%) 3rd-qtr	1-year	5-year*
Direxion:Semicnd Bull 3X	365.3	41.5	150.5	**77.9**
ProShares:UltP QQQ	2,056.0	17.2	77.8	**49.8**
ProShares:UlP Fin Sel	23.7	14.1	128.9	**47.1**
ProShares:Ult Semicond	41.0	26.9	65.1	**47.0**
Direxion:Hlthcre Bull 3X	162.3	9.1	42.5	**46.9**
Direxion:Finl Bull 3X	1,444.6	13.5	91.9	**44.9**
Direxion:Tech Bull 3X	343.0	24.8	84.5	**43.3**
VelShs DlyInv VIX ST ETN	1,273.8	17.4	161.6	**41.5**
ProShs II:ShVIX STF ETF	1,434.9	16.9	158.0	**40.7**
ProShares:UltPro S&P500	942.2	12.4	58.4	**39.1**
Direxion:S&P 500 Bull 3X	599.4	12.3	57.6	**38.5**
ProShares:UltP MidCap400	32.7	8.1	51.5	**38.1**
Direxion:MidCapBull 3X	54.2	8.0	50.8	**37.6**
ProShares:UltP Dow30	184.4	16.0	87.4	**37.1**
ProShares:UltP Rus2000	114.7	15.9	62.4	**34.7**
ProFunds:Semiconduct;Inv	183.4	19.6	46.5	**34.1**
Direxion:Sm Cap Bull 3X	763.7	16.0	62.0	**34.0**
ProShares:Ult QQQ	1,319.0	11.6	48.6	**33.7**
Direxion:M NAS Bl 2x;Inv	171.1	11.4	47.4	**33.3**
Rydex:NASDAQ 2x;H	355.8	11.3	47.2	**32.5**
ProFunds:UltraNASDAQ;Inv	361.3	11.1	46.9	**32.4**
ProShares:Ult Hlth Cr	105.1	7.0	30.6	**32.3**
ProFunds:Internet;Inv	155.1	11.6	37.5	**31.2**
ProShares:Ult Nasdaq Bio	502.2	14.7	26.3	**31.2**
ProShares:Ult Indust	20.8	11.1	47.7	**31.1**
ProShares:Ult Finl	812.9	8.8	56.4	**30.3**
VelShs DlyInv VIX MT ETN	169.8	6.9	71.3	**30.0**
ProShares:Ult Tech	244.6	14.9	57.4	**30.0**
PowerShares Dyn Smcnd	280.2	18.5	51.8	**29.9**
ProFunds:Biotech;Inv	361.6	18.3	31.4	**29.0**
ProShares:Ult Cons Sv	20.1	-0.1	24.6	**28.7**
ProShares:Ult SC600	22.1	11.2	40.7	**28.7**
ProFunds:UltraJapan;Inv	19.2	2.9	48.0	**28.3**
Direxion:Retail Bull 3X	24.0	5.7	-29.8	**27.6**
iShares:PHLX Semicon	1,089.2	13.5	41.8	**26.7**
ProShares:Ultra S&P500	1,906.3	8.3	36.9	**26.5**
Fidelity Sel Semicnd	2,983.1	9.6	26.4	**26.3**
VnEck Vctrs:Semicnd ETF	750.6	13.9	35.7	**26.1**
ProShares:Ult MC400	145.5	5.7	33.6	**26.0**
Fidelity Adv Semicnd;I	223.1	9.5	26.1	**26.0**
Direxion:M S&P Bl 2x;Inv	72.8	8.0	35.6	**26.0**
SPDR S&P Semiconductor	306.6	6.4	24.1	**25.5**
ProFunds:UltraMidCap;Inv	87.9	5.5	32.5	**25.3**
Rydex:S&P 500 2x;H	132.7	8.1	35.5	**25.3**
T Rowe Price Glbl Tech	5,534.8	8.0	31.7	**25.2**
ProShares:Ultra Dow30	337.9	10.6	53.0	**25.2**
ProFunds:UltraBull;Inv	102.4	8.0	35.6	**25.1**
DB Commodity Db Sht ETN	0.6	-11.7	-5.9	**25.1**
iPath ETN LgEx Rus 2000	1.6	8.3	32.4	**24.9**
ProShares:Ult Rus2000	166.0	10.8	40.8	**24.9**
Direxion:M SC Bl 2x;Inv	16.5	10.4	39.5	**24.8**
iPath ETN LgEx Rus 1000	1.4	6.2	27.2	**24.3**
iPath ETN LgEx S&P	2.1	6.2	27.3	**24.2**
iShares:US Aer&Def ETF	3,962.8	13.5	39.5	**23.9**
SPDR S&P Aero&Def	827.6	13.8	38.6	**23.9**
ProShares:Ult Cons Gd	14.4	-1.4	15.0	**23.8**
Rydex:Dow 2x;H	39.9	10.4	51.5	**23.6**
ProFunds:UltraSm-Cap;Inv	57.4	10.5	38.9	**23.6**
ProFunds:UltraDow 30;Inv	33.8	10.3	51.2	**23.5**
ProFunds:Health Care;Inv	61.4	5.1	21.6	**23.4**
SPDR S&P Biotech	4,147.1	12.2	30.9	**23.3**
Columbia:Gl Tech Gr;Z	818.0	10.6	34.0	**23.3**
ProFunds:Banks;Inv	15.9	5.9	65.6	**23.2**
Rydex:Rus 2K 2x;H	37.7	10.4	38.8	**23.1**
Guggenhm China Tech ETF	209.0	22.5	42.2	**23.0**

Five-Year Worst Performers

Fund Name	Assets ($ millions)	Performance (%) 3rd-qtr	1-year	5-year*
ProShs II:UltVIX STF ETF	364.7	-47.5	-93.9	**-87.2**
VelShs Dly 2x VIX ST ETN	257.0	-47.4	-93.9	**-87.2**
Direxion:Nat Gas Bull 3X	52.4	14.4	-52.1	**-72.3**
VelShs 3x Long Nat Gas	654.6	-17.5	-68.5	**-69.4**
Direxion:Gold M Id Bl 3X	1,501.2	4.8	-57.9	**-66.1**
VelShs 3x Long Crude ETN	96.2	27.2	-33.2	**-65.3**
Direxion:Semicnd Bear 3X	43.8	-34.7	-71.6	**-62.6**
VelShs Dly 2x VIX MT ETN	1.5	-17.4	-71.1	**-57.0**
ProShs II:VIX ST Fut ETF	187.9	-23.7	-71.5	**-55.7**
VelShs VIX ShTm ETN	15.3	-23.6	-71.4	**-55.6**
iPath ETN SP500 VIX ST A	1,212.3	-23.6	-71.4	**-55.6**
VelShs 3x Long Silver	266.0	-3.5	-47.9	**-51.2**
ProShs II:Ult Blm Nat Gs	51.5	-10.5	-39.7	**-46.8**
ProShares:UIPS Fin Sel	1.8	-15.6	-64.8	**-46.6**
Direxion:Gold M Id Br 3X	389.6	-16.7	-23.6	**-46.5**
ProShares:UltP Sht QQQ	589.5	-17.2	-49.9	**-46.1**
Direxion:China Bear 3X	42.7	-29.1	-47.4	**-46.1**
Direxion:Finl Bear 3X	186.8	-14.1	-54.2	**-45.1**
Direxion:Tech Bear 3X	19.9	-22.6	-52.8	**-44.1**
ProShs II:Ult Blm CrO	726.9	20.9	-14.9	**-43.6**
Direxion:Sm Cap Bear 3X	631.9	-16.3	-49.0	**-43.5**
ProShares:UlS Semicond	5.5	-23.8	-47.2	**-43.0**
Direxion:Russia Bear 3x	27.7	-37.9	-54.9	**-43.0**
ProShares:UltPSh Rus2000	96.1	-16.5	-48.9	**-42.9**
ProShares:UlS Nasdaq Bio	41.0	-15.2	-34.6	**-42.2**
Direxion:MidCapBear 3X	8.5	-9.7	-41.7	**-41.0**
ProShares:UltPSh MdCp400	3.0	-9.8	-41.7	**-40.7**
ProFunds:UltSh Japan;Inv	1.3	-4.3	-38.3	**-39.1**
Direxion:S&P 500 Bear 3X	421.9	-12.1	-40.8	**-39.0**
iPath Bloomberg NatGas A	2.9	-16.6	-46.4	**-38.5**
ProShares:Ul PrSh S&P500	693.8	-12.0	-40.4	**-38.3**
ProShares:UltP Sht Dow30	190.0	-14.7	-49.7	**-36.9**
Direxion:MSCI RE Bear 3X	15.4	-3.9	-10.2	**-34.6**
ProFunds:UlSh China;Inv	2.2	-25.2	-45.4	**-34.4**
ProFunds:UltSh NAS;Inv	18.6	-11.7	-36.9	**-33.2**
Rydex:Inv NAS 2x;H	17.9	-11.5	-36.5	**-32.9**
ProShares:UlS QQQ	330.3	-11.6	-36.3	**-32.5**
Direxion:Russia Bull 3x	160.9	53.5	50.1	**-32.5**
ProShares:UlS Hlth Cr	1.2	-7.5	-27.9	**-32.3**
ProShs II:Ult Silver	271.4	2.4	-30.6	**-32.1**
ProShares:UlS Tech	3.1	-14.5	-41.1	**-31.6**
ProShs II:VIX MT Fut ETF	44.2	-8.2	-44.9	**-31.4**
VelShs VIX MdTm ETN	1.0	-8.2	-44.8	**-31.2**
iPath ETN SP500 VIX MT A	38.4	-8.2	-44.8	**-31.2**
ProShares:UlS SC600	2.5	-11.6	-35.4	**-31.1**
Direxion:MSCI DM Bear 3X	4.2	-13.7	-42.1	**-31.1**
ProShares:UlS Indust	2.8	-10.9	-35.9	**-31.0**
ProShares:UlS Finl	42.6	-9.2	-39.7	**-30.8**
ProFunds:UltSh Sm-Cp;Inv	9.9	-11.3	-35.7	**-30.2**
Rydex:Inv Rus 2x;H	14.4	-11.1	-35.1	**-29.9**
ProShares:UlS Rus2000	163.1	-11.0	-34.9	**-29.5**
Direxion:M SC Br 2x;Inv	5.9	-11.3	-36.6	**-29.5**
ProFunds:UltSh Md-Cp;Inv	2.0	-6.5	-29.8	**-29.0**
ProShares:UlS Cons Sv	1.8	-0.9	-23.2	**-29.0**
Direxion:MSCI EM Bear 3X	101.8	-22.5	-50.5	**-28.2**
ProShares:UlS MC400	5.8	-6.5	-29.6	**-28.2**
ProShares:UlS FTSE Ch 50	35.1	-20.2	-34.1	**-27.5**
ProFunds:UltraBear;Inv	15.7	-8.4	-29.5	**-27.4**
Rydex:Inv S&P 2x;H	35.0	-8.3	-29.5	**-27.2**
DB Commodity Db Lng ETN	1.1	9.2	4.9	**-26.7**
VelShs 3x Long Gold	108.1	7.7	-16.0	**-26.6**
ProShares:Ul Sht S&P500	1,369.9	-8.1	-28.9	**-26.6**
ProFunds:UltSh Dow30;Inv	5.3	-10.1	-36.9	**-26.5**
Direxion:M S&P Br 2x;Inv	21.1	-8.1	-29.4	**-26.5**
Rydex:Inv Dow 2x;H	11.5	-10.2	-37.1	**-26.4**

One-Year Best Performers

Fund Name	Assets ($ millions)	Performance (%) Sept.	3rd-qtr	1-year
Rex VolMAXX SVW Ftrs Str	21.0	20.6	20.8	**187.5**
VelShs DlyInv VIX ST ETN	1,273.8	16.6	17.4	**161.6**
ProShs II:ShVIX STF ETF	1,434.9	16.5	16.9	**158.0**
Direxion:Semicnd Bull 3X	365.3	15.2	41.5	**150.5**
ProShares:UlP Fin Sel	23.7	15.2	14.1	**128.9**
Direxion:Hbldrs&Sup Bl3X	6.8	22.8	22.4	**113.8**
VelShs VIX Short Vol Hdg	53.9	12.2	10.1	**100.7**
Direxion:Reg Bnk Bull 3X	23.2	29.0	7.4	**98.8**
Direxion:Finl Bull 3X	1,444.6	10.3	13.5	**91.9**
Direxion:MSCI EF Bull 2X	9.3	6.8	13.5	**90.1**
ProShares:UltP Dow30	184.4	6.1	16.0	**87.4**
Direxion:Tech Bull 3X	343.0	2.0	24.8	**84.5**
ProShares:UltP QQQ	2,056.0	-0.9	17.2	**77.8**
Direxion:S&P Btech Bl 3X	380.6	8.9	35.4	**74.8**
UBS E-TRACS MR2xL ISE Hb	6.3	15.2	12.5	**73.5**
Direxion:FTSE EU Bull 3X	62.0	9.3	17.9	**73.5**
VelShs DlyInv VIX MT ETN	169.8	3.7	6.9	**71.3**
ProFunds:Banks;Inv	15.9	10.3	5.9	**65.6**
UBS E-TRACS MP2xL WF MLP	25.4	7.7	11.6	**65.3**
ProShares:Ult Semicond	41.0	11.4	26.9	**65.1**
Direxion:Latin Bull 3X	15.9	4.0	51.6	**65.0**
Direxion:MSCI EM Bull 3X	238.0	-0.8	24.3	**63.7**
VnEck Vctrs:Rare E/SM	60.8	10.4	45.4	**62.7**
ProShares:UltP Rus2000	114.7	19.3	15.9	**62.4**
DB Base Met Db Long ETN	5.4	-3.2	21.9	**62.1**
Direxion:Sm Cap Bull 3X	763.7	19.3	16.0	**62.0**
Direxion:MSCI DM Bull 3X	28.4	6.8	14.3	**58.7**
ARK Web x.0	86.4	-1.4	15.8	**58.4**
ProShares:UltPro S&P500	942.2	5.8	12.4	**58.4**
ProFunds:UltraChina;Inv	35.3	3.7	28.8	**57.8**
Direxion:S&P 500 Bull 3X	599.4	5.8	12.3	**57.6**
ProShares:Ult Tech	244.6	0.5	14.9	**57.4**
Glbl X China Mtrls ETF	3.1	2.4	22.9	**56.5**
ProShares:Ult Finl	812.9	7.4	8.8	**56.4**
Global X Lith & Bat Tech	391.3	11.0	28.6	**55.4**
ARK Innovation	121.2	0.1	18.3	**54.3**
Direxion:S Korea Bull 3X	11.8	1.6	2.4	**53.7**
VnEck Vctrs:Poland	20.9	-3.4	9.7	**53.6**
ProShares:Ultra Dow30	337.9	4.1	10.6	**53.0**
Direxion:China Bull 3X	203.7	-2.1	33.1	**52.1**
PowerShares Dyn Smcnd	280.2	8.5	18.5	**51.8**
VnEck Vctrs:Brazil Sm Cp	106.5	4.5	26.7	**51.8**
Rydex:Dow 2x;H	39.9	4.0	10.4	**51.5**
ProShares:UltP MidCap400	32.7	11.7	8.1	**51.5**
iShares:MSCI Brz Sm-Cap	62.3	4.6	31.4	**51.4**
ProFunds:UltraDow 30;Inv	33.8	4.0	10.3	**51.2**
Direxion:MidCapBull 3X	54.2	11.6	8.0	**50.8**
WisdomTree:China x-S-O	31.9	4.2	19.7	**50.7**
iPath ETN Glbl Carbon A	1.1	22.0	48.4	**50.5**
Direxion:Russia Bull 3x	160.9	13.3	53.5	**50.1**
iShares:MSCI Poland Cp	363.5	-3.1	9.1	**49.9**
Glbl X Copper Miners ETF	52.6	-5.7	18.4	**49.0**
iPath ETN LgEn MSCI EM	2.4	-1.0	15.4	**48.9**
ProShares:Ult QQQ	1,319.0	-0.6	11.6	**48.6**
Rydex:MR NASDAQ-100 2S;H	32.2	-0.5	11.6	**48.4**
ProFunds:UltraJapan;Inv	19.2	8.1	2.9	**48.0**
ProShares:Ult Bas Mat	57.6	7.7	15.0	**47.9**
ProShares:Ult Indust	20.8	7.9	11.1	**47.7**
Direxion:M NAS Bl 2x;Inv	171.1	-0.6	11.4	**47.4**
ProFunds:UltraLatin;Inv	36.2	2.7	31.8	**47.3**
ProShares:Ult FTSE Euro	14.6	6.3	12.0	**47.3**
Rydex:NASDAQ 2x;H	355.8	-0.6	11.3	**47.2**
ProFunds:UltraNASDAQ;Inv	361.3	-0.7	11.1	**46.9**
ProFunds:Semiconduct;Inv	183.4	8.5	19.6	**46.5**
iShares:MSCI Italy Cap	840.6	3.6	13.5	**46.0**

One-Year Worst Performers

Fund Name	Assets ($ millions)	Performance (%) Sept.	3rd-qtr	1-year
ProShs II:UltVIX STF ETF	364.7	-28.5	-47.5	**-93.9**
VelShs Dly 2x VIX ST ETN	257.0	-28.5	-47.4	**-93.9**
Rex VolMAXX LVW Ftrs Str	3.1	-21.0	-35.0	**-82.1**
Direxion:Jr Mnr Bull 3X	809.0	-21.1	-3.8	**-74.2**
Direxion:S&P Btech Br 3X	97.2	-9.6	-33.5	**-73.4**
Direxion:Semicnd Bear 3X	43.8	-15.3	-34.7	**-71.6**
ProShs II:VIX ST Fut ETF	187.9	-15.0	-23.7	**-71.5**
VelShs VIX ShTm ETN	15.3	-15.0	-23.6	**-71.4**
iPath ETN SP500 VIX ST A	1,212.3	-15.0	-23.6	**-71.4**
VelShs Dly 2x VIX MT ETN	1.5	-7.6	-17.4	**-71.1**
VelShs 3x Long Nat Gas	654.6	-11.5	-17.5	**-68.5**
Direxion:Reg Bnk Bear 3X	4.9	-25.5	-14.1	**-67.1**
ProShares:UIPS Fin Sel	1.8	-14.8	-15.6	**-64.8**
Direxion:Gold M Id Bl 3X	1,501.2	-20.5	4.8	**-57.9**
Direxion:Russia Bear 3x	27.7	-13.2	-37.9	**-54.9**
Direxion:Finl Bear 3X	186.8	-10.1	-14.1	**-54.2**
ProShares:UlS MSCI Brz	25.6	-8.6	-34.4	**-53.7**
Direxion:Tech Bear 3X	19.9	-2.9	-22.6	**-52.8**
Nvgtr Sentry Mgd Vol;I	14.0	-11.6	-22.7	**-52.7**
Direxion:Nat Gas Bull 3X	52.4	39.7	14.4	**-52.1**
ProShares:UPS Nasdaq Bio	4.2	-0.6	-22.8	**-50.8**
Direxion:Slvr M Id Bl 2X	4.5	-12.0	-7.7	**-50.6**
Direxion:MSCI EM Bear 3X	101.8	-0.4	-22.5	**-50.5**
ProShares:UltP Sht QQQ	589.5	0.3	-17.2	**-49.9**
ProShares:UltP Sht Dow30	190.0	-6.1	-14.7	**-49.7**
Direxion:Sm Cap Bear 3X	631.9	-16.8	-16.3	**-49.0**
ProShares:UltPSh Rus2000	96.1	-16.9	-16.5	**-48.9**
ProFunds:UltSh Latin;Inv	14.7	-3.5	-26.0	**-48.7**
VelShs 3x Long Silver	266.0	-15.2	-3.5	**-47.9**
Direxion:China Bear 3X	42.7	0.3	-29.1	**-47.4**
ProShares:UlS Semicond	5.5	-11.2	-23.8	**-47.2**
iPath Bloomberg NatGas A	2.9	-12.1	-16.6	**-46.4**
DB Base Metals Db Sh ETN	0.7	3.3	-21.2	**-45.4**
ProFunds:UlSh China;Inv	2.2	-4.7	-25.2	**-45.4**
ProShs II:VIX MT Fut ETF	44.2	-3.8	-8.2	**-44.9**
iPath Bloomberg Sugar A	72.0	-6.4	-1.7	**-44.8**
VelShs VIX MdTm ETN	1.0	-3.8	-8.2	**-44.8**
iPath ETN SP500 VIX MT A	38.4	-3.8	-8.2	**-44.8**
Direxion:S&P OG EP Bl 3X	177.5	43.3	17.0	**-44.1**
Direxion:MSCI DM Bear 3X	4.2	-6.7	-13.7	**-42.1**
Direxion:MidCapBear 3X	8.5	-10.9	-9.7	**-41.7**
ProShares:UltPSh MdCp400	3.0	-10.9	-9.8	**-41.7**
Direxion:Jr Mnr Bear 3X	170.0	19.5	-11.6	**-41.3**
ProShares:UlS Tech	3.1	-1.0	-14.5	**-41.1**
Direxion:S&P 500 Bear 3X	421.9	-5.8	-12.1	**-40.8**
ProShares:Ul PrSh S&P500	693.8	-5.8	-12.0	**-40.4**
ProShares:UlS Finl	42.6	-7.3	-9.2	**-39.7**
ProShs II:Ult Blm Nat Gs	51.5	-6.7	-10.5	**-39.7**
ProFunds:UltSh EM;Inv	2.9	-0.2	-19.2	**-38.7**
iPath ETN P Beta Sugar	1.0	-5.9	-3.1	**-38.6**
ProFunds:UltSh Japan;Inv	1.3	-8.0	-4.3	**-38.3**
Rydex:Inv EM 2x Str;H	0.6	0.1	-18.4	**-38.1**
Rydex:Inv Dow 2x;H	11.5	-4.1	-10.2	**-37.1**
ProShares:UlS Bas Mat	8.1	-7.5	-14.1	**-37.0**
ProFunds:UltSh Dow30;Inv	5.3	-4.1	-10.1	**-36.9**
ProFunds:UltSh NAS;Inv	18.6	0.2	-11.7	**-36.9**
Direxion:M SC Br 2x;Inv	5.9	-12.4	-11.3	**-36.6**
Rydex:Inv NAS 2x;H	17.9	0.2	-11.5	**-36.5**
ProShares:UlS Dow30	220.1	-4.0	-9.9	**-36.4**
ProShares:UlS QQQ	330.3	0.2	-11.6	**-36.3**
ProShares:UlS MSCI EM	35.4	-0.1	-15.3	**-36.2**
ProShares:UlS FTSE Euro	28.9	-6.2	-11.7	**-36.2**
ProShares:UlS Indust	2.8	-7.7	-10.9	**-35.9**
ProFunds:UltSh Sm-Cp;Inv	9.9	-11.7	-11.3	**-35.7**
Teucrium:Sugar	7.8	-6.1	-2.2	**-35.7**

Ten-Year Best Performers

Fund Name	Assets ($ millions)	Performance (%) 3rd-qtr	1-year	10-year*
ProFunds:Biotech;Inv	361.6	18.3	31.4	**20.0**
ProFunds:Internet;Inv	155.1	11.6	37.5	**18.0**
ProShares:Ult Hlth Cr	105.1	7.0	30.6	**17.7**
ProShares:Ult QQQ	1,319.0	11.6	48.6	**17.6**
Delaware Healthcare;A	394.3	9.5	24.2	**17.5**
Frst Tr:NYSEArcaBiotech	1,142.7	8.8	24.4	**17.3**
Rydex:NASDAQ 2x;H	355.8	11.3	47.2	**16.8**
ProFunds:UltraNASDAQ;Inv	361.3	11.1	46.9	**16.8**
SPDR S&P Biotech	4,147.1	12.2	30.9	**16.7**
ProShares:Ult Cons Sv	20.1	-0.1	24.6	**16.0**
T Rowe Price Glbl Tech	5,534.8	8.0	31.7	**15.9**
Fidelity Sel Bio Tech	9,881.7	10.3	21.3	**15.8**
T Rowe Price Hlth Sci	11,679.1	5.3	19.8	**15.5**
Fidelity Adv Biotech;I	2,772.9	10.8	21.5	**15.4**
PowerShares Dyn Pharm	710.6	4.3	6.9	**15.2**
Rydex:Biotechnology;Inv	380.7	8.4	19.2	**15.2**
iShares:Nasdaq Biotech	9,853.4	7.6	15.6	**15.1**
Pru Jenn Health Sci;Z	2,341.4	5.3	21.6	**14.8**
Frst Tr:DJ Internet Idx	4,627.8	8.0	25.5	**14.7**
ProShares:Ult Cons Gd	14.4	-1.4	15.0	**14.5**
PIMCO:Stk+ L Dur;Inst	694.1	5.7	17.7	**14.4**
Franklin Str:BD;A	1,508.2	9.3	18.3	**14.2**
Fidelity Sel IT Svcs	1,821.9	8.6	24.7	**14.1**
Fidelity Sel Retailing	1,746.5	2.3	11.3	**14.1**
Fidelity Sel SW & IT Svc	4,533.1	6.9	24.9	**14.0**
ProShares:Ult Tech	244.6	14.9	57.4	**13.7**
ProFunds:Health Care;Inv	61.4	5.1	21.6	**13.4**
Fidelity Sel Health	6,953.4	3.6	15.3	**13.1**
BlackRock:HS Opp;A	5,913.5	3.2	16.2	**13.1**
Direxion:M NAS Bl 2x;Inv	171.1	11.4	47.4	**13.1**
Fidelity Adv Hlth;I	2,709.1	3.7	15.4	**13.0**
Jns Hndsn:Glb Lf Sci;D	3,691.6	4.3	14.8	**12.9**
PRIMECAP:Odyssey Ag Gr	8,337.0	4.0	22.4	**12.9**
iShares:US Pharma ETF	644.5	1.2	6.1	**12.8**
Fidelity Sel Med Equip	4,064.6	-0.9	12.1	**12.8**
Frst Tr ADex:Hlth Care	1,021.0	0.8	10.9	**12.7**
Brown Cap Sm Co;Inv	3,808.0	3.8	20.5	**12.6**
Parnassus:Endeavor	4,588.2	3.5	22.3	**12.6**
Guggenhm S&P500 Eq W HC	720.0	0.9	13.3	**12.5**
PIMCO:Stk+ Small;Inst	1,156.0	6.7	26.0	**12.4**
ProFunds:Cnsmr Svcs;Inv	33.1	-0.2	17.3	**12.3**
Frst Tr:NASDAQ100 Tech	2,032.1	9.4	34.9	**12.2**
SPDR S&P Pharm	450.5	-1.0	-3.0	**12.2**
T Rowe Price New Hzns	20,649.8	6.7	24.7	**12.1**
PowerShares Dyn Sftwre	117.3	11.0	27.7	**12.0**
PowerShares QQQ Trust 1	53,215.2	5.9	23.5	**12.0**
Shelton:Nasdaq-100;Dir	482.9	6.1	22.9	**11.9**
Eaton Vance AC SMID;I	9,924.1	3.5	17.4	**11.9**
T Rowe Price Md/Tele	4,718.3	5.7	22.6	**11.9**
Hartfd:Healthcare HLS;IB	N.A.	1.6	17.8	**11.9**
Saratoga:Tech&Comm;I	49.9	5.3	22.9	**11.8**
Jackson SMID-Cp Gro;IS	328.2	6.3	14.1	**11.8**
Fidelity OTC	16,251.5	5.8	29.1	**11.8**
Fidelity Sel Chemicals	1,798.9	10.6	33.6	**11.8**
Berkshire:Focus	67.4	9.2	31.8	**11.7**
Firsthand Tech Opptys	102.4	11.8	34.5	**11.7**
Fidelity Sel Technlgy	5,988.4	10.3	38.0	**11.7**
Red Oak Technology Slct	454.3	6.9	27.7	**11.6**
Columbia:Sel C&Info;A	5,619.8	9.9	32.9	**11.6**
iShares:N Amer Tech-Soft	1,039.5	6.9	29.0	**11.6**
Fidelity Sm Cap Disc	5,082.4	1.5	13.7	**11.6**
Virtus:KAR Sm-Cap Gro;I	1,259.2	9.8	33.1	**11.5**
USAA NASDAQ-100 Idx	1,474.9	6.0	23.4	**11.5**
Vanguard Health Care;Adm	47,887.3	1.0	11.9	**11.5**
RBB:BP Lg/Sh Eq;Inst	945.7	4.2	9.0	**11.5**

Ten-Year Worst Performers

Fund Name	Assets ($ millions)	Performance (%) 3rd-qtr	1-year	10-year*
ProShares:UlS Rl Est	31.7	-2.5	-10.1	**-39.8**
Direxion:M SC Br 2x;Inv	5.9	-11.3	-36.6	**-35.8**
ProShares:UlS Semicond	5.5	-23.8	-47.2	**-34.1**
Rydex:Inv Rus 2x;H	14.4	-11.1	-35.1	**-33.0**
ProShares:UlS Finl	42.6	-9.2	-39.7	**-32.6**
ProFunds:UltSh Sm-Cp;Inv	9.9	-11.3	-35.7	**-31.9**
United States Nat Gas	489.1	-3.5	-21.4	**-31.9**
ProFunds:UltSh NAS;Inv	18.6	-11.7	-36.9	**-31.6**
ProShares:UlS QQQ	330.3	-11.6	-36.3	**-31.3**
Rydex:Inv NAS 2x;H	17.9	-11.5	-36.5	**-31.1**
ProShares:UlS Rus2000	163.1	-11.0	-34.9	**-31.0**
ProShares:UlS SC600	2.5	-11.6	-35.4	**-31.0**
ProShares:UlS Bas Mat	8.1	-14.1	-37.0	**-30.3**
ProShares:UlS Tech	3.1	-14.5	-41.1	**-29.4**
ProFunds:UltSh Md-Cp;Inv	2.0	-6.5	-29.8	**-29.2**
ProShares:UlS Cons Sv	1.8	-0.9	-23.2	**-28.5**
ProShares:UlS MC400	5.8	-6.5	-29.6	**-28.4**
ProShares:UlS Indust	2.8	-10.9	-35.9	**-27.3**
ProShares:UlS Hlth Cr	1.2	-7.5	-27.9	**-26.6**
ProFunds:UltSh EM;Inv	2.9	-19.2	-38.7	**-26.3**
Direxion:M S&P Br 2x;Inv	21.1	-8.1	-29.4	**-24.3**
ProFunds:UltraBear;Inv	15.7	-8.4	-29.5	**-24.1**
ProFunds:UltSh Japan;Inv	1.3	-4.3	-38.3	**-23.8**
ProShares:UlS Oil Gas	26.5	-12.9	-4.2	**-23.6**
Rydex:Inv S&P 2x;H	35.0	-8.3	-29.5	**-23.6**
ProFunds:UltSh Dow30;Inv	5.3	-10.1	-36.9	**-23.4**
ProShares:Ul Sht S&P500	1,369.9	-8.1	-28.9	**-23.2**
Rydex:Inv Dow 2x;H	11.5	-10.2	-37.1	**-22.8**
ProShares:UlS Cons Gd	1.7	0.7	-16.6	**-22.7**
ProShares:UlS Dow30	220.1	-9.9	-36.4	**-22.4**
ProShares:UlS Util	7.6	-5.9	-23.6	**-21.8**
ProFunds:UltSh Intl;Inv	2.7	-9.9	-31.2	**-21.0**
iPath ETN S&P GSCI CTR A	652.0	15.1	-6.8	**-19.4**
ProFunds:Sh Real Est;Inv	1.0	-1.4	-5.7	**-17.9**
ProFunds:Prec Metals;Inv	31.1	5.5	-24.5	**-16.6**
United States Oil Fund	2,576.6	10.3	-5.1	**-16.4**
ProFunds:Sh NASDAQ;Inv	10.1	-5.9	-20.3	**-16.3**
ProShares:Sht QQQ	392.5	-5.8	-19.8	**-15.2**
Rydex:Inv NAS Str;Inv	10.8	-5.7	-19.4	**-15.1**
ProFunds:Sh Sm-Cap;Inv	9.9	-5.5	-19.3	**-15.0**
ProShares:Sht SC600	6.5	-5.9	-19.0	**-14.5**
Rydex:Inv Rus 2000 Str;H	5.4	-5.6	-18.8	**-14.2**
ProShares:Sht Rus2000	363.3	-5.5	-18.6	**-14.2**
Guinn Atkin:Alt Energy	10.5	8.0	7.6	**-14.2**
Frst Tr:Natural Gas	151.1	6.1	-16.2	**-13.4**
Midas Fund	19.6	1.7	-13.0	**-13.3**
Rydex:Inv Md-Cp Str;H	0.8	-3.0	-15.6	**-13.2**
PowerShares WldHill CE	95.6	8.5	23.3	**-13.2**
ProShares:Sht MC400	14.5	-3.2	-15.7	**-13.2**
ProFunds:Sh Pr Mtls;Inv	13.5	-5.5	1.9	**-13.0**
Comstock Cap Val;I	38.6	-4.3	-21.0	**-12.6**
ProFunds:Rs Rt Opp;Inv	34.9	-0.5	9.2	**-12.5**
Rydex:Cmdty Str;H	3.7	6.6	1.1	**-11.8**
iPath ETN S&P GSCI TR A	21.7	8.6	1.3	**-11.6**
Leuthold:Grizzly Short	212.9	-4.3	-13.0	**-11.6**
Direxion:M EM Bl 2x;Inv	9.8	15.9	42.3	**-11.4**
ProFunds:OE S&D US;Inv	9.4	6.6	-13.1	**-11.4**
ProFunds:Bear;Inv	53.3	-4.3	-16.2	**-11.4**
PowerShares DB MS Oil	372.6	9.6	-1.2	**-10.9**
iShares:S&P GSCI Cmdty	1,170.5	6.9	0.8	**-10.8**
ProFunds:UltraEM;Inv	59.6	20.7	44.7	**-10.8**
Rydex:Inv S&P500 Str;Inv	71.3	-4.0	-15.6	**-10.7**
ProShares:Short S&P500	1,998.2	-4.0	-15.6	**-10.7**
ProShares:Short Dow30	264.5	-5.1	-20.2	**-10.4**
ProFunds:Mobile Tel;Inv	7.1	-0.9	18.3	**-10.4**

Note: For funds with multiple share classes, only the largest is shown

*Annualized

N.A. = not applicable, fund is too new

Source: Lipper

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Insights on SRI, Alternative Investing, 401(k)s

The Tricky Ethics of Socially Responsible Investing

ISTOCKPHOTO/GETTY IMAGES

The decision to invest more ethically is more complex than many investors realize.

It is often claimed that socially responsible investors—those who incorporate social, environmental or other ethical concerns into the construction of a portfolio—can "do well by doing good."

A 2008 paper in the Journal of Banking & Finance concluded that "existing studies hint but don't unequivocally demonstrate that SRI investors are willing to accept suboptimal financial performance to pursue social or ethical objectives." Still, the reality appears to be that differences in performance, if any, are small enough that socially responsible investors can still "do well."

What is less clear is whether such investors are truly "doing good." Unlike many good deeds we may do in life—picking up trash, donating to a good cause, or helping out someone in need—our actions in the stock market can often be easily (and profitably) reversed by others who may not share our nonfinancial motives.

Suppose a group of environmentally conscious investors decides to engage in fossil-fuel divestment. All else equal, their divestment will put downward pressure on equities within the fossil-fuel industry. Presumably many such investors also hope that such downward pressure will result in consequences such as reduced investment interest, a higher cost of capital for divested firms, corporate policy change, or some other effect that ultimately leads to a world with less fossil-fuel consumption.

But putting downward pressure on fossil-fuel stocks based on nonfinancial criteria will actually increase the profit opportunities for investors who are not averse to investing in the fossil-fuel industry. Assuming that industry fundamentals remain the same, profit-minded investors can short the stocks overweighted by the environmentally conscious investors (that is, wherever environmentally conscious investors invest their divestment proceeds) and purchase fossil-fuel stocks, effectively canceling out the downward pressure socially responsible investors intended to apply.

Of course, some socially responsible investors may feel it is morally wrong to profit off certain business activities, regardless of the consequences. Some such investors may be motivated by consequences that may not show up in stock prices or that may only manifest beyond some threshold of market adoption.

The key point is it shouldn't be taken for granted that socially responsible strategies are "doing good." In reality, some strategies may have little or no impact. And because socially responsible strategies generally come with a higher cost to consumers, investors should carefully consider both the true costs and benefits of any given strategy, as well as the ways in which a strategy fits within their broader moral perspective, before deciding to become a socially responsible investor.

—Derek Tharp, founder of Conscious Capital, research associate, Kitces.com

* * *

Alternative Investments May Be Bad for Your Portfolio

It has never been easier for investors to add exposure to alternative investments to their portfolios. Liquid alternatives offering exposure to hedge-fund strategies and nontraditional asset classes through a mutual fund or ETF wrapper are becoming increasingly popular at a time when equity valuations are high and fixed-income yields are low.

Unfortunately, there is no guarantee that alternatives will improve returns or shield your portfolio in a down market.

The complexity of alternative strategies leaves investors susceptible to making emotional decisions when they don't understand their investments. This tendency is magnified by the lack of good benchmarks for the dozens of alternative investment strategies. Consequently, investors without a sound understanding of each underlying strategy within their alternative allocation might be tempted to dump exposures that trail traditional equity and fixed-income benchmarks.

If you are considering alternative exposures, you need clearly defined goals and expectations for your allocation of alternative investments. Ask questions such as:

◆ How do my various alternative investment strategies work?

◆ How do my alternative investments interact with other parts of the portfolio?

◆ How will this improve the portfolio's ability to meet its investment objective?

◆ How do we determine if the strategy is working?

◆ Do I expect my portfolio to lose less in the next recession?

Alternative strategies aren't inherently bad, but they are likely to lead to bad outcomes for investors without a solid understanding of the underlying strategies and realistic expectations for the range of possible outcomes.

—Peter Lazaroff, blogger, chief investment officer, Plancorp

* * *

Why You Might Leave a 401(k) With an Ex-Employer

Here are three questions to think about when you're considering leaving your retirement funds in a 401(k) with a former employer:

1. Can you replace the fund choices for the same expense?

A large employer may have access to low-cost "institutional" funds that may not be available to individual investors. While you could probably find similar funds in an individual IRA, it might come with a higher expense ratio.

2. Will you ever wish to borrow money from your retirement funds?

Most 401(k)s allow participants the option of borrowing against their savings without penalty or tax implications. You cannot borrow from an IRA. Check with your 401(k) plan administrator to see if this is an option for you. I never advise clients to plan on borrowing from their retirement funds, but occasionally it's important to have the option.

3. Are you at high risk of litigation or concerned about creditors?

Another reason to consider keeping your 401(k) is that 401(k) accounts are generally protected from creditors—except the IRS and your spouse—and IRAs aren't (only the first $1 million is protected in bankruptcy depending on your state).

—George Papadopoulos, fee-only wealth manager in Novi, Mich.

Without sales charges	1-year	3-year	5-year	10-year
Class Z	14.40	9.42	13.06	7.40
Class A	14.13	9.16	12.79	7.13
With sales charge				
Class A (5.75% max. sales charge)	7.56	7.03	11.47	6.50

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Market risk may affect a single issuer, sector of the economy, industry or the market as a whole. **Value** securities may be unprofitable if the market fails to recognize their intrinsic worth or the portfolio manager misgauged that worth. **Foreign** investments subject the fund to risks, including political, economic, market, social and others within a particular country, as well as to currency instabilities and less stringent financial and accounting standards generally applicable to U.S. issuers. **Dividend** payments are not guaranteed and the amount, if any, can vary over time. A rise in **interest rates** may result in a price decline of fixed-income (debt) instruments held by the fund, negatively affecting its performance and NAV. Falling rates may result in the fund investing in lower yielding debt instruments, lowering the fund's income and yield. Debt instruments with longer maturity and duration have greater sensitivity to interest rate changes. Interest rates can change due to local government and banking regulation changes. The fund may invest significantly in issuers within a particular **sector**, which may be negatively affected by market, economic or other conditions, making the fund more vulnerable to unfavorable developments in the sector.

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FUND MANAGERS

American Funds Is Turning Back the Clock

After watching investors flee for years to index funds, the 'active' fund giant starts to win some of them back

BY DAISY MAXEY

THE MUTUAL-FUND company that has famously been on the wrong side of the active/passive divide is once again attracting investor cash. But it remains to be seen if this is a turning point for the company or a temporary reprieve.

American Funds, sponsored by the privately held Los Angeles firm **Capital Group** Cos., has stuck to its classic, actively managed mutual funds while low-cost index-fund competitors such as **Vanguard Group** roared ahead. Many investors regard active funds—which rely on the portfolio-picking skill of their managers—as expensive laggards. After years of strong inflows, American Funds experienced net outflows of nearly $252.5 billion from 2008 through 2016, according to fund tracker Morningstar Inc.

Yet some investors in uncertain times tend to look again for potential value in active funds. After net outflows of $4.9 billion last year, American Funds has taken in a net $13.5 billion this year through August, Morningstar says.

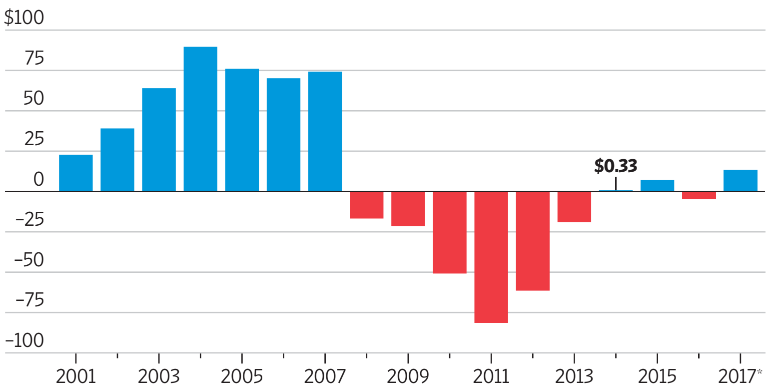
With $1.43 trillion in assets under management at the end of August—$956.3 billion in stock funds, $130.8 billion in bond funds and $343.9 billion in allocation funds, which include both stocks and bonds—American Funds is the largest active stock-fund manager, ahead of Boston-based **Fidelity Investments**, and the second-largest fund family overall after Vanguard, based in suburban Philadelphia. "They have funds that have consistently outperformed and consistently been lower-cost versus their active peers," says Todd Rosenbluth, director of ETF and mutual-fund research at financial data and analysis provider CFRA.

American Funds has gotten more vocal about defending active strategies, after years of seeing the gathering force of passively managed investments at its gates.

"As difficult as the headline environment has been, it's a reminder to people of some basic fundamentals," says Matthew O'Connor, director of North American distribution for American Funds. He says "low costs matter; they're an incredibly important part of an investor getting to their goal." But "above-average returns will help people get there."

Some Returning

Net flow of investor money in or out of American Funds, in billions



* Year to date
Souce: Morningstar
THE WALL STREET JOURNAL.

The fiduciary challenge

The fund company is still smarting after years of asset drainage, and is facing some daunting challenges. Perhaps the biggest is the Labor Department's fiduciary rule, part of which went into effect earlier this year and part of which has been delayed and continues to face challenges.

The fiduciary standard requires that a financial adviser put the client's best interest first. The new rule holds financial advisers who make recommendations on tax-advantaged retirement savings to that standard—including many brokers who previously advised retirement investors under what some critics say is a less-stringent standard.

American Funds typically has charged sales fees on shares in its funds, which it passes on to the brokers who sell the funds in the form of commissions. The new rule will make it harder to view that arrangement as suitable under a fiduciary standard, a headwind for American Funds, says Mr. Rosenbluth.

In response to the rule, the fund company in January launched its F3 class of shares for all its funds, which charge a management fee to investors but don't involve any payments to third parties.

"We actually think there's a benefit in giving investors much more clarity in terms of what they're paying and getting," says Mr. O'Connor. "This is a positive, given our investment returns, given our fees."

The shares accounted for about $49 billion of the firm's assets under management as of Aug. 31, and their adoption will be a slow evolution, says Mr. O'Connor.

Another effect of the fiduciary rule: Some advisory firms have typically offered only American Funds, and that will be more difficult to defend now, says Mr. Rosenbluth. That means more competition from other fund providers.

American Funds will "have to justify each fund on its own," says Janet Yang, a director of manager research at Morningstar. "They'll have to stand up to investment committees, to those who select funds for brokerage platforms. The good thing is they do have a lot of good funds, but there won't be that automatic assumption that they'll go with American Funds going forward, so it will be more work."

'I wouldn't ever say never' on the idea of launching an ETF.
Matthew O'Connor, president of American Funds Distributors, part of Capital Group

As it fights for stock investors, American Funds also has been working to attract more investors to its bond funds, which generally aren't as well-regarded as its stock funds.

The stock funds "have very strong records over the short and long term," says Ms. Yang. "They're very large-cap oriented," which has contributed to their success as such stocks have done well, she says. "But even beyond that tailwind from large and megacap holdings, they're still picking very good stocks."

The firm's mammoth $169.7 billion **Growth Fund of America** (AGTHX), for example, a growth-oriented large-cap fund that has the ability to invest up to 25% of its assets overseas, has gained 10.7% annually on average over the 15 years through September, outpacing the 10% gained by the S&P 500 and the 9.8% gained by the average large-cap stock fund, according to Morningstar. Its $96.6 billion **Washington Mutual Investors Fund** (AWSHX), a value-oriented large-cap fund that can invest only up to 10% of its assets overseas, has gained 9.4% annually on average over those 15 years, outpacing its average peer, up 9.1%.

The firm's fixed-income lineup has been less compelling, says Ms. Yang. The company's flagship $34.4 billion **Bond Fund of America** (ABNDX), for example, is up just 3.1% on average annually over the 10 years through September, lagging behind the benchmark Bloomberg Barclays U.S. Aggregate Bond Index and its average intermediate-term bond fund peer, each of which have gained about 4.3%.

Over the past few years, American Funds has devoted resources to improving its fixed-income funds, including adding new technology and bringing in outside talent, says Ms. Yang. But Morningstar isn't yet convinced the changes will ultimately give the funds an advantage, she says.

Mike Gitlin, head of fixed income at Capital Group, says the majority of American Funds bond funds have beaten their benchmark over the past one, three, five and seven years.

One addition to the fund company's lineup that may help it retain assets is its Target Date Retirement Series. Target-date funds, which have been steadily drawing in retirement-plan assets, automatically adjust their asset allocations as an investor nears retirement. American Funds' versions, launched in 2007, had $76 billion in assets as of Aug. 31, taking in a net $15.4 billion this year through August.

Assets in such funds are invested for decades, and are, therefore, more likely to be retained than some others, says Mr. Rosenbluth.

"Target-date funds are a lifeline for active managers," says Ms. Yang.

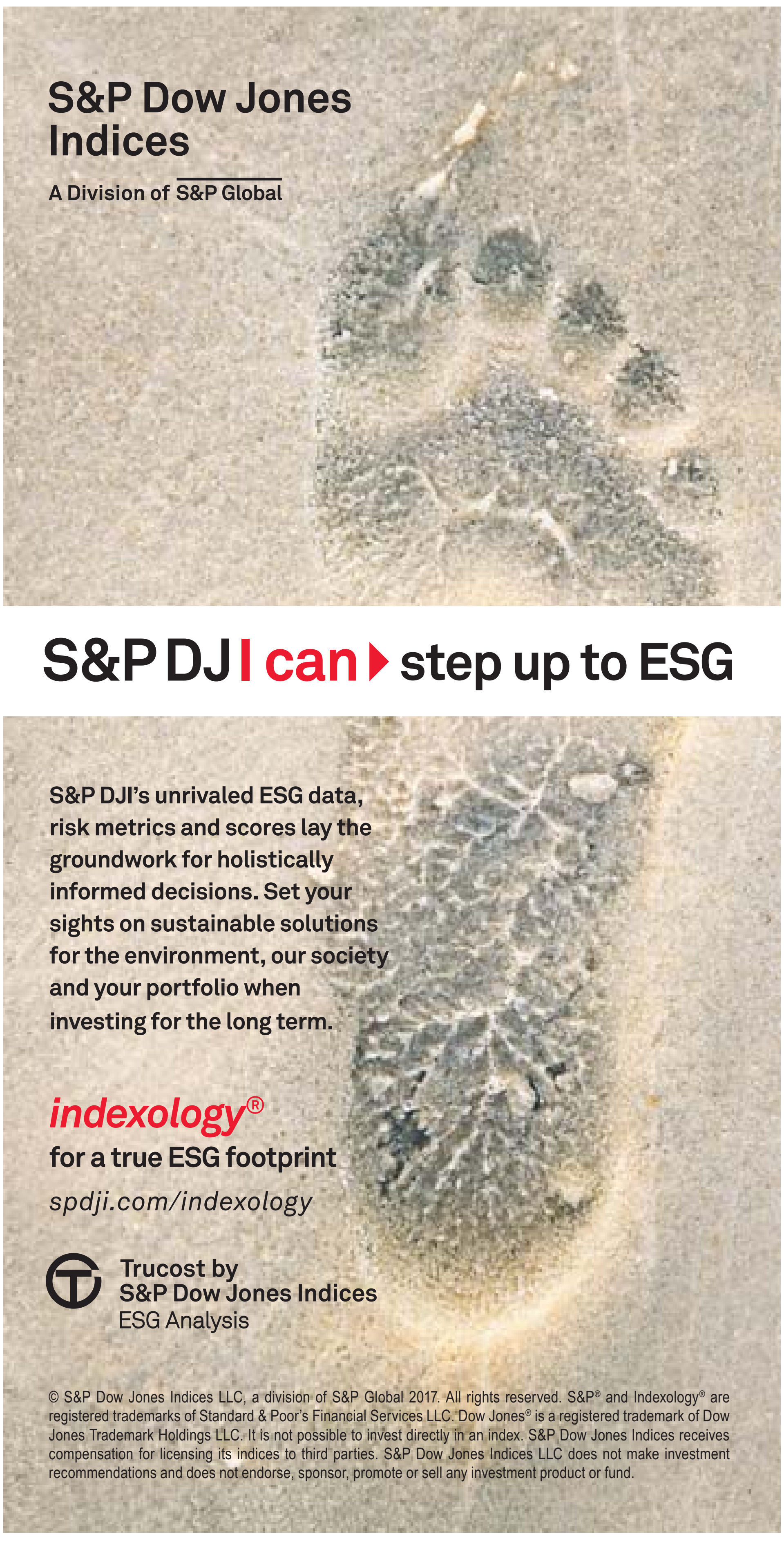
An ETF one day?

One area American Funds hasn't yet ventured into, but which remains a possibility for growth, is exchange-traded funds.

"No one expects them to launch a Growth Fund of America ETF, and tell everyone what they're buying every day," says Dave Nadig, chief executive of ETF.com. But American Funds has received permission from regulators to launch nontransparent active ETFs—a form of ETF that mimics an active fund and doesn't disclose its investments daily like traditional ETFs do.

The company doesn't have plans to launch ETFs, Mr. O'Connor says, but adds, "I wouldn't ever say never."

Ms. Maxey is a reporter for The Wall Street Journal in New York. Email her at ***daisy.maxey@wsj.com.***



Largest Stock and Balanced Funds

Data provided by LIPPER

Total returns are for periods ended Sept. 29. All data are final. Assets are through Aug. 31.
Performance data include both share prices and reinvested dividends.

Fund Name	Symbol	Assets ($ millions)	Performance (%) September	3rd-qtr	1-year	3-year*	5-year*
Vanguard TSM Idx;Adm	VTSAX	603,645.0	2.5	4.5	18.6	10.7	14.2
Vanguard 500 Index;Adm	VFIAX	341,248.6	2.1	4.5	18.6	10.8	14.2
Vanguard Tot I Stk;Inv	VGTSX	299,532.8	1.8	6.0	19.3	5.2	7.4
SPDR S&P 500 ETF	SPY	245,636.0	2.1	4.5	18.5	10.7	14.1
Vanguard Instl Indx;Inst	VINIX	227,336.2	2.1	4.5	18.6	10.8	14.2
American Funds Gro;A	AGTHX	166,457.5	1.6	5.0	19.9	11.5	15.1
American Funds EuPc;R6	RERGX	151,736.2	1.5	6.9	20.6	7.6	9.5
iShares:Core S&P 500	IVV	124,393.5	2.1	4.5	18.6	10.8	14.2
Fidelity 500 Idx;Pr	FUSVX	123,350.9	2.1	4.5	18.6	10.8	14.2
Fidelity Contrafund	FCNTX	117,321.9	0.9	6.1	23.2	12.0	14.6
American Funds Bal;A	ABALX	116,829.4	1.2	3.6	12.5	8.0	10.4
American Funds Inc;A	AMECX	107,244.9	2.2	3.7	11.4	6.8	9.2
American Funds CIB;A	CAIBX	106,316.8	1.5	3.2	10.1	5.5	7.5
Vanguard Wellington;Adm	VWENX	101,501.6	2.0	3.4	13.3	8.0	10.2
Vanguard FTSE Dev Mk ETF	VEA	95,041.7	2.5	5.6	19.3	5.9	8.9
American Funds Wash;A	AWSHX	93,539.8	3.0	5.6	19.3	9.8	13.5
American Funds CWGI;A	CWGIX	92,562.5	2.4	5.0	18.4	7.3	10.8
American Funds FInv;A	ANCFX	89,511.1	2.3	5.2	20.3	11.5	14.6
American Funds ICA;A	AIVSX	87,574.1	3.1	4.2	16.2	9.3	13.8
Vanguard Md-Cp Idx;Adm	VIMAX	86,794.1	2.3	3.4	15.3	9.7	14.4
Vanguard FTSE Em Mkt ETF	VWO	85,367.7	–0.8	7.8	18.9	4.0	3.6
Franklin Cust:Inc;A	FKINX	82,093.0	2.1	3.5	11.9	4.1	6.9
iShares:MSCI EAFE ETF	EFA	78,645.7	2.5	5.4	19.0	5.0	8.3
Vanguard Sm-Cp Idx;Adm	VSMAX	76,553.4	4.4	4.6	17.4	10.4	13.9
American Funds NPer;A	ANWPX	72,297.0	1.0	5.4	20.9	10.4	12.5
Vanguard Gro Idx;ETF	VUG	67,475.2	1.1	4.9	19.8	11.5	14.4
Dodge & Cox Stock	DODGX	66,062.1	4.0	4.8	23.9	9.8	15.7
Vanguard REIT Idx;ETF	VNQ	64,439.9	–0.1	0.9	0.4	9.5	9.5
Dodge & Cox Intl Stock	DODFX	63,630.9	3.4	6.9	26.6	3.9	10.1
Vanguard Value Idx;ETF	VTV	58,296.2	3.0	4.1	17.7	9.9	14.0
Vanguard Ext Mk Id;Adm	VEXAX	57,349.5	4.2	5.0	19.0	10.4	14.2
American Funds AMCP;A	AMCPX	56,476.7	3.2	5.6	17.2	9.4	14.5
Vanguard PRIMECAP;Adm	VPMAX	56,380.9	3.8	5.4	23.8	13.1	18.5
First Eagle:Global;I	SGIIX	55,675.7	1.4	2.8	9.9	6.7	8.3
Vanguard Wellesley;Adm	VWIAX	53,654.8	0.8	2.3	6.3	6.3	6.9
PowerShares QQQ Trust 1	QQQ	53,215.2	–0.4	5.9	23.5	14.9	17.6
T Rowe Price Gro Stk	PRGFX	51,238.8	0.2	5.4	26.1	13.9	16.3
Vanguard Health Care;Adm	VGHAX	47,887.3	0.9	1.0	11.9	9.7	17.6
Vanguard Windsor II;Adm	VWNAX	47,676.4	3.1	2.3	16.6	7.9	12.3
American Funds Mut;A	AMRMX	45,426.2	2.9	4.9	15.5	9.5	12.5
MFS Value;I	MEIIX	44,214.3	2.8	2.8	17.2	10.5	14.0
Fidelity Tot Mk;Pr	FSTVX	44,094.0	2.4	4.6	18.7	10.7	14.2
T Rowe Price BC Gro	TRBCX	41,640.4	1.0	6.9	27.2	14.3	17.1
Vanguard Ins T StMk;Ins+	VITPX	40,778.9	2.5	4.6	18.7	10.8	14.3
Fidelity Gro Company	FDGRX	40,257.8	1.4	7.6	30.4	16.0	17.6
BlackRock:Gl Alloc;I	MALOX	39,263.6	0.6	3.0	10.8	4.4	6.4
iShares:Core S&P Md-Cp	IJH	39,058.4	3.9	3.2	17.5	11.1	14.3
Oakmark Internatl;Inv	OAKIX	38,283.8	4.5	9.1	34.9	9.4	12.9
Fidelity Low-Prcd Stk	FLPSX	37,933.6	2.8	5.0	16.9	8.4	12.8
Oppenheimer Dev Mkts;Y	ODVYX	37,088.9	0.3	8.3	22.0	3.5	5.2
iShares:Core MSCI EmMkts	IEMG	36,775.5	–0.4	7.5	21.3	4.7	N.A.
iShares:Russ 1000 Gr ETF	IWF	36,599.5	1.3	5.9	21.7	12.5	15.0
iShares:Russ 2000 ETF	IWM	36,564.1	6.2	5.7	20.8	12.2	13.8
Vanguard Tgt Ret2025;Inv	VTTVX	36,472.6	1.2	3.5	11.7	6.8	8.9
iShares:MSCI Em Mkts	EEM	35,892.0	–0.5	7.7	21.7	4.3	3.4
American Funds SMCP;A	SMCWX	35,811.8	2.8	5.5	18.1	10.5	12.2
iShares:Russ 1000 Vl ETF	IWD	35,684.4	2.9	3.1	14.9	8.3	13.0
Vanguard Bal Index;Adm	VBIAX	34,813.0	1.3	3.0	10.8	7.6	9.3
SPDR Gold	GLD	34,421.1	–2.2	3.2	–3.4	1.4	–6.7
Vanguard FTSE xUS;ETF	VEU	33,830.9	1.8	5.9	19.4	5.2	7.4
iShares:Core MSCI EAFE	IEFA	33,641.1	2.6	5.7	19.7	6.0	N.A.
Harbor:Internatl;Inst	HAINX	33,183.1	2.4	3.6	15.1	3.6	6.4
Vanguard Div Gro;Inv	VDIGX	31,910.2	1.8	2.8	14.1	9.6	12.8
American Funds NWld;A	NEWFX	31,734.4	1.6	7.3	20.1	5.8	6.5
Fidelity Balanced	FBALX	31,451.8	1.2	3.5	13.3	7.6	10.0

Note: For funds with multiple share classes, only the largest is shown   *Annualized   N.A.=Not applicable or not available

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SAVING FOR COLLEGE | CHANA R. SCHOENBERGER

Pros and Cons of Different College Savings Accounts

Those 529s might be best, but let's take a closer look at the alternatives

We again asked experts to help us answer readers' questions on saving and paying for college.

As usually happens, most of the questions we received were about 529s, the tax-advantaged savings accounts for higher-education costs, which invest in mutual funds. But this time, we begin with a question about *other* kinds of accounts to save for college.

* * *

Aside from 529s, what are the upsides and downsides of alternative ways to pay for college?

While most financial experts agree that 529 plans are the most flexible and tax-advantaged vehicles, there are other ways of saving for college that could be useful.

It depends on what criteria are important to a family's situation.

For instance, in state-sponsored 529 accounts, investors (typically the parents) contribute after-tax money that grows tax-free and can be withdrawn later without federal taxes or penalties when used for qualified expenses like tuition, room and board, or a computer.

Some non-529 choices, by contrast, are more limited in terms of how much you can contribute, but can be less restrictive on what the money is used for.

"We recommend understanding the different features and benefits of the various education savings options, including contribution amounts, control of decision-making and ownership, tax considerations, flexibility with unused balances and financial-aid considerations," says Danae Domian, a principal at brokerage firm Edward Jones.

Here are some ways to save for college, other than 529 plans:

◆ **Coverdell education savings accounts** are more flexible than 529s in that they can be used for K-12 schooling, as well as higher education, says Rachel Ramos, a product manager for the American Funds 529 plan, CollegeAmerica. But they have income limitations and restrict contribution amounts—up to $2,000 a year from all contributors for a single beneficiary. Also, contributions aren't allowed after the beneficiary turns 18.

The Coverdell account custodian—usually a parent—controls the account, and the beneficiary may take control at the age of majority (in most places, that's 18), depending on the plan. Earnings grow tax-free, and there's no federal tax when you take out money for qualified educational expenses. The account must be closed before the beneficiary turns 30. The money can be moved to a 529 for the same beneficiary, a 529 or Coverdell for a relative, or a regular brokerage account, in which case taxes and perhaps penalties are likely to be owed, unless the beneficiary has special needs.

◆ **Custodial accounts** like UGMAs and UTMAs (Uniform Gifts to Minors Act and Uniform Transfers to Minors Act, respectively) don't have tax benefits that compare with 529s, and the beneficiary becomes the account owner automatically at the age of majority, Ms. Ramos says. For gift-tax reporting purposes, individuals can contribute $14,000 per beneficiary a year. Because these accounts belong to the student, they may be counted as student-owned assets for financial-aid purposes, which can have a negative effect on aid eligibility.

Savers can also set up a custodial version of a 529, in which the beneficiary takes control upon reaching legal age, according to Edward Jones. Each contribution is an irrevocable gift, and so is a tax benefit for the contributor. But once the beneficiary reaches legal age, the custodian no longer has control over what the beneficiary does with the money—including requesting a nonqualified transfer out of the account, which would be taxable and may not go toward education.

◆ **Roth IRAs** are designed to be retirement-savings vehicles, which means that if the child doesn't go to college, the account owner can have the flexibility of using the money for retirement. Savers can contribute up to $5,500 a year (or $6,500 if over age 50) to a Roth as long as their incomes are within certain limits, and there is no penalty for withdrawals before age 59½ if the money is used for qualified higher-education expenses. However, the account owner may have to pay income tax on the earnings portion of any withdrawal. Note that the entire withdrawal—principal and earnings—may be considered income for financial-aid purposes and will likely affect your aid application for the following year.

◆ **Series EE and I** savings bonds have some limited benefits for educational savings. Anyone can buy these bonds, up to $10,000 a year per bond type, and financial-aid forms count these bonds as the asset of the bond owner, who must be the student's parent, or an adult student of at least age 24.

Interest earned on the bonds is free from state and local tax, but can be taxed federally as income unless used for qualified higher-education expenses. Income limits apply, and to receive the tax-free education benefit, the bonds must be held in the parent's name, not a student or grandparent's.

◆ **A regular savings or brokerage** account is the choice of many families for educational savings. There are no limits—or tax benefits—to this approach. Money stays within reach, and can be used for education or other priorities. But taxes will be owed on any profits made when investments are sold, as well as on dividends and interest earned. For financial-aid purposes, these regular accounts are counted as assets of the account owners, according to Edward Jones.

◆ **Life-insurance policies**, which readers sometimes ask about, can be an expensive strategy. They often have higher fees than 529s and may have early-withdrawal penalties, Ms. Ramos says. "Life-insurance policies may seem like an attractive option with a claim of guaranteed rates of return, but investors should be wary of this option and do their research."

* * *

What happens to my daughter's 529 if she doesn't attend college, or if she gets free state-resident tuition?

"If there is still money remaining in a 529, the plan beneficiary can be changed to another family member," Ms. Ramos says. The family can also withdraw the funds, paying both income taxes and a 10% penalty on the earnings portion taken out.

* * *

Can we use 529 funds to attend an overseas university?

Yes. Check the Fafsa website at the Education Department, fafsa.ed.gov. Any school listed is eligible to receive 529 funds, in the U.S. or abroad, Ms. Domian says.

* * *

Can one child have multiple 529 accounts—say, one that I set up as the grandparent and one that the parent sets up?

Yes. There are no limitations on the number of 529 accounts someone can have, Ms. Ramos says.

Note that 529s do have a maximum amount you can contribute per child. This amount varies by state, and in many cases is over $250,000. When you set up multiple accounts, note that some states give tax benefits to the account owner or the contributor, while others give these benefits only to the account owner, Ms. Domian says.

* * *

Can I set up a 529 with any investments I choose, or does it have to be invested in funds from a mutual-fund company's list?

Thanks to the program's rules, a 529 account has to be invested in the list of investment options that each plan offers, Ms. Domian says. Each state generally hires a fund company to oversee its own plan.

"Many 529 programs offer combinations of: individual mutual funds; funds-of-funds that blend different individual funds into a single option; age-based options consisting of several funds that automatically reallocate as the beneficiary ages; guaranteed return or money-market funds," she says.

* * *

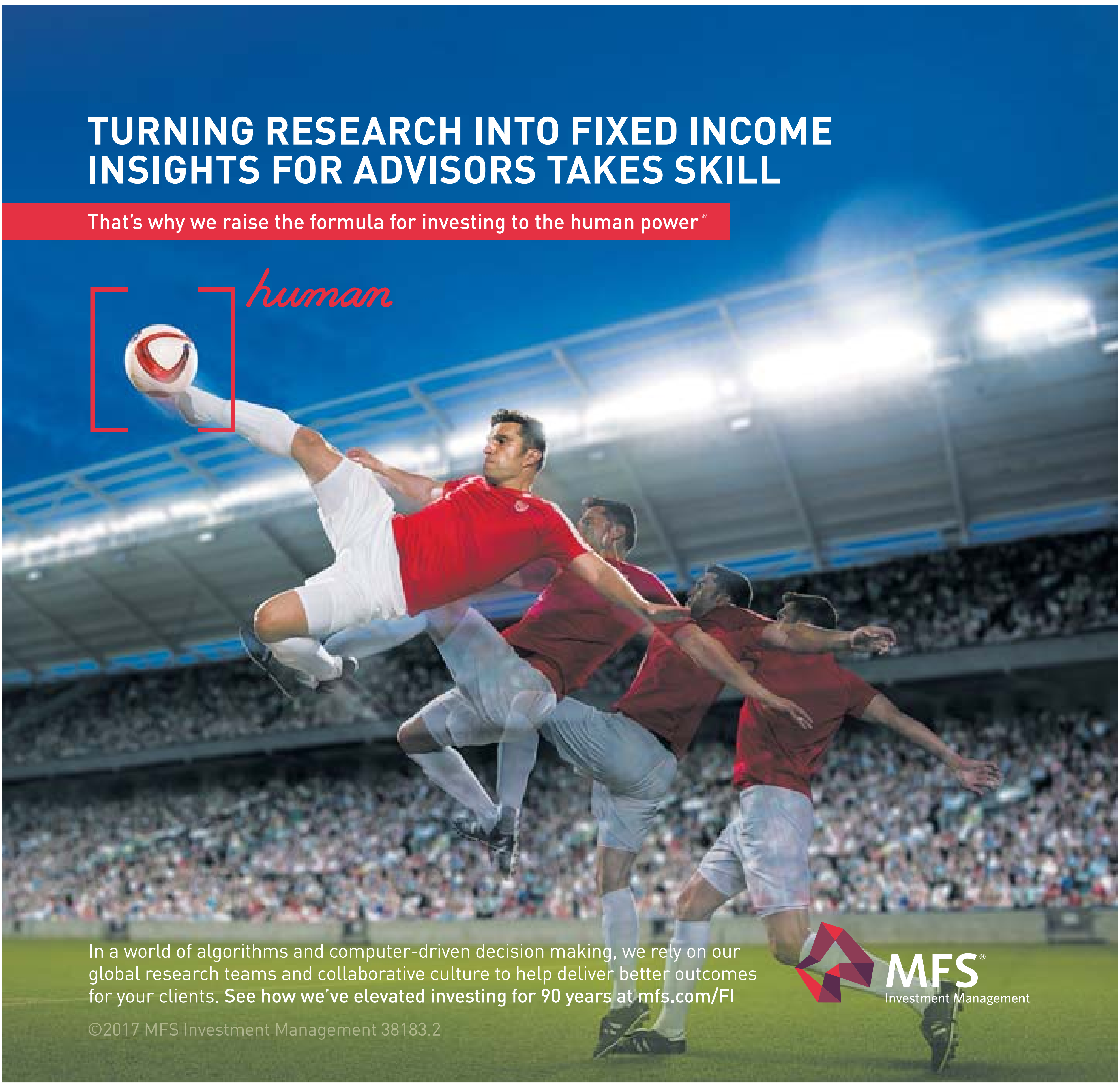
What are the rules on using 529s when it comes to purchasing required items like musical instruments for music majors?

As listed in the IRS rules, qualified education expenses include tuition, fees, reasonable room and board, and items required by the institution, such as laptop computers.

"Musical instruments and other educational tools not specifically approved by the IRS may qualify; however, investors should confirm specifically what 529 plans can be used for in advance," Ms. Ramos says.

DAN PAGE

HAVE A COLLEGE-FINANCE QUESTION IN GENERAL?
We'll be answering them in future Investing in Funds & ETFs reports. Write to reports@wsj.com.



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SPOTLIGHT | PIMCO INCOME FUND

FUND RAISES FEES, SPURS DEBATE

When it comes to expenses, the popular **Pimco Income Fund** (PONAX) is going in the opposite direction of many of its peers: It has raised fees on most share classes of the $99 billion mutual fund as money continues to flood in.

The fund's manager, Pacific Investment Management Co. of Newport Beach, Calif., is betting that the multisector bond fund's strong performance will continue to attract investors even as low-cost passively managed funds pressure many active fund managers to slash their fees.

The firm may well be right.

Investors have poured $20.6 billion in new assets into Pimco Income this year through August, after committing nearly $13.7 billion to the fund last year, according to Morningstar Inc. It is the fastest-growing actively managed U.S. mutual fund over the past 12 months, the research firm says.

The portfolio, which is managed by Daniel Ivascyn and Alfred Murata, has gained 7.1% this year through September, while its average peer has risen 5.4%, according to Morningstar. Over five years through September, Pimco Income Fund has gained 8.9% each year on average, outpacing 98% of its peers, Morningstar says.

"The fund has been consistently outperforming its peers while taking on less risk," says Todd Rosenbluth, director of ETF and mutual-fund research at data and analysis provider CFRA. "People who are paying for active management are willing to pay a premium versus an index-based alternative." That said, "the price usually doesn't go up; it usually stays the same or goes down," he says.

Effective Oct. 2, Pimco increased the fund's supervisory and administrative fees by 5 cents per $100 for most share classes and by 11 cents per $100 for D shares, those sold through broker-dealers or registered investment advisers. That raised the net expense ratio on Class A shares—those sold directly to the investor with an initial sales charge—to 0.90% from 0.85%, and the ratio on D shares to 0.90% from 0.79%.

Pimco cites complexity

The increase is due to the "substantial requirements" to supervise the fund, a Pimco spokeswoman said via email. Managing dividends for the fund adds significant complexity to its supervision and administration, she said.

The increase is well deserved, says Al Procaccino II, president and chief executive of Castle Financial & Retirement Planning Associates Inc. in Hazlet, N.J., who invests in Pimco Income for his clients. "They're doing an outstanding job," he says of the fund's managers. "Everything is cut fees, cut fees, cut fees, [but] you have to pay for talent."

Morningstar recommends the Pimco fund, and says that the fund's expense ratios, for its Class A shares, for example, are lower than those of 58% of its peers. But Eric Jacobson, senior analyst, manager research at Morningstar, questions Pimco's reasoning for the fee increase and says it draws attention to a broader issue: how Pimco breaks down fees for all of its funds.

Pimco breaks down the bulk of its funds' costs into "investment advisory fees" and "supervisory and administrative fees." For the fiscal year ended March 31, the fund's investment advisory fees—fees for the active money manager's services—totaled $166.3 million, while its supervisory and administrative fees—the costs of operating a fund and servicing shareholder accounts—were $178.8 million, according to Pimco's regulatory filings.

It doesn't make sense that the true cost of servicing Pimco's funds is anywhere close to the fair value of its investment-advisory services, says Mr. Jacobson. With the money Pimco Income has attracted, economies of scale should be passed down to shareholders, he says.

Bad timing?

In addition, the increase comes at a time when the fund's strong performance may wane, Mr. Jacobson says.

"They made a very smart decision to invest in nonagency mortgages following the crisis, and have been able to generate very healthy returns with very modest volatility, in some meaningful part, because of that allocation," he says. But with very little new issuance of nonagency mortgages, that market is shrinking, he says.

"My biggest concern is that a lot of this new money coming in might not realize that the future is going to be more normal than the past several years," he says.

The Pimco spokesman noted via email that the fund has outperformed the average multisector bond fund and the Barclays U.S. Aggregate Index even discounting the effect of its nonagency mortgage-backed securities holdings. In the three years through Aug. 31, Pimco Income has gained 3.9% excluding nonagency mortgage-backed securities, the firm says. Its average peer has gained just 3% and the Barclays index has gained 2.6% in the period, according to Morningstar.

Pimco also said that the fund at the end of July held more than 5,500 positions in 27 different types of securities issued from 50 countries, and 15 currencies, a level of complexity that demands significant resources and distinct executive supervisory needs.

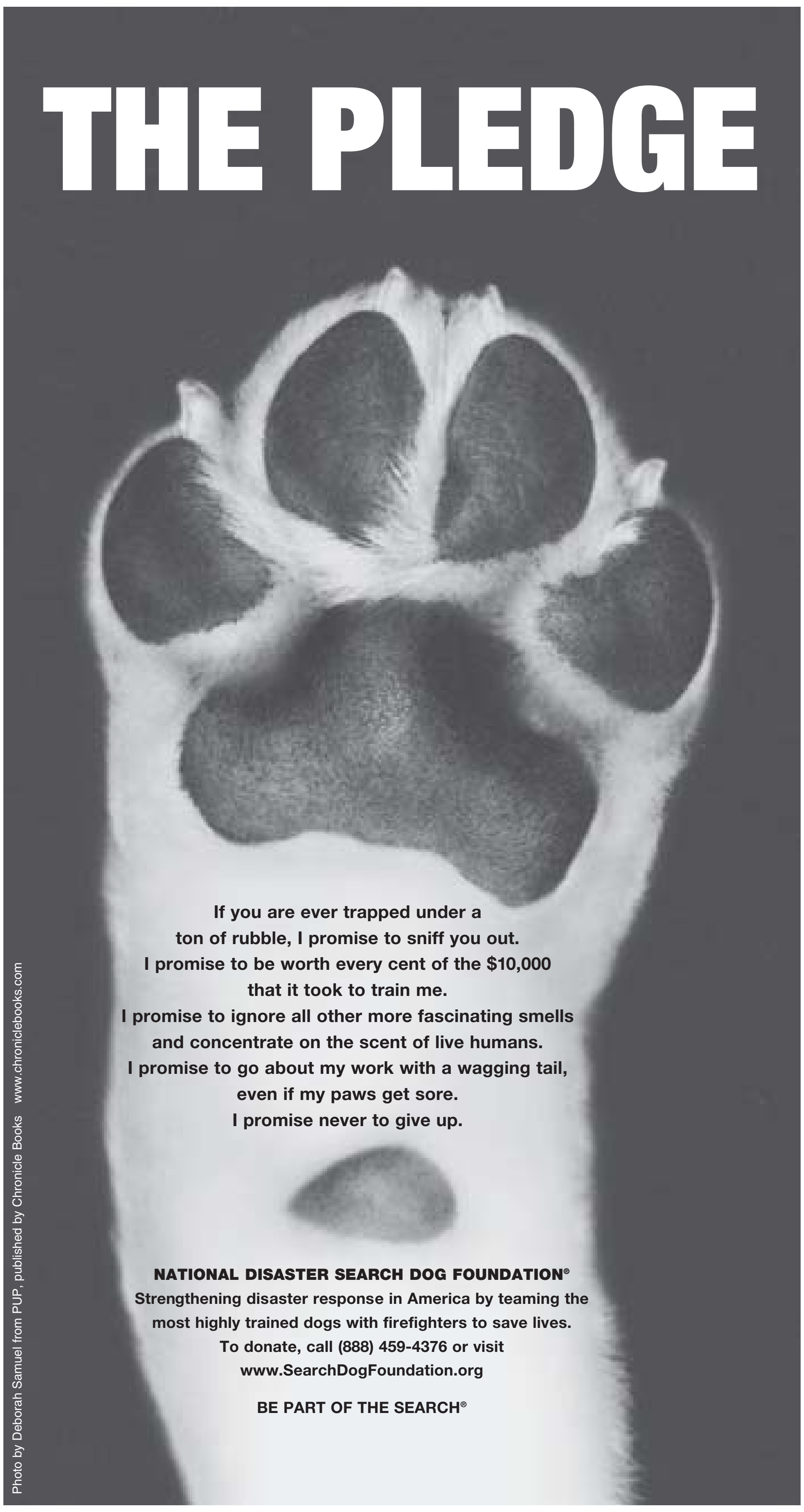
—Daisy Maxey

Tracking Exchange-Traded Portfolios

Performance figures are total returns for periods ended Sept. 29; for largest exchange-traded funds and other portfolios, ranked by asset size.

Fund	Symbol	Assets ($ billions)	Volume (000s)	Expense ratio	Launch date	Performance (%) September	3rd-qtr	1-year
SPDR S&P 500 ETF	SPY	**241.41**	83,389.3	0.09	01/22/93	2.1	4.5	18.5
iShares Core S&P 500 ETF	IVV	**126.49**	5,550.7	0.05	05/15/00	2.1	4.5	18.6
Vanguard Tot Stk Mkt Idx ETF	VTI	**84.43**	1,720.5	0.04	05/24/01	2.5	4.6	18.6
iShares MSCI EAFE ETF	EFA	**80.60**	22,346.7	0.33	08/14/01	2.5	5.4	19.0
Vanguard 500 Index ETF	VOO	**74.15**	657.4	0.04	09/07/10	2.1	4.5	18.6
Vanguard FTSE Developed Markets ETF	VEA	**62.89**	9,159.9	0.07	07/20/07	2.5	5.6	19.3
Vanguard FTSE Emerging Markets ETF	VWO	**62.34**	14,298.1	0.14	03/04/05	–0.8	7.8	18.9
PowerShares QQQ Nasdaq 100	QQQ	**52.37**	41,951.7	0.20	03/10/99	–0.4	5.9	23.5
iShares Core US Aggregate Bond ETF	AGG	**50.33**	5,762.8	0.06	09/22/03	–0.5	0.8	0.1
iShares Russell 2000 ETF	IWM	**41.32**	20,879.8	0.20	05/22/00	6.2	5.7	20.8
iShares Core S&P Mid-Cap ETF	IJH	**40.28**	1,163.7	0.09	05/22/00	3.9	3.2	17.5
iShares iBoxx $ Inv Grade Cor B ETF	LQD	**37.67**	7,119.1	0.15	07/22/02	–0.1	1.4	1.8
iShares Core MSCI Emerging Markets	IEMG	**37.37**	9,502.9	0.17	10/18/12	–0.4	7.5	21.3
iShares Russell 1000 Value ETF	IWD	**37.21**	3,298.1	0.20	05/22/00	2.9	3.1	14.9
iShares Russell 1000 Growth ETF	IWF	**37.13**	2,223.6	0.20	05/22/00	1.3	5.9	21.7
iShares Core MSCI EAFE	IEFA	**36.53**	8,553.7	0.12	10/18/12	2.6	5.7	19.7
Vanguard Total Bond Market ETF	BND	**35.82**	3,001.2	0.05	04/03/07	–0.5	0.8	–0.1
iShares MSCI Emerging Markets Index Fund	EEM	**35.78**	66,552.1	0.72	04/07/03	–0.5	7.7	21.7
SPDR Gold Shares	GLD	**35.66**	10,199.2	0.40	11/18/04	–2.2	3.2	–3.4
Vanguard REIT ETF	VNQ	**34.13**	4,243.3	0.12	09/23/04	–0.1	0.9	0.4
iShares Core S&P Small-Cap ETF	IJR	**33.77**	3,310.9	0.09	05/22/00	7.7	6.0	21.0
Vanguard Value ETF	VTV	**33.50**	1,118.6	0.06	01/26/04	3.0	4.1	17.7
Vanguard Growth ETF	VUG	**29.24**	595.6	0.06	01/26/04	1.1	4.9	19.8
Financial Select Sector SPDR	XLF	**27.35**	42,277.9	0.14	12/16/98	5.1	5.2	36.0
Vanguard Div Appreciation ETF	VIG	**25.19**	372.2	0.08	04/21/06	2.3	2.8	15.4
iShares TIPS Bond ETF	TIP	**23.36**	1,030.6	0.20	12/04/03	–0.7	0.9	–0.8
Vanguard Short-Term Bd Idx ETF	BSV	**22.92**	986.4	0.07	04/03/07	–0.3	0.4	0.4
Vanguard Short-Term Crp Bd Idx ETF	VCSH	**21.14**	3,134.5	0.07	11/19/09	–0.2	0.7	1.6
Vanguard FTSE All-World ex-US ETF	VEU	**20.56**	1,739.1	0.11	03/02/07	1.8	5.9	19.4
Vanguard Mid Cap ETF	VO	**20.21**	356.4	0.06	01/26/04	2.3	3.4	15.0
Vanguard Small Cap ETF	VB	**19.70**	703.6	0.06	01/26/04	4.4	4.6	17.4
Vanguard High Dividend Yield ETF	VYM	**19.48**	466.1	0.08	11/10/06	3.0	4.6	15.9
iShares iBoxx $ Hi Yld Corp Bd ETF	HYG	**19.43**	8,902.5	0.49	04/04/07	0.8	1.7	7.4
iShares Russell 1000 ETF	IWB	**19.34**	722.9	0.15	05/15/00	2.1	4.4	18.4
iShares S&P 500 Growth Index Fund	IVW	**19.17**	510.9	0.18	05/22/00	1.1	5.2	19.7
SPDR S&P MidCap 400 ETF	MDY	**18.85**	915.6	0.25	04/28/95	3.9	3.2	17.1
SPDR Dow Jones Industrial Average	DIA	**18.71**	2,414.7	0.17	01/14/98	2.2	5.6	25.3
iShares US Preferred Stock	PFF	**18.57**	3,573.7	0.47	03/26/07	–0.1	0.6	4.3
Health Care Select Sector SPDR	XLV	**17.86**	6,883.5	0.14	12/16/98	0.9	3.5	15.2
Technology Select Sector SPDR	XLK	**17.83**	12,426.9	0.14	12/16/98	0.9	8.4	25.7
Vanguard FTSE Europe ETF	VGK	**17.74**	4,215.9	0.10	03/04/05	3.2	6.5	23.1
Vanguard Intm-Term Corp Bd Idx ETF	VCIT	**17.40**	2,143.1	0.07	11/19/09	–0.5	1.2	1.4
iShares Select Dividend ETF	DVY	**17.05**	396.9	0.39	11/03/03	2.4	2.4	12.7
Energy Select Sector SPDR	XLE	**16.55**	14,264.7	0.14	12/16/98	10.1	6.9	N.A.
iShares MSCI Japan Index Fund	EWJ	**16.00**	6,216.0	0.48	03/12/96	2.0	3.9	13.7
SPDR S&P Dividend ETF	SDY	**15.72**	270.6	0.35	11/08/05	3.1	3.3	11.8
iShares Russell Mid Cap Value Index Fund	IWR	**15.72**	823.5	0.20	07/17/01	2.8	3.4	15.1
Vanguard Info Tech Ind ETF	VGT	**14.76**	789.1	0.10	01/26/04	0.9	8.3	27.8
Vanguard Intermediate Term Bond ETF	BIV	**14.58**	724.2	0.07	04/03/07	–0.9	0.8	–0.5
iShares Edge MSCI Min Vol USA ETF	USMV	**13.94**	1,975.9	0.15	10/18/11	0.5	3.4	13.1
iShares MSCI Eurozone	EZU	**13.93**	2,812.9	0.48	07/25/00	3.8	8.0	28.4
iShares S&P 500 Value Index Fund	IVE	**13.92**	460.8	0.18	05/22/00	3.3	3.5	16.3
Guggenheim S&P 500 Equal Wght	RSP	**13.77**	519.1	0.40	04/24/03	2.9	3.5	15.8
SPDR Bbg Barclays High Yield Bd ETF	JNK	**12.92**	6,730.3	0.40	11/28/07	0.8	1.7	8.1
Schwab International Equity ETF	SCHF	**12.05**	128.1	0.08	10/30/09	2.6	5.5	19.4
iShares 1-3 Yr Credit Bd ETF	CSJ	**11.97**	234.9	0.20	01/05/07	–0.1	0.5	1.2
Vanguard Small Cap Value ETF	VBR	**11.77**	275.3	0.07	01/26/04	4.9	4.4	17.6
iShares JPMorgan USD Emg Mkts B ETF	EMB	**11.65**	2,763.0	0.40	12/17/07	–0.1	2.6	3.9
Consumer Discretionary Sel Sec SPDR	XLY	**11.55**	3,455.9	0.14	12/16/98	0.8	0.8	14.3
iShares 1-3 Yr Treasury Bd ETF	SHY	**11.19**	880.7	0.15	07/22/02	–0.2	0.2	0.1

*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



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NEED TO KNOW

What 'Liquidity' Means For Fund Investors

A new SEC rule will require mutual funds to make regular disclosures, perhaps pointing up risks

JAMES STEINBERG

BY ARI I. WEINBERG

LIQUIDITY IS A difficult thing to define or measure—but traders say it's easy to tell when it isn't there.

The term generally describes the ability to buy or sell an asset or securities without significantly affecting the price. In financial markets, that means the price and volume a buyer offers per share (the bid) and what the seller is willing to accept (the ask) are fairly similar.

In the fund world, liquidity gets more complicated because it comes into play in two ways: Fund managers can invest in assets with varying degrees of liquidity—from cash to unlisted securities. But managers also have to buy or sell assets to meet purchases and redemptions by fund shareholders (over which they have limited control).

For fund investors, a confluence of market forces and regulatory changes is set to put liquidity in sharper focus.

Last year, the Securities and Exchange Commission made final a rule that would require mutual funds to implement and document a program to manage liquidity risk, including monthly disclosures on the relative liquidity of their assets, beginning Dec. 1, 2018. The new rule is intended to ensure that funds can meet a surge of investor withdrawals in another market panic.

While it took the SEC 459 pages to lay out its new rule, here is a more-concise look at what liquidity means:

1. What is liquidity, anyway? At its core, liquidity for an individual security or asset is defined by supply and demand. Modern securities markets have been designed to encourage liquidity through a system of fees and rebates on transactions that encourages market makers to post quotes and orders. Also helping to foster liquidity are things like market and limit orders—where investors tell brokers or brokerage services to execute trades either at the best available current price (market order), or at a specified price or better (limit order).

"The current structure incentivizes tighter markets, which is good for investors," says Larry Tabb, founder and research chairman of **TABB Group**. "It does, however, create conflicts which are difficult to measure with 12 different exchanges and 30 automated trading systems all transacting in low-single-digit microseconds."

Average daily volume is often used as a proxy for liquidity in normal markets, but it should be viewed in conjunction with bid/ask spreads and short interest—or the number of borrowed shares that investors betting on a price decline have sold short, but not yet covered or closed out. (Mr. Tabb notes that regulators in September reduced the settlement time on short trades to three days from four, which is likely to make borrowing shares to short more expensive. Standard trades moved to two days from three.)

Gauging the liquidity of fixed-income investments, including debt, loans and asset-backed securities, is even harder because of the patchwork of electronic and over-the-counter trading that exists in the bond world. The "cost of liquidity" is defined by wider trading spreads, which are influenced by the availability of the security and its credit quality.

2. Evaluating a fund's liquidity risk. Mutual funds buy or sell assets and take in or distribute cash daily, meaning managers need to be mindful of the liquidity of their holdings in case of a large purchase or redemption. Until the new disclosures are in place, however, accurately gauging a fund's liquidity risk is generally a difficult task for most individual investors.

"If the fund holds large-cap equities or investment-grade bonds, it will usually be able to put cash to work or redeem your shares with minimal impact," says Todd Rosenbluth, director of ETF and mutual-fund research at CFRA. "When you get to emerging-market equities or small-cap stocks, sizable redemptions could be impacted by liquidity constraints," he says. This is also the case for thinly traded areas of the debt market such as high-yield (or junk) bonds and senior loans.

For investors who want to get a grasp on the liquidity profile of a fund, Mr. Rosenbluth says to look at the fund's top holdings. Are they recognizable names? Is the portfolio concentrated? How big are the companies, and where are they located? What is the dispersion of the credit quality?

3. What about ETFs? As a hybrid product—basically, a mutual fund that trades on an exchange like a stock—exchange-traded funds have two layers of liquidity for investors to understand, as well. Like stocks, the first is described by average daily trading volume, bid/ask spreads and short interest of the ETF itself (which can be found at Morningstar.com, ETF.com and other fund data sites). The second, just like mutual funds, is the actual liquidity of the underlying holdings—stocks, bonds, currencies, commodities and commodity futures, cash, and even other ETFs.

"The liquidity of the ETF is driven by the liquidity of the underlying portfolio," says Teddy Fusaro, senior portfolio manager at IndexIQ, a unit of **New York Life Investments**. "It's especially important to understand given new products in the ETF world based on back tests. What will performance be like in the real world?"

ETFs, however, are going to be exempted from some of the new liquidity rules because, unlike mutual funds, they primarily create and redeem shares in-kind, by swapping ETF shares and the underlying assets directly with institutions.

Still, data providers, fund companies and exchanges hold out a metric called "implied liquidity" as an X-ray into the aggregate volume for an ETF's holdings, and believe that this number can better help investors understand the liquidity risk (or lack of it) embedded in a fund's holdings. ETF.com, a unit of **CBOE**, features multiple liquidity metrics on its "tradability" page for all ETFs.

4. The big picture. When it comes to building a portfolio of funds, ETFs, cash and securities with liquidity in mind, Jim Carroll of LongRun Capital Management says investors must have a clear understanding of what liquidity does and doesn't mean in the context of their investments.

"I think of liquidity in the classic sense of how fast I can get my money back and what impact I will have if I have to sell everything at once," says Mr. Carroll. But "what if everybody heads for the exits at the same time? Bids wills disappear because market makers are going to take their own risk off the table."

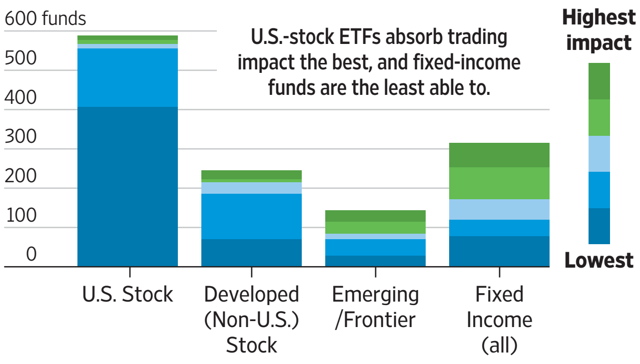
For individual investors and their portfolios, liquidity in normal trading is usually inconsequential. But you have to be prepared for stressed markets where prices potentially could collapse.

Liquidity risk has been pushed out into the market, whereas it used to be held at institutions. Many financial players "are no longer in the balance-sheet business to support trading, if they are even trading at all," Mr. Carroll says. "Other market participants have no obligation to trade."

Mr. Weinberg is a writer in Connecticut. He can be reached at ***reports@wsj.com.***

Scoreboard: Implied Liquidity

Ranking the impact of ETFs on their underlying holdings



Source: FactSet Research Systems via ETF.com

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NEWS CHALLENGE: FUNDS AND INVESTING

Test Your Smarts on...401(k)s and IRAs

BY ROBERT POWELL

WHAT YOU DON'T KNOW won't hurt you. That might be true in some circles. But it isn't the case with retirement accounts such as 401(k)s, defined-benefit plans, individual retirement accounts, profit-sharing plans and ESOP plans—especially when it comes to distribution rules.

In fact, not knowing something might cost you a lot of money in penalties and fines, as well as lost opportunities.

Here's a quiz to test your knowledge, based on some frequently asked questions directed to Ben Norquist, president and chief executive of Convergent Retirement Plan Solutions; Beverly DeVeny, director of retirement education for Ed Slott & Co.; and Denise Appleby, the CEO of Appleby Retirement Consulting Inc. and RetirementDictionary.com.

JOHN KUCZALA/GETTY IMAGES

1. *True or false. Roth 401(k) owners must take required minimum distributions, or RMDs, just as owners of traditional 401(k)s do.*

ANSWER: True. The Roth 401(k), a cousin of the Roth IRA, is funded with after-tax contributions that grow tax-deferred, and qualified distributions are tax-free—basically, the reverse pattern of a traditional 401(k). But the RMD situation is similar: By law, account owners generally must start taking distributions the year they hit 70½.

Note: Roth IRA owners—unlike inherited Roth IRA owners—don't have to take RMDs.

2. *You have an IRA and a 401(k). You must take an RMD this year from both accounts. Which is correct:*

A. You must take a distribution from each account separately.

B. You can add together the required distribution and take it from the IRA.

C. You can add together the required distribution and take it from the 401(k).

D. You can add together the required distribution and take it from either.

ANSWER: A. You must take a distribution from each account separately, says Ms. DeVeny: "Traditional IRA required distributions can be added together and taken from any one or several traditional IRAs. The same isn't true of employer plans."

3. *Which of these statements about Roth 401(k) accounts is INCORRECT?*

A. Roth 401(k) employee elective contributions are made with after-tax dollars.

B. Both Roth 401(k) and Roth IRA contributions are subject to income limits.

C. The maximum aggregate elective contribution to a Roth 401(k) and traditional 401(k) is limited to $18,000 in 2017, plus an additional $6,000 for employees age 50 or older by year-end.

D. Withdrawals of designated Roth contributions and earnings aren't taxed provided it's a qualified distribution. A distribution is qualified if the account is held for at least five years and made on account of disability, after death, or on or after 59½.

ANSWER: B. Roth 401(k)s aren't subject to any income limits, whereas Roth IRAs are. "So, you can make Roth contributions through a 401(k) regardless of how high your income is," Mr. Norquist says.

4. *John reached 70 on Jan. 31, 2017. What is the deadline for him to take his first RMD from his traditional IRA?*

A. Dec. 31, 2017 B. Oct. 15, 2017
C. April 1, 2018 D. Jan. 1, 2018

ANSWER: C. The required begin date according to the Internal Revenue Service, for your first RMD for IRAs (including SEP and Simple IRAs) is April 1 of the year following the calendar year in which you reach age 70½.

5. *Which of the following is subject to the one-per-year rollover rule, limiting an individual to perform only one 60-day rollover during a 12-month period?*

A. A rollover from a Simple IRA to a traditional IRA

B. A rollover from a 401(k) to a 403(b)

C. A rollover from a pension plan to a governmental 457(b) plan

D. A rollover from a traditional IRA to a 401(k) plan

ANSWER: A. The IRS says beginning in 2015, you can make only one rollover from an IRA to another (or the same) IRA of the same type (Roth or non-Roth) in a 12-month period, regardless of the number of IRAs owned. "Any rollover that breaks this rule is considered an 'ineligible rollover' which would create an excess contribution in your IRA if the amount is over your IRA contribution limit for the year," says Ms. Appleby.

6. *Usually there is a 10% penalty for tapping your retirement funds before age 59½. There are exceptions. Which one of these is FALSE?*

A. The exception is effective for those who leave in the year they turn age 55 (age 50 for public-safety employees).

B. Plan participants who leave before the year they reach 55 can keep their funds in the plan until they reach 55, and then take a distribution from the employer plan with no 10% penalty.

ANSWER: B. The exception applies only to those who actually separate from service in the year they reach age 55 or later (or 50 for public-safety employees). "If you separate from service at age 53, for example, you will be subject to the 10% early distribution penalty rules even if you take the distribution after turning 55," Ms. DeVeny says.

7. *Divorce will affect many retirement-plan account owners. The account might be split as part of the divorce settlement. Which of these is FALSE?*

A. Employer plans are split using a qualified domestic relations order (QDRO).

B. IRAs are split using a divorce decree or legal-separation agreement.

C. Retirement assets should be directly transferred from one spouse's account to the other spouse's account to avoid taxation to the original spouse owner who is giving up the assets.

D. A distribution from an employer plan to the ex-spouse who is under 59½ is subject to the 10% early distribution penalty.

ANSWER: D. There is an exception to the 10% early distribution penalty for distributions made from an employer plan to an ex-spouse under a QDRO, says Ms. DeVeny. "There is no corresponding exception for distributions to an ex-spouse from an IRA that split as part of the divorce decree."

8. *A retirement account owner has died. He was 82 years old and hadn't taken his RMD yet for the year of death. Who takes his distribution?*

A. Since he died before the required distribution, there is none for the year.

B. It must be distributed under his Social Security number and included on his final income-tax return.

C. Since he had a required distribution, it must be distributed to his estate.

D. The plan beneficiary(ies) is responsible for taking any remaining, that is, undistributed, RMD for the year of death, by Dec. 31 of the year of death.

ANSWER: D. Any required distribution not taken by a deceased retirement account owner in the year of death must be distributed to the beneficiary, says Ms. DeVeny. It will go to the estate only if the estate is the beneficiary. If the distribution isn't taken, the beneficiary is subject to a 50% penalty on the amount not taken.

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