

THE WALL STREET JOURNAL.

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As of 12 p.m. ET DJIA 21499.89 ▲ 0.54% NIKKEI 20067.75 ▲ 0.62% STOXX 600 391.94 ▲ 0.86% BRENT 47.19 ▼ 0.38% GOLD 1247.70 ▼ 0.50% EURO 1.1161 ▼ 0.33% DLR \$111.37 ▲ 0.44%

What's News

Business & Finance

The oil industry is committed to lower prices for longer, as the price of Brent crude is down 59% since its closing high of \$115.06 a barrel three years ago. **A1**

♦ EQT agreed to buy Rice Energy for \$6.7 billion, the latest proposed tie-up between energy producers after low oil and gas prices roiled the industry. **B1**

♦ Alibaba Chairman Jack Ma will be at an event in Detroit this week to give U.S. entrepreneurs tips on selling to Chinese buyers. **B1**

♦ A proposal by FTSE Russell could force finance chiefs at companies like Alphabet, Ford and Facebook to change their share class structures. **B7**

♦ Tech industry leaders will meet with Trump administration officials to discuss how to improve federal computer systems. **B4**

♦ A small autonomous-cars company owned by GM is getting into the high-definition mapping business. **B4**

♦ Asian equities are near their least volatile this century, following the calm that has been experienced recently by U.S. markets. **B8**

♦ U.S. Sen. Warren is urging the Federal Reserve to remove a dozen Wells Fargo board directors who served during the bank's sales-practices scandal. **B7**

♦ Chevron and other oil firms are piling into the Permian Basin in hopes of turning a profit. **B3**

World-Wide

♦ May vowed to crack down on extremism of all kinds after a driver rammed a van into a crowd of Muslim worshippers in London. **A1**

♦ Russia escalated tensions with the U.S., promising to actively track U.S. and coalition aircraft over Syria. **A1**

♦ The Philippines, Indonesia and Malaysia launched joint maritime patrols to stop a conflict with Islamic State militants in the southern Philippines. **A4**

♦ The U.K. and the EU started negotiations on Britain's exit from the bloc, almost a year after the U.K. voted to leave. **A3**

♦ Police said the number of dead and missing after the London high-rise fire had risen to 79 people. **A3**

♦ Ahead of an annual U.S.-China meeting in Washington, Beijing is working to show why close trade links with China will help America. **A5**

♦ South Korea said it would scrap plans to build new nuclear-power plants and halt operation of the country's oldest reactor. **A5**

♦ The U.S. plans to install cameras that would photograph all passengers just before they board international flights. **A6**

♦ A computer-security firm said that a data set holding personal information on nearly 200 million American voters was left unprotected online. **A6**

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Police stand guard near where a driver plowed into a crowd of Muslim worshippers in London. Theresa May called the attack 'sickening.'

U.K. Attack Sparks Outcry

May vows crackdown on extremism after van strikes Muslims near London mosque

LONDON—Prime Minister Theresa May vowed to crack down on extremism of all kinds, trying to soothe Muslim fears after a driver rammed a

van into a crowd of worshippers in what police were treating as the latest in a string of terrorist attacks.

Witnesses described a scene

of mayhem, saying the driver appeared to deliberately steer a white van into the crowd Monday after Ramadan prayers in the Finsbury Park neighborhood not long after midnight. The attack sparked worries about more violence in an already tense country.

"There seems to be no end to this—and now Muslims are also targets," said Huseyin Ali, a 32-year-old charity worker. "I worry that this might inspire copycat attacks on both sides."

One person was dead, but police said it was too early to say if it was a result of the attack outside the Muslim Welfare House. Eight people were rushed to hospitals, several of them with serious injuries, and

two were treated at the scene. Police said they arrested a 48-year-old man, who is believed to be the sole suspect.

After the attack, the man jumped out of the van and fled, but was chased down and pinned to the ground as he shouted anti-Muslim obscenities, witnesses said. As police detained him and took him away, he smiled and laughed at people in the crowd, they said. One witness described him blowing kisses.

The attack unfolded while the man who died was already receiving first aid from the public at the scene, police said. Some witnesses said people were tending to someone who had fainted before the car hit.

"We saw a van was driving very fast, so we thought at the beginning he wanted to catch the traffic light," said Saeed Hashi, 28, who said he saw the attack. "But he didn't. He hit a woman first and then two men. He carried on, and another three, or four, or five."

Mr. Hashi said he and five others restrained the alleged attacker, who he described as a muscular man with a tattoo. Some were punching him, but the mosque imam intervened, telling them to stop and wait for police, others said.

"He said, 'I've killed the Please see ATTACK page A2

♦ Death toll from London high-rise fire reaches 79 A3
Please see SYRIA page A4

FOR AMAZON, NOW COMES THE HARD PART

The web titan joins a crowd with its Whole Foods deal; the 'last mile' puzzle

With Amazon.com Inc. wheeling sharply into the grocery aisle, the business of selling food may never be the same.

By Julie Jargon,
Annie Gasparro
and Heather Haddon

Food retailing was already struggling with low margins and slow sales growth as shoppers shifted buying patterns. New players have swarmed the crowded market, with grocers ranging from giants Wal-Mart Stores Inc. and Kroger Co. to smaller chains fighting to attract consumers, in large part by slashing prices.

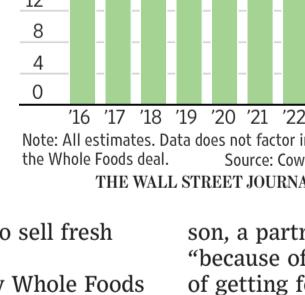
And the industry has been struggling to figure out how to sell food online.

Amazon's agreement to buy Whole Foods Market Inc. could add to the saturated market as it puts more of its own groceries into the distribution system, while putting new pressure on grocers to figure out how to sell

Enter the E-Commerce King

Amazon is expected to increase its share of the U.S. grocery market

Albertsons/Safeway Costco
Amazon Kroger Wal-Mart



Note: All estimates. Data does not factor in the Whole Foods deal.

Source: Cowen

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fresh food online lest the web giant beat them. The deal is "a seminal moment in the world of eating," said RBC Capital Markets LLC analyst David Palmer.

It isn't all clear whether the king of e-commerce can do in fresh cabbages what it has done in CDs, books and just about everything else. Amazon and Whole Foods combined still have a small fraction of Wal-Mart's share of groceries. And Amazon faces a "last mile" logistics problem of getting fresh food to doorsteps that it doesn't with other goods.

"This is going to be one of the hardest areas for them to get into," said Kent Knudson, a partner at consulting firm Bain & Co., "because of some of the physical challenges of getting food into people's homes."

The challenges for grocers today include a new reality: The days of shoppers filling carts during a big weekly trip to their neighbor.

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Oil Firms Adapt to Lower Price

Three years after the price of crude began its rapid descent, the oil industry and investors are finally resigned to the idea of lower prices for longer, potentially ending a period of crisis for the sector.

By Georgi Kantchev,
Sarah Kent
and Erin Ailworth

The price of Brent crude, the international benchmark, is now down 59% since it hit a closing high of \$115.06 a barrel three years ago on Monday. West Texas Intermediate, the U.S. gauge, is also 58% lower than the \$107.26 high it hit a day later.

The steep fall sparked a slump in oil company profits, recessions from Russia to Venezuela, and huge job cuts across the world's oil fields.

But now, petrostates, investors and major oil companies are adapting to a world in which they see a range of \$50 to \$60 a barrel as the new equilibrium. The failure of OPEC and other key producers to lift oil prices by capping their production, most recently at a meeting late May, underscores how the industry has little choice but to accept the new reality.

Producers have cut costs, focused on more-profitable assets and no longer throw cash

at costly projects in places like the Arctic. Their ability to profit at lower oil prices has helped steady investors' nerves and they are starting to fund new projects again.

"Lower for longer has become the new mantra in the industry," said Daniel Yergin, vice chairman of IHS Markit and a longtime oil-market watcher. "People are regearing themselves to a new price level and \$50 to \$60 seems acceptable to most."

To be sure, this new range is far from comfortable for some countries and companies, particularly in the services sector, which continue to

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Russia Cautions U.S. Over Syria

Russia escalated tensions with the U.S., promising to track U.S. and coalition aircraft over Syria with its air defense systems and warplanes, the Defense Ministry said.

By Thomas Grove in Moscow and Arese Ebqali in Tehran

In a statement Monday, the Russian military said it would treat U.S. and coalition aircraft operating west of the Euphrates River as "aerial targets," but stopped short of threatening to shoot them down.

"In regions where the Russian Air Force is carrying out operations in the skies above Syria, any flying objects—including airplanes and drones of the international coalition—discovered west of the Euphrates River will be treated as aerial targets for tracking by land and air defense systems," the statement said.

U.S. defense officials said they were staying in touch with the Russian military to see what the practical impact of the statement might be on air operations in Syria.

Defense officials said there were no immediate steps taken to curtail air operations as a result of the Russian warnings.

Russia's threat was in response to the U.S. downing a Syrian government jet over the weekend, the first time a U.S. pilot has shot down a Syrian regime aircraft during the six-year conflict.

Russia's Defense Ministry also said it would pull out of an agreement between Moscow and Washington to cooperate in the crowded skies above Syria, where U.S. coalition

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Hair-Raising Idea: A Beard Business Sprouts in Indonesia

* * *

Young entrepreneur touts secret to growing facial hair—and finding love

BY JAMES HOOKWAY

JAKARTA, Indonesia—People in Indonesia like the idea of growing beards just as much as hipsters in Brooklyn or Berlin.

Sports stars such as David Beckham and the Houston Rockets' James Harden helped cement the trend, as have actors such as Brad Pitt and Bollywood star Shah Rukh Khan.

The thing is, some Indonesian men struggle to grow beards and often end up with just a few wispy strands or some spotty patches of peach fuzz. It is something that many Asian men face, from Japan to Vietnam, Thailand and China. Japan

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Please see BEARD page A8

WORLD NEWS

A Measured Translation of Trump's Trade Talk



CAPITAL JOURNAL

By Gerald F. Seib

In most administrations, lower-ranking officials make the incendiary comments, while the president rises above to offer the calmer, more soothing explanations of his policies.

In the Trump administration, the opposite is true. That's especially the case on foreign affairs—and in particular on trade policy.

President Donald Trump sounds as if he wants to take a wrecking ball to the international trade system; people fear trade wars because his commentary often has a martial air about it. "I don't mind trade wars" when the U.S. is running big trade deficits, he said at one point. His talk of new tariffs should be read as a "threat," he said during the presidential campaign.

When Mr. Ross appeared last week at the Journal's CFO Network, he described the international trade regime as a kind of anachronism—one that was founded with the best of intentions amid postwar rubble but that now has fallen out of sync with modern economic realities.

"After World War II, there was a deliberate matter of our public policy to try to help the war-ravaged nations rebuild themselves," Mr. Ross said. At that point, obviously, the U.S. was the world's dominant economic power by far, and its self-in-

terest lay in helping its European allies and Japan pull themselves up economically to ward off communism.

America not only could afford to be generous in trade relations, but had a profound self-interest in doing so.



U.S. Commerce Secretary Wilbur Ross in Washington last week.

Agreement on Tariffs and Trade, and the World Trade Organization.

Along the way, the allies caught up with the dominant U.S., but, Mr. Ross argued, "our policies didn't really change. And so we now have a terrible structural problem that I think is really inhibiting free trade."

That history, he said, has produced some "oxymoronic" outcomes. For example, the tariff on a European automobile sent into the U.S. is 2.5%, while the tariff on an American auto sent into Eu-

rope is 10%, despite the fact that the two markets now are roughly the same size.

Perhaps most important, the international trade structure didn't anticipate the rise of a command-economy giant in China as a trade juggernaut, with the imbalances that has created. Nor, given that the structure was created in an era of fixed exchange rates, did it anticipate the ability of countries to manipulate currency values to give their exports an advantage.

A few caveats are in order.

On auto trade with Europe, for example, the European Union doesn't dispute the tariff imbalance. But it also notes that the same is true in reverse on, for example,

passenger-train cars, on which the U.S. imposes a 14% duty on European imports, while the EU charges 1.7% on those bought from the U.S.

"The EU wants to remove these duties and other barriers to trade, such as lengthy administrative checks, that increase the cost of trade in goods," the EU says in an online explanation of its view.

Still, the broader Ross argument is one that many on the Democratic side in the U.S. would accept. "I think Ross is right," says Jared

Bernstein, senior fellow at the Center on Budget and Policy Priorities and onetime adviser to former Vice President Joe Biden. The trade "macro infrastructure" is "problematic," he says. "There are countries that manage trade in such a way as to boost their trade surpluses and essentially import jobs from other countries."

Mr. Bernstein suggests changing international trade agreements to allow a country to offset currency manipulation by a trading partner by buying that partner's currency. More broadly, he advocates establishing a high-level, bipartisan commission to find a consensus approach to such issues—ideally led by investor Warren Buffett.

Ultimately, though, even the hard-line Trump view argues for, not against, negotiated solutions. Douglas Irwin, an economist and trade historian at Dartmouth College, notes that, unlike the U.S., Mexico "doesn't face any tariffs when they export their autos to Europe." Why? "Because they have a free-trade agreement....If we want to get rid of that tariff, we have to have a free-trade agreement with the EU."

ATTACK



Forensic officers at work in north London's Finsbury Park neighborhood, where a man was arrested after a van hit pedestrians.

whatever form, it shares the same fundamental goal. It seeks to drive us apart," she said following a meeting of the emergency-security committee. "We will not let this happen."

Police said extra police would be deployed around London, especially to protect Muslims.

Neil Basu, deputy assistant commissioner of London's police, said the incident was being treated as a terrorist attack but that "no matter what his motivation proves to be, we are keeping an open mind."

In Finsbury Park, the imam at the Muslim Welfare Center, Mohammed Mahmoud, told reporters that bystanders held

the attacker down, but couldn't push back people who were trying to hit him, so he and others "pushed the people back."

He said people who wish to divide the U.K. and London have influenced some who are "vulnerable and impressionable into thinking we're barbaric and that we are people who like to shed blood."

Some remained shaken. Adil Rana, 24, said he was in front of the mosque when he saw the van accelerate toward him. He ducked for cover and then saw people on the ground covered in blood.

"I'm extremely upset," he

said. "This will only escalate violence. People are angry. I'm angry."

Ibn Omar said he had received texts from friends and family telling him to stay away from mosques.



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"I can't practice my religion freely," Mr. Omar said. "How will the government assure us we are safe? Who will be next?"

Witnesses said they had come from praying at the Finsbury Park Mosque, where Egyptian-born radical cleric Abu Hamza al-Masri, who was jailed for life by a U.S. court for supporting terrorism, used to preach. In 2005, the mosque changed its board of trustees and imams. It hasn't been linked to extremism since the changes.

—Paul Hannon
and Joanna Sugden
contributed to this article.

Car Rams Police Vehicle in Paris

Attacker dies amid explosion; no police or bystanders hurt

A man on the radar of French authorities was killed Monday after ramming a car carrying explosives into a police vehicle in the capital's Champs-Élysées shopping district, prompting a fiery blast, officials said. France's antiterrorism prosecutor opened an investigation.

No police officers or passersby were hurt, the Paris police department said. It is unclear why the attacker drove into police, though officials said the incident apparently was deliberate.

Interior Minister Gerard Collomb said the man was killed after an attempted attack on a police convoy, saying that shows the threat is still very high in the country and justifies a state of emergency in place since 2015. He said he would present a bill Wednesday at a cabinet meeting to extend the state of emergency from July 15, its current expiration date, until Nov. 1.

Two police officials told the Associated Press that a handgun was found on the driver, who they said was badly burned after the vehicle exploded. They identified the man as a 31-year-old from the Paris suburb of Argenteuil who had an "S" file, meaning he was flagged for links to extremism.

—Associated Press

OIL

Continued from Page One
struggle. Venezuela and its oil-fueled economy have collapsed and others, like Iraq, are far from comfortable with the new price.

"The real problem is oil prices going down," said Assem Jihad, a spokesman for the Iraqi oil ministry.

But for others, the new level is a relief after a combination of booming U.S. shale output and Saudi Arabia's continued pumping sank crude to decade-low levels of under \$30 early last year.

Those U.S. drillers have led the way in adapting to the lower price. Before the bust, producers often needed \$80-\$85 oil to break even.

When the oil price began to fall, Bryan Sheffield, chief executive of Parsley Energy Inc., doubted his company would pull through. "In year one, I wasn't sure we were going to survive. We went from \$17 to \$11 in like three days," he said of a decline in share price at one point in 2014.

Since the start of 2015, in the U.S., 105 producers and 120 oil-field service companies have filed for bankruptcy, according to Haynes & Boone

LLP. In a calmer environment, there might be one or two bankruptcies of note among oil and gas producers, and a few more among smaller services companies.

U.S. shale drillers persevered by focusing on their best acreage and making technological improvements, such as drilling super-size wells with more sand to gain savings.

Parsley repeatedly sold shares to raise cash, allowing it to make acquisitions in the Permian, a West Texas field where producers can profit on wells even at low oil prices.

Now, Mr. Sheffield said Pars-

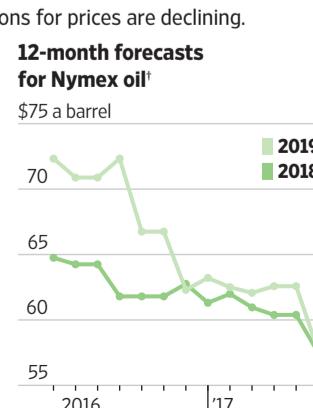
ley can continue to grow even if oil drops down to \$40 a barrel.

Big oil, too, is settling in for an extended period of cheap crude. Chevron Corp., Royal Dutch Shell PLC, Exxon Mobil Corp. and BP PLC have indicated they will be able to generate enough cash at \$60 a barrel to cover their spending and shareholder payouts this year. At \$50 a barrel, the picture is more mixed. But the companies say they are focused on living within their means at even this price.

In the first quarter of 2017, many oil majors posted their highest profits in over a year.

Oil prices are slipping, and predictions for prices are declining.

12-month forecasts for Nymex oil^{*}



*Through 9 a.m. EDT Monday. †Wall Street Journal monthly survey of banks.

Sources: WSJ Market Data Group (futures); the banks (forecasts)

To cope with the new price range, companies have driven down costs by squeezing suppliers and contractors, trimmed less-profitable projects and tackled a once-spendthrift culture.

This is all a big change from just three years ago.

In 2013, then oil minister for Saudi Arabia, Ali al-Naimi, declared \$100 a barrel a "reasonable price" for consumers and producers. Throughout the 2000s, oil prices climbed to record levels, driven by soaring demand in emerging markets, especially China, and concerns over supply.

Now, many in the oil industry don't even want to see that price again, some analysts say. That is because high oil prices triggered a huge investment boom that fueled a global glut and crashed the market.

In Iraq, the once booming oil town of Basra is now dotted with half-finished construction projects and motorways that go nowhere. In Peace River, Canada, the promise of a \$2 billion Shell oil facility was expected to double the population of this Albertan town. The project never happened.

Cheap oil also helps the economies of major consumers like the U.S. and Europe. U.S. motorists had logged a record number of miles in the year till March, according to the Fed-

eral Reserve Bank of St. Louis.

"For oil, \$50 to \$60 is a sweet spot both for consumers and for producers," said Rob Thummel, who manages energy assets for Tortoise Capital Advisors.

While prices are currently

below that level, it is a range that has persisted for much of this year and that analysts expect to last. In The Wall Street Journal's May survey, analysts predicted Brent would average \$59 a barrel next year, down from \$68 in the survey a year earlier. For 2019, the analysts now see Brent at \$60 a barrel, down from a prediction of \$76 in May 2016.

But the oil industry is feeling better about itself. At this year's big gathering, Houston's CERAWeek conference, the mood was palpably lighter, said BP CEO Bob Dudley. "I don't think I heard anyone laugh last year at anything," he said.

"It feels like we're heading into a balance point here," he said.

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WORLD NEWS

U.K. Embarks on Negotiations to Quit EU

The two sides have until March 2019 to complete and ratify a deal on the divorce

By LAURENCE NORMAN
AND VALENTINA POP

BRUSSELS—The U.K. and the European Union started talks on Britain's exit from the bloc Monday morning, almost a year after the U.K. voted to leave, with EU chief negotiator saying he hoped the two sides can start removing the uncertainties created by that decision.

The two sides have until March 2019 to complete and ratify a deal on the U.K.'s divorce from the EU after more than four decades of membership and to try to shape a future partnership between Britain and its neighbors.

In short press statements, the EU's chief negotiator, Michel Barnier, said he hoped Monday's discussions can "identify priorities and timetable that would allow me to report...that we had a constructive opening of negotiations."

"Our objective is clear. We must first tackle the uncertainties caused by Brexit," he said.

The U.K.'s Brexit Secretary

David Davis said the British government was determined to "deliver a deal that works in the best interest of all citizens."

"To that end, we are starting negotiations in a positive and constructive tone, determined to build a strong and special partnership between ourselves and our European partners and friends in the future," he said.

Britain enters the negotiations with the EU at a time when U.K. Prime Minister Theresa May faces huge political challenges at home following an election that resulted in her Conservative Party losing its

majority in Parliament.

There are widespread questions over whether Britain may soften its Brexit goals

The talks begin in Brussels as Britain finds itself in political turmoil.

outlined before the election, which include taking the U.K. out of the EU's single market for goods and services and the bloc's customs union.

However, European officials have said in recent days negotiations must proceed on the basis of Mrs. May's current plans.

The EU has said that before it will start discussing a future trade deal with the U.K., it wants to resolve the biggest uncertainties arising from Brexit, including the future rights of around three million EU citizens in the U.K. and the arrangements for avoiding a hard border between Northern Ireland and the Republic of Ireland.

The EU is also seeking British commitments to meet all past EU spending pledges when it leaves the bloc, a bill

European officials say could amount to upward of €60 billion (\$67.2 billion).

Mr. Barnier has said he hopes to conclude the talks by October 2018, leaving six months to ratify the deal. A trade agreement can be completed only once the U.K. leaves the bloc. Some European officials say that could take years.

EU leaders have said they hope sufficient progress is made on the key divorce issues by the autumn to allow discussions to begin on the future trade and security relationship. EU leaders must unanimously agree when they are ready to do so.

German Building Boom Unearths Old Bombs

BY ANTON TROIANOVSKI

ELLENSERDAMMERSIEL, Germany—This country's construction boom has reached such heights that its unexploded-ordnance-removal technicians can barely keep up.

"This really takes it out of you," one of them, Hans Mohr, said one recent Saturday after a 65-hour workweek—not counting this morning's assignment, which was digging up a railway bed. "I can't keep going on like this."

Thanks to low interest rates and a humming economy, new construction activity in Germany is approaching 20-year highs. That building boom is disturbing the thousands of tons of bombs, artillery shells, and hand grenades from two world wars that are still hidden underground.

People have been digging up unexploded ordnance in Germany for decades. But more than 70 years after the end of World War II, statistics from across Germany show that its governmental unexploded-ordnance technicians are now busier than they have been in years.

"We're not going to go extinct," said Karl-Friedrich Schröder, another veteran of the trade, as he locked up a secret bunker filled with recovered bombs in the Westphalian hills. "Interest rates are still low."

British and U.S. airplanes dropped some 1.4 million tons of explosives on German cities and production centers during World War II. The bombs that didn't explode are among the remnants of previous conflicts and land-warfare ordnance, including artillery shells and hand grenades, now buried underground. The country's main construction trade group says that around 100,000 tons of unexploded ordnance still lie in German soil.

Mr. Schröder's office in the intensely bombed Ruhr region

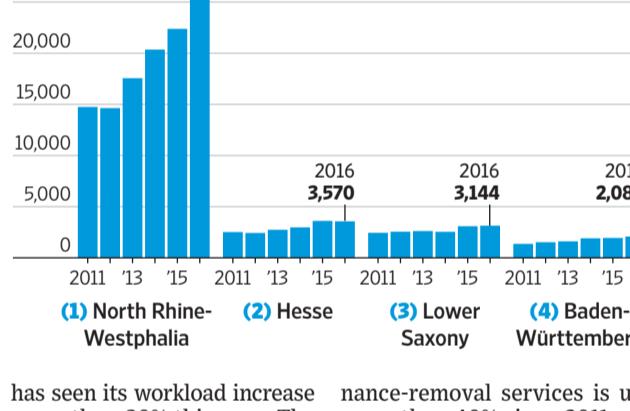


Unexploded World War II bombs found in Germany's Arnsberg district are stockpiled in a bunker.

A Dangerous Job on the Rise

An increase in construction activity in Germany is spurring a rise in bomb-removal work, including in the states of North Rhine-Westphalia, Hesse, Lower Saxony and Baden-Württemberg.

Ordnance-removal cases



has seen its workload increase more than 30% this year. The state of Lower Saxony, where Mr. Mohr is based, disposed of 93 tons of unexploded ordnance last year—the most in at least a decade. In the large German states of North Rhine-Westphalia, Hesse, and Baden-Württemberg, the number of inquiries received by ord-

nance-removal services is up more than 40% since 2011.

And another challenge looms underwater: a surge in wind-park construction is forcing the country to reckon with the more than one million tons of munitions long hidden under the sea. Last year, officials received 264 reports of ordnance finds off German



Note: Most ordnance-removal cases don't result in bomb finds.

Sources: State of North Rhine-Westphalia; Regierungspräsidium Darmstadt (Hesse); State of Lower Saxony Regierungspräsidium Stuttgart (Baden-Württemberg)

THE WALL STREET JOURNAL.

coasts—compared with 148 in 2013, when nationwide records started being kept.

For construction projects, the impact of unexploded bombs runs deep. In Hannover, the discovery of three British bombs under an apartment-building construction site forced 50,000 people to be evacuated in May.

Death Toll From Fire In London Rises to 79

BY MATT SURMAN

LONDON—Police said the number of dead and missing after the London high-rise fire had risen to 79 people.

Police had warned the death toll might rise as search operations continued in the charred shell of the building, which residents had complained for years wasn't fire-safe.

Experts have said the newly installed cladding may have contributed to the fire's quick spread.

Prime Minister Theresa May has ordered an inquiry into the fire and police are conducting a criminal investigation.

"We will be looking at all criminal offenses that may have been committed," police commander Stuart Cundy said.

Over the weekend, the British government sought to defend itself from accusations it hadn't done enough to prevent the deadly fire.

Asked if the government would implement a ban on the type of cladding used in Grenfell Tower, a 24-story building consumed by a blaze early Wednesday, Treasury chief Philip Hammond on Sunday said: "My understanding is that the cladding in question, this flammable cladding, which is banned in Europe and the U.S., is also banned here."

The Conservative government also came under sharp criticism for not having concluded a review of fire-safety standards prompted by a 2009 fire in a high-rise in south London, which killed six people. Mr. Hammond denied an accusation that the government "sat" on the review, which has yet to be published.

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WORLD NEWS

NATO Boosts Baltic Force, to Russia's Ire

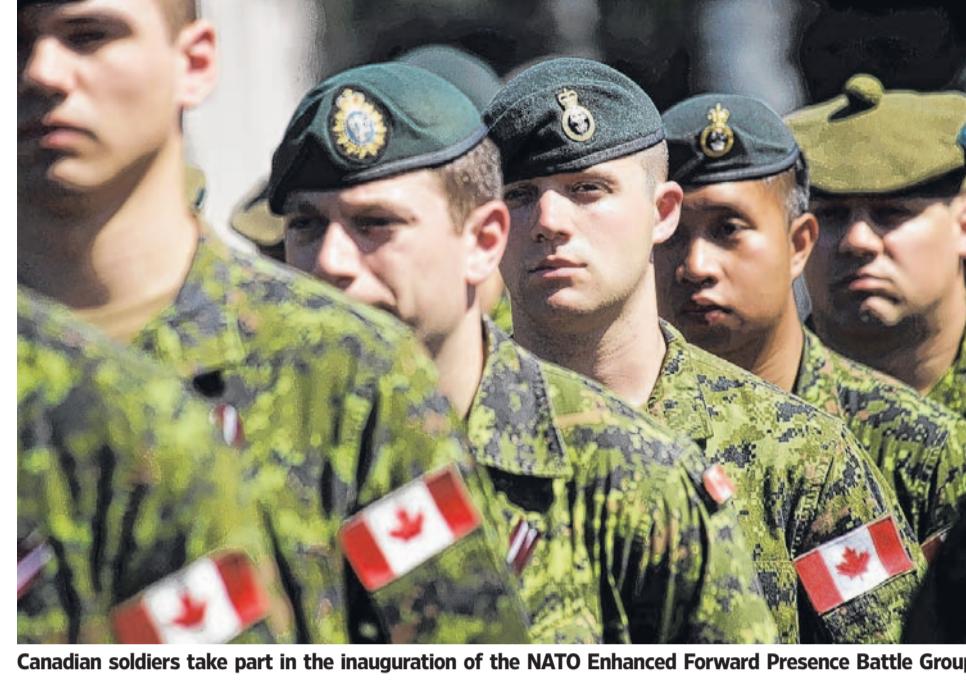
By JULIAN E. BARNES

ADAZI, Latvia—The North Atlantic Treaty Organization said its deterrent force is fully in place in the Baltic area with the addition of a Canadian-led battle group in Latvia, enhancing deployments criticized by Russia.

A ceremony on Monday, featuring parading troops from Latvia, Canada, Poland, Italy, Spain, Slovenia and Albania, marked complete deployment of the fourth and final alliance battle group to the Baltic region. In all, NATO has positioned some 4,500 troops in Latvia, Lithuania, Estonia and Poland.

Allied and Russian forces have both been building up in the Baltic region. The deployments have raised the risk of miscalculation, some analysts said, but both sides have said they are necessary defensive initiatives.

The U.S. has deployed a tank brigade to Central and Eastern Europe and is conducting exercises in the Baltic Sea region. This month, the U.S. flew B-2 stealth bombers to Europe for what American military officials called a demonstration of reassurance for



Canadian soldiers take part in the inauguration of the NATO Enhanced Forward Presence Battle Group.

presence underlines the importance of transparency, predictability, and risk reduction."

Russia has said the NATO deployment violates an agreement with Moscow not to permanently station significant combat forces on Russia's borders.

Russian officials have consistently said the NATO force is undermining, not improving, security. Alexander Grushko, the Russian ambassador to NATO, recently said the alliance should focus on fighting terrorism, not defending against Moscow.

Mr. Grushko also said NATO's buildup risked an arms race. "The situation is dangerous," he said. "We know from our previous experience when there is a military dynamic...it will reproduce the logic of having additional assets, additional assets, additional assets."

Mr. Stoltenberg said the alliance hadn't violated agreements with Russia. Canadian Defense Minister Harjit Sajjan said the NATO arrangements were clearly defensive. He said it was Russia that had committed aggression by annexing Crimea, prompting Canada to deploy its largest force to Europe since the Cold War.

"You really have to ask Russia that question: Who is the aggressor here," Mr. Sajjan said in an interview. "We, with NATO, are sending an important message for our alliance, we stand together....This is not an aggressive message."

In recent months, the alliance has had to deal with political sensitivities as U.S. President Donald Trump has said European powers don't spend enough on their militaries, and questions have been raised about whether the U.S. would live up to its commitment to defend allies.

Mr. Trump said in May that current spending was inadequate and raised the prospect of increasing the NATO target from 2% of economic output to 3%, allied officials said.

With most allies spending well below 2%, there is little appetite to raise the target, they said. Mr. Stoltenberg said he has urged countries to abide by the 2014 Wales pledge to move toward spending 2%.

"I know that President Trump has recognized the progress we see across Europe and Canada," Mr. Stoltenberg said. "He has actually said the money is pouring in."

WORLD WATCH

PORUGAL

At Least 61 Killed In Forest Fires

Forest fires raging through central Portugal killed at least 61 people, a death toll that officials said is expected to rise as firefighters battle six major blazes.

At least 47 of those killed had been found dead in their vehicles or alongside a road, engulfed by flames and smoke as they tried to flee their homes, many of which had been consumed by the conflagration, said interior ministry official Jorge Gomes.

Portugal and other Southern European countries such as Spain are often hit by deadly forest fires as summer temperatures rise, parching the land. But the impact of the fires that spread Saturday afternoon into Sunday in Portugal were particularly devastating. Portugal declared three days of mourning.

More than 1,500 firefighters, hundreds of firefighting vehicles and more than a dozen airplanes were battling six major fires and dozens of smaller ones.

Authorities said the cause of the blazes appears to have been lightning strikes on Saturday afternoon.

—Jeannette Neumann

AIR SAFETY

Officials See Risk In Wakes of Big Jets

European aviation authorities will issue a safety warning to airline pilots about turbulence generated by other aircraft at high altitude, according to government and industry officials, an issue becoming more common as jetliners grow ever larger and fly closer together.

The safety-information bulletin, responding to roughly a dozen serious incidents world-wide over the past few years, is slated to remind cockpit crews to follow trajectories slightly offset from official routes, to reduce the impact of wakes from airliners passing overhead. It is expected in the next few weeks.

Wake vortices—high-velocity, whirling airflow spinning off wing-tips—spread downward and backward, so offsetting laterally by a mile or two from the planned route typically avoids the brunt of the turbulence.

In a January incident that has garnered considerable global attention, a Bombardier Inc. business jet temporarily went out of control and plunged some 9,000 feet over the Arabian Sea after an Airbus A380 superjumbo jet flying in the opposite direction passed 1,000 feet overhead.

—Andy Pasztor



Indonesian naval vessels and a helicopter patrolled in the Tarakan Sea, in Tarakan, Indonesia, on Monday as part of joint patrols.

Southeast Asian Sea Patrols Begin

By BEN OTTO

MANILA, Philippines—Three Southeast Asian nations under threat from Islamic State-linked militants launched joint maritime patrols in an effort to stop a conflict in the southern Philippines from spreading to other parts of the region.

The Philippines, Indonesia and Malaysia plan to police the Sulu and Celebes seas, a vast area prone to piracy and kidnappings.

Security officials in Southeast Asia have long feared that Islamic State's activities in Syria could ignite dormant terrorist cells in Indonesia, the Philippines and Malaysia, nations with combined populations of almost 400 million people. The conflict in the southern Philippines, now entering its fifth week, is raising concerns in Jakarta that mil-

tants could flee to neighboring Indonesian islands.

The joint patrols were first agreed to more than a year ago, but were delayed over disputes such as overlapping territorial claims, said Ian Storey, a senior fellow at the Iseas-Yusof Ishak Institute in Singapore. The continuing battle between Philippine troops and Islamic State-linked militants in the southern Philippine town of Marawi pushed officials to move forward with the plan, Mr. Storey said.

"The Marawi siege, and the recognition that terrorism poses a major security threat to all three countries, has concentrated minds and made this breakthrough possible," Mr. Storey said. Still, given the vast area of the waters, "challenges of interoperability and lingering political sensitivities over sovereignty, it remains to be seen how effective these

patrols will be."

U.S. Special Forces have been supporting Philippine troops with technical support and intelligence, including providing surveillance planes over Marawi to monitor militant positions. But that support has been limited. U.S. Defense Secretary Jim Mattis last week cited the Marawi conflict in telling Congress that the U.S. had too quickly decided to end a special-operations task force in the southern Philippines three years ago.

The southern Philippines has been under martial law since late May as troops battled local militants in Marawi, a town of about 200,000 people on Mindanao Island, where Philippine extremists have been seeking to create an Islamic caliphate. More than 300 militants, security personnel and civilians have been killed and 180,000 people dis-

placed in a conflict that has included dozens of foreign fighters from Indonesia, Malaysia, Saudi Arabia, Yemen and Morocco, officials have said.

On Monday, Philippine military officials said militant numbers in Marawi had dwindled, but that some fighters have escaped along with evacuees.

Philippine officials also announced the seizure of as much as \$5 million worth of crystal methamphetamine from a house in Marawi, along with a cache of advanced firearms.

"They are not ordinary firearms at all but high-powered firearms that can fire from afar," said Brig. Gen. Restituto Padilla, spokesman for the Philippine armed forces. "This is indicative of the length of planning that went to this operation of these rebels."



OLD BONES: Excavation in a graveyard near Duenas, Spain, discovered 156 graves dating back to the 12th to 14th centuries.

SYRIA

Continued from page A1

tion planes operate alongside Syrian and Russian aircraft.

This isn't the first time that Russia has escalated its rhetoric over Syria. Earlier this year, Moscow unilaterally pulled out of the memorandum on military coordination after U.S. President Donald Trump ordered a Tomahawk missile strike at the Shayrat air base in western Syria in early April. Washington and Moscow subsequently confirmed they would resume the agreement.

While the U.S. has stepped up military action against Syrian government forces in recent weeks, the Russian government has pushed a narrative that Washington is hampering its efforts to target Islamic State.

In a recent briefing in Moscow, Col. Gen. Sergei Surovikin, the commander of Russian forces in Syria, condemned recent U.S. strikes on Syrian regime forces, saying they were actually aimed at thwarting

the advances of the Syrian government.

The coalition strikes, he said, "blocked the way for government troops that carry out the task of destroying the ISIS groupings," adding that recent actions were a violation of Syrian sovereignty.

"It creates the impression that it is the government forces of Syria, not the terrorists of ISIS, that present the real danger to the coalition," Gen. Surovikin said.

The shooting down of the Syrian aircraft also comes amid a fast-shifting situation on the ground inside Syria. U.S.-backed Syrian Democratic Forces are battling to capture the Islamic State stronghold of Raqa. The forces of Syrian President Bashar al-Assad, backed by the Russians and Iranians, have continued advancing east from Aleppo province into neighboring Raqa province, putting them on a collision course similar to the confrontations happening in southeast Syria.

There, the U.S. has fired on pro-regime forces and downed

an Iranian drone to stop an advance toward U.S.-backed rebels fighting Islamic State near the Jordanian and Iraqi border.

A spokesman for the U.S.-backed Syrian Democratic Forces said in a statement Monday that the Syrian regime forces began widespread attacks on them Sunday using warplanes, artillery fire and tanks on areas that the SDF had previously captured from Islamic State around the Tabqa Dam.

"If the intention of the regime's repeated attacks on our forces is to terminate the liberation of Raqa city, we stress that continued regime attacks on our forces in Raqa will compel us to respond in a similar manner," spokesman Talal Silo said in the statement.

On Sunday, Iran's Revolutionary Guards force launched multiple missile strikes targeting Islamic State in one of its last Syrian strongholds, Deir Ezzor province.

Those strikes were retaliation for a June 7 attack on Iran's parliament and a shrine in Teh-

ran claimed by the terror group, and state television on Monday aired celebratory footage of the strikes, which were launched by mobile systems in the western provinces of Kermanshah and Kordestan. State TV also showed the drone-sent footage of the targets being hit, and a TV reporter standing close to a

launch point said "bon appetit" to the Islamic State fighters being targeted. Iranian officials from across the political spectrum praised the missile attack, including Foreign Minister Javad Zarif.

"Terrorist supporters should receive Iran's message of power," Mohsen Rezai, secretary of the prominent Expediency Council and former commander of Iran's hard-line Revolutionary Guards force was quoted as saying by state TV.

—Nathan Hodge in Moscow,
Raja Abdulrahim in Beirut
and Dion Nissenbaum in Washington
contributed to this article.



An F/A-18E Super Hornet aircraft of the type the U.S. says shot down a Syrian government warplane.

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Raja Abdulrahim in Beirut
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contributed to this article.

WORLD NEWS



Greece objected to criticism of China by the European Union. Here, Greek and Chinese officials settled down to talks on June 12.

China's Cash Buys Tolerance

Investments in Greece, other strapped nations help blunt criticism of Beijing on human rights

By NEKTARIA STAMOULI AND WILLIAM WILKES

ATHENS—Greece's recent veto of a European Union statement condemning Chinese human-rights violations shows the return Beijing is getting on its multibillion-dollar investments in the bloc's cash-strapped periphery.

China's acquisition spree in Western Europe last year raised fears about the commercial costs of losing cutting-edge technologies. Less foreseen was the degree to which Beijing's investment in poorer parts of Europe appears to have bought silence on China's human-rights record, according to analysts, diplomats and human-rights organizations.

On Thursday, Greece was alone among the 28 EU members in objecting to criticism of China by the bloc, which sought to challenge Beijing's crackdown on political activists and dissidents.

"Greece's position is that unproductive and in many cases selective criticism against specific countries

doesn't facilitate the promotion of human rights in these states, nor the development of their relation with the EU," a Greek foreign ministry official said.

EU officials played down the rift.

"The global human-rights agenda is best served when the EU speaks with one voice," said a spokeswoman for EU Foreign Affairs chief Federica Mogherini. "We will continue our work to bring all 28 together."

China has helped fund major infrastructure projects in Europe's south and east, offering billions of euros in finance for railways, power lines, roads and bridges across such economically squeezed countries as Greece, Hungary, Croatia and Portugal.

For Greece, under pressure from its international creditors to slash public spending, Chinese cash has been vital. It helped refurbish Greece's largest port and propped up its wheezing state-owned power-grid operator.

China's investment has bought influence in Athens, human-rights groups said after Greece told fellow EU members it was uneasy about criticism of China's human-rights record before blocking the statement on Thursday.

Chinese President Xi Jinping has called Greece China's

"most reliable friend in the EU." Hungary and Croatia have also blocked EU statements chastising Beijing. The three countries last year repeatedly thwarted a statement from the 28 member states taking issue with China's aggressive stance in the South China Sea.

"Those countries are in a weak situation economically and they want those investments," said Nadège Rolland, a senior China analyst at the National Bureau of Asian Research in Washington.

Chinese Foreign Ministry spokesman Geng Shuang said while Beijing didn't know specifics of internal EU discussions on the issue, China wanted to commend "the relevant country" for taking the right position on the matter.

"We oppose politicizing the human-rights issue" and using it to interfere with countries' sovereignty, Mr. Geng said.

Chinese officials say they use infrastructure loans—particularly for transport projects—to buy diplomatic influence in Europe, a strategy dubbed "high-speed rail diplomacy" by one Chinese government-backed university.

China's European investments mirror the country's moves in Asia, where it is building roads, railways and power plants as part of its "Belt

and Road Initiative" to link Europe and Central Asia to China.

High-speed rail investment has been a key part of China's push to gain diplomatic leverage in parts of Europe. Beijing in 2013 said it would finance 85% of a \$2-billion project to build a high-speed railway between the capitals of Serbia and Hungary.

Hungarian politicians have lauded Chinese investment and moved to shield China from criticism. Prime Minister Viktor Orban said in Beijing last month that developed countries lecturing on human rights has become "increasingly offensive."

China has also lent money for the construction of a bridge in Serbia, a power station in Bosnia and new roads in Macedonia. Further west, Portugal and Spain have received Chinese investment in energy-production networks.

China has been one of the few investors debt-laden Greece has attracted in recent years. Greece's left-wing Prime Minister Alexis Tsipras has visited China twice—most recently last month—during the last two years in an effort to lure investors to his economically struggling country.

—Josh Chin and Brian Spegele in Beijing contributed to this article.

Beef Is on Table Ahead of Talks

By JOSH CHIN

BELIJING—Ahead of a high-level U.S.-China security meeting in Washington, Beijing is doing its utmost to show why close trade links with China are a good thing for America, and starting with Iowa beef.

Chinese and U.S. officials are set to kick off an annual security dialogue on Wednesday that will address an impasse over North Korea's missile development and nuclear program.

On the same day, the first shipment of American beef in 14 years is scheduled to arrive in Shanghai, following a breakthrough in trade relations. Members of a recent Chinese delegation to the U.S. pointed to this and other moves as a relative bright spot in a fraught relationship.

"The next step is to import a huge volume of agricultural goods," Wei Jianguo, a former Chinese trade official, said in Beijing on Monday, flagging how he said the swelling appetites of Chinese consumers could benefit the U.S. "Ignoring a market this big, how is that going to solve the U.S.'s problems?"

Mr. Wei just returned from a trade-focused trip with other current and former government officials to New York City and Des Moines, Iowa. He brought home an upbeat message on the progress of a U.S.-China 100-day plan to reduce trade friction.

The security dialogue that is opening with a high-level meeting in Washington on Wednesday was proposed by Presidents Donald Trump and Xi Jinping earlier this year. Secretary of State Rex Tillerson, who will run Wednesday's one-day meeting alongside Chinese State Councilor Yang Jiechi, has said the U.S. intends to focus on limiting North Korea's nuclear program.

Washington and Beijing have hit an impasse over North Korea, which has pushed forward with its nuclear-weapons and missile program despite U.N. sanctions. Chinese officials say they are doing everything they can under existing sanctions to pressure Pyongyang. U.S. officials say China, as North Korea's lone major ally, can do more.

Trade, by contrast, has seen some progress. Aside from the

beef deal, China also approved the import of two new varieties of genetically modified crops, expanding the market for U.S. agricultural companies.

In addition, several Chinese companies, including e-commerce giant Alibaba Group Holding Ltd., have pledged investment they say will bring new jobs to U.S. workers. Alibaba founder Jack Ma said in January that he would use his company's platform to help small and medium-size American companies gain access to the Chinese market, pledging to create one million jobs.

Mr. Ma plans to try to sell that vision at a conference in Detroit this week. The billionaire's keynote speech is scheduled to coincide with Wednesday's meeting in Washington.

"I think he will be successful. I hope he's successful, because it's in the interests of both sides," said Mr. Wei, who is now a senior figure at a state-supported think tank. He predicted Alibaba would help promote development of the U.S. logistics industry in addition to adding jobs in retail.

Officials who traveled with Mr. Wei had positive words for Mr. Trump, who had threatened a trade war.

On eve of beginning of annual security talks with U.S., China promotes trade.

"His attitudes on China have changed a lot," said Zhao Qizheng, former head of the information office of China's State Council, speaking at a press briefing with Mr. Wei and other officials.

For China, challenges to the trade relationship remain, Mr. Wei said. He pointed to U.S. rules barring the export to China of high-tech products with potential military applications, and U.S. security reviews that have restricted Chinese investment in sensitive U.S. industries.

He also acknowledged frustrations among U.S. companies with China's own foreign-investment restrictions.

Mr. Wei said he saw no risk of a U.S.-China trade war in the coming year.

South Korea Powers Down Nuclear-Energy Industry

BY MIN SUN LEE

SEOUL—South Korea said it would scrap plans to build new nuclear-power plants and halt operation of the country's oldest reactor, marking a shift for a nation that ranks among the most reliant on atomic energy.

President Moon Jae-in, the left-leaning leader elected last month, said Monday that he would permanently end operations at the Kori-1 reactor, which went online in 1978, at midnight on Sunday.

"The permanent shutdown of the Kori-1 nuclear reactor is

the first step toward a nuclear-free state and a paradigm shift to a safer Korea," Mr. Moon said. "I will review nuclear-reactor policy in full measure and scrap all the existing plans to build new nuclear reactors and will not extend the lifespan of current ones."

The move fulfills a campaign pledge to review nuclear policy and expand renewable energy. In addition, Mr. Moon said the government would close 10 outdated coal-power plants and halt construction of new ones.

South Korea's decision is

the latest blow to nuclear power in developed nations. The triple meltdown at Japan's Fukushima Daiichi nuclear-power plant in March 2011 led German Chancellor Angela Merkel to order a gradual end to nuclear power in her country.

In Japan, where nuclear power once accounted for 30% of electricity production, only a handful of reactors have restarted since stricter regulations were introduced after

the Fukushima accident. And in the U.S., the availability of inexpensive natural gas has hit the competitiveness of nuclear power, leading utilities to close nuclear plants.

The skepticism has spread to developing nations. In November, Vietnam scrapped plans for its first nuclear-power plants. Safety concerns and the high cost of protecting against accidents have limited the appeal of what once looked like an inexpensive electricity source.

Defenders of nuclear power observe that it is a carbon-free source of energy and can operate 24 hours a day, while renewable sources of energy such as solar and wind can produce power only some of the time.

South Korea has 25 nuclear reactors, which produce about 30% of the country's power supply, according to Korea Hydro & Nuclear Power Co.

Many were built near densely populated cities in the coun-

try's south.

To make up for the energy shortfall in a country plagued by summer brownouts and blackouts in recent years, Mr. Moon said that the government would foster renewables, including solar and wind power, and develop liquefied natural gas as a new energy source.

Environmentalists wel-

comed Monday's announcement. In a statement, Greenpeace said the shift would give priority to safety and environmental sustainability.

Korea Hydro & Nuclear

Power Co., a subsidiary of Korea Electric Power Corp., will

prepare a plan by 2019 to de-

commission the Kori-1 reactor.

The complete decommission process is expected to take at

least 15 years and cost 643.7

billion won (\$568 million), ac-

cording to the Energy Minis-

try. Kepco shares fell 3.1% on

Monday.

—Peter Landers in Tokyo contributed to this article.

An official shuts off a Kori-1 nuclear-reactor supply line.



A tugboat tows the USS Fitzgerald on Saturday in the waters near the U.S. Naval base in Yokosuka.

U.S. Navy Had Similar Crash

BY ALASTAIR GALE

TOKYO—In late 1985, a U.S. Navy frigate was sailing in the dark near Yokosuka port in Japan when it was hit by a Philippine-registered freighter, tearing a large gash in its right side.

The collision, which caused only minor injuries, bears an uncanny resemblance to the deadly impact in the predawn hours Saturday of the USS Fitzgerald, a destroyer, and a Philippine-flagged cargo vessel

56 nautical miles south of Yokosuka. Seven U.S. sailors

were killed in the weekend dis-

aster.

While the incidents are 32 years apart and may have dif-

ferent causes, they highlight

questions over safety in one of

Japan's busiest maritime re-

gions. Yokosuka, home to the

U.S. Navy's Seventh Fleet,

sits at the entrance to Tokyo Bay,

home to the major ports of Yo-

kohama and Tokyo.

On Monday, a U.S. Coast Guard investigation team arrived in Japan to begin working on a safety probe into the latest collision. The U.S. Navy is holding a separate investigation into the cause of the incident, while Japan's coast guard and Transport Safety Board have launched their own investigations.

Officials on both sides de-

clined to provide initial as-

sessments on the cause of the

collision.

The cargo ship involved in

the weekend accident, the ACX

Crystal, finished unloading its

cargo of containers on Monday

in the port of Yokohama, offi-

cials from the ship's owner,

Nippon Yusen K.K., said. They

added that damage to the

front of the vessel would likely

be repaired.

The U.S. Navy and Nippon

Yusen declined to make crew

members available for interviews.

The collision from Decem-

ber 1985 occurred around 1 mile outside Yokosuka harbor, according to an Associated Press report from the time. The USS Lockwood sustained a hole 25 feet wide in front of the bridge on its right side. Three sailors sprained their backs and one broke his ankle, according to the report.

The U.S. Navy didn't respond to an emailed question about the result of the investigation into the 1985 incident.

John Durkin, a former crew member of the USS Lockwood who had been transferred off the ship shortly before the accident, said that the captain was immediately relieved from his position.

"In the Navy it doesn't matter whose fault it is, the captain is responsible," Mr. Durkin said, adding, "there's a very strong culture of responsibility."

—Chieko Tsuneoka contributed to this article.

U.S. NEWS

Justices to Consider Redistricting Limits

Supreme Court will review the rejection of a GOP plan to redraw a Wisconsin map

By BRENT KENDALL

WASHINGTON—The Supreme Court agreed to consider whether there are constitutional limits to how far lawmakers can go in drawing electoral districts to maximize partisan political advantage, a case that could have profound implications for U.S. elections.

The justices in a brief written order said Monday they would review a redistricting case from Wisconsin, where a three-judge lower court last year invalidated a redistricting plan enacted by the Republican-controlled Wisconsin legislature in 2011.

In a hint of the potential divisiveness of the issue, the high court on a 5-4 vote stayed the effect of the lower court ruling while it hears the case. That means Wisconsin officials for now won't have to put a remedial redistricting map in place. The court's four liberal justices would have denied the stay and left in place a lower court order requiring a new map by Nov. 1.

The lower court said Wisconsin lawmakers redrew the state's legislative districts after the 2010 census to unlawfully maximize the number of Republicans elected and dilute the power of Democratic voters.

Election results since then have shown the redistricting had its intended effect, with the GOP winning a larger majority in the state assembly,

even as the statewide tally of votes was nearly even between Republicans and Democrats, the lower court said.

Both political parties have been accused of engaging in partisan gerrymandering in states where they hold power and other cases are pending in court, including one challenging Democrats' map-drawing in Maryland. Critics say extreme partisan line-drawing creates too many uncontested districts and makes lawmakers too removed from the will of voters.

Some Supreme Court justices have previously expressed concern about partisan gerrymandering, but a majority of the court has been hesitant to intervene so directly in the American political process and say how much partisanship is too much.

On the other hand, gerrymandering that discriminates against minority voters long has been held unconstitutional, and both the Supreme Court and lower courts frequently have invalidated such maps. Critics, including retired Justice John Paul Stevens, have argued that racial gerrymandering is in essence a proxy for partisan motives, and that similar principles should apply in evaluating legislative maps.

The court took up a major case on partisan gerrymandering 13 years ago involving a challenge by Democratic voters to a Republican drawing of Pennsylvania's congressional districts. The ruling produced a 5-4 vote that threw out the lawsuit, but the court's reasoning was splintered and left the issue unsettled.

Four conservative justices



CHUCK MYERS/ZUMA PRESS

The Supreme Court stayed the effect of the panel's ruling, leaving the boundaries in place for now.

Free Speech Cited In Trademarks Case

WASHINGTON—The Supreme Court, citing free-speech protections, ruled Monday that the government can't reject trademarks that some people might find disparaging or offensive. The justices sided with the Asian-American rock band the Slants and invalidated a 70-year-old provision in federal trademark law that prohibited the registration of disparaging trademarks.

Among the immediate beneficiaries could be the Washington Redskins football team, which has been fighting a legal

battle to save its trademarks after the U.S. Patent and Trademark Office canceled them in 2014 after finding that Native Americans believed the team name to be disparaging.

The Patent and Trademark Office declined to register a trademark for the Slants after finding that people of Asian descent would likely find the band's name derogatory.

Band leader Simon Tam argued the government's refusal to register certain trademarks because of their content infringed on the free speech of those expressing disfavored or negative viewpoints.

The Supreme Court agreed, in an opinion written by Justice

Samuel Alito. The justices were unanimous in ruling against the government, though two different groups of justices wrote opinions offering their views on why the Patent Office should lose.

The court's new justice, Neil Gorsuch, didn't participate in the case, which was argued before he joined the court.

The Patent Office had warned a win for the Slants would clear the way for the registration of trademarks on even vile racial epithets. An appeals court acknowledged as much when it ruled for the Slants in 2015 but said the First Amendment protected speech even when it inflicted great pain on others.

—Brent Kendall

in that case said courts couldn't referee partisan gerrymandering claims because there was no workable standard for deciding when parti-

san line-drawing crossed a constitutional line, and because there wasn't a good way for a court to fix a violation if one did exist.

The court's fifth conservative, Anthony Kennedy, agreed that the specific Pennsylvania lawsuit should be thrown out, but he left open the possibility

that the court in a future case could declare that the use of partisan favoritism in drawing districts was unconstitutional.

Justice Kennedy's middle-ground position in the 2004 case makes him a focal point this time around. Moreover, one of the justices who upheld partisan gerrymandering, Antonin Scalia, has since died and his successor, President Donald Trump appointee Neil Gorsuch, hasn't weighed in on the topic.

In the Wisconsin case, a special three-judge court, in a 2-1 ruling, said state Republicans drew district lines "to make it more difficult for Democrats, compared with Republicans, to translate their votes into seats." For example, Wisconsin Democrats in 2012 received 51.4% of the statewide vote, but only 39 of 99 state assembly seats, according to the court opinion.

A dissenting judge said Wisconsin's map complied with traditional redistricting principles, and added that Republicans likely would have won control of the state legislature in 2012 and 2014 even without the alleged gerrymandering.

State officials appealed the case to the Supreme Court, saying the lower court ruling was erroneous and unprecedented. Wisconsin said recent election results were similar to those before the Republican-drawn map, citing among other things the advantages enjoyed by incumbents.

The court will hear arguments in the case, *Gill v. Whitford*, during its new term, which begins in October.

—Jess Bravin contributed to this article.

Plan to Track Foreigners Hits Snag

By LAURA MECKLER AND SUSAN CAREY

After years of delay, the federal government says it has developed a way to reliably track foreigners when they depart the U.S., at least by airplane, and plans to install cameras that would photograph all passengers just before they board international flights.

But there's a big hitch: The government wants airlines to operate the cameras, saying the cost would be "astronomical" if border agents had to staff every international departure gate. Airline officials argue this is a national-security function that should be shouldered by the government, not private companies.

"Right now, there is no benefit to us. We're not interested in adding another 10 minutes to the boarding process," one airline official said.

Disputes such as this one help explain why it has taken more than two decades for the federal government to create a system to track and eventually catch people who enter the U.S. legally and then stay past their dates of departure.

Congress repeatedly has ordered an exit-tracking system, and President Donald Trump included a fresh mandate to get the system running in an executive order.

It is a rare immigration initiative with bipartisan support. A biometric system would serve as a defense against terrorism, making it



A worker directs passengers at a Hartsfield-Jackson Atlanta International Airport security checkpoint.

more difficult for someone to leave or remain in the country without detection. It also draws attention to people who have overstayed their visas.

"We're out of time and we're out of excuses," John Wagner, who runs the program for the Department of Homeland Security's Customs and Border Protection agency, told a House committee last month. "I understand your frustration with this."

The idea for a tracking system took on urgency after the 2001 terror attacks, when it was discovered that several of the terrorists were living in the U.S. on expired visas. Since 2004, Congress has directed use of biometric data—unique physical identifiers such as fingerprints

or photos—to ensure people are who they say they are.

The government succeeded in creating a biometric system for people entering the U.S., with foreigners fingerprinted and photographed upon entry. The exit part has proved much tougher.

DHS ran several pilot programs at large airports. A breakthrough occurred when the agency realized it could use a small, mounted camera to scan people's faces quickly at the boarding gate, Mr. Wagner said. Those images are then compared with photos in a database of travelers airlines expect to be on a given flight.

If there's a match, the government can be confident that person has left the U.S.

Major carriers say they support the agency's commitment to technology and innovation and are participating in test programs for the new cameras this summer. Some carriers, particularly Delta Air Lines Inc., are experimenting with their own biometric solutions to ease passengers' gauntlet of check-in steps.

American Airlines Group Inc., plans a test at one gate at O'Hare International Airport in Chicago. Delta has been running a pilot program for more than a year in Atlanta and recently launched another at New York's John F. Kennedy International Airport. United Continental Holdings Inc. is expected to run a pilot program at one of its hubs as well.

U.S. WATCH

SOUTH CAROLINA

Democrats Seek Upset in Special Vote

While Georgia's House special election Tuesday is a test of whether Republicans will cross party lines to support a Democrat, another contest the same day in South Carolina aims to measure a different proposition: Can a white Democrat drive enough black voter turnout to score an upset?

The race is to succeed former Rep. Mick Mulvaney, whom President Donald Trump picked to serve as his budget director. Archie Parnell, a former Goldman Sachs executive, is running on the Democratic ticket against Republican Ralph Norman, who narrowly advanced from a GOP primary race.

With Mr. Trump's approval rat-

ings at historic lows and Democrats showing double-digit gains in turnout during two prior unsuccessful House special elections, South Carolina Democrats have spent recent weeks trying to turn a machine to turn out the district's African-American voters.

Black voters represent 28% of the district but typically are a far smaller percentage of the electorate. To win, former South Carolina Democratic Party Chairman Jaime Harrison said, black turnout Tuesday must be 35% or more of the electorate. "We know how loyal this community is to the Democratic Party," Mr. Harrison said. "The question is: How do you get people interested enough to vote?"

South Carolina's is the first post-Trump congressional election with a large bloc of black voters.

—Reid J. Epstein

CLIMATE

Study Says Heat Waves to Worsen

Deadly heat waves like the one now broiling the American West are bigger killers than previously thought and they are going to grow more frequent, according to a new comprehensive study of fatal heat conditions. Still, those stretches may be less lethal in the future, as people become accustomed to them.

A team of researchers examined 1,949 deadly heat waves from around the world since 1980. They found that nearly one in three people now experience 20 days a year when the heat reaches deadly levels. But the study predicts that up to three in four people worldwide will endure that kind of heat by the end of the century, if global

warming continues unabated.

"The United States is going to be an oven," said Camilo Mora of the University of Hawaii, lead author of a study published Monday in the journal *Nature Climate Change*.

Mr. Mora and his colleagues created an interactive global map with past heat waves and computer simulations to determine how much more frequent they will become under different carbon dioxide pollution scenarios. The map shows that under the current pollution projections, the entire Eastern U.S. will have a significant number of killer heat days.

Even higher numbers are predicted for the Southeast U.S., much of Central and South America, central Africa, India, Pakistan, much of Asia and Australia.

—Associated Press

Voter Data Set Left Unprotected Online

BY SHANE HARRIS AND KATE FAZZINI

A computer-security company said that a proprietary data set containing personal information on nearly 200 million American voters and their predicted voting behavior was left unprotected online, in a large cache of spreadsheets and other electronic files.

According to security company UpGuard, the information, which was available on a public server accessible by anyone via the internet, was compiled by consulting firm Deep Root Analytics, which helps Republican campaigns choose which voters to target with TV advertising.

The voter records, which are public information, were augmented with proprietary analysis about voter behavior by Deep Root, which tries to predict voters' policy preferences and how likely they are to choose a particular candidate.

Beyond paying customers, that kind of information could be valuable to rival campaigns or even foreign entities trying to determine how to persuade American voters, according to elections experts.

The discovery of the unprotected voter information comes as the integrity of American elections has become a top concern in state capitols and in Washington. Federal investigators and congressional panels are probing Russia's alleged meddling in the 2016 election, and U.S. and state officials have taken steps to safeguard elections from potential hacking and other interference.

The information was found on a publicly accessible cloud server, said Chris Vickery, an analyst with cybersecurity company UpGuard. He said he dis-

covered the information on June 12 after trying different combinations of letters for web addresses that he thought might point to the information. Mr. Vickery is a specialist in searching for exposed information using this technique, known as "cloud fuzzing," to help secure sensitive information.

The voter information, portions of which were reviewed by The Wall Street Journal, includes the names and other personally identifying information about 198 million registered voters, which would appear to be nearly all of the estimated registered voters in the U.S., the company found. The information includes dates of birth, mailing addresses and party affiliation, as well as self-reported racial demographics, according to Mr. Vickery, but didn't include social security numbers or financial information.

In a statement, Deep Root Analytics acknowledged the exposure. The company "has become aware that a number of files within our online storage system were accessed without our knowledge," the statement said. The company added that "to the best of our knowledge," the information that was accessed consisted of proprietary analysis "as well as voter data that is publicly available and readily provided by state government offices."

Since this event has come to our attention, we have updated the access settings and put protocols in place to prevent further access. We take full responsibility for this situation."

Mr. Vickery said that he notified federal authorities and that the information is no longer publicly accessible.

—Rebecca Ballhaus contributed to this article.



MICHAEL REAVES/GETTY IMAGES

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—Reid J. Epstein

With Mr. Trump's approval rat-

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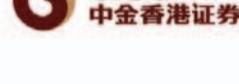
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IN DEPTH

FOOD

Continued from Page One
borhood supermarket appear over for now. Consumers are more targeted in their shopping habits. They are less loyal to retailers and more willing to buy groceries online. And they are buying more from stores at two poles: ones with cheap prices, and ones that offer high-quality fresh food, often at a premium.

Grocery sales last year barely budged from 2015 levels, after rising a bit more than 2% in each of the previous three years, according to market-research firm Nielsen. Kroger ended a 13-year streak of rising quarterly same-store sales this year, while Wal-Mart, which gets more than half of its sales from groceries, and Target Corp., have struggled, too.

Consumers want "convenience, selection and the right price and they want it now," said Natalie Kotlyar, head of the consumer business practice at consulting firm BDO USA. "Everyone is trying to meld those concepts to create the perfect shopping experience."

Amazon, which has revolutionized the way people shop, is betting it can learn the business and solve at least part of the puzzle. It has shown a willingness to forgo profits for years to build market share in an industry. It has cash to burn, deep experience in logistics and a record of relentlessly driving down supplier costs. And its big push into fresh groceries will likely force other food retailers to accelerate efforts at making e-commerce work if they are to remain competitive.

E-commerce has been tough to crack for the more-than-\$700 billion grocery sector because selling food online is inherently complex. Last year, online shopping accounted for 2% of the sector's sales, according to consulting firm Kantar Retail.

People want to squeeze their produce, pick out their vegetables and inspect their meat. Making sure fresh groceries stay that way through transit is challenging yet crucial for attracting shoppers. "It's really the fresh categories such as produce and meat that are driving people's decision of where to shop," said Bain's Mr. Knudson.

Wal-Mart, Peapod LLC and FreshDirect LLC have been competing to deliver groceries faster and more cheaply. But fresh-food delivery is typically unprofitable, analysts and some companies said.

"Amazon has obviously reinvented supply chain and logistics in a way nobody has," said Doug Ehrenkranz, a 25-year food industry veteran who is now a recruiter at Boyden Global Executive Search.

Now, the more-than-460 Whole Foods stores across the U.S. give Amazon access to the kind of refrigerated distribution system its regular fulfillment network lacks, all while tapping into the upmarket natural and organic foods market that it has barely touched.

"Wal-Mart and Kroger will

feel pain for a while and the regional players that can't move fast enough will disappear," said Diana Sheehan, director of retail insights at Kantar Retail. "The bigger concern becomes, what does Amazon do next? Once they've navigated the Whole Foods space, they'll learn how to play in mainstream grocery, too."

Amazon and Whole Foods declined to comment for this article.

A Kroger spokesman said: "We're in the middle of a transition today both because of the operating environment and the competitive landscape. We will continue to evolve." Target said grocery is a key business for the company.

A spokeswoman for Peapod said it is profitable in its mature, established markets. "The grocery industry is a low-margin business and last mile logistics make margins even more challenging," she said. Wal-Mart said: "We feel great about our position."

Fresh-food logistics

While Amazon could put pressure on others to step up their e-commerce game, it has struggled for years with a logistical challenge in fresh food that it doesn't in books and electronics. A Cowen & Co. report points out: "The entire fulfillment process is more complex and time consuming from the moment a 'grocery' shipment arrives" at a fulfillment center until it is shipped, what with the need for refrigeration and attention to factors such as "expiration dates, smell, and color, among others."

The Amazon-Whole Foods deal came together relatively quickly, according to people familiar with the matter, indicating Amazon may not yet have a fully formed strategy for Whole Foods.

Amazon will try to expand the appeal of Whole Foods by using its efficiencies to lower prices, which would bring a fresh wave of pressure to the beleaguered sector, said Chris Baker, a retail and consumer-goods expert at management consulting firm Oliver Wyman.

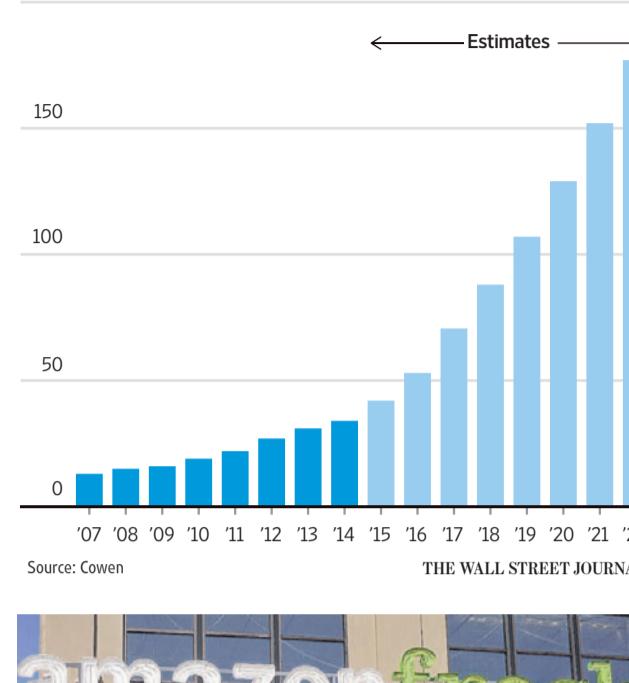
The supermarket business has always been tough, in part because American consumers have grown accustomed to cheap food. Supermarkets arose out of the Depression, as the efficiency and scale of larger stores made food more affordable for consumers than shopping at local cheese and meat markets, said food historian Andrew F. Smith. As suburbs developed after World War II, grocery chains expanded and found that stocking more inventory provided greater economies of scale.

By the 1970s, there was saturation in the supermarket industry, according to Mr. Smith, and a national recession led to the creation of discount warehouse stores. Competition from fast-food chains and price wars in the grocery sector fueled a wave of consolidation in the 1980s.

A seismic change hit the industry in the 1990s when Wal-Mart began selling low-price food and within a decade became the nation's larg-

From Cart to Click

U.S. Online grocery shopping is expected to take off in the next few years



Source: Cowen

THE WALL STREET JOURNAL.



An AmazonFresh Pickup location in Seattle.

to books and documentaries about the food industry and the rise of television cooking shows. More upscale organic-food stores have opened in response, eating into grocers' market share while simultaneous demand for convenience has fueled the rise of meal-kit services such as Blue Apron Holdings Inc.

Grocery executives say they are willing to lower prices at the expense of profits if that's what it takes to keep shoppers from turning to online and discount stores. Even Whole Foods has taken a hit to its margins by lowering prices in an effort to win back customers.

"We are not trying to lead the market down on price," Kroger Chief Executive Rodney McMullen said in an interview last week. "But we want to make sure we won't lose a customer based on price."

Meanwhile, new discounters are still entering the U.S. market. German grocery chain Aldi said this month it planned to invest \$5 billion over five years to open nearly 900 stores in the U.S. and remodel hundreds more. Rival Lidl, another German discounter, entered the U.S. market with 10 stores this month—another "body blow" to the traditional U.S. industry, said Craig Johnson of Customer Growth Partners, a retail research and strategy group.

Aldi and Lidl have disrupted European grocery markets by offering low prices, and company officials have said they believe they can aggressively compete in the U.S. market as well.

Driving downward pressure on prices are frugal shoppers such as Meg Meyers, a 35-year-old psychotherapist and married mother of two in St. Louis. She said she buys food exclusively at Aldi to help stretch her household's \$79,000 annual income, which also goes toward student loans. "We have no disposable income," she said, adding that she limits her purchases to about \$100 a week using a meal-planning app that enables her to buy only what she needs.

Amazon, which first entered the food sector several years ago with dry groceries via its website, has slowly built its Fresh grocery-delivery business over years by targeting cities where it already owns large warehouses in part to avoid the need for refrigerated trucks. Still, Amazon has faced the same problem others have: Many consumers have been slow to buy produce and fresh items online.

Amazon has tiptoed into the brick-and-mortar grocery-store business this year, opening two Fresh Pickup stores in its hometown of Seattle and has explored various ideas for other types of grocery stores.

Recent commodities deflation has forced grocery stores to slash prices on such staples as milk, beef and eggs. Labor costs have risen, applying further pressure to profit margins.

Other changes have taken root in recent years. Consumers are far more curious and educated about the source and content of their food, thanks

convince shoppers that they should be the store people go to for fresh food."

Amazon's 'last mile'

NPD Group Inc. food analyst David Portalatin said the Whole Food stores would solve much of "Amazon's 'last-mile' delivery challenge for fresh groceries." He said that logistics hurdle was a big reason Amazon hasn't been able to make a dent in the grocery shopping of the 60% of millennials who already buy other items from Amazon.

The migration online for at least a portion of grocery purchases, led by Amazon, almost certainly means a further shakeout in the industry. The online grocery industry could grow into a \$100 billion business over the next decade, according to Nielsen and the Food Marketing Institute.

"I would be the first one to sign up for Whole Foods delivery and would probably never step foot in the store again," said Judah Ross, 29, an entrepreneur who lives near the Whole Foods flagship store in Austin, Texas, and shops there every other week. "Whole Foods is a pleasant place but I hate going out to shop for groceries. Even though it's so close, there's traffic, parking and waiting in line. The convenience of delivery would outweigh any benefit of picking out the food."

'This is going to be one of the hardest areas for them to get into.'

Whole Foods currently partners with delivery service Instacart to offer grocery delivery in some cities.

Chains that don't adapt quickly to the changes in consumer behavior and business dynamics won't survive, say analysts, who, along with some supermarket executives, expect more consolidation in the coming years and predict more grocery stores will close.

To compete with Amazon, Wal-Mart is offering curbside pickup and home delivery in test markets. Kroger is expanding its platform for customers to order groceries online and pick them up at the stores. It also said it has invested \$3.8 billion in lowering its prices over the past decade.

Albertsons Companies Inc., which owns Safeway, says it will offer grocery delivery in eight of the 10 most populated markets in the U.S. by February. It declined to comment for this article.

Even though it is expensive for Albertsons, Chief Executive Bob Miller said in an interview earlier this year, he doesn't want Amazon to beat him to his customers. "Technology is changing rapidly. Amazon is a prime example of that," he said. "We don't want to be cutting edge, ahead of the curve, but we want to be understanding what's going on."

—David Benoit
and Laura Stevens
contributed to this article.

BEARD

Continued from Page One
dil for six months I had a pretty good beard. And I also got a girlfriend."

Mr. Gamal's discovery is providing a new lease on life for a baldness treatment that is often the butt of jokes in the West. He is now promoting the hair-loss treatments through his website, Misterbrewok, or Mister Beard in Indonesian. He has nearly 28,000 followers on the photo-sharing site Instagram, many of whom submit before-and-after shots comparing their new beards with their old, baby-fresh faces.

Recently, Mr. Gamal has begun touring Indonesia to meet his "Beard Bros," as his customers call themselves, sharing tips on how to grow a thick, luscious beard and maybe selling a few bottles of hair-growth treatment afterward, much as traveling salesmen used to do in the Old West.

More important, they encourage each other to keep going through long months of doubt until some whiskers finally begin to show.

"I had only a small bit of



Fariz Gamal, above, offers beard tips on his website.

mustache and some stubble when I started using minoxidil," said one Beard Bro, Kamal Muhammad, 21. "I got stuck on the fourth month when there wasn't much progress, but I realized it was just a matter of time before I would make my breakthrough."

He says his beard has now grown so much that he has had to trim it a couple of times—something he didn't dare imagine a few months before.

The effect on his love life? "Awesome," Mr. Muhammad said.

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LIFE & ARTS

YOUR HEALTH | By Sumathi Reddy

A Tug-of-War of Cholesterol Drugs

Patients struggle to obtain PCSK9 inhibitors, a powerful class of drugs that lower bad cholesterol when statins don't work

SLIM AND ATHLETIC, Carlyn Cirrincione doesn't look like someone who should be worried about having a heart attack.

But the 22-year-old CrossFit enthusiast and avid runner has to think about the health of her heart and cholesterol levels all the time. No bacon for her. No egg yolks. Ice cream, a once-loved treat, is on the blacklist.

What she does need, according to her doctor, is powerful new drugs known as PCSK9 inhibitors that can dramatically lower LDL, or bad cholesterol levels when other drugs, known as statins, can't do the job.

There is just one problem: the price tag. Nearly two years after the drugs were approved by the U.S. Food and Drug Administration, doctors and patients say getting insurance to pay for the drugs, which list for more than \$14,600 a year before rebates or discounts, is a battle that requires countless hours, applications and appeals. Even then, the battle for insurance approval of PCSK9 inhibitors is successful less than half the time, according to several recent studies.

Ms. Cirrincione hasn't yet been approved despite her and her doctor's numerous applications and efforts. She was diagnosed four years ago with familial hypercholesterolemia (FH), a genetic disorder that causes high cholesterol because the liver is unable to remove excess LDL. Her cholesterol at the time of her diagnosis was off the charts, with a total of 387 mg/dL and an LDL level more than four times what doctors recommend for FH patients, at 297 mg/dL.

High levels of cholesterol, a fat-like substance, can build up in the arteries and slow down or block blood flow to the heart, causing heart disease and heart attacks, and to the brain, causing strokes. Doctors typically recommend LDL levels no higher than 100 mg/dL for healthy individuals and less than 70 mg/dL for those with heart disease.

Most people with high cholesterol try to bring it down with a combination of healthy diet, exercise and drugs known as statins, such as atorvastatin (brand name Lipitor) and rosuvastatin (Crestor). But these drugs can't always get LDL levels low enough for FH patients. And for some, like Ms. Cirrincione, statins aren't an option because they cause severe muscular aches.

Some doctors believe PCSK9 inhibitors could be a lifesaving solution for millions of heart disease patients and could transform treatment for the most difficult cases—patients with FH, as well as those with a history of heart disease or stroke for whom statins and other therapies are inadequate. Drug companies estimated the target population to be 11 million patients.

But other doctors say that until drug companies can prove PCSK9 inhibitors reduce the number of deaths caused by heart disease, not just their ability to reduce heart attacks and strokes, the drugs aren't worth the high price.

The two PCSK9 inhibitors currently on the market were approved in 2015. Amgen Inc. makes the drug Repatha (evolocumab), which has a list price of about \$14,536 a year. Sanofi SA and Regeneron Pharmaceuticals Inc. makes Praluent (alirocumab),



Everyone in the Cirrincione family but the mother has high levels of LDL, or bad cholesterol. From left, Calvin, John, 18, Vince, 57, Tracey, 45, Carlyn, 22, and Garrett Vincent, 20.

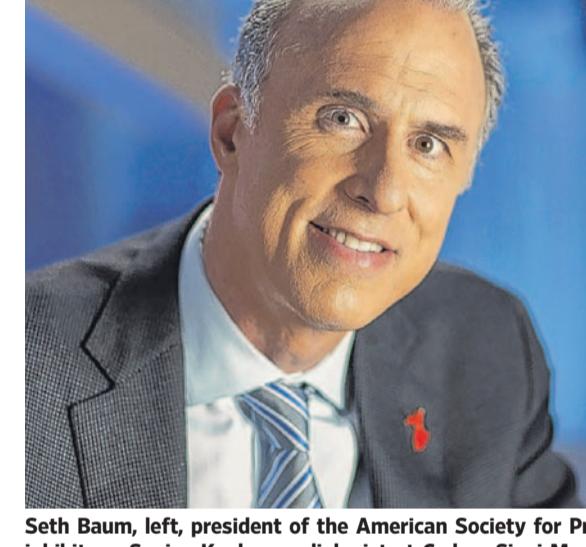
which has a list price of \$14,600 a year. The medicines are new entrants in a group of extremely costly drugs that have cropped up in recent years.

Doctors, consumers and lawmakers have spoken out against escalating drug prices. The criticism has triggered hearings in Congress. A public furor over the high cost of EpiPen allergic-reaction treatments also led manufacturer, Mylan NV, to begin selling a generic version of the devices that sells for half the \$609 list price.

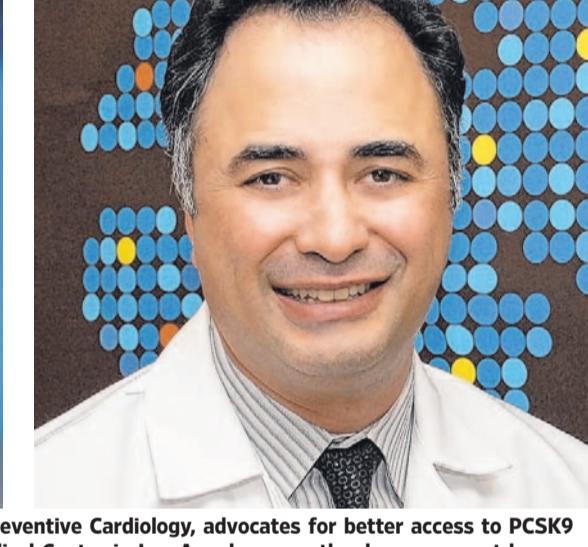
Doctors and researchers say part of the reason PCSK9 inhibitors are priced so high is because they are a fully human monoclonal antibody, which is harder to manufacture than a normal pill. Patients inject them into their bodies every two- to four- weeks.

Sanofi and Regeneron remain concerned about restrictive access to PCSK9 inhibitors but are starting to see more approvals for Praluent and more confidence from prescribers in preparing the necessary documentation, said Ashleigh Koss, a Sanofi spokeswoman. Kristen Neese, a spokeswoman for Amgen, said while Repatha isn't a replacement for statins, "many patients are not adequately treated by statins and are at high risk for cardiovascular events like heart attack or stroke." She noted that payers don't pay the list price for the drug, and the price is supported by "robust" data from its clinical trial. The company is offering support, such as a \$5 copay card for eligible patients.

For people who are approved by their insurers, high copays can pose an additional barrier to obtaining the drugs. One recent analysis of all PCSK9 inhibitor pre-



Seth Baum, left, president of the American Society for Preventive Cardiology, advocates for better access to PCSK9 inhibitors. Sanjay Kaul, a cardiologist at Cedars-Sinai Medical Center in Los Angeles, says the drugs may not be worth the price.



scription claims in the first year the drugs were approved found that 27% of claims had a monthly copay of more than \$400. The mean copay amount was \$107 for patients with commercial insurance plans and \$213 for those with government-funded Medicare. Another recent analysis from Duke researchers found that 35% of approved patients never picked up the medication.

"We've been waiting for this kind of advance for quite a long time," said Seth Baum, president of the American Society for Preventive Cardiology. "We finally have it, and now we need to be able to use it."

Health insurers and their consultants say PCSK9 inhibitors have less-expensive alternatives in statin drugs. They also say that the PCSK9 drugs are a lifelong prescription at a high cost.

Insurance companies are also mindful of setting a precedent, said Helen Leis, a partner in the health and life sciences practice of consulting firm Oliver Wyman, a division of Marsh & McLennan Cos. Approving one set of pricey drugs could set a precedent when it comes to other expensive drugs that treat a larger population, such as cancer drugs.

In 2016, 88.4% of patients with a commercial insurance plan were rejected when trying to get a new prescription for a PCSK9 inhibitor, according to data from Symphony Health Solutions. That number declined to 72.8% after 14 days, likely due to patient appeals.

Doctors have had mixed reactions to results of Amgen's clinical trial for its drug, Repatha, announced in March. The study followed 27,564 patients over 2.2 years and found that Repatha reduced the risk of heart attacks and strokes by 20% compared with the standard treatment with statins.

For Dr. Baum, the trial was proof that that PCSK9 inhibitors are effective, showing they could lower LDL by 60%. "We do know

unequivocally that a lower LDL equals a lower risk of heart attack, stroke and death," said Dr. Baum, who has been paid as a consultant and scientific board member for Amgen and Sanofi/Regeneron.

But some doctors say the study would have been more convincing if the drug had lowered the heart attack risk more and caused a decline in deaths. The lower LDL "didn't translate into a mortality benefit," said Sanjay Kaul, a cardiologist at Cedars-Sinai Medical Center in Los Angeles.

The approval process for PCSK9 inhibitors, which requires different criteria depending on the insurer, has become so cumbersome and time-consuming that some doctors have completely stopped or cut back on even prescribing them even though the doctors fully believe in their potential.

Andres Ruiz, an interventional cardiologist in Florida, is one.

"At the end of the day, you would like to do what is best for the patient. But you really don't have the time to play the insurance games," he said.

Doctors say many rejections affect patients with heart disease and FH patients, such as Carlyn Cirrincione, who stopped taking statins because of side effects.

Her mom, Tracey, had never heard of FH until four years ago when the 45-year-old Gibsonia, Pa., resident learned that all three of her children have the genetic disorder. Her husband also has FH.

Mrs. Cirrincione's sons—now 18 and 20—take statins, which have also been effective for her husband. But Carlyn, who recently graduated from Clarion University with a graduate degree in speech pathology, can't take statins, which after several tries caused debilitating muscular pain.

In 2015 her cardiologist told the family that PCSK9 inhibitors were approved for FH, and Carlyn started samples of Repatha. By April of last year her LDL was down to 82 mg/dL.

Ms. Cirrincione's cardiologist has now filed three applications for Repatha. All have been denied.

A spokeswoman for UPMC Health Plan, the family's current insurance plan, said it doesn't discuss individual members' cases.

While the most recent application is on appeal, Ms. Cirrincione continues to receive samples of Repatha from her cardiologist. "The samples will run out. Then what do I do?" she said.

For Nancy Harris, a 66-year-old resident of Pataskala, Ohio, it took 18 months and half-a-dozen applications and appeals to get Cigna, to finally cover a PCSK9 inhibitor last month.

Her doctor, Scott Merryman at Ohio Health in Columbus, diagnosed her with FH in June, 2016 after she'd been on and off statins for years. His office applied for coverage of Repatha with Cigna even though she had been rejected when a previous doctor had applied. Cigna rejected the request initially and then again on appeal.

Dr. Merryman applied for coverage again in March. His office received a rejection on March 22 and he sent in another appeal. On May 23, four days after a Wall Street Journal reporter had submitted a request to discuss denials of Ms. Harris's applications, Cigna approved coverage for her.

Cigna's repeated rejections of applications for Ms. Harris were because it didn't have documentation of an FH diagnosis and unsuccessful prior treatment with statins, said Mark Slitt, a spokesman. Mr. Slitt noted that Cigna's coverage denial was upheld by an external reviewer. On May 23, Cigna received the additional requested information, said Mr. Slitt.

Dr. Merryman said he had previously provided that information.

Ms. Harris said she's relieved to finally have been approved, but worried about the renewal process.

"I am a little worried," she said. "Are we going to have to go through this every year?"



The PCSK9 inhibitor Repatha. It and other PCSK9 inhibitors are fully human monoclonal antibodies. Patients inject them every two- to four- weeks.

OPINION

REVIEW & OUTLOOK

Is Malaysia a Kleptocracy?

The U.S. Justice Department filed civil lawsuits late last week to seize a second trove of assets allegedly purchased with funds embezzled from the Malaysian state-run investment fund 1MDB. Last July the Feds went after more than \$1 billion in financial assets, real estate, artwork, film rights and a private jet.

Now the Kleptocracy Asset Recovery Initiative, as Justice calls it, is targeting \$540 million in assets owned by relatives and associates of Prime Minister Najib Razak.

The most striking item on the list is a necklace worth \$27.3 million featuring a 22-carat pink diamond. The lawsuit alleges that 1MDB funds were used to buy it and other jewelry for the wife of "Malaysian Official No. 1." U.S. officials told the Journal that Official No. 1 is Mr. Najib.

The 1MDB fund denies that money is missing, Mr. Najib denies any wrongdoing, and Attorney General Mohamed Apandi Ali cleared Mr. Najib in January 2016. Mr. Apandi Ali said in a statement Friday, "We also note that there has been no evidence from any investigation conducted by any law enforcement agencies in various jurisdictions that shows that money has been misappropriated from 1MDB."

Yet the U.S. Justice Department has provided considerable evidence that \$3.5 billion went missing, while the Swiss Attorney General puts the figure at \$4 billion. Singapore and Switzerland have already punished finan-

cial institutions for breaking money-laundering rules in moving 1MDB funds.

The U.S. Justice Department targets missing 1MDB assets.

from a \$3 billion 1MDB bond offering in 2013 were diverted to help purchase Coastal Energy, a Houston-based oil firm. The Abu Dhabi sovereign-wealth fund International Petroleum Investment Co. says that 1MDB owes it about \$6.5 billion for defaulted debt that IPIC guaranteed.

The Malaysian government accuses the U.S. of pursuing a political vendetta. But Barack Obama pursued closer ties with Mr. Najib, even inviting him to play golf in Hawaii in December 2014, right up to when the Journal broke the 1MDB story in July 2015.

Defense Minister Hishammuddin Hussein, who is Mr. Najib's cousin, on Monday urged the U.S. to press criminal charges so the accused can clear their names. The Journal has reported that U.S. investigators are preparing to charge at least one of Mr. Najib's associates. Since Malaysian authorities have concluded that there's nothing worth investigating in the 1MDB matter, civil and criminal cases in other jurisdictions are the best hope Malaysians have of finding out whether their country has become a kleptocracy.

France's Macron Moment

France has for years been the sick democracy of Europe that can't reform itself. But suddenly the French have surprised the world, and maybe themselves, by handing new President Emmanuel Macron a legislative majority and a mandate to restore Gallic vitality.

In Sunday's runoff election for the National Assembly, Mr. Macron's La République en Marche party and its centrist ally Modem clinched 350 of 577 seats. A 60% majority in the Assembly looked impossible a few weeks ago, and the smart money thought Mr. Macron would be forced to cobble a legislative coalition with the center-right Republicans or the center-left Socialists.

Instead voters handed the new President and his upstart party a decisive mandate to act alone. The Republicans and their center-right allies won 137 seats, down 88 from the previous Assembly. The previously ruling Socialists were humiliated with 45 seats, down 283. The party of Léon Blum and François Mitterrand is now a minor opposition group. The hard-right National Front secured eight seats, short of the 15 that would have allowed Marine Le Pen to shape some of the legislative agenda.

Credit Mr. Macron for seizing the political moment and pursuing the unorthodox strategy of recruiting newcomers and political outsiders as En Marche candidates. They arrive unburdened by a voting history, which means they can be more flexible than traditional politicians. On the other hand, they presumably don't have firm convictions beyond loyalties to Mr. Macron's call to revive French confidence and economic growth.

How will the 39-year-old use this malleable majority? European Union grandes are patting themselves on the back for checking the growth of insurgent political movements on the Continent. They see Mr. Macron as putting a fresh face on the familiar European "social model" of

burdensome regulation, high taxes and bureaucratic hauteur. German Chancellor Angela Merkel exemplified this attitude when she congratulated Mr. Macron for defeating "populism."

If Mr. Macron takes that advice, he'll fail like the last three French Presidents did. At its best Mr. Macron marshaled his own version of populism and even nationalism. This wasn't cramped or ethnocentric nationalism à la Ms. Le Pen. Instead it emphasized inclusive French pride. Married to a reform agenda, Mr. Macron's mode of populism could see France take its rightful place next to Germany and revive French influence in Europe.

Mr. Macron says he wants to start by loosening the 35-hour workweek, which will be a crucial test of his political will, but there's much more to do. As Economy Minister in the Socialist government, Mr. Macron tried limited privatization, but now he can make the case that taxpayers shouldn't have to subsidize bloated state-run enterprises.

His proposal to cut corporate taxes to 25% from 33% is welcome, but French workers should get a tax cut, too, and the wealth tax that has been the terror of entrepreneurs should be scrapped. As a candidate he shied away from pension reform, but it's hard to see how France can prosper long-term with a current retirement age of 60. Some want to diminish the reform mandate because voter turnout fell to 43%. But Mr. Macron's duty is to those who showed their reform hope by voting.

Mr. Macron's big test will come when labor unions and the left hit the streets to paralyze the country as he moves his reform agenda in the assembly. Recent Presidents have wilted under that assault, and if Mr. Macron does the same he will fail too. Reform opportunities like Mr. Macron's come once in a generation. This one would be a terrible thing to waste.

Congress Steps Up on Russia

Whatever you think about Donald Trump's relationship with Russia, the controversy has achieved one positive result. Last week the Senate voted 97-2 to strengthen sanctions on Vladimir Putin's regime, a rare moment of bipartisan agreement these days.

The amendment to an Iran sanctions bill would require congressional approval before President Trump lifts current sanctions on Russian entities. It broadens the field of potential sanctions targets to include those involved in human-rights abuses or doing business with Russian intelligence and defense industries, among others. It also expands the range of Russian industries that could be subject to sanctions.

The Administration objected to the proposal, but what did Mr. Trump expect? Ordinarily we'd agree with Secretary of State Rex Tillerson, who warned a House committee not to limit the President's "flexibility to adjust sanctions to meet the needs of what is always an evolving diplomatic situation." The Constitution intends for the executive to have broad discretion on foreign policy.

Sia still occupies Ukrainian territory in Crimea; frequently violates the Minsk cease-fire agreements the Obama Administration helped negotiate for eastern Ukraine; and is propping up Bashar Assad in Syria.

U.S. sanctions are also a message of support for the thousands of Russians protesting against corruption last

week in the streets of major cities. The protests were inspired by opposition leader Alexei Navalny, who was sentenced last week to 30 days in jail for organizing a rally in Moscow. In a sign of how worried the Kremlin is, up to 1,700 protesters may have been arrested and courts are sentencing some to weeks in prison.

One question is why Democrats on Capitol Hill took so long to notice. Their new enthusiasm for Russia sanctions follows eight years during which most—although not all—Congressional Democrats endorsed President Obama's and Hillary Clinton's "reset" with Mr. Putin, supported Mr. Obama's refusal to offer lethal defensive weapons to Ukraine, and granted him ample loopholes in sanctions legislation on both Russia and Iran. Their conversion now looks more political than principled.

That doesn't make them less right, and we hope the House picks up the Senate sanctions legislation. Mr. Trump would then have to decide whether to veto, but an override wouldn't improve his standing on the world stage. The better choice would be to sign the bill, enforce the sanctions vigorously, and work with Congress to forge a bipartisan approach to Russia. That would help the President rebut fears that he can't be trusted on Russia, while telling Mr. Putin that rogue behavior won't be rewarded.

But it's hard to fault Congress for being skeptical. Though there's no evidence of campaign "collusion" with Russia, Mr. Trump has been oddly solicitous of Mr. Putin. Congress is sending a useful message that Mr. Trump has little running room to negotiate unless the Russian changes his behavior.

Mr. Putin is giving American leaders plenty of reasons to act. Russians have spread misinformation and used computer hacks to disrupt elections in France, Germany and the U.S. Rus-

Zuckerberg's Opiate For the Masses

By Andy Kessler

At Harvard's commencement last month, dropout Mark Zuckerberg told eager graduates to create a new social contract for their generation: "We should have a society that measures progress not just by economic metrics like GDP, but by how many of us have a role we find meaningful." He then said to applause: "We should explore ideas like universal basic income to give everyone a cushion to try new things." Who wouldn't like three grand a month?

Having the government provide citizens with a universal basic income is the most bankrupt idea since socialism, but others in Silicon Valley still have been proselytizing money for nothing. "There will be fewer and fewer jobs that a robot cannot do better," Tesla CEO Elon Musk said at the World Government Summit in Dubai earlier this year. "I think some kind of universal basic income is going to be necessary."

Robert Reich, President Clinton's labor secretary, summed up the wrong-headed thinking a few months ago: "We will get to a point, all our societies, where technology is displacing so many jobs, not just menial jobs but also professional jobs, that we're going to have to take seriously the notion of a universal basic income."

This is a false premise. All through history, automation has created more jobs than it destroyed. Washboards and wringers were replaced by increasingly inexpensive washing machines, while more women entered the workforce. Automated manufacturing and one-click buying has upended retail, yet throughout the U.S. millions of jobs go unfilled.

With Amazon's proposed purchase of Whole Foods, the online giant is primed finally to bring efficiency to the last mile of grocery shopping—but don't count on all grocery jobs to disappear.

The economics, which they apparently stopped teaching at Harvard, are straightforward: Lowering the cost of goods and services through automation allows capital—financial and human—to attack even harder problems. Wake me up when we run out of problems.

These kinds of predictions aren't new, and they've been wrong almost always. In 1930 John Maynard Keynes envisioned that his grandchildren would have a 15-hour workweek. Sam Altman, who runs the startup incubator Y Combinator, dabbles in similarly bold but meaningless statements. "We think everyone should have enough money to meet their basic needs—no matter what, especially if there are enough resources to make it possible," he wrote last year, while admitting he has no idea "how it should look or how to pay for it."

Where to begin? First, the cost of a universal basic income would make free college for everyone look like

austerity. The cost of anything the government touches tends to increase well faster than inflation—education, health care, housing. Price signals get distorted, but since Uncle Sam is paying, no one seems to care. Anyway, why stop at \$3,000 a month? Why not \$4,000 a month or \$40,000? Everyone deserves a MacArthur genius grant!

If last year's U.S. presidential election proved anything, it's that people want jobs, not handouts. America's education system needs reform, but there are already two billion mobile classrooms built into smartphones world-wide. Paying people not to work means you'll never get them back into the workforce. Why would you want to work when you can bang on a drum all day?

If we get 'universal basic income,' the millennials will never leave our basements.

The U.S. is already turning European—I really think so. Remember the Obama administration's "Life of Julia," which glorified the nanny state? Every year more Democrats push single-payer health care because competition is deemed too messy. The safety net now has a safety net. These are all on the riverbank of paying people not to work. Universal basic income would be the final drowning of capitalism.

Many Americans really do need help, and no one should be dying in the streets. But why create an entire class of freeloaders out of people who otherwise wouldn't have sought handouts?

The bigger question is why all these Silicon Valley bigwigs are intent on giving away other people's money. Perhaps it's a misplaced sense of shame for their riches. Worse, some believe they are chosen to carry society on their backs while the teeming masses can be paid to idle along. Well, as long as they download the latest apps and are given enough to pay for wireless internet and an iPhone upgrade every few years. Facebook and videogames are already huge mind sinks. Add Mr. Musk's Neuralink direct brain interface and no one will ever get off the couch.

Most millennials are hardworking and motivated, but have you noticed that the talk of universal basic income comes just as marijuana legalization is making more gains than ever? It's already been legalized for recreational use in eight states and for medicinal purposes in 29.

Universal basic income, combined with legal weed, could ruin an entire generation. We'll never get them out of our collective basements. Thanks, Zuck.

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

We Need Guns Before

The Police Arrive

By Daniel Lee

The attack on U.S. congressmen last week illustrates the realities of sudden violence. There's a saying among gun-carry permit advocates: "When seconds count, police are minutes away."

That wasn't the case last week but only because Majority Whip Steve Scalise's Capitol Police detail was on hand and courageously engaged the shooter. Had Rep. Scalise and his security team not been present, congressmen and their aides would have been easy pickings until local police arrived. That took three minutes—but that's a long time to spend taking cover in a baseball dugout under armed assault. "It would have been a bloodbath," said Texas Republican Joe Barton.

In largely rural states like Indiana, where I live, response times can be 30 minutes or more. Maybe that's why nearly a million Hoosiers hold active gun permits, as per state records, out of an adult population of 4.5 million.

I've been one of them for decades. I've gone Christmas shopping armed, carried at family outings, sporting events and movie theaters. I was fired from a job with the gun tucked in an ankle holster. Aside from the indignity of being fired, the only person in danger was me, when I broke the news to my wife.

Indiana assumes—in the absence of evidence to the contrary—that people will protect themselves without reflexive, wanton violence. It works. A gun-use Venn diagram would show a mere sliver of overlap between those who lawfully carry weapons and those who use guns in the commission of crimes. You don't find National Rifle Association stickers on getaway cars.

The inconvenient fact that laws aimed at restraining criminals are only obeyed by noncriminals was vividly demonstrated in this case. Rep. Barry Loudermilk (R., Ga.) reported that his

aide "back in Georgia, carries a 9mm (pistol) in his car.... He had a clear shot at him, but here we're not allowed to carry any weapons."

Bad news for New York Republican Chris Collins, who said, "I can assure you from this day forth—I have a carry permit—I will be carrying when out and about." Well, when he's out and about on Capitol Hill he won't be allowed to carry. He might be permitted to have a gun in his desk—unloaded. It will make a fine paperweight.

Members of Congress were lucky the Capitol Police were on hand when the gunman attacked.

Mr. Collins's New York state carry permit is recognized in Virginia, under expanding reciprocity laws that have extended permit rights beyond state lines. He could also carry in Indiana; our reciprocity rules are very liberal, in the least bossy sense of the term. But relying on his New York permit in Maryland or the District of Columbia would get Mr. Collins one phone call and a court date.

Mr. Scalise's heroic security team, Capitol Police agents Crystal Griner and David Bailey, were armed with handguns and faced a man shooting a rifle. The situation wasn't likely to offer a good outcome.

The truth is that armed citizens can never substitute for police, who train, practice and retrain constantly. But officers can't be everywhere. And ordinary citizens—even congressmen—can't field full-time security teams. Local jurisdictions shouldn't take away the tools we need to be our own first line of defense.

Mr. Lee is a writer in Indianapolis.

OPINION

Only Congress Can Undo Its Regulatory Mess

By David Schoenbrod

Candidate Donald Trump vowed to spur economic growth by freeing businesses from burdensome regulation. President

Trump has fallen short on this pledge, despite strong rhetoric and some excellent appointments. If he wants lasting reforms of the regulatory state, he'll have to work with Congress to make elected officials accountable again.

"We're cutting regulations massively," Mr. Trump said at the Jan. 30 signing ceremony for an executive order commanding agencies to repeal two regulations for every new one. Conservatives may see this as a move in the right direction, but it won't work: The agencies might have been able to comply before the late 1960s, when they had a freer hand, but not now.

U.S. lawmakers seek credit for benefits while evading blame for burdens. Change will require them to act.

In 1970 Congress passed the Clean Air Act. It was one of the first in a long series of statutes that give citizens the right to regulatory protection, command agencies to do what is necessary to protect those rights, and direct courts to enforce the commands.

This type of legislation allowed elected officials to claim credit for the benefits of regulations while shifting blame to agencies for the burdens. The system became so politically profitable that politicians from both parties showed practically limit-

less enthusiasm for giving citizens rights to protection. The Clean Air Act contained 940 detailed commands for the Environmental Protection Agency, some of which require it to issue dozens of separate regulations binding businesses.

With so many judicially enforceable commands requiring agencies to regulate, Mr. Trump's executive order can keep the feds from issuing new regulations only until courts require compliance with the statutes. The order will postpone new regulations—but at the price of exposing businesses to growth-killing uncertainty.

Agencies have some wiggle room to reduce the burdens imposed under existing regulations, but doing so requires time-consuming work to demonstrate compliance with each statute's detailed requirements. Even if the burden-reducing changes survive judicial review, the process takes years.

An even more daunting obstacle is the demand for regulatory protection, which gives rise to the laws themselves. At its start, the Reagan administration seemed unresponsive to Americans' demand for more environmental protection. Membership in green organizations surged, the president's popularity took a hit, and in 1983 he was forced to give a free hand to a new EPA administrator with strong environmental credentials.

If Mr. Trump wants to reduce regulatory burdens without suffering a similar fate, he needs to find smart ways to reconcile Americans' desire for regulatory protection with their distaste for its burdens.

Making the task even more difficult, the regulatory statutes are ridiculously obsolete. The major environmental laws took shape in the 1970s, and most haven't been revised since the 1980s. They fail to



DAVID KLEIN

take advantage of newer, better ways to produce more protection for the regulatory buck.

I co-wrote a 2009 study that took ideas from environmental experts of all political stripes to propose smarter statutes, "Breaking the Logjam: Environmental Reform for the New Congress and Administration." We showed that the country could get more protection with less cost by having the EPA deal with the most dangerous interstate air-quality problems through a national market-based approach.

In early 2009 I joined other leaders of the project to discuss these proposals with Democrats and Republicans in Congress. They told us they wished the proposals were already on the books because their col-

leagues wouldn't shoulder the responsibility necessary for reform. Lawmakers didn't want to tamper with a status quo that is perfect for them and bad for constituents.

Americans can get regulatory statutes that give them more protection with less burden only if members of Congress bear personal responsibility for the consequences of the laws they enact. This can be achieved by requiring Congress to vote to approve or to disapprove all major regulations issued by federal agencies. This would create a powerful incentive to revise statutes so they are more balanced.

This idea isn't new. James Landis, a New Deal expert on regulation and later dean of Harvard Law School, proposed it nearly 80 years ago. Be-

fore he joined the Supreme Court, Stephen Breyer wrote a 1984 law review article about how it could work in practice.

Earlier in this Congress, House Republicans passed the Regulations from the Executive in Need of Scrutiny Act, or Reins Act. Republicans on the Judiciary Committee wrote in a statement that Congress would have to vote on agency actions "that cost the economy \$100 million or more."

They say nothing about actions that *reduce* regulatory protection. The Reins Act thus looks more like a poke in the eye to Democrats than a serious reform—guaranteeing it won't get the 60 Senate votes to overcome a filibuster.

Again, lawmakers claim credit while shifting blame: Supporters of the Reins Act can assert they fought burdensome regulations while avoiding responsibility for votes on specific regulatory protections that many constituents want.

Members of Congress willing to shoulder responsibility should change the bill's title to the Responsibility for Regulation Act and make substantive changes so the bill is pro-responsibility rather than anti-regulation. To start, the statute should apply to major regulations that reduce protection as well as to those that add costs.

As a candidate, Mr. Trump said he supported the Reins Act. As president, he told Congress he wants to reform regulation and work with Democrats. If he reaches across the aisle for an alternative to the Reins Act, he might be able to keep his promise.

Mr. Schoenbrod, a professor at New York Law School, is the author of "DC Confidential: Inside the Five Tricks of Washington" (Encounter, 2017).

Europe's Elites Seem Determined to Commit Suicide by 'Diversity'

By Douglas Murray

Europe in 2017 is racked with uncertainty—the eurozone crises, the endless challenges of the European Union, national elections that resemble endless rounds of bullet-dodging. Yet even these events are insignificant compared with the deep tectonic shifts beneath the Continent's politics, shifts that Europeans—and their allies—ignore at our peril.

Throughout the migration crisis of recent years I traveled across the Continent, from the reception islands into which migrants arrive to the suburbs in which they end up and the chancelleries which encouraged them to come. For decades Europe had encouraged guest workers, and then their families, to come. As Germany's Chancellor Angela Merkel once admitted, nobody expected them to stay.

Yet stay they did, with their numbers swelling even when there were no jobs. Waking up to the results of their policy, European societies rebranded themselves "multicultural" societies, only to begin wondering what that meant. Could

a multicultural society make any demands of its newcomers? Or would that be "racist"?

From the 2000s legal and illegal immigration picked up. Boats regularly set out from Turkey and North Africa to enter Europe illegally. Syrians fleeing civil war pushed into the Continent, soon joined by people from across sub-Saharan Africa, North Africa, the Middle East and Far East.

Today the great migration is off the front pages. Yet it goes on. On an average weekend nearly 10,000 people arrive on Italian reception islands alone. Where do they go? What do they expect? And what do we expect of them?

To find the answer to these and other questions it is necessary to ask deeper questions. Why did Europe decide it could take in the poor and dispossessed of the world? Why did we decide that anybody in the world fleeing war, or just seeking a better life, could come to Europe and call it home?

The reasons lie partly in our history, not least in the overwhelming German guilt, which has spread across the Continent and affected

even our cultural cousins in America and Australia. Egged on by those who wish us ill, we have fallen for the idea that we are uniquely guilty, uniquely to be punished, and uniquely in need of having our societies changed as a result.

Politicians say with fury that their migration policies 'must' work. What if they don't?

There is also, for Europe, the sense of what I call tiredness—the feeling that the story might have run out: that we have tried religion, all imaginable forms of politics, and that each has, one after another, led us to disaster. When we taint every idea we touch, perhaps a change is as good as a rest.

It is often argued that our societies are old, with a graying population, and so we need immigrants. When these theories are challenged—by asking, for instance, why the next generation of Germany's

workforce might not come from unemployed Greece rather than Eritrea—we are told that we need low-skilled workers who don't speak our languages because it makes Europe more culturally interesting. It is as though some great hole lies at the heart of the culture of Bach, Dante and Wren.

When people point out the downsides of this approach—not least that more immigration from Muslim countries produces many problems, including terrorism—we get the final explanation. It doesn't matter, we are told: Because of globalization this is inevitable and we can't stop it anyway.

All these instincts, when put together, are the stuff of suicide. They spell out the self-annihilation of a culture as well as a continent.

Conversations with European policy makers and politicians have made this abundantly clear to me. They tell me with fury that it "must" work. I suggest that with population change of this kind, at this speed, it may not work at all.

Yet still it is possible that the publics won't go along with the instincts of their leaders. Earlier this

year, a poll of European attitudes was published in which citizens of 10 countries were asked a tough question: whether they agreed that there should be no more Muslim migration into their countries. Majorities in eight out of the 10 countries, including France and Germany, said they wanted no more Muslim immigrants.

Over recent decades Europe has made a hasty effort to redefine itself. As the world came in, we became wedded to "diversity." As terrorism grew and more migrants arrived, public opinion in Europe began to harden. Today "more diversity" remains the cry of the elites, who insist that if the public doesn't like it yet, it is because they haven't had enough of it.

The migration policies of the political and other elites of Europe suggest that they are suicidal. The interesting thing to watch in the years ahead will be whether the publics join them in that pact. I wouldn't bet on it.

Mr. Murray is author of "The Strange Death of Europe: Immigration, Identity, Islam," out this week from Bloomsbury Continuum.

German-Style Apprenticeships Simply Can't Be Replicated

By Eric A. Hanushek

Say the words "apprenticeship program," as the Trump administration has been doing recently, and maybe you imagine a win-win: Young people welcomed by companies that want to train them to become skilled workers.

Some American policy makers have begun to see Germany's approach—credited with helping it navigate the 2008 recession while keeping youth unemployment in the single digits—as the magic formula. But adapting the German system for the U.S. is little more than a dream.

More than half of young Germans enter apprenticeships, which can lead to certification in more than 300 different careers. Many are

blue-collar jobs ranging from construction to baking, but apprenticeships also cover white-collar fields such as information technology and engineering.

An apprenticeship generally involves two to three years of work and study after secondary school. In Germany's "dual system," apprentices work on the job for three or four days a week and spend the rest of the time in academic instruction paid for by the government. This setup has been shown to ease a student's transition into work. Openings in apprenticeships are based on employers' demands for workers, and youths who've earned a vocational certificate are readily hireable.

But this comes at a cost. Workers enter the job market with skills that

often become obsolete as industries change. The early-career advantage is offset by disadvantages later in life. Research shows that after age 50 German workers with general education do better than vocationally trained ones, many of whom leave the workforce.

Germany and the European Union recognize the need to retrain people whose earlier skills become obsolete. There are continuous calls for "lifelong learning." Unfortunately, governments haven't figured out effective ways to retrain older workers, and companies often don't see the advantage of doing so. Training over the course of a career is significantly more prevalent among workers with a general education.

Moreover, the U.S. cannot quickly replicate Germany's deep history of

apprenticeships. The German system builds on a half-century of employer experience, on national standards and on a relatively rigid labor market that relies on certification as a hiring credential.

Half of young Germans enter vocational training, and the rigid labor market relies on certification.

By contrast the U.S. has retreated from vocational education. In high schools, it has morphed into an alternative way to teach basic skills such as math and reading and to motivate students not doing well in the gen-

eral curriculum. The move toward broad standards and accountability via test scores hasn't helped vocational education either.

Community colleges might provide something like the mixture of education and training found in the German system, but they haven't developed serious relationships with industry. The construction trades have found some success with apprenticeships, but this hasn't been replicated for white-collar jobs. And skill certification is much less important in the U.S. labor market than in the German market.

Even if the U.S. succeeded in expanding apprenticeships, the problem of skill obsolescence remains. The American model of providing vocational training to those who don't like or don't do well in the general curriculum doesn't augur well for adaptation when new skills are required.

Employers like the idea of vocational training because it could reduce the demands on them to train new workers. But when the skills they need change, they also may find it easier simply to return to the entry-level market rather than retrain their existing workforce.

The largest problem of skills in the U.S. today isn't a shortage of young workers with specific competencies. Instead it is a need for more general cognitive skills that give workers the ability to adapt to new circumstances and new jobs. In that area, American schools aren't competitive with their international competitors—and more apprenticeships won't help.

Mr. Hanushek is a senior fellow at the Hoover Institution of Stanford University.

THE WALL STREET JOURNAL.

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Notable & Quotable: Rules

From "Free Speech, the Goose, and the Gander" by lawyer Ken White on his Popehat blog, June 17:

Last night a popular alt-right troll disrupted a controversial modern production of Julius Caesar staged with a Trumplike figure in the lead role....

The "eye for an eye" theory of respecting free speech is particularly pernicious because it represents the worst sort of collectivism, something the principled Right ought reject. Note that people who say "apply the Liberals' own rules to the Liberals" aren't disrupting, say, an Antifa rally or the meeting of some Berkeley student group that advocated shutting down a conservative speaker.

They're disrupting other people entirely, on the theory that everyone they deem part of the nebulous collective "Liberal" deserves to be silenced because someone else in that nebulous collective engaged in insidious behavior....

And yet, the "we're just applying their rules to them" theory has some heft.... The bit of plausibility comes from the reaction of people in authority, people who ought to know better, people whose conduct is somewhat more fairly attributed to a larger political group. A few hysterically censorious kids screaming for a professor's termination for crimestink do not threaten the foundations of free speech, but Yale lauding them does.

Mr. Hanushek is a senior fellow at the Hoover Institution of Stanford University.

LIFE & ARTS

BONDS: ON RELATIONSHIPS | By Elizabeth Bernstein

Can Bunny Photos Help Your Relationship?

People grow fonder of a partner after looking at slideshows of happy images like cute animals mixed with ones of their beloved

ASK HAPPY COUPLES what the secret to a long-term relationship is and they'll probably say communication, space or sex.

New research suggests it might just be bunny photos.

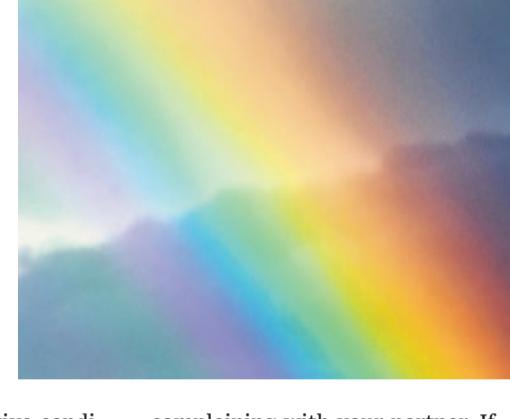
In a study published online last month in the journal "Psychological Science," researchers at Florida State University, the University of Tennessee and the University of Minnesota found that people who viewed pictures of their spouse interspersed with photos of baby animals, beaches or sunsets, saw a significant boost in their relationship satisfaction.

Social psychologists call this evaluative conditioning. It's what happens when our mind learns to associate an object or person with a feeling—good or bad—that we had when we were previously around that object or person. Have you ever gotten sick after eating something and forever hated that food? Do you have a song that reminds you of your first love? You've experienced it.

The new research on evaluative conditioning was funded by the U.S. Department of Defense as part of the Military Suicide Research Consortium, an effort to stem the suicide rate of active military members and veterans. The goal is to find ways to strengthen soldiers' marriages and, therefore, their support systems.

The researchers brought into their lab 120 couples married for three to four years and assessed their implicit, or gut-level, feelings toward their partner—the ones they may not want to acknowledge or even know they have. They did this by showing participants pictures of their partner followed by negative and positive words, timing how quickly they could identify the words. They also asked participants how they felt about their spouse.

They then showed the participants a slideshow once every three days for six weeks. Half viewed one that intermittently included



photos of their spouse paired on a split screen with positive images (of puppies, bunnies and sunsets) and positive words ("incredible," "terrific," "amazing"). Half viewed one with photos of their partner intermittently paired with neutral images (of a chair, a shed, gravel) and neutral words ("If," "like," "when"). Researchers measured the participants' implicit attitudes toward their partner every two weeks for eight weeks, and again asked them how they felt about their spouse.

The people who viewed the bunnies and puppies images became happier in their relationship. Their implicit feelings improved, and they also reported that they felt better about their partner. "It was like they went on 13 artificial good dates," says Jim McNulty, a pro-

fessor in the psychology department at Florida State, and the lead researcher on the study.

The researchers haven't designed a way to intervene with soldiers and their spouses yet, they say. They believe they first need to figure out how many sessions of the slideshow and which photos will work best.

Dr. McNulty believes that evaluative conditioning can be used to improve other types of relationships in addition to romantic ones. We might be able to prime ourselves to like our difficult siblings, co-workers or in-laws more by actively trying to associate them with something positive. Imagine viewing a photo of your crabby boss alongside a picture of a duckling or a baby elephant.

People will need to be careful,

though, because evaluative conditioning cuts both ways. Just as the positive thoughts or experiences we associate with a person can make us like him or her more, negative ones can make us like that person less.

Dr. McNulty's tips for using evaluative conditioning to improve your relationship:

Boost the positive. Do more activities together that you both enjoy and aim for new experiences. Research shows that when romantic partners try something new together they feel more attracted to each other. They come to associate the excitement of the new activity with their partner.

Minimize the negative. When you are together, try to put your bad mood aside because you will come to automatically associate

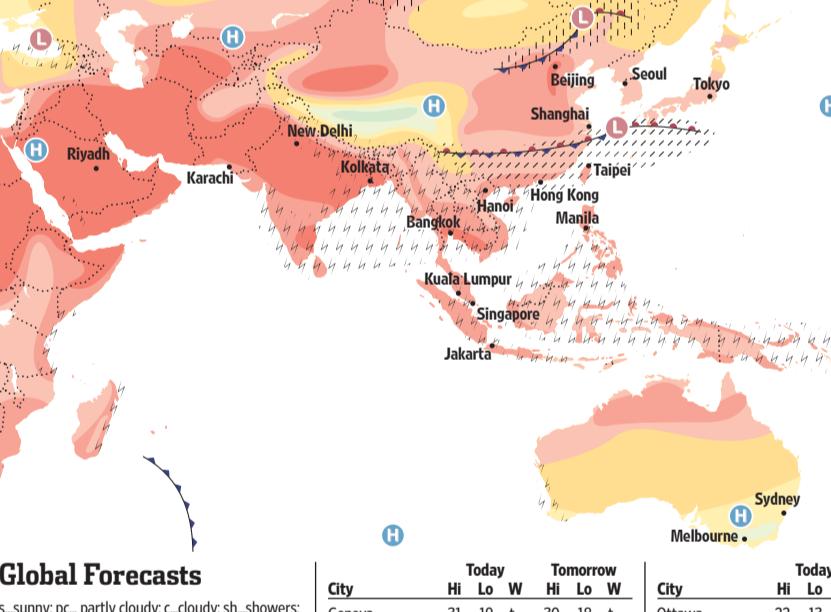
complaining with your partner. If you are in a bad mood, it might be better not to hang out with your partner until you feel better, Dr. McNulty says.

Always weave in something happy. When you want to be with your partner after you've had a bad day, try to include some positive emotions. Hug or cuddle.

Share a good meal or a bottle of wine. Make sure the conversation includes something happy.

Have sex. It is one of the most enjoyable experiences you can have with a partner. Sex releases feel-good chemicals in the brain, always a positive. And research shows that people who have more sex with their partner have more positive implicit feelings toward him or her, meaning they are happier in the relationship.

Weather



AccuWeather.com

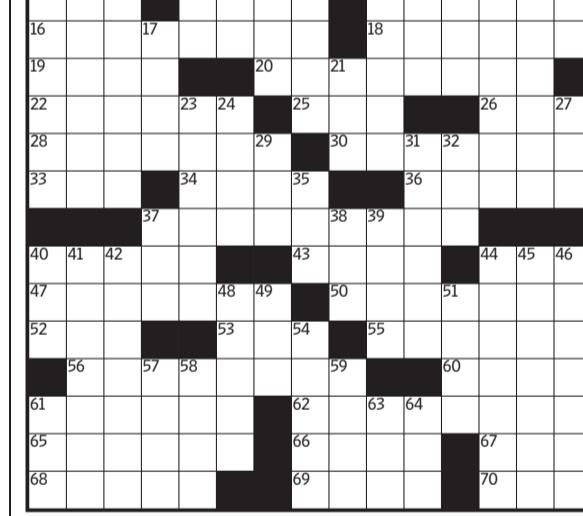
Global Forecasts

s...sunny; pc...partly cloudy; c...cloudy; sh...showers; t...storms; r...rain; sf...snow flurries; sn...snow; l...ice

City	Today			Tomorrow		
	Hi	Lo	W	Hi	Lo	W
Amsterdam	27	12	t	25	16	pc
Anchorage	13	9	r	15	11	c
Athens	28	20	pc	29	20	s
Atlanta	25	20	sh	26	22	s
Bahrain	41	25	s	40	25	s
Baltimore	30	18	s	29	18	pc
Bangkok	35	27	t	34	26	pc
Beijing	35	21	s	33	21	t
Berlin	28	12	t	22	12	pc
Bogota	17	9	r	17	9	c
Boise	35	17	s	30	13	s
Boston	29	18	pc	27	17	pc
Brussels	31	15	pc	29	18	t
Buenos Aires	12	6	c	14	10	pc
Cairo	35	23	s	33	22	s
Calgary	24	7	pc	17	7	t
Caracas	31	25	pc	31	26	pc
Charlotte	26	20	pc	28	20	pc
Chicago	25	15	pc	28	20	pc
Dallas	35	23	s	24	23	s
Denver	35	18	s	34	17	pc
Detroit	24	13	pc	26	18	pc
Dubai	41	31	s	40	32	s
Dublin	18	14	pc	24	13	pc
Edinburgh	18	12	pc	21	13	t
Frankfurt	32	18	t	30	17	t

City	Today			Tomorrow		
	Hi	Lo	W	Hi	Lo	W
Geneva	31	19	t	30	18	t
Hanoi	32	26	t	33	27	pc
Havana	31	25	t	32	23	pc
Hong Kong	31	27	t	32	29	t
Honolulu	29	23	sh	30	23	pc
Houston	34	24	pc	32	24	pc
Istanbul	26	18	t	26	21	s
Jakarta	32	23	pc	32	24	t
Johannesburg	20	4	s	18	4	pc
Kansas City	32	21	s	33	23	s
Las Vegas	46	31	s	46	31	s
Lima	22	16	pc	22	16	pc
London	30	16	pc	30	17	pc
Los Angeles	34	19	s	34	19	s
Manila	35	21	pc	37	22	pc
Mandalay	34	26	t	33	26	t
Melbourne	16	8	pc	13	5	c
Mexico City	26	10	pc	26	12	pc
Miami	32	27	c	33	27	t
Milan	33	20	pc	34	21	pc
Minneapolis	24	15	pc	26	18	t
Monterey	35	22	pc	36	19	pc
Montreal	24	15	sh	21	13	pc
Moscow	22	12	pc	19	10	pc
Nashville	32	28	r	32	28	t
New Delhi	37	26	t	34	25	t
New Orleans	27	24	r	28	24	r
New York City	28	19	s	27	19	pc
Washington, D.C.	30	21	pc	30	21	pc
Zurich	32	17	t	31	16	t

The WSJ Daily Crossword | Edited by Mike Shenk



LOONY TOONS | By John Lampkin

Across

- 1 Brewery sight
- 4 Formal accord
- 8 Beachcomber's find
- 13 Savings for senior yrs.
- 14 Sandy shade
- 15 Colorful phenomenon caused by charged solar particles
- 16 Porky's lingo?
- 18 Became more appealing over time
- 19 Rose on a diamond
- 20 Yogi's pillow stuffing?
- 22 Relaxed

Down

- 25 Lose power
- 26 "Imagine that!"
- 28 Catch off guard
- 30 Go off course
- 33 Texan hero Houston
- 34 Wetlands plant
- 36 Affectionately highbrow
- 37 Donald's hooch?
- 40 "____ where they ain't" (advice from baseball's Willie Keeler)
- 43 Banks on the runway
- 44 "Wham!"
- 47 Like a bread dough failure, perhaps
- 50 Interlace

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

Down

- 1 It might give you backstage access
- 2 Short operatic piece
- 3 Pro wrestling duo
- 4 Pod sphere
- 5 False front
- 6 Baby or corn container
- 7 Ready for playing, in a way
- 8 Morsel for Miss Muffet
- 9 Twister treat
- 10 "Trouble again?"
- 11 Trendy bakery hybrids
- 12 Solo in a spaceship
- 15 Concur
- 17 King with three daughters
- 21 Lend a hand
- 23 Plays a zither, say
- 24 Util. bill portion
- 27 Alternative to "Psst!"
- 29 "A rodent!"
- 31 Clear out of
- 32 Rage

35 "Spring forward" initis.
37 "Agnus ____"
38 Pirate's assent
39 Caterers' coffee holders
40 Refrigerator noise
41 Seriously stuck
42 Give a shellacking
44 Stereotypical love-at-first-sight sound
45 Construction zone feature, sometimes
46 "Go, us!"
48 "Family Ties" mom
49 "Don't wanna"
51 Ford a stream, say
54 Fails utterly
57 March Madness org.
58 Capone's nemesis
59 Summer hangout
61 Xbox 360 rival
63 Customary practice
64 Stitch

Previous Puzzle's Solution

B	I	A	S	S	N	O	W	Y	Z	A	P
A	N	T	E	M	O	I	N	E	R	P	
S	T	E	A	L	O	N	V	E	A	L	
E	R	A	I	N	G</td						

BUSINESS & FINANCE

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THE WALL STREET JOURNAL.

Tuesday, June 20, 2017 | B1

Yen vs. Dollar 111.3650 ▲ 0.44%

Hang Seng 25924.55 ▲ 1.16%

Gold 1247.70 ▼ 0.50%

WTI crude 44.54 ▼ 0.45%

10-Year JGB yield 0.056%

10-Year Treasury yield 2.174%

EQT to Buy Rice for \$6.7 Billion

Tie-up of energy producers comes after low oil prices stirred turmoil within sector

By DANA MATTIOLI

EQT Corp. agreed to buy **Rice Energy Inc.** for \$6.7 billion, the latest proposed tie-up between energy producers after low oil and gas prices

roiled the industry.

Rice shareholders are to receive 0.37 shares of EQT stock and \$5.30 a share in cash, the companies said. As of Monday morning, Rice had a market value of \$4 billion. EQT has a \$10.4 billion market value. Both companies have significant amounts of debt.

Shares of Rice Energy soared 25% to \$24.64 Monday morning, while EQT's stock fell 8.9% to \$53.54.

Rice is run by the Rice family. Chief Executive Daniel Rice IV runs the company alongside younger brothers Toby and Derek, the company's chief operating officer and exploration head, respectively. A fourth brother, Ryan, joined in 2014 as a petroleum engineer. The patriarch, Daniel Rice III, left BlackRock in 2012 after it failed to disclose Rice Energy's partnership with a coal producer that was one of the biggest holdings in Mr. Rice's BlackRock funds.

Rice made its stock-market debut in January 2014 in an initial public offering that valued the family's stake in the company at \$900 million. The family owned about one-third of its stock. The stock's strong start fizzled that summer when oil prices began to fall, prompting a broad sell-off in energy stocks, including those of U.S. gas producers.

EQT, based in Pittsburgh, is one of the country's largest natural-gas producers. The company focuses on Appalachian area natural-gas production, gathering, and transmission.

Citigroup acted as financial adviser to EQT, and Waughell, Lipton, Rosen & Katz acted as legal adviser. Barclays acted as financial adviser to Rice Energy, and Vinson & Elkins LLP acted as legal adviser.



Alibaba chairman Jack Ma

Alibaba Pursues Western Sellers

American homes are brimming with products made in China. This week, **Alibaba Group Holding** chairman Jack Ma will put on a show to help U.S. entrepreneurs flip the script.

By Liza Lin in Shanghai and Laura Stevens in San Francisco

In a two-day event starting Tuesday in Detroit, the e-commerce giant will offer an expected 3,000 U.S. small-business owners tips on how to market and ship their wares to Chinese consumers. There is also a "fireside chat" with Martha Stewart, and Mr. Ma will be interviewed by TV news personality Charlie Rose.

The event, to be held at Detroit's Cobo Center, is being staged partly to show that Mr. Ma is making good on his pledge to President Donald Trump to help create one million new American jobs. But Alibaba, which is credited with starting China's online shopping binge, could use some new Western goods to sell, analysts say.

Chinese rival **JD.com** Inc. said Monday that it generated \$17.7 billion in sales during its "618" sales event in China this month, buoyed by tie-ups with U.S. retailer **Wal-Mart Stores** Inc. and Chinese social-media giant **Tencent Holdings**. Niche e-commerce providers are also starting to lure buyers away from the big sites.

"Expanding U.S. connections will help Alibaba attract more merchants and more products to its platform," said Tian Hou, founder of equity research firm TH Capital in Beijing.

Alibaba President Michael Evans says China's swelling ranks of middle-class consumers are looking for Western brands, "which the consumers in China find enormously appealing."

Still, merchants and industry consultants say Mr. Ma has work to do.

One continuing issue is the presence of counterfeits on Alibaba's Taobao site, which features products primarily sold by small businesses. Its other shopping site, Tmall, is

Please see ALIBABA page B4



VLADIMIR MARINA/TASS/ZUMA PRESS

Aircraft on display as the Paris Air Show opened on Monday. Boeing announced 135 deals for the 737 Max 10, a single-aisle jet.

Boeing Adds New Single-Aisle Jet

By ROBERT WALL

LE BOURGET, France—**Boeing Co.** on Monday formally launched a new version of its single-aisle jetliner with more than \$16 billion in deals to regain market share lost to rival **Airbus SE**.

The plane, called the 737 Max 10, is the largest of Boeing's new narrow-body planes that represent the backbone of global air travel. "Our customers told us to build it bigger," said Kevin McAllister, president of Boeing Commercial Airplanes.

Mr. McAllister said more than 10 customers have already committed to buying the plane. The deals, to be unveiled this week at the Paris Air Show, would be for more than 240 aircraft.

The plane carries a price tag of \$124.7 million each,

though buyers get discounts. It is expected to enter service in 2020.

Boeing began the Paris Air Show announcing 135 deals for the 737 Max 10, though some buyers have switched from commitments previously made to other models. At list price, the value of the announced

arm, known as Gecas, which signed an order for 20 of the planes. **BOC Aviation**, another plane-leasing firm, signed a memorandum of understanding to take 10. **AerCap Holdings NV**, the largest independent lessor, said it was in talks with Boeing about the plane, though didn't buy any.

Not everyone is on board, though: **Qatar Airways** Chief Executive Akbar Al Baker said that he wouldn't buy the plane and would stick with the Airbus A321neo planes already ordered.

Big single-aisle planes have become a sweet spot for buyers. They cost far less than larger widebody planes and can fly attractive routes such as coast-to-coast in the U.S., or even some shorter trans-Atlantic hops.

Airbus has had a lead on Boeing in this growing and increasingly important plane

Please see BOEING page B2

♦ GE to expand jet-leasing business, seek Asia deals... B2

AstraZeneca's Go-It-Alone Approach Faces Big Test

By DENISE ROLAND

LONDON—**AstraZeneca PLC** Chief Executive Pascal Soriot made a promise to investors three years ago as the Anglo-Swedish drugmaker was fending off takeover advances from **Pfizer Inc.**: If left alone, AstraZeneca would nearly double its revenue within a decade.

Three years into that commitment, Dr. Soriot still has a long way to go to convince investors that walking away from Pfizer was the right call. A series of drug-test successes have lifted AstraZeneca shares this year, bringing them within range of Pfizer's 2014 offer price. But AstraZeneca has hit some headwinds, including unfavorable currency rates and disappointing results of an attempt to widen the use of one of its new drugs.

Dr. Soriot faces his biggest test in coming weeks. Early results for a new lung-cancer treatment could shore up investor confidence in AstraZeneca's go-it-alone approach—or sow fresh worry. The drugs involved are part of a new breed of cancer medicine called immunotherapies, which boost



completed a \$20 billion deal with Novartis AG in 2015 that expanded its vaccines and drugstore-staples businesses while slimming down its prescription-drug arm.

When Dr. Soriot came aboard in 2012, AstraZeneca had a near-empty new-drug pipeline and a series of patent expirations that have pressured profit. Last year, annual earnings per share came in at \$2.77, down from \$7.33 in 2011.

Instead of diversifying, Dr. Soriot doubled down on prescription drugs. He prioritized the development of cancer immunotherapies in particular and embarked on a deal-making spree to stoke the pipeline in oncology treatments and a handful of other disease areas.

Earlier this year, Dr. Soriot backtracked a bit from the long-term revenue forecast he made in the heat of the Pfizer approach. Blaming currency fluctuations, he said sales should come in at about \$40 billion by 2023, about \$5 billion below his earlier promise.

Even so, revenue has fallen since that adjusted forecast. Dr. Soriot has long said he expected 2017 to be the year

Please see CEO page B2

the immune system's ability to fight tumors.

The trial, dubbed Mystic, "will be a critical transition point for the company," said Jamie Freedman, who heads the company's cancer division. "Very soon we're going to see how that plays out."

The stakes in such trials are

higher for AstraZeneca than most of its peers: It never diversified into fields outside the high risk-reward business of creating new drugs, which succeed or fail after costly development and clinical trials with uncertain outcomes.

Drugs that become blockbusters eventually fizz out when

they lose patent protection and face competition from low-cost copycats.

Slower but steadier businesses—over-the-counter medicines or personal-care products such as toothpaste—have provided a cushion for many of AstraZeneca's competitors. GlaxoSmithKline PLC

INSIDE



Morgan Stanley

ERIC THAYER/BLOOMBERG NEWS

BOND-TRADING RUNT FLEXES SOME MUSCLE

FINANCE, B7

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HEARD

Continued from the prior page
of Amazon's net revenue, compared with 10% five years ago. And while the company's existing distribution footprint is immense, only about 3% of its 94.5 million square feet of distribution space is devoted to fresh-food delivery, according to Marc Wulfraat, president of supply-chain consultancy MWPVL.

Whole Foods reported 17.8 million gross square feet of space at the end of 2016, with another 4.1 million in development. It also has 11 distribution centers of its own, according to Mr. Wulfraat. So Amazon's acquisition of the food seller significantly boosts its grocery capacity. And the average size of Whole Foods' stores has crept up by 14% over the past five years, which theoretically gives Amazon more room to add other types of products or services, such as same-day pickup for goods sold online.

There is a cost, of course. The price of the deal amounts to nearly two-thirds of Amazon's last reported cash position. The company's debt load already has risen

Primed



by nearly a factor of 10 in the past five years as it has financed an aggressive expansion, though its ability to service that debt has risen even faster and the company's balance sheet remains healthy. Nevertheless, S&P Global Ratings placed Amazon on watch for a possible downgrade Friday.

Amazon's investors are clearly willing to bear the cost, given that the company added more than \$11 billion in market capitalization on the deal's announcement Friday. That is because Amazon these days is valued primarily for its ability to maintain double-digit growth in its core retail business while breaking into new markets. Whole Foods should help on both counts.

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The Mart

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CIN: L23201MH1952G01008858

CENTRAL PROCUREMENT-MARKETING NOTICE INVITING GLOBAL e-TENDER

HPCL-CP(M) invites bids from all eligible bidders for the following e-tenders.

Tender No. 17000090- Global Tender for Procurement of Pipeline Scheduling Software for HPCL Pipelines, India

Tender No. HD-10002 Scheduling Software for HPCL Pipelines, India

Tender details can be downloaded from the following websites

1. www.hindustanpetroleum.com/TendersAndContracts

2. HPCL e-Tender website : [https://tender.hpcl.co.in](http://tender.hpcl.co.in)

3. Central Procurement Portal : <http://eprocure.gov.in/cppp>

All details, revisions, corrigenda, addenda etc., to the tender/s will be hosted on the above websites only.

Bidders meeting the eligibility criteria can participate by logging into the site [https://etender.hpcl.co.in](http://etender.hpcl.co.in).

2. HPCL e-Tender website : [https://tender.hpcl.co.in](http://tender.hpcl.co.in)

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All details, revisions, corrigenda, addenda

BUSINESS NEWS

Big Drillers Flock to Shale

Chevron and others expect more success than smaller rivals in Permian Basin region

BY BRADLEY OLSON

MIDLAND, Texas—For Bruce Niemeyer, the **Chevron** Corp. executive overseeing the company's \$15 billion expansion here, one question looms above all: Will we earn money?

Big oil companies including Chevron, Exxon Mobil Corp. and Royal Dutch Shell PLC are piling into the Permian Basin, the oil-rich region straddling Texas and New Mexico that is the epicenter of the second wave of U.S. shale drilling.

Chevron and others say they will soon achieve something that has proven surprisingly elusive for their smaller peers: turning a profit. The shale-drilling renaissance rocked global markets and helped send crude prices into a prolonged slump.

What it didn't do was bring in much cash. Since 2011, the largest 30 independent U.S. shale producers spent an average of nearly \$1.33 for every \$1 they made drilling wells, according to a Wall Street Journal analysis.

In the past two years, those 30 have lost \$130 billion. More than 120 companies have gone bankrupt, and many of those that survived have done so with cash infusions from Wall Street, which rewarded the drillers for their fast growth.

That model won't work for Chevron, Exxon and other companies that pay shareholders generous dividends and need to bring in more cash than they spend over time. To transform an important—yet money-losing—technology into a source of profit, executives such as Mr. Niemeyer, the head of Chevron's midcontinent business, are turning to their strengths.

Those include massive



Big oil companies are piling into the oil-rich Permian Basin, which straddles Texas and New Mexico.

scale, deep pockets that have given them time to learn from the successes and failures of others, and an ability to bring techniques used globally into West Texas. They are joining the race to push crude production here to four million barrels a day within a decade, rivaling the output of Iraq.

"The early stages favored the smaller companies, which could test technology and try different things," said Anish Kapadia, an analyst at Tudor Pickering Holt & Co., an energy investment bank in Houston. "As they move into development mode, those with a low cost of capital will have an advantage. This is the domain" of large oil companies, he added.

The big companies face considerable skepticism from investors who don't see how they can meet growth targets and generate excess cash by exploiting shale fields. In recent years, Exxon, Chevron and Shell have lagged behind top operators in the Permian Basin by a wide margin, with the big companies' individual wells producing about half as

Money Pit

Cash-flow deficit* at 30 major independent shale producers.



*Defined as capital spending and dividends that exceed cash flow from operations

Source: FactSet

THE WALL STREET JOURNAL

much oil and gas in some cases, analysts say.

Executives at the biggest companies counter that these results reflect, in part, a focus on drilling practices that bolster output over the life of the well, rather than maximize short-term flows.

"Big oil companies are basically lethargic, slow-moving

giants," said David Arrington, an entrepreneur based in Midland, Texas, who has drilled wells in Texas for decades.

But last year, the big companies showed signs of narrowing the gap, embracing techniques pioneered by smaller companies such as drilling longer wells horizontally and using more sand to prop open rock layers and let oil flow.

Within a decade, Chevron estimates it might produce as much as 700,000 barrels a day in the Permian, an amount that would exceed the total current output in the U.K.'s portion of the North Sea. Last year, Chevron's output in the Permian averaged 175,000 barrels a day.

Chevron hasn't disclosed how much it will boost spending in the area over the next 10 years, but analysts say it is likely to exceed \$15 billion.

"Nobody remembers who was winning the Indianapolis 500 after the first 100 miles," said Mr. Niemeyer, 55 years old. "How you start is interesting, but it's far more important how you finish."

Activist Investor Prods Saks Parent

BY SUZANNE KAPNER AND DAVID BENOIT

An activist investor is pushing the parent of **Saks Fifth Avenue** to consider strategic alternatives, including possibly taking the company private or redeveloping its vast real estate holdings, in the latest sign of the challenges facing the department-store industry.

Land & Buildings Investment Management LLC, which has accumulated a stake of roughly 4.3% in **Hudson's Bay** Co., said in a letter delivered to the company's board Monday that its real estate is worth four times the stock price. The Wall Street Journal viewed a copy of the letter.

The multiple Land & Buildings cited in its letter was before the shares of Hudson's Bay rose 15% in Monday morning trading in Toronto to 10.24 Canadian dollars (US\$7.50).

"This drastic public markets mispricing is why Hudson's Bay should evaluate all strategic options to maximize value for shareholders," Jonathan Litt, founder and chief investment officer of Land & Buildings, wrote in the letter.

He noted that over the past several months, as Hudson's Bay has taken abortive looks at acquiring **Macy's** Inc. and then at **Neiman Marcus Group**—as reported by the Journal, the company's stock has fallen 25%.

The Macy's talks were preliminary and never progressed far, and the discussions with Neiman Marcus fell apart over price, people familiar with the situation have said. Last week, Neiman Marcus confirmed that any conversations it had been having about selling itself had terminated and it planned to remain independent.

Hudson's Bay on Monday confirmed receipt of the letter Land & Buildings sent its board, and said it would respond in due course.

Land & Buildings could face an uphill battle since insiders own a large chunk of the company's stock, possibly making it difficult to force their hand.

This month, Mr. Litt lost a shareholder vote to force change at mall owner **Taubman Centers** Inc.—largely because of the controlling family's large voting bloc. He continues to push for change there. Mr. Litt has also been urging change at real-estate empire **Forest City Realty Trust** Inc. and **Brookdale Senior Living** Inc.

Either way, the campaign is the latest sign of the upheaval roiling the department-store and broader retail industry as shopping habits evolve.

Hudson's Bay Chairman Richard Baker is a real-estate executive who grew up building shopping centers with his father Robert, founder of **National Reality & Development** Corp.

He began stitching together a department-store conglomerate a decade ago with the acquisition of Lord & Taylor, followed by Saks Fifth Avenue in 2013. The company also owns the Hudson's Bay chain in Canada, and **Galeria Kaufhof** in Germany.

To highlight the value of Hudson's Bay's real estate, Mr. Baker has formed joint ventures with several mall owners and obtained an independent appraisal of the Saks Fifth Avenue flagship in Manhattan that values the store at more than the \$2.9 billion Hudson's Bay paid for the whole company.

Mr. Litt, a well-known real-estate investor, wants Hudson's Bay to go further, arguing that it could generate better returns for shareholders by redeveloping its prime department-store space into office towers, hotels or boutiques. Alternatively, Hudson's Bay could go private, given its modest market capitalization of roughly \$1.2 billion and insider ownership of roughly 20%, Mr. Litt argues.

Vice Media Attracts \$450 Million Investment

BY LUKAS I. ALPERT

AND SHALINI RAMACHANDRAN

Vice Media has secured a \$450 million investment from private-equity firm TPG, as the youth-focused digital media company looks to step up its spending on scripted programming and plans a direct-to-consumer service.

The deal would give Vice a valuation of about \$5.7 billion, including the new investment, people familiar with the situation say.

Media giant Walt Disney Co., which has pumped \$400 million into Vice and owns an 18% stake, didn't participate in the funding round. Disney's stake will be diluted along with those of other existing shareholders, according to the people.

Last summer, there was speculation Disney could purchase all of Vice, in part because it already had placed a significant bet on the company. Neither side denied the merits of a potential union. But after an initial storybook romance, a Disney takeover looks unlikely at this stage, the people familiar with the situation say.

Vice will use some of the new money to create a subscription service based on something similar it offers in

Japan for mobile phones. The company also will invest in scripted programming for its fledgling Viceland cable channel and mobile and digital platforms, and expand its international footprint.

Viceland, a joint venture with A+E Networks, airs shows such as "Bong Appetit," which is about chefs who make cannabis-infused food, and "Balls Deep," about a journalist who immerses himself in others' lives.

The deal with TPG would give the digital media firm a valuation of about \$5.7 billion.

It has struggled to build an audience, averaging just 96,000 viewers in prime-time since September including live plus same-day recorded viewing, according to Nielsen.

Vice executives are optimistic and point to the example of Discovery Communications Inc.'s Oprah Winfrey Network, which also got off to a slow start in the ratings before gaining traction after a few years. They also note that

Viceland is attracting younger viewers than H2, the A+E channel it replaced.

Vice executives contend that part of the challenge has been creating enough programming to fill 24 hours from scratch, as the company mostly develops its own shows in-house.

The move into scripted programming—such as the recently announced show "What Would Diplo Do?," a parody program in which "Dawson's Creek" star James Van Der Beek portrays the DJ and music producer Diplo—is expected to help.

The turbulence in the pay-TV world has affected Disney as much as anyone. Indeed, one reason its executives are less focused on Vice, people familiar with the matter say, is that their attention has been drawn to righting the ship at ESPN, which has begun to suffer the financial effects of losing cable subscribers in recent years.

Disney has been trying to figure out where ESPN will fit in the streaming-media landscape. Disney last August plunked down \$1 billion to buy 33% of BAMTech, Major League Baseball's streaming-media unit, and has since said it plans to offer streaming services targeted at specific teams, regions and sports.

Disney remains committed to Vice and is optimistic about its potential, a person familiar with the situation said.

Vice, like BuzzFeed, Vox and other digital media outfits, looked especially attractive to traditional media companies a few years ago. All those companies were able to build large audiences of young people online at a time when cable TV was struggling to retain viewers under 35.

But sustaining fast-paced growth has been difficult across-the-board for digital media companies, and traditional media giants now evaluate their investments with even more scrutiny than they did before.

—Ben Fritz

contributed to this article.



VICE/ANDREW EVERETT COLLECTION

The fledgling Viceland cable channel airs shows such as 'Balls Deep,' about a journalist who immerses himself in others' lives.

THE HUMAN ELEMENT 勢在人为

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Ransomware Is Often Unreported

By MELANIE EVANS

A cyberattack last year paralyzed **MedStar Health** computers, forcing the Maryland operator of 10 hospitals and more than 300 outpatient centers to shut down its entire electronic-record system. Doctors logged patient details with pen and paper. Laboratory staff faced delays delivering test results.

"It was three weeks before we got most of everything that was important to us on a daily basis back and operational," Craig DeAtley, director of the MedStar Institute for Public Health Emergency Readiness, said during a panel organized by federal health officials last year to address cyberthreats.

Yet the attack—and others last year at hospitals in California and Kentucky—don't appear on the U.S. Department of Health and Human Services public list of data breaches. The attacks involved ransomware, a type of software that locks away data until victims pay a ransom. HHS rules say hospitals need only report attacks that result in the exposure of private medical or financial information, such as malware that steals data. When ransomware's data encryption meets that threshold it's a gray area.

Proponents for more mandatory reporting say this regulatory gap limits the healthcare system's ability to fight cybercriminals. Hospitals left in the dark about attacks hitting their rivals are less likely to be ready to defend themselves, they say.

Regulators can't protect patient safety if they are unaware when hospital medical records are held for ransom, said Rep. Ted Lieu, a California Democrat who along with Rep. Will Hurd, a Texas Republican, is pushing HHS to



HHS rules say hospitals need only report attacks that expose private medical or financial information.

require hospitals to report ransomware attacks.

"I view it as a loophole that ransomware does not have to be reported," Mr. Lieu said in an interview.

Opponents say HHS reporting comes with a harsh spotlight, potential penalties and liability risks.

Spokeswomen for HHS didn't respond to a request to clarify the agency's position on the issue. In a report to Congress this month, an HHS-led task force of industry and public officials stopped short of calling for required disclosure of ransomware attacks. The report called for a "flexible approach" to sharing cybersecurity information and recommended the industry build on voluntary efforts already under way.

The dilemma has grown more acute as ransomware proliferates. Two large, multi-state hospital operators "face significant challenges to operations" from a global ransomware assault in May

called WannaCry, HHS disclosed in an email to healthcare executives and officials this month.

The attack also halted surgeries at British hospitals, shut European auto plants and affected some U.S. medical devices.

WannaCry "highlighted the disturbing reality that the true state of cybersecurity risk in this sector is underreported by orders of magnitude," Leo Scanlon, deputy chief information security officer for HHS, said during a U.S. House hearing on cybersecurity this month.

MedStar spokeswoman Ann Nickels declined to say whether MedStar reported the 2016 ransomware attack to HHS, and declined to specify how many patients' data were affected. HHS publicly reports breaches that expose confidential data for at least 500 people. HHS declined to comment on the attack, saying it "does not release information about current or potential investigations."

MedStar "shared insights privately" with other hospital operators about the attack, Ms. Nickels said. "Our position all along has been that we are not making public statements about lessons learned and the specific circumstances of the malware event we handled a year ago," she said in a written statement.

On a Friday evening in February 2016, ransomware swiftly spread throughout Hollywood Presbyterian Medical Center in Los Angeles, locking doctors and nurses out of computers, Steve Giles, the hospital's chief information officer, told a California senate hearing a few months later.

Hollywood at first tried unsuccessfully to unlock the computers, before paying \$17,000 in ransom in bitcoin.

HHS ultimately didn't require the hospital to report the attack after Hollywood officials offered evidence the ransomware didn't expose patient data, he said.

can Clark, author of the book "Alibaba: The House that Jack Ma Built." Its goals are likely more modest, he said.

"The U.S. impression of China is more like China equals cheap, not yet China as a destination market so much," said Beijing-based Mr. Clark. "That is what Alibaba is attempting to change. To change perceptions of China as a consumer, not just a producer."

Janice Ungar, a Detroit-based seller of European and American puzzles on Amazon and eBay, says she is eager to hear what Mr. Ma and company have to say. Despite her concerns about competing against fakes, she has signed up to attend Gateway 17.

"I'm always looking for the next angle, the next place to sell," said Ms. Ungar. "If I can tap the Chinese market, it's a win-win."

sell on it," she said. "But we can't sell against the fake products, and the price still matters. Even in middle-class China."

Alibaba executives say they have worked tirelessly to police their site, and Mr. Evans said Alibaba will have experts on hand in Detroit to help merchants learn how to protect their goods from counterfeits.

Even without the threat of fake goods, however, China has emerged as an online retail behemoth. China will post an estimated \$771 billion in annual online retail sales this year, compared with \$446 billion in the U.S.

"U.S. brands aren't blind to the fact that China has surpassed the U.S. to become the largest e-commerce marketplace globally," said Lily Varon, a Cambridge, Mass.-

based analyst with Forrester, adding that they are also familiar with stories of brands that have tried and failed to crack China.

Some question whether Mr. Ma's initiative, should it succeed, actually would create new jobs since the sellers are already marketing their products on **Amazon.com Inc.** and **eBay.com Inc.**

Selling on Alibaba "will merely extend the range of what sellers are doing," said Ben Cavender, an analyst at China Market Research Group in Shanghai. "Realistically this is not going to result in a lot of job creation as most of the increased labor needs are going into logistics or manufacturing—that are already highly automated."

Alibaba can't hope to put all those concerns to rest in a two-day conference, said Dun-

can Clark, author of the book "Alibaba: The House that Jack Ma Built." Its goals are likely more modest, he said.

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ALIBABA

Continued from page B1

used by brands themselves.

The U.S. Trade Representative's Office reinstated Taobao on a list of "notorious" marketplaces for fakes last year, citing "the challenges right holders experience in removing and preventing illicit sales and offers of such goods."

Cyndi Zlotow of Chicago has been selling women's and men's fashion on eBay for 15 years. She says she will continue to sell there and on Amazon.com, out of fear that if she sells on other channels, knockoffs will quickly show up and undercut her on price.

"If Alibaba was this great marketplace that I could sell my products at the prices I need to be at, yeah, I would

construct for Cruise could add 1,100 employees over five years.

GM is the No. 1 U.S. car seller, but is far behind Google's mapping efforts.

Google's car project, now called Waymo, is expected to be a beneficiary of the tech giant's solid position in high-definition maps. The mapping advantage has given Alphabet's various business units an advantage over Apple Inc. and other companies competing in other business sectors.

GM isn't the only auto maker playing catch-up in HD maps. BMW AG, Mercedes-Benz-parent Daimler AG and Volkswagen AG's Audi came together to buy Nokia Corp.'s mapping service in 2015 for more than \$3 billion.

Intel Corp., eager to catch up with Nvidia in the autonomous-car market, announced a deal earlier this year to ac-

quire a 15% stake in the map company. Intel is closing its \$15 billion purchase of Mobileye NV, an Israeli supplier of cameras and software for autonomous-driving functions.

GM ultimately might have an advantage that Google didn't have when its map program began years ago: a fleet of cars on the road. Last year, GM announced it would explore with Mobileye the use of real-time data taken from the auto maker's OnStar system to create the kinds of maps required for self-driving cars.

GM sells about 10 million cars annually, many of which are connected to OnStar.

"Look at how many cars GM sells—it won't take much to have that data very quickly," said Dave Sullivan, an Ann Arbor, Mich.-based analyst for AutoPacific Inc., which advises auto makers.

Currently employing more than 150 people, Cruise has started to grow rapidly since GM acquired it in 2016. A San Francisco headquarters being

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"Look at how many cars GM sells—it won't take much to have that data very quickly," said Dave Sullivan, an Ann Arbor, Mich.-based analyst for AutoPacific Inc., which advises auto makers.

Currently employing more than 150 people, Cruise has started to grow rapidly since GM acquired it in 2016. A San Francisco headquarters being

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GM is the No. 1 U.S. car seller, but is far behind Google's mapping efforts.

Google's car project, now called Waymo, is expected to be a beneficiary of the tech giant's solid position in high-definition maps. The mapping advantage has given Alphabet's various business units an advantage over Apple Inc. and other companies competing in other business sectors.

GM isn't the only auto maker playing catch-up in HD maps. BMW AG, Mercedes-Benz-parent Daimler AG and Volkswagen AG's Audi came together to buy Nokia Corp.'s mapping service in 2015 for more than \$3 billion.

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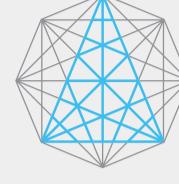
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Toby Crabel

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PIMCO

2016 Best Diversified CTA
(Less than \$500 million AUM)
Splendor Capital Management, Ltd.

5-Year Best Diversified CTA
(\$500 million+ AUM)

Two Sigma

5-Year Best Diversified CTA
(Less than \$500 million AUM)
Whitehaven

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361 Capital

5-Year Best Single Sector CTA
Goldman Management, Inc.

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UOB-SM Asset Management Pte. Ltd.

5-Year Best Multi-Advisor Futures Fund
AC Investment Management

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2016 Best Options Strategy
LJM Partners, Ltd.

5-Year Best Options Strategy
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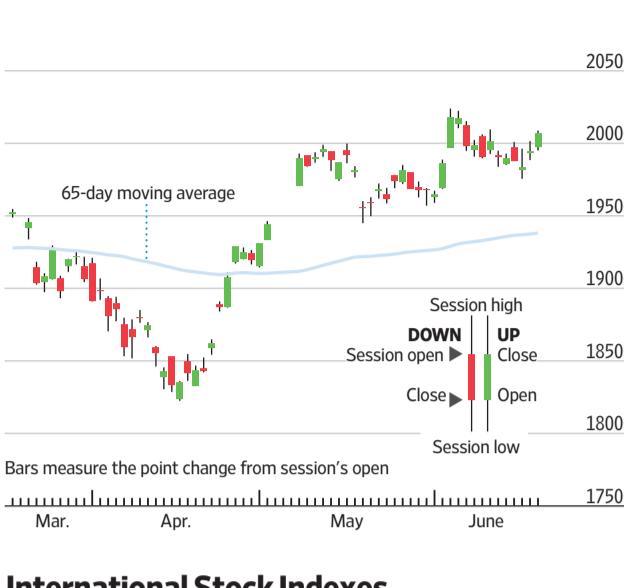


MARKETS DIGEST

Nikkei 225 Index

20067.75 ▲ 124.49, or 0.62%

High, low, open and close for each trading day of the past three months.



STOXX 600 Index

391.94 ▲ 3.34, or 0.86%

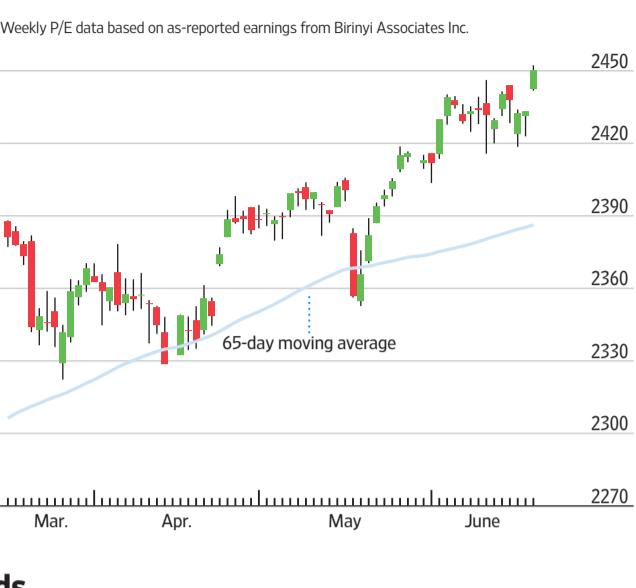
High, low, open and close for each trading day of the past three months.



S&P 500 Index

2450.26 ▲ 17.11, or 0.70%

High, low, open and close for each trading day of the past three months.



Data as of 12 p.m. New York time

Last Year ago
Trailing P/E ratio 24.09 23.85
P/E estimate * 18.75 17.87
Dividend yield 1.95 2.19
All-time high: 2440.35, 06/13/17

Weekly P/E data based on as-reported earnings from Birinyi Associates Inc.

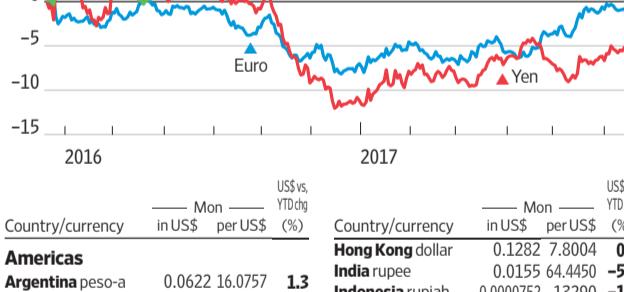
International Stock Indexes

Region/Country	Index	Data as of 12 p.m. New York time					
		Close	NetChg	% chg	52-Week Range	YTD High	% chg
World	The Global Dow	2781.82	16.49	▲ 0.60	2193.75	2791.48	10.0
	MSCI EAFE	1900.42	7.49	▲ 0.40	1471.88	1956.39	10.7
	MSCI EM USD	1011.45	8.33	▲ 0.83	691.21	1044.05	27.4
Americas	DJ Americas	587.78	4.02	▲ 0.69	480.90	588.19	8.8
Brazil	Sao Paulo Bovespa	62025.55	399.13	▲ 0.65	48954.41	69487.58	3.0
Canada	S&P/TSX Comp	15282.57	90.03	▲ 0.59	13609.58	15943.09	-0.03
Mexico	IPC All-Share	48991.47	-229.56	-0.47	43902.25	50154.33	7.3
Chile	Santiago IPSA	3680.84	6.45	▲ 0.18	3061.18	3786.05	14.2
U.S.	DJIA	21499.89	115.61	▲ 0.54	17063.08	21506.41	8.8
	Nasdaq Composite	6223.23	71.47	▲ 1.16	4574.25	6341.70	15.6
	S&P 500	2450.26	17.11	▲ 0.70	1991.68	2452.25	9.4
	CBOE Volatility	10.35	-0.03	-0.29	9.37	26.72	-26.3
EMEA	Stoxx Europe 600	391.94	3.34	▲ 0.86	308.75	396.45	8.4
	Stoxx Europe 50	3223.09	30.20	▲ 0.95	2626.52	3279.71	7.1
France	CAC 40	5310.72	47.41	▲ 0.90	3955.98	5442.10	9.2
Germany	DAX	12888.95	136.22	▲ 1.07	9214.10	12921.17	12.3
Israel	Tel Aviv	1439.54	14.23	▲ 1.00	1372.23	1490.23	-2.1
Italy	FTSE MIB	21014.25	73.52	▲ 0.35	15017.42	21828.77	9.3
Netherlands	AEX	525.87	5.20	▲ 1.00	409.23	537.84	8.8
Russia	RTS Index	998.34	3.96	▲ 0.40	885.22	1196.99	-13.4
Spain	IBEX 35	10848.90	89.50	▲ 0.83	7579.80	11184.40	16.0
Switzerland	Swiss Market	9030.30	67.01	▲ 0.75	7475.54	9136.95	9.9
South Africa	Johannesburg All Share	51615.90	784.01	▲ 1.54	48935.90	54716.53	1.9
Turkey	BIST 100	99332.13	1139.58	▲ 1.16	70426.16	100000.7	27.1
U.K.	FTSE 100	7523.81	60.27	▲ 0.81	5788.74	7598.99	5.3
Asia-Pacific	DJ Asia-Pacific TSM	1630.53	6.94	▲ 0.43	1308.52	1643.59	14.6
Australia	S&P/ASX 200	5805.20	31.20	▲ 0.54	5103.30	5956.50	2.5
China	Shanghai Composite	3144.37	21.21	▲ 0.68	2854.29	3288.97	1.3
Hong Kong	Hang Seng	25924.55	298.06	▲ 1.16	20172.46	26063.06	17.8
India	S&P BSE Sensex	31311.57	255.17	▲ 0.82	25765.14	31311.57	17.6
Indonesia	Jakarta Composite	5741.91	18.27	▲ 0.32	4834.57	5792.90	8.4
Japan	Nikkei Stock Avg	20067.75	124.49	▲ 0.62	14952.02	20177.28	5.0
Malaysia	Kuala Lumpur Composite	1788.90	-2.41	-0.13	1616.64	1792.35	9.0
New Zealand	S&P/NZX 50	7592.03	39.28	▲ 0.52	6664.21	7592.03	10.3
Pakistan	KSE100	46593.34	-265.22	-0.57	37039.57	52876.46	-2.5
Philippines	PSEI	7943.75	61.53	▲ 0.78	6563.67	8102.30	16.1
Singapore	Straits Times	3247.18	15.74	▲ 0.49	2729.85	3271.11	12.7
South Korea	Kospi	2370.90	9.07	▲ 0.38	1925.24	2381.69	17.0
Taiwan	Weighted	10250.60	93.87	▲ 0.92	8458.87	10250.60	10.8
Thailand	SET	1581.14	4.56	▲ 0.29	1406.18	1591.00	2.5

Source: SIX Financial Information; WSJ Market Data Group

Currencies

Yen, euro vs. dollar; dollar vs. major U.S. trading partners



London close on June 19

US\$ vs. Country/currency Mon YTD chg

Country/currency In US\$ per US\$ (%)

Country/c

FINANCE & MARKETS

Morgan Stanley's Secret Weapon

By LIZ HOFFMAN

When Morgan Stanley trading chief Ted Pick dialed into a conference call in April with about 300 of his top reports, a little chest-thumping was in order.

The firm's bond-trading division, long the runt of Wall Street, had just reported its best quarter in years, accumulating more revenue than rival Goldman Sachs Group Inc. for only the second time since the financial crisis.

But Mr. Pick struck a cautious note: The business was showing "green shoots," but there was no rush, he told his troops, advocating what he called "defensive offense."

His wariness is understandable. A decade of failed reboots and trading blowups has left Morgan Stanley's fixed-income desk well behind rivals including Goldman and J.P. Morgan Chase & Co. Other turnarounds have shown promise only to crumble.

This one is marked by four quarters of fixed-income revenue above \$1 billion, Morgan Stanley's longest streak since 2010. Its market share among the five big U.S. firms has doubled since Mr. Pick was elevated in late 2015 to oversee both stock and debt trading.

As the second quarter winds down, Mr. Pick and Morgan Stanley are looking to extend their luck in a tougher environment. Trading revenue across Wall Street is expected to weaken from a year ago, when the U.K. Brexit vote spurred client activity.

Morgan Stanley is being careful not to overpromise. Mr. Pick has been telling associates in recent weeks that the division is operating with "omentum"—that is, momentum with an "m" so small it is invisible.



Morgan Stanley trading chief Ted Pick, right, has fueled the bank's bond-trading rebound. The bank's New York offices above

"We are modest in our aspirations, but we have proven this dog can hunt," Chief Executive James Gorman said at a conference Wednesday.

A Morgan Stanley lifer with a contrarian streak, Mr. Pick spent seven years running the bank's stock-trading arm, where he helped rebuild relationships frayed by the firm's near-collapse during the financial crisis. On his watch, it surpassed Goldman as Wall Street's biggest by revenue.

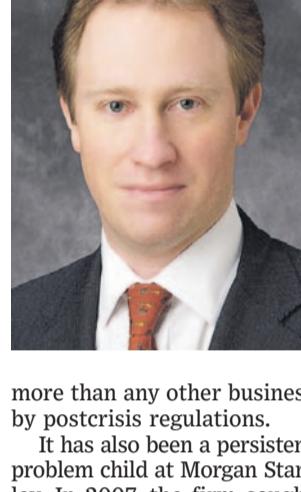
Currently overseeing 6,000 employees who generate about one-third of the firm's revenue, the 48-year-old New York City native has emerged as a leading contender to succeed Mr. Gorman, who has hinted he would like to remain at least a few more years.

In his rise up the ranks, Mr. Pick won over senior executives for resisting the urge to

sugarcoat bad news. As a young equities trader, he became an expert in the firm's own stock. In the depths of the financial crisis, he would regularly ride the elevator up to the 40th floor at 4 p.m. and update John Mack, then CEO, about how shares were trading.

Mr. Mack liked to tease Mr. Pick about his penchant for profanity, once playing a trick by having the firm's compliance department tell Mr. Pick his emails had been flagged for excessive use of expletives, according to people familiar with the episode.

He is a newcomer to fixed income, a more varied and fickle business than stock trading. Ranging from government bonds to complex derivatives contracts, it is one of the biggest fee pots on Wall Street and has been reshaped



more than any other business by postcrisis regulations.

It has also been a persistent problem child at Morgan Stanley. In 2007, the firm sought emergency financing after a \$9 billion losing bet on sub-prime mortgages. In 2011, it stumbled on Treasurys. Four years later, the culprit was distressed bonds.

The firm churned through

five fixed-income chiefs in seven years. Some investors urged Mr. Gorman to get out of the business altogether, especially as the CEO's big push into wealth management—its multiyear purchase of Smith Barney—began to show signs of working.

By late 2015, the fixed-income division hit what Colm Kelleher, Morgan Stanley's president, called "a WTF moment." Morgan Stanley hadn't found its groove, and globally across banks, fixed-income trading fees were in a tailspin.

The firm did a top-to-bottom review of the unit. For an extra set of eyes, it hired consulting firm McKinsey & Co. The consensus: The division was far too big and soaked up too much of Morgan Stanley's capital, a precious resource since the crisis.

In late 2015, the firm promoted Mr. Pick to oversee the combined sales and trading operation. He brought along Sam Kellie-Smith, a British options trader who had been his deputy in equities, to run the fixed-income group.

The pair swiftly fired 25% of the unit's traders, cutting deep in European credit trading, where activity had slowed, and foreign exchange, where electronic trading had gutted fees. They preserved more staffing in interest rates and U.S. credit, and combined equities and fixed-income sales teams to squeeze more business out of hedge-fund clients.

Tighter risk-management also improved returns. Risk-weighted assets in the unit have fallen since late 2015 by about 30%. Executives have also reduced "slippage" on bond trades, which refers to price moves between when an order is placed and when it is executed.



Sen. Warren wants the Fed to remove 12 board members.

Fed Urged To Oust Wells Fargo Directors

By EMILY GLAZER

Sen. Elizabeth Warren is urging the Federal Reserve to remove a dozen Wells Fargo & Co. board directors who served during the bank's sales-practices scandal, according to a letter reviewed by The Wall Street Journal.

In the letter sent to Federal Reserve Chairwoman Janet Yellen on Monday, the Massachusetts Democrat urged the Fed to invoke its authority under a rule that allows it to remove certain people associated with depository institutions under specific circumstances.

Sen. Warren pointed to 12 directors who served on the San Francisco bank's board between May 2011 and July 2015, a period in which Wells Fargo fired 5,300 employees for the bad behavior. The bank settled with two regulators and a city official in September for \$185 million over the practices. Its chief executive later abruptly retired, and the bank continues to face state and federal investigations, with which it has said it is cooperating.

A Wells Fargo spokeswoman said the board and its management team have "taken many actions in response to its retail-sales practices issues, including changes in senior leadership, executive accountability actions and numerous steps to ensure we make things right with any customer affected by unacceptable sales practices."

A Ford spokesman referred to a section of the company's 2017 proxy statement that says, "Our ownership structure has helped insulate our Company from business cycles and related short-term pressures."

FTSE Russell, which is owned by London Stock Exchange Group PLC, solicited suggestions on what kinds of restrictions should be applied to companies that fail to meet the threshold. All of a company's securities might be excluded or just nonvoting shares, for example.

Rival index firms S&P Dow Jones Indices and MSCI Inc. also have launched reviews concerning the inclusion of companies with nonvoting shares in their indexes. An S&P spokeswoman said the firm would complete its consultations with market participants on June 30 and announce its decision soon after.

An MSCI spokeswoman didn't return requests for comment.

In her eight-page letter to the Fed, Sen. Warren wrote that the sales-practices scandal "revealed severe problems with the bank's risk management practices—problems that justify the Federal Reserve's removal of all responsible Board members."

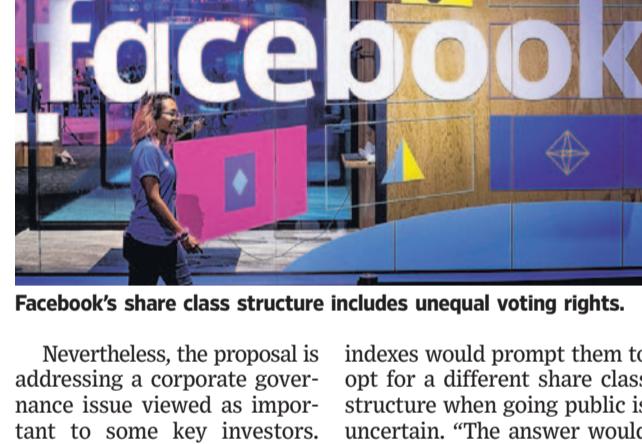
In the wake of the scandal, Wells Fargo's board conducted an investigation of the bank, but largely didn't fault directors. On a call with the media after the report was disclosed in April, Chairman Stephen Sanger said "the findings of the investigation showed the board took the appropriate actions with the information it had, when it had it" and that it hired a law firm to do the investigation to get "an independent and objective assessment of our performance."

Sen. Warren's letter cited the Fed's ability to remove board members, including if they "engaged or participated in any unsafe or unsound practice" that caused certain depository institutions to "suffer financial loss" and that demonstrated "continuing disregard...for the safety and soundness" of the institution.

The 12 board directors mentioned in the letter are: John D. Baker II, John S. Chen, Lloyd H. Dean, Elizabeth A. Duke, Enrique Hernandez Jr., Donald M. James, Cynthia H. Milligan, Federico F. Pena, James H. Quigley, Mr. Sanger, Susan G. Swenson and Suzanne M. Vautrinot.

Indexer Might Boot Unequal Voting Shares

By RICHARD TEITELBAUM



cause investors who track the benchmark are no longer required to hold the stock in question. "There are some studies that show it could make a 15% difference," Mr. Andrus said.

FTSE Russell and two rivals began considering the issue of nonvoting share classes after the March initial public offering of Snap Inc., whose Class A shares carry no voting rights. The new FTSE Russell proposal broadens that to other kinds of unequal voting shares.

And the fact that FTSE Russell described a system using thresholds to limit the inclusion of shares with unequal voting rights suggests the firm is likely to do something.

"I do think there's a high likelihood that one of these thresholds will be implemented," said Aeisha Mastagni, a portfolio manager at the California State Teachers' Retirement System. "The question is what the threshold will be."

FTSE Russell estimated the percentage of voting power held by the public of selected companies that have shares with unequal voting rights. By the firm's estimates, 38.64% of Alphabet's voting power is represented by the shares included in its main indexes.

For Facebook, 30.27% of total votes are represented by the shares in its main indexes and 59.64% for Ford Motor.

Alphabet and Facebook didn't respond to emails seeking comment on the proposal or FTSE Russell's estimates.

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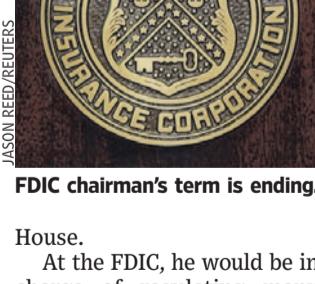
GOP Staffer Is Favorite to Lead FDIC

By RYAN TRACY

The White House announced President Donald Trump's intent to nominate a longtime Republican congressional staffer to be chairman of the Federal Deposit Insurance Corp., lining up another pick for a key regulatory post.

James Clinger, who has been the chief counsel for the House Financial Services Committee, could start serving on the FDIC board as soon as he is confirmed by the Senate and would take over as chairman in late November, when current FDIC Chairman Martin Gruenberg's term ends.

Mr. Clinger has been a staffer on the House panel since 1995, with a break from 2005 to 2007, when he served as deputy assistant attorney general at the Justice Department, according to the White



FDIC chairman's term is ending.

House.

At the FDIC, he would be in charge of regulating many small, locally focused community banks as well as evaluating whether large banks have credible "living will" plans for failing without a taxpayer bailout.

He would serve a five-year term as chairman.

"The FDIC has arguably been the toughest regulator on banks in recent years," Ian Katz, an analyst at Capital Alpha Partners, wrote of the nomination in a note to clients. "Under Clinger, we believe the agency would be more sympathetic than at any time since the financial crisis."

ARGENTINA

Nation Prepares Sale Of 100-Year Bonds

Argentina is preparing to sell 100-year bonds with a yield of 8.25%, according to people familiar with the matter.

A sale would mark another step in Argentina's turnaround. Before last year, the country largely was locked out of international capital markets after defaulting in 2001 on about \$80 billion of debt. At the time, it was the largest default by a sovereign borrower in history.

The private placement would mark the first time the South American nation has sold 100-year debt, the people said.

The offering is led by Citi-

group Inc. and HSBC Holdings PLC, with Nomura Securities Co.

and Banco Santander as co-

managers.

The Argentine government is

looking to raise about \$2.4 bil-

lion from the bond sale, say peo-

ple familiar with the offering.

With this deal, Argentina

VENTURE CAPITAL

New Enterprise Raises \$3.3 Billion

New Enterprise Associates has closed its latest fund with \$3.3 billion, making it the largest venture fund raised to date, according to Dow Jones VentureSource.

The new fund, which closed at its so-called hard cap, is just larger than NEA's last pool of \$3.15 billion in 2015, which included a \$2.85 billion main fund and a \$350 million opportunity fund for investing in growth-stage companies.

NEA's new 16th fund continues a trend of strong fundraising among venture-capital firms, as limited partners seek to find growth in startups. Venture-capital fundraising totaled \$44 billion

last year, an amount not seen since the dot-com era.

—Julie Wernau,

Taos Turner

—Tomio Geron

CHINA

Home-Price Gains Slowed in May

The growth of home prices in China slowed slightly in May after more cities rolled out stricter measures to curb demand.

The average price of new homes in 70 cities rose 0.7% in May from April, excluding government-subsidized housing, according to calculations based on data released Monday by the National Bureau of Statistics.

On a year-over-year basis, average new home prices rose 9.7% in May, compared with a 9.9% increase in April.

"It's clear that prices are still rising but at a slower pace," said Larry Hu, a China economist at Macquarie Group. "Looking ahead, the headwinds will be stronger for the second half and especially for next year."

—Dominique Fong

MARKETS

Markets' Quiet Is Global

Asian shares' volatility is near lowest since 2000 amid improved profits, stable growth

By STEVEN RUSSOLILLO

The calm that has descended on U.S. financial markets is stretching around the world.

Based on one commonly used measure, Asian equities are near their least volatile this century—a byproduct of improving corporate earnings, stabilizing economic growth and the diminishing impact of geopolitical events on markets.

In the U.S., Wall Street's "fear gauge" is near record lows, and in Europe, volatility has also largely subsided.

"This is a global dynamic," said Michael Parker, head of strategy, Asia-Pacific at Bernstein Research in Hong Kong. "You see low volatility everywhere."

By contrast, sharp gyrations in Chinese markets early last year caused a spike in volatility around the globe.

In Asia, Mr. Parker cites the MSCI Asia ex-Japan stock index, a broad measure of regional performance—weighted most heavily to China, South Korea, Taiwan, Hong Kong and India—that has risen 19% this year. The index's 90-day realized volatility, a measure of historical moves over that period, has fallen to 8.2%, near its lowest since at least 2000, according to Mr. Parker, and down by nearly half from a year ago. Only in summer 2014 was this volatility gauge lower.

Realized volatility is a measure of how much share prices move around. At this percentage, it shows that the market has moved by about 0.5% a day on average over the measured time frame.

Another sign of calm is the lack of major daily declines: Since January 2016, the index has fallen more than 3% in one

day just once. By comparison, in the prior two bull markets—from September 2001 to October 2007 and from March 2009 to May 2011—there were 3% daily declines on average every two to three months.

Mr. Parker reckons that investors haven't had to contend with as many "binary events," such as China's surprise devaluation of August 2015, which sent shock waves through global markets. Signs of healthier consumer demand and strengthening industrial profits regionally have helped bolster equities. "Broad fears around China imploding and capital fleeing have abated," he said.

Global index provider MSCI is expected to decide this week whether to include China's domestically traded A-shares in its indexes. In prior years, MSCI said mainland stocks weren't accessible or transparent enough to warrant inclusion.

A different decision this time would increase the China

exposure of the many global investors who invest based on MSCI indexes.

Low volatility has swept across asset classes globally. In the U.S., the CBOE Volatility Index, or VIX, closed Friday at 10.38, near its lowest level since 1993. The VSTOXX index of eurozone equity volatility, a European variation of the VIX, was also near a record low.

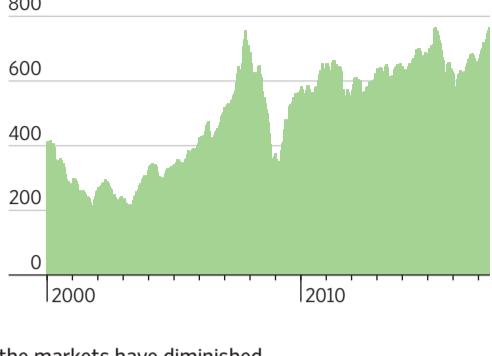
For now, few see any reason for the low volatility to end.

Investors will likely continue to watch China closely, analysts at Goldman Sachs said in a note last week. Policy makers there have recently been trying to tamp down leverage in the country's financial system, and any "over-tightening...could exacerbate the mild growth slowdown so far," Goldman said.

As for U.S. prospects, the Federal Reserve's failure to raise rates as fast as it earlier forecast has made investors skeptical about the pace of increases it forecasts now. That

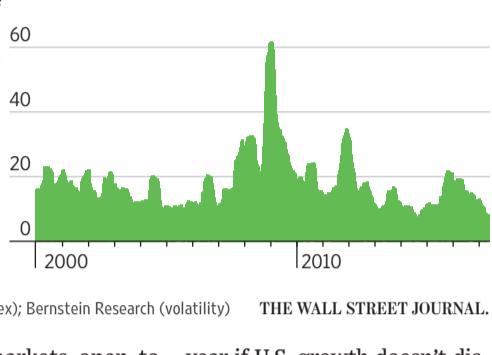
Calm in East Asia

Stocks are rallying...



...and swings in the markets have diminished.

A measure of volatility in the MSCI Asia ex-Japan stock index



Sources: FactSet (index); Bernstein Research (volatility) THE WALL STREET JOURNAL.

could leave markets open to "hawkish surprises" later this

year if U.S. growth doesn't disappoint, Goldman said.

Retail Rebound, French Vote Lift European Stocks

BY MIKE BIRD AND ESE ERHIERIENE

European stocks powered ahead, driven by a rebound in shares of retailers and news of an election victory for French

President Emmanuel Macron, while gains in technology lifted key indexes in the U.S.

The Stoxx Europe 600 rose 0.9% to 391.98, and Germany's DAX gained 1.1% to close at 12888.95, a record closing level. London's FTSE 100 rallied 0.8% to 7523.81, while the CAC 40 rose 0.9% to 5310.72.

French legislative elections on Sunday gave Mr. Macron's centrist party an outright majority in the country's parliament. Analysts say the victory

gives him a stronger mandate to implement his policies in the eurozone's second largest economy, while offering a further sign of the receding tide of populist European politics that concerned investors.

"There is a new political wind blowing through Europe," said Vincent Juvyans, global market strategist at J.P. Morgan Asset Management. "Macron can now more or less freely implement his program, he won't have to compromise as much as he did when he was economy minister."

Mr. Macron's La Republique en Marche party and its centrist ally won 350 of the 577 seats in the National Assembly in the final round of voting on Sunday.

"We expect [Macron] to begin with the least popular re-



Shares of J Sainsbury rose 2.3% in London.

forms in the next 100 days to show Europe that France is back," wrote ING economist Julien Manceaux. "This should continue to support business confidence and help GDP growth to accelerate in the second half of the year to

reach 1.7% in 2018 after a still weak (1.3%) 2017."

Shares of retailers bounced back after declining Friday in response to news that Amazon.com is buying Whole Foods Markets, a development seen as a threat to other oper-

ators of grocery markets. On Monday, the U.K.'s Ocado Group, an online grocer, rose 11% as investors speculated that it could be a target for a takeover.

Also in the U.K., J Sainsbury shares gained 2.3%, and Marks & Spencer Group rose 1.6% after Friday's selloff among food retailers.

In midday U.S. trading, the Dow Jones Industrial Average added 116 points, or 0.5%, to 21500 and the S&P 500 index rose 0.7%. The Nasdaq Composite climbed 1.25%. Apple and J.P. Morgan Chase led the Dow's climb, with respective gains of 2.5% and 1.8%.

"With yields so low, there isn't anywhere else to put your money," said Charlie Ripley, investment strategist for Allianz Investment Manage-

ment.

In Asia, the Nikkei Stock Average closed 0.6% higher as weakness in the yen boosted shares of exporters. Australia's S&P/ASX 200 ended up 0.5%, South Korea's Kospi added 0.4%.

Hong Kong's Hang Seng Index gained 1.1% and the Shanghai Composite rose 0.7%, aided by gains in property stocks following the release of figures indicating Chinese housing prices remain resilient.

Also supporting the market was a decision by the People's Bank of China to channel a further 110 billion yuan (\$16.2 billion) into money markets to boost liquidity, following an injection of 250 billion yuan on Friday.

—Gunjan Banerji contributed to this article.

HEARD ON THE STREET

Email: heard@wsj.com

FINANCIAL ANALYSIS & COMMENTARY

WSJ.com/Heard

Legg Mason Must Build on Healthy Start

Breakout Performance

Legg Mason has outperformed its rivals this year.



tional mutual funds. Much of the rest went into separately managed accounts, a lower-cost personalized offering for individual investors.

The company's new suite of "smart-beta" ETFs have gotten only modest traction, with around \$200 million under management at the end of May. Speaking at an analyst event on Thursday, Chief Executive Joseph Sullivan said

two institutional investors have notified the firm they intend to invest around \$450 million in those ETFs. Some \$250 million of this is being reallocated from another Legg Mason vehicle, so it isn't a net new inflow. But it does, as Mr. Sullivan noted, underscore "the importance of vehicle choice" in retaining funds.

Legg Mason also is benefiting from rivals' pain. Thomas

Hoops, Legg Mason's head of business development, said at the same event that an unspecified large distributor recently eliminated 20% of the asset managers on its platform and sharply reduced allocations for many others. But Legg was relatively unscathed, losing just 1% of its assets with this distributor, he said.

Still, it isn't all blue skies from here. The company talks

about this distributor, he said.

—Aaron Back

Amazon and Alibaba: Two Strategies

In retail, fashions are now moving from east to west. Online giant **Amazon.com**'s \$13.7 billion deal to buy **Whole Foods Market Inc.** has shaken up the sector in the U.S. That isn't unusual in China, where e-commerce behemoth **Alibaba** has already been snapping up brick-and-mortar stores for some time, spending some \$5 billion on physical retail companies in recent years.

Still, the two companies' strategies aren't exactly alike. China lacks retail giants like **Wal-Mart Stores** or **Costco Wholesale Corp.** that have mastered how to distribute goods from producers to supermarkets. Meanwhile, online shopping accounts for a much larger share of China's retail market.

So while Amazon hopes to expand its already formidable distribution capabilities by buying Whole Foods, Alibaba has always relied on logistics company partners to deliver goods bought on its websites. Its model is to act as a platform for merchants and consumers to meet, taking a cut in between by offering services like advertising and payments.

For Alibaba, buying into physical retail companies isn't about improving its distribution. Instead, it points to its ambitions to offer its services to anyone selling goods, online or offline.

Alibaba hopes to help physical stores set up an online presence and market them to mobile shoppers.

Buying stakes in physical retailers also helps Alibaba glean more data on consumer behavior.

As Amazon and Alibaba move down from the clouds into the real world, their aims contain crucial differences.

—Jacky Wong

China's Smaller Cities Lift Property Spirits

In Beijing and Shanghai, housing speculators are gasping for air as tighter credit bites. But in the inland cities that drive the bulk of China's steel and copper demand, property owners are smiling: Data released Monday showed prices rose 7% on the year in May, the fastest since early 2014.

That should help keep a floor under industrial commodity prices this year even as China's headline growth slows—good news for investors in mining companies like **Rio Tinto** and **BHP Billiton**, whose shares have lost around 15% after a rout in metal prices beginning in February.

The key factor is China's well-known housing inventory problem: the "ghost cit-

ies" enshrined in the West's imagination. Inventories in top-tier coastal markets like Beijing and Shanghai never reached the stratospheric levels in the interior. So when policy makers turned on the credit taps in mid-2015, those markets snapped back quickly. But smaller cities bogged down by inventory overhangs didn't experience rising prices until early 2016.

That situation has now reversed. Prices in Beijing, Shanghai and other top markets are flatlining, but vacant, unsold residential floor space nationwide has fallen to its lowest level since 2014. Property inventories peaked at 30 months of sales in early 2015 and have since fallen to 20 months, esti-

OVERHEARD

For a show about nothing, "Seinfeld" resides deep in the public consciousness nearly two decades after going off the air. A common theme involved the characters making up lies about themselves and then seeing their ploys backfire badly.

New York Attorney General **Eric Schneiderman** clearly was a fan of the show. According to a news release from his office, a man with the surname Newman pleaded guilty to posing as an architect for several years and is headed to state prison. Mr. Schneiderman dubbed the scheme "Operation Vandelay Industries."

As he probably knows, though, the character named

Newman was Jerry's archenemy and a mailman, not an architect. The character who pretended to be, among other things, a marine biologist and an employee of Vandelay Industries was George Costanza. He stated in the show that he always wanted to be an architect or at least "pretend to be an architect." In one episode, he claims to have designed part of the Guggenheim Museum.

The real fake architect now headed for the slammer, **Paul J. Newman**, drew designs for over 100 commercial buildings, collecting nearly \$200,000 for his services. There was no word on whether he also claimed to be driving Jon Voight's car.

THE AD MAZE

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THE WALL STREET JOURNAL.

Tuesday, June 20, 2017 | R1

The Web's Perilous Paths for Brands

ILLUSTRATION BY PETER AND MARIA HOEY



Advertisers are increasingly wary of objectionable content and fraudulent traffic, as they seek their goal: the attention of audiences who will buy their products

BY SUZANNE VRANICA

In February, Kieran Hannon, chief marketing officer of Belkin International Inc., noticed an odd tweet asking the electronics maker why it was advertising on Breitbart News Network, a right-wing website known for scorched-earth populism.

A banner ad promoting the company's new Linksys mesh router had appeared on the site, even though Breitbart wasn't among the roughly 200 sites Belkin had preapproved for its ads.

Mr. Hannon called his ad agency, which couldn't explain the mix-up.

"We still don't know how that happened," he said.

Such headaches are becoming all too familiar for marketing executives, as they come to grips with the trade-offs inherent in automated advertising. Known as "programmatic" ad buying, it is now the way the vast majority of digital display ads are sold.

Programmatic advertising allows the buyer to target consumers across thousands of sites, based on their browsing history or shopping habits or demographics. Doing so is more cost-effective than buying more expensive ads on a handful of well-known sites.

But marketers don't fully control whether their ads will show up in places they would rather avoid: sites featuring pornography, pirated content, fake news, videos supporting terrorists, or outlets whose traffic is artificially generated by computer programs.

The confusion stems from the convoluted infrastructure of the ad-technology world: a maze of agencies, ad networks, exchanges, publisher platforms and vendors. Instead of buying space on websites, brands can buy audiences—categories of people—and their ads are placed on sites those people visit.

The problems arise when those people are on sites where brands don't wish to appear.

As the issues pile up, marketers are taking action, with the help of companies that independently verify that their ads aren't going to toxic locations. Brands are cutting down their purchase of ads through open exchanges—public pools of ad space from hundreds of thousands of sites—opting instead for methods that give them more visibility into where ads are appearing.

On open exchanges, it "just becomes harder and harder to figure out if your ad is showing

up in a legitimate ad experience," said Kristi Argyilan, senior vice president of marketing at retailer Target Corp.

Marketers have been dealing with these issues for years. But the "brand safety" risks in digital advertising have hit home with multiple high-profile episodes in recent months.

In March, a number of big brands including PepsiCo Inc., Wal-Mart Stores Inc. L'Oréal SA and AT&T Inc. pulled their ads from YouTube and the Google Display Network, a network of third-party websites, after revelations that ads ran alongside objectionable content, including videos promoting anti-Semitism and terrorism.

Google, a unit of Alphabet Inc., promised to better police its content and give marketers more information about where their ads appear on YouTube. It also said it would bolster its technology that automatically screens video.

Please see BRANDS page R2

Race Is On to Challenge Digital 'Duopoly'

INSIDE

BY LARA O'REILLY

Facebook Inc. and Alphabet Inc.'s Google tower so far above the rest of the digital advertising world that no company can claim the mantle of No. 3. But many are trying.

Snapchat parent Snap Inc. believes it has the young eyeballs advertisers crave. Amazon.com Inc., ever the disrupter, has the ability to upend the whole business with its extensive data. Verizon Communications Inc. is betting on its blend of web content, location data and ad technology following the purchases of AOL and Yahoo, while AT&T Inc. thinks buying Time Warner Inc. will give it an edge.

With the exception of Chinese internet giants Alibaba Group Holding Ltd., Baidu Inc. and Tencent Holdings Ltd., which dominate their home market—where their Western rivals are restricted—none of the would-be challengers to the Google-Facebook "duopoly"

even cracks a 3% share of global digital advertising.

Google and Facebook together collect nearly half of global spending. Last year, the U.S. online ad market expanded by nearly \$12 billion and the two firms accounted for over 77% of that spending growth, according to eMarketer.

Advertisers are hoping for the emergence of a legitimate third player to provide competition that can give them more leverage and help keep prices in check. For ad agencies, the matter is existential: Google and Facebook have the resources to deploy entire teams to work with marketers directly, cutting out the middleman.

Wenda Harris Millard, vice chairman at advertising and media consulting firm MediavLink, said that to compete with Google and Facebook, other players will need to create premium content that appeals to advertisers or use new technologies that aren't yet main-

stream.

"Maybe the third player competes on different grounds," Ms. Millard said.

Many ad executives believe Amazon, which has expanded successfully beyond its core retail business into areas like streaming video and artificial intelligence, has the greatest chance of taking on the "duopoly."

Amazon already allows marketers to place search ads on its website, as well as display ads on all its platforms. The company also built a tool that lets companies tap the e-commerce giant's data on its consumers' shopping habits in order to more efficiently place ads elsewhere on the web. And Amazon is helping publishers make more money from the ads on their sites with a so-called "header bidding" product that gives multiple buyers a chance to bid on their ads at the same time.

eMarketer predicts Amazon will generate \$1.81 billion in ad revenue world-wide in 2017, a tiny fraction of Google's \$74 billion. Amazon declined to comment.

"Amazon is going to be an increasingly important force and one we have to better understand and link with effectively for our clients," Martin Sorrell, the chief executive of ad holding giant WPP PLC said at the company's annual meeting earlier this month. He said the company was "highly disruptive in many ways."

On Amazon's first-quarter earnings call in April, Chief Financial Officer Brian Olsavsky said the company was "very happy" with the growth of its ad business.

Snap is the newest contender for the third-place rosette. In 5½ years, Snapchat has grown to 166 million active users—a mere blip compared with Facebook's 1.24 billion daily active users, though the gap is much



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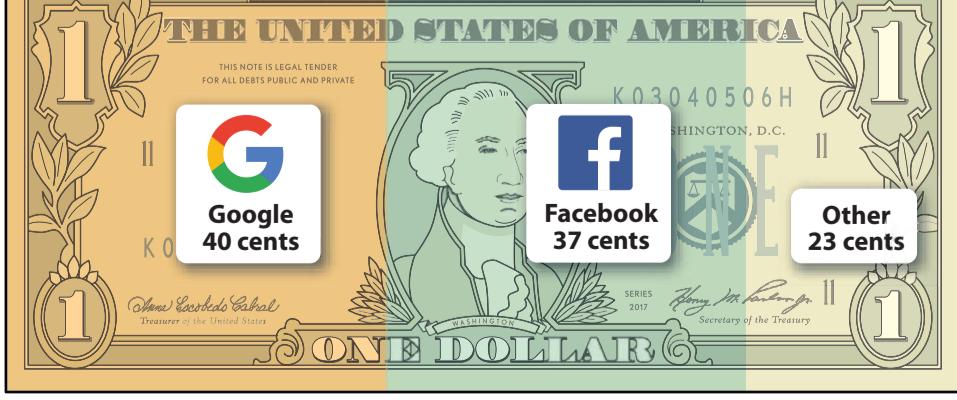
PAGE R6

ADVERTISING MISSTEPS
RISK SPARKING
VIRAL BACKLASH

PAGE R3

TV LOOKS TO TARGET
SPECIFIC VIEWERS BY
USING DATA, SOFTWARE

PAGE R7



The U.S. digital advertising market grew by nearly \$12 billion last year, with Google and Facebook collecting 77 cents of each new dollar spent, according to eMarketer, a research firm.

Please see DUOPOLY page R4

THE AD MAZE

A Landscape Full of Dangers, Opportunities

Gerard Baker, the Journal's editor in chief, introduces our report on an advertising world disrupted by technology and political change



Creative folk from the worlds of advertising, media and marketing like to consider themselves as sharp as anyone in identifying and reacting to the big social, economic and cultural change. They are, after all, not just supposed to be communications specialists. They are in some ways the diviners and even originators of consumer tastes, moods and attitudes.

But lately it seems the dizzying pace of change has caught even our data-heavy, tech-savvy media tribunes off guard. Political convul-

sions in the past year: populism, nationalism, Brexit, Trump—and the deeper cultural and economic trends that have given rise to them—crept up almost by stealth, rendering much of the received wisdom about popular attitudes uncertain. And even as companies have been rapidly adjusting to the new world of digital hegemony of the likes of Facebook and Google as the primary channels for advertising and marketing, new challenges have arisen. The proliferation of so-called "fake news" sources and the discovery that advertising material can appear alongside some of the most objectionable content the web has to offer have fostered further depreciation in trust, accuracy and even in the very value of truth itself.

For the media crowd that will gather on the beaches, in the conference halls and in the bars of the Cannes Lions advertising festival this week, these disruptive discoveries have created new sets of challenges. Marketers are seeking to understand better the audiences they reach; advertisers are becoming increasingly nervous about where their material appears; the media companies are dealing with all these challenges and the continuing migration of ad dollars to the digital field. And of course, all this takes place against a backdrop of the continuing digital revolution—as companies get access to better and more data, as new technologies such as virtual reality and augmented reality offer exciting new content pos-

sibilities, and as mobile-device ubiquity further shrinks distances and renders old distribution channels obsolete.

In this special report to mark the start of the Cannes festival, The Journal's team of advertising reporters explores these and the other pressing issues that confront modern corporate communications specialists.

Suzanne Vranica examines how marketers are re-evaluating their approach to buying automated ads, with more emphasis on "private" marketplaces that are safer for brands, and how they are demanding more accountability and transparency from the companies that sell them digital ads.

Lara O'Reilly explains why many

ad executives believe Amazon may be the company with the best chance to challenge Facebook and Google for online ad supremacy. And Jack Marshall takes a look at China's "triopoly" of ad giants, which dominate terrain that is unwelcome to their Western rivals.

We also explore the massive buzz generated by State Street's "Fearless Girl" statue—showing that there is no substitute for creative ingenuity, even in an era when technological advances get all the attention.

Throughout the week at the festival, The Journal will be hosting a series of events at which leading business figures will address these developments. Be sure to follow our coverage for the latest news and trends throughout the week.

The Tangled World of Digital Ads

Online advertisers and their partners can generally target specific groups of users based on certain characteristics. But their ads can still wind up in undesirable places across the web.

- 1 An advertiser contacts a media agency to plan a campaign for the placement of ads.



Advertiser

Media agency

Product

Advertisement



- 2 Data-management platforms use behavioral and demographic information to identify people potentially receptive to the ad.

BRANDS

Continued from the prior page
eos, and it set a 10,000-view threshold for a video channel to reach before it can make money from ads.

Some advertisers, satisfied with Google's efforts, have begun spending again, while others, including big marketers such as SC Johnson & Son Inc., Procter & Gamble Co. and J.P. Morgan Chase & Co., haven't returned, according to people familiar with the matter.

J.P. Morgan is working with Google to get its ads back on "safe YouTube channels" and expects to return soon, one of the people said.

P&G is working closely with YouTube to test the safeguards it has put in place since the problems arose, a spokeswoman for the company said. A spokeswoman for SC Johnson declined to comment.

- 3 Demand-side platforms (DSP) purchase ad space across multiple exchanges, targeting users with the desired characteristics.

How problems arise

Ads are placed on sites advertisers don't want to be associated with, despite having viewers matching the profile of the advertiser's desired audience.



Problems also arise when ads are shown to computer programs or "bots" instead of real people.



THE WALL STREET JOURNAL.

"Many advertisers never left and many have decided to come back," Google said in a statement. "While they know that no system can be perfect, they appreciate the actions we've taken and know we are taking this seriously and are committed to getting better and better."

Though the number of ordinary web users who saw an ad in an offensive YouTube video was likely small, the combination of the public relations damage from the revelations and the potential for more widespread exposure down the road led marketers to act.

Breitbart, which is popular with the "alt-right"—a loose conglomeration of groups, some of which embrace white supremacy and view multiculturalism as a threat—became a controversial landing spot for advertisers in the wake of the 2016 presidential election. Brands that have pulled out of Breitbart include Kellogg Co., eyewear company

Warby Parker and insurer Allstate Corp.

A spokesman for Breitbart declined to comment.

The recurring issues have caused brands to adjust their overall approach to automated ad buying.

Colgate-Palmolive Co. is adding language to the contract it has with its ad-buying firm, which requires it to maintain blacklists of sites the company doesn't want to have its ads appear on, according to people familiar with the matter. Colgate didn't respond to requests for comment.

Advertisers are doubling down on using online ad verification services such as Integral Ad Science Inc. and White Ops Inc.

OpenSlate, which helps advertisers vet YouTube channels, currently works with roughly 230 advertisers, more than twice as many as last year. "The interest in finding out where your ads are running and who

saw your ad has skyrocketed over the past three months," said OpenSlate CEO Mike Henry.

More marketers are purchasing ads through "programmatic direct" deals, in which a publisher uses technology to sell directly to advertisers, and "private programmatic marketplaces," in which a publisher or a select group of publishers can sell to a select group of advertisers, in real time. Automation is involved in both, but the risks are far lower than with open exchanges.

Display-ad spending on programmatic direct deals in the U.S. is expected to grow by 35% this year to \$18.2 billion, while spending on private marketplaces will increase 39% to about \$6 billion, according to eMarketer. By contrast, spending on open exchanges is forecast to grow by 8.4% this year to \$8.3 billion.

Target pulled back from buying via open exchanges at the end of 2015 and now uses private market-

places to buy ads from about 160 different publishers.

Hewlett-Packard Enterprise, which spun out from Hewlett-Packard Co. in 2015, set up private marketplaces with about 15 publishers including Forbes and CNN about a year ago.

"We needed to make sure our ads are showing up where our ads make contextual sense," said Chris Drago, the company's senior director of global media. "I don't want to be on Victoria's Secret because someone is there buying bras for his wife."

While lower prices and the ability to better target customers often trumped marketers' desire to appear alongside specific content, ad executives said things are beginning to change.

"We focus on quality," rather than on price, said Mr. Hannon at Belkin, which has reduced its reliance on programmatic buying over the past few years.

What industry executives and marketing chiefs are saying about brand safety in the digital age



BLOOMBERG NEWS

"Brands and agencies understand how hard we work to create the safest possible environment."

Sundar Pichai,
Google CEO

"You [Google] have to take responsibility for this as a media company."

Martin Sorrell, WPP CEO, on ads appearing alongside extremist content on YouTube



ZUMA PRESS



LYFT

"[We need places] where we feel we can run ads without needing to audit that at all times."

Melissa Waters,
Lyft chief marketing officer



ANA

"A dearth of trust and a need for verification lie at the heart of [brand-safety issues]."

Bob Liodice, Association of
National Advertisers CEO



BLOOMBERG NEWS

"We have a media supply chain that is murky at best and fraudulent at worst."

Marc Pritchard,
Procter & Gamble's chief brand officer

THE AD MAZE

Marketing Backlash Erupts Faster Than Ever

Consumers and activists on social media step up pressure on companies to pull ads they object to

BY JACK MARSHALL

When Pepsi in April introduced a new ad in which Kendall Jenner offers a soda to a police officer in riot gear to the cheers of protesters, the outrage machine took no time kicking into high gear.

Before the ad even aired on television, **PepsiCo** Inc. was taken to task across social media for trivializing the Black Lives Matter movement. About 59% of the 2.7 million tweets that included the word "Pepsi" expressed negative sentiment during the week of April 3, according to data from Salesforce Marketing Cloud. Pepsi pulled the commercial only a day after it was posted online—and it never aired on TV.

Advertisers don't always hit the mark, whether it is with tone-deaf attempts at socially conscious ads or marketing messages that end up appearing alongside objectionable content.

But the backlash has reached new speeds and levels of intensity recently. Consumers' criticisms and calls for boycotts can quickly go viral, pressuring companies to take decisive action or risk further brand damage.

As Pepsi, Anheuser-Busch InBev NV's Budweiser, Daimler AG's Mercedes-Benz and many others have learned the hard way, a perceived misstep can quickly blow up into a public-relations nightmare.

"Ad buys are no longer just an asset; there's now maybe an equal chance they could become a liability," said Steve Rubel, chief content strategist at public relations and marketing firm Edelman.

Diving into the political fray has become riskier than ever in the polarized environment. Budweiser's Super Bowl



Ads perceived as offensive can backfire, such as this Pepsi commercial that was criticized for trivializing the Black Lives Matter movement. A post on Twitter by Bernice King, the daughter of civil-rights leader Martin Luther King Jr., was picked up by media outlets.

ad highlighting its co-founder's journey from Germany to the U.S. prompted short-lived calls for boycotts of the beer at a time when President Donald Trump's attempt to temporarily ban travel to the U.S. for people from several Muslim-majority countries was fiercely contested. Audi AG's big game spot promoting pay equity for women also drew blowback—some called it antimale propaganda while others said the auto maker, with an all-male board, was being hypocritical. Audi said it supported "pay equality, inclusivity, and the growth and development of all employees."

Watchdogs and activists now have an effective playbook to pressure advertisers: 1) Shame the brand publicly on social media; 2) Organize calls for a boycott that will inflict financial damage; 3) Demand the company withdraw the ad or prevent it from appearing on a specific site or program.

Perhaps no campaign has proven more effective at pressuring advertisers recently than the anonymous "Sleeping Giants" Twitter account, which has been systematically questioning companies about their relationship with the Breitbart News website and en-

couraging other Twitter users to do the same by posting screenshots of ads that appear on the site.

Breitbart became a particularly controversial site for advertisers as its influence and visibility grew with the 2016 presidential election. It is popular with the "alt-right"—some of whom embrace white supremacy and view multiculturalism as a threat—and was previously run by now-White House

chief strategist Steve Bannon. Many of the advertisers targeted by Sleeping Giants said they didn't intentionally place ads on Breitbart or were unaware their ads might appear there when they set up their online ad campaigns. That highlights the potential risks of advertisers increasingly relying on automated ad-targeting technologies and ad networks to help them place ads across thousands of websites simultaneously.

A Breitbart spokesman declined to comment.

Reached via Twitter, a representative for Sleeping Giants, who wouldn't identify himself, said the group uses Twitter because it is public and companies are typically more responsive on social media than through other channels.

"Oddly as it's gotten bigger, it's actually gotten more manageable. In a way it's become a self-policing community of its own," the person said, in reference to the social media activity the account has helped stimulate.

A similar story played out with Bill O'Reilly after reports that the Fox News star was accused of sexual harassment by multiple women. Companies including Mercedes-Benz and **Hyundai** quickly stopped advertising on Mr. O'Reilly's top-rated show after social-media users questioned their association with him. In less than two weeks, the network had parted ways with Mr. O'Reilly, who denied the harassment allegations.

Brands can easily end up with an advertising message—or an advertising placement—that can be seen as offensive, particularly through a partisan lens.

Edelman's Mr. Rubel suggests the best course of action is for advertisers to better plan ahead for potential backlash to their advertising and to carefully monitor social media to spot the situation as early as possible.

"If you're buying advertising, it's not something that's happening to you," he said. "It's entirely inside of your control."

Advertising World Braces For Europe's New Data Rules

BY NICK KOSTOV

PARIS—Advertising executives love to talk up how they use mountains of data to target consumers. But gathering that data is about to become more of a headache, at least in Europe.

New European Union legislation that goes into effect next May will restrict how companies can collect and use information about web users in Europe, requiring that they obtain "unambiguous" consent from those users.

The move contrasts with the U.S., where lawmakers recently voted to overturn privacy rules that would have required telecom companies to get consumers' permission before sharing their web-browsing and app usage with third parties.

Privacy activists say the European rules are aimed at helping individuals take back control of their information. But they could hit the advertising sector hard, striking ad-tech companies, ad-buying arms of big agencies and web publishers, experts say.

Once the new rules are in effect, European users browsing the internet will have to provide their consent every time they enter a new website to allow that site's publisher to share their personal information with other companies, which may have to be named as part of the consent form.

Lobbyists say this could lead to more intrusive pop-ups upon entering websites.

"Anything that creates a higher bar to entry will affect both publishers and marketers," said Simon Morrissey, head of data and privacy at Lewis Silkin LLP in London. "If you can't get the consent that you need then you can't obtain the data that you want."

A group representing the EU's national data-protection regulators is still clarifying its guidance on exactly where it thinks the bar should stand for user consent.

In most cases, companies can no longer demand that us-

The Dos and Don'ts Of the New Rules

- ◆ Consent must be 'freely given, specific, informed and unambiguous'
- ◆ Consent can't be bundled with other written agreements
- ◆ Consent must be active; can't be gained through inactivity or pre-ticked boxes
- ◆ Users can withdraw consent at any time and ask to have their data erased
- ◆ Users can't be asked for consent to gain access to a service, in most cases

ers consent to the sharing of their personal information with third parties as a requirement for access to an online service, said Jan Philipp Albrecht, a member of European Parliament who participated in the drafting of the rules.

Mr. Albrecht also said that marketing practices like pre-ticked boxes and consent forms that can be long and complicated will run afoul of the rules.

The rules also say companies can't collect data for one part of their business and use it for another. Finally, consent must be as easy to take away as it is to give. Citizens can also ask to have their data erased.

In Europe, companies that violate these rules could be fined as much as 4% of the firm's annual world-wide revenue, or €20 million (\$22.4 million), whichever is greater.

The new rules also apply to tech juggernauts like Alphabet Inc.'s Google and Facebook Inc., though they may be in a relatively stronger position because they have direct relationships with large numbers of consumers and the ability to mine their own data.

Most vulnerable are ad-tech

firms that use data to target ads across the internet without any explicit consumer relationship, according to Townsend Feehan, chief executive of the European unit of the Interactive Advertising Bureau, an online advertising trade group. Data-warehouse firms that buy data that may have been collected for different purposes also would be affected.

"The ad-tech companies are in a particularly difficult position," Ms. Feehan said. "They are going to be dependent on the publishers to get that consent for them."

Lawyers and lobbyists say there could be court battles to determine how strictly the new rules should be interpreted by the regulator.

GroupM, the media-buying giant owned by **WPP** PLC, has formed a working group that includes lawyers, privacy experts, product leaders, information officers, data architects and compliance professionals to make sure that its agencies comply with the regulations.

Ad-tech provider AppNexus is planning to invest in its European data-center infrastructure to ensure that data originating in Europe stays in Europe, said Julia Shullman, deputy general counsel of commercial and privacy at the company.

Axiom, a marketing-services company that collects data like how many times consumers shopped online over the past year with a particular brand, their household income, and whether they are interested in golf or art, has increased its privacy budget by about 30% to comply with the new rules, according to its privacy officer in Europe, Sachiko Scheuing.

Ms. Scheuing has documented what data Axiom holds on its customers, where it is held, whether it has permission to do so, whether it is stored safely, and how it can be extracted or deleted if requested.

"The key is really to show that you take accountability very seriously," she said.

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THE AD MAZE



BY JACK MARSHALL

China is home to some of the world's largest digital-ad players, mostly because they have a stranglehold on the world's second-biggest market, where their Western rivals are pretty much absent.

Baidu Inc., Alibaba Group Holding Ltd. and Tencent Holdings Ltd. are forecast to attract a healthy 15% of the global market this year, according to eMarketer, even as their digital ad revenue comes almost exclusively from within China.

Only the industry's two behemoths, Alphabet Inc.'s Google and Facebook Inc., do better worldwide: eMarketer expects them to capture 49% of global digital ad spending this year, despite their lack of presence in China.

China represents an attractive ad market that foreign companies can't easily access, largely because of restrictions placed on them by the Chinese government. Regulators blocked access to Facebook in 2009, and Google all but abandoned its China operations in 2010 over hacking and censorship concerns, although it has since attempted to slowly work its way back in.

Alibaba, Tencent and Baidu are expected to attract over 62% of the \$50 billion digital-ad market in China this year, eMarketer said, and command a predicted 70% of a \$76 billion market by 2019.

Each of the three Chinese ad giants has a different focus.

Alibaba operates the nation's largest e-commerce platforms Tmall and Taobao, where it collects vast amounts of data and makes most of its money by charging shops for advertising.

Tencent owns WeChat, the messaging app with more than 900 million users that has evolved to also offer mobile games, mobile payments and a social-media-style timeline.

Baidu runs the dominant search engine, accounting for nearly 80% of mobile searches in China in the first quarter.

"These three guys are pretty much dominant in the subsectors they operate in," said Michael Levine, a global technology and media investor and analyst.

The Chinese digital ad market is growing rapidly, as mobile-device usage proliferates and ad formats and data-driven targeting capabilities continue to evolve. As that market

expands, the dominance of the three is only expected to increase.

"Ad spending in China continues to shift rapidly toward digital formats, fueled by rising time spent online and greater advertiser spending on mobile formats," said eMarketer forecasting analyst Cindy Liu.

While Alibaba and Tencent's presence is projected to quickly expand in China, Baidu's roughly one-fifth share of the digital ad market there is expected to erode, with e-commerce ad revenue growth outpacing search-engine ads.

Still, a lack of significant product overlap and competition between the three companies has made it difficult for other Chinese companies to wrestle away market share, Mr. Levine said.

That could also help explain why other Chinese companies and bankers are choosing to invest in online ad firms outside of China, including in the U.S.

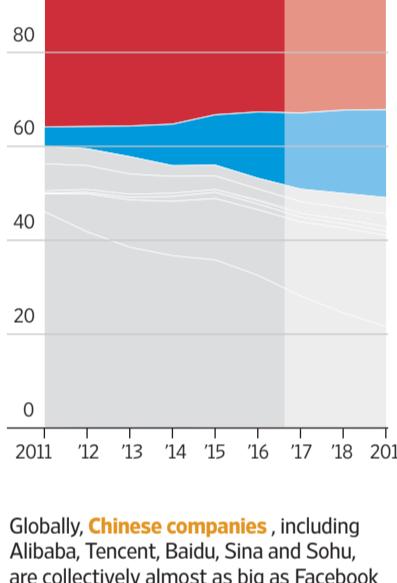
A group of Chinese investors led by the chairman of tech conglomerate Miteno Communication Technology Co. last year paid \$900 million to acquire Media.net, a Dubai-based online ad broker that gets 90% of its revenue from the U.S.

The Chinese digital-ad market is surging as mobile-device usage proliferates.

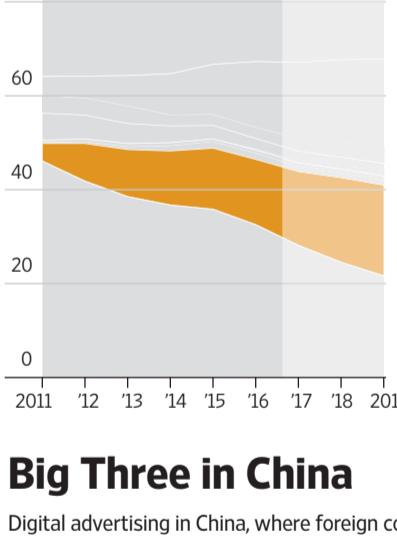
Two Goliaths and Not a Slingshot in Sight

World-wide digital ad revenue market share for 2011-2019

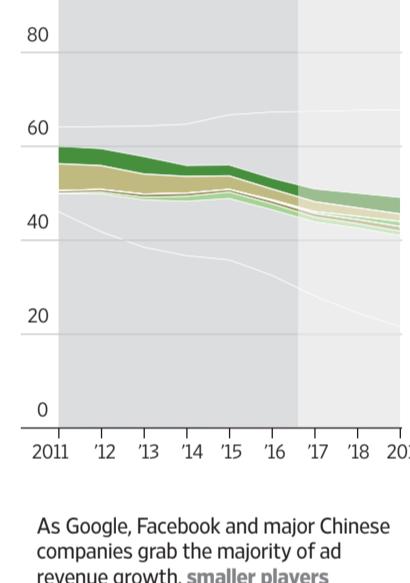
Google and Facebook will soon account for more than half the market. Facebook's share is expanding, while Google's is contracting slightly.



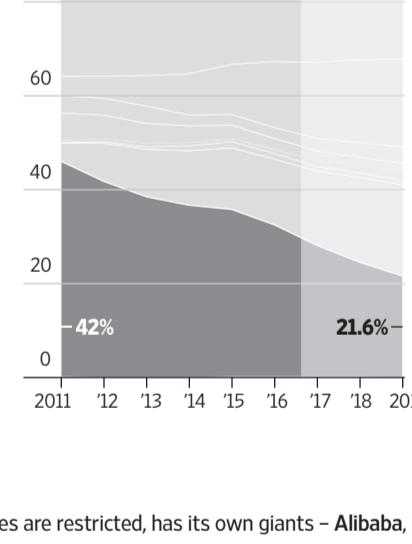
Globally, Chinese companies, including Alibaba, Tencent, Baidu, Sina and Sohu, are collectively almost as big as Facebook because of their dominance in China.



Outside of China, Microsoft, Verizon, Snapchat, Amazon and Twitter are all in a race for a distant third place. Their projected combined share for 2017 is 7%, world-wide.

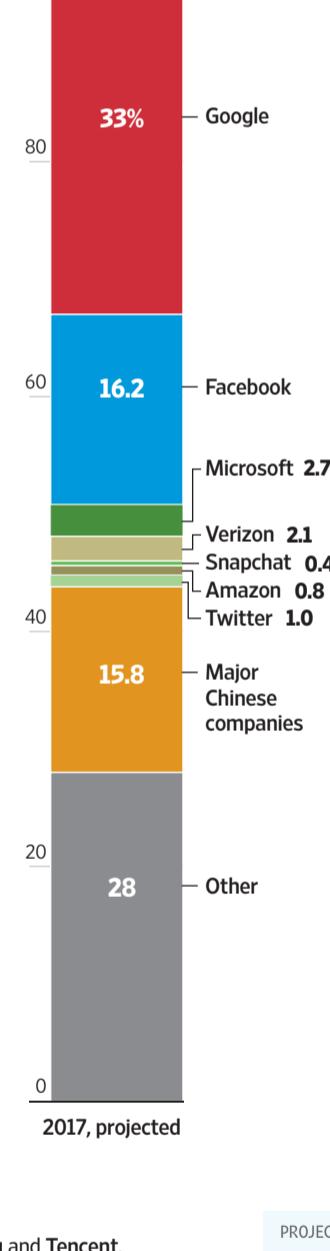


As Google, Facebook and major Chinese companies grab the majority of ad revenue growth, smaller players continue to get squeezed.



2017 digital ad revenue

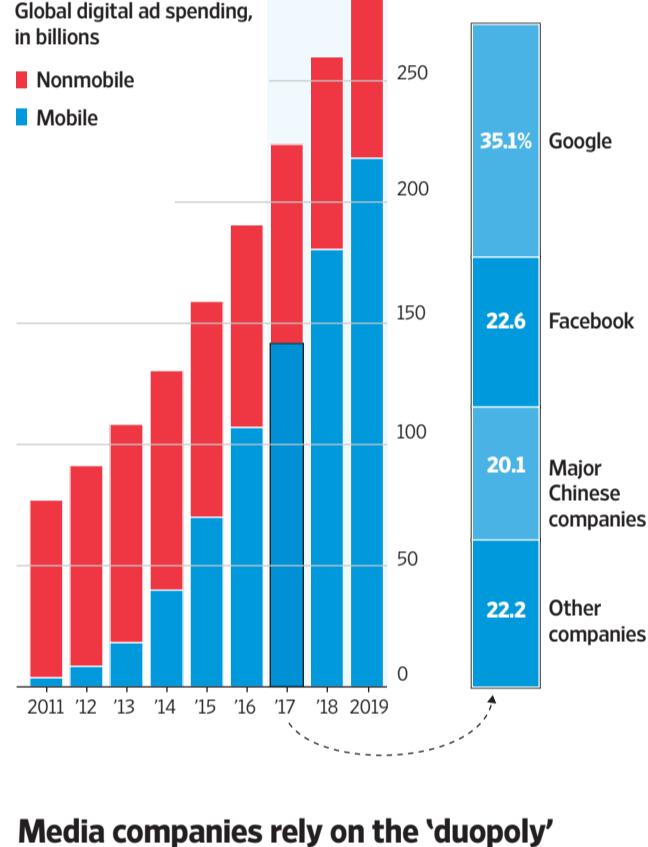
The 'duopoly' of Google and Facebook controls nearly half the market.



Mobile's march

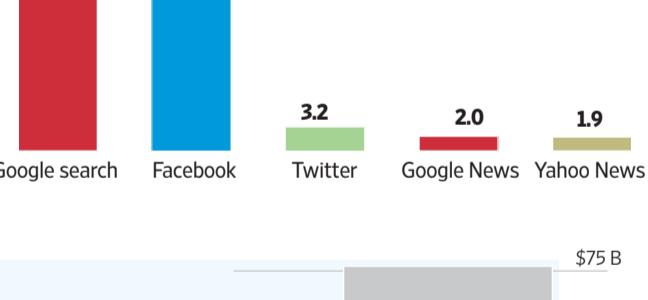
The rapid growth in the digital ad market has been driven by the rise of mobile. Global digital ad spending, in billions

■ Nonmobile
■ Mobile



Media companies rely on the 'duopoly'

Google and Facebook are the dominant outside sources driving traffic to publishers' websites.



Big Three in China

Digital advertising in China, where foreign companies are restricted, has its own giants – Alibaba, Baidu and Tencent.

Net digital ad revenue share in China, in billions of U.S. dollars

■ Alibaba (includes Youku Tudou) ■ Sina
■ Baidu ■ Sohu
■ Tencent ■ Other Companies



Notes: Microsoft includes LinkedIn for all years. Verizon includes AOL, Millennial Media and Yahoo for all years.

Sources: eMarketer (digital ad sales); Chartbeat (traffic referrals)

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DUOPOLY

Continued from page R1
narrower in strong ad markets like the U.S. and Canada.

Snapchat's advantage is that its audience is mostly made up of the 18- to 34-year-old segment. On average, each Snapchat user spends more than 30 minutes daily in the app, giving advertisers lots of opportunities to target them. Snapchat has also brought on board several TV companies and publishers for the app's "Discover" section, offering marketers the opportunity to position their ads next to curated content.

Snap's ad business still has some catching up to do: Its average revenue per user in North America in its first quarter was \$1.81, while Face-

book clocked \$16.56 per user in the U.S. and Canada.

Snap declined to comment. Verizon also is emerging as a "new" player, having just merged AOL and Yahoo to form an advertising and content unit of the company called "Oath."

"There are only three companies in the world that touch one billion consumers digitally—Facebook, Google, and Oath," said former AOL boss Tim Armstrong—now the CEO of Oath—in an interview.

Mr. Armstrong believes the company can expand its reach to two billion people world-wide and ratchet up revenue to between \$10 billion and \$20 billion by around 2020. The recipe: ad technology that has spent years investing in, location data and well-known web brands including HuffPost and Yahoo Sports.

The Contenders For Third Place

SNAPCHAT

Strengths: High user engagement

Weaknesses: Slowing user-growth rate

VERIZON and AT&T

Strengths: First-party and location-based data

Weaknesses: Mergers and privacy issues are complicated

He said rivals to Google and Facebook can zero in on "white spaces" with no dominant player: promoting brands instead of specific products, and using newer technologies such as augmented reality and virtual reality, for example.

Verizon's chief rival, AT&T, has its own lofty ambitions. AT&T CEO Randall Stephenson said at a conference in May that the Time War-

AMAZON

Strengths: World's best data on what we buy

Weaknesses: Limited brand-advertising opportunities

TENCENT and ALIBABA

Strengths: Dominance in Asia

Weaknesses: Lesser known elsewhere

APPNEXUS and other ad-tech participants

Strengths: Access to the wider open web

Weaknesses: Limited first-party data

ner acquisition would create an entity that delivers nearly "one trillion" ad impressions a year. Mr. Stephenson said his company will be able to make money from Warner Bros. and Turner shows at a higher rate because it has data on AT&T subscribers' internet usage that can help marketers more accurately target their intended audiences.

For the foreseeable future, Madison Avenue will have to get used to dealing with two dominant players, a dynamic that isn't totally alien in the ad business.

"From a small-business perspective it's not much different than when Yellow Pages was the only game in town," said Pivotal Research analyst Brian Weiser. "For large brands, it's not that different than the era where there were three [TV] networks."

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THE AD MAZE

'Fearless Girl' Steals the Conversation

Placement of statue near Wall Street bull turns talk about gender equality into publicity win for State Street

BY SUZANNE VRANICA

It appeared overnight—a bronze statue of a young girl, hands on her hips, defiantly staring down the iconic charging bull on Wall Street.

Installed on the eve of International Women's Day in early March, the "Fearless Girl" statue was quickly embraced as a symbol of female empowerment and gender equality.

State Street Global Advisors, the investment arm of Boston-based State Street Corp., was responsible for commissioning and placing the work, and the result was a public-relations boon for the manager of index-tracking funds that is generally thought of as one of the most passive investors.

The 50-inch statue became a viral sensation, garnering plenty of attention from media outlets around the globe and trending on social-media sites such as Twitter with the hashtag #FearlessGirl. Legions of New Yorkers, tourists, politicians like Sen. Elizabeth Warren and celebrities including singer Cyndi Lauper have made the pilgrimage to lower Manhattan to take a picture of the sculpture or pose with it.

The stealth placement of the statue, a campaign crafted by Interpublic Group of Co.'s McCann New York, was intended to pressure the public companies in which State Street invests to add more women to their boards. It also promoted State Street's SHE fund, which invests in companies with women in top executive roles.

"Fearless Girl" is among the marketing efforts expected to rack up awards when Madison Avenue descends on the French Riviera for the annual Cannes Lions advertising festival this week, according to ad firm Leo Burnett Worldwide, the Publicis Groupe SA agency that has been predicting Cannes award winners for 30 years.

"It's a really interesting piece of work. It transcends how we think about work," said Mark Tutssel, Leo Burnett's global chief creative officer. "It's become part of the society" and "created conversations," he added.

Fearless Girl spawned almost one



SHANNON STAPLETON/REUTERS

million tweets and plenty of free publicity for State Street, including thousands of mentions on news and entertainment TV programs and hundreds of articles in major papers around the country. State Street estimates the traditional and social-media exposure the brand generated with "Fearless Girl" is valued at between \$27 million and \$38 million.

It isn't a bad outcome for a relatively cheap marketing effort. The company spent roughly \$250,000 on Fearless Girl, according to a person familiar with the matter. State Street declined to confirm how much it spent.

State Street is the latest company touching on social issues in their marketing, hoping to endear custom-

ers to their brands and drum up good publicity.

The Super Bowl was a good indicator of the trend, with an Airbnb Inc. commercial that highlighted unity and diversity and Audi AG promoting gender-pay equality. Still, some of the ads such as Audi's took some heat on social media.

The Academy Awards brought

more of the same, as Hyatt Hotels Corp. promoted unity with an ad that used a cover of the song "What the World Needs Now Is Love."

Richard Edelman, chief executive of PR giant Edelman, said it is harder to reach people through regular advertising nowadays—so brands have to be part of the "cultural discussions that are taking place on social media."

Still, the approach can backfire, particularly in the charged political environment. About 57% of consumers are buying or boycotting one or more brands based on the company's position on a social or political issue, according to a recent online survey of 14,000 people from 14 countries that Edelman conducted in the spring.

Fearless Girl had its share of detractors, who criticized State Street's own diversity issues or called Fearless Girl a publicity stunt, hollow feminist marketing tool or defamatory to the longstanding 7,000-pound bull.

"Equal? Bull! Bankers behind 'Girl' count few women as execs," read one headline from the New York Daily News. State Street said it addressed some of the criticism by releasing its gender-equality statistics.

The "Charging Bull" sculptor has accused Fearless Girl of distorting the meaning of his art with what amounts to an ad campaign, and another sculptor created a small statue of a urinating dog that was briefly placed next to Fearless Girl.

Stephen Tisdale, chief marketing officer of State Street Global Advisors, said the company did have some reservations when it set out to craft the effort. But it was careful to make sure the sculpture and messaging were done in a meaningful way and not tied to a political movement.

The risk has paid off. "This put us on the map," he said. It's a "global phenomenon."

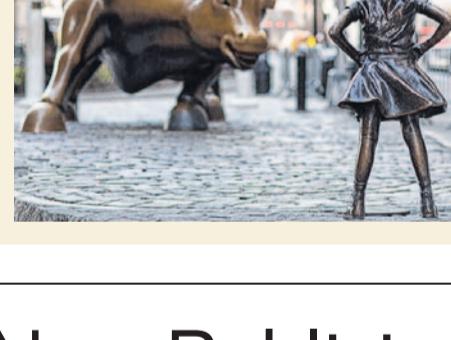
The publicity from Fearless Girl will likely help State Street increase its overall brand awareness.

The firm's SHE fund saw its average daily trading volume increase 384% in the days following the release of Fearless Girl, and the fund had \$315 million in assets as of May 22, up 8% from March 6. The company said that inbound calls from prospective institutional investors rose 15-fold in the four weeks after the company placed the statue, compared with the two weeks prior.

Free Media

958,923 tweets
4,122 TV segments
2,400 news articles
215,163 Instagram posts

Source: McCann, March 2017



SARA BLAKELY

New Publicis Chief Takes On a Turbulent Era

BY SUZANNE VRANICA

Madison Avenue has a new power player: Arthur Sadoun.

Mr. Sadoun was installed earlier this month as the new chief executive of advertising giant **Publicis Groupe SA**. The 46-year-old is only the third chief executive to lead the storied ad conglomerate in its 91-year history.

Known for his client-handling skills, Mr. Sadoun has big shoes to fill. He takes over from Maurice Lévy, the widely respected ad chief who led the Paris-based firm for almost 30 years and was named chairman of the supervisory board. Mr. Lévy transformed Publicis into the third-largest ad holding company in the world, with €9.73 billion (\$11 billion) in revenue last year and 80,000 employees crafting marketing for brands such as Nestlé SA, Samsung Electronics Co. and Citigroup Inc.

Mr. Sadoun is charged with navigating the company through the most turbulent time in marketing. Technology now enables consumers to more easily avoid ads, the dominance of Facebook Inc. and Alphabet Inc.'s Google continues to grow, and the trust between agencies and marketers in the \$529 billion global ad business has been damaged by a report that was released last year that said the U.S. ad industry is full of nontransparent business practices.

Mr. Sadoun will need to help the company get back on track after los-

ing significant assignments from a rash of companies such as Procter & Gamble Co. Its bold acquisition of Sapient has also failed to live up to expectations.

The Wall Street Journal caught up with the newly installed ad czar to discuss the brewing tensions between advertisers and tech giants, the challenges ad companies face, and how rising populism is affecting marketing.

Edited excerpts:

WSJ: What is the biggest threat to ad companies?

Mr. Sadoun: If the industry does not bring back growth to our clients' business, we will be in danger. We have to overcome the fragmentation that now makes marketing splintered. We must be delivering expertise in technology and data and think very broadly about creativity.

WSJ: Have Google and Facebook done enough to calm the concerns marketers have about brand safety and measurement?

Mr. Sadoun: We've been pleased to see Google and Facebook's recent efforts in this area. But there is a lot more they will need to do. Clients are worried by the lack of transparency on how and where their marketing messages are distributed and/or seen, how the algorithms work and the 'just trust us' approach. Today, leveraging data is key to marketing, but the limited amount of

data clients get back about their [marketing] programs and the lack of a true ability to work across platforms, like they can do on the open internet, is a problem. It's the clients' money and data after all. We need to take a lot more access.

WSJ: Publicis recently wrote down the value of Sapient, a digital-technology company. What's been the biggest challenge?

Mr. Sadoun: The premium we paid for Sapient was not completely justified due to slower growth than we had anticipated. So we reflected this slower growth by taking this non-cash charge. The struggles for growth, partly, came from us underestimating how difficult it is to get technologists and marketing working together. They are different cultures. We have been winning businesses and seeing momentum globally.

WSJ: There is a real lack of trust between agencies and marketers following the Association of National Advertisers' probe that discovered a lack of transparency in the way agencies conduct business. How can ad companies repair the relationships?

Mr. Sadoun: At Publicis, we believe any areas of conflict of interest must be eliminated right away and clients should never feel that there is any part of the process that they do not have transparency into. While we have passed all the audits to date, we remain committed to re-

affirming a trusted and principled relationship.

WSJ: There has been a huge rise in populism around the world. What does that mean for marketers?

Mr. Sadoun: We have to acknowledge that there is almost everywhere in the world a middle class that is really in pain. This is something that we need to take into account at the political level, but also in the way we communicate. It has never been so important to make sure that whatever you do, you make people understand what you bring into their day-to-day life. This is what we are trying to do with our clients. A brand that is strong is a brand that is playing a concrete role in people's life.

WSJ: Where will ad companies be in five years?

Mr. Sadoun: The one prediction I will make is that there is likely to be more changes in our industry in the next five years than in the past 20.



ARTHUR SADOUN

THE AD MAZE

Don't Touch That Dial, We're Talking to You

Television networks look to target advertising to more specific audiences by using data, software

BY ALEXANDRA BRUELL

In the past two years, the cold and allergy relief brand Zicam has shifted its TV ad-buying strategy markedly. Instead of just buying ads aimed at gender and age groupings—the traditional currency of TV—the company chose to target audience segments most receptive to cold-medicine pitches.

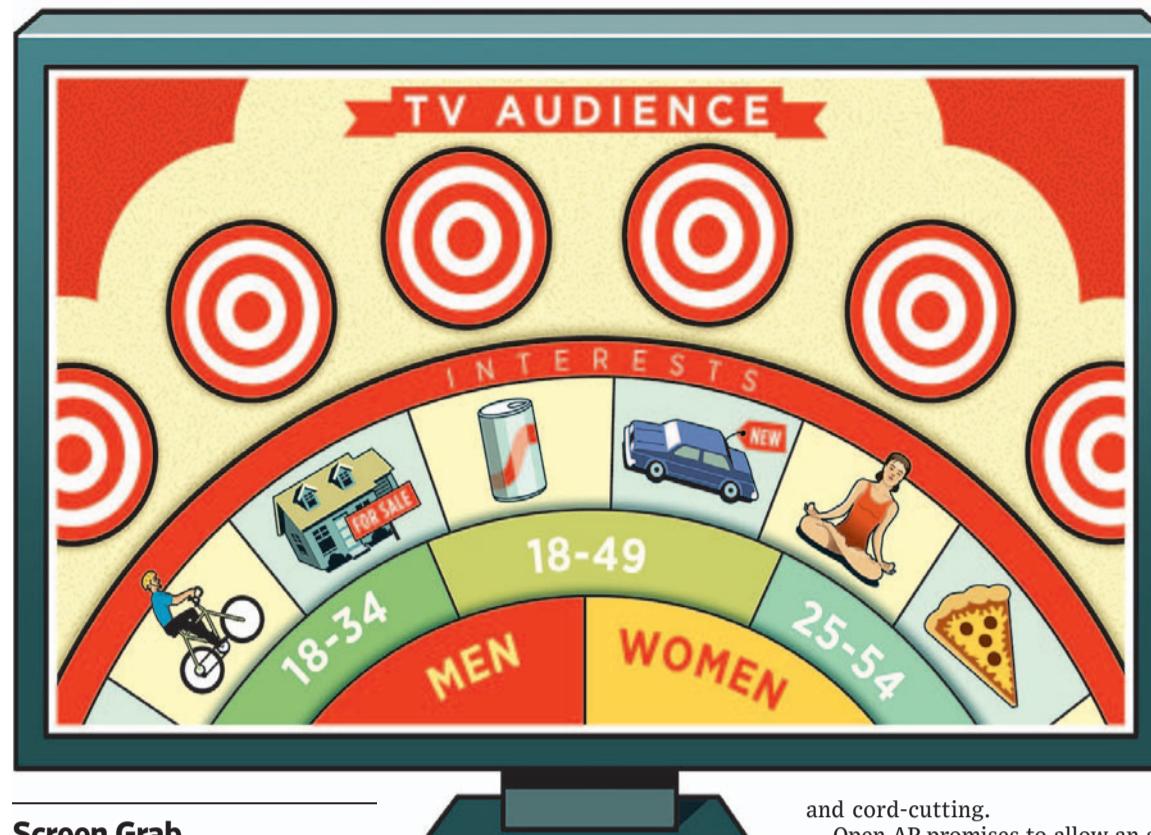
Zicam began giving big chunks of its media-buying budget to **Simulmedia**, whose software helps find TV audiences representing more specific groups of people. Zicam found more than 45 networks and shows that would be a good fit. In the cold season ending early last year, Zicam put 60% of its TV budget into Simulmedia and said it enjoyed an 8% lift in sales.

Across the board, marketers are clamoring for these sorts of targeting opportunities in television, and the industry is racing to cater to their desires. Digital advertising has trained a generation of marketing executives to expect the ability to reach very fine audience segments, and TV's setup has looked hopelessly unsophisticated in comparison.

"TV has been limping around conducting business on a currency that doesn't reflect consumer behavior for decades," said Linda Yaccarino, head of ad sales for NBCUniversal.

Networks are doing everything they can to change that—whether it means joining with vendors like Simulmedia or developing their own proprietary ad-targeting systems, or both.

Viacom Inc., 21st Century Fox Inc. and Time Warner Inc.'s Turner joined forces a few months ago to start building Open AP, a system intended to standardize the precise categories ad buyers can purchase in TV. That way an advertiser who wants to reach soda drinkers or people in the market for a minivan doesn't have to deal with different data approaches at different networks.



publishers, marketers can have a single view of how their money is working," said Michael Strober, executive vice president of client strategy and ad innovation at Turner.

The Open AP media company participants are in talks with other networks about joining, according to people familiar with the matter. Some ad executives say the initiative needs more scale to be more relevant.

L'Oréal SA began selecting TV commercial space through advertising technology firm TubeMogul in 2015 to target certain consumers. By using detailed sets of first- and third-party data—loyalty program and purchase data, for example—L'Oréal is able to find audiences at levels as granular as women who bought lipstick from specific retailers over the past 30 days.

TubeMogul, which was acquired by Adobe Systems Inc. last year, uses TV viewing data to help L'Oréal buy inventory targeting similar households more broadly. After buying TV ads through TubeMogul, L'Oréal says it has seen a lift in product sales.

To group all consumers into a broad audience and expect the same desired action is "not the way of the future," said Nadine McHugh, a senior marketing executive at L'Oréal. "We understand the power of TV content, but how do we leverage our investment for optimal results out of our dollars in that environment?"

Advertisers can define their budgets and target audiences through TubeMogul's system. The software then sends recommendations for available TV inventory, along with specified pricing. If the advertiser chooses to buy the inventory, TubeMogul or the advertisers then need to deal with the relevant networks, which then check for availability.

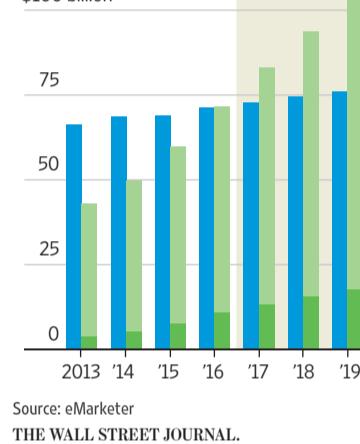
From there, the old-school negotiation and transaction commence—a sign that while targeting of ads on TV may be getting more "programmatic," booking of ad slots hasn't really changed.

"That's a limitation of the TV ecosystem," said Denise Colella, senior vice president of advanced advertising products and strategy at NBCUniversal. It's "programmatic."

Screen Grab

U.S. digital ad spending has surpassed TV ad spending.

■ TV ■ Digital ■ Digital video



Source: eMarketer
THE WALL STREET JOURNAL.



ten used to describe this activity in TV—in an effort to tie it to the use of automated or "programmatic" systems in digital advertising, in which buyers bid in real-time for available inventory.

But TV's targeting efforts are a far cry from what has happened in the digital ad world. The targeting opportunities still aren't anywhere near as granular. The nature of cable and broadcast TV means that selling and inserting ads in real time isn't possible, or even advisable. But that could all change when more households have internet-enabled TV systems and more programming is delivered on-demand rather than in a continuous, "linear" stream.

Credit Suisse predicts that targeted linear TV products will open up a revenue opportunity of more than \$100 billion for TV networks, according to its Future of Advertising report from April. Other analysts predict there will be increasing turbulence in TV advertising from the growth of online video

and cord-cutting.

Open AP promises to allow an ad buyer or agency to submit information about who it wants to target—people who buy yogurt, for example—and use various data sources to drill down. Perhaps, for example, they know yogurt buyers tend to be women in their 20s who like to do yoga, and from anonymized data they know where those people live. The networks will cross-reference that information with data on what similar households tend to watch. Ads can then be purchased on

Targeting efforts by networks are a far cry from what has happened in the digital ad world.

shows with viewers that fit that profile. Deals will then be hammered out with the networks one-by-one.

The real benefit is getting three big media companies on the same page. "By organizing this across



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