THE WALL STREET JOURNAL.

DOW JONES | News Corp

THURSDAY, JULY 13, 2017 ~ VOL. XXXV NO. 114

WSJ.com

EUROPE EDITION

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Business & Finance

Google won a reprieve in one of its biggest legal battles when a Paris court threw out a $1.27 billion bill sought by France for five years of back taxes. **A1**

◆ **As interest rates rise,** banks are confronted with a dilemma over when to increase retail deposit rates. **A1**

◆ **Apple plans** to store all cloud data for its China customers with a state-owned firm to comply with the nation's cybersecurity rules. **B1**

◆ **The Fed's Yellen said** she expects forces holding down consumer prices to fade, allowing the central bank to stick to its plans for gradual rate increases. **A7**

◆ **Germany called on** Siemens to explain how gas turbines sold for use at a Russian power plant got diverted to Crimea, possibly violating EU sanctions. **B2**

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◆ **OPEC produced** more crude oil in June despite efforts to curb output. **B5**

◆ **Iran's ambitious agenda** for its oil-and-gas sector is running up against the caution of big energy firms. **B3**

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◆ **Trump defended** his eldest son in tweets that proclaimed Donald Trump Jr.'s innocence and took aim at the news media. **A1, A6**

◆ **Trump was set** to arrive in Paris on Thursday for a whirlwind visit amid a political storm at home. **A4**

◆ **The German government** adopted legislation that will make it easier for it to veto takeovers of strategically important firms. **A4**

◆ **Brazilian ex-President** da Silva was sentenced to almost a decade in prison for corruption. **A5**

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◆ **NATO and Russian pilots** are reviving a Cold War contest of nerves, increasing the risk that airborne close encounters could accidentally spark a conflict. **A3**

◆ **The U.K. must** stand by spending commitments if it wants Brexit talks to progress into discussions on a trade deal, the EU's chief negotiator said. **A4**

◆ **Indonesia said** President Widodo had signed a decree giving his government the power to disband radical groups. **A5**

◆ **Christopher Wray,** Trump's pick for FBI director, pledged to never let politics interfere with probes. **A6**

◆ **An international team** met secretly with Venezuelan officials to persuade them to move a prominent political prisoner to house arrest. **A5**

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€3.20; CHF5.50; £2.00;
U.S. Military (Eur.) $2.20

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Trump Defends Son, Hits Media

President calls scandal a witch hunt; Senate panel wants campaign manager to testify

By Peter Nicholas, Byron Tau And Nathan Hodge

President Donald Trump defended his son Donald Trump Jr. in morning tweets Wednesday that proclaimed his innocence and took aim at the news media, a day after the younger Mr. Trump released documents showing he accepted a meeting to discuss an alleged Russian government offer of help damaging Hillary Clinton's presidential campaign.

Mentioning his son's appearance Tuesday night on Fox News, the president wrote: "My son Donald did a good job last night. He was open, transparent and innocent. This is the greatest Witch Hunt in political history. Sad."

He also repeated his contention that people should disregard news reports that rely on unnamed sources.

"Remember, when you hear the words 'sources say' from the Fake Media, often times those sources are made up and do not exist," he wrote.

Many stories about this White House, as with past administrations, have been based on unnamed sources. The stories on the meeting with the Russian lawyer included details from unnamed sources that were later confirmed by Donald Trump Jr.

White House aides often speak to the news media on the condition of anonymity, a practice seen in past administrations.

Later on Wednesday, a Senate committee said it would ask President Trump's former campaign chairman to testify about the June 2016 meeting between Trump confidants and a Russian lawyer who was said to have information from the Kremlin intended to boost Mr. Trump's candidacy.

Sen. Chuck Grassley, the Republican chairman of the Judiciary Committee, said he would be inviting Paul Manafort to a hearing he is organizing on the topic of foreign lobbying and influence in the U.S.

Mr. Grassley said that Mr. Manafort's attendance at the meeting would also be a topic of conversation.

"He was present at the meeting that we've all read about in the last week in the news," Mr. Grassley said.

"We're going to invite him," said Mr. Grassley, adding that the committee had the power to issue a subpoena to Mr. Manafort if he would not appear voluntarily. A spokesman

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With Eye on China, Berlin Bolsters Power to Veto Foreign Takeovers

TIZIANA FABI/AGENCE FRANCE-PRESSE/GETTY IMAGES

NEW RULES: German Chancellor Angela Merkel, left, with French President Emmanuel Macron and Italian Prime Minister Paolo Gentiloni at a summit in Trieste, Italy. Berlin adopted legislation that effectively targets China's attempt to acquire key technology via takeovers. **A4**

Google Wins Key Decision On Taxes In France

By Sam Schechner

PARIS—Alphabet Inc.'s Google won a reprieve from one of its biggest legal battles in Europe on Wednesday, when a Paris court threw out a €1.11 billion ($1.27 billion) bill that France's tax authority has sought from the search giant for five years of back taxes.

In a decision issued Wednesday, Paris's administrative tribunal ruled that Google's lucrative advertising-sales business had no taxable presence in France—absolving it of income or sales taxes on advertising income from French clients.

The decision, covering the years 2005 to 2010, backs Google's position in a dispute that has dragged on for more than six years, and could have implications for other tax battles in Europe and elsewhere.

A Google spokesman said that the court "has confirmed Google abides by French tax law and international standards," adding: "We remain committed to France and the growth of its digital economy."

French Budget Minister Gérald Darmanin said the tax authority is analyzing the decision with a view to appealing it, noting "the significant role of French employees in Google's commercial activity in France."

Though the decision concerns only France, and is subject to appeal, it is a victory for Google and other Silicon Valley firms when they are facing multiple regulatory battles on topics including taxes, competition and privacy.

The European Union two weeks ago fined Google €2.4 billion ($2.7 billion) for abusing the dominance of its search engine to promote one of its own businesses, one of three antitrust cases in which the EU has filed formal charges.

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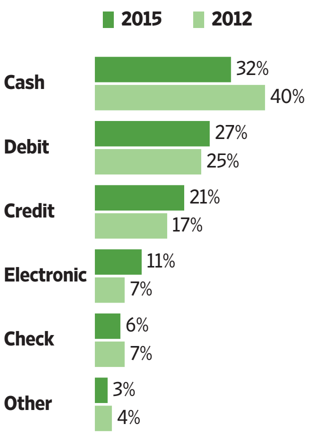
Visa Expands War on Cash

Share of U.S. consumer transactions by payment type



Source: Federal Reserve Bank of San Francisco
THE WALL STREET JOURNAL.

'OPENING SALVO': Visa is offering to upgrade small merchants' payment technology. In exchange, the firms must stop accepting cash. **B1**

HOUSING FRENZY CONFOUNDS CHINA

Higher rates and larger down payments don't deter Chinese buyers, who don't believe the government will allow a market collapse

By Lingling Wei and Dominique Fong

GUANGZHOU, China—The more China tries to rein in its roaring housing market, the more obsessed people get about buying.

In February, with this southern megalopolis in the throes of a property frenzy, state banks raised mortgage rates. Then came higher down-payment rules for second homes and limits on owning multiple apartments.

The result: Prices in Guangzhou continue to climb, and the market one town over has heated up.

Pei Zhiyong, a 56-year-old advertising executive, was barred by the new restrictions from buying a third apartment in Guangzhou. One Sunday in April, he drove his BMW SUV to Foshan, an hour away, to check out a new riverfront high-rise. He figures it's the ideal time to buy.

"The harder the government tries to control the market, the more prices will rise," Mr. Pei said.

With each new policy intended to restrict home purchases, buyers are piling in. Stressed about the prospect of being left behind, many are borrowing heavily, believing prices will continue to rise despite the restrictions and will soar if the government has to lift restrictions to spur economic growth.

Another article of faith is that the Communist Party won't allow housing prices to collapse. "The government will spare no effort to make sure there are no big swings in the property market," says Ni Pengfei, a housing expert at the Chinese Academy of Social Sciences, a government think tank.

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Zuckerberg Hits The Road

* * *

CEO meets people across America, with little notice

By Reid J. Epstein And Deepa Seetharaman

Mark Zuckerberg is trying to understand America, so he's embarked on a journey to meet people like hockey moms and steelworkers who don't typically cross his path.

But there are rules to abide by if you are an ordinary person about to meet an extraordinary entrepreneur.

Rule One: You probably won't know Mr. Zuckerberg is coming.

Rule Two: If you do know he's coming, keep it to yourself.

Rule Three: Be careful what you reveal about the meeting.

While the Facebook CEO

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INSIDE

ZUMA PRESS

BRAZIL'S DA SILVA GETS 9½ YEARS

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BLOOMBERG NEWS

TAP THE BRAKES ON ELECTRIC CARS

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Rates Are On the Rise, But Not for Depositors

By Christina Rexrode

Interest rates are rising. So why aren't bank customers demanding higher interest on their deposits? This is the dilemma confronting banks.

For now, most bankers are happy to keep deposit yields low, standing pat even as the Federal Reserve hikes short-term rates. No one is sure, though, how long customers will tolerate that.

"Many bank management teams believe we could be one to two hikes away from an increase in retail" deposit rates, John McDonald, a bank analyst at Bernstein, wrote in a recent note. "At the same time however, we've never quite seen a cycle like this play out

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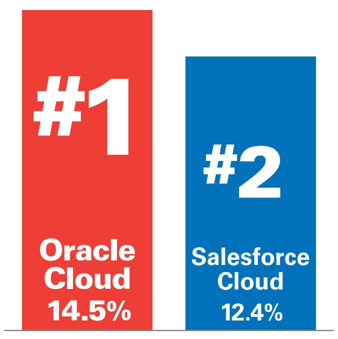
Oracle #1
SaaS Enterprise Applications Revenue



1,000+ Employees Segment, 2015

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Source: IDC "Worldwide SaaS Enterprise Applications Market Shares, 2015: The Top 15 by Buyer Size," doc #US41913816, Dec. 2016; Table 4. For the purposes of this report, SaaS enterprise applications include the following application markets: CRM, engineering, ERP, operations and manufacturing, and SCM. Copyright © 2017, Oracle and/or its affiliates. All rights reserved.

WORLD NEWS

CAPITAL ACCOUNT | By Greg Ip

Electric Cars Are the Future? Not So Fast

Skepticism of electric cars melts a bit more with each new announcement from the likes of Tesla, which last week launched production of a mass-market vehicle, and **Volvo**, which days later promised to phase out gasoline-only engines by 2019.

But that progress comes with two big caveats: First, it has relied on extensive public subsidies and, second, it has done little to reduce planet-warming emissions of carbon dioxide. If electric cars are ever to displace gasoline engines without government putting its thumb on the scale, they must not only keep innovating but outrun innovation in fossil fuels.

Electric cars have come a long way. They are no longer ugly, impossibly expensive and impractical, thanks to advances that have cut battery storage from $1,000 per kilowatt-hour in 2010 to $273 last year, according to Bloomberg New Energy Finance.

Nonetheless, that means a 75 kwh battery (about 250 miles of range) adds about $20,000 to the cost. So how do the cars sell? Public largess helps a lot. The U.S. federal government offers a tax credit of up to $7,500 each for the first 200,000 electric or plug-in hybrid cars a manufacturer sells. Throw in state tax credits, subsidies for recharging infrastructure, relief from gasoline taxes, preferential lanes and parking spots and government fleet purchases, and taxpayers help pay for every electric car on the road.

What happens when the credits go away? When Hong Kong slashed a tax break worth roughly $55,000 for a Tesla in April, its sales ground to a halt. In Georgia, electric vehicle sales plummeted 80% the month after a $5,000 tax credit was repealed.

Tesla will find plenty of niche buyers for its high-priced cars once it exhausts its credits. But for electric vehicles as a whole, hybrids have a sobering lesson. From 2005 to 2010, some hybrid buyers enjoyed a $3,500 tax credit. Sales kept rising after the credit expired, peaking at 487,000, or 3.1% of total vehicles, in 2013, according to Edmunds.com, when gasoline averaged $3.51 a gallon. A surge in oil supply caused gas prices to drop to $2.36 a gallon this year, and hybrids' market share fell to just 2.1%.

Many optimists think falling battery costs mean electric vehicles will inevitably displace the internal combustion engine (ICE). Last week, Bloomberg predicted electric cars would become "price competitive" with ICE cars in eight years without subsidies.

But such scenarios hinge not just on the cost of batteries but on the price of oil and the efficiency of competing vehicles. Economists Thomas Covert, Michael Greenstone and Christopher Knittel, in an article for the Journal of Economic Perspectives, estimate that at the current battery cost of $270 per kwh, oil would have to cost more than $300 a barrel (in 2020 dollars) to make electric and gasoline equally attractive. If battery costs fall to $100, as Tesla Founder Elon Musk has targeted, oil would have to average $90.

That could happen. But optimists "overlook the compensating effect of incumbent technology," says Kevin Book, of **ClearView Energy Partners**, an advisory firm. He notes, for example, the spectacular decline in natural gas prices that fracking has made possible. And ICE efficiency typically rises 2% a year.

ClearView says that in an optimistic scenario, where battery costs fall 10% a year starting now and gasoline begins at $5 a gallon, electric vehicles will be competitive in five years. If battery costs fall just 5% a year and gasoline starts at $2.25, it will take more than 20.

This would still be a step forward for the climate, but by how much depends on other factors. Electric vehicles are meant to be recharged at night. Economists Joshua Graff Zivin, Matthew Kotchen and Erin Mansur note in a 2014 article in the Journal of Economic Behavior and Organization that night is when electricity is likeliest to come from coal. They estimate electric vehicles account for more carbon dioxide per mile than comparable hybrids in most of the U.S.

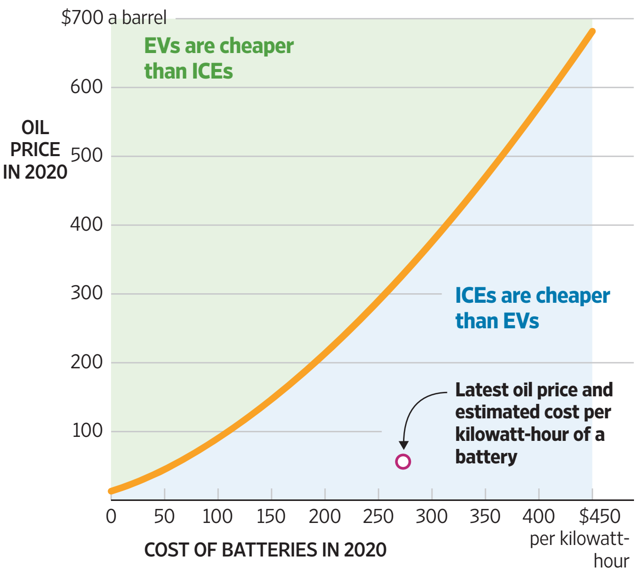
Regulators further dilute the reduction impact by giving auto makers additional credit for each electric vehicle, when complying with average fuel efficiency standards.

These subsidies have clearly accomplished one goal: They've accelerated innovation when the private market had little incentive to invest. Yet they may not be the most efficient way to combat carbon emissions. A carbon tax, for example, would incentivize conservation and alternative fuels regardless of oil prices.

Since that's unlikely for now, Mr. Greenstone and Sam Ori, both of the University of Chicago's **Energy Policy Institute**, and Cass Sunstein, of **Harvard University**, suggest scrapping the current array of fuel efficiency standards and assigning manufacturers a tradable emissions cap for each vehicle. This would put alternatives to electric cars on a level playing field. Just in case electric vehicles don't meet their heady expectations, the world should spread its bets.

The Future Is Not Yet Electric

For electric vehicles (EVs) to displace internal combustion engines (ICEs), it will require some combination of higher oil prices and cheaper battery storage.



Sources: Thomas Covert, Michael Greenstone, and Christopher R. Knittel

THE WALL STREET JOURNAL.

American Men's Tennis Roars to Life at Wimbledon

CLIVE BRUNSKILL/GETTY IMAGES

AT LAST: Sam Querrey, above, became the first American man to reach a major semifinal since Andy Roddick in 2009, beating Andy Murray, 3-6, 6-4, 6-7(4), 6-1, 6-1. Roger Federer also made the semis, while Novak Djokovic retired from his match with an elbow injury.

RATES

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before, so it's tough to know for sure."

How banks prepare for any moves by depositors is important for their profits, especially given disappointing loan growth this year.

Deposit rates will be top of mind for many investors when banks begin reporting earnings this Friday, because increases could maintain pressure on already-low net-interest margins.

The Fed had previously signaled that it expected to raise rates one more time this year, from the current range of between 1% and 1.25%. But Fed Chairwoman Janet Yellen, testifying before Congress on Wednesday, gave no indication about the timing of the next rate increase. She also said the Fed could alter its rate-raising plans if the slowdown in global inflation persists.

Separately, the Bank of Canada on Wednesday raised its policy rate to 0.75% from 0.50%, the first time it has increased rates in seven years.

Banks have been dealing with interest-rate cycles and depositors for decades, but a number of factors, both psychological and technological, make this time of rising rates different. A decade of near-zero rates, more competition from online firms, less loyalty from customers and new capital rules, among other factors, are making preparations more difficult.

"We've never really seen this movie before," Marianne Lake, chief financial officer of J.P. Morgan Chase & Co., told investors recently.

Of course, banks don't want to raise deposit rates until they have to. Though they tend to raise certain loan rates as soon as the Fed makes a move, they prefer to let deposit rates lag, bolstering profits.

And when they do raise rates, it is often because competition has forced them. "Nobody wants to be first," said Greg Carmichael, chief executive of Fifth Third Bancorp. "But nobody wants to lose deposits."

So far, the Fed has raised rates four times since December 2015, but banks haven't been under much pressure to raise deposit rates concurrently.

0.09%

BofA's first-quarter cost for U.S. interest-bearing deposits

Bank of America is a case in point. Its cost for U.S. interest-bearing deposits in the first quarter was just 0.09%—unchanged from the prior quarter and the lowest among its peers.

Talking with analysts recently, finance chief Paul Donofrio said it seemed unlikely that customers would leave the bank to chase rates because many had their primary checking accounts there.

Officers at some banks believe it will take another one or two Fed rate increases before they have to start raising deposit rates. Others believe customers will start to demand higher deposit rates now that the Fed rate has crossed the visually important 1% threshold.

"The first Fed increase, people are like, 'Oh, it's still so small, who cares?' " said William H.W. Crawford IV, chief executive of United Financial Bancorp Inc., a community bank based in Glastonbury, Conn. "By the fourth or fifth increase, people care."

Or at least they used to care. A complicating factor is that depositors haven't thought of bank accounts as income-producing instruments in nearly a decade, thanks to the Fed's near-zero interest-rate policies.

Given that, many customers have come to view banks in terms of the services they offer, such as mobile banking, rather than the rates they pay.

Another difference: Banks are awash in deposits. At the end of June, total deposits at U.S. commercial banks equaled $11.72 trillion, only slightly below an all-time high reached in May, according to Fed data.

What's more, loan growth has slowed this year, so the 4.7% average rate of deposit growth during the first half of 2017 was ahead of the 4.5% average rate of loan growth, Fed data show. Loans at U.S. commercial banks are equal to just 79% of total deposits, meaning even if banks saw some deposit outflows, many would have plenty of room to keep lending.

Fitch Ratings analysts said in a recent report that they expect banks will be able to keep deposit rates low throughout 2017, even if the Fed raises rates again, and won't meaningfully increase their rates until loan demand picks up.

Yet banks can't ignore depositors if they start to make moves. There are regulatory concerns, for example.

In certain tests related to the amount of liquid assets a bank has on hand, consumer deposits are more valuable than commercial deposits. That could prompt some banks to act quickly if depositors get itchy.

Meanwhile, technology has made it much easier for depositors to quickly shift funds and to use multiple banks.

Andrew Bain doesn't think much of the rates at J.P. Morgan Chase & Co., which generally pays customers with savings accounts from 0.01% to 0.08%. But he likes the bank's QuickPay system, which lets him pay for his children's day care easily and without a fee.

So Mr. Bain, who works in corporate finance in Portland, Ore., found a workaround. He keeps enough money at J.P. Morgan to pay some bills and spreads the rest between a credit union and an online bank, both of which pay him more than 1%.

A number of online-focused banks, like Ally Financial Inc. and Synchrony Financial, are able to pay higher rates because they are less encumbered by brick-and-mortar expenses. An even newer competitor, Goldman Sachs Group Inc., has been driving rates higher to draw deposits to its new consumer bank. It currently offers 1.2% interest on online savings accounts.

All those factors combined raise the prospect that when consumers do decide to move, banks may be forced to raise rates at a faster pace than investors might be expecting.

Nelson Bonilla is part of that threat. His savings account at Synchrony pays about 1.15% interest. But Mr. Bonilla, a software developer in San Francisco, is on the lookout for institutions that might pay more.

Though he has already moved his savings account twice in recent years, he's open to being wooed away a third time. "I wouldn't hesitate," Mr. Bonilla says, "to switch again."

GOOGLE

Continued from Page One

Multiple European regulators are investigating Facebook Inc. over its use of personal data, and tech companies are clashing with authorities over how to best remove hate speech and terrorist propaganda from their platforms. Last month, Germany passed a law threatening fines of up to $57 million for companies that don't comply quickly enough.

Taxes have been a particular pressure point. Politicians in countries such as France and the U.K. have said tech giants declare too little profit in their countries and then manage to reduce whatever profit they do declare elsewhere in Europe by paying untaxed royalty fees that often end up in tax havens.

Several European countries, other than France, have pursued Google for back taxes. Spain raided Google offices in Madrid last year, and the company earlier this year agreed to pay Italian tax authorities €306 million ($349 million).

The EU last year demanded that Ireland recoup as much as €13 billion ($14.8 million) in back taxes from Apple Inc. stemming from profits the EU said Apple should have declared as taxable in Ireland, and it is investigating whether Amazon.com Inc. should owe back taxes to Luxembourg. Apple is appealing, and Amazon has said it pays all the tax it owes.

The threat of legal action—coupled with new tax rules proposed by the Organization for Economic Cooperation and Development, and a new "diverted profits tax" in the U. K.—has led companies to make structural changes. Last year, Facebook began directing U.K. clients to start paying an affiliate in the country rather than funneling that money through Ireland and then on to the Cayman Islands, boosting its tax payments in the U.K.

Google also made a controversial tax deal with the U.K. that involves attributing more income to that country, therefore paying more taxes there.

The French case indicates, however, that there may be limits to tax authorities' efforts to make significant clawbacks of taxes under existing laws.

Similar to how Google operates in other large EU countries, its French unit doesn't sell ads to French customers, but rather offers only logistical and marketing support to the Google unit in Ireland that closes the advertising deals. Google Ireland pays the French unit for that support service, leaving a smaller profit in France than if the sales were booked in the country.

Politicians have said tech giants declare too little profit in their countries.

The French tax authority argued that the structure is fictitious and that it believed French employees were actually selling ads in France. The authority said that meant the Google's Irish unit should have paid income and sales taxes as if it had a "permanent establishment" in France.

But in its decision, the court backed Google's argument that its French employees were doing nothing more than preparatory work allowed under the Franco-Irish tax treaty.

France's tax authority has separately complained to France's tax prosecutor, which said last year that it has been investigating the company since 2015 for aggravated tax evasion. Wednesday's court decision that Google doesn't owe any additional taxes could complicate that criminal case.

CORRECTIONS & AMPLIFICATIONS

The estimate for the price-earnings ratio of the S&P 500 index for the week ended July 7 was 18.56. The Markets Digest published in the Business & Finance section on Monday and Tuesday incorrectly said the P/E estimate was 21.44 because of incorrect data from Birinyi Associates.

The JBL Flip 4 Bluetooth speaker costs $100. An Off Duty article in the June 30-July 2 edition about waterproof gadgets incorrectly listed a price of $150, which is the price of a similar model, the Charge 3.

Readers can alert The Wall Street Journal to any errors in news articles by emailing **wsjcontact@wsj.com**.

THE WALL STREET JOURNAL.
Europe Edition ISSN 0921-99
The News Building, 1 London Bridge Street, London, SE1 9GF

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Printers: France: POP La Courneuve; Germany: Dogan Media Group/Hürriyet A.S. Branch; Italy: Qualiprinters s.r.l.; United Kingdom: Newsprinters (Broxbourne) Limited, Great Cambridge Road, Waltham Cross, EN8 8DY

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Editeur responsable: Thorold Barker M-17936-2003. Registered address: Avenue de Cortenbergh 60/4F, 1040 Brussels, Belgium

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WORLD NEWS

Risky Test of Wills Unfolds Over Baltic Sea

Adversarial flights, close intercepts raise concern of escalation between Russia, NATO

NATO and Russian pilots are reviving a Cold War contest of nerves, increasing the risk that airborne close encounters could accidentally spark a conflict.

*By **Nathan Hodge** in Moscow and **Julian E. Barnes** in Brussels*

Over the past three years, the number of adversarial flights near the other side's planes and ships have increased significantly. The tactic, usually meant as a show of force or used to test tactics, revives a dormant game of chicken long played by Soviet and North Atlantic Treaty Organization pilots.

It was a risky game: Aircraft sometimes narrowly avoided midair collisions, and opposing ships occasionally collided at sea. NATO officials now worry about a new phase of reckless gamesmanship and its consequences.

Concerns have risen to the point where they now figure large in conversations between NATO and Russia. The NATO-Russia Council, a body established in 2002 to encourage cooperation and consultation between Moscow and the alliance, is set to meet Thursday to discuss large-scale Russian exercises in September. Western officials worry the exercises could lead to a new surge in midair incidents.

The Baltic Sea has become the focal point for this new white-knuckle geopolitical tussle. Rhetoric is rising in the region, where newer NATO members on Russia's border are nervous and Russia's military has shown a willingness to use close intercepts as political messages.

NATO and U.S. officials believe an accidental air-to-air collision, or a plane crashing into a ship, is one of the most dangerous threats facing the alliance. A deadly mishap could engender an escalation—with each side accusing the other of provocation.

"What we see in the Baltic Sea is increased military activity—we see it on land, at sea and in the air, and that just underlines the importance of transparency and predictability to prevent incidents and accidents," NATO Secretary General Jens Stoltenberg said. "And if they happen, it is important to make sure they don't spiral out of control and create dangerous situations."

Allies are expected to raise the issue of the intercepts at Thursday's meeting, officials said. Allied officials said risk reduction in the Baltic Sea is a concern, in particular in light of what one NATO official called "unsafe and unprofessional behaviors by Russian pilots."

The air-safety issue has been discussed in that forum before, but it is taking on renewed urgency because of the coming exercises and several close calls this year.

Global Zero, a research and advocacy group that opposes nuclear weapons, analyzed 97 midair confrontations between Western and Russian military aircraft over the Baltic between March 2014 and April 2017, more than two-thirds the global total of air intercepts in that period. Such confrontations were rarer in the decade before Russia annexed Crimea from Ukraine in early 2014.

Markers are already down. The U.S. recently accused a Russian Su-27 jet fighter of unsafely intercepting an American reconnaissance plane on June 19 and flying erratically just yards away from it.

Two days later, Russian television broadcast footage appeared to show a Polish F-16 approaching a plane with the Russian defense minister on board. A Russian Su-27 fighter then zooms into the picture, performing what the Russians described as a warning maneuver before flying away. The channel quoted Russian military expert Alexander Zhilin as saying the allied pilots "are conducting themselves simply like bandits."

Poland has said its plane was on a NATO patrol mission when it intercepted the Russian jet. NATO officials have said there was nothing unprofessional about the intercept.

Western officials and the Global Zero report say it is Russian pilots who more often undertake unsafe intercepts. Some, they say, are accidents, some negligence, and others intentional shows of force.

Lukasz Kulesa, research director at the **European Leadership Network**, a London-based think tank, said some of the most recent incidents "seem to be connected to sending a message to the other side."

Mr. Kulesa noted that Russian aircraft approached American spy planes over the Baltic Sea shortly after an escalation in the confrontation between the U.S.-led coalition and the Syrian regime that led to the shooting down of a pro-regime drone and Syrian warplane by American aircraft.

"It's a way to say that we, the Russians, are displeased with your behavior," Mr. Kulesa said.

Some allied and U.S. officials believe the Russian government uses confrontations to turn up and down the pressure in the region for geopolitical advantage, ordering pilots to be cautious or to approach more aggressively.

Moscow denies this and that their pilots are at fault, saying it is the West that has been eroding security by building up its military forces on Russia's borders.

NATO and Russia are working to agree on "risk reduction" measures in the Baltic region. Western and Russian officials say progress is a test of each side's seriousness about dialogue despite deep suspicion.

"We share the view dialogue is important," Alexander Grushko, Russia's ambassador to NATO, said last month. "The prevention of military incidents demands...systemic communications between the two militaries, and discussions [by] military experts."

Finland has organized one discussion between NATO and Russia on safety measures and proposed requiring all planes to use transponders. Allied officials have reacted skeptically to the transponder measure, noting many Russian military aircraft don't have transponders. American reconnaissance planes also don't always operate with them on.

Many Western officials fear the large military exercises Russia and Belarus are planning for the fall will raise the risk of an incident. In a sign of the concern about potential provocations by Russia, the U.S. adjusted the rotation of fighter planes for the NATO air-policing mission in the Baltic, so that its planes rather than those of less-experienced pilots from other NATO countries would be on alert during the Russian exercises in the fall.

When Russia begins its major exercise, called Zapad or West, over the Baltic airspace in September, Sweden will be conducting its own, called Aurora, joined by a number of NATO countries.

"We hope everyone keeps calm," Finnish Defense Minister Jussi Niinistö said.

A U.S. RC-135U, flying in international airspace over the Baltic Sea, is intercepted by a Russian SU-27 Flanker on June 19.

MASTER SGT. CHARLES LARKIN SR./US AIR FORCE/ASSOCIATED PRESS

Tensions in the Sky Recall 'Top Gun' Era

Aerial daredevilry between Russian and American pilots has a history.

Ward Carroll, a former F-14 Tomcat radar intercept officer, recalled that in the Top Gun-era game of chicken in the 1980s, slow-flying Soviet warplanes would lumber past U.S. aircraft carriers. A carrier would launch fighters to intercept them, with Mr. Carroll and his fellow naval aviators flying high-speed passes over Soviet ships as a show of force.

The aerial maneuvers had a serious purpose during what one Russian-language aviation history described as the "hot skies of the Cold War." Both militaries could test the other's tactics, assessing the range and capabilities of ships and aircraft.

The Soviets wanted to score propaganda points by capturing images of their planes buzzing U.S. carriers. The Americans intercepting them wanted to take close-up photos of the antennae and telltale bumps on the fuselage of the Soviet aircraft that could reveal vital intelligence about their capabilities.

"Anytime they took a picture of a carrier, you wanted a Tomcat in the picture," Mr. Carroll recalled. "It was photobombing. That was our job, to photobomb the Russians as they flew past the carrier."

The game of nerves had lighter moments, underscoring a sort of camaraderie among aviators. Mr. Carroll recalled flashing copies of Playboy magazines at the Soviet pilots, and he and his colleagues removing their helmets and putting on Ronald Reagan masks to spoil Russian photographs.

—Nathan Hodge

WORLD WATCH

EUROZONE

Economic Upturn Picks Up Steam

Output at the eurozone's factories, mines and utilities rose at the fastest annual pace in more than five years in May, a fresh indication that the area's economic recovery picked up in the second quarter.

The eurozone economy grew at the fastest rate in two years during the first three months of 2017, outpacing the U.S., the U.K. and Japan. Business surveys suggest that the more rapid pace of growth has continued, and figures for industrial production released on Wednesday back them up.

The European Union's official statistics agency said output was up 1.3% from April, and 4% from May 2016. The annual rate of increase was the fastest since August 2011. That performance was stronger than expected.

—Paul Hannon

GERMANY

Police Arrest Four In Gold-Coin Robbery

Hundreds of German special police raided several buildings in Berlin early Wednesday, arresting four suspects in connection with the theft of a 221-pound Canadian gold coin stolen from one of the city's museums this year.

Heavily-armed masked police arrested the suspects, one wearing a hood over his head, in Berlin's Neukoelln neighborhood. Another nine people are being questioned in the case. All suspects are related and are between 18 and 20 years old, police said.

The raids of 13 buildings lasted several hours, but the gold coin wasn't recovered.

"We assume that the coin was partially or completely sold," Carsten Pfohl of the Berlin state criminal office said, adding that police also confiscated clothes and cars to comb for traces of gold.

The Canadian "Big Maple Leaf" coin, valued at several million dollars, was stolen from the Bode museum in March.

Police say the 1.2-inch-thick coin, with a diameter of 20.9 inches, has a face value of 1 million Canadian dollars ($774,300). By weight alone, however, it would be valued at nearly $4.5 million at market prices.

Experts think the coin may have been melted down to cash in on the gold. Police also searched a nearby jewelry store, saying they had indications the store may have been involved in the possible sale.

—Associated Press

HANI MOHAMMED/ASSOCIATED PRESS

WAITING ROOM: A man hoped to be treated for a suspected cholera infection at a hospital in San'a, Yemen, on Wednesday. The United Nations special envoy to the country warned that the conflict in the Arab world's poorest nation has sparked the world's worst epidemic of the disease.

Huge Iceberg Breaks Off Antarctic Peninsula

By Daniela Hernandez

Scientists reported Wednesday that an iceberg nearly the size of the state of Delaware broke off the Antarctic Peninsula, changing the continent's landscape in one of the largest such "calving" events in recent history.

Experts say the new iceberg—at 2,240 square miles, or 12% of the total ice shelf from which it came—won't lead to rising sea levels because the same amount of mass was already submerged in the water.

But they do worry about what it means for the floating ice shelf from which it came, called Larsen C, and whether the calving might herald a growing vulnerability to the warmer temperatures associated with climate change.

"Antarctica has lost area by a huge amount," said Martin O'Leary, a scientist at Swansea University in the U.K. who is part of a European project focused on studying Western Antarctica.

Ice shelves are large floating ice formations hanging off the perimeter of the Antarctic land mass. Scientists are particularly interested in the western region of the continent, in part because recent data show that the ice shelves there are melting more rapidly than they are being replenished.

Two ice shelves, Larsen A and Larsen B, have previously collapsed. Larsen C could be next, according to scientists. In 2000, a larger chunk splintered off the Ross Ice Shelf on the Western edge of Antarctica to the south of the Larsens.

It is unclear whether climate change contributed to the rift that developed recently in Larsen C and the eventual calving of the new iceberg.

"People are pretty hesitant to say this is for sure related to climate change," said Kelly Brunt, a glaciologist at the University of Maryland and the NASA Goddard Space Flight Center.

While it is "way outside" the average size of other observed calving events, scientists haven't observed telltale signs of warming-induced changes, like melt ponds, she said. When the Larsen B ice shelf collapsed in the early aughts, scientists had documented pools of meltwater that eventually led its breaking apart, and therefore attributed it in part to climate change.

Trump Travels to Paris for Macron Talks

U.S. president makes quick visit for Bastille Day amid controversy over his son's meeting

By Rebecca Ballhaus And William Horobin

EMMANUELE CONTINI/NURPHOTO/ZUMA PRESS

U.S. President Donald Trump chatted with French President Emmanuel Macron at the summit of G-20 leaders in Hamburg last week.

PARIS—President Donald Trump is set to arrive in Paris Thursday morning for a whirlwind visit amid a political storm at home over revelations that his son welcomed incriminating information on Democrat Hillary Clinton he was told came from the Russian government.

French President Emmanuel Macron is set to treat Mr. Trump to fine dining and a front-row seat at the Bastille Day military parade, as the leaders seek to overcome deep divisions on trade and climate change. Both men see advantage in bolstering ties, as Mr. Macron looks to raise his global profile and Mr. Trump finds himself increasingly isolated abroad.

White House officials described the French leader in flattering terms before the trip, while French officials say the two men don't hesitate to discuss their disagreements.

"It's a working relationship that has been extremely open, frank and direct, but also constructive," a French official said.

Mr. Trump's relationship-building efforts abroad this week are unlikely to break through in Washington, which has been rocked by the revelation that Donald Trump Jr. in June 2016 met with a Russian lawyer after being promised damaging information about Mrs. Clinton that he was told had been gathered as part of a Russian government effort to boost Mr. Trump.

Congressional investigators have called for the younger Mr. Trump to testify, as a special counsel appointed by the Justice Department this year probes whether the president's campaign associates colluded with Moscow to interfere in the 2016 U.S. election.

The two leaders are set to hold a news conference Thursday evening, likely the first time Mr. Trump will face questions in such a forum about his son's meeting with the Russian lawyer. The president is also set to speak in public for the first time since he returned from the Group of 20 summit in Hamburg on Saturday. On Wednesday morning, he tweeted in defense of his son and his administration, saying: "The W.H. is functioning perfectly."

After touching down Thursday morning, Mr. Trump is set to hold a working lunch with Gen. Joe Dunford, the chairman of the Joint Chiefs of Staff, and other U.S. military officials, while Mr. Macron meets separately with German Chancellor Angela Merkel.

After military ceremonies with Mr. Macron to commemorate the 100th anniversary of the U.S. entry into World War I, Messrs. Trump and Macron will hold a bilateral meeting, currently scheduled to last an hour and 15 minutes, that is expected to focus on Syria and counterterrorism efforts.

The White House said the two leaders could also discuss trade and climate change—two areas where they have opposing views. Mr. Macron has been a vocal critic of Mr. Trump's decision to pull out of the Paris Accord and launched a website to lure researchers and investors in renewable energy to emigrate to France. The initiative, dubbed "Make Our Planet Great Again," parodies Mr. Trump's campaign slogan.

French officials say they won't make any changes to the Paris Accord to suit U.S. demands, but will continue to push for Mr. Trump to rejoin.

"You never give up hope of being able to convince. I think that's a duty given my role, but it's also part of my character," Mr. Macron said at the G-20 meeting Saturday.

On Thursday evening, the two leaders and their wives are expected to dine at the luxurious restaurant Le Jules Verne on the second floor of the Eiffel Tower. On Friday, Mr. Trump and first lady Melania Trump will be the guests of honor at the Bastille Day celebrations, which will be led by U.S. forces in commemoration of the centennial. The Trumps are scheduled to depart for Washington shortly afterward.

Trump administration officials had positive words about France and its leader ahead of Mr. Trump's visit and characterized the two leaders' relationship as strong. In a White House briefing on Tuesday, a senior official described Mr. Macron as an "innovative, charismatic guy" who has "been a real trailblazer" and said the nations share more similarities than differences.

"There are some issues where we see the world a little bit differently, but many issues where we see the world more or less the same," the official said. The official also praised France for its commitment to the North Atlantic Treaty Organization, noting that the country already commits 1.8% of its gross domestic product to military spending. "France is far and away one of the strongest military members of the alliance," the official said.

A French official said the two armies are working in "perfect interoperability" and the level of trust "has never been so high." Mr. Trump has been a vocal critic of allies that fall considerably short of the NATO goal of spending 2% of GDP on the military.

Messrs. Trump and Macron had a rocky start to their relationship following Mr. Macron's victory in May after a campaign in which Mr. Trump had expressed support for his opponent, far-right politician Marine Le Pen.

In their first meeting, at a NATO summit in Brussels in May, the two leaders' handshake devolved into a death grip, in which their knuckles were described as turning white and their jaws as clenching. Mr. Macron later told a French newspaper the move was "not innocent" and was intended to show that he wouldn't "make small concessions, not even symbolic ones."

In Shift, France To Speed Tax Cuts

PARIS—Emmanuel Macron's government revised its budget plans to front-load deeper tax cuts the French president says will drive job creation and growth.

The French government made the tweaks after Prime Minister Édouard Philippe said only a week ago that some tax cuts would be delayed as the country faced a mountain of debt and a larger-than-expected deficit this year.

On Wednesday, however, Mr. Philippe said that after consulting with Mr. Macron he would make tax cuts to the order of €11 billion ($12.6 billion) in 2018 to spur the gradual acceleration in the economy. To finance the cuts and keep the deficit under the European Union's limit of 3% of economic output, the government will find €20 billion of savings in 2018.

"We want to spark a tax blast effect in favor of investment, employment and growth," Mr. Philippe said in an interview with French daily Les Echos.

The to-and-fro on the budget plans shows the challenge Mr. Macron faces to juggle competing pledges that defined his political brand. On one hand, the 39-year-old leader is seeking to improve France's standing in Europe by repairing the country's finances, while on the other hand he is promising pro-business measures that can be costly to the public coffers.

The announcement of delays to tax cuts drew criticism from business leaders last week, but overall Mr. Macron's pro-business stance has struck a chord with investors. At an event promoting Paris as a financial center on Tuesday, J.P. Morgan Chase Chief Executive Jamie Dimon praised the new government for making the capital city a more attractive place to invest and recruit thanks to a promised loosening of labor laws and lower taxes on the financial sector.

"It has a new president who I think is great, who's behind entrepreneurship, growth and jobs. And it's nice to be wanted," Mr. Dimon said.

Of the €11 billion in tax cuts in 2018, the French prime minister said overhauling France's wealth tax to encourage investment will cost the state €3 billion in lost revenue next year. Cuts to taxes on savings will cost €1.5 billion and a reduction in local-residency taxes another €3 billion.

To finance the tax cuts and keep a lid on the deficit, the government will freeze the volume of public spending. That will deliver €20 billion of savings in 2018, Mr. Philippe said, without giving details of where the state will rein in spending.

Overall, the deficit will fall to 2.7% of gross domestic product in 2018 from 3% this year, the government said. In 2019, the deficit will rise to 2.9% of GDP due to the one-time cost of transforming a tax credit into a straight tax cut. The deficit will then drop to 1.5% of economic in 2020, according to the government forecasts.

—William Horobin

Germany Stymies Foreign Takeovers

By Andrea Thomas

TRUEBA/EUROPEAN PRESSPHOTO AGENCY

Economics Minister Brigitte Zypries, left, confers with Finance Minister Wolfgang Schäuble.

BERLIN—Germany is putting up barriers to protect its technology from Chinese suitors.

The government adopted new legislation Wednesday that will make it easier for it to veto takeovers of strategically important companies, a move that effectively—though not nominally—targets China's attempt to acquire key technology.

The new rules will apply mainly to targets in the defense sector and developers of critical software powering financial and telecommunications services, public transport or power grids.

Under the new rules, Berlin will be allowed to impose reporting obligations on investors and request longer review periods for deals.

"We remain one of the most open economies in the world, but we also watch out for fair competition. We owe this to our companies," said Economics Minister Brigitte Zypries as she outlined the plan.

The move illustrates how a push among mature economies for fairer trade terms with the rest of the world—from U.S. President Donald Trump's "America First" policies to French President Emmanuel Macron's call for more trade protection—is gaining ground. The trend is occurring even in Germany, a country whose economy is highly reliant on exports and which is a vocal advocate of free trade.

In recent months, Germany, France and Italy have called for the creation of a European equivalent to the Committee on Foreign Investment in the U.S., which reviews sensitive foreign investments. The U.S. is also considering new protections after Chinese investments there tripled last year.

In Berlin, China is the main concern. Last year, Chinese firms, often backed by government money, bought German competitors at a rate of one a week, a push analysts believe reflects the Chinese government's plans to dominate advanced manufacturing by 2025.

"German companies are certainly a flashpoint because it's all about high-tech industries and China catching up," said Jan Gaspers, researcher at the Mercator Institute for China Studies in Berlin.

"Germany is just the market leader in many domains...It's a natural target," he said.

Overall, the number of German companies under Chinese control rose to 270 in 2014 from 153 in 2009, according to the most recent German government statistics available.

Chinese investments in Germany reached $10.8 billion in 2016, from $500 million in 2015, while total investment in Europe was $97.8 billion, more than three times the level of 2015, according to data provider Dealogic. Figures available so far for 2017 suggest waning appetite, with the value of acquisitions in Germany reaching $2.6 billion and $31.7 billion in Europe, according to the firm.

The new rules were partly prompted by last year's successful $5 billion purchase of Kuka AG, which makes robotics systems for the auto and aerospace industries, by China's Midea Group.

Berlin already had limited legal tools to review foreign investments on national security grounds. In recent years, it scrutinized 40 to 50 deals a year by non-EU investors bidding for at least 25% of strategically important assets.

Last year, the government blocked a €670 million ($760 million) bid for technology company Aixtron SE by the German unit of China's Fujian Grand Chip Investment Fund LP, drawing a complaint by the Chinese ambassador.

The new rules are controversial among German business. Instead of raising new barriers, the government should raise pressure on others to lower theirs, the influential BDI Federation of German Industry said in a statement Wednesday.

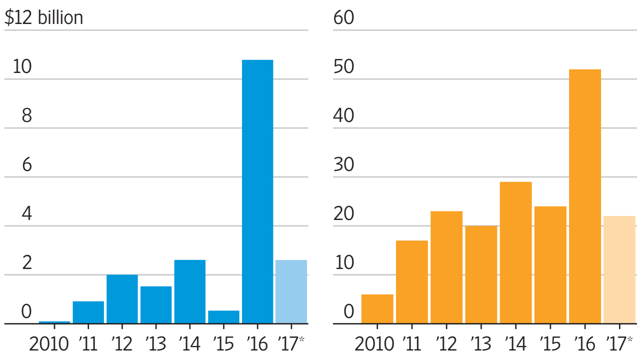
In a visit to China last year, Chancellor Angela Merkel expressed frustration with the country's own barriers to investment. Foreign companies can't acquire Chinese firms in many industries and are limited to forming local joint ventures.

—Natalia Drozdiak and Emre Peker in Brussels contributed to this article.

Grabbing German Know-How

China's shopping spree took off in the past year... **China's acquisitions in Germany**

...with an average of one company per week changing hands **Number of deals**



*Though July 12 Source: Dealogic

THE WALL STREET JOURNAL.

EU's Brexit Official Holds U.K. to Vows

By Laurence Norman

OLIVIER HOSLET/EUROPEAN PRESSPHOTO AGENCY

Michel Barnier said the clock is ticking on Brexit negotiations.

BRUSSELS—Britain must stand by the spending commitments it has made to the European Union if it wants to progress during Brexit talks into discussions on a future trade deal, the EU's chief negotiator Michel Barnier said.

With the second round of Brexit talks set to start on Monday, Mr. Barnier on Wednesday urged the U.K. government to present position papers on all the priority issues in the talks, saying that so far Britain had only set out its stance on the future rights of EU citizens in the U.K. once Britain leaves the bloc in March 2019.

The EU has placed several key divorce issues as priorities in the talks, which it says must be tackled before the bloc starts working on the outlines of a future trade deal. They are citizens' rights, the situation in Northern Ireland and a divorce bill, which represents British EU spending pledges agreed in the past.

"These three priority subjects...are indivisible," Mr. Barnier said in a press conference. "Now what that means in other words is that progress on one or two of these subjects would not be sufficient in order for us to be able to move onto" discussions on a future trade deal.

"The sooner we receive clarification on the British positions from the topics we have not heard from them on, the better," the former French foreign minister said, adding that he would work through the July 14 holiday to comb through British positions. "I am ready. Our team is ready."

Mr. Barnier said the EU team would send additional position papers on divorce issues to London ahead of next week's talks. They have already sent nine such papers on specific divorce issues.

EU officials have said the U.K. should stand by financial commitments of upward of €60 billion ($68.81 billion) when it leaves.

U.K. officials have said they would abide by legal commitments but have questioned the reasoning behind demands for large sums. On Tuesday, U.K. Foreign Secretary Boris Johnson called such large figures "extortionate" and said Brussels can "go whistle" if they want Britain to pay such amounts.

Mr. Barnier responded to that comment in his remarks on Wednesday: "I am not hearing any whistling, just the clock ticking," he said, referring to the tight timetable for the exit talks.

Mr. Barnier has in the past said he hopes to be in a position to recommend to EU leaders in October that enough progress has been made on the priority divorce issues for negotiations to move ahead. However there have been warnings from officials and diplomats in Brussels that if Britain doesn't speed its responses on the main issues, that timetable may be delayed. Mr. Barnier didn't specifically echo that.

Brazil Ex-President Convicted of Graft

JOÉDSON ALVES/EFE/ZUMA PRESS

Former Brazilian President Luiz Inácio Lula da Silva at a party conference in Brasília last month.

By Samantha Pearson
And Luciana Magalhaes

SÃO PAULO—Former President Luiz Inácio Lula da Silva, the most popular politician in Brazil's history, has been sentenced to almost a decade in prison for corruption and money laundering, dealing a heavy blow to his leftist Workers' Party and its chances of regaining control over Latin America's biggest country in elections next year.

Sergio Moro, the judge at the head of Brazil's vast Car Wash graft investigation, found Mr. da Silva guilty Wednesday of corruption and money laundering, sentencing the 71-year-old to nine-and-a-half years in prison, according to a court document.

Mr. Moro ruled that Mr. da Silva received "undue benefits" from construction group OAS and laundered money by trying to hide his ownership of a luxury beachside apartment in São Paulo that OAS built. Prosecutors had accused the former president of accepting the apartment and its costly renovation as part of about $1.2 million in bribes from OAS in exchange for securing contracts with state-owned oil company Petróleo Brasileiro.

"The responsibility of a President of the Republic is enormous and, consequently, so is the guilt when he commits crimes," Mr. Moro ruled.

The ruling, the highest-profile sentence yet in the Car Wash case, is the first verdict to emerge from five graft-related charges against Mr. da Silva.

He has repeatedly denied any wrongdoing, saying he is the victim of a political witch-hunt. He is expected to appeal and is allowed to do so while out of jail. His lawyers didn't immediately respond to requests for comment.

Brazil's currency and stocks extended their gains after Mr. the sentence as traders bet the move would make it harder for Mr. da Silva and his Workers' Party to return to power.

"The market's view is that a candidacy by ex-President Lula could put many uncertainties regarding economic and fiscal policy on the horizon," said Pedro Paulo Silveira, an economist at Nova Futura brokerage.

A former metal worker, Mr. da Silva became Brazil's first working-class president in 2003. His social policies, coupled with a commodity boom during his eight years in office, are credited with lifting close to 30 million Brazilians out of poverty.

Despite being accused by prosecutors of masterminding Brazil's multibillion-dollar bribery-and-kickback scheme, Mr. da Silva still ranks as the country's most popular politician and has signaled he plans to run for president in elections in October next year.

The Workers' Party has said it has no "Plan B" for winning in 2018 other than with its founder Mr. da Silva as candidate.

Constitutional experts fear Mr. da Silva's conviction, as well as the outstanding charges against him, could plunge next year's elections into a legal quagmire, presenting one of the biggest challenges yet for the country's courts. In one of several scenarios, it would even be technically possibly for Mr. da Silva to be elected president from inside jail.

"This is really an unprecedented situation," said Ricardo Cury, a professor of constitutional law at Brazil's FAAP University. "Brazilian politics is truly like a game of chess—there are so many moving parts right now."

If the conviction is upheld, Mr. da Silva would be expected to go to jail, based on a Supreme Court ruling last year. Under the 2010 'Clean Record' law, Mr. da Silva would also not be allowed to run for public office for the next eight years.

Since it began in 2014, Operation Car Wash has unveiled a nationwide bribery and kickback scheme in which companies paid billions of dollars of bribes in exchange for government contracts, cheap state loans and other favors. Politicians spent the cash on everything from jewelry and yachts to their election campaigns.

—Jeffrey T. Lewis and Paul Kiernan contributed to this article.

Venezuela Was Pressured to Move Prisoner

An international team led by a former Spanish prime minister met secretly for months with leading Venezuelan officials to persuade them to move

By Santiago Pérez, Juan Forero and Kejal Vyas

the country's most-prominent political prisoner to house arrest from jail, people involved in the talks told The Wall Street Journal.

President Nicolás Maduro's government, buffeted by more than 100 days of protests and growing international condemnation, on Saturday commuted Leopoldo López's nearly 14-year sentence, transferring him from the Ramo Verde stockade to his home in Caracas.

"We've been telling Maduro for a very, very long time that he has to give a signal, and the signal has to be the release of the political prisoners," said one of those close to the talks.

The person said the mediators—led by former Spanish leader José Luis Rodríguez Zapatero and including two former presidents, Leonel Fernández of the Dominican Republic and Martín Torrijos of Panama—believe Mr. López's release is a sign that the government and an opposition coalition could hold talks to dial down the unrest, which has led to 93 deaths, mostly of antigovernment demonstrators.

"The antagonism and challenges are huge, and the only way is to look for basic agreements to avoid confrontation," said a second person involved in the talks. "You need to make an effort so one party recognizes the legitimacy of the other."

Mr. López, 46 years old, who was convicted in 2015 of inciting violence, occasionally got messages to the public from his cell urging opponents to maintain pressure on the government. He has been demonized by the government, with some officials referring to him in official pronouncements as "the Monster of Ramo Verde."

CARLOS BECERRA/BLOOMBERG NEWS

Opposition leader Leopoldo López outside his house in Caracas after he was freed from prison and placed under house arrest.

Mr. López's transfer was seen by opposition moderates as a positive sign for the mediators, who started working months ago to break the political deadlock that has engulfed the country amid social turmoil and economic collapse. As word of the foreign mediators' efforts has filtered out in recent months, however, they were criticized for having secured few, if any, tangible concessions from the government.

Venezuela's Information Ministry didn't respond to phone calls and an email seeking comment about the talks, but people in Mr. Maduro's administration have said more political prisoners could be reprieved in the near future.

On Tuesday, Venezuela's human-rights ombudsman, Tarek William Saab, a close ally of Mr. Maduro, said he was working to commute the sentences of jailed opposition lawmaker Wilmer Azuaje and activist Yon Goicoechea.

Lawyers in Venezuela who represent political prisoners say that while some have been released, hundreds more have been arrested, leaving the country's jails now holding 437 government foes. "What's clear is that these negotiations have focused on political leaders, leaving all of the other political prisoners orphans," said Gonzalo Himiob, director of the rights group Foro Penal.

Under the conditions of his transfer, Mr. López, can't speak with the press or leave his apartment, and he must wear a monitoring ankle bracelet. His mother, Antonieta Mendoza, said he remains politically active, holding meetings with members of his party.

"He's still a prisoner but learning to adapt," Ms. Mendoza said, adding her son is also spending time with his two small children. "It's a huge relief, I feel a spiritual peace because Leopoldo is safe."

The secret effort by Mr. Zapatero and others had been going on for months, initiated to break the political deadlock that has engulfed the country amid social turmoil and economic collapse, the people close to the talks said.

Mr. Zapatero met with Mr. López in the Ramo Verde military prison three times over the past year. He was accompanied by two close confidants of Mr. Maduro, the former foreign minister, Delcy Rodríguez, and her brother Jorge, mayor of a district of Caracas, both of whom are seen as receptive to calls for political rapprochement with the opposition.

In the end, Mr. López´s release was seen as a "key element that could contribute to the possibility of reaching other agreements down the road," one of the people involved in the talks said.

In reducing his punishment, the government was making a relatively painless concession, said Javier Corrales, an Amherst College professor. "Frankly, releasing or moving Leopoldo López to house arrest is one of the least risky things they could do."

Mr. Corrales noted that the government hasn't budged on bigger opposition demands and still plans to replace the opposition-held congress with a new assembly convened to write a new constitution.

U.S. Delay On Sudan Has Risks

By Matina Stevis

KHARTOUM, Sudan—The Trump administration's move to delay a decision to permanently lift sanctions on Sudan leaves the country an international pariah and could hinder efforts to cooperate on intelligence, counterterrorism and aid to South Sudan.

The State Department on Tuesday said despite progress by the strategically important nation of 40 million, it would put off until mid-October the widely expected ratification of an Obama-era policy that would bring the country back into the global fold.

Senior administration officials involved in the process played down the extension on Wednesday, saying, "the stated intent is to lift the sanctions," which have been in place since 1998.

Sudan's presidency then pledged to suspend talks with the U.S. for the same period.

"We believe we don't have more to do," Foreign Minister Ibrahim Ghandour said in an interview with the Wall Street Journal. "All the stakeholders from CIA to FBI to the State Department showed on various occasions their satisfaction with the progress."

Western diplomats in Khartoum said experts and civil servants working on five areas in which the U.S. was demanding changes from Sudan had recommended sanctions be lifted. These included opening humanitarian corridors, intelligence sharing and ending conflicts in parts of the country.

"It was the president who made the final decision," the senior administration official involved in the assessment said.

For President Omar Bashir—the world's only sitting head of state wanted for war crimes by the International Criminal Court—the Washington-led sanctions have changed little: He is firmly ensconced in power and has responded brutally to any protests against his 27-year rule.

The Obama administration in January began taking steps to lift the trade embargo with Sudan as well as to unblock Sudanese government assets that have been frozen in various sanctions measures taken against the country.

The Trump administration faced a July 12 deadline to decide whether to make that relief permanent or not, and said late Tuesday it would delay the decision for three months but that the initial steps to ease sanctions would remain in place.

The path to lifting sanctions has been slowly transforming regional geopolitics, re-engaging Sudan as a key actor and ally of Sunni Saudi Arabia in Arab and Horn of Africa politics. Sudan is a strategic partner of Qatar and Saudi Arabia, and is key in containing extremists from Libya.

Tough Indonesia Decree Takes Aim at Radical Groups

By James Hookway
And Anita Rachman

JAKARTA, Indonesia—Indonesia said Wednesday that President Joko Widodo had signed a decree giving his government the power to disband radical organizations, following months of sectarian tensions in the predominantly Muslim nation.

The growing influence of hard-line Islamist groups recently has undermined Indonesia's reputation for practicing a moderate, tolerant form of the faith. Several organizations were involved in coordinating mass protests over the past year against the governor of Jakarta, an ethnic-Chinese Christian whom they had accused of blaspheming against Islam.

The governor, Basuki Tjahaja Purnama, lost his re-election bid in April and was subsequently convicted of blasphemy and sentenced to two years in prison, stirring widespread concern about the growing power of Islamists in Indonesia, the world's most populous Muslim nation.

Wednesday's announcement, which was made by Indonesia's chief security minister Gen. Wiranto, gives the government the power to ban mass organizations, circumventing a potentially lengthy court process to outlaw specific groups.

The most likely target of the new decree is an international group called Hizbut Tahrir, which argues that Indonesia should adopt Islamic Shariah laws and become part of a transnational caliphate. The government had said earlier that it planned to ban the group. But many political analysts said the decree could also apply to other domestic groups, such as the Islamic Defenders Front, whose influence grew sharply during the blasphemy case against Mr. Purnama.

BAY ISMOYO/AGENCE FRANCE-PRESSE/GETTY IMAGES

Muslim student activists in Jakarta protest President Joko Widodo's signing of the new law on Wednesday.

Gen. Wiranto, who, like many Indonesians, uses one name, told reporters that some groups pose a threat to the unity of Indonesia and that the new measure was designed to protect the country's pluralist traditions, which guarantee rights for Christians, Buddhists and other minority religious groups. It wasn't designed to marginalize Muslim groups, he said.

The decree, which Mr. Widodo signed on Monday, is effective immediately but will be debated in the country's parliament later.

Indonesia's largest Muslim group, the moderate Nahdlatul Ulama, supported the measure. But some rights groups questioned it, arguing that Indonesia, as one of Asia's largest democracies, already has sufficient legal tools to act against groups suspected of breaking the law.

"The fact that it has no appeal procedure raises a very serious question about freedom of assembly in Indonesia," said Andreas Harsono, a researcher in Indonesia with New York-based Human Rights Watch. "It means that nobody could challenge the government—national and local—if it bans an organization. It is a huge setback for Indonesia."

The Associated Press reported that a spokesman for Hizbut Tahrir said that it intends to contest the legality of the move by seeking a judicial review by Indonesia's Constitutional Court.

U.S. NEWS

Trump Jr. Emails Spark Uproar, Extend Woes

CAPITAL JOURNAL
By Gerald F. Seib

Donald Trump Jr.'s email disclosure makes it clear the White House has a long-term problem on its hands.

RICK WILKING/PRESS POOL

For months, the hope in President Donald Trump's world—sometimes realistic, sometimes strained—was that the story of Russia's role in the 2016 presidential election would quickly shrivel up and blow away.

That dream died Tuesday. Whatever else the stunning email chain released by Donald Trump Jr. did or didn't show, it undermined the argument that the idea of Russian collusion with the Trump campaign is so ludicrous that it shouldn't be taken seriously. Instead, in black and white, were messages showing that someone offered help from the top of the Russian government to distribute damaging information about Hillary Clinton—and that the president's son, in his own words, was eager to get it. Indeed, he scheduled a meeting to receive it.

As a result, government investigations and media inquiries of 2016 election maneuvering just got a load of new fuel. The stakes now seem higher, and previous responses more suspect. The prospect that all of this will go away soon has grown dim, if not extinguished entirely.

Moreover, the disclosure of the emails raises the prospect of divisions breaking out within Trump world. The president's son released them on his own, but only after it was clear that they were about to become public. That suggests someone else had put them in circulation, possibly to point a finger of blame for a questionable decision at Donald Trump Jr.

In sum, it is now more clear that the Trump White House has a long-term rather than a short-term problem on its hands. Moving forward, it likely will need a clearer way to separate its handling of investigations from the daily task of conducting presidential business.

To be sure, while the disclosure shook Trump world, it didn't change the White House's basic line of argument, which is that collusion with the Russians remains a myth. Essentially, Trump aides are arguing that Donald Trump Jr. was showing a willingness to accept opposition research from Russians, not to coordinate with them in hacking into the emails of Mrs. Clinton and other Democrats, which is the truly explosive idea at the heart of the election-year inquiries. The former, they argue, is a far cry from the latter.

Moreover, Trump aides say nothing of substance was produced or handed over in the meeting with a Russian lawyer arranged by those emails—an account the lawyer corroborates. They believe the revelation has created more a perception problem than a legal one.

In a normal and fully formed presidential campaign, it is likely that such a meeting never would have happened. There would have been a system to set off alarm bells over such a suspicious offer of help from the fringes of the political world, and it would have been rejected outright or shuffled off to some lower level for vetting.

But the Trump campaign wasn't a normal campaign. It clinched the nomination with only a skeletal organization in place. In June 2016, when the emails were sent, the Trump campaign, seemingly stunned by that success, was tiny.

Indeed, the campaign inner circle consisted of essentially a handful of family members and loyalists—a circle certainly including Donald Trump Jr.—minus the legal, political and fundraising apparatus that is the norm for modern campaigns. There was a lot of winging it going on—including, apparently, by the president's elder son.

Now, of course, the key question is what the new shock does to the course of the inquiries now under way, as well as the White House's handling of them. The silver lining in the election-controversy clouds remains the fact that the American people seem far less fascinated with the election-collusion question than do those in the nation's capital. Whether that will continue to be the case remains to be seen, of course.

The second key question, as it has been all along, involves the attitude of Republicans in Congress. They have remained largely supportive of President Trump. But their willingness to stand with the president on tough policy questions inevitably is affected by their perception of his standing and strength.

What the president really needs now are some policy successes. That means, in the first instance, making progress on health care, taxes and funding the government.

Keeping Republicans on board on those topics may require convincing them that there won't be more nasty surprises on the question of Russia's role in the 2016 election. And that may require the White House to be less dismissive of questions on that topic, and more transparent in answering them.

FBI Nominee Pledges Independence

BY DEL QUENTIN WILBER
AND ARUNA VISWANATHA

Christopher Wray, President Donald Trump's pick to be the next FBI director, pledged Wednesday to be an independent leader who would never let politics interfere with the bureau's investigations.

"I believe to my core that there's only one right way to do this job, and that is with strict independence, by the book, playing it straight," Mr. Wray told the Senate Judiciary Committee, which is considering his nomination.

Mr. Wray, flanked by his wife and children, weighed in on contentious topics from torture to accusations of collusion between Mr. Trump's campaign and the Russian government during the 2016 election. Senators of both parties asked Mr. Wray if he would resist any efforts by the Trump administration to influence investigations.

Mr. Wray, a 50-year-old former top Justice Department official and longtime defense lawyer, promised he wouldn't buckle under any such pressure, adding that he had no reason to doubt intelligence agencies' conclusion that Russia meddled in the election.

If the president asked him to do something unethical or illegal, Mr. Wray testified, "First, I would try to talk him out of it, and if that failed, then I would resign."

Mr. Wray suggested he understood the political maelstrom he would be facing, telling senators, "I understand this is not a job for the faint of heart. And I can assure the committee I am not faint of heart."

Lawmakers, particularly Democrats, have expressed concerns about the possibility of the White House seeking to influence the Federal Bureau of Investigation's work in the wake of Mr. Trump's firing in May of then-FBI Director James Comey.

Mr. Trump has said the probe into Russian interference in the 2016 election was on his mind when he dismissed Mr. Comey, and the former FBI director testified before Congress that he felt the president was pressing him to drop an investigation into former national security adviser Michael Flynn, something Mr. Trump has denied.

Wednesday's hearing came as Washington continued to digest new revelations about the Trump campaign's contacts with Russia last year. The president's eldest son, Donald Trump Jr., released emails Tuesday that showed he attended a meeting in June 2016 to discuss allegedly incriminating information about Democratic nominee Hillary Clinton and that he was told the information would be offered as part of the Russian government's support for his father's candidacy.

Mr. Wray agreed with the suggestion of Sen. Lindsey Graham (R., S.C.) that campaign officials should call the FBI if they are contacted by a foreign government seeking to hurt their opponents.

"Any threat or effort to interfere with our election, from any nation state or nonstate actor, is the kind of thing the FBI would want to know," Mr. Wray said.

Sen. Patrick Leahy (D., Vt.) asked Mr. Wray whether anyone from the White House had pressed him for his loyalty. Mr. Comey said in testimony last month before Congress that Mr. Trump had sought such a pledge from him, an assertion the president has denied.

"No one asked me for any kind of loyalty oath," Mr. Wray said. "I sure as heck didn't offer one."

He also defended Special Counsel Robert Mueller, who was tapped to take over the investigation into Russian meddling after Mr. Comey's firing. Mr. Wray said he knew Mr. Mueller well and didn't consider him to be on a "witch hunt," as Mr. Trump has repeatedly called the Russia probe.

Associates of Mr. Wray say he keeps a lower profile than Mr. Comey, who wasn't shy about making strong statements at news conferences or congressional hearings. Mr. Graham asked Mr. Wray whether he would have held a news conference, as Mr. Comey did, announcing that he was recommending against prosecuting Mrs. Clinton for her email arrangement when she was secretary of state, while also criticizing her conduct.

MANDEL NGAN/AGENCE FRANCE-PRESSE/GETTY IMAGES

FBI-director nominee Christopher Wray testifying on Wednesday.

Without directly answering, Mr. Wray said, "I can't imagine a situation in which, as FBI director, in which I would give a press conference about an uncharged individual."

But he also expressed support for Mr. Comey, who has engaged in a public back-and-forth with Mr. Trump. "In all my dealings with Jim Comey, he was a terrific lawyer, a dedicated public servant and a wonderful colleague," Mr. Wray said.

Senators of both parties expressed support for Mr. Wray's nomination and some of his early answers on difficult topics. Sen. Chuck Grassley (R., Iowa), the committee chairman, said it is "vitally important for the FBI director to be independent" and "in reviewing his record, I've seen Mr. Wray's commitment to independence."

Sen. Dianne Feinstein (D., Calif.), the top Democrat on the panel, said the next director "must be a leader who has integrity and strength to withstand any attempts at political interference."

Ms. Feinstein, who led a Senate investigation into the Central Intelligence Agency's use of enhanced interrogation techniques, praised Mr. Wray's testimony that in his view, "torture is wrong, unacceptable, illegal and ineffective."

TRUMP

Continued from page A1

for Mr. Manafort declined to comment.

Mr. Manafort was present at the Trump Tower meeting with Russian attorney Natalia Veselnitskaya, along with Donald Trump Jr. and the president's son-in-law, Jared Kushner.

On Tuesday, the younger Mr. Trump released a chain of emails that showed he had been told the Russian government possessed information damaging to Mrs. Clinton's candidacy and that an individual described as a "Russian government attorney" wanted to pass the material to the Trump campaign.

"If it's what you say," the younger Mr. Trump wrote to the intermediary who arranged the meetings, a British publicist, "I love it."

Meanwhile, the Kremlin said Wednesday the release of an email chain by Trump's eldest son was part of a "long-running TV drama," dismissing an alleged Russian government offer to pass on information.

ASSOCIATED PRESS; REUTERS

Russian lawyer Natalia Veselnitskaya says she has no connection to the Russian government. A Senate panel said it would ask former Trump campaign chairman Paul Manafort to testify about the meeting.

"There is nothing to investigate," said Kremlin spokesman Dmitry Peskov said, according to the news agency RIA-Novosti.

Mr. Peskov said the disclosure appeared timed to damage U.S.-Russian relations after a meeting last Friday between President Trump and Russian President Vladimir Putin.

He compared the new revelations with a "long-running TV drama that can compete with the most successful series airing in the U.S.," the news agency Interfax reported.

The Russian government has maintained that it wasn't involved in any effort to tilt last year's election in favor of Mr. Trump.

But the release of the emails Tuesday appeared to indicate that Russia's prosecutor general may have sought to influence the Trump campaign through Aras Agalarov, the Russian-Azerbaijani businessman who organized a Moscow beauty pageant in 2013 with Mr. Trump.

The Russian prosecutor general's office said in a statement to The Wall Street Journal that it "does not exchange information and does not conduct any meetings at the international level outside the framework regulated by international legal agreements and Russian procedural legislation. Interaction with the competent authorities of the United States is no exception."

Mr. Agalarov told Russian radio station Business FM on Wednesday that it was his son Emin, a pop star, who had the primary relationship with the younger Mr. Trump, and called the released correspondence "some kind of fiction."

Mr. Trump also insisted Wednesday on Twitter that the White House "is functioning perfectly, focused on HealthCare, Tax Cuts/Reform & many other things. I have very little time for watching T.V."

The comment comes as some White House aides have said they fear the Russia email story will make it increasingly difficult to advance the president's policy agenda.

"This is more significant and serious than anything else we've seen," one administration official said Tuesday.

A White House spokeswoman, Sarah Huckabee Sanders, said Tuesday that the president is "frustrated …that this continues to be an issue.

In his Fox News interview with host Sean Hannity, Donald Trump Jr. said that he "probably would have done things a little differently" in agreeing to meet with Ms. Veselnitskaya.

Mr. Manafort is a longtime lobbyist and Republican political operative.

He was forced to resign from the Trump campaign after media reports indicated that he was part of a covert influence campaign in Washington on behalf of the Ukrainian government. The campaign ended in 2014, before he worked for Mr. Trump.

More than three years after the lobbying work ended, Mr. Manafort registered as an agent of a foreign government in late June, acknowledging for the first time that a small part of his lobbying work for Ukraine's former president was aimed at influencing U.S. policy makers and journalists.

The broad thrust of the planned Judiciary Committee hearing would look at foreign influence peddling and lobbying inside the U.S., including questions about a political intelligence firm that compiled a dossier on Mr. Trump while simultaneously working on a campaign against U.S. sanctions against Moscow.

U.S. NEWS

Yellen Still Expects Fed to Raise Rates

JACQUELYN MARTIN/ASSOCIATED PRESS

Chairwoman Janet Yellen said the Fed could alter course if inflation doesn't rebound.

By Nick Timiraos

Federal Reserve Chairwoman Janet Yellen, seeking to address a recent puzzling slowdown in global inflation, said she expects forces holding down consumer prices to fade in the months ahead, allowing the central bank to stick to its plans for gradual interest-rate increases.

But she left herself an out, saying the Fed would alter its plans if softer price pressures proved more persistent.

"It's premature to reach the judgment that we're not on the path to 2% inflation over the next couple of years," Ms. Yellen said Wednesday, during a hearing of the House Financial Services Committee. She repeated her view that an increasingly tight labor market would put upward pressure on wages and prices, but added, "We're watching this very closely and stand ready to adjust our policy if it appears that the inflation undershoot will be persistent."

Fed officials next meet July 25-26. At their meeting last month, officials raised rates for the third time in as many quarters to a range between 1% and 1.25% and penciled in one more rate increase this year. Ms. Yellen gave no indication about the timing of the next rate increase in her testimony Wednesday.

Ms. Yellen also updated lawmakers on the Fed's plans to start slowly shrinking its $4.5 trillion portfolio of bonds and other assets acquired during and after the 2008 financial crisis. Ms. Yellen said she expected to set those plans into motion "relatively soon" this year, but wasn't more specific about the timing.

Ms. Yellen faces two days of testimony, with the House panel Wednesday and the Senate Banking Committee on Thursday, in what could be her final appearances on Capitol Hill before her term expires in February. The White House is beginning the process of considering who should be the next Fed leader. While Ms. Yellen isn't expected to be reappointed, President Donald Trump hasn't ruled it out.

Ms. Yellen demurred when asked repeatedly about her desire to serve a second term. "I really haven't had to give further thought at this point to this question," she said.

Asked repeatedly whether she wants to serve a second term, Ms. Yellen initially demurred and implied that the White House hadn't discussed the matter with her. Later, when asked what she would say if Mr. Trump asked her to serve another term, she said, "It is certainly something that I would discuss with the president, obviously."

Statements from Fed officials in recent weeks have highlighted a debate over whether a slowdown in inflation should lead them to hold back on additional rate increases for now. But even those who want to go slower on raising rates because of their inflation doubts have shown no such qualms about announcing plans to implement the portfolio runoff in the next few months.

Excluding volatile food and energy categories, the Fed's preferred inflation gauge slowed to a gain of 1.4% over the year ended May, versus 1.8% in February.

In her testimony, Ms. Yellen said the inflation slowdown partly reflects unusual one-off declines and officials would monitor inflation developments closely in the months ahead.

Her remarks Wednesday indicated slightly greater uncertainty about the forces slowing price growth than her comments at a press conference following the decision to raise interest rates last month. Ms. Yellen said Wednesday the recent slowdown "partly" reflected one-off factors, while she said they "significantly" reflected such factors last month. Stocks rallied and bond yields fell after her testimony Wednesday morning.

Ms. Yellen's tenure as Fed chairwoman began in early 2014, as the Fed began to slow its purchases of Treasury and mortgage securities, the conclusion of the latest—and broadest—effort to spur household and business investment by pushing down long-term interest rates.

The Fed stopped adding to its holdings, also known as its balance sheet, in October 2014, but it has continued to reinvest the proceeds of maturing assets to maintain the portfolio's size. Since then, central bankers in Europe and Japan have ramped up similar bond-buying experiments, and the Fed slowly moved to raise interest rates from near zero.

Under the balance-sheet plan announced last month, the Fed will allow its holdings to decline gradually by allowing a predetermined amount of bonds to mature every month without reinvestment.

The Fed doesn't plan to use its portfolio as an active tool of monetary policy during normal times, Ms. Yellen said Wednesday. But it would be "prepared to resume reinvestments if a material deterioration in the economic outlook were to warrant a sizable reduction in the federal-funds rate," she said.

More broadly, Ms. Yellen said the economy's performance was likely to warrant "gradual increases in the federal-funds rate over time" to achieve the Fed's goals of maximum sustainable employment and stable prices, measured relative to a 2% annual inflation target. Inflation has fallen below that target for most of the last five years.

Ms. Yellen characterized the Fed's benchmark short-term rate as "somewhat below" its neutral level, one in which the Fed is neither trying to speed up or slow down the economy. Because that level is currently low by historical standards, "the federal-funds rate would not have to rise all that much further to get to a neutral policy stance," she said.

Aging Infrastructure: Waterways Face Critical Juncture

By Kris Maher

JONNO RATTMAN FOR THE WALL STREET JOURNAL

Contractors pouring concrete for the wall of a new lock chamber at the Charleroi Locks and Dam on the Monongahela River in Pennsylvania.

CHARLEROI, Pa.—More than a million tons of commodities normally pass through the lock on the Monongahela River here every month. But on a recent day, the giant steel gates that hold back the river didn't budge.

The 85-year-old structure is undergoing a long-delayed $2.7 billion makeover, and the lock is closed to river traffic during the week. But it was bustling as crews worked to build a bigger lock chamber. Seven cranes stretched across its length. A diver in a wetsuit slipped into the river to inspect an underwater wall.

"Progress is a good thing to see," said Paul Meininger, the 68-year-old lockmaster in charge of the 24/7 operations at the Charleroi Locks and Dam.

The construction south of Pittsburgh is one of several major projects across the U.S. aimed at improving the nation's vital waterways network of dams and locks that make commercial river traffic possible, enabling more than $70 billion worth of cargo to be shipped annually, according to the U.S. Army Corps of Engineers.

An example of the looming threats from the nation's crumbling infrastructure, the often unseen system of more than 230 locks along 12,000 miles of river is at risk of failing in places like Pittsburgh from decades of underinvestment.

The Lower Monongahela River Project in southwest Pennsylvania will upgrade locks near the towns of Charleroi and Braddock and remove a third lock in Elizabeth that was built 110 years ago. The system of dams and locks were first put in place to ensure that the entire length of the river was deep enough for boats to traverse it year-round.

President Donald Trump has promised $1 trillion worth of investments in the country's infrastructure, but his proposed 2018 budget didn't include funding for the Monongahela River locks project.

The project is the second-highest priority for the Army Corps, behind another locks project on the Ohio River near Cairo, Ill. The system of 23 locks spread over 200 miles of the Allegheny, Ohio and Monongahela rivers near Pittsburgh is among the oldest, largest and most fatigued of the nation's inland waterways system, according to the agency.

One Army Corps study shows that a failure of one of the two locks now being rebuilt would result in $200 million in economic losses to the region, which covers parts of Pennsylvania, Ohio and West Virginia.

"People don't know they're getting a $200 million benefit each year moving through these locks and dams on the Monongahela River," said U.S. Army Corps of Engineers project manager Stephen Fritz, who is overseeing the Pittsburgh project. He said the project was an example of upgrades needed across the nation.

Begun in 1994, the Lower Mon Project was originally scheduled to be completed by 2004. But it has suffered delays as the Ohio River project used up most available federal funds. The Army Corps now says it will complete the project in a scaled-down form that provides 90% of the original plan's benefits by 2023, but with only one new lock instead of two, leaving many with mixed emotions.

"We're getting a brand-new, reliable lock, which is great. But it's disappointing that we're not getting both," said Mary Ann Bucci, executive director of the Port of Pittsburgh Commission, a state-funded agency.

Ms. Bucci said her group's attention is focused on ensuring the project receives $105 million in federal funding for the next fiscal year to keep it on track, and securing additional funds in future budgets.

Up close, the scale of the project and the challenges of marine construction are evident. A cement factory was built on the other side of the Monongahela River to supply material for the project, and a covered conveyor belt stretches across the river.

At the upstream end of the lock, workers in rubber boots and hard hats stand in a 40-foot-wide "coffer box," a pocket of dry ground surrounded by a steel wall holding back the river. They shovel cement that pours down from the conveyor belt into the area. A load takes about four minutes to arrive from the factory after a supervisor radios in.

Companies in steel construction and oil and gas all rely on the locks here. But few depend more on the system than coal mines, towing firms and power plants.

By increasing the capacity at Lock 4 and removing a second, smaller lock, the Lower Mon Project will standardize this part of the river so that towing companies can easily haul nine barges throughout the region. Currently towboats can take only six barges at a time through the Charleroi locks.

Brian Loring, port captain who oversees staffing for Murray American, said that until recently he felt secure working on the river. But the drop in coal use and long delays in upgrading the locks around Pittsburgh have caused him to worry. "Years ago, when I started decking, I had a captain tell me all the time, 'Brian, this river is not going anywhere, it will always be here,' " Mr. Loring said. "It just makes you nervous."

U.S. WATCH

WHITE HOUSE

Senate Democratic Aide Tapped for CFTC

The White House is expected to nominate Russ Behnam, a Senate Democratic aide, to be a commissioner on the **Commodity Futures Trading Commission** as early as this week, according to people familiar with the matter. Mr. Behnam serves as an aide to Sen. Debbie Stabenow (D., Mich.). She is the top Democrat on the Senate Agriculture Committee, which has jurisdiction over the CFTC.

Mr. Behnam didn't respond to immediate requests for comment. The White House declined to comment.

The CFTC currently has two members—acting Chairman J. Christopher Giancarlo and Democratic Commissioner Sharon Bowen. Mr. Giancarlo's nomination to be permanent chairman passed the Senate Agriculture Committee by a 16-5 vote in June, though the full Senate has yet to vote on his approval. Ms. Bowen recently announced her intent to step down in the coming months, citing her desire for a full slate of new commissioners as one of the reasons for her decision.

Two other Republicans have been nominated as commissioners: Dawn Stump, a derivatives lobbyist and former staffer on the Senate Agriculture Committee, and Brian Quintenz, a former House aide. Nominations to the CFTC typically move through the Senate in Republican-Democratic pairing to preserve bipartisanship.

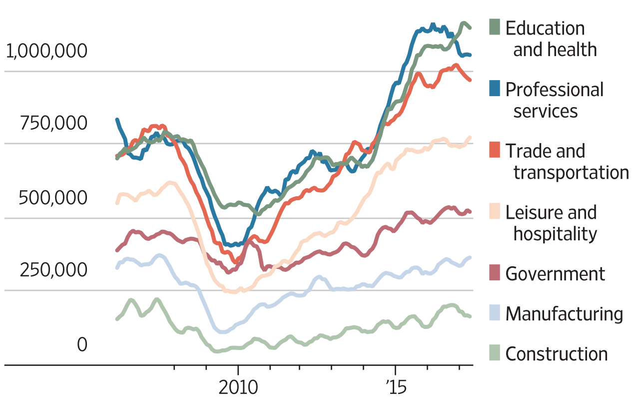
—Gabriel T. Rubin and Andrew Ackerman

ECONOMY

Jobs Survey Showed Strength in May

Now Hiring

Number of job openings per industry



Note: seasonally adjusted, 6-month moving average
Source: Labor Department

THE WALL STREET JOURNAL

The pace of hiring rose in May while the number of job openings dropped but remained near a record level, the latest indication that the labor market continued to exhibit signs of strength in the second quarter of the year. The hiring rate climbed to 3.7% in May from 3.5% the prior month, according to the Labor Department's monthly Job Openings and Labor Turnover Survey, known as Jolts. May's figure remained below the hiring rates that were reached in late 2015 and early 2016. The hiring rate is the number of hires in a month, as a share of the total number of employed people.

There were about 5.7 million job openings at the end of May, down from about six million at the end of April. About 5.3 million people left a job, and 5.5 million people were hired in May. Both numbers were up from April.

—Josh Zumbrun

TRANSPORTATION

Federal Agency Drops Key Rail Plan

The Federal Railroad Administration released Wednesday its final version of a $153 billion plan to speed up service and improve reliability on Amtrak's busy Northeast Corridor, dropping a controversial plan to build a new rail segment through Connecticut and Rhode Island.

The federal agency said its plan will shave off 45 minutes of travel time for Amtrak riders between New York and Boston and 35 minutes from Washington, D.C., to New York. The project for the nation's busiest passenger rail segment—which stretches 457 miles from Washington to Boston—still needs funding from Congress.

The FRA's plan calls for new segments designed for faster trains and eliminating choke points to achieve the speed improvements. "Safe, reliable and efficient rail transportation is a vital part of our nation's infrastructure," said U.S. Department of Transportation Secretary Elaine Chao. "And expediting the project delivery process is key to delivering needed infrastructure more quickly."

The FRA said it canceled plans for the new rail segment between Connecticut and Rhode Island because of broad public concern.

—Joseph De Avila

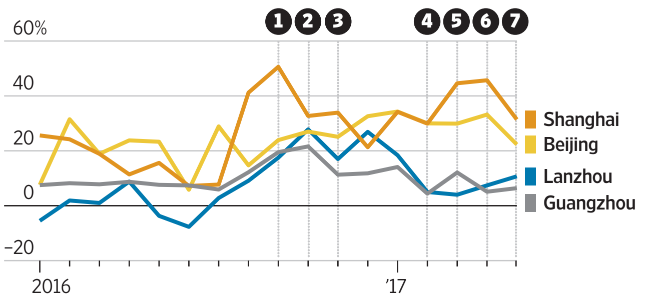
CHINA

Apartment buildings in Shenzhen, where the average home sells for a far higher annual household income multiple than in other high-cost cities such as Hong Kong and New York City.

Fever Curve

China's megacities have had varying success in taming property rallies that in Shanghai sent prices up more than 50% in a year. Across the country in Lanzhou, prices crept up as the big cities cracked down.

Year-on-year change in home prices



1 **September 2016:** Beijing raises minimum down payment for first and second homes.

2 **October:** Guangzhou restricts nonlocals to only buying one home.

3 **November:** Shanghai targets fake divorces to get around home-purchasing rules and raises down-payment requirements for first homes.

4 **February 2017:** Several banks in Beijing and Guangzhou tighten mortgage rates.

5 **March:** Guangzhou raises down payments for second homes and sets a two-year wait before a homebuyer can sell. Beijing requires higher down payments from recently-divorced buyers and for second or luxury homes.

6 **April:** Lanzhou raises down-payment requirements.

7 **May:** Shanghai bans sales of homes in commercial-use properties.

Sources: WSJ calculations based on data from E-house China R&D Institute, SHKF Research

THE WALL STREET JOURNAL.

Continued from Page One

The desperate home buyers are exposing Beijing's inability to control a housing market it has been relying on for economic growth. A decade ago, the real-estate sector, including construction and home furnishings, accounted for about 10% of China's gross domestic product, according to Moody's Investors Service. It now accounts for almost one-third, reflecting both a dearth of other investment options and the petering out of manufacturing growth.

With Chinese companies staggering under debt levels pegged by UBS analysts 164% of GDP, the government has turned to less-indebted corners of the economy to keep growth going.

At one time, low levels of household debt reassured government officials and economists that a property slump wouldn't trigger a wider financial crisis. But the property-buying binge has changed that equation.

Long-term household loans, mostly mortgages, now account for one-third of all new bank loans. Household debt stands at more than 42% of GDP, according to Moody's. That ratio has grown 9 percentage points in three years and now surpasses levels in China's emerging-market peers including Brazil, Mexico, Turkey and Russia. In the U.S., that ratio hit about 85% during the housing crisis.

Policy makers want to prevent the property bubble from getting worse, worried that any collapse could send defaults cascading through the banking system, infecting the overall economy perhaps for years to come.

On the other hand, they are concerned that an investment slowdown could hamper growth. Economists already are warning that the recent property controls are starting to cause developers to scale back on new projects, potentially denting growth later this year.

"Lessons from Japan and the U.S. told us that there is no such thing as an ever-rising market," says Li Xunlei, chief economist at Chinese brokerage Zhongtai Securities.

Frothy as prices have been, China's housing market isn't vulnerable to a full-blown property downturn like the one in the U.S. a decade ago, economists say. Chinese home buyers often are required to put at least 30% down.

Because Chinese banks only have a limited ability to sell off loans as securities, they don't offer risky mortgages like those that triggered the U.S. housing debacle. Moreover, home-equity financing that lets owners borrow against their homes hasn't taken off in China.

In Shenzhen, the average home sells for 44.4 times average annual household income, compared with around 12 for homes in New York, according to an analysis by Zhang Ming, a senior economist at the Chinese Academy of Social Sciences.

Chinese government data show that prices across 70 Chinese cities were 9.7% higher in May than a year earlier, a larger year-over-year increase than the 9.3% last September, when the current round of housing controls were instituted.

In some big cities, the frenzy has moderated somewhat. In Shanghai, the year-over-year increase was 31% in May, compared with 50% last September. Beijing posted a 22% annual increase in May, down from 33% in April.

Halfway across China in Lanzhou, a polluted industrial hub at the edge of the Gobi Desert, the housing market is booming. Homes for sale are packed with would-be buyers, including small-business owners who think that property is a better bet than shops or factories.

Prices started to take off in September, just as Beijing took its first steps to crack down. By December, Lanzhou's prices were 27% higher than a year earlier. In April, Lanzhou also cracked down with higher minimum down payments and limits on second- and third-home purchases in the city center.

"The housing market in Lanzhou is too heated," Gao Jia, deputy director of Lanzhou's housing authority, said in an April interview as he leaned back in his chair and smoked a cigarette. "The government needs to make sure the housing price is going up steadily, not too fast."

In Foshan, a city of seven million dotted with factories making refrigerators, TV sets and other household appliances, home prices have risen 18% in recent months as buyers poured in after property controls were imposed in Guangzhou.

Mr. Pei, the advertising executive, was one of many Guangzhou buyers signing contracts in April for apartments at the Master Work high-rise overlooking the Desheng River in Foshan. He intended to pay for a three-bedroom apartment partly with the proceeds from a studio in Guangzhou he and his wife had just sold. He said it had gone up in price more than 50-fold since they bought it 13 years ago.

"No other investment is as profitable as property," he said. "Stocks are too risky."

One middle-aged homemaker was so eager to snag an apartment in a Foshan shopping-mall complex that she asked a broker to wait in line all night when sales started in May. "Foshan to Guangzhou is just like Brooklyn to Manhattan," she said. All 300 units sold out within 60 hours, according to the broker, Huang Kai.

The boom in Foshan hasn't cooled things off in Guangzhou. Sales agents for the Blessed and Colorful Apartments, a new high-rise complex in the southern part of the city, say that prices for the units have risen nearly 30% since they went on sale in January.

Zhang Ying, a 27-year-old web designer who makes about $1,500 a month, bought a two-bedroom apartment in another development in January. Her mortgage payments amount to nearly 80% of her income. "I'm essentially a slave to this property now," she says.

In some smaller cities, the property boom is helping to reduce a housing glut produced by earlier overbuilding—a goal of the central government.

Tangshan, a heavy-manufacturing city two hours east of Beijing, had benefited from home buyers driven out by new restrictions in the capital. The estimated time it would take to clear the inventory of unsold homes declined from 38 months last November to 27 in May.

Many buyers appear to be investors who don't intend to move to the city or work there. In late May, Tangshan authorities raised down-payment requirements to discourage speculative buying.

The housing rally in Lanzhou, the central China industrial city, also was driven by buyers from outside the area, according to Mr. Gao, the housing official.

Zhang Xiaoqi, a retired accountant, was eyeing an apartment for her son. She was prepared to put 20% down on an apartment early this year. When Lanzhou raised the down-payment requirement to 30%, she gave up. "Originally I could afford a home, but now it's too much," she said. She contends prices shot up because of the restrictions.

A 53-year-old engineer in Lanzhou was determined to buy. "The harder it is to get something, the more you want to buy," he said while browsing apartments decorated in Old Europe style, replete with chandeliers. "I need to buy before prices go up further."

At the end of last year, real estate accounted for 68.8% of China's household assets, Moody's says. In the U.S., it is less than 60%.

Mr. Ni, the housing expert at the Chinese Academy of Social Sciences, estimates that as much as 50% of China's home sales today are for investment, a situation that worries the Communist Party leadership.

"Houses are for living in, not for speculation," President Xi Jinping said at a December meeting that set main economic goals for 2017.

Nonetheless, the government has stopped short of imposing a property tax, which would discourage people from buying homes as an investment and leaving them empty by making it more expensive to own a home. Beijing has shown little political will to force a move that would raise costs for already stretched homeowners.

Releasing more land for development is another way to take the pressure out of the property bubble. But local governments rely on land sales to fund their programs and have an incentive to sit on land as it appreciates and sell it to developers in small increments.

The new rules instituted to tame the housing frenzy in Beijing and Shanghai have angered some buyers and sellers.

On a recent weekend, hundreds of people marched down a busy Shanghai shopping street to air grievances over deals thrown into jeopardy. Videos circulating on social media showed protesters clashing with police and some being dragged away—unrest highly unwelcome in a year of a major Communist Party conclave expected to consolidate Mr. Xi's power. Shanghai promptly eased some restrictions on developers and buyers.

Among protesters in front of Beijing's municipal hall one weekend in May was Cui Meng, a 30-year-old saleswoman. Earlier this year, she put up her apartment for sale and borrowed 900,000 yuan (about $132,000) from a friend to buy a three-bedroom home costing 4 million yuan.

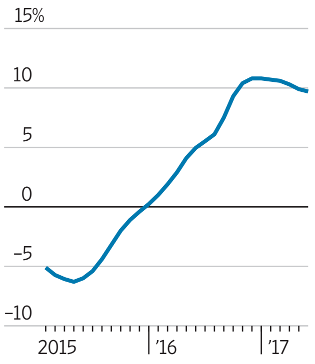
After new property restrictions took effect in March, the buyer of her apartment pulled out and asked for the deposit back. Without the ability to sell her old home, Ms. Cui found herself unable to repay her friend and facing a mortgage bill representing about 65% of her and her husband's combined income. "It's too much pressure," she said.

—Pei Li contributed to this article

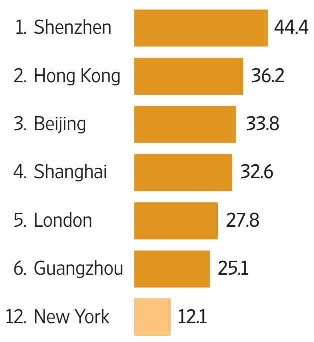
China's Property Frenzy

As home prices have surged in China, buyers have had to borrow more, pushing up household-debt levels.

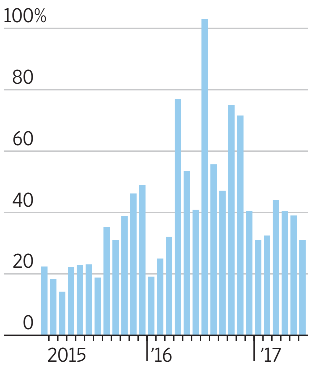
Year-over-year change in home prices in 70 Chinese cities



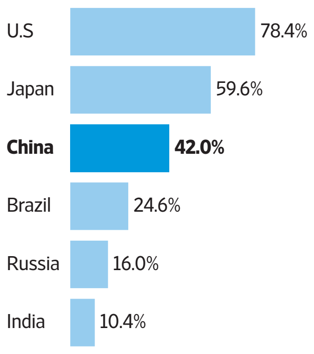
Home-price-to-income ratio in 2016



Chinese household loans, mostly mortgages, as a share of all new loans*



Household debt as a percentage of GDP



*In July 2016, banks called in large amounts of corporate debt, propelling long-term household loans to a share larger than 100% of net new loans.

Source: National Bureau of Statistics (change in prices); Chinese Academy of Social Sciences (ratios); CEIC, People's Bank of China (loans);

THE WALL STREET JOURNAL.

TRIP

Continued from Page One

has built a social network that inspired people around the world to share the most intimate details about their personal lives, his team goes to extraordinary lengths to keep his movements under wraps and control how he is perceived. Midway through a "personal challenge" to travel to 30 states he'd never visited, the 33-year-old aims "to talk to more people about how they're living, working and thinking about the future," he wrote in January on his Facebook page.

Among those people was Kyle McKasson, manager of the Wilton Candy Kitchen, a century-old shop on the town square in Wilton, Iowa.

He was at work one Monday afternoon in June when two men and a woman dressed in jeans and button-down shirts entered the store, which is a regular stop on Iowa's presidential campaign circuit.

The three said they were from California on a business trip on their way to Chicago and asked Mr. McKasson for a tour of the store and its museum of the history of Wilton, population 2,800. They didn't tell their names, he said, and he thought it impolite to ask.

Four days later, the same three people returned to the candy store, and one of his new customers revealed their true mission: "Mark Zuckerberg will be here in five minutes."

A startled Mr. McKasson, 54, asked: "What do I need to do?" he recalled, and was told: "Nothing."

Mr. Zuckerberg walked through the red-and-white store door. He ordered a $5.75 chocolate malt. An assistant paid the world's fifth-richest man's tab with a debit card.

The tech titan chatted with the young cashier about her future plans and spoke to Mr. McKasson about life in Wilton and the city's downtown revitalization efforts.

Members of Mr. Zuckerberg's team plan his visits with secrecy, but there are rare instances of the Facebook CEO's cover being blown. The result: chaos.

When someone let slip he'd be at the Kusanya Café on Chicago's South Side, Renée Banks, a barista, said she had to fetch extra chairs for the 100 people who showed up.

Amy Dudley, a spokeswoman for the Chan Zuckerberg Initiative LLC, an entity formed in 2015 by Mr. Zuckerberg and his wife, Priscilla Chan, which is helping to arrange the tour, said the design of "these visits is to have the most honest and candid interactions and discussions as possible, without the additional attention that's likely to come as a result of word getting out ahead of time."

For nearly a decade, Mr. Zuckerberg has started every year with a "personal challenge." In 2009, this meant wearing a tie every day. Another year, he swore only to eat meat that he had personally slaughtered. "I just killed a pig and a goat," he boasted in a private Facebook post in 2011.

Facebook, the 13-year-old company he co-founded, now has two billion monthly active users. Its market value is $446 billion.

In Wilton, Mr. Zuckerberg's advance team had stopped at city hall to secure a meeting with Wilton Mayor Bob Barrett and City Administrator Chris Ball to discuss life in rural Iowa before the CEO went to the candy store.

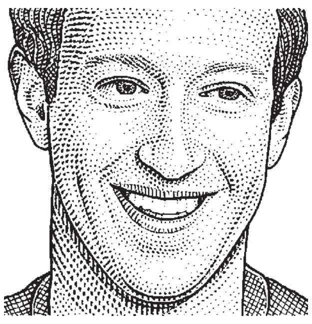
But Messers. Ball and Barrett were asked not to tell anyone Mr. Zuckerberg was coming. Mr. Ball said Mr. Zuckerberg's representatives instructed them not to relay verbatim quotes from their discussions with him if asked by reporters.

"They asked me not to quote what Mr. Zuckerberg said," Mr. Ball said. "They said to refer people to their press guys."

Mr. Zuckerberg spent the July 4 weekend in Alaska, the 15th state he's visited on his tour since it began in January. He stayed at the Kachemak Bay Wilderness Lodge, a $1,000-per-night fishing resort on the Kenai Peninsula. A receptionist said the lodge's owners wouldn't discuss the visit. "You have to call Amy Dudley," she said.

Ms. Dudley, a former aide to Vice President Joe Biden and Virginia Sen. Tim Kaine, said Mr. Zuckerberg declined to be interviewed for this article.

Despite his world-wide fame, Mr. Zuckerberg isn't always recognized by his surprise hosts.



Mark Zuckerberg

In June, he attended an Iftar dinner in Minneapolis. Mr. Zuckerberg arrived after the prayers and the other people in the room, who were mostly refugees from Somalia, didn't know who he was, said attendee Mohammed Jama.

Blues musician James "Super Chikan" Johnson was booked in February to play a concert funded by a mystery client at the Ground Zero Blues Club in Clarksdale, Miss. Mr. Johnson, 66, said it is unusual for him to not be told for whom he'd be performing. When he was on stage setting up his equipment, Mr. Zuckerberg approached.

"They said, 'That's Mark Zuckerberg.' I said, 'Who dat?'" Mr. Johnson said. "They said, 'It's the Facebook guy, the guy who owns the Facebook. I said, 'You've got to be kidding me.' I had no idea who he was."

The secrecy surrounding Mr. Zuckerberg's visits has nearly led to his target audience blowing him off.

Adam Kragthorpe, who runs a local youth hockey program in Minnetonka, Minn., deleted the initial email from James Eby requesting a meeting for "a Fortune 500 CEO who is traveling the United States and visiting a wide range of communities."

"We thought it was a multilevel marketing scheme," Mr. Kragthorpe said.

Mr. Eby, who planned travels for four Defense secretaries in the Obama administration, is now a contractor working for the Chan Zuckerberg Initiative. He declined to comment.

Two days after he emailed Mr. Kragthorpe, Mr. Eby arrived unannounced at the hockey rink.

Mr. Kragthorpe said he was told that Mr. Zuckerberg would like to visit with hockey families a couple of days later. He said Mr. Eby told him not to tell anyone the Facebook CEO was coming and asked that people at the rink not photograph the CEO.

The Zuckerberg entourage, which can be up to eight people, includes a professional photographer. His aides said there is no prohibition against others snapping pictures.

In Newton Falls, Ohio, Dan Moore got a call in April from Jimmy Dahman, a former presidential campaign field organizer for Hillary Clinton in Ohio. Mr. Dahman doesn't work for Mr. Zuckerberg's organization, but was acting as a volunteer, he said.

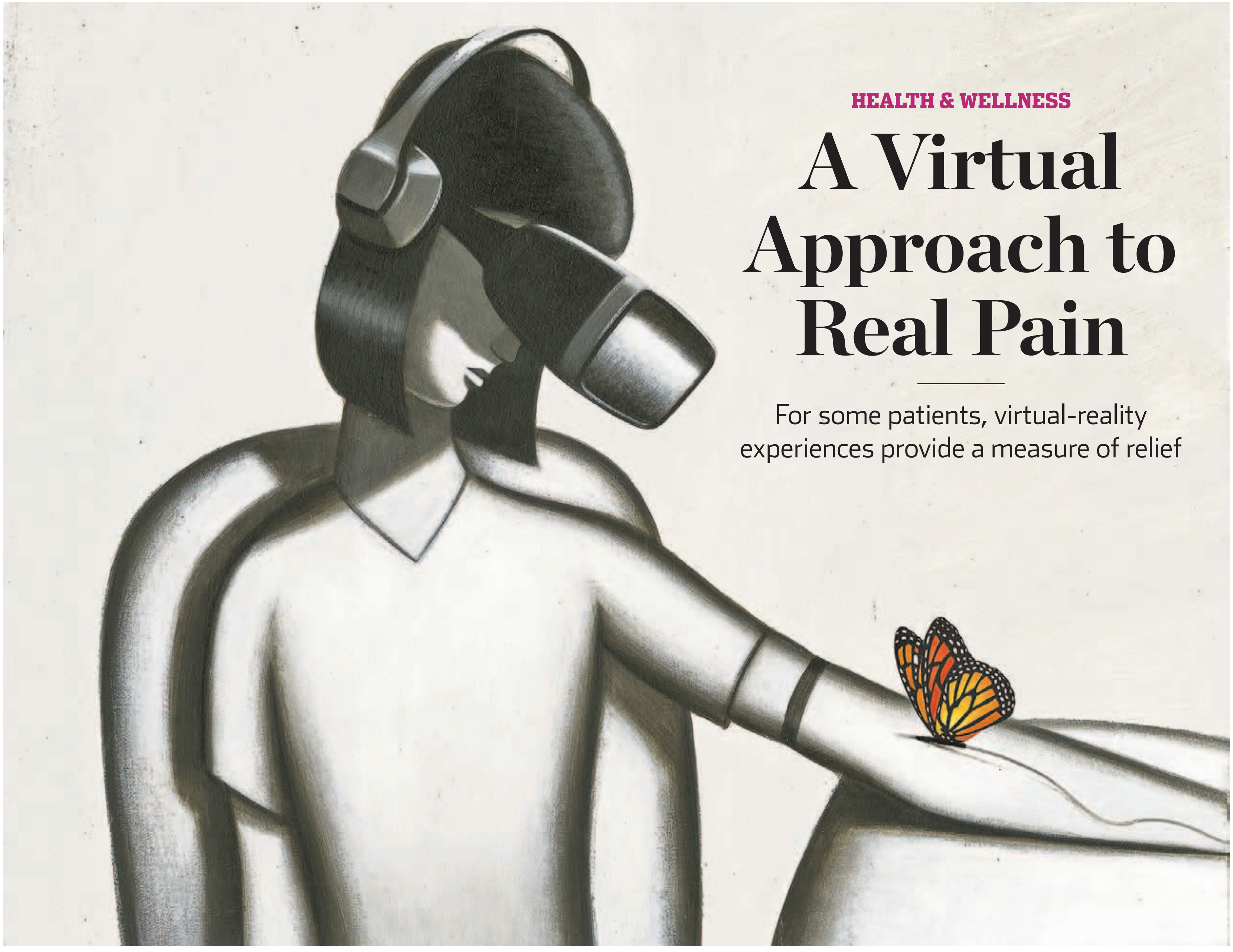
He wanted to know if Mr. Moore, a Democratic union steelworker who was a volunteer for Donald Trump's presidential campaign, would host "a billionaire philanthropist from California" at his home five days later.

Four days later, Mr. Moore, 57, was standing in his driveway waiting for his mystery guest. Fifteen minutes before a pair of black SUVs arrived, he was told he'd be joined by Mr. Zuckerberg.

Mr. Moore and his family enjoyed a dinner of chicken Francaise and baked whitefish Mr. Zuckerberg's staff had catered from a nearby restaurant. As Mr. Zuckerberg was leaving, he made one request, Mr. Moore said.

"He said, 'If there are any news reporters that call you, just make sure you tell them I'm not running for president.'"

LIFE & ARTS



HEALTH & WELLNESS

A Virtual Approach to Real Pain

For some patients, virtual-reality experiences provide a measure of relief

CLOCKWISE FROM TOP: JON KRAUSE (ILLUSTRATION); STEPHANIE KLEINMAN/USC; WALTER URIE; APPLIED VR

BY LUCETTE LAGNADO

Virtual-reality experiences such as Bear Blast, above left, can ease some patients' pain. Dr. Albert Rizzo, above, runs a VR lab in California. Below, Brandon Taitai uses VR while having his blood drawn at Children's Hospital Los Angeles.

IN A LOS ANGELES hospital a short drive from Hollywood, some patients are tapping into virtual reality. But at Cedars-Sinai Medical Center, 3D technology is there not for entertainment but pain relief.

Patients in chronic or acute pain have put on special goggles and traveled virtually through Iceland's waterfalls and valleys, floated among dolphins or meditated beside an idyllic coastline.

Brennan Spiegel, a Cedars-Sinai researcher, says a virtual-reality experience can reduce pain by 24% or more, according to clinical trials he conducted in the past two years. VR eased different types of pain, from cancer to orthopedic injuries to abdominal discomfort.

An immersive virtual-reality experience can commandeer a patient's brain so it no longer focuses on pain, says Dr. Spiegel, a gastroenterologist and professor of medicine. "It doesn't work on everybody, but when it works, it really, really works."

At a time when doctors are scrambling to curb the use of addictive painkillers, he and others say VR could be an effective alternative or complementary treatment.

Virtual-reality technology engages a person in a 360-degree visual experience. It has been used in medical research for more than two decades, to treat trauma, anxiety and even burn pain. The fact that it can now be accessed with headsets and mobile phones is fueling hospitals' interest.

Researchers at the Children's Hospital Los Angeles and Boston Children's Hospital are using virtual reality in studies on pain and anxiety in youngsters and adolescents. NewYork-Presbyterian/Weill Cornell Medical Center in Manhattan recently launched a VR study on patients in its burn center.

AppliedVR, Inc., a private company headquartered in Los Angeles, says it is contributing and lending equipment or funding studies in four hospitals around the country to determine if virtual reality can ease pain and anxiety. The company also has sold virtual-reality equipment to about 100 hospitals. Chief Executive Matthew Stoudt says the firm has created or acquired a library of more than 20 experiences, as the VR scenarios are called.

Virtual reality holds promise in alleviating psychological and physical pain, says Albert "Skip" Rizzo, a psychologist who has run his own virtual-reality laboratory at the University of Southern California in Los Angeles since the 1990s.

"I don't think we have any illusions that you are going to have open-heart surgery and you are going to slap on the headset and do it without anesthesia," says Dr. Rizzo, a research professor in USC's psychiatry department.

But virtual reality can have "dramatic effects" on reducing pain, he says.

Years back, it was hard even to get funding. "A lot of the agencies thought it was 'Star Trek,'" he recalls. But the landscape has changed dramatically in the past year or two, and he believes that "clinical virtual reality" will be used more broadly in patient care. In 2015, Dr. Rizzo received a consulting fee of $1,200 from appliedVR.

"It is Christmas time for virtual-reality researchers," says Hunter Hoffman, a VR pioneer and research scientist at the University of Washington in Seattle, who has used virtual reality to help burn victims for the past 20 years. Once upon a time, it was a costly research niche. "We used $90,000 computers and the helmet weighed 8 pounds," Dr. Hoffman remembers. Yet it was effective, and he and a research partner, Dr. David Patterson, used it to ease the pain burn victims felt. They designed a VR experience known as SnowWorld which was "the antithesis of fire," and used colors such as white and blue.

At Cedars-Sinai, patients in Dr. Spiegel's trials used an $800 kit consisting of a Samsung headset and a Galaxy phone to access VR "experiences." The gear was provided by appliedVR, in partnership with Samsung.

For some of the studies, the experiences included a tour of Iceland's terrain and a game called Bear Blast, where participants shoot balls at animated teddy bears. In another experience—a guided relaxation and meditation session alongside a waterfront—an unseen narrator soothingly intones: "See if you can offer loving kindness to yourself by saying or thinking these words: May I be healthy. May I be happy."

A study published in March about a group of 50 Cedars-Sinai patients who were offered the virtual-reality teddy bear game for their pain found "statistically significant and clinically relevant" improvement. Another 50 patients, who were offered a relaxing video with scenes of lakes and running streams, experienced less relief. The paper, which appeared in the Journal of Medical Internet Research Mental Health, concluded that virtual reality "may be an effective adjunctive therapy" for hospital patients. Dr. Spiegel was the senior author.

In a new trial, Dr. Spiegel took 120 patients who were in pain and randomly assigned half to try VR experiences and half to watch a relaxation channel on hospital TV. Preliminary results show a larger drop in pain among the VR group than the TV one, he said.

He now plans to measure whether there was a drop in the patients' opiate use. Dr. Spiegel says he received a $1,250 consulting fee from appliedVR and was reimbursed $889 for transportation; he has no other financial ties to the company. Samsung, in partnership with appliedVR, partially funded the most recent Cedars-Sinai clinical trial.

Ernest "Buck" Shearer, a 40-year-old Cedars-Sinai patient who has endured considerable pain related to Crohn's disease, took part in a trial last spring and found relief with virtual reality. "It distracts your mind completely," he says. Mr. Shearer, who says he was on the opioid drug Dilaudid while hospitalized, says he would reach for the goggles during rough stretches between doses of the painkiller. "It helps you get through the hump," he says. Playing Bear Blast was a welcome distraction. "Once, I played the game and forgot it was time for my pain medicine."

JoAnn Difede, a psychologist and professor at NewYork-Presbyterian and Weill-Cornell Medicine, recently began testing VR on burn victims having staples removed after surgery. AppliedVR is funding her pilot study. "Burn pain is extraordinarily difficult to control," says Dr. Difede, even using opiates. Dr. Difede, who has used virtual reality to treat trauma victims of the 9/11 attack and in the military, believes in its potential. "There is a lot of evidence it does reduce pain," she says. She hopes one day "the equipment is in every patient's room—that VR is as ubiquitous as TV."

At Children's Hospital Los Angeles, a trial led by Jeffrey Gold, a pediatric psychologist, offered patients a VR experience—playing Bear Blast—while they had their blood drawn. This simple procedure can be distressing for children who have complex diseases such as cancer. "They have been stuck numerous times and every needle poke is another trauma," Dr. Gold says. The study involved more than 100 patients ages 13 to 21, some of whom were offered VR, while others were given the usual care. The trial was funded by appliedVR. Dr. Gold says he has been an unpaid scientific adviser to the company and is negotiating to acquire options in it.

Brandon Taitai has leukemia and has been a Children's Hospital patient since 2014. The 15-year-old says he isn't afraid of needles or having his blood drawn but enjoyed the VR experience. While playing Bear Blast he was "a lot more focused on the game" than on the blood test.

Boston Children's Hospital has been using virtual reality to help calm children before they receive medicine intravenously or undergo endoscopies or colonoscopies. Kate Donovan, the hospital's Innovation Technology Coordinator, says children like the goggles. "It is a new toy for them," Dr. Donovan says. While the headsets aren't intended for anyone under 13, Boston Children's has offered them to patients as young as 8 whose parents have consented. The hospital is investing in more headsets from appliedVR and wants to study if VR can reduce reliance on pain medicine.

To Dr. Spiegel of Cedars-Sinai one big advantage of virtual reality is that it has no side-effects other than possible dizziness.

REVIEW & OUTLOOK

Keystone Kops Collusion

Did Don Jr., a Russian pop star and a lawyer steal the 2016 election?

President Trump's critics claim to have uncovered proof, finally, of 2016 collusion between the campaign and the Kremlin. Another reading of the meeting between Donald Trump Jr. and a well-connected Russian lawyer is, well, political farce.

In June 2016, Mr. Trump Jr. arranged an appointment in Trump Tower with the lawyer, Natalia Veselnitskaya. He said in a statement that he hoped to acquire opposition research about Hillary Clinton, and he even pulled in Trump son-in-law Jared Kushner and then campaign manager Paul Manafort. By Mr. Trump Jr.'s account, Ms. Veselnitskaya relayed nothing to compromise Mrs. Clinton and then lobbied him about the Magnitsky Act, a 2012 U.S. law that sanctions Russian human-rights abusers.

According to the emails that Mr. Trump Jr. released Tuesday, Mr. Trump Jr. agreed to meet with Ms. Veselnitskaya after he was approached by Rob Goldstone, a publicist who offered to pass along "some official documents and information that would incriminate Hillary and her dealings with Russia and would be very useful to your father." He wrote that this information "is part of Russia and its government's support for Mr. Trump."

The appropriate response from a political competent would have been to alert the FBI if a cut-out promised material supplied by a foreign government. Mr. Trump Jr. instead replied that "if it's what you say I love it."

Then again, the Trumps knew Mr. Goldstone through the Russian pop star Emin, aka Emin Agalarov, whose father partnered with Donald Trump Sr. in bringing the Miss Universe beauty pageant to Moscow in 2013. Mr. Trump Sr. appeared in a music video with Emin the same year. Mr. Goldstone said that "Emin just called and asked me to contact you with something very interesting"—info his father got from the "Crown prosecutor of Russia." Russia's "Crown prosecutor" doesn't exist.

Mr. Trump Jr. responded that "perhaps I just speak to Emin first." Mr. Goldstone brokered the call, reporting that "Ok he's on stage in Moscow but should be off within 20 Minutes so I am sure can call." Subsequent messages show Emin asked Mr. Trump Jr. to meet with Ms. Veselnitskaya, who was well-known as an anti-Magnitsky operative at the time. Mr. Goldstone publicly checked into Trump Tower on Facebook during the meeting, which isn't how a KGB man would normally conceal the handoff of state secrets.

In the daisy chain from Russian oligarch to singer to PR go-between to lawyer to Trump scion, which is more plausible? That Don Jr. was canny enough to coordinate a global plot to rig the election but not canny enough to notice that this plot was detailed in his personal emails? Or that some Russians took advantage of a political naif named Trump in an unsuccessful bid to undermine the Magnitsky law they hated?

The problem is that President Trump has too often made the implausible plausible by undermining his own credibility on Russia. He's stocked his cabinet with Russia hawks but dallied with characters like the legendary Beltway bandit Mr. Manafort or the conspiratorialist Roger Stone. His Syrian bombing and energy policy are tough on Russia, but Mr. Trump thinks that if he says Russia interfered in 2016 he will play into the Democratic narrative that his victory is illegitimate.

Thus in retrospect the John Podesta and Democratic National Committee hacks—still so far the tangible extent of Russian meddling—did less damage to U.S. democracy than it has done to the Trump Presidency. The person who should be maddest about the Russian hacks is Mr. Trump.

Putting Britain to Work

Theresa May's government on Tuesday unveiled a major report on work and employee protection in the modern economy. Too bad it delivers the same version of Labour-lite policy that voters rejected last month.

Named for Tony Blair advisor Matthew Taylor, the Taylor Review clarifies how Britain's labor market is—and isn't—changing. Contrary to complaints from politicians and pundits on the left, there's no British crisis of full-time employment. The percentage of working people with full-time contracts offering benefits such as vacation and sick pay has fallen only slightly since 2008—to 63% from its average of around 65% in the decade before the financial panic.

Meanwhile, at its high after the 2008 crisis, part-time work accounted for 28% of employment but is starting to fall again. The rise in part-time employment helps explain why there wasn't a greater decline in overall employment during and after the recession, as Britain's relatively flexible labor laws allowed employers to reduce employee hours instead of laying them off. That's a lesson for the rest of Europe.

The Taylor Review does identify some problems. A large number of part-time workers say they would like to work more hours if they could, although some 70% of part-timers say they wouldn't want to go full-time. Inflation-adjusted pay also hasn't returned to its pre-2008 level despite years of nominal weekly pay growth. This will continue as consumer-price inflation is expected to hit 3% this year, and the strain on household finances helps explain Mrs. May's election fiasco last month.

So it's puzzling that everyone, including Mrs. May in her speech unveiling the report, is focused on other matters. The review's main proposals concern applying different kinds of employment contracts and minimum-wage increases to "gig economy" workers such as Uber drivers. It also suggests increasing social-insurance taxes on the self-employed so they don't deprive the government of £5.1 billion ($6.57 billion) in revenue each year.

This is self-defeating. The Taylor Review hints, without openly admitting, that economic growth is the best guarantor of worker rights and paychecks. Healthy growth and a tight labor market have allowed some part-time workers, such as those at McDonald's restaurants, to demand firmer contracts and more hours, while leaving other workers at the same company with the flexibility to opt out.

The real lesson is that Britain should avoid the labor trap into which so many other European economies have fallen, in which high taxes on labor coupled with onerous legal obligations stifle entrepreneurship and job creation.

After Victory in Mosul

How the U.S. and Iraq can prevent Islamic State from rising again.

Iraqi Prime Minister Haider al-Abadi declared victory Monday over Islamic State in Mosul, and Americans can also take pride at the end of a bloody three-year campaign that would not have happened without U.S. leadership and arms. The triumph will be short-lived, however, if the Baghdad government and U.S. repeat the mistakes they made after the successful "surge" of 2007-2008.

The victory removes Islamic State from the capital of the self-styled caliphate that Abu Bakr al-Baghdadi declared after routing the Iraqi army in Mosul in June 2014. It provides relief to tens of thousands of Iraqis living in fear of torture or death for even minor offenses against Shariah law, or for being a non-Muslim.

It is also a morale boost to the Iraqi military and Mr. Abadi, who has proved to be a major improvement over predecessor Nouri al-Maliki. Particular credit goes to the Kurdish *peshmerga* who were the main resistance to Islamic State in 2014 and prevented a larger rout.

The biggest problem with the Mosul campaign is that it took so long. Barack Obama never wanted to admit that his 2011 withdrawal of all U.S. forces was a blunder that required a U.S. military return to Iraq. He thus deployed a light footprint limited mainly to special forces and air power.

New Defense Secretary Jim Mattis accelerated the pace of battle after January. But the ability of Islamic State to survive in Mosul for so long gave it an élan in the Islamic world that helped recruit young radicals and spread its brand around the globe.

Defeat in Mosul diminishes that appeal, a decline that will continue as the U.S. coalition closes in on Islamic State's Syrian stronghold in Raqqa. But the threat won't vanish, as the jihadists disperse into smaller cells in towns and cities across the Sunni heartland. The jihadists will return to their post-Saddam insurgent tactics and wait to exploit bad governance or more sectarian conflict.

"We have another mission ahead of us, to create stability, to build and clear Daesh cells, and that requires an intelligence and security effort, and the unity which enabled us to fight Daesh," Mr. Abadi said Monday, using the Arabic acronym for Islamic State. We hope he means it.

He could start by declaring his support for local Sunni government and preventing Iran-backed Shiite militias from treating Sunnis like members of Islamic State as they go door to door in Mosul. He needs to rebuild Mosul rapidly and more effectively than his government has Fallujah and other former Islamic State-run cities. (See Seth Jones nearby.)

The Trump Administration can help by negotiating a modest U.S. military presence that will remain in Iraq for the long run. Mr. Mattis told the U.S. Senate in June that such a force could serve "in a training role and mentoring role in Iraq if we work that out with the government." A U.S. presence will serve as a moderating voice among the Sunni, Shiite and Kurdish factions. And it may give Mr. Abadi more courage to resist becoming a de facto subsidiary of Iran and its Hezbollah-like militias in Iraq.

This will be crucial as September's Kurdish-independence referendum approaches, which may threaten the Abadi government. Iran would love a fractured and diminished Baghdad to replace Mr. Abadi with an ally like Mr. Maliki. A politically stable and independent Iraq, by contrast, would improve the chances of stabilizing Syria after Islamic State is swept from Raqqa. There are no permanent victories in the Middle East, but the liberation of Mosul is an important milestone in the war against radical Islam.

Trump Agonistes

BUSINESS WORLD
By Holman W. Jenkins, Jr.

Surprise, he didn't run his campaign any smarter than his government.

Many decisions by the Trump-for-president campaign were ill-advised. Certainly that goes for a meeting between the president's son and a Russian lawyer who claimed to have dirt on Hillary Clinton but was really trying to get her foot in the door to lobby the Republican nominee against the Magnitsky Act.

The Washington Post celebrates the latest revelation as a "grave new set of facts." Maybe this really is the beginning of the end, but an awful lot depends on the email bluster of a former British tabloid journalist who apparently was the go-between.

Before keeling over, remember what else was going on at the time. The U.S. media even then were getting ready to pour considerable resources into trying to corroborate lurid "Trump Dossier" accusations *explicitly attributed by the dossier's author to Russian intelligence*, and assembled at the expense of Republican and Democratic opponents of Mr. Trump.

A lot of what you're seeing is just naked political warfare, at which Team Trump is failing badly, in fact getting buried.

With qualification, we might even recommend former drama critic Frank Rich's New York magazine cover story insisting on a Watergate parallel. No, Mr. Trump is not Nixon, and Watergate, in its antecedents, was more like the polar opposite of what is now befalling the Trump administration. Nixon and colleagues were lifelong political operatives, on their way to a genuine and sweeping mandate, and their crimes were crimes that Mr. Trump has hardly had time yet to master.

But Mr. Rich dwells on the dubious Watergate analogy for the sake of a more newsy point: It took many, many months for Nixon's political base to unravel and drive him from office.

In fact, Mr. Rich's speculations that Mr. Trump, Nixon-like, might resign will sound very much like speculation you've read in this column. The presidency is hard work. Mr. Trump keeps finding himself cast in the role of "loser." The damage to his business and personal brand is becoming intolerable.

Now an investigation is under way. Even if special counsel Robert Mueller dispenses with collusion, even if he runs out the string on obstruction, is it conceivable that a competent prosecutor—with the 185,053-page code of federal regulations in one hand and Mr. Trump's every loan application, conservation easement, etc. in the other—won't find something, and probably 100 somethings?

The relevant text here isn't the Watergate memoirs Mr. Rich consults, but "Three Felonies a Day" by Boston civil-rights lawyer Harvey Silverglate, who says the government can always find something on anyone.

It was Nixon himself, Mr. Rich tells us, who said it's not the crime, it's the coverup. But it would be even truer to say it's the investigation. The existence or nonexistence of an investigation is almost an exogenous factor of its own.

Mr. Rich fancifully likens Russia's hacking to Nixon's DNC break-in, and implies Trump complicity. What likely won't be investigated, though, is the numerous illegal intelligence leaks meant to harm Mr. Trump, though these are far more reminiscent of the Nixon White House sending ex-CIA agents to burglarize dirt on political opponents.

The one Russian intervention that may actually have influenced the election was fake intelligence planted about Hillary Clinton that prompted FBI Chief James Comey's decision to clear Mrs. Clinton publicly of email charges. This likely won't be investigated either, under the guise that the intelligence is too "sensitive," but also because it fits neither party's preferred narrative of blame-laying.

Also unlikely to be investigated is the Trump dossier. Though it may well be a Russian plant, apparently it was financed by U.S. political operatives and has been exploited by Trump opponents to claim a dark conspiracy.

Each of these episodes features either the FBI, U.S. intelligence leakers, the press or major party figures "colluding" (in one sense of the word), wittingly or semiwittingly, with Russian intelligence. But there will be no investigation.

Unlike Mr. Trump, these institutions are not expendable. The gnashing of teeth would be so much greater than any from merely driving out of office an "outsider" president, arguably an incompetent one, who isn't fulsomely claimed by either party and whose election is regarded as an institutional and statistical aberration anyway.

The great irony is that Mr. Trump, for all his public vulgarity and personal sleaziness, is the political innocent in this drama, and will be sacrificed to protect the sophisticates.

Democratic and news-media types are already pronouncing the verdict of treason. We can't resist ending with Mr. Rich's 1974 quote from Elizabeth Drew about Nixon, which applies as much to some of Mr. Trump's critics today: "There was no one to challenge his assumptions, to set him straight in his confusion of political opponents with enemies. He didn't recognize boundaries. He never learned to observe limits—anything went."

A Trump Disappointment For U.S. Manufacturers

By Jay Timmons

Does Scott Garrett want to lead the Ex-Im Bank or kill it?

President Trump has been a vigorous and outspoken supporter of manufacturers. That's why his nomination of Scott Garrett as president of the U.S. Export-Import Bank is such a disappointment.

U.S. manufacturers have enthusiastically supported Mr. Trump's previous nominees and his initiatives on comprehensive tax reform, infrastructure investment and regulatory reform. We were energized by his endorsement of the Ex-Im Bank.

But Mr. Garrett's confirmation would be a terrible trade deal for America. His record of aggressively undermining the Ex-Im Bank is tantamount to a vicious trade war against U.S. manufacturing workers.

A quick look at the Garrett record as a congressman before he lost reelection last year shows his contempt for the agency he now seeks to lead. In 2012 and again in 2015, he voted against multiyear reauthorizations of the bank and declared to his House colleagues: "We have the opportunity today to keep the Export-Import Bank out of business. We should take each of those opportunities."

The Ex-Im Bank is an agency that returns a profit to the U.S. Treasury. Some suggest pragmatic reforms to improve its benefits to U.S. exporters. But Mr. Garrett isn't a reformer; he's a destroyer. He has worked consistently to restrict the agency's ability to support U.S. jobs through exports, voting more than a dozen times to prevent the agency from fulfilling this critical mission.

If we want to make manufacturing in the U.S. even greater, we cannot get there by letting other countries take deals away—losing business with the 95% of the world's customers who live outside America's borders.

The Ex-Im Bank, when fully functioning, is America's most effective tool to level the playing field when trading with other countries. At least 85 foreign-government-backed export credit agencies are working aggressively to support their own domestic industries, pulverizing manufacturers in the U.S.

While the Ex-Im Bank's board has been hobbled without a quorum, countries like China and Germany are devoting hundreds of billions of dollars to their official export credit agencies and inflicting long-lasting harm on the U.S. manufacturing base.

One small energy company, FirmGreen Inc., had to take $180 million in business for U.S. manufacturers to China because the Ex-Im Bank's board lacked a quorum to approve the deal.

Elsewhere, U.S. companies have lost foreign satellite sales because the Ex-Im Bank isn't fully operational yet. Singapore-based Kacific Broadband Satellite told U.S.-based companies not to bother bidding on its new project unless Ex-Im financing is available.

For his part, Mr. Trump understands exactly what is at stake. American manufacturers are thankful to have a president who is willing to break through all of the rhetoric and misinformation about the Ex-Im Bank in order to get it—and America—back in business.

But the politician who wants to lead it, Mr. Garrett, would do exactly the opposite.

Those like Mr. Garrett who have stood in the path of a fully functioning Ex-Im Bank are responsible for moving America's jobs, wealth and factories to other countries. The president should withdraw his nomination.

Mr. Timmons is president and CEO of the National Association of Manufacturers.

OPINION

America Isn't Ready for a 'Cyber 9/11'

By H. Rodgin Cohen And John Evangelakos

The prospect of a "cyber 9/11" grows likelier every day. In May the WannaCry ransomware attack, affecting hundreds of thousands of computers, disrupted health care and telecommunications across the world. American investigators now believe Russian hackers precipitated the continuing Gulf diplomatic crisis by planting false news stories on the Qatari state news agency's website. And late last month another ransomware outbreak, Petya, went global.

A new cabinet-level agency could help—if officials have learned the lessons of U.S. Homeland Security.

Cyberattacks have become capable of much more than stealing consumer information or embarrassing business executives and politicians. Whether conducted by lone wolves or nation-states, they can compromise the safety of medical, food and water systems, disrupt transportation or even destabilize nuclear plants. Such attacks can undermine democratic institutions or encourage violence by spreading false information. The cyber threat has become existential.

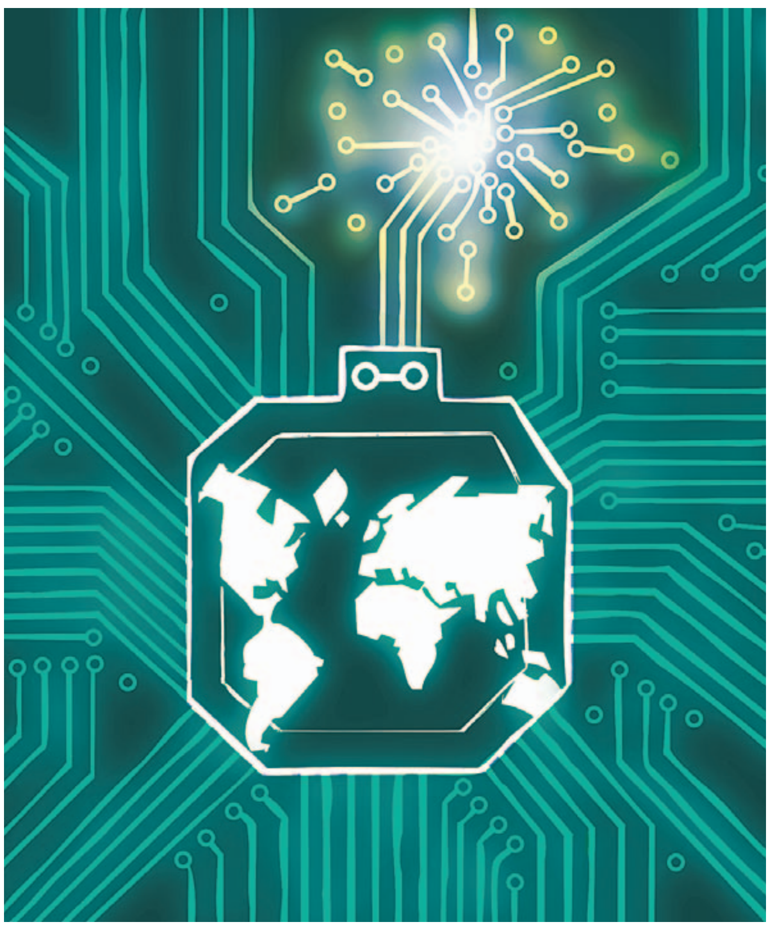
Enhanced cybersecurity controls from private and public organizations are necessary but insufficient. The problem hasn't been lack of action. It is the multiplicity of programs and division of responsibility that diminish their effectiveness. At least 11 federal U.S. agencies bear significant responsibility for cybersecurity: the Central Intelligence Agency, National Security Agency, Department of Homeland Security, the Treasury Department, three branches of the military, and three federal banking agencies.

Congress should merge these disparate cybersecurity programs into one cabinet-level agency that also serves as the focal point for collaboration with the private economy. Call it the Department of Cybersecurity. This would be an extraordinary and risky measure, requiring careful implementation. But the magnitude of the danger, and the limits of America's current ability to defend against the cyber threat, compel a bold response.

Some leaders in government and business say they doubt this kind of unification is feasible, but very few have questioned whether it is desirable.

Lessons from the creation of the Department of Homeland Security 15 years ago can help Congress and the president implement the idea more smoothly. What to avoid? Fragmented congressional oversight—more than 100 committees and subcommittees oversee the DHS. Constant bureaucratic turf battles have hurt the DHS's effectiveness. As did raising public anxiety while failing to provide concrete instructions for action: Initiatives like the DHS daily color codes should be avoided.

The new agency would need a clearly defined mission, consolidation of reporting into a limited number of congressional committees, and an independent, expert body providing periodic review to ensure accountability. There is also an opportunity for the new agency to be formed in a more deliberate way, drawing on leadership from the private economy to promote efficiency and cost-effectiveness.



DAVID KLEIN

Most important, the new agency should be led by someone with demonstrated management skills who is fully empowered to bring all the strands of cyberdefense together and to create a credible threat of retaliation. Leading candidates that come to mind are former NSA Chief Keith B. Alexander, former Assistant Treasury Secretary Leslie Ireland, Scott Charney of Microsoft and former Vice Chairman of the Joint Chiefs of Staff Edmund P. Giambastiani.

This leader would inherit a group of agencies that are already collaborating more effectively than before 9/11, but there is still room to improve coordination. Civilian networks are separated from military ones. Jurisdictional limitations to domestic, or homeland, concerns impede global cooperation.

Although coordination between the federal government and the private economy has improved, it is still not a substitute for a unified defense against a global threat. In today's multiagency environment, information and knowledge are too often isolated within individual agencies. As the DHS experience proved, agencies that have competing objectives eventually end up undermining the country's ability to address security challenges. These problems would be more effectively addressed by a single agency, if it had the authority to succeed.

Perhaps most important, talent remains dispersed. Substantial cyber expertise exists throughout government, but these experts would be far more effective working under a unified command structure. Such an agency would likely attract the best and brightest at a time when those minds can mean the difference between cyber catastrophe and cyber protection.

A unified federal agency would also be best suited to provide crucial coordination with state and local governments and the business community. Private companies are a critical source of technological breakthroughs and early warnings, and the states have often been laboratories for policy innovation. These efforts could be accelerated and enhanced through leadership from a single, properly structured federal authority.

A new federal office for cybersecurity can provide the unification, collaboration, coherence, skills and leadership to implement a comprehensive policy that counters the existential cyber threats America must confront. Too much is at stake to ignore the problem any longer.

Mr. Cohen, senior chairman of Sullivan & Cromwell LLP, served on the National Security Agency's Cyber Advisory Committee (2012-16). Mr. Evangelakos, a partner at Sullivan & Cromwell, leads the firm's cybersecurity practice.

Iraq Declares Victory in Mosul, but the War Is Far From Over

By Seth G. Jones

Iraqi Prime Minister Haider al-Abadi arrived in Mosul on Sunday, dressed in a black military uniform, and announced the "liberation" of the city where Islamic State declared its so-called caliphate in 2014. "The world did not imagine that Iraqis could eliminate Daesh," he remarked, using the Arabic acronym for the group.

But this war is far from over. A growing number of Iraq's Sunnis are disenchanted with the slow pace of reconstruction and frustrated with a Baghdad government they consider too friendly to Iran.

The U.S. needs to shift its focus quickly from supporting military operations in cities such as Mosul to helping the Iraqi government better address political grievances. Failure risks sowing the seeds of Islamic State's resurgence.

Islamic State started strong in 2014, taking advantage of Sunni grievances against the Iraqi government. At its peak, according to a Rand Corp. analysis, Islamic State controlled nearly 58,000 square kilometers of territory in Iraq, home to more than six million people.

But beginning in 2016 the group lost significant territory in cities such as Sinjar, Fallujah, Ramadi and now most of Mosul to a combination of U.S. and allied strikes, ground assaults by the Iraqi security forces, and Sunni, Shiite and Kurdish militia advances.

Despite these successes, there are troubling signs in Iraq, particularly within the Sunni Arab community. Take the western city of Fallujah. A year after Iraqi forces liberated the city, residents are disenchanted because of the slow pace of rebuilding, the absence of government services and skyrocketing unemployment. "This area was liberated in June, and it still looks the same now," Hussein Ahmed, a Fallujah resident, told a visiting journalist earlier this year. "I speak for thousands of people when I say the government has forgotten us."

Many Sunnis also look warily at growing Iranian influence. Tehran is committed to increasing its influence in Iraq through such organizations as the Popular Mobilization Units, militias that include as many as 150,000 Shiite fighters. To the consternation of many Sunnis, Iraq's Parliament passed a law in December 2016 formally integrating the Popular Mobilization Units into Iraq's security forces. Today, such Shiite forces are nearly as large as the entire Iraqi army.

Islamic State fighters are attempting to leverage these grievances in several ways. Its operatives have recruited new members who are unhappy about the pace of reconstruction in Sunni towns and cities, angry about friends or family members who have been abused by pro-government militias, and nervous about Iran's growing influence in the country. Iraq's security services have noted with alarm that Islamic State cells are re-establishing intelligence networks in Ramadi and Fallujah.

Islamic State emerged in the vacuum of the U.S. withdrawal in 2011. Don't make that mistake again.

Even after last week's defeat in Mosul, Islamic State still holds nearly 10,000 square kilometers of territory in Iraq with a total population of one million, including the western city of al Qa'im. It also boasts more than 15,000 fighters across the Iraq-Syria battlefield and more than $500 million in annual revenue through the end of 2016, though Islamic State's monthly revenues have declined in 2017.

Islamic State is also shifting from conventional to guerrilla operations, including ambushes, raids, suicide attacks, car bombs and assassinations. The group is relocating its personnel and battlefield supplies to mountains, caves and desert areas around the Iraqi city of Haditha, Lake Tharthar, and the Iraq-Syria border region. Islamic State has also used multirotor and fixed-wing drones for surveillance and, occasionally, strike missions. In addition, the group is restructuring its *wilayahs*, or provinces, and decentralizing its organizational structure in Syria and Iraq to conduct more effective guerrilla operations.

The U.S. needs a more aggressive political strategy to prevent Islamic State's revitalization. U.S. diplomats and military leaders need to encourage Iraqi leaders to better address Sunni grievances. One step would be to cut in half the number of Shiite forces under the Popular Mobilization Units and transition militia fighters to civilian employment. U.S. officials might also press Baghdad to withdraw Shiite militias from the Iraq-Syria border, including in Nineveh, where they facilitate a regional pipeline of Shiite fighters from Iran all the way to Lebanon.

The U.S. should also help coordinate international assistance coming into Iraq, with an emphasis on rapid repair of damaged infrastructure in urban centers such as Mosul, Ramadi, Fallujah and Beiji. Reconstruction assistance should be openly associated with efforts to move the Iraqi government and Sunni Arabs closer together.

Islamic State's predecessor, al Qaeda in Iraq, began to reconstitute itself in 2011 in part because of Baghdad's failure to address Sunni grievances and Washington's decision to withdraw U.S. forces and inability to influence Iraqi politics. It would be doubly tragic to make the same mistake again today.

Mr. Jones is director of the International Security and Defense Policy Center at the Rand Corp. and author of "Waging Insurgent Warfare: Lessons from the Vietcong to the Islamic State" (Oxford).

What Does Donald Trump Mean by 'the West'?

POLITICS & IDEAS

By William A. Galston

Thirty-five years ago, Ronald Reagan addressed the British Parliament. He felt very much at home in Westminster, he began, because it's "one of democracy's shrines." He added that "here the rights of free people and the processes of representation have been debated and refined."

These opening remarks were more than routine diplomatic niceties. Democracy was the heart of the speech, one of the most notable Reagan ever gave. Despite the apparent strength of democracy's enemies, he insisted, "optimism is in order," because "regimes planted by bayonets do not take root."

A democratic revolution is gaining momentum, he observed presciently. But although "democracy is not a fragile flower . . . it needs cultivating." The West must act to assist the "campaign for democracy."

Reagan spelled out the elements of this campaign: to foster the "infrastructure of democracy, the system of a free press, unions, political parties, universities, which allows a people to choose their own way."

To those who objected to the promotion of democracy as "cultural imperialism," he had a forthright reply: It is "providing the means for genuine self-determination and protection for diversity." Indeed, "it would be cultural condescension, or worse, to say that any people prefer dictatorship to democracy."

Noting that Western European nations were already engaged in this endeavor, Reagan promised to mobilize U.S. leaders across party lines to join and strengthen it. "It is time we committed ourselves as a nation—in both the public and private sectors—to assisting democratic development," he declared, and he went on to spell out how he intended to do so. "Let us ask ourselves, 'What kind of people do we think we are?' " he concluded. "Let us answer, 'Free people, worthy of freedom and determined not only to remain so but to help others gain their freedom as well.' "

Toward the beginning of his speech, Reagan observed that Poland was "at the center of European civilization" and was contributing to this civilization as he spoke by resisting oppression. Poland resisted to regain its national independence, but also "to secure the basic rights we often take for granted." The "struggle for Poland" was inextricably tied to the struggle for democracy.

Thirty-five years later, the current U.S. president addressed a crowd in Warsaw. In his speech last week Donald Trump barely mentioned democracy. He spoke instead of the "will to defend our civilization."

Although he didn't offer an explicit definition of this civilization, the basic thrust of his understanding emerged. Our civilization rests on bonds of "history, culture, and memory." It puts "faith and family" at the center of our lives. It is best summarized in the words one million Poles chanted in response to Pope John Paul II's Warsaw sermon in 1979: "We want God."

In Warsaw, he talked of culture, history and faith. But he barely mentioned democracy.

This is the heart of the matter, said Mr. Trump: "The people of Poland, the people of America, and the people of Europe still cry out, 'We want God.' "

While this may well be true for the most devoutly Catholic nation in Europe, it would come as a surprise to most other Europeans. It is an inherently—perhaps intentionally—divisive interpretation of what we allegedly share as participants in Western civilization. Freedom of religion—the right of each to worship in his own way or not at all—would have been a more accurate way of putting it. It would also have been unifying. If this is what Mr. Trump meant, he should have said so. He is, after all, the president of a country dedicated like no other to the principle of religious liberty.

But had he framed it that way, his audience might not have chanted his name. They certainly wouldn't have done so if Mr. Trump had summoned the courage to say what many Poles and most Europeans know—that along with Hungary's Viktor Orbán, the current Polish government is Europe's leading threat to liberal democracy.

There is no evidence that Donald Trump cares much about democracy, one way or the other. He regularly praises autocrats as strong leaders and reserves most of his blame for democratic leaders whose policies he doesn't like. If he had been born in an autocracy, he wouldn't have been a dissident.

If Ronald Reagan had been asked to define the phrase "America First," his initial reaction probably would have been: Those were the people too myopic to see why the United States should oppose fascism and Nazism.

To judge from his Westminster address, his deeper answer would have been that America puts itself first when it is true to itself. And being true to itself means understanding that our constitutive principles apply beyond our borders. Indifference to democratic self-determination for other peoples is not putting America first; it is a betrayal of who we are.

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

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THE MIDDLE SEAT | By Scott McCartney

Hope for Faster Airport Security Lines

Two changes in the screening process now being tested could end nuisances like laptop bans and the 3-ounce rule

TWO DIFFERENT airport-screening changes—one high-tech, one very low—show promise at speeding up security lines and improving accuracy at finding weapons.

The Transportation Security Administration, airports, airlines and manufacturers are gearing up for a major effort to replace X-ray machines at checkpoints with computed tomography scanners—CT scanners similar to what hospitals use. They can give a clean, 3-D look inside cluttered bags, which have become a big problem for TSA.

These machines could eliminate calls for cabin laptop bans because they can look inside electronics and find explosive material. They could someday do away with 3-ounce, quart bag restrictions on liquids, since they can measure the density of any liquid and determine if it's explosive. And they can boost the number of people screened at a checkpoint each hour, reducing lines.

"When and if we go to deploy these systems...the intent would be that laptops and liquids stay in" bags, says Steve Karoly, TSA acting assistant administrator.

At the other end of the technology spectrum, bins with an ID tag visible on an X-ray screen are being tested at select checkpoints in Denver, New York LaGuardia, Indianapolis and Ontario, Calif. It's as low-tech as you can get, but it's showing it can speed up screening, at least according to data collected by the manufacturer.

A metal plate with a three-character ID stencil is attached to a corner of a bin, reducing incidents where screeners end up with the wrong bag for a hand check and screening gets halted until the suspicious bag is found. Those mistakes are infrequent but disruptive.

Taken together, the two innovations show how years of research by manufacturers and TSA into ways to improve screening are finally starting to affect checkpoints. In the past, many screening efforts failed, like shoe scanners, or had limited impact, like liquids scanners. Body scanners have been criticized as invasive. And past changes to reduce screening failures have led to long lines.

These innovations could ultimately disappoint, too. But officials say the CT machines in particular could be revolutionary. Airlines and airports are so excited about it they are willing to pay for machines themselves until TSA can get funding from Congress.

The technology has already been in TSA use for several years: It scans checked luggage in baggage sorting systems. But those machines were too big, too expensive—at about $1 million each—and too slow to replace the 2,200 X-ray machines that scan hand baggage in the U.S.

A CT scanner rotates around the bag, taking visual X-ray slices from all angles to create a detailed three-dimensional picture. Specific items can be isolated for close study. Software analyzes images for screeners and distinguishes between safe and dangerous materials.

Several manufacturers have come up with ways to shrink the machines, lower the cost and speed them up for checkpoint use. Machines have now been made small enough to fit into existing checkpoint screening lanes and light enough to not require reinforcement of floors. The cost has come down to about $250,000.

TSA has certified two models for use and is close to signing off on two others. One, made by L3 Security and Detection Systems, is in use at Phoenix Sky Harbor International Airport Terminal 4. Another, made by Integrated Defense & Security Solutions, is being tested in Terminal E in Boston. American Airlines has struck a deal for the first eight Analogic machines to be used in American hubs in the U.S. and Europe.

Analogic expects to roll out machines in late summer or early fall.

One reason airlines are eager to see checkpoint screening improvements: baggage fees. Airlines collected $4 billion in checked baggage fees in 2016, but the higher volume of carry-on bags from passengers trying to avoid fees has made screening more difficult.

RYAN DAVID BROWN FOR THE WALL STREET JOURNAL

The ID tag in the corner of this bin at Denver International Airport shows up on X-rays and can reduce bad bin handoffs between screeners, which sometimes force shutdowns at TSA checkpoints.

That's led to worries that the government might force airlines to roll back baggage fees to ease the screening strain.

The other possible screening change shows that sometimes simple can be pretty smart.

SecurityPoint Media, a St. Petersburg, Fla., company that provides bins with advertising inside to 38 airports for TSA checkpoints, saw an opportunity to solve a nagging problem: Sometimes it's hard for TSA screeners to identify the right bin.

Screeners working X-ray machines identify shapes and patterns in a bin to make sure they are sending the right one off for a hand check. Sometimes the screener doing the hand check ends up with the wrong bag, creating a scramble to find the suspicious one. The lane gets shut down and lines grow.

"We have access control issues that happen," TSA's Mr. Karoly says. "What this will do is guarantee that when you see it on the X-ray and it shows you A25, and you just pulled that bin that says A25 now you know that you've got the right bag."

TSA tested new bins in Denver, which has two main checkpoints in the heart of its terminal. The south checkpoint got the new bins. The north kept using existing bins.

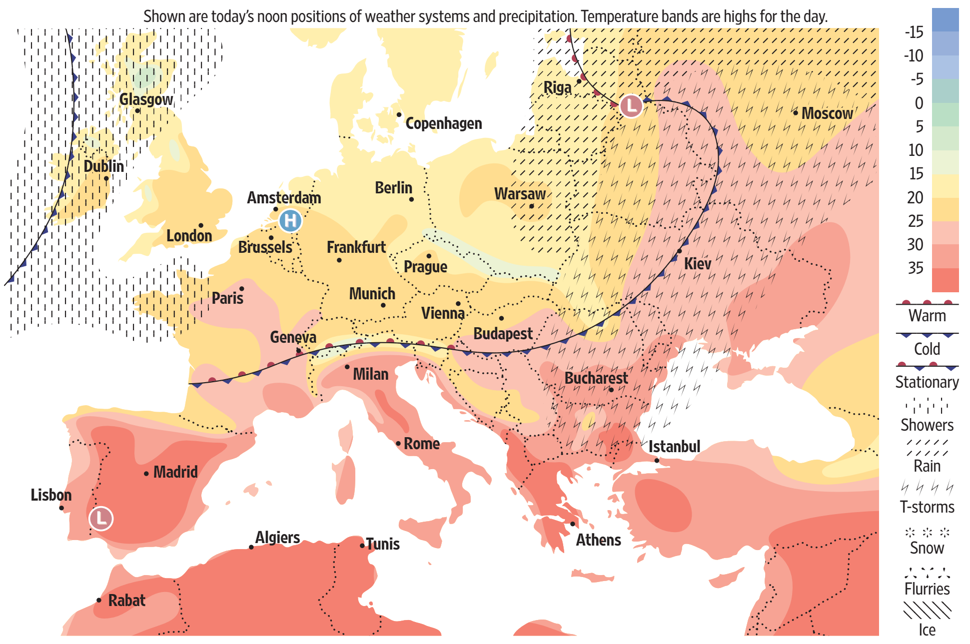
Research sponsored by SecurityPoint showed a 21% increase in passengers screened per hour at the south checkpoint. Analysts attributed some of that to a redesigned bin with more surface area and lower sides. But most of the increase in passengers per hour resulted in an 83% drop in bad bag handoffs. The south checkpoint had just one bad-bag handoff in a two-month study period.

TSA says it's too early to verify claims of speeding up lanes—it hasn't done a full test yet. The agency is also working on alternatives, such as systems that would automatically divert a bin with a possible threat.

Weather

AccuWeather.com

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

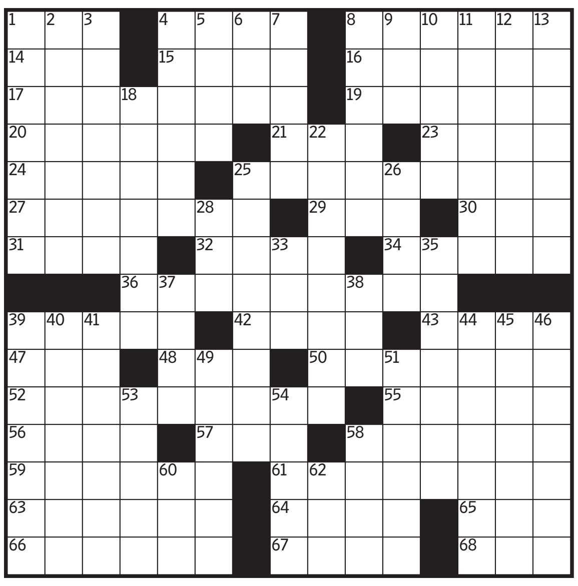


Global Forecasts

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

City	Today Hi	Lo	W	Tomorrow Hi	Lo	W
Amsterdam	19	11	pc	20	13	sh
Anchorage	22	16	pc	20	14	sh
Athens	36	27	s	34	24	s
Atlanta	33	23	t	33	24	pc
Baghdad	46	27	s	47	29	s
Baltimore	37	24	pc	34	23	t
Bangkok	32	26	t	31	25	t
Beijing	37	26	pc	35	24	t
Berlin	19	9	pc	19	13	t
Bogota	18	9	c	20	9	c
Boise	38	20	s	39	23	pc
Boston	25	16	t	19	17	sh
Brussels	21	11	pc	21	11	sh
Buenos Aires	23	12	pc	16	11	r
Cairo	37	25	s	38	26	s
Calgary	30	14	s	27	13	s
Caracas	31	24	pc	31	26	pc
Charlotte	34	23	pc	34	23	t
Chicago	30	18	c	26	17	s
Dallas	35	26	s	35	25	pc
Denver	29	15	t	29	15	pc
Detroit	29	19	t	26	16	pc
Dubai	45	35	s	42	34	s
Dublin	20	10	sh	20	14	pc
Edinburgh	19	10	sh	17	14	pc
Frankfurt	22	11	s	25	11	sh
Geneva	25	14	t	25	14	t
Hanoi	32	26	t	32	26	t
Havana	31	23	pc	32	23	pc
Hong Kong	32	28	t	32	27	sh
Honolulu	30	25	pc	30	24	pc
Houston	33	24	t	34	25	t
Istanbul	32	23	s	28	22	s
Jakarta	33	25	pc	32	24	c
Johannesburg	21	8	s	21	6	s
Kansas City	32	20	pc	29	18	t
Las Vegas	42	30	s	43	32	s
Lima	21	16	pc	21	15	s
London	23	14	pc	23	14	pc
Los Angeles	29	19	pc	30	20	pc
Madrid	40	22	s	39	21	s
Manila	31	25	t	29	25	t
Melbourne	14	8	c	13	5	r
Mexico City	22	13	t	24	11	pc
Miami	32	27	c	33	27	sh
Milan	32	21	t	30	18	pc
Minneapolis	24	16	pc	28	20	s
Monterrey	33	22	pc	35	21	pc
Montreal	20	13	sh	22	17	t
Moscow	22	16	r	21	12	r
Mumbai	31	26	sh	30	27	r
Nashville	33	24	t	32	23	t
New Delhi	33	27	pc	35	28	pc
New Orleans	32	25	t	32	25	t
New York City	34	22	t	28	21	t
Omaha	29	17	pc	30	20	s
Orlando	32	24	t	32	23	t
Ottawa	20	12	c	20	15	t
Paris	25	14	pc	25	13	pc
Philadelphia	36	24	t	32	22	t
Phoenix	41	31	pc	42	31	s
Pittsburgh	30	21	t	27	18	t
Port-au-Prince	34	23	pc	34	22	pc
Portland, Ore.	26	13	s	29	13	s
Rio de Janeiro	26	18	s	26	18	s
Riyadh	45	32	pc	44	31	pc
Rome	32	21	s	30	21	s
Salt Lake City	36	23	pc	37	22	pc
San Diego	25	20	pc	25	20	pc
San Francisco	21	13	pc	21	13	s
San Juan	31	26	sh	31	26	sh
Santiago	12	2	sh	12	1	pc
Santo Domingo	32	23	pc	33	23	pc
Sao Paulo	23	13	pc	24	13	s
Seattle	23	12	s	26	12	pc
Seoul	31	23	pc	30	24	t
Shanghai	35	28	t	35	27	t
Singapore	29	25	t	31	25	t
Stockholm	17	9	pc	19	10	pc
Sydney	18	10	s	21	11	pc
Taipei	36	26	pc	36	26	pc
Tehran	29	19	pc	31	24	pc
Tel Aviv	32	24	s	33	24	s
Tokyo	31	25	pc	30	26	pc
Toronto	23	17	t	24	17	pc
Vancouver	22	12	s	22	13	s
Washington, D.C.	37	27	pc	36	25	t
Zurich	24	12	s	23	11	t

The WSJ Daily Crossword | Edited by Mike Shenk



NOW, NOW! | By Samuel A. Donaldson

Across

1 Mme. in Madrid
4 Cardinal point?
8 Sealed glass tube
14 Call's opposite
15 Seal predator
16 Runway models
17 Slogan advertising free detergent for the masses?
19 The way things are
20 Adjusts after a miss
21 Corner key
23 African lifeline
24 Singer with the 1949 #1 song "Careless Hands"
25 Unconventional assassin?
27 Wool bearers
29 Tribe home, informally
30 Env. stuffing
31 Former depilatory brand
32 Getaway destination
34 1949's "Careless Hands," e.g.
36 "Introducing Signor Gucci!"?
39 Artful dodges
42 Zap
43 Saddam's supposed stash
47 Don't go fast?
48 Theater section
50 Where tweens can't sit
52 Remnants of a corn fire?
55 Swamp flora
56 "Glad that's over!"
57 Atlanta-based HHS arm
58 Pull away
59 "Fancy schmancy!"
61 Golf course cops?
63 Less bright
64 Race on the Morlock menu
65 Change colors
66 Super excited
67 Half of quatorze
68 W-9 fig.

Down

1 Hardly luxurious
2 For Fight Club, it's "You do not talk about Fight Club"
3 Not yet apprehended
4 New arrival of the 1950s
5 Eon divisions
6 Oft-torn knee part, in sports reports
7 38-Down's nemesis, originally
8 Army helicopter
9 Seattle Sounders' org.
10 House coat
11 Like some tests
12 WNBA guard Mitchell
13 Nature
18 Hay grass
22 Person who takes off running?
25 Expressed approval
26 Dressy-casual clothing brand
28 Filling for some mattresses
33 Shaq's alma mater
35 Like a presentation without PowerPoint
37 "Around the Horn" channel
38 Evil Luthor
39 Stir-fry veggies
40 Respond angrily
41 Role for Laurence Olivier and Laurence Fishburne
44 Role for Gary Cooper and Adam Sandler
45 Summer period
46 Make more attractive, as a deal
49 It may get you in the door
51 Spotter's cry
53 ___ in the park
54 What Aleve alleviates
58 Trough fare
60 Calm side
62 Soccer cheer

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

Previous Puzzle's Solution

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Read ambitiously

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BUSINESS & FINANCE

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THE WALL STREET JOURNAL. Thursday, July 13, 2017 | B1

Euro vs. Dollar 1.1414 ▼ 0.47% | FTSE 100 7416.93 ▲ 1.19% | Gold 1218.10 ▲ 0.37% | WTI crude 45.49 ▲ 1.00% | German Bund yield 0.511% | 10-Year Treasury yield 2.325%

Apple Eases Grip on Chinese Data

To comply with new rules, users in China will transition to a cloud-storage service

By Alyssa Abkowitz And Eva Dou

JOHANNES EISELE/AGENCE FRANCE-PRESSE/GETTY IMAGES

Apple will build a data-storage center in a southern province that will be operated by a government-owned company.

BEIJING—To comply with tough new cybersecurity rules, **Apple** Inc. will begin storing all cloud data for its China customers with a government-owned company—a move that means relinquishing some control over its Chinese data.

Apple will build its first Chinese data center in the southern province of Guizhou to house data for customers of its iCloud service. The data include photos, documents, messages, apps and videos uploaded by Apple users throughout the mainland, the company said Wednesday.

The center will be operated by a company owned by the Guizhou provincial government and whose chairman was a local-government official until last year.

Under the agreement, Apple will retain control over encryption keys at the data center. It wasn't clear if it would have access to any of the data itself, which would be overseen by its Guizhou partner.

In addition, Apple wouldn't be able to transfer data from Chinese customers to the U.S., in compliance with China's new cross-border data guidelines that were also part of the latest cybersecurity rules.

The announcement significantly expands a concession Apple made to appease Chinese authorities in 2014, when it started storing some data at facilities owned by state-owned China Telecom to dispel security concerns. At the time, Apple said the move would improve performance for Chinese customers.

Apple didn't clarify which data was being stored under that previous agreement, but under the new arrangement all iCloud data for its customers in China will be stored in the country. Currently, Apple pulls some iCloud data for Chinese users from servers in the U.S.

Apple said it made the latest change to comply with China's new rules on data storage and cloud-services operation that went into effect June 1 as part of regulations aimed at improving cybersecurity. It said the new data center would improve speed and reliability for customers in China.

The Silicon Valley company has been one of the technol-

Please see APPLE page B2

Pricing Dilemma Over a $16,000 Medicine

By Denise Roland

Novartis AG recently discovered that a drug it sells for a group of very rare diseases could be used to treat a much more common ailment. There is just one problem: its $16,000-per-dose price tag.

The drug, called ACZ885, is already sold under the brand name Ilaris for certain rare inflammatory disorders affecting a very small number of people. But a recent clinical trial suggests it could also reduce the risk of serious complications like strokes in people who have suffered a heart attack.

If the drug does pan out with regulators, Novartis would have to drastically cut its price to make it competitive with other cardiovascular drugs. That would mean jettisoning a small, but reliable, revenue stream on an uncertain bet that the drug could become a top seller as a cardiovascular medicine.

"They've got a bit of a puzzle on their hands," said Bernard Munos, a senior fellow at nonprofit FasterCures who previously worked at **Eli Lilly** & Co.

A Novartis spokesman said it is too early to discuss its pricing strategy. "We will continue to fully analyze the data, plan to discuss these with regulatory agencies and determine how it would fit into clinical practice," he said.

Rare-disease, or orphan, drugs can command sky-high prices because they are typically the only treatment option available. The small number of patients limits the overall bill to the health-care system.

That isn't the case for drugs for common ailments. If approved for use in patients recovering from a heart attack, ACZ885's potential market would skyrocket: around 615,000 people in the U.S. survive a heart attack every year, according to the American Heart Association. Novartis estimates that the drug, which helps patients who also suffer from inflammation in the arteries, could be suitable in around 40% of those cases.

Novartis's revenue from ACZ885, at $283 million last year, is modest. Adding heart-attack patients, even at a vastly reduced price, could bring that figure to as much as $3.6 billion, according to Jefferies analysts. Credit Suisse analysts put the peak sales estimate at closer to $1.5 billion.

On paper, that seems an obvious gamble to take. But because of the way drugs are priced in the U.S., Novartis would have to drop the price it charges rare-disease patients as well, giving up most of that revenue stream. Once the price of a drug is cut, it is difficult to raise it again. Ilaris is sold in more than 70 countries, including Canada, parts of Latin America, Europe, Russia, Japan, Turkey, Israel and Switzerland.

And there is no guarantee that the drug will be widely

Please see DRUG page B2

HEARD ON THE STREET

By Stephen Wilmot

Past Flop May Help Tobacco Companies

What consumer good offers the best growth potential? It could be one in decline: the cigarette. Some stock-market valuations have yet to catch on.

As unit sales have fallen in the U.S. and other rich countries, manufacturers have generated profit growth by ramping up prices and trimming costs. Meanwhile, spending on smokes in developing countries has risen. This formula has yielded huge gains for tobacco investors in recent years.

Now there is an added source of growth: cigarette substitutes. The popularity of so-called heat-not-burn products in Japan has transformed the most recent quarterly results of **Philip Morris International**.

Unlike vaping products popular in the U.S. and U.K., heat-not-burn cigarettes contain tobacco and generate a "throat hit" similar to traditional varieties. But, instead of being lighted with a flame, they are heated by a sleek holder to generate a nicotine-laden inhalation whose health effects are widely debated.

Heat-not-burn technology was a costly flop when pioneered in the 1980s by Reynolds, yet it sowed a seed that under Philip Morris has grown into a credible product: IQOS. Released in Japan in 2014, IQOS accounted for 7% of cigarettes sold in the country in the first quarter, up from less than 1% a year earlier.

Crucially, PMI gains even if IQOS replaces Marlboro, because heat-not-burn smokes are more lightly taxed than conventional cigarettes in most countries (though not the U.S., important for PMI's sister company Altria). Citigroup estimates that a pack of IQOS generates 30% more revenues for PMI in Japan than a pack of Marlboros, even at similar prices.

The brokerage is penciling in 8% organic sales growth at PMI this year, double what can be expected at consumer-products groups.

Buying PMI stock is the obvious way to play this theme. A smarter bet could be London-listed British American Tobacco. BAT's valuation gap to PMI is near its widest in at least a decade; investors are excited about IQOS, but give BAT no credit for its challenger product, glo. BAT's lower margins also suggest potential for cost-cutting.

WALDO SWIEGERS/BLOOMBERG NEWS

Mining trucks carry diamond-bearing rock ore, or kimberlite, at Lesotho's Letseng mine, majority owned by U.K.-based Gem Diamonds.

Mining for Diamonds in the Rough

By Alexandra Wexler

LETSENG-LA-TERAE, Lesotho—A looming global diamond shortage is driving a small band of adventurous miners to brave bone-chilling winds at the world's highest mine to extract stones that are worth as much as 20 times the global average.

The excavation is extremely challenging. The diamond-bearing kimberlite formations in the 11,000-foot-high Maluti mountains had for years been largely untouched by mining companies due to the difficulty and cost involved in extracting the stones from such heights. The mines—which see temperatures dip 30 degrees below zero with wind chill—lie through landlocked and impoverished Lesotho's steep, narrow, winding mountain passes and past one of southern Africa's two ski resorts.

The roads are often blocked by herdsmen on horseback wrapped in colorful traditional blankets surrounded by hundreds of their shaggy sheep.

Recently, active mines in the area have been on the rise, with more mines slated to come online soon, as strong demand for high-end diamonds encourages nimbler miners to brave the craggy area known as the Roof of Africa to dig up some of the earth's most valuable stones.

The Letseng mine, majority-owned by U.K.-based Gem Diamonds, has a tiny yield, but produces diamonds whose price—roughly $2,000 a carat on average based on 2015 and 2016 prices—far surpassing the global average of just over $100 a carat.

Since Gem took over the mine in 2006, Letseng has produced four of the 20 largest diamonds ever found. That is excluding the 601-carat "Lesotho Brown," which was discovered at Letseng by a local woman in 1967. One diamond cut from that stone is said to have ended up in Jackie Kennedy's engagement ring from Aristotle Onassis.

"It's a mine that mines a jewelry box," says Clifford Elphick, Gem's chief executive, quoting a favorite quip from his former boss, gold and diamond magnate Harry Oppenheimer. Mr. Elphick recalls how the late Mr. Oppenheimer, who served as chairman of mining behemoth **Anglo American** PLC and diamond giant **De Beers** from the late 1950s to early 1980s, would often point to the mountains of Lesotho while flying over them on his way from Johannesburg to Durban, South Africa. "He

THE WALL STREET JOURNAL.

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Visa Wants Small Merchants to Go Cashless

By AnnaMaria Andriotis

PATRICK T. FALLON/BLOOMBERG NEWS

The credit-card company is offering shops a $10,000 incentive.

Visa Inc. has a new offer for small merchants: Take thousands of dollars from the card giant to upgrade your payment technology and in return stop accepting cash from customers.

The company unveiled the initiative on Wednesday as part of a broader effort to steer Americans away from using old-fashioned money. Visa says it plans give $10,000 apiece to as many as 50 restaurants and food vendors to cover technology and marketing costs, as long as the businesses pledge to start what Visa executive Jack Forestell calls a "journey to cashless."

"We're really viewing this as the opening salvo," said Mr. Forestell, Visa's global head of merchant solutions, of the potential $500,000 commitment.

Shoppers at the stores involved would be able to pay for goods or services only with debit or credit cards or their cellphones. Visa's payments to merchants would enable them to upgrade their checkout-line technology so they can accept contactless payments, such as Apple Pay.

Visa will pick the participants from an application process that starts in August. Online-only merchants are excluded.

Visa has long considered cash one of its biggest competitors and has been taking steps to chip away at it. Visa Chief Executive Al Kelly, who took over late last year, has made conversion from cash a priority, even as cash and check transactions continue to grow globally. "We're focused on putting cash out of business," Mr. Kelly said at Visa's investor day last month.

Visa processes credit- and debit-card payments on behalf of banks and merchants, making money when consumers use their Visa-branded cards.

The company accounted for 59% of purchase volume on U.S. general-purpose credit and debit cards last year, compared with rival Mastercard's 25% market share, according to the Nilson Report, a trade publication.

Please see VISA page B2

INSIDE

THOMAS TRUTSCHEL/PHOTOTHEK/GETTY IMAGES

INVESTORS EMBRACE THE EURO

MARKETS, B8

INDEX TO BUSINESSES

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

INDEX TO PEOPLE

VISA

Continued from the prior page

Still, cash remains a formidable competitor. Check and cash transactions totaled $17 trillion world-wide in 2016, up about 2% from a year prior, according to Visa.

Cards have made headway but cash remains the most widely used means of payment among Americans, accounting for 32% of all consumer transactions in 2015, according to a November report by the Federal Reserve Bank of San Francisco. By comparison, debit cards accounted for 27% and credit cards 21%.

To gain share, Visa in the U.S. is targeting spending categories, such as parking and rent, that have been entrenched in cash and check payments for decades.

Abroad, the company is forming partnerships with governments to move more payments onto its network, including a recent agreement to help Poland move toward a cashless system.

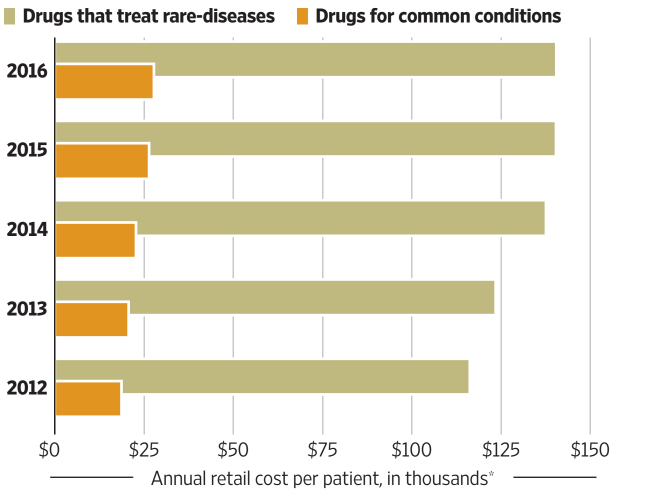
Some merchants have already stopped taking cash. New York City-based 2nd City, a Filipino taqueria, hasn't accepted cash since it opened its doors in 2016. Michael Ryan, the co-owner and cofounder, said he never ordered cash drawers or a safe. He estimates that by not having to count cash, visit a bank or arrange for change, the manager on duty saves about 23 hours a week.

Nonetheless, many merchants prefer sticking with cash because of the fees. Credit-card interchange fees, which networks like Visa set and that merchants pay to the banks that issue their cards, are on average around 2% of the transaction amount, according to the National Retail Federation, the largest trade group that represents merchants in the U.S.

"The idea that merchants don't want to accept cash is a myth," said Mallory Duncan, senior vice president and general counsel at the National Retail Federation.

Scarcity Value

Drugs for rare diseases command much higher prices than those for more common ailments.



*Estimated Source: Evaluate Pharma

THE WALL STREET JOURNAL.

DRUG

Continued from the prior page

used if the price comes down. Cardiologists can be reluctant to put their patients—especially those already on several medications—onto new drugs. That problem has dogged several recently launched heart drugs, including Novartis's own Entresto.

Another potential problem: ACZ885 is late in its patent cycle, making it uncertain whether Novartis could really get all that additional business if it dropped the price now.

Credit Suisse analysts say they expect ACZ885 to lose patent protection around 2024, at which point lower-cost versions can enter the market and erode sales.

To keep a lid on cost, insurers also tend to impose higher copays or complex approval processes for patients to get access to new, pricey drugs for common conditions. One example: insurance plans are curbing access to a new class of cholesterol-lowering drugs that cost around $14,500 a year before rebates or discounts, in a bid to keep all but the most serious cases patients on pennies-per-day statins, which work well for the majority of people.

ACZ885—dosed every three months at its current pricing before rebates and discounts—would cost around $64,000 a year for heart-attack patients. Novartis may need to drop the price by more than 90% "to get close to palatable," according to Craig Granowitz, chief medical officer at Amarin Corp., a small pharmaceutical company that focuses on cardiovascular medicine.

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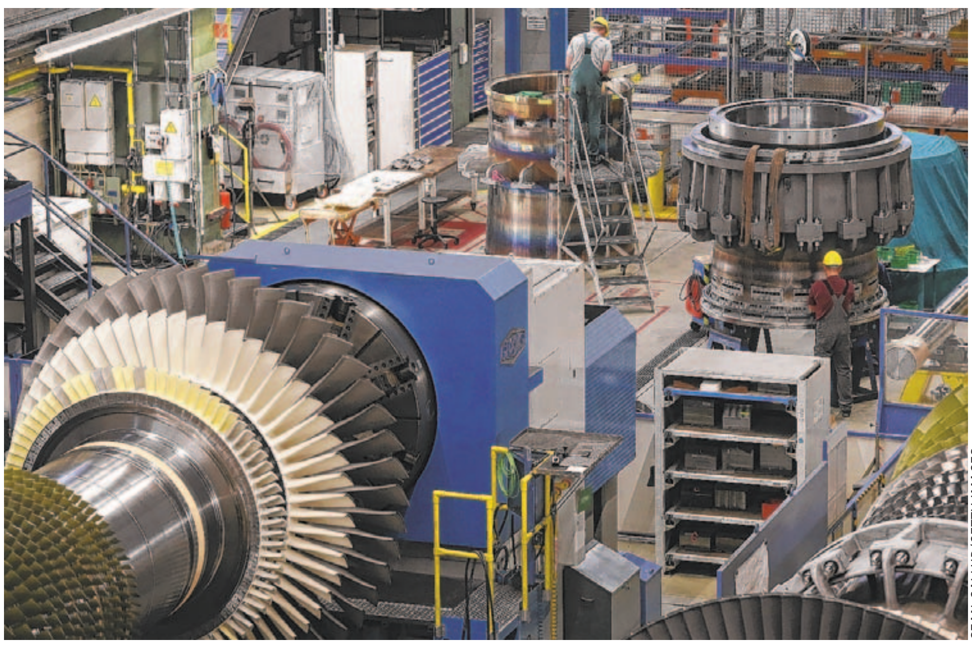
BUSINESS & FINANCE

Germany Presses Siemens

The German government on Wednesday called on **Siemens** AG, one of the country's biggest corporations, to explain how gas turbines it sold for use at a Russian power plant got diverted to Crimea, possibly violating European Union sanctions tied to Russia's annexation of the Black Sea peninsula from Ukraine.

By William Boston in London and William Wilkes in Frankfurt

Siemens filed a lawsuit in Moscow this week against Technopromexport, a subsidiary of Russia's state-owned **Rostec State** Corp., after learning that two turbines it had sold to Technopromexport for a power plant to be built in Taman, southern Russia, ended up in Russian-occupied Crimea.



SEAN GALLUP/GETTY IMAGES

Berlin wants answers on how Siemens gas turbines sold to a Russian company ended up in Crimea.

The German government, which under EU law is responsible for determining whether the shipment violated sanctions, said it was monitoring efforts to determine what happened and said it expected quick answers from the company.

"It is above all now up to Siemens," government spokesman Steffen Seibert told reporters on Wednesday. He said the government was discussing how to respond to the "completely unacceptable" actions.

"The transaction itself is not in violation of any sanctions," a Siemens spokesman said, adding that the terms of the contract with Technopromexport included clauses prohibiting delivery of the turbines to any third parties without the express permission of Siemens, a standard provision to prevent circumventing sanctions. Siemens declined to comment on Mr. Seibert's remarks.

The company said it received the contract for four turbines in 2015 for use in a power station to be built in Taman. The turbines were delivered as agreed with the buyer to a warehouse in St. Petersburg in June 2016, the company said.

Weeks later, Siemens began to doubt that Technopromexport was abiding by the contract, a spokesman said. By September, Siemens had indications that the turbines had not arrived in Taman. Evidence cited by the company included a lack of activity at the site where the power plant was supposedly under construction. Siemens says it believes the turbines were delivered instead to the port of Sebastopol.

Media reports first raised suspicions two years ago that the Russian buyer, a contractor with close ties to the Kremlin, might have other plans for the turbines. But at the time Siemens said it had no evidence they were destined for Crimea.

Siemens said it had repeatedly sought assurances from Technopromexport that the turbines would be installed as agreed. On Monday, Siemens said it believed that the equipment had been diverted. "Siemens has received information from reliable sources that at least two of the four gas turbine sets...have been moved to Crimea against our will," it said in a statement.

Technopromexport didn't respond to a request for comment.

After Siemens's statement on Monday, Kremlin spokesman Dmitry Peskov declined to comment, saying, "We do not deal with turbines in the presidential administration," the news agency TASS reported.

Wall Street Journal Reorganizes

By Lukas I. Alpert

The Wall Street Journal on Wednesday announced details of a broad editorial reorganization as part of its "WSJ2020" review, creating a new leadership structure with the aim of transforming the 128-year-old newspaper into a mobile-first news operation.

The Journal's current deputy editor in chief, Matt Murray, will become executive editor with an expanded role in day-to-day news decisions. Editor in Chief Gerard Baker will continue to oversee news coverage and drive strategy.

In a memo to staff, Mr. Baker said the "far-reaching reorganization" wasn't a "job-cutting exercise" and that the newsroom's head count of about 1,300 would remain "roughly stable."

As resources dramatically shift toward digital and mobile initiatives, some existing roles could be eliminated, forcing some people to find other positions within the company.

"Our news operations have been somewhat like an elegant and rather gorgeous stately home, whose owners have steadily augmented and renovated, rewiring every now and then, adding a new plumbing system, repainting, refurbishing," Mr. Baker said. "But eventually it's time to tear down the old structure and build a new one."

"The pace of change, the proliferating adoption of new technology, the changing way in which our audience consumes news and information: all require something much more," said Mr. Baker, who has been editor in chief since 2013.

The restructuring creates a number of new senior newsroom roles. Mr. Baker's new reports will include editors for professional news, digital content strategy, strategic initiatives and a managing editor responsible for non-news matters such as finance and personnel. There also will be an editor of features, special content and events. New roles such as chief news editor, news planning editor and analytics and audience editor will report to Mr. Murray, who will continue to report to Mr. Baker.

Many of the open positions will be available to applicants inside and outside the newsroom. The Journal hopes to increase the diversity of its newsroom leadership through the reorganization and aims to have all of these positions filled by the end of the summer.

"We need to introduce new faces, new skills and a greater diversity to our news leadership. If we are to thrive in the competitive environment newspapers face, we must ensure that we are hiring and promoting the best people," Mr. Baker said in the memo.

The reorganization also will seek to revamp the editing process to publish stories more quickly, by reducing the number of hands a story passes through and the amount of stories published. Mr. Baker will discuss these changes at a series of company town hall meetings on Monday.

The Journal, a unit of **News Corp**, launched its WSJ2020 initiative in October 2016. It is part of an effort to revamp operations following a period of sharp declines in print advertising revenue as the news industry undergoes a tumultuous shift toward digital and mobile.

Other news organizations, such as the New York Times, have launched similar operational reviews.

In a move separate from the WSJ2020 initiative, the Journal is completing plans to significantly reduce production of its print editions in Asia and Europe amid a steep drop in advertising revenue and promising growth in digital subscriptions, a person familiar with the matter said.

DIAMOND

Continued from the prior page

said it produced the most beautiful of all the diamonds," Mr. Elphick says.

De Beers—which operated Letseng for a decade until a market downturn in the early 1980s—reaped the rare type-IIa stones, known during colonial times as "gin-and-tonic diamonds" because they are the color of a freshly poured G&T. Gem bought 76% of the mine from the Lesotho government in 2006, and currently owns 70%.

Since Gem's successful reboot of the flagship Letseng mine about a decade ago, Lesotho—a tiny nation encircled by South Africa that ranks 160 out of 188 on the United Nations' Human Development Index—has made a fresh push to promote its mineral wealth.

It is taking advantage of the impending closure of older diamond mines around the world and the lure of high-end stones, whose prices have held even as revenues from lower-grade stones softened in recent years.

GEM DIAMONDS/REX FEATURES/ASSOCIATED PRESS

The Letseng Star, a 550-carat diamond, next to a yellow diamond.

The newest mine to come into production—**Firestone Diamonds** PLC's Liqhobong mine, located in the same Maluti mountains as Letseng—was completed end of last year. In February, Firestone held its first auction of diamonds from the mine, selling all 75,936 carats offered. A single 37-carat diamond was sold for over $1 million. Liqhobong "has raised a lot of eyebrows and very well could result in a recurrence of interest in terms of diamond exploration in Lesotho," said Patrick Morton, a metals and mining analyst at Macquarie Group.

In May, Australia's **Lucapa Diamond** Co. said it had raised 19 million Australian dollars (US$14.5 million) to develop the neighboring Mothae mine. Lucapa says it expects to get an average price of over $1,000 a carat after the mine comes into production in early 2018.

There are obstacles, however, to turning Lesotho into an African diamond hub.

Since a bloodless attempted coup in 2014, Lesotho has changed government twice, most recently after it held elections on June 3. The political upheaval has deterred long-term investment, especially as companies are finding it difficult now to raise the kind of capital needed to explore Lesotho's low-grade ore.

Although the country has one of the highest concentrations of kimberlite in the world, diamonds aren't found in all kimberlite and are costly to retrieve.

Lack of skilled workers was a big reason for **Lucara Diamond** Corp. to turn back its 75% stake in the Mothae diamond mine to the government of Lesotho; the mine is now operated by Lucapa.

"The challenge for Lesotho has been getting these skilled workers to return and remain in country with limited opportunities due to the small number of active mining operations," said William Lamb, chief executive of Lucara.

APPLE

Continued from the prior page

ogy industry's strongest advocates for fending off government incursions into user data. In a statement, Apple said it has "strong data privacy and security protections in place and no backdoors will be created into any of our systems."

The latest move comes as Apple has been facing increasing regulatory headwinds in China. Last year, for example, its online book-and-movie service was shut down by authorities, who didn't give specific reasons for the closing.

China has ramped up pressure on foreign cloud-service providers over the past year to comply with longstanding rules that require them to partner with local firms. **Microsoft** Corp. and **Amazon.com** Inc. have local partners.

"It's clear that this is now being enforced across the board," said Chris DeAngelis, Beijing-based general manager of consultancy Alliance Development Group. "Any cloud-based company coming into China has to have a local operating partner." U.S. lawmakers sent a letter to China's ambassador in March, protesting restrictions on foreign cloud-service providers.

Under the arrangement announced Wednesday, Apple's China users will transition to a cloud-storage service that will carry the brands of both Apple and its Chinese partner, whose full name is **Guizhou on the Cloud Big Data Industry Development** Co.

It is the first time iCloud has been co-branded. The transition will occur over the next several years while the $1 billion data project is developed.

Apple has said its encryption can't be cracked, not even by Apple itself, making the company one of the strongest defenders of user privacy among U.S. tech companies. Apple refused the FBI's demand that it unlock an iPhone owned by a gunman in the 2015 mass shooting in San Bernardino.

—Tripp Mickle in San Francisco contributed to this article.

Large Oil Companies Stay Wary of Iran

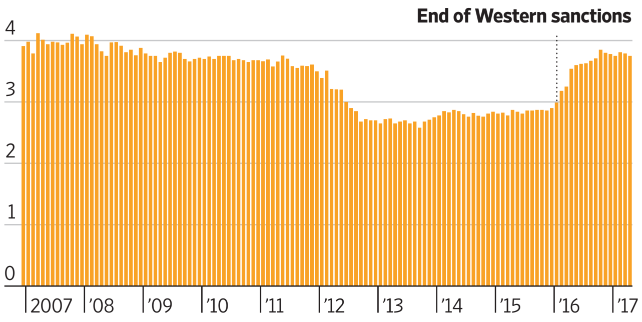
France's Total enters after the easing of sanctions, but U.S. remains a deterrent

By Benoit Faucon

Stuck in Gear

Iran's oil production has plateaued after a brief rise following the end of Western sanctions.

5 million barrels a day



Source: International Energy Agency

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BERK OZKAN/ANADOLU AGENCY/GETTY IMAGES

BP Chief Executive Bob Dudley said at the World Petroleum Congress in Istanbul that his company was on a 'capital diet.'

ISTANBUL—Iran's ambitious agenda for its oil-and-gas industry is running up against the caution of big energy companies.

At a major energy conference here, Iranian officials said French oil giant **Total** SA's commitment of $1 billion toward a gas project this month marked a new chapter in the country's energy business since the end of Western sanctions. Iranian officials promised 10 contracts like it in the next year and said they were seeking $92 billion in foreign investment to raise oil production by a third and gas exports by 15-fold by 2021.

"Our hands are full," Iranian Deputy Oil Minister Amir Hossein Zamaninia told reporters here at the World Petroleum Congress, saying 25 contracts were being negotiated with foreign companies. "We think that the situation is normal enough now for major international oil business to get engaged in Iran," he said.

But other big oil companies have been more reticent than Total about wading into Iran, even with its huge reserves.

Western companies are wary of running afoul of remaining U.S. sanctions on Iran tied to weapons, human-rights and terrorism allegations. Overall, the industry is still smarting from an oil-price downturn that isn't letting up in its third year, making companies wary of new spending.

Speaking at the same conference here, **BP** PLC Chief Executive Bob Dudley said he was looking outside Iran for now, as the company had already committed to $15 billion in spending elsewhere this year. "We have a full plate," Mr. Dudley said at a news briefing. "We have to stay on a capital diet."

U.S. companies like Exxon Mobil Corp. and Chevron Corp. are barred from doing business in Iran, but European companies like London-based BP can still try to make a deal work. One factor slowing things down: U.S. President Donald Trump has criticized the deal over Iran's nuclear program and threatened to pull out or tighten sanctions.

"BP's decision to be cautious on Iran [was] a ripple effect" of U.S. pressure against doing business in Iran, Mr. Zamaninia said. A BP spokesman declined to comment.

Total's commitment in Iran is evidence that oil companies have concluded "the return of sanctions is very unlikely, if not impossible," Mr. Zamaninia said. Total said it was in compliance with all sanctions.

Mr. Zamaninia has tried to use the World Petroleum Congress as a sort of coming-out party for Iranian energy opportunities after the Total deal. He cracked jokes while sharing a panel with Mr. Dudley and Barry Worthington, the executive director of the U.S. Energy Association, an industry body that advocates for American oil companies.

But the panel also underscored Iran's challenges. While Messrs. Dudley and Zamaninia talked before the panel, Mr. Dudley said they only discussed its topics—not any potential business. Mr. Dudley, a U.S. citizen, didn't elaborate but Washington's sanctions bar Americans from discussing oil deals with Iran.

Mr. Dudley called Total's deal a "very good sign for the industry" but said he hadn't seen its terms. Total and Iranian officials have said the 20-year contract was longer than deals Iran permitted in the past and allowed the company more flexibility to recoup costs.

Total Chief Executive Patrick Pouyanne said the company and its partners were already preparing tenders to contractors in the project. Total's partners include China National Petroleum Corp. and an Iranian company.

Royal Dutch Shell PLC signed a preliminary agreement to explore opportunities in Iranian oil fields late last year. The Anglo-Dutch company held meetings in Tehran and Dubai in the two past months with the National Iranian Oil Co. and Chinese state-run China Petroleum & Chemical Corp. to work together on an oil field called Yadavaran, according to a person familiar with the discussions.

People who work with the company said it is concerned about its exposure to the U.S. and is more selective in the choice of its banks than Total.

A Shell spokeswoman said "Shell is interested in exploring the role it can play in developing Iran's energy potential. We have been engaging with Iranian officials but it is still too early to discuss potential Shell investment in any project."

◆ OPEC output rises despite planned cuts............B5

CHIP SOMODEVILLA/GETTY IMAGES

Proponents of net neutrality protested against the FCC in Washington, D.C., this past May.

Internet Firms Protest Efforts To Roll Back Net Neutrality

By John D. McKinnon

Dozens of major online companies launched protests against Republican efforts to roll back Obama-era net-neutrality rules, in an escalation of tensions over Washington's proper role in the internet.

"Protect Internet Freedom. Defend Net Neutrality," a banner on **Netflix** Inc.'s home page said, offering users a link to submit comments to the GOP-led Federal Communications Commission, which is considering the rollback plan. Protesters argue the rollback could allow websites to be blocked or forced into slow lanes.

"The internet's less fun when your favorite sites load slowly, isn't it?" said a message that slowly typed out on Reddit, an aggregation site.

Blake Irving, **GoDaddy** Inc.'s chief executive officer, said in a prominently displayed blog post that "nothing less than our long-term economic well-being is at stake."

But the protests appeared to be cause little real disruption early Wednesday.

The protests, said by organizers to involve tens of thousands of people, websites and organizations, are aimed at highlighting public support for the 2015 net-neutrality rules, which require internet service providers to treat all online traffic the same, without blocking or paid fast lanes.

The GOP-led FCC launched a proceeding in May aimed at substantially overhauling and narrowing the rules. Organizers of the protest hope to slow down or stop that effort, although they face an uphill fight.

Big telecommunications firms were trying to sound conciliatory, and **AT&T** Inc. went so far as to join the "day of action" aimed at preserving net-neutrality principles.

But some firms also sounded frustrated by the protests.

"The day of action isn't designed to educate consumers about sensible policies, rather its goal is to scare them into thinking their internet experience will somehow suddenly be degraded if the FCC restores light touch regulation," said the NCTA, a cable trade group, in a blog post. "Don't believe the hype."

The Trump administration is siding with the FCC. "The Trump administration supports the FCC's efforts to roll back burdensome, monopoly-era regulations," an administration official said in a written statement.

Leukemia Therapy Gains in U.S.

By Denise Roland And Joseph Walker

A group of cancer experts voted unanimously on Wednesday to support U.S. regulatory approval for a first-of-its kind gene therapy targeting an aggressive form of leukemia that occurs in children and young adults.

The treatment, called CTL019 and developed by Swiss drug company **Novartis** AG, works by modifying a patient's own immune cells to make them more effective at hunting down and killing tumor cells. It involves removing some of the patient's blood and genetically modifying the T-cells, a type of immune cell, before re-infusion.

A Food and Drug Administration advisory committee made up of cancer experts from across the U.S. voted 10 to 0 that the therapy had a favorable risk-benefit balance, meaning that its positive effects outweigh its safety risks. The question of risk-benefit balance is widely seen as a proxy for whether the FDA should approve the treatment.

"This is a major advance and is ushering in a new era of treating children with" severe leukemia, said committee member Malcolm A. Smith, who is associate branch chief for pediatric oncology at the National Cancer Institute.

The FDA isn't required to follow the advice of advisory panels, but it generally does so. Analysts expect the FDA to issue a final decision by the end of September.

The therapy holds out the promise of a significant advance in the treatment of children and young adults with a form of blood cancer known as B-cell acute lymphoblastic leukemia. It is also the first in a series of new treatments facing FDA review that use genetically modified T-cells.

For Novartis, FDA approval would open a potentially big, new revenue stream. Jefferies analysts estimate the therapy could bring in $850 million in annual sales by 2021.

Novartis has said that in a clinical trial, 52 of 63 participants who received the treatment were cancer-free after three months. The patients in the study had either failed to respond to standard therapies, or relapsed. Most children and young adults with this form of leukemia are treated using existing methods such as chemotherapy, radiotherapy and bone-marrow transplants.

Shell Exits Irish Gas Field

By Michael Amon

LONDON—**Royal Dutch Shell** PLC sold its stake in a controversial Irish gas field for up to $1.23 billion to one of Canada's biggest pension funds in a deal that will result in accounting losses of as much as $750 million for the Anglo-Dutch energy company.

Shell led the development of the Corrib gas field, located about 52 miles off the Atlantic coast of rural County Mayo. The field began producing in 2015 after years of delays caused by local opposition to the construction of an associated pipeline.

The deal with the **Canada Pension Plan Investment Board** takes Shell out of the energy-development business in Ireland. A subsidiary of the pension fund will take control of Shell's 45% interest in Corrib, while **Vermilion Energy** Inc., a Calgary-based oil-and-gas producer, will become the new operator of the field. Vermilion also owns part of Corrib, as does Norway's Statoil.

The transaction is for $947 million initially with payments of up to $285 million between 2018 and 2025, depending on gas prices and production.

Shell said on Wednesday the sale was consistent with its plan to sell off $30 billion in assets by 2018, as it tries to repair its balance sheet after loading up on debt for the 2015 acquisition of BG Group PLC for more than $50 billion.

One of Canada's biggest pension funds is buying the energy company's 45% stake.

Andy Brown, a top Shell executive, said the company has announced deals valued at over $20 billion.

"This transaction is part of our strategy to reshape Shell and to deliver a world-class investment case," he said.

Shell acquired the company that discovered Corrib in 2002, but its plans to build an onshore pipeline to transport the field's gas to a terminal it would construct at Bellanaboy in County Mayo sparked fierce opposition.

That resistance focused on concerns about the safety of the pipeline and its effects on the environment. The controversy led to changes to the pipeline's path, including routing it through a 4.9-kilometer (3-mile) tunnel, the longest in Ireland, that increased the project's costs and forced delays.

Those delays and changes are forcing Shell to book an impairment charge of about $350 million in its second-quarter earnings.

The company also said it would take an accounting loss of about $400 million because of currency fluctuations between the euro and the dollar once the deal is completed, likely in the first part of 2018.

Shell will maintain a presence in Ireland through an aviation joint venture, Shell and Topaz Aviation Ireland Ltd., based near Dublin airport.

ADVERTISEMENT

Legal Notices

INTERNATIONAL NOTICES

THE HIGH COURT
COMMERCIAL
RECORD NO. 2017 NO. 252 COS
IN THE MATTER OF NEXVET BIOPHARMA PUBLIC LIMITED COMPANY
AND
IN THE MATTER OF SECTIONS 449 TO 454 OF THE COMPANIES ACT 2014
AND
IN THE MATTER OF THE COMPANIES ACT 2014
AND
IN THE MATTER OF SECTIONS 84 TO 86 OF THE COMPANIES ACT 2014
AND
IN THE MATTER OF THE IRISH TAKEOVER PANEL ACT 1997
NOTICE

NOTICE is hereby given that in pursuance of an Order of the Irish High Court dated 1 June 2017 a meeting of the holders of Nexvet Shares (as defined in the proposed scheme of arrangement between Nexvet Biopharma Public Limited Company (the "**Company**") and the Scheme Shareholders (as defined therein) (the "**Scheme**")) for the purpose of their considering, and voting on, a resolution proposing that the Scheme in its original form or with or subject to any modification(s), addition(s) or condition(s) approved or imposed by the Irish High Court be agreed to (the "**Scheme Meeting**") was held on 10 July 2017 and the holders of Nexvet Shares passed the necessary resolution at the Scheme Meeting approving the Scheme without modification.

NOTICE is hereby further given that at an extraordinary general meeting of the Company held on 10 July 2017 the shareholders of the Company in furtherance of the Scheme passed, inter alia, special resolutions to reduce the issued share capital of the Company by the cancellation and extinguishing of all Cancellation Shares (as defined in the Scheme) and the Euro Deferred Shares (as defined in the Scheme) pursuant to Section 84 of the Companies Act 2014 (but without thereby reducing the authorised share capital of the Company) (the "**Share Cancellation**").

NOTICE is hereby further given that consequent upon an application made to it by the Company on 11 July 2017 the Irish High Court has directed that an application by the Company for orders, inter alia, pursuant to:

1) Section 453(2) of the Companies Act 2014 sanctioning the Scheme; and

2) Sections 84 and 85 of the Companies Act 2014 confirming the Share Cancellation;

shall be heard by the Commercial List of the Irish High Court at 11:00 am (Irish Time) on Friday, 28 July 2017 at the Four Courts, Inns Quay, Dublin 7, Ireland.

MATHESON
Solicitors for the Company
70 Sir John Rogerson's Quay
Dublin 2
11 July 2017

Note: Any person who intends to appear at the hearing of the said application should notify the Company's Solicitors, Matheson, 70 Sir John Rogerson's, Dublin 2, Ireland (quoting reference TS/665236-12) in writing not later than 5:00 p.m. (Irish Time) on Monday, 24 July 2017 of that person's or persons' intention to appear at the hearing of the said application and should indicate to the said Solicitors whether such person or persons intend to support or oppose the said application and should serve any affidavit evidence on which that person or persons intends to rely on the Company's Solicitors by that date and time.

BANKRUPTCIES

UNITED STATES BANKRUPTCY COURT, SOUTHERN DISTRICT OF NEW YORK

In re: Oi Brasil Holdings Coöperatief U.A., Debtor in a Foreign Proceeding.	Chapter 15 Case No. 17-11888 (SHL)
In re: Oi Brasil Holdings Coöperatief U.A., Debtor in a Foreign Proceeding.	Chapter 15 Case No. 16-11794 (SHL)
In re: OI S.A., et al.,[1] Debtors in a Foreign Proceeding.	Chapter 15 Case No. 16-11791 (SHL) (Jointly Administered)

NOTICE OF HEARING ON VOLUNTARY PETITION FOR RECOGNITION OF A FOREIGN MAIN PROCEEDING UNDER CHAPTER 15 OF THE UNITED STATES BANKRUPTCY CODE AND RELATED MOTION

PLEASE TAKE NOTICE that, on July 7, 2017, Jasper R. Berkenbosch, solely in his capacity under Dutch law as the duly appointed trustee (*curator*) (the "Insolvency Trustee") of Oi Brasil Holdings Coöperatief U.A. ("Coop") in its bankruptcy proceeding, Case No. F.13/17/163 (the "Dutch Bankruptcy Proceeding"), pending before the District Court of Amsterdam (the "Dutch Court") pursuant to the Dutch Insolvency Act (*Faillissementswet*) (the "Dutch Insolvency Act"), caused to be filed (a) a petition for relief (the "Voluntary Petition"), under chapter 15 of title 11 of the United States Code (the "Bankruptcy Code"), and (b) the related *Verified Petition and Motion for an Order (I) Recognizing the Dutch Bankruptcy Proceeding as the Foreign Main Proceeding for Oi Brasil Holdings Coöperatief U.A.; (II) Recognizing the Insolvency Trustee as the Foreign Representative; (III) Modifying the Prior Recognition Order; (IV) Modifying the Prior Joint Administration Order and (V) Granting Certain Related Relief* (the "Verified Petition and Motion"), in the United States Bankruptcy Court for the Southern District of New York (the "Bankruptcy Court").

PLEASE TAKE FURTHER NOTICE that the Voluntary Petition and the Verified Petition and Motion seek an order: (a) modifying the prior order of the Bankruptcy Court granting recognition to the judicial reorganization of Oi S.A. and its affiliates (the "Brazilian RJ Proceeding") in the *7a Vara Empresarial do Rio de Janeiro* (Seventh Business Court of Rio de Janeiro) to terminate recognition of the Brazilian RJ Proceeding for Coop and the current foreign representative for Coop; (b) granting recognition of the Dutch Bankruptcy Proceeding as the foreign main proceeding for Coop; (c) recognizing the Insolvency Trustee as the foreign representative for Coop in that proceeding; (d) modifying the prior order of the Bankruptcy Court jointly administering the chapter 15 proceeding of Coop with that of Oi S.A. and its affiliates; and (e) granting related relief, all as more fully described in the Verified Petition and Motion.

PLEASE TAKE FURTHER NOTICE, that pursuant to the *Order Scheduling Hearing and Specifying the Form and Manner of Service of Notice*, entered on July 7, 2017 (Case No. 17-11888) (the "Scheduling Order"), the Bankruptcy Court has scheduled a hearing before the Honorable Sean H. Lane in Room 701 of the United States Bankruptcy Court for the Southern District of New York, One Bowling Green, New York, New York 10004-1408, on **August 1, 2017 at 11:00 a.m. (Eastern Time)** to consider approval of the Voluntary Petition and the relief requested in the Verified Petition and Motion (the "Recognition Hearing").

PLEASE TAKE FURTHER NOTICE, that at the Recognition Hearing, the Bankruptcy Court may order the scheduling of a case management conference to consider the efficient administration of this chapter 15 proceeding. A proposed order granting the relief sought by the Verified Petition and Motion is attached as Exhibit A to the Verified Petition and Motion (the "Proposed Recognition Order").

PLEASE TAKE FURTHER NOTICE, that copies of the Verified Petition and Motion and all accompanying documentation are available to parties in interest through the Electronic Case Filing System of the Bankruptcy Court, which may be accessed from the Bankruptcy Court's website at http://www.nysb.uscourts.gov (a PACER login and password are required to retrieve a document) or upon written request to the Insolvency Trustee's counsel (including by email) addressed to: Jones Day, 250 Vesey Street, New York, New York 10281, Tel: (212) 326-3939, Fax: (212) 755-7306, Attn: Bryan M. Kotliar, Esq. (bkotliar@jonesday.com), Anna Kordas, Esq. (akordas@jonesday.com), Charles Wittmann-Todd, Esq. (cwittmanntodd@jonesday.com). Copies of this Notice, the Voluntary Petition and the Verified Petition and Motion (including all accompanying documentation) and all other pleadings referenced in this Notice will also be available free of charge on the Insolvency Trustee's website at http://oibrasilholdingscoop-administration.com/.

PLEASE TAKE FURTHER NOTICE, that any party in interest wishing to submit a response or objection to the Voluntary Petition or the Verified Petition and Motion must do so in accordance with the Bankruptcy Code and the Local and Federal Rules of Bankruptcy Procedure in writing and setting forth the bases therefore with specificity and the nature and extent of the respondent's interests in Coop's estate, and such response or objection must be filed with the Office of the Clerk of the Court, One Bowling Green, New York, New York 10004-1408, and served on Jones Day, 250 Vesey Street, New York, NY 10281-1047 (Attn: Corinne Ball, Esq. (cball@jonesday.com) and Bryan M. Kotliar, Esq. (bkotliar@jonesday.com)), **so as to be actually received by them by no later than 12:00 p.m. (Eastern Time) on July 25, 2017.**

PLEASE TAKE FURTHER NOTICE, that all parties in interest opposed to the Voluntary Petition and the Verified Petition and Motion must appear at the Recognition Hearing at the time and place set forth above or such other date and time as may be subsequently set forth in a notice filed on the docket of this chapter 15 proceeding or otherwise established by the Bankruptcy Court.

PLEASE TAKE FURTHER NOTICE, that the Recognition Hearing also may be adjourned from time to time without further notice other than an announcement in open court at such hearing of the adjourned date or dates or any further adjourned hearing.

PLEASE TAKE FURTHER NOTICE, that if no response or objection is timely filed and served as provided above, the Bankruptcy Court may grant the relief requested in the Voluntary Petition and the Verified Petition and Motion without further notice or hearing.

Dated: July 7, 2017, New York, New York, Respectfully submitted, /s/ Corinne Ball, JONES DAY, 250 Vesey Street, New York, New York 10281, Telephone: (212) 326-3939, Facsimile: (212) 755-7306, Corinne Ball, Esq., Bryan M. Kotliar, Esq., Anna Kordas, Esq., *Attorneys for Jasper R. Berkenbosch, as Insolvency Trustee and putative Foreign Representative of Oi Brasil Holdings Coöperatief U.A.*

[1] The debtors in the chapter 15 cases that currently are jointly administered and the four identifying digits of the tax number of each are: Oi S.A. (5.764); Telemar Norte Leste S.A. (0.118); Oi Brasil Holdings Coöperatief U.A. (8518); and Oi Móvel S.A. (3.963).

Esports League Reveals Backers

By Sarah E. Needleman

Activision Blizzard Inc. on Wednesday unveiled a roster of sports-team owners and videogame-industry veterans involved in an esports league it pledged to launch before the end of the year.

The company is building a league around "Overwatch," betting on a year-old shooter videogame with a cartoonish bent that has more than 30 million registered players but lacks the lineage of a franchise such as "Call of Duty."

Activision Blizzard, which reported $6.61 billion in revenue last year, is looking to build on a growth streak that has led its stock to nearly quadruple in the past five years to about $58 a share. "They've aggressively sold this story to Wall Street and the expectation is that at some point in the next three to five years, esports will be a meaningful profit contributor," Cowen & Co. analyst Doug Creutz said.

The rollout of Overwatch League is being watched as a signal for whether publishers can win control of the multimillion-dollar competitions sprouting around their biggest videogames. Two rivals—Electronic Arts Inc. and Take-Two Interactive Software Inc.—are developing their own leagues.

They are looking to capture a market whose average fan, according to Newzoo BV, is between the ages of 21 and 35—a coveted demographic for advertisers. Roughly 191 million people world-wide this year are expected to watch an esports competition at least once a month, more than double the number in 2012, the research firm estimates.

Activision Blizzard Chief Executive Bobby Kotick said the rollout was going according to plan. The company is banking on city-based teams, a structure typical of traditional sports leagues, to drive growth. "We wanted to introduce that to esports," he said.

Seven teams are on board so far. The buyers paid $20 million apiece, the going rate this year, according to people familiar with the matter. The launch draws on a roster of executives, athletes and locales familiar to sports fans.

Groups backed by Robert Kraft, owner of the National Football League's New England Patriots, and Jeff Wilpon, operating chief of Major League Baseball's Mets, bought rights to teams in Boston and New York, respectively.

Mr. Kraft said he considers his bet on esports on par with his backing of Major League Soccer in the 1990s. It took about five years for his New England Revolution to become profitable, and it remains so today, he said. "We're thinking long here," Mr. Kraft said.

Mr. Wilpon said he didn't follow esports until his venture-capital firm, **Sterling.VC**, began looking into the industry. "We wouldn't make the investment if we didn't think it would be profitable," he said. There are "good advertisers out there looking to get in on this demographic," he added.

The NFL's Robert Kraft and baseball's Jeff Wilpon acquire rights to teams.

The involvement of the various sports figures "absolutely lends credibility," said Tim O'Shea, an analyst at Jefferies. "They have arenas, local marketing muscle and know-how to excite a fan base."

Activision Blizzard's publishing partner in China, NetEase Inc., will operate a team in Shanghai, and a startup led and self-funded by game-industry veterans purchased a team in Seoul.

PERSONAL TECHNOLOGY | By Geoffrey A. Fowler

An Oven That Cooks by Itself

EMILY PRAPUOLENIS/THE WALL STREET JOURNAL

Tovala's prepared meals are cooked in a special $400 steam oven that connects to the internet.

Attention, people too tuckered out to make dinner and anyone who eats way too much Chipotle: There's now an oven that will cook you a fresh meal—pretty much on its own.

Tovala, launching this week, aims to reinvent the TV dinner. Instead of lurking in the freezer aisle, these $12-a-person meals are shipped to your door, chilled in ready-to-cook packs. Instead of a microwave, the meals cook in a special $400 steam oven. And since this is 2017, of course that oven connects to the internet.

The verdict, after two weeks of cuisine a la robo-chef: Tovala turns out super-fast, consistent restaurant-quality meals, making it the first connected kitchen device with real mass appeal. But before I buy in, Tovala has to prove it can turn its razor-and-blades model into a sustainable business.

Ever since a colleague and I began testing two Tovala ovens, our insta-meals have been the subject of fascination, and considerable ribbing, by family and colleagues. Some couldn't believe mankind had slipped to this new level of laziness. The rest wanted to know where they could buy one.

Internet food shopping still hasn't gone mainstream, but millions of Americans are going online for "meal kits." They remove the hassle of planning and shopping by shipping selected recipes' necessary ingredients to your doorstep—right down to that tablespoon of Sriracha. Meal-kit pioneer Blue Apron, which listed on the stock market last month, faces dozens of competitors, with prices that range as high as $18 a person. There's even a Tom Brady meal kit.

Tovala's subscription kits, with meals costing $2 a person more than Blue Apron's, arrive mostly oven-ready. For a smoky mesquite chicken dish, I peeled plastic off the top of two foil containers and poured the included sauce over the raw chicken. That took 10 seconds.

You put the containers in the oven, and the oven scans a QR code on the leftover cardboard wrappers to know what's cooking. Press a big button to start.

An alert pops up on your phone when dinner's ready—usually in 15 to 20 minutes. Just promise me you'll use all this newfound free time to call your mom, OK?

The oven is big enough to cook up to four meals at once, depending on their size. You're still responsible for taking the hot meal out of the oven and putting the elements onto your own plate.

Tovala's founders, graduates of the Y Combinator startup program, say their meal kits are for people who tried others but gave up because they were too much work. On some nights, that includes me. I've subscribed to Blue Apron for nearly two years, but there are plenty of times when I just couldn't be bothered with 30 to 45 minutes of chopping, mixing and cooking—leaving some ingredients to go to waste.

Tovala promises that, unlike takeout, its meals contain healthy and "clean" ingredients; they range from 450 to 650 calories, not counting toppings like Parmesan cheese. Of the more than 10 meals we tried, all were at least diner-quality and most better than that.

What you give up, even versus other meal kits, is control over salt, sugar and fat in your food—and a sense of accomplishment. When a machine does all the work, can you still call it "home cooking"?

And for many budgets, $12 a person is a lot for dinner. But it's less than the $17.50 a person it typically costs to go to a full-service restaurant, including tax, tip and parking, says Bob Goldin, partner at research firm Pentallect.

The Tovala oven, sold separately from the meal kits, is both the key to its magic and likely the biggest hurdle to mass adoption. It's a steam oven—a cooking technology that hasn't made it into many homes because it requires some expertise to operate. Restaurants use steam ovens to bake, cook and reheat food faster, more evenly and (most important) without drying things out. Instead of "cook at 325 degrees for 20 minutes," the Tovala oven runs a program that might involve cycles of steaming, convection baking and broiling.

Tovala's internet connection and companion app are what make it accessible: You don't have to know anything about food science to make a tasty dish. Increasingly, kitchen gear is building in smarts. A pricier oven, called June, uses machine learning to identify and cook dishes to perfection.

Will you be an early adopter in hopes that Tovala catches on? Or do you wait to make sure you don't get stuck with a $400 steam oven but no ready-to-eat meals, should the startup fail? I want Tovala to succeed, because I like their product—but it's a chicken-or-egg situation, and there's no guarantee it will turn into a delicious quiche.

Yellen Boosts Stocks, Government Debt

By Riva Gold
And Amrith Ramkumar

Stocks and government bonds rallied Wednesday, after Federal Reserve Chairwoman Janet Yellen addressed a slowdown in inflation.

The market moves were the latest swings caused by comments from the world's largest central banks.

WEDNESDAY'S MARKETS

Many investors and analysts have been closely watching for clues about how quickly central banks plan to scale back the monetary stimulus that has been in place since the financial crisis.

The Dow Jones Industrial Average climbed 123.07 points, or 0.6%, to 21532.14, after hitting a new intraday high early in the session. The S&P 500 rose 0.7%, and the Nasdaq Composite advanced 1.1%.

Bonds have steadied in recent days after a two-week selloff that was driven by concerns about central-bank policy. U.S. government bonds strengthened Wednesday. The yield on the 10-year note declined to 2.325% from 2.362% Tuesday and 2.393% at the end of last week. Yields fall when bond prices rise.

The Stoxx Europe 600 bounced back from an 11-week low, rising 1.5% to 384.90, for its biggest one-day gain since April 24.

In testimony on Capitol Hill, Ms. Yellen said she expects consumer prices to allow the central bank to keep gradually raising interest rates, but that the Fed would alter its plans if weak inflation proved more persistent.

Inflation has slowed in recent months, and some analysts and investors said Ms. Yellen's comments suggested that the Fed might be more cautious with future rate increases. Consumer-price index data for June are scheduled for release on Friday.

"People heard what they wanted to hear," said Rob Bernstone, a managing director in equity trading at Credit Suisse Group AG.

"In the absence of the micro data that corporate earnings release, central bankers will continue to be a great point of emphasis for investors," said Eric Wiegand, portfolio manager at the **Private Client Reserve** at U.S. Bank.

The **Bank of Canada** raised interest rates for the first time in seven years Wednesday, joining a growing group of global central bankers signaling a need to dial back on ultralow interest rates.

Meanwhile, higher oil prices boosted shares of energy companies. U.S. crude for August delivery gained 1% to \$45.49 a barrel, while Brent, the global benchmark, added 22 cents, or 0.5%, to \$47.74 a barrel.

Crude storage levels fell by 7.6 million barrels in the week ended Friday, the U.S. Energy Information Administration said Wednesday morning. That is more than double the draw estimated by analysts surveyed by The Wall Street Journal and nearly confirmed a drawdown of 8.1 million barrels that the American Petroleum Institute estimated Tuesday evening.

Commercial crude stockpiles fell to 495 million barrels, EIA said. It was the 11th decline in the last 13 weeks.

The market had surged after that report Tuesday, sending prices higher into the morning. It pared gains after the EIA report, likely from skeptics still concerned about oversupply and from automated-trading systems that are following a pattern from recent months of selling off after similar data or reports that might indicate an end of oversupply, brokers said.

Japan's Nikkei Stock Average fell 0.5% as the yen rebounded against the dollar. The Shanghai Composite Index ended down 0.2%, while Hong Kong's Hang Seng Index rose 0.6%.

Berkshire Pushes Regulator on Oncor Deal

By Peg Brickley

Berkshire Hathaway Energy Co. is racing to get Texas regulators to sign off on its takeover of Oncor in an effort to outpace **Elliott Management** Corp., a hedge fund with its own designs on the energy-grid business.

Time is of the essence in the duel between the two contenders for **Oncor**, one of the largest power-transmission systems in the country. Berkshire Hathaway Energy, the energy unit of Warren Buffett's Berkshire Hathaway Inc., signed a \$9 billion cash deal last week but needs approval from the Public Utility Commission of Texas as well as from a bankruptcy judge to finalize the buyout.

MIKE BLAKE/REUTERS (LEFT); RICK WILKING/REUTERS

Paul Singer, left, runs hedge fund Elliott Management, which is dueling with Warren Buffett's Berkshire Hathaway over Oncor.

Instead of the usual 180-day regulatory review period, Berkshire Hathaway will try to get the PUC Texas to act in 60 to 90 days, said Chad Husnick, lawyer for **Energy Future Holdings** Corp., which owns 80% of Oncor, at a hearing Wednesday in U.S. Bankruptcy Court in Wilmington, Del.

The goal is for Berkshire to show up in bankruptcy court in October, he said, to win confirmation of an Energy Future bankruptcy restructuring plan that will cement Berkshire's acquisition of Oncor.

Meanwhile, Elliott, Energy Future's biggest bondholder, is lining up financing for a counteroffer that is picking up support from other junior bondholders who believe the Berkshire buyout will leave them shortchanged.

Instead of the recovery of 80 cents on the dollar they were expecting under an earlier Energy Future plan, junior bondholders calculate they will receive only 24 cents for every dollar of debt they own, said Gregg Galardi, a lawyer for Elliott, at Wednesday's court hearing.

At the hearing, Energy Future's legal team sketched out a timeline for future action, one that calls for Berkshire to initiate formal proceedings with a Monday filing with the Texas PUC, which has twice killed deals for Oncor, an essential component of the Texas power grid.

On Aug. 10, Energy Future will ask a judge for authority to go through with the Berkshire deal, which is built into a Chapter 11 plan slated for hearings to start Oct. 24 in the U.S. Bankruptcy Court in Wilmington.

Twice before, the bankruptcy court confirmed Chapter 11 plans premised on the sale of Oncor, only to see those plans upended by regulators. This time, Berkshire will go to regulators before coming to bankruptcy court.

"I think that makes a lot of sense," Judge Christopher Sontchi said.

Until last week, Oncor was to have been sold to NextEra Energy Inc., a Florida power company. NextEra's proposed buyout has foundered for months in regulatory action, and Energy Future began talking to others, including Elliott.

On Wednesday, Elliott's lawyer complained that Energy Future insisted on keeping creditors in the dark about the negotiations that led to Berkshire's \$9 billion all-cash buyout proposal.

"We understand that this was not the position of Oncor and it was not the position of Berkshire," Mr. Galardi said.

As a result, creditors are moving as quickly as possible to complete their alternative transaction, doubting they can get an improved offer from Mr. Buffett, who is famously resistant to bargaining once a deal is agreed upon.

"We all know Berkshire's MO [modus operandi]—that they will not negotiate a deal once they execute it," Mr. Galardi said.

Elliott is Paul Singer's \$33 billion hedge fund. It bought up Energy Future debt at strategic positions in the capital structure, hedging against losses and gaining a "blocking" position that means the company needs Elliott's vote if it wants to avoid a pricey bankruptcy court fight.

Energy Future's lawyer, Mr. Husnick, said he understands there have been some discussions between Berkshire and Elliott.

Energy Future, the former TXU Corp., filed for bankruptcy in April 2014, burdened with tens of billions in debt left over from a record-breaking leveraged buyout seven years earlier. While most of the operating businesses left Chapter 11 to become a separate company, Energy Future and its 80% stake in Oncor remain in bankruptcy, with costs running more than \$20 million a month, according to Mr. Husnick.

Bond Rally Is Troubling For Beijing

By Shen Hong

SHANGHAI—A Chinese bond rally—bucking the recent global selloff in government debt—is narrowing the yield gap with U.S. bonds, a potential complication for Beijing.

Prices in the world's third-largest bond market have recovered in recent weeks as Chinese regulators back off efforts to discourage risky loans and cool debt-fueled speculation. That has sent yields falling—to 3.54% on the 10-year government bond, from a two-year high of 3.69% in early May.

Meanwhile, yields on U.S. Treasurys and German bonds have risen as central banks signal that their loose-money policies—which have propped up the world economy—are nearing an end.

The result: The yield gap, or spread, between the 10-year Chinese bond and its U.S. counterpart has shrunk to 1.19 percentage points, a 20% narrowing since early June, when it was at its widest in nearly two years.

A smaller edge for Chinese assets could make U.S. assets, including bonds, more attractive to Chinese investors, tempting them to send their money out of the country, a flow Beijing has managed to slow in recent months by tightening capital controls.

In turn, that could deepen Chinese authorities' policy "trilemma," economists' term for the impossibility of keeping independent control over a currency, interest rates and the capital account at the same time.

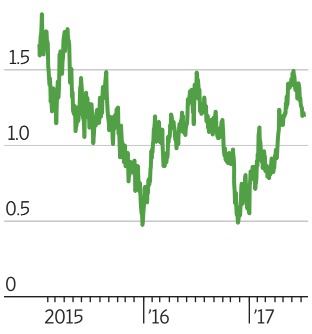
"If U.S. interest rates rise further and the spread narrows more, it will certainly put more pressure on China's currency and encourage more money to head abroad," said Zang Min, senior fixed-income analyst at **Hongxin Securities**, a Shenzhen-based brokerage. And that, he added, could force the People's Bank of China to raise interest rates.

For now, investors in China are enjoying the easing of Beijing's crackdown on financial-system risks.

"These moves aimed at stabilizing the market have rekindled enthusiasm among some bond bulls," said Mr. Zang.

Gap Squeeze

Spread between the 10-year Chinese and U.S. bond yields



Source: Wind Info

THE WALL STREET JOURNAL.

OPEC Output Climbed in June Despite Planned Cuts

OPEC produced more crude oil in June despite efforts to curb output, the group said, flagging that rising production elsewhere could complicate its ability to control the global oil market.

By Christopher Alessi in Frankfurt and Benoit Faucon in Istanbul

The Organization of the Petroleum Exporting Countries' output rose by roughly 1.4% to 32.61 million barrels a day in June, compared with May, led mainly by production increases in Libya, Nigeria, Angola, Iraq and Saudi Arabia, according to the group's monthly market report.

The report comes amid heightened skepticism of OPEC's efforts to influence the oil market. The group comprises 14 countries that control about 40% of the world's crude-oil production, but its power has been tempered by the rise of U.S. shale producers that have flooded the world with new supplies of petroleum.

OPEC's members and 10 producers outside the group agreed last November and December to cap production at about 1.8 million barrels a day lower than October 2016 levels.

The goal was to drain a global oversupply that has kept prices depressed, but the market has remained subdued as U.S. production keeps increasing.

Brent, the international benchmark, and West Texas Intermediate, the U.S. benchmark, both rose on Wednesday but are still trading below \$48 a barrel.

"It will be a very difficult six months for the oil industry," including OPEC, said Fatih Birol, the chief of the International Energy Agency, at a conference in Istanbul. "It will be riding on the storm."

ABDULLAH DOMA/AGENCE FRANCE-PRESSE/GETTY IMAGES

An oil facility in Libya. An increase in production by OPEC members is hurting efforts to ease a glut.

Highlighting the pressures on the group, senior OPEC national representatives—known as OPEC governors—are being summoned to its Vienna headquarters for a special meeting on Monday, according to people familiar with the matter. The people said the rare gathering was for "administrative matters."

OPEC's report Wednesday highlighted non-OPEC oil supply, which is projected to increase by 1.14 million barrels a day in 2018, to an average of 58.96 million a day. That uptick is expected to be driven by production in the U.S., Brazil, Canada, Russia, Kazakhstan, the Democratic Republic of the Congo and the U.K.

An increase in the non-OPEC supply could meet much of the world's demand for oil, while directly undercutting the group's efforts to stem the glut and allow prices to rise. Both Russia and Kazakhstan are among the 10 producers that agreed to join the group in limiting production, so predictions that they will increase output potentially undermines OPEC's efforts to manage global oil supplies.

The production cap deal, which was extended in May through March 2018, comes amid a historically high surplus of oil in storage that has kept prices between \$45 and \$55 a barrel for much of the past year.

OPEC's output remained lower than the record levels reached last year, but its numbers showed the strain some producers are under to keep limiting their supplies during the summer season.

Saudi Arabia, OPEC's biggest producer and the world's largest crude exporter, told OPEC that its output was 10.07 million barrels a day in June, the first time it has exceeded the 10.058 million barrels a day limit it agreed to last year. The kingdom traditionally has high domestic oil demand in the summer that causes its output to rise.

The oil market was weighed down by "excess oil supply and still high oil inventories, despite ongoing high conformity by OPEC and non-OPEC oil producers," the group said Wednesday.

Oil inventories in the Organization for Economic Cooperation and Development—a group of industrialized, oil-consuming nations—fell in May to 3.015 million barrels, but were 235 million barrels above OPEC's target of the last five-year average, the group said.

"We expect this drawdown to gather steam as demand picks up, bringing the markets back to balance," OPEC Secretary-General Mohammad Barkindo said Wednesday at a conference in Istanbul.

Also speaking in Istanbul, **BP** PLC Chief Executive Bob Dudley said OPEC's production cuts were working. "The market is in balance today," he said.

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FUND NAME	GF	AT	LB	NAV DATE	CR	NAV	%RETURN YTD	%RETURN 12-MO	%RETURN 2-YR
■ Chartered Asset Management Pte Ltd - Tel No: 65-6835-8866									
Fax No: 65-6835 8865, Website: www.cam.com.sg, Email: cam@cam.com.sg									
CAM-GTF Limited	OT	OT	MUS	07/07	USD	302100.35	0.0	3.6	-1.1

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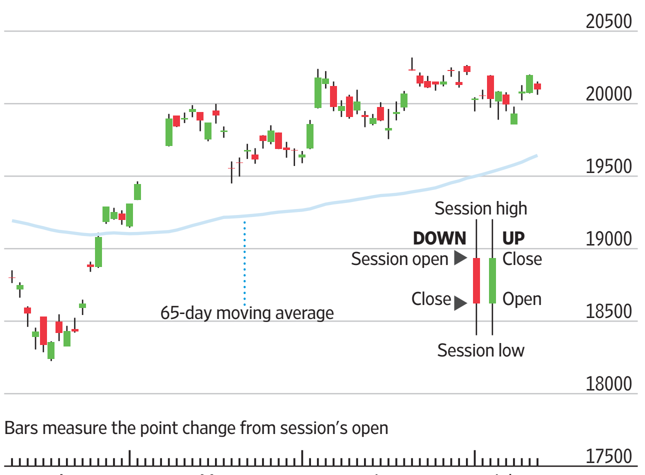
MARKETS DIGEST

Nikkei 225 Index

20098.38 ▼97.10, or 0.48%

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

Year-to-date		▲5.15%
52-wk high/low	20230.41	16083.11
All-time high	38915.87	12/29/89



Bars measure the point change from session's open

STOXX 600 Index

384.90 ▲5.75, or 1.52%

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

Year-to-date		▲6.50%
52-wk high/low	396.45	328.80
All-time high	414.06	4/15/15

S&P 500 Index

Data as of 4 p.m. New York time

2443.25 ▲17.72, or 0.73%

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

	Last	Year ago
Trailing P/E ratio	23.77	24.07
P/E estimate *	18.56	17.94
Dividend yield	2.01	2.17
All-time high:	2453.46, 06/19/17	

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

International Stock Indexes

Data as of 4 p.m. New York time

Region/Country	Index	Latest Close	Latest NetChg	Latest % chg	52-Week Range Low	52-Week Range High	YTD % chg
World	**The Global Dow**	2807.14	25.24	0.91	2376.99	2810.19	11.0
	MSCI EAFE	1900.14	21.76	1.16	1471.88	1956.39	10.7
	MSCI EM USD	1032.31	14.11	1.39	691.21	1044.05	30.0
Americas	**DJ Americas**	588.04	4.70	0.81	503.44	588.72	8.8
Brazil	**Sao Paulo Bovespa**	64903.68	1071.52	1.68	53732.82	69487.58	7.8
Canada	**S&P/TSX Comp**	15145.46	–3.68	–0.02	14319.11	15943.09	–0.9
Mexico	**IPC All-Share**	50817.47	307.24	0.61	43998.98	51103.85	11.3
Chile	**Santiago IPSA**	3765.27	46.28	1.24	3120.87	3786.05	16.8
U.S.	**DJIA**	21532.14	123.07	0.57	17883.56	21580.79	9.0
	Nasdaq Composite	6261.17	67.87	1.10	5002.82	6341.70	16.3
	S&P 500	2443.25	17.72	0.73	2083.79	2453.82	9.1
	CBOE Volatility	10.20	–0.69	–6.34	9.37	23.01	–27.4
EMEA	**Stoxx Europe 600**	384.90	5.75	1.52	328.80	396.45	6.5
	Stoxx Europe 50	3159.06	51.97	1.67	2720.66	3279.71	4.9
Austria	**ATX**	3171.81	24.90	0.79	2129.92	3212.50	21.1
Belgium	**Bel-20**	3867.48	42.74	1.12	3362.71	4055.96	7.2
France	**CAC 40**	5222.13	81.53	1.59	4293.34	5442.10	7.4
Germany	**DAX**	12626.58	189.56	1.52	9919.41	12951.54	10.0
Greece	**ATG**	843.22	–1.11	–0.13	546.95	850.96	31.0
Hungary	**BUX**	35872.46	122.89	0.34	26912.03	36168.63	12.1
Israel	**Tel Aviv**	1442.12	6.19	0.43	1372.23	1490.23	–1.9
Italy	**FTSE MIB**	21432.55	320.85	1.52	15923.11	21828.77	11.4
Netherlands	**AEX**	516.59	5.60	1.10	436.28	537.84	6.9
Poland	**WIG**	61601.72	901.26	1.48	44837.76	62666.49	19.0
Russia	**RTS Index**	1024.56	23.05	2.30	898.05	1196.99	–11.1
Spain	**IBEX 35**	10560.40	111.30	1.07	8229.40	11184.40	12.9
Sweden	**SX All Share**	589.00	9.68	1.67	482.48	598.42	10.2
Switzerland	**Swiss Market**	9015.60	141.53	1.59	7585.56	9148.61	9.7
South Africa	**Johannesburg All Share**	52905.98	529.60	1.01	48935.90	54716.53	4.4
Turkey	**BIST 100**	103809.78	627.14	0.61	70426.16	104283.30	32.9
U.K.	**FTSE 100**	7416.93	87.17	1.19	6615.83	7598.99	3.8
Asia-Pacific	**DJ Asia-Pacific TSM**	1630.60	10.27	0.63	1403.90	1643.59	14.6
Australia	**S&P/ASX 200**	5673.80	–55.10	–0.96	5156.60	5956.50	0.1
China	**Shanghai Composite**	3197.54	–5.49	–0.17	2953.39	3288.97	3.0
Hong Kong	**Hang Seng**	26043.64	166.00	0.64	21322.37	26063.06	18.4
India	**S&P BSE Sensex**	31804.82	57.73	0.18	25765.14	31804.82	19.4
Japan	**Nikkei Stock Avg**	20098.38	–97.10	–0.48	16083.11	20230.41	5.1
Singapore	**Straits Times**	3208.91	–9.89	–0.31	2787.27	3271.11	11.4
South Korea	**Kospi**	2391.77	–4.23	–0.18	1958.38	2396.00	18.0
Taiwan	**Weighted**	10420.68	5.11	0.05	8857.75	10513.96	12.6

Source: SIX Financial Information; WSJ Market Data Group

Global government bonds

Latest, month-ago and year-ago yields and spreads over or under U.S. Treasurys on benchmark two-year and 10-year government bonds around the world. Data as of 3 p.m. ET

Coupon	Country/ Maturity, in years	Yield	Spread Over Treasurys, in basis points Latest	Previous	Month Ago	Year ago	Yield Previous	Month ago	Year ago
2.750	**Australia** 2	1.866	51.9	36.2	25.2	94.8	1.753	1.612	1.637
2.750	10	2.730	40.4	34.0	18.8	44.2	2.705	2.402	1.953
3.000	**Belgium** 2	-0.501	-184.8	-186.6	-195.3	-124.5	-0.475	-0.594	-0.556
0.800	10	0.863	-146.3	-145.2	-162.6	-142.5	0.912	0.587	0.086
0.000	**France** 2	-0.389	-173.6	-177.0	-187.4	-123.2	-0.379	-0.515	-0.543
1.000	10	0.869	-145.7	-144.4	-160.6	-131.9	0.921	0.607	0.192
0.000	**Germany** 2	-0.619	-196.6	-198.8	-211.5	-134.9	-0.597	-0.756	-0.660
0.250	10	0.511	-181.5	-181.4	-196.4	-159.6	0.551	0.250	-0.085
0.050	**Italy** 2	0.067	-128.0	-128.1	-162.6	-76.3	0.110	-0.266	-0.074
2.200	10	2.260	-6.6	-4.2	-19.7	-34.8	2.322	2.017	1.163
0.100	**Japan** 2	-0.106	-145.3	-149.3	-147.0	-103.8	-0.101	-0.111	-0.349
0.100	10	0.090	-223.6	-227.0	-215.5	-179.0	0.095	0.059	-0.279
4.000	**Netherlands** 2	-0.592	-193.9	-196.4	-205.9	-129.3	-0.572	-0.700	-0.604
0.750	10	0.711	-161.5	-161.4	-174.5	-154.9	0.750	0.469	-0.038
4.750	**Portugal** 2	0.025	-132.2	-134.8	-127.8	-32.9	0.044	0.082	0.360
4.125	10	3.079	75.3	76.4	75.2	161.8	3.129	2.965	3.129
2.750	**Spain** 2	-0.293	-164.0	-159.8	-166.1	-82.5	-0.206	-0.301	-0.136
1.500	10	1.632	-69.4	-67.7	-78.1	-33.9	1.687	1.433	1.172
4.250	**Sweden** 2	-0.722	-206.9	-208.7	-209.9	-132.1	-0.695	-0.740	-0.632
1.000	10	0.643	-168.3	-168.6	-182.7	-132.3	0.678	0.386	0.188
1.750	**U.K.** 2	0.301	-104.6	-108.8	-128.6	-49.7	0.304	0.073	0.193
4.250	10	1.264	-106.2	-108.5	-124.7	-68.3	1.280	0.966	0.828
1.250	**U.S.** 2	1.347	...	...	...	...	1.391	1.359	0.689
2.375	10	2.326	...	...	...	...	2.364	2.214	1.511

Commodities

Prices of futures contracts with the most open interest 3:30 p.m. New York time

EXCHANGE LEGEND: CBOT: Chicago Board of Trade; **CME:** Chicago Mercantile Exchange; **ICE-US:** ICE Futures U.S.; **MDEX:** Bursa Malaysia Derivatives Berhad; **TCE:** Tokyo Commodity Exchange; **COMEX:** Commodity Exchange; **LME:** London Metal Exchange; **NYMEX:** New York Mercantile Exchange; **ICE-EU:** ICE Futures Europe. *Data as of 7/11/2017

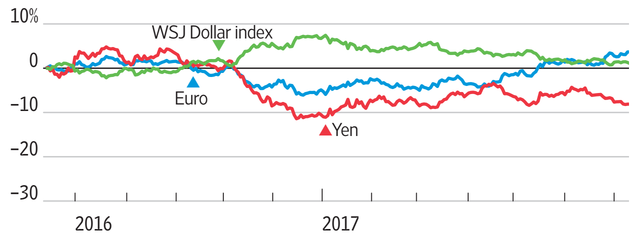
Commodity	Exchange	Last price	One-Day Change Net	One-Day Change Percentage	Year high	Year low
Corn (cents/bu.)	CBOT	385.50	-16.25	-4.04%	404.75	364.50
Soybeans (cents/bu.)	CBOT	1035.00	-8.25	-0.79	1,047.00	907.00
Wheat (cents/bu.)	CBOT	536.75	-16.25	-2.94	574.50	430.75
Live cattle (cents/lb.)	CME	117.825	3.000	2.61%	122.850	99.125
Cocoa ($/ton)	ICE-US	1,818	1	0.06	2,281	1,767
Coffee (cents/lb.)	ICE-US	127.65	0.75	0.59	163.75	115.50
Sugar (cents/lb.)	ICE-US	13.49	0.05	0.37	20.50	12.74
Cotton (cents/lb.)	ICE-US	67.11	-0.56	-0.83	75.72	66.15
Robusta coffee ($/ton)	ICE-EU	2107.00	35.00	1.69	2,286.00	1,885.00
Copper ($/lb.)	COMEX	2.6835	0.0115	0.43	2.8495	2.4850
Gold ($/troy oz.)	COMEX	1219.90	5.20	0.43	1,300.30	1,155.00
Silver ($/troy oz.)	COMEX	15.900	0.155	0.98	18.780	14.340
Aluminum ($/mt)*	LME	1,891.50	-31.50	-1.64	1,972.00	1,688.50
Tin ($/mt)*	LME	19,850.00	150.00	0.76	21,225.00	18,760.00
Copper ($/mt)*	LME	5,824.50	9.50	0.16	6,156.00	5,491.00
Lead ($/mt)*	LME	2,312.00	25.50	1.12	2,445.00	2,022.00
Zinc ($/mt)*	LME	2,775.00	-4.00	-0.14	2,958.50	2,450.50
Nickel ($/mt)*	LME	9,040.00	120.00	1.35	11,095.00	8,780.00
Rubber (Y.01/ton)	TCE	201.80	4.50	2.28	n.a.	n.a.
Palm oil (MYR/mt)	MDEX	2582.00	-1.00	-0.04	2966.00	2390.00
Crude oil ($/bbl.)	NYMEX	45.69	0.46	1.02	58.36	42.29
NY Harbor ULSD ($/gal.)	NYMEX	1.4749	-0.0014	-0.09	1.7930	1.3609
RBOB gasoline ($/gal.)	NYMEX	1.5198	0.0015	0.10	1.8561	1.3902
Natural gas ($/mmBtu)	NYMEX	2.992	-0.055	-1.81	3.5750	2.8320
Brent crude ($/bbl.)	ICE-EU	47.78	0.26	0.55	60.18	44.60
Gas oil ($/ton)	ICE-EU	437.25	3.50	0.81	530.25	403.50

Sources: SIX Financial Information; WSJ Market Data Group

Currencies

London close on July 12

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



Country/currency	Wed in US$	Wed per US$	US$ vs, YTD chg (%)
Americas			
Argentina peso-a	0.0589	16.9824	7.0
Brazil real	0.3100	3.2257	–0.9
Canada dollar	0.7841	1.2754	–5.1
Chile peso	0.001507	663.40	–1.0
Colombia peso	0.0003274	3054.56	1.8
Ecuador US dollar-f	1	1	unch
Mexico peso-a	0.0563	17.7775	–14.3
Peru sol	0.3076	3.2515	–3.0
Uruguay peso-e	0.0348	28.710	–2.2
Venezuela bolivar	0.098652	10.14	1.4
Asia-Pacific			
Australia dollar	0.7672	1.3034	–6.1
China yuan	0.1473	6.7878	–2.3
Hong Kong dollar	0.1280	7.8114	0.7
India rupee	0.0155	64.4100	–5.2
Indonesia rupiah	0.0000751	13324	–1.5
Japan yen	0.008839	113.13	–3.3
Kazakhstan tenge	0.003041	328.89	–1.4
Macau pataca	0.1243	8.0444	1.6
Malaysia ringgit-c	0.2329	4.2935	–4.3
New Zealand dollar	0.7259	1.3776	–4.6
Pakistan rupee	0.0095	105.150	0.7
Philippines peso	0.0198	50.510	1.8
Singapore dollar	0.7258	1.3777	–4.8
South Korea won	0.0008780	1138.90	–5.7
Sri Lanka rupee	0.0065053	153.72	3.6
Taiwan dollar	0.03294	30.356	–6.5
Thailand baht	0.02945	33.960	–5.2
Europe			
Bulgaria lev	0.5834	1.7140	–7.8
Croatia kuna	0.1541	6.491	–9.5
Euro zone euro	1.1414	0.8762	–7.8
Czech Rep. koruna-b	0.0437	22.871	–11.0
Denmark krone	0.1535	6.5155	–7.8
Hungary forint	0.003721	268.71	–8.7
Iceland krona	0.009448	105.84	–6.3
Norway krone	0.1208	8.2782	–4.2
Poland zloty	0.2697	3.7083	–11.4
Russia ruble-d	0.01666	60.009	–2.1
Sweden krona	0.1187	8.4219	–7.5
Switzerland franc	1.0368	0.9645	–5.3
Turkey lira	0.2803	3.5670	1.2
Ukraine hryvnia	0.0386	25.9150	–4.3
U.K. pound	1.2888	0.7759	–4.2
Middle East/Africa			
Bahrain dinar	2.6504	0.3773	0.03
Egypt pound-a	0.0557	17.9490	–1.0
Israel shekel	0.2823	3.5418	–8.0
Kuwait dinar	3.2997	0.3031	–0.8
Oman sul rial	2.5970	0.3851	0.02
Qatar rial	0.2702	3.701	1.7
Saudi Arabia riyal	0.2667	3.7491	–0.04
South Africa rand	0.0754	13.2560	–3.2

	Close	Net Chg	% Chg	YTD % Chg
WSJ Dollar Index	87.98	–0.23	–0.27	–5.33

Sources: Tullett Prebon, WSJ Market Data Group

Cross rates

London close on Jul 12

	USD	GBP	CHF	JPY	HKD	EUR	CDN	AUD
Australia	1.3034	1.6799	1.3515	0.0115	0.1669	1.4879	1.0220	...
Canada	1.2754	1.6439	1.3224	0.0113	0.1633	1.4557	...	0.9785
Euro	0.8762	1.1292	0.9082	0.0077	0.1122	...	0.6870	0.6722
Hong Kong	7.8114	10.0673	8.0989	0.0691	...	8.9155	6.1244	5.9929
Japan	113.1290	145.8100	117.2800	...	14.4820	129.1300	88.7000	86.7900
Switzerland	0.9645	1.2433	...	0.0085	0.1235	1.1011	0.7562	0.7399
U.K.	0.7759	...	0.8043	0.0069	0.0993	0.8857	0.6083	0.5953
U.S.	...	1.2888	1.0368	0.0088	0.1280	1.1414	0.7841	0.7672

Source: Tullett Prebon

Key Rates

	Latest	52 wks ago
Libor		
One month	**1.22444%**	0.48135%
Three month	**1.30389**	0.68010
Six month	**1.46044**	0.98010
One year	**1.74594**	1.29340
Euro Libor		
One month	**-0.40357%**	-0.36857%
Three month	**-0.37229**	-0.30786
Six month	**-0.30614**	-0.19271
One year	**-0.18414**	-0.07029
Euribor		
One month	**-0.37400%**	-0.37100%
Three month	**-0.33100**	-0.29500
Six month	**-0.27300**	-0.19100
One year	**-0.15400**	-0.06100
Yen Libor		
One month	**-0.03129%**	-0.07143%
Three month	**-0.00686**	-0.03900
Six month	**0.00986**	-0.03207
One year	**0.11771**	0.05679
	Offer	Bid
Eurodollars		
One month	**1.3200%**	1.2200%
Three month	**1.3400**	1.2400
Six month	**1.4900**	1.3900
One year	**1.8300**	1.7300
	Latest	52 wks ago
Prime rates		
U.S.	**4.25%**	3.50%
Canada	**2.70**	2.70
Japan	**1.475**	1.475
Hong Kong	**5.00**	5.00
Policy rates		
ECB	**0.00%**	0.00%
Britain	**0.25**	0.50
Switzerland	**0.50**	0.50
Australia	**1.50**	1.75
U.S. discount	**1.75**	1.00
Fed-funds target	**1.00-1.25**	0.25-0.50
Call money	**3.00**	2.25
Overnight repurchase rates		
U.S.	**1.05%**	0.48%
Euro zone	**n.a.**	n.a.

Sources: WSJ Market Data Group, SIX Financial Information, Tullett

Top Stock Listings

4 p.m. New York time

Asia Titans

Cur	Stock	Sym	Last	% Chg	YTD% Chg
HK$	AIAGroup	1299	58.40	1.39	33.49
¥	AstellasPharma	4503	1379.50	-0.50	-15.03
AU$	AustNZBk	ANZ	28.41	-1.53	-6.61
AU$	BHP	BHP	24.88	0.40	-0.72
HK$	BankofChina	3988	3.75	2.46	9.01
HK$	CKHutchison	0001	99.35	0.40	13.03
HK$	CNOOC	0883	8.60	0.70	-11.34
AU$	CSL	CSL	129.10	-2.54	28.57
¥	Canon	7751	3794.00	0.66	15.14
¥	CentralJapanRwy	9022	17880	-0.20	-7.02
HK$	ChinaConstructnBk	0939	6.34	2.59	6.20
HK$	ChinaLifeInsurance	2628	24.70	0.41	22.28
HK$	ChinaMobile	0941	80.70	-0.37	-1.82
HK$	ChinaPetro&Chem	0386	5.87	0.51	6.73
AU$	CmwlthBkAust	CBA	82.12	-0.99	-0.35
¥	EastJapanRailway	9020	10770	-1.06	6.63
¥	Fanuc	6954	22160	-1.07	11.83
¥	Hitachi	6501	714.00	0.27	12.97
TW$	Hon Hai Precisn	2317	118.50	...	40.74
¥	HondaMotor	7267	3103.00	-0.03	-9.14
KRW	HyundaiMtr	005380	149000	0.68	2.05
HK$	Ind&Comml	1398	5.19	3.39	11.61
¥	JapanTobacco	2914	3856.00	-0.46	0.31
¥	KDDI	9433	2917.00	-0.41	-1.44
¥	Mitsubishi	8058	2386.50	0.36	-4.16
¥	MitsubishiElectric	6503	1642.50	-1.82	0.80
¥	MitsubishiUFJFin	8306	738.40	-1.73	2.53
¥	Mitsui	8031	1608.50	-0.03	0.09
¥	Mizuho Fin	8411	202.60	-1.17	-3.43
¥	NTTDoCoMo	9437	2637.00	-0.15	-0.98
AU$	NatAustBnk	NAB	29.72	-1.23	-3.10
¥	NipponTeleg	9432	5259.00	-0.87	7.06
¥	NissanMotor	7201	1148.00	-0.56	-2.34
¥	Panasonic	6752	1522.00	0.07	27.95
HK$	PingAnInsofChina	2318	54.85	-0.45	41.37
$	RelianceIndsGDR	RIGD	46.25	1.09	46.59
KRW	SamsungElectronics	005930	2494000	1.80	38.40
¥	Seven&I Hldgs	3382	4544.00	0.35	2.04
¥	SoftBankGroup	9984	9046.00	-0.66	16.50
¥	Sony	6758	4477.00	0.86	36.70
¥	Sumitomo Mitsui	8316	4330.00	-1.10	-2.91
HK$	SunHngKaiPrp	0016	116.20	0.26	18.57
TW$	TaiwanSemiMfg	2330	210.50	-0.71	15.98
¥	TakedaPharm	4502	5681.00	-0.44	17.50
HK$	TencentHoldings	0700	281.20	1.01	48.23
¥	TokioMarineHldg	8766	4819.00	0.25	0.48
¥	ToyotaMtr	7203	6225.00	-0.61	-9.49
AU$	Wesfarmers	WES	40.33	-0.86	-4.30
AU$	WestpacBanking	WBC	30.73	-1.13	-5.74
AU$	Woolworths	WOW	25.68	-0.27	6.56

Stoxx 50

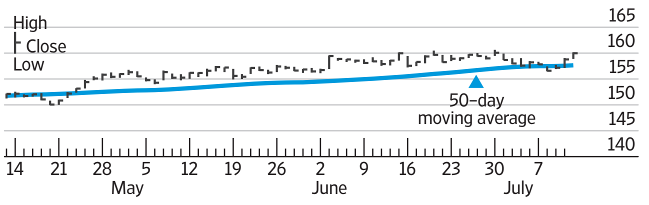
Cur	Stock	Sym	Last	% Chg	YTD% Chg
CHF	ABB	ABBN	24.30	1.89	13.13
€	ASMLHolding	ASML	119.80	1.96	12.33
€	AXA	CS	25.12	0.38	4.75
€	AirLiquide	AI	109.20	2.06	3.36
€	Allianz	ALV	182.50	1.45	16.24
€	AB InBev	ABI	98.49	2.06	-2.05
£	AstraZeneca	AZN	5192.00	2.18	17.00
€	BASF	BAS	82.12	0.37	-7.01
€	BNP Paribas	BNP	65.99	1.12	8.98
£	BT Group	BT.A	290.10	0.87	-20.93
€	BancoBilVizAr	BBVA	7.51	-0.08	18.34
€	BancoSantander	SAN	5.79	0.40	16.68
£	Barclays	BARC	208.00	1.09	-6.91
€	Bayer	BAYN	112.55	2.27	13.54
£	BP	BP.	450.65	1.85	-11.57
£	BritishAmTob	BATS	5278.00	1.89	14.21
€	Daimler	DAI	65.46	2.04	-7.44
€	DeutscheTelekom	DTE	15.86	1.31	-2.09
£	Diageo	DGE	2301.00	1.77	9.05
€	ENI	ENI	13.19	1.70	-14.74
£	GlaxoSmithKline	GSK	1628.00	1.56	4.23
£	Glencore	GLEN	315.00	2.44	13.57
£	HSBC Hldgs	HSBA	745.40	0.38	13.47
€	INGGroep	INGA	15.58	-0.03	16.53
£	ImperialBrands	IMB	3467.00	1.75	-2.13
€	IntesaSanpaolo	ISP	2.85	0.49	17.39
€	LVMHMoetHennessy	MC	216.35	0.86	19.27
£	LloydsBankingGroup	LLOY	66.04	0.75	5.65
€	LOreal	OR	182.00	1.62	4.96
£	NationalGrid	NG.	931.00	0.92	-10.32
CHF	Nestle	NESN	83.70	1.70	14.58
CHF	Novartis	NOVN	80.50	2.16	8.64
DKK	NovoNordiskB	NOVO-B	278.50	2.20	9.34
£	Prudential	PRU	1775.00	1.43	9.06
£	ReckittBenckiser	RB.	7748.00	1.95	12.52
£	RioTinto	RIO	3453.00	0.80	9.32
CHF	RocheHldgctf	ROG	243.40	2.05	4.64
£	RoyDtchShell A	RDSA	2076.50	1.57	-7.40
€	SAP	SAP	91.58	1.38	10.59
€	Sanofi	SAN	85.96	3.12	11.78
€	SchneiderElectric	SU	69.03	1.83	4.42
€	Siemens	SIE	122.80	1.87	5.14
€	Telefonica	TEF	9.14	1.34	3.63
€	Total	FP	43.08	0.95	-9.81
CHF	UBSGroup	UBSG	16.80	-0.24	5.33
€	Unilever	UNA	49.05	1.34	25.41
£	Unilever	ULVR	4263.50	0.97	29.49
€	Vinci	DG	77.07	2.60	19.12
£	VodafoneGroup	VOD	220.45	1.36	10.31
CHF	ZurichInsurance	ZURN	289.60	1.08	3.28

DJIA

Cur	Stock	Sym	Last	% Chg	YTD% Chg
$	AmericanExpress	AXP	84.84	0.81	14.52
$	Apple	AAPL	145.74	0.14	25.83
$	Boeing	BA	206.42	0.07	32.59
$	Caterpillar	CAT	108.96	0.67	17.49
$	Chevron	CVX	103.85	0.71	-11.77
$	CiscoSystems	CSCO	31.16	0.23	3.11
$	Coca-Cola	KO	44.50	0.38	7.33
$	Disney	DIS	104.36	0.50	0.13
$	DuPont	DD	84.81	2.71	15.54
$	ExxonMobil	XOM	80.98	0.47	-10.28
$	GeneralElec	GE	26.60	0.83	-15.82
$	GoldmanSachs	GS	227.30	0.15	-5.07
$	HomeDepot	HD	152.62	1.34	13.83
$	Intel	INTC	34.25	0.97	-5.57
$	IBM	IBM	153.76	0.37	-7.37
$	JPMorganChase	JPM	92.51	-0.34	7.21
$	J&J	JNJ	132.23	0.76	14.77
$	McDonalds	MCD	156.68	1.14	28.72
$	Merck	MRK	62.78	0.71	6.64
$	Microsoft	MSFT	71.15	1.66	14.50
$	Nike	NKE	58.22	0.07	14.54
$	Pfizer	PFE	33.22	0.15	2.28
$	Procter&Gamble	PG	86.96	0.22	3.43
$	3M	MMM	211.31	0.79	18.33
$	Travelers	TRV	125.29	0.19	2.34
$	UnitedTech	UTX	123.71	0.14	12.85
$	UnitedHealth	UNH	186.79	0.45	16.71
$	Visa	V	96.23	0.86	23.35
$	Verizon	VZ	43.22	0.77	-19.03
$	Wal-Mart	WMT	73.99	0.71	7.05

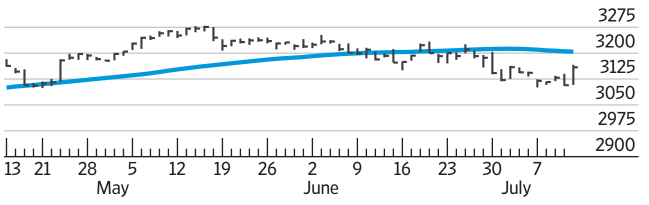
Asia Titans 50

Last: **159.98** ▲ 1.20, or 0.75% YTD ▲ 13.5%



Stoxx 50

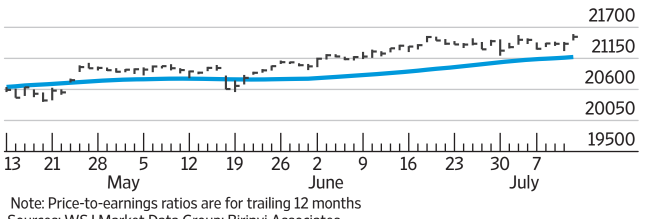
Last: **3159.06** ▲ 51.97, or 1.67% YTD ▲ 4.9%



Dow Jones Industrial Average

P/E: 21

Last: **21532.14** ▲ 123.07, or 0.57% YTD ▲ 9.0%



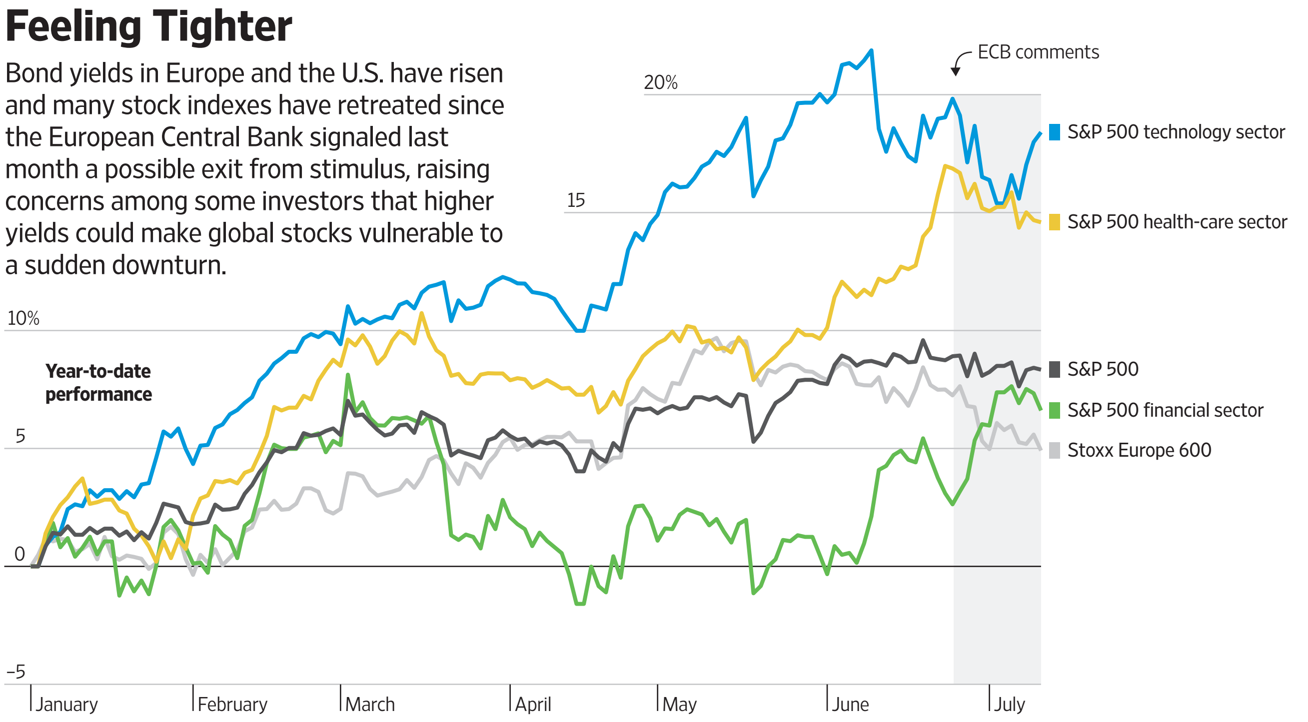
Note: Price-to-earnings ratios are for trailing 12 months
Sources: WSJ Market Data Group; Birinyi Associates

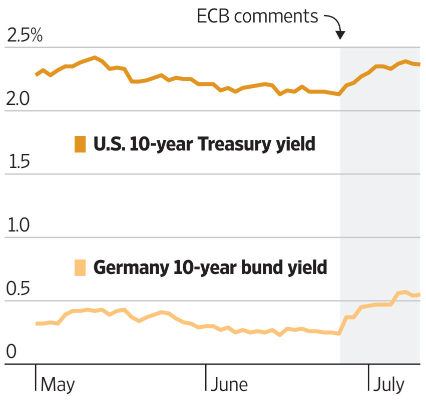
Higher Bond Yields Spur Worry on Stocks

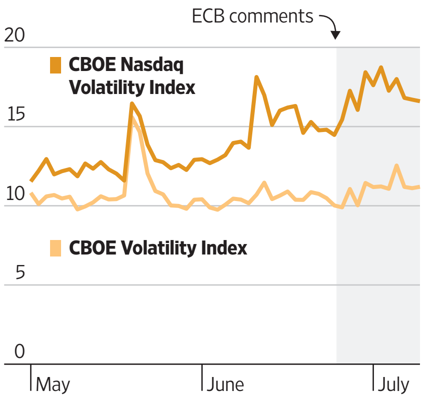
By Riva Gold

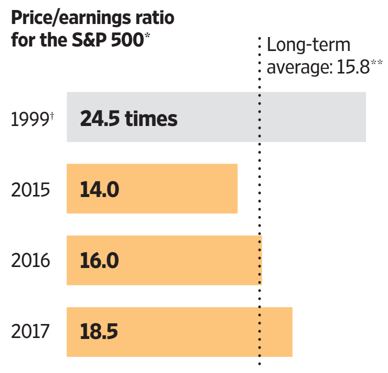
Feeling Tighter

Bond yields in Europe and the U.S. have risen and many stock indexes have retreated since the European Central Bank signaled last month a possible exit from stimulus, raising concerns among investors that higher yields could make global stocks vulnerable to a sudden downturn.









*Stock price divided by per-share earnings estimates for coming year †Peak P/E ratio **Since 1990

Sources: FactSet (indexes, yields, P/E); WSJ Market Data Group (CBOE Volatility Index); Thomson Reuters (CBOE Nasdaq Volatility Index); J.P. Morgan (long-term average P/E)

THE WALL STREET JOURNAL.

With central-bank support set to wane, investors are worried that stocks trading near records could be vulnerable to any further selling in the bond market.

Global stocks have soared on a combination of steady economic growth and extensive monetary stimulus. But with major central banks now expected to shut off the bond-buying taps, one pillar of support is fading and so, too, are some investors' optimistic outlook for stocks.

Investors are asking: Can stocks keep climbing if the bond market gets hit?

While few predict a major stock meltdown, a U.S. market that is at records is more exposed to any signs of an economic downturn, investors say. Many now expect returns from stocks to be more muted and for volatility to move higher.

Stocks that led this year's rally, particularly U.S. technology and health-care companies, are expected to come under further pressure, and those that benefit from higher yields, like banks, have been gaining.

Some investors are considering looking outside the U.S., where benchmarks such as those in Europe trade at a cheaper price and are more weighted to banks.

"I've been a bit more cautious in our portfolios, reducing equity exposure," said Ed Keon, portfolio manager at QMA, a multiasset manager owned by Prudential Financial. "Equity valuations are at historic highs, interest rates are quite low...so I think the risk that there's a miscalculation or unexpected reaction is greater than it would be under ordinary circumstances."

The value of shares depends on how much money companies are expected to generate in the future. When interest rates rise, investors may be able to get a similar return investing in a risk-free bond.

Yields on 10-year Treasury notes have climbed to around 2.33% from around 2.2% over the two weeks since several important central banks started signaling an exit from stimulus programs. The S&P 500 had fallen around 1% during that period through Tuesday, while the Stoxx Europe 600 had given up 2½ months of gains.

On Wednesday, however, the S&P 500 was up 0.8% in late trading and the Stoxx Europe 600 jumped 1.5%, while Treasury prices strengthened, after Federal Reserve Chairwoman Janet Yellen said the Fed won't need to raise interest rates as high as previous cycles amid an uncertain inflation outlook. In written testimony before the House Financial Services Committee, Ms. Yellen said that "gradual increases in the federal funds rate" were warranted over time to meet the central bank's objectives of full employment and stable prices. But she added "the neutral level of the federal funds rate is likely to remain below levels that prevailed in previous decades."

Still, comments from central bankers in the U.S., Canada, the eurozone and Britain have signaled that the days of easy money are nearing an end.

After a long period of calm, the CBOE Volatility Index, known as Wall Street's fear gauge, has climbed 10% through Tuesday, albeit off ultralow levels. The S&P 500 tech sector, the first half's best performer, as of Tuesday had shed around 2% since yields started climbing two weeks ago, while banks in the index had gained roughly 5%. Higher rates tend to benefit banks' net interest margins, while reducing the appeal of growth stocks trading at a premium to the market.

The latest rise in the U.S. 10-year yield hasn't reached heights that analysts fear could damage prospects for stocks, but it wouldn't take a huge selloff to get to those levels. Analysts at Morgan Stanley, for instance, are watching 2.75% as a threshold where they might turn less optimistic on U.S. equities.

That level, combined with the average historical equity risk premium, or the extra return demanded for holding stocks over safe Treasurys, would suggest a price/earnings level of roughly 19 on the S&P 500. Any higher on the Treasury yield, and stocks could start to come under pressure, they say.

For much of the past year, stocks actually climbed as bonds were sold. The fact that investors were dumping debt on expectations of stronger economic growth and inflation was seen as good for stocks.

"Investors started to think higher real rates and equities could go up because you have a robust underlying economy," said Mahmood Noorani, founder of Quant Insight, which looks at trading patterns across asset classes.

But investors have taken recent increases in yields as more of a reflection of shifting monetary policy than a buoyant economy.

Meanwhile, some analysts are less sure that American economic growth will be as robust as once thought. U.S. gross domestic product expanded at a seasonally and inflation-adjusted annual rate of just 1.4% in the first quarter.

To be sure, bond yields remain low by historic standards and below the high of around 2.6% reached in March. A combination of steady economic growth later in the year and brightening corporate earnings may keep the market buoyant enough to withstand an orderly adjustment of bond yields, some investors say. "I think we'd need to get more concerned about growth to get really bearish about equities," said Paul O'Connor, head of multiasset at Janus Henderson.

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MARKETS

Investors Embrace Euro

Currency climbs as the risk of a eurozone breakup eases and economy improves

By Mike Bird

ORESTIS PANAGIOTOU/EUROPEAN PRESSPHOTO AGENCY

The euro has gained 10% against the dollar this year. Here, the common currency depicted in Athens.

Once dubbed a crisis currency, the euro has outperformed its peers against the dollar, and investors are betting there are gains to come.

The euro is up 10% against the greenback this year, as the eurozone economy rebounds and the threat from populist politicians calling for the currency bloc's demise recedes.

With the risk of breakup fading, analysts are trying to determine whether the currency can reclaim some of the global standing it held before 2009 and the sovereign-debt crisis, not least as central banks place more of the currency into their reserves.

Several indicators suggest that investors are more positive about the euro than in many years. On Wednesday in New York, the currency traded at its highest level in more than a year and was at $1.1418 in afternoon trading.

"Political threats to the euro have definitely reduced its status, and from a historical perspective the rest of the world is underweight Europe," said Carl Hammer, head of global macro and foreign-exchange research at Swedish bank Skandinaviska Enskilda Banken AB.

Three-month euro-dollar risk reversals, which measure the cost of hedging against drops in currencies, broke into positive territory at the end of June for the first time since at least 2010. A positive figure suggests investors are no longer asking to be paid a premium to hold euros, a sharp change from the recent past.

Investors also have a net long position in the euro—a bet that the currency will appreciate—for the first time in three years. U.S. Commodity Futures Trading Commission data show investors held 77,464 more long than short contracts on the euro in the week to July 3. A short position is a wager that an asset will fall in value.

Following its launch 18 years ago, the single currency reached a high of about $1.60 in 2008. But the currency has lost ground even since the sovereign-debt crisis ended in 2012.

Its share of daily trading volume in foreign-exchange markets has dropped from 39% in 2010 to 31% in 2016, according to the Bank for International Settlements.

The European Central Bank estimates that the share of international bonds denominated in euros has declined from as high as 29% in 2004 to 22% at the end of last year.

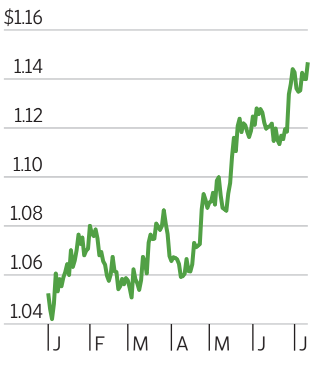
In the first quarter of the year, slightly less than 20% of global official foreign-exchange reserves were held in euros, according to the International Monetary Fund. At its peak in 2009, the euro's share of international reserves reached nearly 28%.

A greater international role would help eurozone companies raise funds while potentially reducing exchange-rate volatility.

Building Strength

The euro has rallied, driven by positive economic news and dissipating political risks.

How many dollars €1 buys



Source: FactSet

THE WALL STREET JOURNAL.

The lingering risk that the currency won't survive has reduced the euro's position in foreign-currency reserves held by governments and central banks while putting off some investors. That risk has abated recently. Elections in the Netherlands and France saw pro-European Union candidates win convincingly, and support for Germany's main anti-euro party has dwindled.

Expectations that a country will leave the eurozone have fallen. Investors assign an 8.6% chance to a country exiting the eurozone in the next 12 months, against over 25% early in the year, according to the Sentix euro breakup index, which polls investors on expectations for the bloc.

To be sure, factors such as less monetary stimulus and a brighter economy could end up hurting the euro if the pace of both disappoint. The region's anti-euro politicians could also stage a comeback.

Still, the brighter outlook for regional growth, which has recently outstripped the U.S., helps the euro on several fronts. It reduces the risk of breakup by helping to bolster the weaker southern European economies, whose debts and stagnant growth helped to fuel the sovereign-debt crisis. It makes the region more attractive for outside investors.

It also means the ECB will be quicker to jettison the bond-buying and negative interest-rate policies that have capped the currency's gains. Such quantitative easing, or QE, policies keep bond yields low, reducing long-term returns for investors and stemming the flow of foreign exchange that would boost the euro.

RBS to Pay U.S. $5.5 Billion Fine

By Max Colchester

LONDON—**Royal Bank of Scotland Group** PLC on Wednesday agreed to pay $5.5 billion to the Federal Housing Finance Agency to settle a U.S. probe into its sale of toxic mortgage-backed securities in the run-up to the financial crisis.

The settlement clears one of several obstacles the U.K. government-controlled bank faces before it can resume dividend payments and continue its return to private hands. RBS said in a statement that it had already set aside funds to cover most of the cost of the settlement. The bank will book an additional charge of $196 million for its results due out in August.

In settling, RBS becomes the 17th bank to strike a deal with the FHFA over the sale of subprime mortgages to Fannie Mae and Freddie Mac. The settlement came in higher than investors expected, tempering the idea that U.S. agencies would soften their approach to foreign banks under the Trump administration.

More pain could be in store. Before the FHFA settlement, RBS had set aside $8.3 billion to cover the full range of allegations it faced over its role in packaging and selling subprime mortgages before the financial crisis. The bank still faces probes from several U.S. agencies including criminal and civil investigations by the U.S. Department of Justice. RBS warned Wednesday that "further substantial provisions and costs may be recognized...depending upon the final outcomes." Analysts at Jefferies estimate RBS will set aside an additional $2.5 billion by year end to cover future Justice Department settlements. So far, the bank hasn't had meaningful discussions with the Justice Department over any settlement, said RBS Chief Financial Officer Ewen Stevenson.

That could slow the already grinding process of returning RBS to private hands. U.K. Treasury officials have said they won't sell the government's 71% stake until there is clarity on the size of the fines RBS may face.

Under the FHFA settlement, RBS will pay the $5.5 billion, but is eligible for a $754 million reimbursement under indemnification agreements. Mr. Stevenson admitted the deal was "at the high end of the other settlements" but said there should be no read across to potential settlements with the Justice Department. RBS paid more per mortgage bond sold than any other bank that has settled with the FHFA to date.

RBS is involved in another FHFA case as a co-defendant with Japanese bank Nomura. It continues following an appeal.

The FHFA settlement "is a stark reminder of what happened to this bank before the financial crisis, and the heavy price paid for its pursuit of global ambitions," RBS Chief Executive Ross McEwan said.

The bank, which was bailed out in 2008, has shed a big chunk of its bond-trading operations in the U.S. as it retreats to its U.K. base.

—Razak Musah Baba contributed to this article

ANDY RAIN/EUROPEAN PRESSPHOTO AGENCY

Royal Bank of Scotland remains in government hands.

HEARD ON THE STREET

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China Sets Sights on Chip Sector

China already makes most of your gadgets. Now it wants to fill those products with Chinese chips. Making semiconductors is far harder than assembling phones, but the experience of dozens of industries shows that it is a mistake to bet against China's ability to upend an industry.

China plans to spend up to $108 billion over the next 10 years on its own chip-making industry, according to **Bain** & Co. China consumes almost half of the world's chips, mostly for exported electronics, but it makes less than 10% of those chips, according to Gartner.

That, the government believes, is a national security threat, and China has made building its own chip supply chain a national priority.

The government is showering money on the country's chip makers. State-owned chip maker **Tsinghua Unigroup**, for example, just got $22 billion from a state bank and a government-backed fund in March.

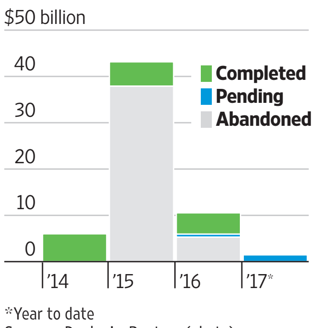
Despite the lavish spending, it will be at least a couple of years before the Chinese chips hit the market. Even then, China will find it difficult to close its technological gaps with the top chip makers. In the two areas in which it invests heavily—chip fabrication and memory chips—China is way behind market leaders like Samsung and **TSMC**.

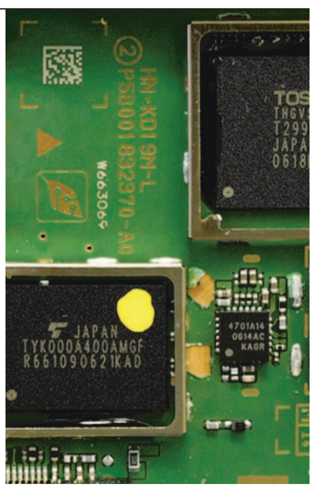
China first tried to buy rather than build a domestic chip industry. Chinese companies announced a record $43 billion of foreign acquisitions in the semiconductor sector in 2015, yet only $5.2 billion of those were completed, according to Dealogic. The deals failed largely because it became clear they had little chance to get past U.S. regulators.

Among the failed deals are Tsinghua's $23 billion pursuit of memory-chip maker **Micron Technology** and the $2.5 billion bid for Fairchild Semiconductor by a group led by another state-owned firm, China Resources.

Chips Are Down

China's outbound M&A in semiconductor industry





*Year to date

Sources: Dealogic; Reuters (photo)

THE WALL STREET JOURNAL.

China's outbound M&A in the sector for the first six months this year amounted to $1.6 billion—an 81% drop from last year.

But there is one area in which Chinese chip makers could have some success: devices that don't require the best chips but ones that are just good enough. Domestic Chinese brands like **Huawei**, **Oppo** and **Vivo** build cheap gadgets that are popular in China.

These Chinese vendors likely will be big buyers of Chinese chips if they can meet at least some minimum standards. Smaller foreign chip makers that don't have the market leaders' efficient cost structure could get hurt by a flood of cheap chips. Companies like **UMC** and **Nanya Technology** in Taiwan or even South Korea's SK Hynix could be affected.

China's big splash in the chip industry may not unseat the champions but could weed out the laggards.

This is the third of three columns on what is next for the booming semiconductor industry. —*Jacky Wong*

OVERHEARD

Central bankers can't avoid dealing with numbers. But numbers can be tricky things.

So it is with the U.K., where the good news is that the unemployment rate has fallen to 4.5%, the lowest since 1975. But for the Bank of England, it raises questions: It was only in February that the central bank cut its estimate of the unemployment rate that increases wage-inflation pressures, the so-called equilibrium rate, to 4.5% from 5%. It thought unemployment would remain around 4.75%, keeping rate increases off the agenda. Wage growth, however, is still weak, although the latest data were slightly better than expected.

The BOE has been here before. In 2013, with unemployment at 7.8%, the central bank said it wouldn't even think about raising rates until joblessness fell to 7%. When it made that pledge, it thought that might not happen for three years. It took just eight months: Unemployment duly hit 6.9% in February 2014. Some moving targets are easy to hit.

A Slow Tack May Not Be Right for Fed

The word of the day at the Federal Reserve is "gradual." It might not be the word of tomorrow.

In congressional testimony Wednesday, Fed Chairwoman Janet Yellen noted that the central bank has "gradually" tightened policy this year, that "additional gradual rate hikes" are likely in the years to come.

The risk is that falling unemployment will force the Fed to raise rates faster than either it or investors expect.

The unemployment rate, at 4.4%, is a bit below what Fed policy makers think is its long-run, just-right level for the economy. But slow wage growth and low inflation raise the possibility the right rate might be even lower. If the unemployment rate were to drift lower, the Fed might be open to finding out what the right rate is.

The unemployment rate is nearly a half point lower than it was at the start of the year, and at the recent pace of hiring it could fall below 4% by January. That would put the Fed in a situation in which it had to guess whether the labor market is overheating.

The consequences of guessing it isn't overheating, and being wrong, would be dangerous. The Fed would then need to raise rates sharply. And, as Bank of America Merrill Lynch economist Ethan Harris points out, increases in the unemployment rate of a few tenths of a percentage point are usually followed by recessions.

Instead of running that risk, the Fed would probably raise rates faster than it has mapped out. Investors' surprise at this wouldn't be gradual. —*Justin Lahart*

Gig Workers Pose Danger to the Consumer-Lending Boom

Jobs in the gig economy and other flexible roles are on the rise, generating concern about pay and workers' rights. But banks should fear the phenomenon, too: It poses risks to lending they may not appreciate.

People in part-time jobs, agency work, self-employment and work found online on platforms such as **Uber Technologies** or **TaskRabbit** can see much greater variation in monthly incomes than those in traditional roles. That makes it harder to plan budgets and meet regular bills and credit repayments. This change has been spreading through the U.S. and U.K. in recent years. U.S. labor statistics miss a lot of flexible jobs.

Income volatility is highest among the young and those on low incomes, and these people are typically more reliant on consumer credit. There also has been rapid growth in consumer lending on both sides of the Atlantic.

When regulators stress-test consumer credit, they look for rises in unemployment. This is no longer likely to be as good a guide. When the economy slows, people who work part time, or have contracts with no guaranteed hours, or who sell their labor online, will see hours and income fall without becoming unemployed.

People in flexible roles can see much greater variation in monthly incomes.

So far, online gig work seems to be used mainly to top up other income. That is the finding of studies such as one by the J.P. Morgan Chase Institute, which found that gig work could save people from having to cut spending, taking out extra costly credit or failing to pay what they already owed. That study covered the period from 2012 to 2015 when work was plentiful.

Yet in a downturn when more people are more desperate, incomes will likely be worse. A study by the Boston Federal Reserve found that even in good times, the amount people could earn per hour through gig work tended to fall the more hours they were willing to supply. Those who most need the work get paid less for it.

For banks and regulators, as flexible working grows, they will need to find other indicators of looming payment problems. Difficulties may already be happening. Delinquency rates on some forms of subprime credit and auto loans are rising, according to New York Fed data, at a time when unemployment rates are still trending down.

That is very unusual, but it may be a sign of things to come. —*Paul J. Davies*