

THE WALL STREET JOURNAL.

DOW JONES | News Corp

MONDAY, SEPTEMBER 4, 2017 ~ VOL. XLII NO. 2

WSJ.com

ASIA EDITION

As of 4 p.m. ET DJIA 21987.56 ▲ 0.18% NIKKEI 19691.47 ▲ 0.23% STOXX 600 376.14 ▲ 0.60% BRENT 52.75 ▲ 0.21% GOLD 1324.50 ▲ 0.63% EURO 1.1880 ▼ 0.25% DLR \$110.12 ▲ 0.13%

What's News

Business & Finance

U.S. bank stocks tumbled in August as interest rates slipped, and some money managers say lenders have farther to fall. **A1**

◆ The battle for artificial-intelligence expertise is forcing Apple to grapple with its famous penchant for secrecy. **B1**

◆ Huawei launched a new chipset with built-in AI capabilities to power its next-generation smartphones and take on Apple and Samsung. **B1**

◆ Moves by Beijing to rein in financial risks are curbing smaller Chinese banks' ability to grow. **B1**

◆ An extended run of labor-market gains this year has produced little uptick in wage growth or inflation, complicating Fed policy decisions in the months ahead. **A5**

◆ Apple and Amazon are bolstering the teams that run their Siri and Alexa virtual assistants as competition heats up in the sector. **B4**

◆ Instagram said a hack disclosed last week affected a larger number of users than it previously detected. **B4**

◆ Banks have cut their forecasts on oil prices for a fourth consecutive month as analysts brace for further supply when OPEC's agreement to cap output ends next year. **B8**

World-Wide

◆ North Korea said it conducted a sixth and significantly larger nuclear test, stepping up pressure on Trump. **A1**

◆ A U.S. threat to withdraw from its trade pact with South Korea risks alienating an ally as fears intensify over North Korea's weapons program. **A1**

◆ The Pentagon for the first time set a schedule of naval patrols in the South China Sea in an attempt to create a consistent posture to counter China's claims there. **A3**

◆ A letter Trump drafted to Comey laying out the reasons he didn't want the then-FBI chief to stay in the job has been turned over to Special Counsel Mueller. **WSJ.com**

◆ A border standoff between China and India has magnified friction over trade and security days before their leaders meet. **A4**

◆ The U.S. State Department said it would hold up \$255 million in military aid for Pakistan until the country addresses U.S. concerns about terrorist groups. **A4**

◆ Trump is set to announce Tuesday whether the Obama-era "Dreamers" immigrant program will be retained. **A5**

◆ German police began defusing a World War II-era bomb in Frankfurt after evacuating more than 60,000 residents. **A4**

CONTENTS Markets B8
Business News... B3 Markets Digest B6
Crossword A12 Opinion A10-11
Europe File A2 Technology B4
Heard on Street B8 U.S. News A5
In Depth A7 Weather A12
Life & Arts A8-9,12 World News A2-4

China: RMB28.00; Hong Kong: HK\$23.00;
Indonesia: Rp25,000 (incl PPN);
Japan: Yen620 (incl JCT); Korea: Won4,000;
Malaysia: RM750; Singapore: S\$5.00 (incl GST)

KDN PP 9315/10/2012 (031275); MCI (P)
NO. 066/01/2017; SK MENPEN RI NO. 01/
SK/MENPEN/SCJ/1998 TGL 4 SEPT 1998

ISSN 03779920 4,200,2
9 77037799200

Copyright 2017 Dow Jones & Company. All Rights Reserved

Google research in machine intelligence. Published research on "Apple Machine Learning Journal."

Source: the companies

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

THE WALL STREET JOURNAL.

Copyright 2017 Dow Jones & Company. All Rights Reserved

9 77037799200

WORLD NEWS

Trade: Reddest of Britain's Brexit Red Lines



EUROPE FILE

By Simon Nixon

One by one, many of the U.K.'s red lines for leaving the European Union are being watered down. Over the summer, the government conceded that EU citizens will continue to enjoy the right to live and work in the U.K. more or less as they do now, at least for a transitional period of up to three years; it also softened Prime Minister Theresa May's pledge to end the jurisdiction of the European Court of Justice to a commitment to end only direct jurisdiction; and despite a standoff in Brussels last week, the U.K. has acknowledged it has financial obligations to the EU and that it may continue to pay into EU coffers after Brexit to secure access to markets and programs.

But as other red lines soften, one red line has hardened to the point where it now holds the key to the Brexit process: Any new relationship with the EU must allow the U.K. the freedom to negotiate its own free-trade deals with third countries. For a Conservative party determined to dissociate itself from the nativist anti-immigration agenda of fellow Brexiters in the UK Independence Party, the need to go into the next election due in 2022 having signed independent trade deals has assumed totemic importance. As one senior cabinet minister puts it: "If we can't do that, what's the point of leaving?"

But Mrs. May's problem is that this political imperative is at odds with her goal of securing a "deep and special partnership" that enables the continuation of frictionless trade with the EU. To strike trade deals, a country needs to have something to trade: tariffs or regulation or ideally both. Yet the only way to maintain frictionless trade between the U.K. and the EU

is for the U.K. to remain in both a customs union and a regulatory union with the EU, mirroring exactly the EU's external tariffs and regulations, leaving no scope to sign its own independent trade deals. The U.K. government has spent more than a year trying to devise ways around this conundrum but the reality is that it can't be done.

To see why, consider the case of Turkey, which actually has its own customs union with the EU yet whose exporters still experience lengthy delays at the border. That is partly because Turkey's customs union doesn't cover all goods. The moment

you introduce exceptions in the customs regime you need to have border checks to ensure that excluded goods aren't slipping into the EU tariff free, said Dr. Peter Holmes, an expert in trade policy at Sussex University. A second issue is that Turkey is not part of the EU's regulatory union—the European Economic Area—which ensures that all goods circulating in the EU comply with the same standards. So further border checks are required to ensure that Turkish exports are safe.

Sure, there are ways to minimize barriers but it is impossible to remove en-

tirely the need for checks. Norway, for example, is part of the EEA, which means its exports are deemed safe to sell in the EU, but it is outside the customs union, which means that its exports still face border checks to ensure that the goods are indeed Norwegian and didn't originate in a third country.

Regulatory order checks can also be streamlined by mutual recognition agreements whereby both sides agree to respect each other's standards, surveillance and enforcement systems. But even if the EU agree to recognize post-Brexit U.K. regulatory standards—unlikely un-

less they were exactly aligned with those of the EU—the moment the U.K. agreed a free-trade agreement with a third country that included recognition of a different set of standards—say, over food hygiene—new border checks would inevitably be needed to ensure that goods entering the EU were safe, notes Dr. Holmes. That would mean new frictions to EU trade.

As things stand, British ministers still refuse to acknowledge that the U.K. will face any trade-off between frictionless EU trade and the freedom to pursue independent trade deals. The official position—set out in a series of papers in August—is that the U.K. should be able to set its own regulatory standards and have these recognized by Brussels while using innovative technological solutions to obviate the need for customs border checks. Even so, the government already appears to be already backing away from its most eye-catching proposal—that every import into the U.K. be fitted with a tracking device to determine whether it was destined for the domestic or EU market—just two weeks after first floating it.

But privately, British officials accept that the trade-off is real and will have to be confronted: Ministers will have to decide how much disruption to U.K.-EU trade—and indeed to trade with the 48 countries with which the EU itself has a free-trade agreement—they are willing to countenance to secure their prize of independent free-trade deals. Or whether this red line too will have to yield to reality.



The U.K. has softened Prime Minister Theresa May's pledge to end the jurisdiction of the European Court of Justice.

LEON NEAL/GTET IMAGES

BANKS

Continued from Page One
bank stocks hoping for a regulatory reprieve," said Justin Wiggs, managing director in equity trading at Stifel Nicolaus.

"But from an operating standpoint, there are obviously concerns for banks," he said, referring to falling bond yields.

The 10-year Treasury yield fell to 2.122% on Thursday, its lowest since Nov. 10, two days after the presidential election.

The recent declines have narrowed the gap between long- and short-term rates, which doesn't bode well for banks, which earn money on the difference between what they pay on deposits and what they charge to lend money.

The difference between the yield on the two-year Treasury note and the 10-year was at 0.812 percentage point late Friday, below the 1.21-percentage-point differential on Nov. 10 and near its smallest since 2007.

The KBW Nasdaq Bank index of large U.S. lenders fell 3.1% in August but closed the month up 14% since Nov. 10.

"I was a little surprised banks aren't down more," Mr. Wiggs said. "We should be a bit more cautious."

Daniel Genter, chief executive officer of RNC Genter Capital Management, an investment management firm in Los Angeles, said he has been decreasing his position in fi-

nancial stocks, saying that as the yield curve flattens, banks will likely need stronger deposit growth to maintain their profitability levels.

"That's going to be a challenge," he said.

The big question now for banks is the U.S. economy. While the global economy continues to hum along, there are some cracks in the U.S. Household debt reached a record last quarter, inflation remains stubbornly low and gross-domestic-product growth has been choppy.

The KBW Nasdaq Bank index of large U.S. lenders fell 3.1% in August.

Those concerns have contributed to the decline in the 10-year yield, which ended July at 2.292% and finished 2016 at 2.446%.

Still, not everyone is so down on bank stocks.

Michael Mattioli, portfolio manager at Manulife Asset Management, said he isn't as bullish on bank stocks as he has been in the past, and said he has trimmed his bank-stock exposure since the election. Yet he still believes there could be some upside to the group.

"There's a lot more things that can go right for banks than can go wrong," he said, such as a change to capital requirements or a tax overhaul.

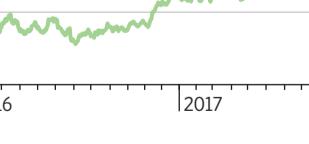
Eye on the Divide

The slimming differential between Treasury notes doesn't bode well for banks despite rising share prices since the election.

The gap between long- and short-term rates is narrowing again.



Bank stocks fell in August, but remain well above their pre-election levels.



Sources: Ryan ALM (yield); FactSet (stocks)

STYLE

Continued from Page One
older millennials. Some of them who came of age during the 1990s are baffled to see new passion for the brands of their youth—and many are rattled by the idea that the clothes are old enough to be called vintage.

Emily Collins, a 26-year-old communications manager in New York, says she couldn't believe that a Tommy Hilfiger sweater was priced at more than \$100 at The Vintage Twin in New York City. She took a picture and tweeted, "How?"

She remembers when such sweaters sold for less than \$20, she says, back when she was a middle-school student in West Haven, Conn.

"Fashion is rooted in nostalgia, so in some weird way it does make sense for something like Tommy Hilfiger to resurface," says Amber Snider, a 30-year-old design editor in New York.

In middle school, she wore yellow and green Hilfiger Windbreakers occasionally paired with a Ralph Lauren purse, a look she would revisit only out of jest, she says, though "I do miss that yellow windbreaker."

Mr. Hilfiger says his brand was a pioneer of baggy dress and oversize logos: "Today, we're seeing the resurgence of this look with millennials that are discovering the '90s trend for the first time."

The era also featured choker necklaces, button-down flannel shirts, striped sweaters and acid-wash denim. Many items arrived in the first big wave of fashion imports after U.S. retailers shifted production to China.

Resurrection of the '90s look has sparked debate among sellers over what, exactly, is "vintage." The online marketplace Etsy Inc. says it is anything older than 20 years, making most '90s clothes fair game.

Some old-school sellers object. "The fact that they can get away with calling that stuff vintage just kills me," says Kristine Anderson, a 68-year-old in San Diego. She sells clothes and accessories dating to the 19th century, as well as 1940s dresses and 1930s lingerie.

The term "vintage" should be limited to describing apparel produced before 1965, or what Ms. Anderson calls the "pre-polyester era." Clothes from the 1990s rehashed older



Dominic LaBella, age 20, displays vintage Tommy Hilfiger clothes.

times. "It brings back the last memories of my parents being my age," says Isa Cruz, a 27-year-old Etsy seller in Portland, Ore. "I get scoffed at from old people," she says, "but I don't care."

Many older millennials and Gen Xers haven't yet come to terms with the idea that their childhood clothes have taken a turn on fashion's nostalgia rack.

"I definitely don't feel old enough for my high-school clothes to be considered vintage," says Megan Wirts, a 35-year-old writer near Grand Rapids, Mich.

She was aghast when her 13-year-old daughter, searching for a vintage look, made her way to mom's closet and emerged with some flannel shirts, Ms. Wirts said. "I thought she meant '60s or '70s—not my things!"

Andrea Ezell, a 22-year-old Kennesaw State University student in Atlanta, raided her dad's closet for Fubu jerseys and other era throwbacks. The clothes fit big, she says, but have an attractive "retro vibe."

"Your kids are never going to tell you that you're hip," she says, "but they will go into your closet."

THE WALL STREET JOURNAL.
Dow Jones Publishing Company (Asia)
25/F, Central Plaza, 18 Harbour Road,
Hong Kong
Tel: 852 2573 7121 Fax 852 2834 5291

Andrew Dowell, Asia Editor
Troy McCullough, Senior News Editor, Asia
Daren Everson, International Editions Editor

Hugo Restall, Editorial Page Editor
Mark Rogers, Advertising Sales
Jacky Lo, Circulation Sales
Toby Rodman, Communications
Simon Wan, Technology

Jonathan Wright,
Global Managing Director & Publisher

Advertising through Dow Jones Advertising Sales: Hong Kong: 852-2831 2504; Singapore: 65-6415 4300; Tokyo: 81-3 269-2701; Frankfurt: 49 69 29725390; London: 44 207 842 9600; Paris: 33 1 40 17 17 01; New York: 1-212 659 2176.
Or email: MarkRogers@wsj.com

Printers: Hong Kong: Euro Limited, 2/F, Block 1, Tai Ping Industrial Centre, 57 Ting Kok Road, Tai Po, Hong Kong; Indonesia: PT Gramedia Printing Group, Jalan Palmerah Selatan 22-28, Jakarta 10270; Japan: Mainichi Newspapers Co., Ltd., 1-1 Hitotsubashi, Chiyoda-ku, Tokyo, 100-8051; Korea: JoongAng Ilbo, 100 Seosomun-ro, Jung-gu, Seoul, 100-814; Publisher/Printer: Sompri Ph-Ho, Malaysia: Datar Cetak (M) Sdn Bhd, Lot 2, Jalan Sepana 15/3, Off Persiaran Selangor, Seksyen 15, 40200 Shah Alam, Selangor, ROC No: 04888516; Singapore: Singapore Press Holdings Limited, 2 Juriung Port Road SPH Print Centre Singapore 619088

Trademarks appearing herein are used under license from Dow Jones & Co. ©2017 Dow Jones & Company, All rights reserved. USPS 337-350; ISSN 0377-9920

NEED ASSISTANCE WITH YOUR SUBSCRIPTION?

By web: <http://wsj-asia.com>

By email: service@wsj-asia.com

By phone: Hong Kong: 800 901 216; Australia: 0011 800 322 8482; China: 400 991 1174;

India: 000 800 440 1938; Indonesia: +62 21 2970 2702; Japan: 0120 779 868; Korea: 030 844 0063; Malaysia: 1800 804 612; New Zealand: 0800 442 434; Philippines: 1800 1441 0033; Singapore: 1800 232 2042; Taiwan: 00801 444 141; Thailand: 001800 441 8323

CORRECTIONS & AMPLIFICATIONS

Stock of Philip Morris International Inc. recorded a 27% gain this year through Wednesday. The Streetwise column in the Friday-Sunday edition about the dollar's effect on stocks incorrectly said that Philip Morris stock gained 133%.

Angola's population is growing by nearly a million people a year. A World News article on Tuesday about the country incorrectly said that the population adds around 80,000 people a year.

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

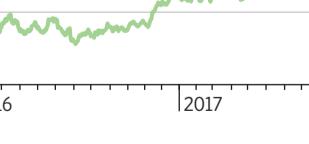
EYE ON THE DIVIDE

The slimming differential between Treasury notes doesn't bode well for banks despite rising share prices since the election.

The gap between long- and short-term rates is narrowing again.



Bank stocks fell in August, but remain well above their pre-election levels.



Sources: Ryan ALM (yield); FactSet (stocks)

THE WALL STREET JOURNAL.

WORLD NEWS

U.S. to Add Patrols in Disputed Waters

Schedule of naval patrols is set for first time to counter China maritime claims

BY GORDON LUBOLD
AND JEREMY PAGE

WASHINGTON—The Pentagon for the first time has set a schedule of naval patrols in the South China Sea in an attempt to create a more consistent posture to counter China's maritime claims there, injecting a new complication into increasingly uneasy relations between the two powers.

The U.S. Pacific Command has developed a plan to conduct so-called freedom-of-navigation operations two to three times over the next few months, according to several U.S. officials, reinforcing the U.S. challenge to what it sees as excessive Chinese maritime claims in the disputed South China Sea. Beijing claims sovereignty over all South China Sea islands and their adjacent waters.

The plan marks a significant departure from such military operations in the region during the Obama administration, when officials sometimes

struggled with when, how and where to conduct those patrols. They were canceled or postponed based on other political factors after what some U.S. officials said were contentious internal debates.

The idea behind setting a schedule contrasts with the more ad hoc approach to conducting freedom-of-navigation operations, known as "fon-ops" in military parlance, and establish more regularity in the patrols. Doing so may help blunt Beijing's argument that the patrols amount to a destabilizing provocation each time they occur, U.S. officials said.

Chinese officials didn't respond to a request for comment on the latest U.S. plans. Beijing has accused the U.S. of militarizing navigation in the region by conducting military patrols. There have been three navigation patrols so far under President Donald Trump; there were four during the Obama administration, according to the Congressional Research Service.

Officials described the new plan as a more predetermined way of conducting such patrols than in the past, though not immutable. The plan is in keeping with the Trump administration's approach to

the U.S. military is planning a series of scheduled operations through the South China Sea to challenge Chinese maritime claims. The patrols have been conducted on an ad hoc basis since 2015.



military operations, which relies on giving commanders leeway to determine the U.S. posture. In keeping with policies against announcing mili-

tary operations before they occur, officials declined to disclose where and when they would occur.

The added military pres-

sure on China comes while the U.S. is seeking greater cooperation from Beijing in reigning in North Korea's nuclear weapons and missile program. The Trump administration has complained that Beijing hasn't done all it can to pressure its allies in Pyongyang not to develop weapons or threaten the U.S. and its territories and allies.

In a new facet, some freedom-of-navigation patrols may be "multi-domain" patrols, using not only U.S. Navy warships but U.S. military aircraft as well.

Thus far, there have been three publicly disclosed freedom-of-navigation operations under the Trump administration. The last one was conducted on Aug. 10 by the navy destroyer, the USS John S. McCain, which days later collided with a cargo ship, killing 10 sailors.

That patrol around Mischief Reef—one of seven fortified artificial islands that Beijing has built in the past three years in the disputed Spratlys archipelago—also included an air component.

According to U.S. officials, two P-8 Poseidon reconnaissance aircraft flew above the McCain in a part of the operation that hadn't been previ-

ously disclosed. More navigation patrols using warships likely now will include aircraft overhead, they said.

Pacific Command officials had no comment on the matter.

The first such patrol under Mr. Trump was conducted by the destroyer USS Dewey May 24 around Mischief Reef. In July, the guided-missile destroyer USS Stethem conducted a patrol near Triton Island in the Paracel Island chain in the South China Sea, coming to within 12 nautical miles of the island.

Together, the moves amount to a more extensive U.S. posture in the South China Sea, where the U.S. has attempted to counter what it sees as excessive Chinese claims around two island chains, the Paracels and the Spratlys, where Beijing has conducted reclamation activities, building or expanding islands using sand dredged from the ocean floor to establish runways, ports, buildings and other facilities for military purposes.

Those structures worry the U.S. and other nations, which believe China's presence there could impede shipping lanes through which billions of dollars of cargo transit each year.

Pyongyang's New Threat: Cripple U.S. Power Grid

BY PETER LANDERS

North Korea's threats against the U.S. now include a tactic long discussed by some experts: an electromagnetic pulse, or EMP, triggered by a nuclear weapon that would aim to shut down the U.S. electricity grid.

North Korea's state news agency made a rare reference to the tactic in a Sunday morning release in which the country said it was able to load a hydrogen bomb onto a long-range missile. The bomb, North Korea said, "is a multi-functional thermonuclear nuke with great destructive power which can be detonated even at high altitudes for super-powerful EMP attack."

The idea of an EMP attack is to detonate a nuclear weapon tens or hundreds of miles above the earth with the aim of knocking out power in much of the U.S. Unlike the U.S. atomic bombs dropped over Hiroshima and Nagasaki in 1945, such a weapon wouldn't directly destroy buildings or kill people. Instead, electromagnetic waves from the nuclear explosion would generate pulses to overwhelm the electric grid and electronic devices in the same way a lightning surge can destroy equipment.

In a worst-case scenario, the outages could last for months, indirectly costing many lives, since hospitals would be without power, emergency services couldn't function normally, and people could run short of food and water.

Warnings about the threat have percolated for many years, including in a 2008 report commissioned by Congress that warned an EMP attack could bring "widespread and long lasting disruption and damage to the critical infrastructures that underpin the fabric of U.S. society."

When the U.S. tested a hydrogen bomb in the Pacific in

KOREA

Continued from Page One

the North Korea crisis, which is shaping up as Mr. Trump's biggest foreign-policy challenge.

"North Korea is trying to drive a wedge between the United States and South Korea. Killing the free-trade agreement would make that a much easier goal," said Jon Wolfsthal, a fellow at Harvard University's Belfer Center for Science and International Affairs.

With North Korea's capabilities steadily advancing, "this would seem the worst time to engage in economic warfare with a close ally," said Mr. Wolfsthal, who was senior director for arms control and nonproliferation at the National Security Council during the Obama administration.

While Trump aides confirmed over the weekend that the administration was seriously weighing a Korus pullout, they said no decision had been made. Some people briefed on administration discussions said they felt it was intended to scare Seoul into offering fresh concessions.

The threat to pull out of a key Asian trade deal exacer-

bates concerns about U.S. engagement in the region, stoked when Mr. Trump in January pulled out of the Trans-Pacific Partnership pact with 11 other Asian and Pacific economies.

It also is likely to heighten concerns in Seoul that the U.S. doesn't see South Korea as instrumental in the region.

Underscoring those concerns, Mr. Trump spoke with Japanese Prime Minister Shinzo Abe on Sunday—the third talk between the leaders since North Korea's Tuesday launch of a missile that flew over Japanese territory. Mr. Trump has spoken with South Korean President Moon Jae-in once in that period.

The U.S. also has yet to nominate an ambassador to South Korea, while envoys are in place in Tokyo and Beijing.

On Sunday, Mr. Trump took to Twitter to lambaste Mr. Moon's conciliatory approach toward North Korea, which emphasized dialogue and economic cooperation with Pyongyang, calling it "appeasement."

South Korea's presidential Blue House responded in a statement Sunday, saying it was on board with Mr. Trump's attempts to apply "maximum sanctions and pressure."

In recent weeks, Mr. Moon has taken a tougher line on

North Korea, authorizing further deployment of a U.S. missile-defense battery and opening the door to the reintroduction of U.S. "strategic assets" to South Korea—a phrase that typically refers to aircraft carriers, stealth bombers and nuclear weapons.

Mr. Trump has linked trade and security in his East Asia policy, particularly in his dealings with China, where Mr. Trump has offered President Xi Jinping more breathing room on trade in exchange for action to rein in North Korea's weapons program.

Even if the Trump administration is only threatening ter-

mination as a negotiation tactic, some Korus advocates fear the damage to the alliance from Mr. Trump's criticism of the trade pact could be lasting.

"There is likely to be a serious deterioration of the atmosphere with such a termination notice," said Jeffrey Jones, chairman of the board of governors at the American Chamber of Commerce in Korea. He said U.S. companies are already facing an increase in government audits and inspections in South Korea. "They have been relatively hostile, and I think it would only get worse if we get a Korus pullout," he said.

TEST

Continued from Page One

profit foundation with a focus on seismology, estimated the explosive yield at 120 kilotons, based on a 5.8-magnitude assessment of the explosion. South Korea's national security adviser, Chung Eui-yong, said after a 90-minute

emergency meeting of the National Security Council that Seoul would consider the possible deployment of what he described as the "most powerful strategic assets that the U.S. possesses," without elaborating, according to a statement from the presidential Blue House.

Others said defenses could be bolstered at less expense by designing electrical-grid components to withstand sudden pulses, just as the grid already is protected against lightning strikes, and building backup systems that could step in for the principal electrical grids in an emergency.

Chain Reaction

North Korea's six nuclear tests since 2006 have been part of a program to develop nuclear-tipped missiles

that can threaten the U.S. and its allies. Each test has shown some progress towards that goal.

Magnitude of earthquake and estimated yield of explosion:

Oct. 9, 2006	May 25, 2009	Feb. 12, 2013	Jan. 6, 2016	Sept. 9, 2016
Magnitude: 4.1	4.7	5.1	5.1	5.3

Yield of explosion: Less than 1 kiloton

2-6 kilotons

7 kilotons

7 kilotons

10 kilotons

Sept. 3, 2017
Magnitude: 6.3

Around 100 kilotons

After years of multilateral talks to roll back its nuclear program, North Korea exploded a device in what was viewed as a partially successful test of a nuclear bomb.

North Korea's second nuclear test was viewed by experts as successful. It came soon after Pyongyang fired a long-range rocket that landed in the Pacific Ocean.

North Korea said after the test it had detonated a "miniaturized and lighter" device, suggesting it was making progress toward having a bomb to mount on a long-range missile.

North Korea said the detonation was the first test of a hydrogen bomb. Experts said the explosion was too small but may have been boosted by hydrogen.

The fifth nuclear test didn't appear to be big enough for a standard hydrogen bomb. Still, Pyongyang said it was now able to produce nuclear warheads at will.

THE WALL STREET JOURNAL.

nuclear armed ICBM that can strike the United States," said Leif-Eric Easley, a professor of international studies at Ewha Womans University in Seoul. "It is in a sprint to deploy that capability, because it wants the world to recognize it before returning to diplomatic talks, and before sanctions become unbearable."

Analysts have been divided on whether North Korea could shrink a nuclear warhead to fit on the tip of a missile. Many also are skeptical about whether a North Korean warhead can survive the strain of re-entry into Earth's atmosphere.

Sunday's nuclear test came just before Chinese President Xi Jinping was set to give a speech at a summit of the five so-called Brics countries, including Brazil, Russia, India and South Africa, being held in the southern Chinese coastal city of Xiamen.

China's environmental min-



North Korean leader Kim, second from left, meets with officials.

istry posted online Sunday evening that it has initiated emergency protocol for possible radiation from North Korea at 11:46 a.m. local time (11:46 p.m. EDT), and is currently monitoring radiation on the northeast border.

Zhao Tong, a fellow at the Carnegie-Tsinghua Center for Global Policy in Beijing, said North Korea may have chosen to conduct the nuclear test ahead of China's leadership reshuffle set for next month, knowing Beijing will emphasize stability before the critical meeting.

China's Foreign Ministry condemned the latest North Korean nuclear test in a statement, vowing to "comprehensively implement" U.N. Security Council resolutions on Pyongyang.

—Kwanwoo Jun in Seoul, Eva Dou in Xiamen, China, Yang Jie in Beijing and Chieko Tsuneoka in Tokyo contributed to this article.

WORLD NEWS

China-India Trade Hits Snag

Border standoff amplifies tensions over commerce and security ahead of talks

By EVA DOU

BEIJING—A tense border standoff between China and India has magnified friction over trade and security between the two nations days before their leaders meet face to face.

In India, the strife on a remote Himalayan plateau has fanned hostility toward Chinese companies and calls for economic retaliation against China, whose soaring exports to India have already invited criticisms of unfair trade.

The scenario echoes Chinese disputes with other nations, including the U.S., as China's trade relationships get caught up in other bilateral strains. President Donald Trump has launched a trade probe and threatened economic retribution against Beijing, saying it doesn't pressure North Korea enough over its nuclear program. China, meanwhile, has lashed out at South Korea over the installment of a U.S. missile-defense system there, with Chinese consumers spurning the country's autos and other goods.

The Himalayan standoff,

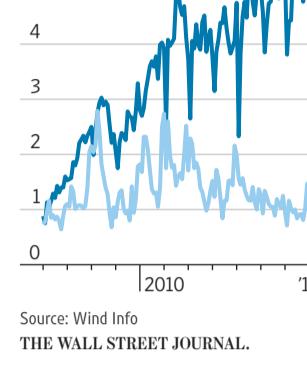
Trade Imbalance

China exports four times as much to India as a decade ago, while the reverse flow has stayed much the same.

■ China exports to India

■ China imports from India

\$6 billion



Source: Wind Info

THE WALL STREET JOURNAL

which had raised concerns about a potential military conflict, was sparked by China's construction of a road in an area claimed by China and Bhutan, a close Indian ally sandwiched between the two. India fears the road will be used for military purposes, reflecting territorial ambitions by China that have alarmed New Delhi and pushed it to seek closer defense ties with

the U.S. and Japan.

Beijing and New Delhi this week agreed, without disclosing details, to pull back from the brink ahead of a meeting between Indian Prime Minister Narendra Modi and Chinese President Xi Jinping at a Brics summit in Xiamen, China, that starts Sunday and includes Brazil, Russia and South Africa.

China and India, the world's most populous nations, are the only Brics countries to have avoided recession in the past year, and they will likely find some common ground at the summit.

On Friday, India's Commerce Ministry said the two countries had jointly called on the World Trade Organization to eliminate certain farm subsidies for developed countries like the U.S.

Still, the border clashes over the past month cloak the relationship in tension.

"This particular standoff is forcing India to rethink its trade strategy," said Brahma Chellaney, a professor at the Centre for Policy Research in New Delhi. "A lot of Indians during the crisis were asking how India lets China rack up a growing trade surplus while treating India as an enemy."

Exports from China, India's largest trading partner, have quadrupled over the past de-

cade, as China sold rising quantities of electronics, machinery and chemicals. But imports have barely grown as China's slowing economy suppressed its need for natural resources such as copper, cotton and petroleum from India. India also has complained that China is often selling goods below cost.

Much as China's untapped market once exerted a pull on the West, India now attracts China. Companies including Chinese smartphone maker Xiaomi Corp. count India as their largest overseas market. Indian consumption will triple to \$4 trillion by 2025, Boston Consulting Group estimates, and the country plans a \$59 billion infrastructure upgrade.

Chinese-Indian relations have also been strained by the billions of dollars Beijing has invested into infrastructure in Pakistan, India's neighbor and rival. India is increasingly wary that China is using trade to advance its strategic aims, said Rajan Menon, a political-science professor at City College in New York. India says one planned route of China's flagship "One Belt, One Road" infrastructure initiative doesn't respect India's territorial integrity.

"India views [the corridor] not so much as an economic plan but as a strategic plan," Mr. Menon said.

U.S. Halts Pakistan Military Assistance

By FELICIA SCHWARTZ

WASHINGTON—The State Department notified Congress that it will be holding up \$255 million in military aid for Pakistan until the country takes steps to address U.S. concerns about providing safe haven to terrorist groups.

The notification last Wednesday follows the Trump administration announcement the previous week that it will take a harder line on Pakistan as part of a strategy to keep extremists from developing a stronghold in Afghanistan and to support a U.S.-backed Afghan government.

The State Department faced a deadline either to give the funds to Pakistan or return them to Congress. So, officials disbursed the funds but placed them on hold, as if in an escrow account, until the Trump administration sees progress.

It is unusual for the U.S. to hold up the release of assistance, particularly in the case of a country that doesn't require a formal U.S. certification of compliance with conditions spelled out by an act of Congress.

"Consistent with our new South Asia strategy, this deci-

sion allows us the flexibility to continue reviewing our level of cooperation with Pakistan prior to committing new security assistance resources to projects in Pakistan and a strong signal that additional action is needed," a State Department official said. "Pakistan must ultimately decide for itself the degree to which groups like the Taliban and Haqqani network threaten its place in the international community."

Secretary of State Rex Tillerson told reporters at the State Department on Aug. 22 that the U.S. would be "conditioning our support for Pakistan and our relationship with them on them delivering results" on harboring terror groups.

"We want to work with Pakistan in a positive way, but they must change their approach," he said.

The move to hold back on the funds is the first in a series of possible actions Mr. Tillerson and others previewed last week. Other steps to turn up the heat on Pakistan could include sanctioning Pakistani government officials and stepping up U.S. drone strikes, as well as further reductions in U.S. aid.

Frankfurt Clears Site To Defuse Old Bomb

By WILLIAM BOSTON

FRANKFURT—German police on Sunday completed the evacuation of more than 60,000 residents in the country's financial capital and began the sensitive work of defusing a World War II era bomb unearthed during construction a few days ago.

"The bomb squad is beginning its work now!" Frankfurt police announced on their Twitter feed about two and a half hours past the original noon deadline for work to begin.

Earlier in the day police and fire-department officials said completion of the country's largest evacuation since the war had been delayed by last-minute transfers of elderly and infirm residents and others who were refusing to leave their homes.

Officials believe the bomb is an HC 4000, a type dropped by Britain's Royal Air Force during the war, and also known as a "blockbuster" bomb.

The bomb was discovered on Tuesday at a construction site near Frankfurt's Goethe University.

While the discovery of unexploded munitions isn't unusual in Germany, local authorities were alarmed by the sheer size of the ordnance found and its central location.

Myanmar Defends Clearing Muslim Villages

By JAMES HOOKWAY

As tens of thousands of Rohingya Muslim refugees stream across Myanmar's border into Bangladesh, Myanmar's army commander-in-chief has defended clearing Rohingya villages as an essential step in rooting out a small band of militants armed with little more than spears or knives.

Myanmar has come under growing criticism for its actions in Rakhine State. Since a small group of militants launched attacks against government outposts there on Aug. 25, Myanmar's armed forces have responded with a disproportionate show of force, prompting the United Nations and the Vatican to voice their concern over the impact on the civilian population.

On Saturday, Turkish President Recep Tayyip Erdogan described what is happening to the Rohingya community in Myanmar as genocide.

The U.N. has said more than 58,000 refugees have made their way across the border, joining some 500,000 other Rohingya who already reside in Bangladesh, an impoverished country poorly equipped to receive them. New York-based Human Rights Watch said satellite images show many villages where Rohingya once lived have been razed to the ground.

"This new satellite imagery...prompts serious concerns that the level of destruction...may be far worse than originally thought," said Philip Robertson, deputy Asia director at Human Rights Watch.



Rohingya refugees carried a woman from Rakhine State in Myanmar along a path near Teknaf, in Bangladesh, on Sunday.

Myanmar's army, meanwhile, says 400 people have been killed in the violence, mostly Rohingya militants belonging to a new group calling itself the Arakan Rohingya Salvation Army, or ARSA.

There is relatively little criticism toward the military operation within Myanmar itself, however. Army commander Sr. Gen. Min Aung Hlaing's remarks on Friday suggest it won't ease off its campaign, describing it as "unfinished business" dating back to World War II.

Speaking in the capital Nay-

pyitaw, he said the army was pursuing its duty to preserve Myanmar's borders and prevent Rohingya insurgents from carving out their own territory in northern Rakhine State. He referred to communal violence in the area in 1942, when ethnic Rohingya who sided with the retreating British forces clashed with local ethnic-Rakhine Buddhists, who aligned themselves with the Japanese.

Tens of thousands of people died in a failed attempt to create a Rohingya state.

"We will never let such a terrible occurrence happen again," Gen. Min Aung Hlaing said.

After independence from Britain, Rohingya were denied citizenship and often are dismissed as Bengalis—illegal immigrants from Bangladesh. Many of the one million Rohingya who still live in Myanmar are restricted to tented camps where they rely on food and medical services provided by the U.N. and other groups and are prevented from moving freely. In 2012, around 140 Rohingya were killed in clashes with the majority Buddhist population, and the vio-

lence helped fuel a broader wave of anti-Muslim sentiment in the country as it emerged from decades of tight military control, which civilian leaders have found difficult to resist.

Aung San Suu Kyi, the Nobel laureate who is now Myanmar's de facto leader, has, for instance, commended the army for its recent campaign in Rakhine State. Her office last week released a statement blaming international aid agencies for helping Rohingya militants, prompting the U.N. to evacuate some of its staff.

WORLD WATCH

INDIA

New Defense Chief Named in Shuffle

Prime Minister Narendra Modi shook up his cabinet on Sunday, ousting underperformers and bringing in some nonpolitical technocrats to help boost the economy and his party's popularity.

Mr. Modi—who was elected on his pledges to bring jobs and prosperity to more Indians—is looking to lock in his party's success ahead of important local elections a well as the national poll scheduled for 2019.

In the shuffle, Nirmala Sitharaman gave up her position as trade minister to become defense minister. The defense job was previously held by Arun Jaitley, who was also finance minister, a position he keeps.

Among other notable moves important for the management of Asia's fourth-largest economy, Coal Minister Piyush Goyal was given the additional duty of railways minister as the previous incumbent, Suresh Prabhu, became the new trade minister.

—Rajesh Roy and Vibhuti Agarwal



THOMAS Mukoya/REUTERS

Diplomatic Locations In U.S. Are Vacated

Russia has complied with a U.S. order to vacate its consulate in San Francisco as well as diplomatic properties housing trade missions in New York and

Washington, D.C., a senior State Department official said Saturday.

Russian embassy personnel and State Department officials together walked through the properties to secure them and ensure that Russia had vacated the sites by the Saturday deadline, the official said.

Russia's Foreign Ministry said earlier Saturday it handed a letter of protest to a U.S. diplomat over American officials' decision to search Russia's trade mission in Washington.

The ministry said the search would be "illegitimate" and could be used to plant compromising materials on the premises. The

note was handed to Anthony F. Godfrey, deputy chief of mission at the U.S. Embassy in Moscow.

The State Department said a search was carried out in the presence of both U.S. and Russian officials.

—Felicia Schwartz and Thomas Grove

KENYA

President Warns Judiciary After Poll

President Uhuru Kenyatta promised Saturday to "fix" the judicial system a day after the Supreme Court nullified his reelection, and he warned the chief justice and judiciary not to interfere with the electoral commission as the country prepares for a new presidential vote.

Mr. Kenyatta again accused the court of overturning the will of the people after he had been declared the winner of the Aug. 8 election. The court on Friday said the electoral commission had committed irregularities in the vote and called for a new election within 60 days.

The judiciary has a "problem," Mr. Kenyatta said in comments to elected officials from county

assemblies. He also announced the start of his new campaign.

"We shall show you in 60 days that the will of the people cannot be overturned," Mr. Kenyatta said. "We will come back and revisit this issue....Going forward, we must fix it."

Mr. Kenyatta on Friday called the court "crooks."

Opposition leader Raila Odinga had petitioned the court challenging Mr. Kenyatta's win, claiming manipulation. He now wants the electoral commission disbanded.

The commission's chairman has promised changes in personnel ahead of the vote and invited the prosecution of any staffer found to have manipulated results.

Mr. Kenyatta's party deputy chief whip in the Senate, Irungu Kangata, said Friday the party will use its numerical strength in parliament to stop any attempt to disband the commission.

Constitutional lawyer Bob Mwangi said the electoral commission likely won't be disbanded unless the commissioners resign or lawmakers from the ruling and opposition parties reach a negotiated settlement.

—Associated Press

U.S. NEWS

Trump Returns to Devastated Gulf Coast

BY JOSEPH DE AVILA
AND QUINT FORGEY

LAKE CHARLES, La.—President Donald Trump visited Texas for his second trip to the devastated Gulf Coast, as rescues continued amid floodwaters that were still rising in some areas.

The president and first lady Melania Trump traveled to Louisiana Saturday after they met flood survivors and volunteers in Houston.

The two joined Texas Gov. Greg Abbott at the NRG convention center, which has been serving as one of Houston's main shelters, as the president posed for photos, greeted victims and spoke with children playing games.

"The message is that things are working out well," Mr. Trump said. "Really, I think people appreciate what's been done. It's been done very efficiently, very well, and that's what we want. We're very

happy with the way everything is going. There's a lot of love."

The visit came a day after Mr. Trump asked Congress for \$7.9 billion for the first round of relief from a disaster that has killed dozens of people, displaced tens of thousands, inundated hundreds of thousands of homes and required thousands of rescues. Mr. Abbott has said the state may need more than \$125 billion in aid.

The White House said that it would make additional disaster assistance available to Texas for debris removal and emergency protective measures. Mr. Trump authorized increased cost sharing to 90% for federal funding for debris removal and 100% federal funding for emergency protective measures. Mr. Trump's original disaster declaration on Aug. 25 permitted 75% for federal cost sharing.

Hurricane Harvey, which first made landfall last week,



KEVIN LAMARQUE/REUTERS

President Trump and first lady Melania Trump visited a shelter.

has had the worst effect for communities along 250 miles of the Texas coast with its high winds and record rainfall. More than 45 people have died because of the storm, local officials say. That number could still rise pending investiga-

tions of other deaths. The Louisiana city of Lake Charles, while affected by flooding, emerged as a point of refuge for residents of storm-battered towns in Southeast Texas, including the hard-hit cities of Beaumont,

Orange and Port Arthur, where officials said thousands of people have been evacuated. Many Texans crossed the state line to shelters such as the Civic Center, which housed more than 800 storm victims last week.

At a staging area in Orange, Bill Borchert, a 53-year-old volunteer with a group from Louisiana that came to distribute food and hot meals to displaced residents, said some evacuees hadn't eaten in three days.

Mr. Abbott on Friday warned that floodwaters remained dangerous and told residents to exercise caution. Areas in Houston and surrounding counties remain flooded, including Brazoria County where roads are still closed, and portions of Fort Bend County to the southwest still have mandatory evacuation orders.

Even as parts of Houston clean up, Harvey's toll else-

where in Texas and Louisiana worsens. The city asked residents in eight Houston ZIP Codes on Saturday to conserve water and not flush toilets or use extra water for showers, baths, laundry and dishes until further notice.

The Environmental Protection Agency said it conducted initial assessments of 41 Superfund sites in areas where Harvey has had an impact. The EPA found that 13 sites have been flooded or were damaged because of the storm.

Of those sites, two have been inspected and don't require emergency cleanup. The agency said response teams haven't been able to reach 11 other sites.

More than 42,000 people in Texas remain in shelters, according to the Red Cross. An additional 1,500 people are in six emergency shelters in Louisiana, the organization said.

—Tawrell D. Hobbs contributed to this article.

ECONOMIC CALENDAR

This week's economic calendar features U.S. trade and productivity data, a European Central Bank policy meeting, and Chinese foreign-exchange and trade figures.

WEDNESDAY: The U.S. Commerce Department releases its July **international trade** report. Economists surveyed by The Wall Street Journal expect the July trade deficit was \$44.6 billion.

THURSDAY: European Central Bank officials gathering in Frankfurt could discuss a key topic for investors: How to wind down the ECB's giant bond-buying program, known as quantitative easing, which is due to run through December.

China releases data on **foreign-exchange reserves**. Economists expect reserves edged up to around \$31 trillion at the end of August, from \$30.81 trillion at the end of July.

The U.S. Labor Department releases revised data on second-quarter **productivity and costs**. Economists surveyed by The Wall Street Journal forecast productivity rose at a 1.3% seasonally adjusted annual rate in the second quarter, up from an originally reported 0.9% pace of growth.

FRIDAY: China releases trade data (release time is Thursday evening in the U.S.). Economists forecast that **exports** rose about 6% from a year earlier in August, moderating from July's 7.2% growth, while **imports** likely climbed 10%, down from July's 11% increase.

Low Wage Growth Poses Challenge to Fed

BY ERIC MORATH
AND NICK TIMIRAO

An extended run of labor market gains this year has produced little acceleration in wage growth or inflation, underscoring a puzzle that complicates Federal Reserve policy decisions looming in the months ahead.

Nonfarm payrolls rose a seasonally adjusted 156,000 in August, a modest slowdown from the prior two months, the Labor Department said Friday.

The unemployment rate ticked up from a 16-year low to 4.4% and wages failed to break out, rising 2.5% from a year earlier for the fifth straight month.

"The economy is doing well, but it's not necessarily taking off," said Laura Rosner, senior economist at Macro Policy Perspectives. "We're on an even keel. The labor market continues to hum along."

The August hiring report won't change the Fed's immediate plans. The Fed is widely expected to initiate the slow runoff of its \$4.5 trillion portfolio of bonds and other assets at its Sept. 19-20 policy meeting.

But the report deepens a debate inside the Fed about how to respond to soft wage and inflation pressures. This dilemma could complicate how aggressively the Fed should proceed with interest-rate increases after it sets the balance sheet plan into motion.

Tight Labor Market Eases Disparities

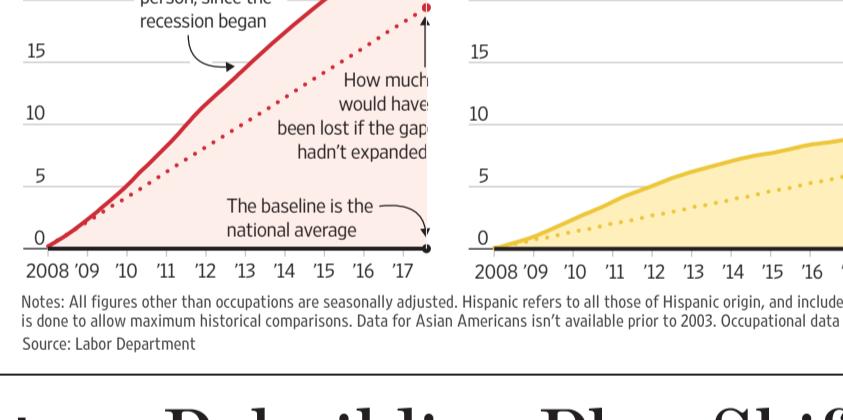
The gaps are still sizeable and the monthly figures are volatile, but the larger trend is clear: as the labor market tightens, black and Hispanic unemployment rates are falling and minorities are coming off the sidelines.

Unemployment rate



But these recent gains won't restore the opportunities black and Hispanic workers lost due to their unusually high unemployment rates and higher exposure to occupations that were hammered by the 2007-09 recession.

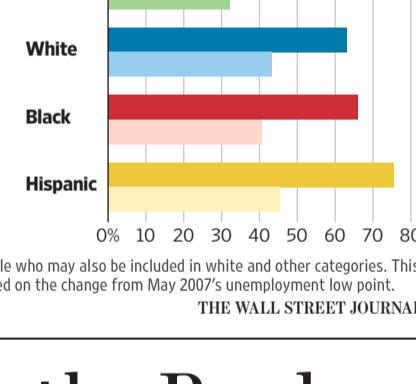
Cumulative work weeks lost since the recession began, calculated based on the difference between each group's unemployment rates and the national average



Notes: All figures other than occupations are seasonally adjusted. Hispanic refers to all those of Hispanic origin, and includes people who may also be included in white and other categories. This is done to allow maximum historical comparisons. Data for Asian Americans isn't available prior to 2003. Occupational data is based on the change from May 2007's unemployment low point.

SOURCE: LABOR DEPARTMENT

Share of the workforce in occupations such as manufacturing and construction which haven't recovered from the recession



0% 10 20 30 40 50 60 70 80

THE WALL STREET JOURNAL

Infrastructure Rebuilding Plan Shifts the Burden to States

BY TED MANN

Top advisers crafting President Donald Trump's infrastructure plan say they aim to upend the way U.S. public works are financed, shifting the bulk of the decision-making and costs to states and cities and away from Washington.

The administration is proposing \$200 billion in new federal funding as the central piece of its \$1 trillion plan to improve the nation's infrastructure. President Donald Trump frequently cited the need for upgrades on the campaign trail.

Most of the \$200 billion, White House officials say, will be parceled out as incentives to localities that raise their

own funding for building projects, with the aim of reaching the administration's overall goal. Cities and states could turn to private-sector financing or levying tolls and taxes to pay for new bridges and roads instead of relying on the federal government for the bulk of the funding.

The administration's approach—which it hopes to deliver this fall to Congress as a set of "principles" for legislative action—alarms supporters of some of the country's biggest planned projects, who say that local cost-sharing and private financing efforts would fall well short of making up for sharply reduced federal funding.

Funds for roads, bridges and other infrastructure cur-

rently come from a variety of sources, including the Federal Highway Trust Fund and formula grants that the administration says it will maintain.

The proposed 20-80 split of federal to local contributions would dramatically change parts of the current system. Though funding levels vary, the federal government generally pays about 80% of highway projects and up to 90% of projects at airports, with the remainder coming from local government.

If we're putting in a dollar, we want a state or a locality to have ideally four dollars that they're putting in," a senior White House official said. "This gets us to the trillion."

Talking to local government officials about the incentive

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

Still uncertain is whether that approach would work on projects with much larger price tags. Officials working on a proposed new railroad tunnel under the Hudson River and related improvements said they were concerned at the White House's refusal so far to commit to a large share of the more than \$29 billion cost.

Republican New Jersey Gov. Chris Christie and Democratic

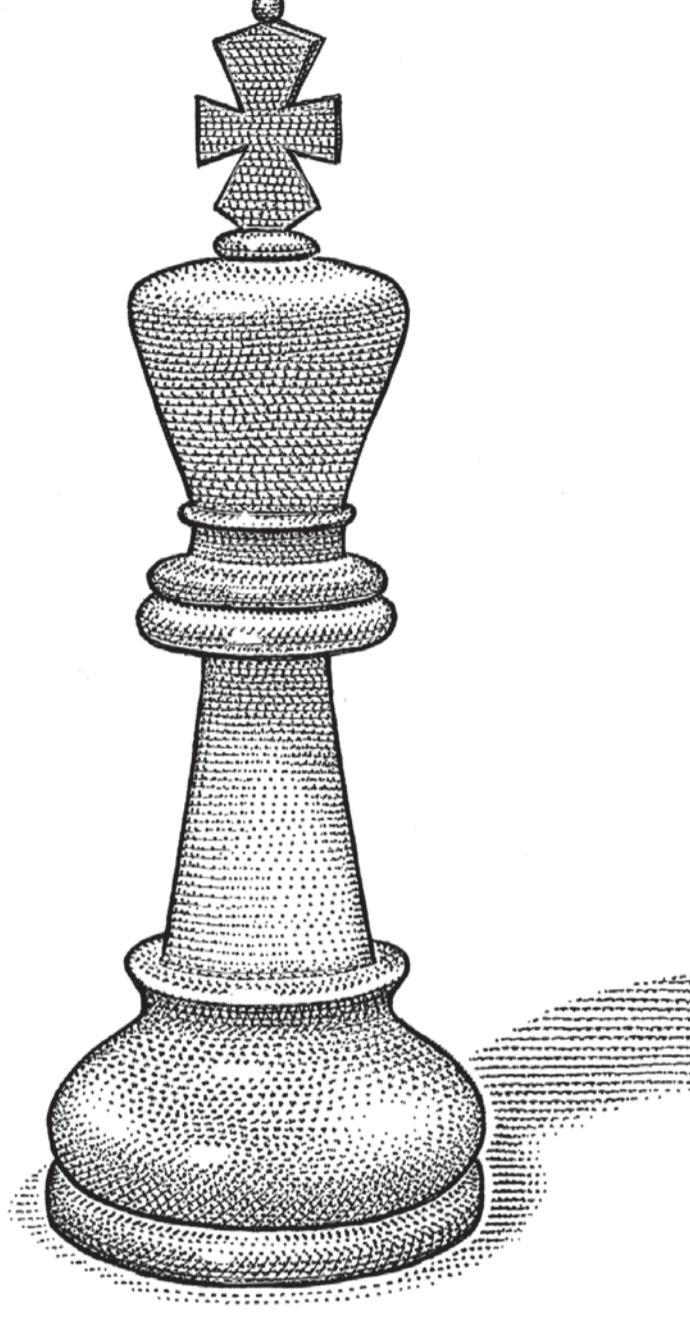
plan recently, White House Budget Director Mick Mulvaney said he had spoken to a governor who was nearly ready to begin a \$200 million bridge project, and needed just \$20 million from the federal government to complete the financing. "That's the kind of thing that we want to put at the top of the list," he said.

<

THE WALL STREET JOURNAL.

CEO Council

Where Ambition and Exclusivity Meet



Upcoming Member Events

Annual Meetings

U.S. Meeting
November 13–14, 2017 | Washington, D.C.

Asia Meeting
May 15, 2018 | Tokyo

WSJ editors, policy makers, business leaders and members gather to discuss the most pressing global business issues.

Editor's Dinner Series

September 28, 2017 | New York, NY

October 25, 2017 | Singapore

November 27, 2017 | Tokyo

December 5, 2017 | New York, NY

Moderated by senior WSJ editors, these engagements bring together executives from around the world for dinner and discussion focused on issues facing global business.

D.LIVE

October 16–18, 2017 | Laguna Beach, CA

April 19–20, 2018 | Hong Kong

The Wall Street Journal's premier technology events bring together CEOs, founders, investors and luminaries from around the world to set the global tech agenda.

CEO Council members lead companies that collectively employ more than 6 million people, generate \$2.5 trillion+ in annual revenue and represent 21 countries in a wide cross section of industries.

Membership is by invitation.
For more information, please visit CEOCouncil.wsj.com

THE WALL STREET JOURNAL.
Read ambitiously

IN DEPTH

FLOOD

Continued from Page One
near Brays Bayou, one of the swampy waterways that course through the city and serve as the primary conduits to carry runoff to the Gulf of Mexico. Many in the swollen bayou's path are now pondering the same question: Is it time to leave for good?

Known as the Bayou City, Houston has long favored rapid development and maintaining a low cost of living. It doesn't have a formal zoning code, which some cities use to force builders to incorporate flood-management measures. Large-scale planning is complicated by the city's sprawling 10,000-square-mile metro area, nearly the size of Massachusetts, home to almost seven million people.

Houston and Harris County, where it is located, have passed referendums to fund drainage projects, moved to widen waterways, boosted deed restrictions and planning regulations, and even required new houses in certain areas such as Meyerland to be built to withstand rising water.

Some of the measures have worked. But it hasn't been enough.

"They've been playing catch up," said Philip Bedient, an engineering professor and flooding expert at Rice University in Houston. "It's all sorry, a day late and a dollar short."

In London, massive flood gates on the Thames can rise during a storm surge and hold back water. New York City has spent years deliberating whether to follow London's lead and build storm barriers for the Hudson and East rivers.

From Florida to the Netherlands, deep water catchment systems paired with storm water pumps allow flat areas to withstand drenching rains by slowly releasing the water over time to prevent floods. The Houston area doesn't have pumps.

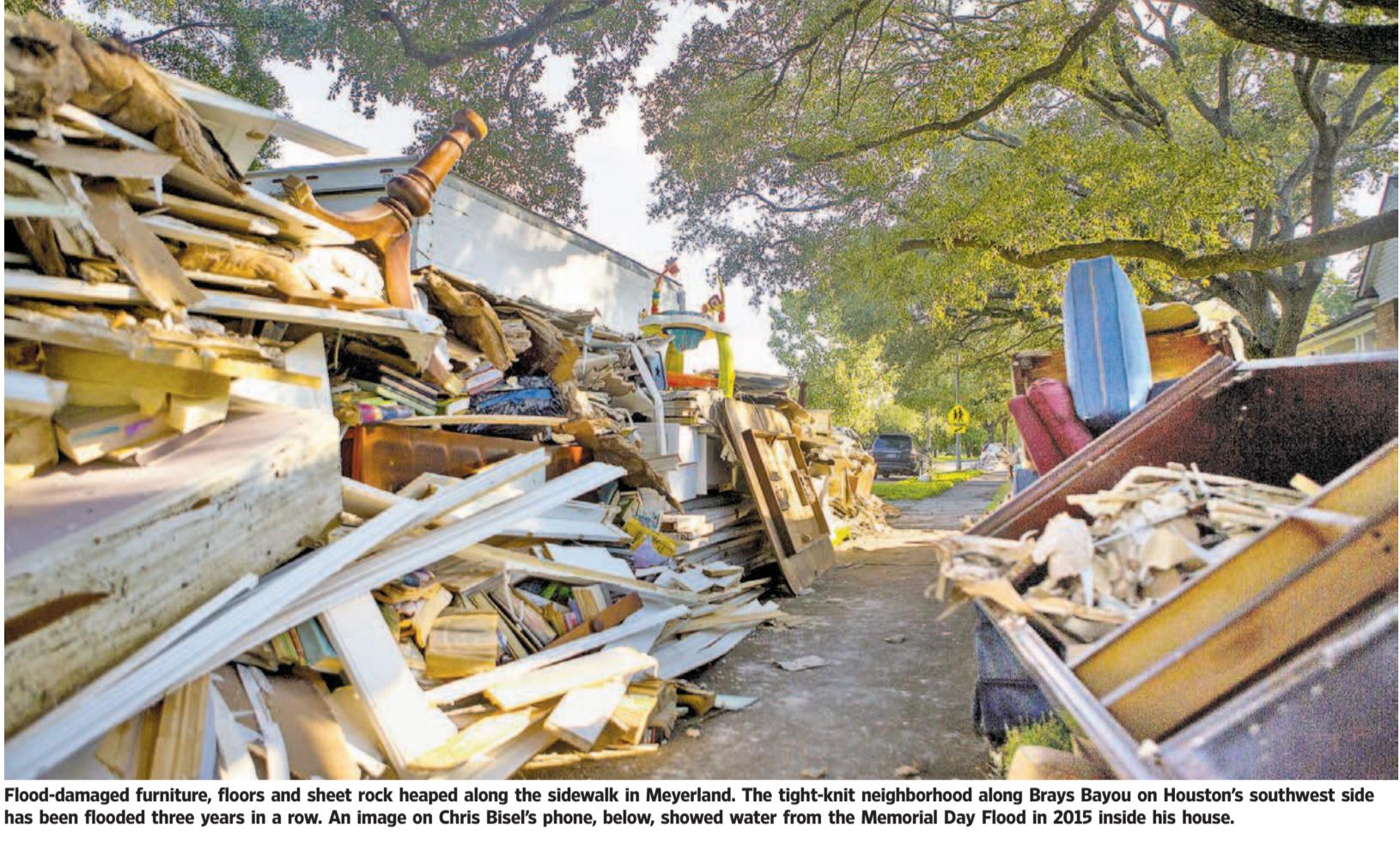
New Orleans had storm water pumps before Hurricane Katrina, although the anti-flooding safeguards were destroyed when levees broke, killing about 1,400 of the total of more than 1,800 who died from the storm, and showing the perils of underfunding critical infrastructure.

Houston's disaster will intensify a debate that is already upending insurance markets and worrying federal officials, whose coffers are increasingly tapped to pay for calamities. The U.S. has seen 20 storms causing a billion dollars or more in damage since 2010, not including Harvey, compared with nine billion-dollar floods in the full decade of the 1980s, according to inflation-adjusted estimates from the National Oceanic and Atmospheric Administration.

One option for preventing future superfloods would be radical reconstruction, a move that would likely force the government into battles with private property owners. After Katrina, Louisiana officials tried to tell flooded homeowners not to rebuild in some areas, but the instructions were ignored.

In the case of Meyerland, Mr. Bedient said the government should buy out thrice-flooded homeowners and use the land to create more detention ponds and widen storm channels.

Farther upstream, at least three new reservoirs should be constructed west of Houston, and the existing two reservoirs, which were built in the 1940s and which engineers say could be at risk of



Flood-damaged furniture, floors and sheet rock heaped along the sidewalk in Meyerland. The tight-knit neighborhood along Brays Bayou on Houston's southwest side has been flooded three years in a row. An image on Chris Bisel's phone, below, showed water from the Memorial Day Flood in 2015 inside his house.



failing, should be upgraded, he said.

That said, Houston's flat landscape and hardpan clay makes it nearly impossible to absorb intense rainfall the way geographies with sandier soil do. And 50 inches of rain would swamp virtually any U.S. city.

"It was an outrageous storm event," he said. "We've never seen anything like this."

Houston Mayor Sylvester Turner rejected the notion that the city's flood-control efforts and approach to zoning and planning were to blame. "You cannot significantly mitigate flooding and drainage on the cheap," the mayor said.

"And a lot of people don't want to pay, but you're going to pay sooner or later."

Meyerland, built on former rice fields, has for decades served as the center of Jewish life in Houston, a place where families who felt unwelcome elsewhere due to their religion forged a community of their own.

Today, Meyerland remains one of Houston's most desirable family neighborhoods, with high-performing public schools and lush parks. It is increasingly diverse, like much of the city—one of America's most ethnically multifaceted places, with immigrants who speak more than 140 languages.

Mr. Bisel, who owns a hearing-aid business in Mey-

erland, bought his current home three weeks before Tropical Storm Allison, the plodding 2001 rainstorm that until Harvey served as the high-water mark for modern Houston flooding.

The house took in about 10 inches of water then. Like most Houstonians, Mr. Bisel thought that was a once-in-a-lifetime event, until it happened in 2015, 2016 and again last week.

After the 2015 flood, which took place around Memorial Day and poured 34 inches of water into his house, he was among several dozen residents approved to receive federal grant funds aimed at reducing repeat flood insurance claims by tunneling under homes and raising them on pillars.

Since the government is likely to have to pay for catastrophic flood damage anyway, the Federal Emergency Management Agency has sought to pay to shore up homes against flooding instead of the \$350,000 it can cost to rebuild them.

Mr. Bisel was hopeful his home could be raised before the next big flood. But the construction faced chronic delays, he said. After living in one second-floor room with his wife, two children and a dog for nearly a year during renovations, he settled back into the full home in April 2016 after most of the rebuild-

ing work was completed, while he waited along with about 40 others for their houses to be raised.

Less than two weeks later, another storm, dubbed the Tax Day Flood, inundated his house with 20 inches. He pressed the city to move more quickly.

This July, the Houston City Council approved the elevation plans for the first batch of homes being raised with FEMA money. But Mr. Bisel was in the second batch, 14th on the list. As he saw the forecast for Harvey, he feared he had run out of time. Mr. Bi-

'This is my home... where I grew up, and it didn't used to be this way,' Mr. Bisel said.

sel, his wife and son went through the now-familiar ritual of moving their furniture and treasured belongings to higher ground.

By the time Harvey was done dumping trillions of gallons over the Houston area, forcing his wife to escape in a kayak, his home had taken on 55 inches of water. That would have been 5 inches short of his first floor if his house had been raised. Neighbors who had elevated their homes earlier with their own money stayed dry.

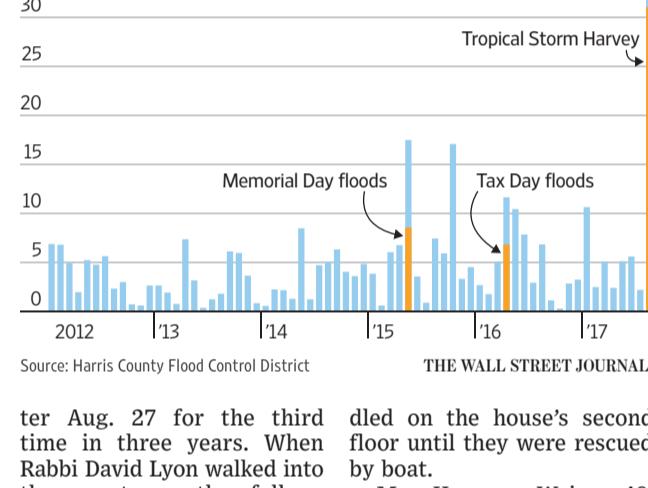
More than 700,000 people live near Brays Bayou, which meanders through Meyerland, draining 127 square miles around it. A \$500 million city project aimed at reducing flooding was under way on another part of the bayou when Harvey hit.

Lined with hiking and biking trails, the waterway winds past many areas that have seen rapid urbanization, including NRG Stadium, where the Houston Texans play; the Texas Medical Center, the largest collection of hospitals and health-care research institutions in the world; and Beth Israel, the oldest synagogue in Texas.

Beth Israel, which sits across the street from the bayou, began taking on wa-

Repeat Floods

Houston's Meyerland neighborhood has been hit by three major floods in the past three years, after years of relatively minor flooding. Rain as measured at a gauge on the Brays Bayou in Meyerland



Source: Harris County Flood Control District

died on the house's second floor until they were rescued by boat.

Ms. Hausman-Weiss, 49, had moved to Houston from Birmingham, Ala., in 2011, and got a job as director of a nonprofit that takes disabled children into the outdoors. As Reform Jews, the family had been drawn to Meyerland and loved the Jewish life here.

They had initially been under contract to buy a spacious family home near the bayou, but pulled out at the last minute when they learned it had flooded three times. They were told the home they eventually bought had never taken on water.

But three months after they moved in, a small amount of rain caused water to pool up from the floor. They quickly spent \$30,000 on upgrades for protection including new gutters, French drains beneath the windows and waterproofing for bricks on the chimney.

When the bayou overflowed its banks during the Memorial Day Flood of 2015, water came in again, this time an inch high. The family replaced the floors and portions of the walls from 4 feet down, costing them roughly \$70,000, much of which was covered by their flood insurance. But the experts called that flood an anomaly, so surely nothing similar would happen again, Ms. Hausman-Weiss remembered thinking.

After Harvey, the bayou swamped their home with 3 feet of water.

When they returned Aug. 27, "It looked like a war zone. Brown muck everywhere," she said. "We've been through a lot in our lives. And I know this is just stuff. But this is our stuff."

They family already had the maximum amount of flood insurance made available by FEMA's National Flood Insurance Program, she said. But to do any further renovations, they would likely have to spend \$200,000 to raise the house—money they didn't have. And who would buy it now, she said.

For now, the family is staying in a two-bedroom home owned by a friend. But eventually, they will have to return to Meyerland, and somehow reckon with their damaged home. Amid all the uncertainty about the future, there was one thing of which she was sure.

"It's going to flood again," she said.



Catastrophe adjuster Ian Richardson spoke to Ian Hartman, right, on Thursday at his Meyerland home.

LIFE & ARTS

FASHION

Calvin Klein's Luxury Test

At New York Fashion Week, the mid-priced brand hopes to prove its high-end collection is more than a one-hit wonder.

CLOCKWISE FROM TOP LEFT: CALVIN KLEIN (2); BILLY FARRELL AGENCY (2); GETTY IMAGES (2)



Clockwise from left: the high-end collection's ad campaign; a 2017 ad featuring 1993 photos of Kate Moss; Steve Schiffman, left, and Raf Simons.

BY RAY A. SMITH

On opening night of New York Fashion Week Thursday, Calvin Klein is hoping to prove that its much-lauded new luxury line is more than just a one-hit wonder.

If asked to quickly name a few hot luxury fashion brands, the average customer wouldn't have mentioned Calvin Klein. But now, the nearly 50-year-old label better known for its midprice signature underwear and jeans sold at Macy's and Lord & Taylor is working hard to win over the Barneys shopper too.

Calvin Klein Inc. hired acclaimed fashion designer Raf Simons last year to lead what its chief executive Steve Schiffman calls a "creative revolution," overhauling everything from its clothes to its logo, now officially in all caps and in a new custom font called "Klein." The designer's debut runway show for the brand's highest-end ready-to-wear collection in February drew widespread raves from critics and retailers.

Now as the label mounts its second show under Mr. Simons, Mr. Schiffman will have to prove it can sustain the buzz.

The American fashion industry is counting on Calvin Klein to give a needed boost to fashion week, which this year suffered a blow when some of its biggest draws—Proenza Schouler, Rodarte, Thom Browne and Altuzarra—opted to show in Paris instead. Meanwhile, the global industry is watching to see how the revival of an iconic American brand plays out.

"Raf and I share many common goals, but one is to see Calvin Klein become one of the world's great brands as we move into the future," said Mr. Schiffman, a veteran of Calvin Klein's parent company PVH Corp. who spent seven years as a Calvin Klein executive before becoming CEO in 2014.

Mr. Simons said he valued Mr.

Shiffman's leadership and knowledge: "He and I have a wonderful ongoing exchange, and I am grateful for his support and understanding of my role and creative vision," Mr. Simons said by email.

Calvin Klein started his company in 1968 with business partner Barry Schwartz. Through minimalist clothing and savvy marketing, Mr. Klein turned it into one of the hottest fashion brands of the 1980s and 1990s.

Mr. Klein understood that sex sells early on, titillating audiences with provocative commercials, like the one featuring a 15-year-old Brooke Shields purring "You want to know what comes between me and my Calvins? Nothing," in 1980. There was the 1989 Obsession fragrance ad featuring a nude couple on a swing, and the racy underwear ads in the 1990s starring a shirtless Marky Mark and a topless Kate Moss.

In more recent years, the brand has chugged along but lost its status as a leading fashion voice, despite attempts to strengthen its high end.

Mr. Schiffman tapped Mr. Simons, whose luxury-fashion bona fides include a 3½ year run as creative director of Christian Dior and seven years as creative director at Jil Sander. Mr. Simons' job is to give Calvin Klein the high-fashion credibility that has eluded it since its visionary founder stepped away from the company after selling it to PVH in 2003.

"When I walked into the job, I had to acknowledge we really weren't winning at the luxury level," Mr. Schiffman said. "It's great [from a] public relations as-

pect. But at the same time, I'm a businessman, and I want to make it a business."

Having a stronger high-end business will "set the tone" for the brand's more affordable lines, Mr. Schiffman says. He hopes the company can grow from about \$8.5 billion in global sales to \$10 billion, as the aesthetic refresh trickles down.

While the bulk of sales growth will continue to come from the company's midprice jeans and underwear, which he



Two looks from the Calvin Klein Collection's February debut at New York Fashion Week.

described as "incredibly important" to the brand, he envisions more sales from the higher-end collection than in the past.

Maintaining a strong luxury-end image and a mass reputation at the same time is a tricky feat that few big fashion brands have managed successfully. Mr. Simons is known as a conceptual, modernist designer but has little experience appealing to a wide audience. Some of his more daring looks from the February show featured removable, transparent plastic overlays that were reminiscent of retro couch covers. Others had jarring chunky "varsity sleeves" resembling slouchy legwarmers, but for arms.

Mr. Schiffman made

Mr. Simons chief creative officer, meaning the designer oversees all Calvin Klein lines, including home, jeans, underwear, the more-affordable men's and women's lines and the highest-end collection, plus advertising and marketing.

Only Calvin Klein himself had that much control. Before Mr. Simons came on board, responsibilities

were divided among various people. Mr. Schiffman made the change in the hopes of sending a consistent brand message from the merchandise sold at Barneys to that sold at Macy's.

A women's cotton-satin overcoat from the high-end collection is priced at \$2,495, compared with \$298 for a mélange wool blazer coat in the main line.

High-rise straight-leg jeans cost \$495 for the higher-end collection, compared with \$69.50 to \$128 for men's straight-leg jeans in the main line, and \$69.50 to \$148 for women's.

One of Mr. Simons' first moves was rebranding. The highest-end collection, once called Calvin Klein Collection, is now CALVIN KLEIN 205W39NYC, a nod to the address of the New York-based company's headquarters. "It's a whole mouthful," Mr. Schiffman said, with a laugh. Internally, "we've already abbreviated it. We call it CALVIN KLEIN 205 or 205 collection. Everybody's going to interpret it in their own way."

The 205 collection includes a new, high-end jeans line called CALVIN KLEIN JEANS ESTABLISHED 1978 in a nod to the company's original jeans launch. It was the sleeper hit of the February runway show, largely because of the patches on the back of the jeans featuring a silhouette of Brooke Shields posed in her famous 1980s jeans ads. The collection also includes a high-end underwear line.

Since Mr. Simons's February show, the 205 collection is being carried in 500 retail locations world-wide, including upscale online retailers like Net-a-Porter.

"It's the first time we've carried the brand ever, or at least in many, many years," said Daniella Vitale, chief executive of Barneys New York, which will stock the CALVIN KLEIN 205W39NYC men's and women's apparel collections in its 14 full-priced stores and online. Barneys will also be the first and only retailer to carry the collection's handbags for fall.

As the strategy for Calvin Klein ramps up, Mr. Schiffman's office will move from another floor to the office next to Mr. Simons'.

"You want to have a quick conversation," said Mr. Schiffman, when it comes to decision-making. "Not everything needs to be this formalized meeting."

PLAYLIST: DAR WILLIAMS

FOLK-SONG EPIPHANY

Dar Williams, 50, is a folk singer-songwriter and guitarist who has recorded more than 20 albums. She is the author of "What I Found in a Thousand Towns" (Basic Books). She spoke with Marc Myers.

In 1972, when I was 5, my family spent a lot of time together in the living room. As my two older sisters and I worked on jigsaw puzzles, my parents read and listened to their folk albums. Judy Collins's album "Whales & Nightingales" from 1970 was a favorite.

We lived in Chappaqua, N.Y., out in the suburbs of New York City, so nights were quiet. Folk music rocked my world even then. I was moved by how seriously artists took themselves. Everything was about life and death, and all the



songs Judy sang were like this.

One spring day when I was 16, I stayed home from school. I wasn't feeling well and had a performance that night with a little dance troupe at the Guggenheim museum in Manhattan. I wanted to rest up.

Home alone, I put on "Whales" while doing my homework. When "Sons Of," the second track, came on, I was again completely taken by the song. It was originally co-written and recorded by French singer Jacques Brel.

Shortly after "Sons Of" began, I saw my neighbor's dog limping across our lawn. I hadn't seen the dog for years, and suddenly it was old. It was a powerful mortality moment. As I listened, I felt something change inside of me. I sensed

poetry's power and how it could alter how you look at life.

Judy's version has a gentle carousel-like arrangement behind her, and she delivers the lyric so powerfully: "Some built the roads, some wrote the poems / Some went to war, some never came home / Sons of your sons, sons passing by / Children lost in lullaby." When Judy finished, I started to cry. I finally understood the words and how the world of my parents had been transformed by poetry and folk music.

I didn't tell my parents what had happened to me that afternoon. It's not the kind of thing you tell anyone other than your favorite English teacher.

And that's the whole thing. You don't know who to talk to about this. You suddenly see the world differently, and, in a way, the song becomes your confidant.



Judy Collins performing around 1970.

GETTY IMAGES

LIFE & ARTS

WEEKEND CONFIDENTIAL | By Alexandra Wolfe

The Life of a Professional Skeptic

Michael Shermer, founder of the Skeptics Society, stands up for science and warns against utopias

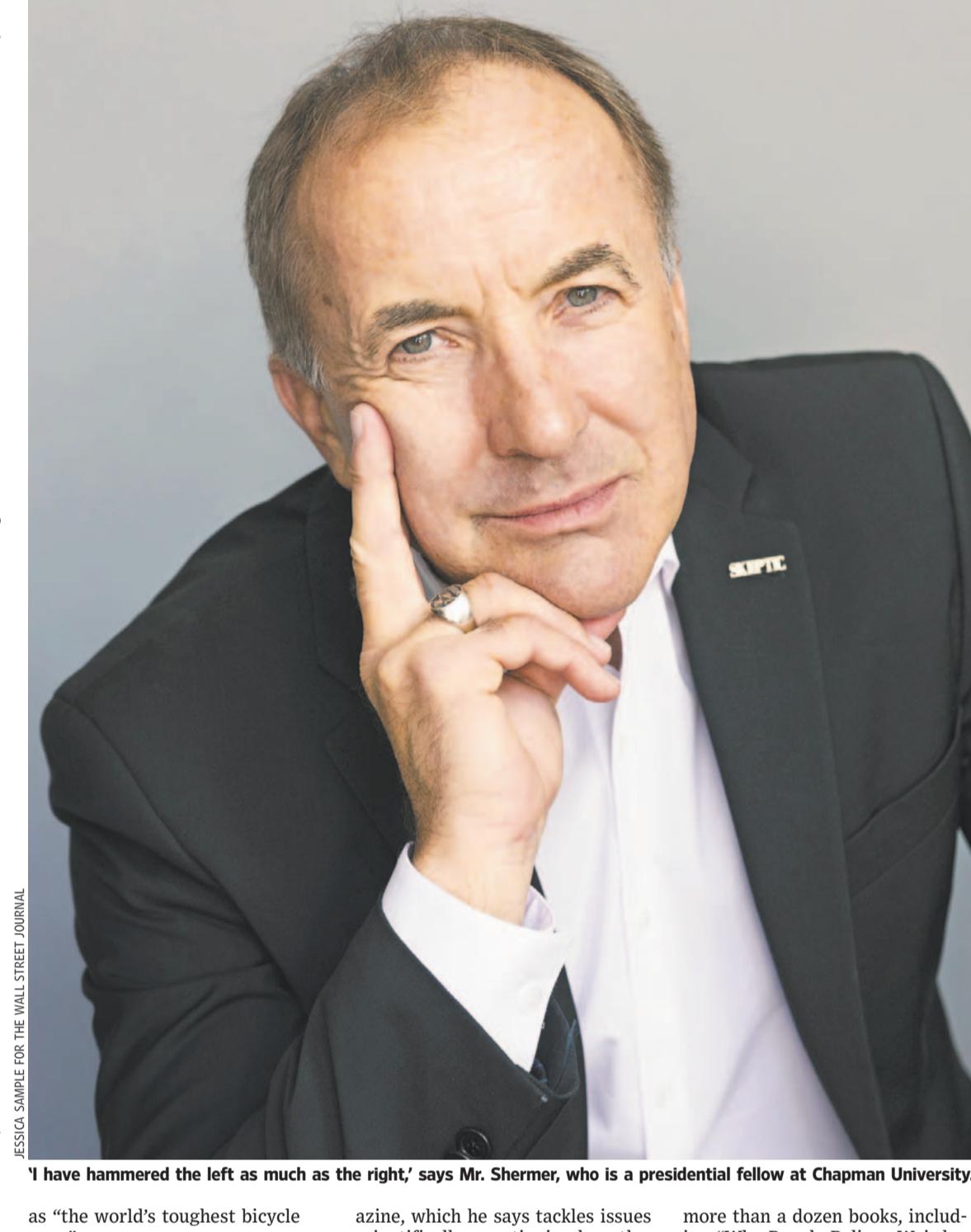
MICHAEL SHERMER, the founder of the Skeptics Society, points to a single event in the late 1970s as his breaking point with the Christianity of his youth. The "final straw," as he calls it, was finding himself at the hospital bedside of his college girlfriend, who had been a passenger in a van that rolled off the side of a hill, breaking her back and leaving her paralyzed from the waist down. He prayed fervently for her recovery, to no avail. "If anyone deserved to be healed it was her, and nothing happened, so I just thought there was probably no God at all," he recalls.

His career over the past several decades has involved insistent questioning not just of religious belief but of other sorts of orthodoxy, in pop culture, self-help, science and politics. This month marks the 25th anniversary of the Skeptics Society, which is now a 50,000-member group dedicated to "promoting critical thinking and lifelong inquisitiveness."

In his longstanding monthly column for *Scientific American*, Dr. Shermer, 62, has turned a critical eye on antivaccination advocates, the campus craze for condemning "micro-aggressions" and disinviting controversial speakers, and the movement to ban genetically modified crops. He has come out against both climate-change alarmists and deniers. (He tends to side with commentators such as Matt Ridley and Bjorn Lomborg, who agree that humans are changing Earth's climate but argue that the consequences may not be as dire as doomsayers think.) In his columns and books, he has debunked everything from UFOs and claims of alien abduction to conspiracy theories about the Kennedy assassination and the 9/11 attacks.

A convert to evangelical Christianity as a high-school student in La Cañada, Calif., he went to Pepperdine University intending to become a theologian. But after taking classes in science and philosophy, he decided to study psychology instead. He later earned a Ph.D. in the history of science at Claremont Graduate University.

Unable to find a job as a professor, he went to work at a cycling magazine in Irvine, Calif. He became so interested in the sport that he started cycling hundreds of miles a week and racing long distances, with the support of corporate sponsors. In 1982, he co-founded the 3,000-mile Race Across America, which bills itself



'I have hammered the left as much as the right,' says Mr. Shermer, who is a presidential fellow at Chapman University.

as "the world's toughest bicycle race."

At night, Dr. Shermer taught at Glendale Community College. He is now a presidential fellow at Chapman University in Orange, Calif., where he offers a course called "Skepticism 101." The school is about 2½ hours from Santa Barbara, where he lives with his wife.

Dr. Shermer started the Skeptics Society in 1992 out of his garage. For the past 25 years, he has also edited and published *Skeptic* mag-

azine, which he says tackles issues scientifically, questioning hypotheses and weighing research and data. "The principle is to start off skeptical and be open-minded enough to change your mind if the evidence is overwhelming, but the burden of proof is on the person making the claim," he says. "I would change my mind about Bigfoot if you showed me an actual body, not a guy in an ape suit in a blurry photograph."

Dr. Shermer is the author of

more than a dozen books, including "Why People Believe Weird Things" (1997), whose targets included creationists, Holocaust deniers and believers in ESP, and "The Moral Arc" (2015), which argued that reason and science have made the world progressively more just.

His new book "Heaven on Earth" comes out in January. In it, he casts a critical eye on many religious visions of the afterlife and on the high-tech quest to evade

death through such methods as deep-freezing (cryonics) or uploading memories into the cloud. "There's no assurance that by copying every last thing in your brain, you're going to wake up and say, 'Here I am!'" he says. "You wouldn't wake up inside the computer—you'd just be dead."

President Donald Trump may often dismiss "fake news," but Dr. Shermer warns against shrugging off evidence. Still, he says, "Everyone does it to a certain extent...It's a little more heightened now because the internet is so fast to respond in real time." Politicians have always ignored data, he says, though Mr. Trump "seems to be more bold about it than others, and that inspires others to do the same."

Recently, Dr. Shermer has denounced both the alt-right and "the regressive left." After the violent white supremacist protest in Charlottesville, he warned against what he calls "this whole 'punch a Nazi' thing," including the actions of the controversial far-left movement known as antifa. "This is why the antifa movement is just as bad as the white supremacist movement," he says. "They both feel they have a moral cause that's worth dying for and worth killing for."

In the decades ahead, Dr. Shermer expects to see more people adhering to secular philosophies and Eastern religions with stronger links to science: Meditation, he says, can clearly improve health and well-being.

He is less enthusiastic about the rise of some New Age philosophies, which he says can contain troubling quasi-religious urges toward utopianism. "There is no one answer to what makes a perfect society," he says, and the attempt to create an earthly paradise can turn murderous, as it did at Jonestown in Guyana in 1978: "Someone is in your way, preventing you from achieving eternal happiness, and they have to be dispensed with."

Dr. Shermer considers organized self-help movements misguided because they tend to encourage people to chase after money and a simple ideal of happiness, rather than to find satisfaction in a purposeful life.

"Most of what we do doesn't make us happy, it makes us more fulfilled as a person," he says. His morning bike ride, for example, wasn't fun, he says. "It's a sufferfest," he says. "It's 90 degrees out, my lungs are screaming and my legs are screaming, but I feel better after."

EXHIBITION REVIEW

MANY OCTAVES OF MEANING

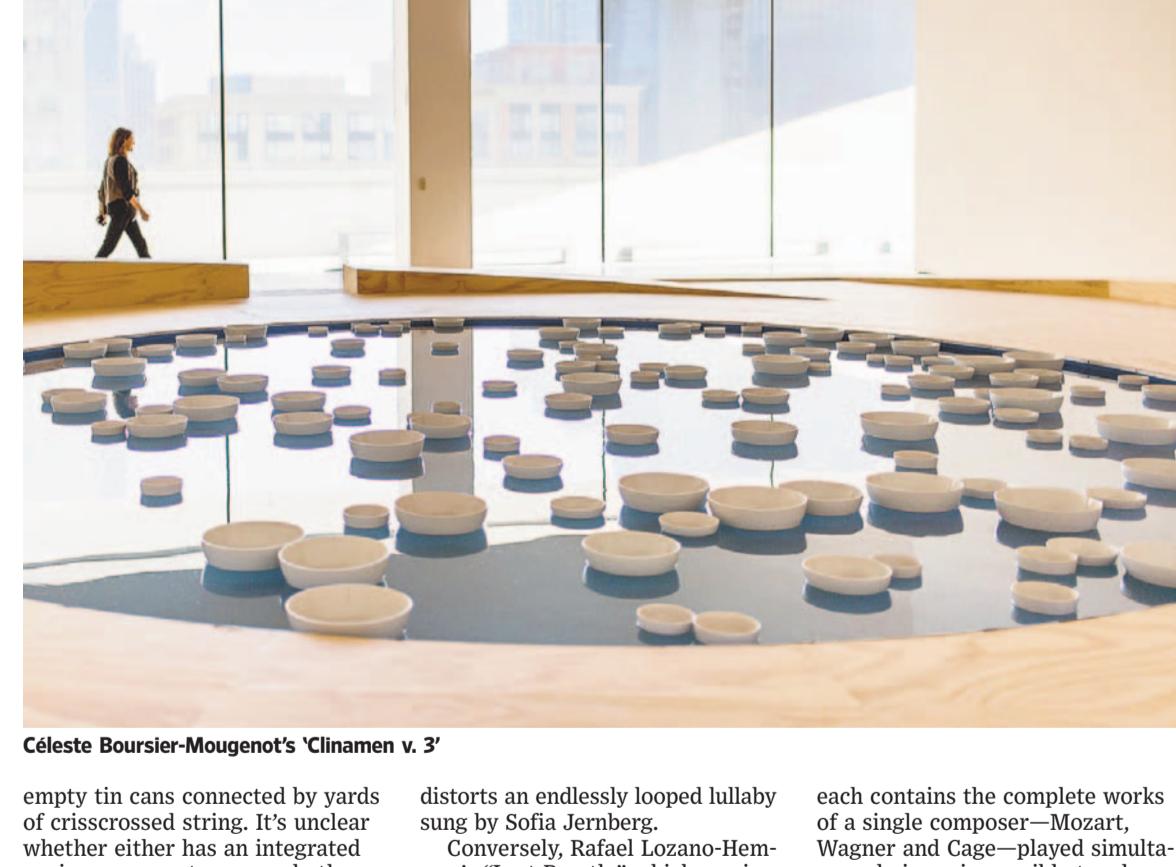
BY DAVID MERMELSTEIN

San Francisco

THERE AREN'T many museum shows that can honestly claim to be fun for all ages, but "Soundtracks" at the San Francisco Museum of Modern Art is surely one of them. This sprawling exhibit of some 25 works, all from this century and most constructed after 2010, occupies the museum's entire seventh floor, along with some spaces elsewhere in the building and, in one case, even outside it.

The concept of sound as exhibited art may stretch some people's notions of the form, but along with the rise of video as art, sound has increasingly found itself not just welcomed but displayed in galleries originally constructed as showcases for static visual art. Still, this show, conceived by Rudolf Frieling, curator of media arts at SFMOMA, marks a major turning point in the embrace of sound as museum-worthy art. And not just because of the exhibition's scale. It's the wide variety of concepts, materials, intent and expression that really distinguishes what's on display.

Ultimately, "Soundtracks" can be considered a meditation on sonic possibilities. The show's depths, while not always immediately apparent, are abundant and striking, should one wish to consider them. But "Soundtracks" can also be enjoyed, thoroughly, on an entirely superficial level. Visitors may enter its many discrete areas, appreciate a work's immediate impact, and move on. What child won't be delighted by Céleste



Céleste Boursier-Mougenot's 'Clinamen v. 3'

empty tin cans connected by yards of crisscrossed string. It's unclear whether either has an integrated sonic component, even as both suggest the prospect of sound.

Pleasures of a different sort await those who enter the exhibit's darker corners. "New Urban Spaces Series #4: 'Compact Forest Proposal'" by Brian Eno lures visitors into an alien world composed largely of string lights and ambient music emanating from 10 asynchronous CD players. The effect is utterly transporting, and those who enter knowing nothing of what's inside will encounter an additional surprise, revealed gradually to unsettling effect. Camille Norment's "Lull" haunts in a different way, as an upside-down microphone swings pendulum-like over a spotlighted amplifier, producing feedback that

distorts an endlessly looped lullaby sung by Sofia Jernberg.

Conversely, Rafael Lozano-Hemmer's "Last Breath," which carries an implicit chill, operates in a brightly lit space. Bookending a length of white respirator tubing are a motor and a brown paper bag. As the motor pumps air through the tubing, the bag inflates and deflates, mimicking the labored breathing of a hospital patient, while nearby, on video, the avant-garde composer Pauline Oliveros, who died last year, breathes into a paper bag. Sharing the same gallery are three orbs from Mr. Lozano-Hemmer's less macabre "Sphere Packing" series, their surfaces covered in ear buds emitting muffled sounds similar to what one hears on a cheap radio when navigating between stations. In fact,

each contains the complete works of a single composer—Mozart, Wagner and Cage—played simultaneously in an impossible tangle.

This show's chief achievement, earned through cheek and intelligence, is that sound can stake a real claim to belonging in a museum's traditionally silent galleries. True, pure sound remains best appreciated in a concert hall or jazz club. But when combined with other elements (visual, tactile, etc.), the aural can exert as potent a pull on our imagination as anything we see.

Mr. Mermelstein writes for the Journal on classical music and film.

Soundtracks

San Francisco Museum of Modern Art, through Jan. 1, 2018

OPINION

The Hurricane Lull Couldn't Last

By Roger Pielke Jr.

Activists, journalists and scientists have pounced on the still-unfolding disaster in Houston and along the Gulf Coast in an attempt to focus the policy discussion narrowly on climate change. Such single-issue myopia takes precious attention away from policies that could improve our ability to prepare for and respond to disasters. More thoughtful and effective disaster policies are needed because the future will bring many more weather disasters like Hurricane Harvey, with larger impacts than those of the recent past.

The U.S. hadn't been hit by a Category 3 or stronger storm since Katrina in 2005. We were overdue.

For many years, those seeking to justify carbon restrictions argued that hurricanes had become more common and intense. That hasn't happened. Scientific assessments, including those of the Intergovernmental Panel on Climate Change and the U.S. government's latest National Climate Assessment, indicate no long-term increases in the frequency or strength of hurricanes in the U.S. Neither has there been an increase in floods, droughts and tornadoes, though heat waves and heavy precipitation have become more common.

By Oren Cass

To a union leader, the question "What's in it for the employer?" might seem bizarre. The point of organizing is to improve labor's position against management. But much has changed since U.S. Congress passed the National Labor Relations Act in 1935—when workplaces were largely unregulated, the Great Depression had pushed Americans to the brink and labor unrest was widespread.

The NLRA's objective wasn't only to empower workers but also to end what Sen. Robert Wagner, its sponsor, called "a procession of bloody and costly strikes, which in some cases swelled almost to the magnitude of national emergencies."

Today bargaining over employment terms is mostly superfluous. The law already mandates a 40-hour week, paid overtime, a minimum wage, workplace-safety standards and employer-sponsored health insurance. The government provides benefits to the elderly, disabled and unemployed. Yet unions still must find something to deliver to members. Thus the prevalence of destructive work rules, grievance procedures and seniority systems.

In 1936, after hundreds of deaths in auto plants, General Motors workers in Flint, Mich., launched their famous sit-down strike. Among their demands: permission to speak in the lunchroom. Seventy years later, GM had converted the strike site into a "rubber room" where laid-off union members earned salaries and benefits for doing nothing.

The NLRA no longer accomplishes its goals. Its adversarial model pits labor against management, winning short-term "gains" for workers while reducing their long-term value.

Employees seem to understand this. Since 1953 union membership has fallen to less than 7% of the private labor force from 36%, while workers' total share of national income has increased to 66.1% from 64.5%.

As its relevance waned, Big Labor mutated into a political force. Of the \$2.1 billion spent on federal elections by the 30 largest donors since 1990, unions accounted for more than \$1 billion—and directed 97% to Democrats. This has locked the status quo in place: Democrats prize union

Prior to Harvey, which made landfall as a Category 4 storm, the U.S. had gone a remarkable 12 years without being hit by a hurricane of Category 3 strength or stronger. Since 1970 the U.S. has only seen four hurricanes of Category 4 or 5 strength. In the previous 47 years, the country was struck by 14 such storms.

President Obama presided over the lowest rate of hurricane landfalls—0.5 a year—of any president since at least 1900. Eight presidents dealt with more than two a year, but George W. Bush (18 storms) is the only one to have done so since Lyndon B. Johnson. The rest occurred before 1960.

Without data to support their wilder claims, climate partisans have now resorted to shouting that every extreme weather event was somehow "made worse" by the emission of greenhouse gases. Last week New York Times columnist David Leonhardt directed researchers "to shed some of the fussy over-precision about the relationship between climate change and weather."

Turning away from empirical science—or "fussy over-precision"—comes with risks. But whatever one's views on climate, there should be broad agreement today that bigger disasters are coming. Some may blame greenhouse gases, while others may believe it to be some sort of karmic retribution.

But there is a simpler explanation: Because the world has experienced a remarkable period of good fortune when it comes to catastrophes, we are due.



DAVID J. PHILLIP/APASSOCIATED PRESS

A neighborhood near Addicks Reservoir in Houston on Aug. 29.

Agreement that more big disasters are on their way should provide opportunity for those otherwise opposed on matters of climate policy to come together and make some smart decisions. Here is where they might start:

- **Establish disaster review boards.** In the aftermath of every plane crash, the U.S. government convenes experts under the auspices of the National Transportation Safety Board to find out what went wrong and what might be done to prevent it from happening again. Meteorologist Michael Smith of AccuWeather (a scientist who decades ago helped identify the "microburst" weather phenomena and its role in plane crashes) has long argued that the nation needs a

National Disaster Review Board. After every disaster, it would evaluate what went wrong—and right—and distill lessons. The Trump administration should create such a board in the wake of Harvey.

- **Encourage resilient growth.** Disaster researcher Dennis Mileti has explained that the choices made at the local level—such as where to build—determine how a community will experience disasters. As communities develop, it can be difficult to see how local decisions might affect disasters years or decades down the road. This is particularly the case in the immediate aftermath of a disaster, when the push to "return to normal" might mean simply reinforcing

the conditions that led to problems. Local communities need to take better advantage of experts who can explore development choices with an eye toward better preparing for an uncertain future.

- **Enhance federal capacity.** The federal government plays a crucial role in supporting states and local communities to prepare for, respond to and recover from disasters. When Harvey was out at sea, accurate forecasts from the National Weather Service saved many lives. The National Flood Insurance Program shapes how communities develop, and the Federal Emergency Management Agency and other agencies provide resources for those whose lives are upturned by natural disasters. President Trump should also appoint a science adviser, whose primary job traditionally has been to coordinate federal science agencies, facilitate budget requests and assess performance. There is no reason to go more than seven months without one.

The hyperpoliticized debate over climate change sees the same tiresome script play out with every extreme event. We needn't all agree on the reasons why disasters will assuredly get worse in the coming years in order to come together to make sensible decisions about disaster policies. The time is now. Our good luck appears to have run out.

Mr. Pielke is a professor of environmental studies at the University of Colorado, Boulder. He is the author of "The Climate Fix" (Basic Books, 2011) and "Disasters and Climate Change" (ASU/CSPO, 2014).

American Workers Need a New Kind of Labor Union

By Oren Cass

To a union leader, the question "What's in it for the employer?" might seem bizarre. The point of organizing is to improve labor's position against management. But much has changed since U.S. Congress passed the National Labor Relations Act in 1935—when workplaces were largely unregulated, the Great Depression had pushed Americans to the brink and labor unrest was widespread.

The NLRA's objective wasn't only to empower workers but also to end what Sen. Robert Wagner, its sponsor, called "a procession of bloody and costly strikes, which in some cases swelled almost to the magnitude of national emergencies."

Today bargaining over employment terms is mostly superfluous. The law already mandates a 40-hour week, paid overtime, a minimum wage, workplace-safety standards and employer-sponsored health insurance. The government provides benefits to the elderly, disabled and unemployed. Yet unions still must find something to deliver to members. Thus the prevalence of destructive work rules, grievance procedures and seniority systems.

In 1936, after hundreds of deaths in auto plants, General Motors workers in Flint, Mich., launched their famous sit-down strike. Among their demands: permission to speak in the lunchroom. Seventy years later, GM had converted the strike site into a "rubber room" where laid-off union members earned salaries and benefits for doing nothing.

The NLRA no longer accomplishes its goals. Its adversarial model pits labor against management, winning short-term "gains" for workers while reducing their long-term value.

Employees seem to understand this. Since 1953 union membership has fallen to less than 7% of the private labor force from 36%, while workers' total share of national income has increased to 66.1% from 64.5%.

As its relevance waned, Big Labor mutated into a political force. Of the \$2.1 billion spent on federal elections by the 30 largest donors since 1990, unions accounted for more than \$1 billion—and directed 97% to Democrats. This has locked the status quo in place: Democrats prize union

money, so they shun real reform. Republicans seem content to watch the dysfunctional system wither.

What a missed opportunity. Organized labor isn't inherently partisan or economically counterproductive. Under Europe's "Ghent system," workers voluntarily join unions independent of their jobs. Denmark and Sweden have no required workplace elections or compulsory dues, yet a majority of workers are in a union.

Adapting this model to the U.S. could allow new labor organizations—call them "co-ops"—to do a lot:

- **Expand social insurance.** In Europe, unions administer systems of voluntary unemployment insurance. Although the vast U.S. labor market may seem dissimilar, most American social insurance is already managed by the states. Co-ops could supplement or supplant these programs.

- **Improve job training.** Today's training, run mostly by government agencies and well-meaning nonprofits, is ineffective. Putting co-ops in charge would keep training focused on workers, who measure their investment by the resulting job, not "enrollment" or "graduation."

Co-ops may be better positioned to negotiate with employers over matters like apprenticeships. One example today is the Las Vegas Culinary Union's academy, created in partnership with the city's hotels. But such programs remain few, and they come accompanied by the aggressive, oppositional tactics of Big Labor.

- **Strengthen civil society.** Co-ops could act as mediating institutions for poor and less-educated Americans, helping workers build relationships, access resources and provide mutual aid. Policy makers on the left and right generally agree on the need to rebuild social capital but find few levers. Reforming organized labor is a plausible one.

- **Resolve problems with employers.** Co-ops could help workers build collaborative relationships with management. Such arrangements exist in many countries as company-specific "works councils." In Germany they're present at almost 90% of companies with more than 500 employees.

But works councils are prohibited in the U.S. The NLRA treats them, absent a formal union, as an unfair labor practice.

The failure to fix this is another reminder that Big Labor looks after itself first. Unions rightly fear works councils as competition. Former AFL-CIO president Lane Kirkland once called them "sham organizations designed to prevent real worker empowerment."

Laws dating to 1935 pit employees against their bosses, a zero-sum game that hurts everyone.

- **Provide alternatives to government rules.** The argument for employment regulation—say, the minimum wage—flows from the premise that individual workers lack the leverage to protect their interests. But co-ops bargaining collectively should be able to accept lower standards if the company offers something compelling in return.

A retail chain might eliminate "on call" scheduling in exchange for lowering overtime pay below time-and-a-half. That could reduce costs while increasing worker satisfaction. Allowing such deals would end zero-sum negotiations,

since each side would have something to gain. Imagine an employer dropping an inch-high stack of rules on the table and asking the co-op representative: "What will it take to get rid of this?"

- **Support workers in the gig economy.** Co-ops could extend employment-like benefits to Uber drivers, contract coders, call-center temps and other nontraditional workers. Here the NLRA delivers the worst of both worlds: The law pushes employers to avoid worker relationships that could trigger collective bargaining, but it offers little to the pseudo-employees this dynamic creates. Co-ops would give structure to otherwise free-floating careers.

How to achieve this vision? The smoothest path would involve four steps. First, amend the NLRA to allow alternative labor groups. The law covers any worker organization whose purpose is "dealing with employers." That jurisdiction should be narrowed, while leaving current arrangements in place for union members who are satisfied.

Second, formally recognize the "labor co-operative": a nonprofit controlled by dues-paying members to advance employment and create value, not merely reallocate it.

Third, allow works councils. The law should include checks to ensure councils aren't dominated by the employer. If workers began to think a council no longer represented their interests, they might have recourse to a snap "vote of no confidence."

Fourth, let employees designate a co-op or works council as their representative for collective bargaining. Put most employment regulations on the negotiating table to create space for mutually beneficial deals.

It isn't crazy to think labor groups should focus on delivering benefits to workers instead of campaign contributions to politicians. Or to suggest employees in the modern economy have more to gain from collaboration with their bosses than from conflict.

If Democrats and Republicans want robust civil society, competitive markets, widely shared prosperity, and a stronger safety net, they have more than enough reason to give organized labor—in a new form—a fresh look.

Mr. Cass is a senior fellow at the Manhattan Institute. This article was adapted from his essay, "More Perfect Unions," in City Journal's "The Shape of Work to Come" issue.

How Washington Redefined the Internet

By Bruce P. Mehlman

The U.S. Federal Communications Commission received more than 21 million comments on its plan to reconsider the Obama administration's internet regulations. Most advocates on both sides voice indignant, moralistic conclusions about the plight of innovation, the future of the internet and the fate of the world if they don't get their way.

But for the FCC, the question is a semantic one: Is broadband internet an "information service," as concluded repeatedly over two decades by Democratic and Republican commissioners, or a "telecommunications service" as a partisan majority decreed two years ago?

This is a distinction with a profound legal difference under the Telecommunications Act of 1996. Tele-

communications services are subject to the same restrictions and government controls that applied to the old Bell monopoly starting in the 1930s. Information services have far more freedom to compete and innovate.

The real-world effects of this heavy vs. light regulation are dramatic, and they turn on the question of how consumers use broadband internet.

It was an 'information service' for 20 years until Barack Obama's chairman came along.

In response to the FCC's inquiries, the Internet Innovation Alliance, of which I am co-chairman, commissioned a study by CivicScience, an online market-research and data-analysis firm, sampling more than 10,000 U.S. adults. The survey asked what consumers "regularly or occasionally" do online. The results show clearly that most consumers use the internet to get information.

The survey found that 72% of U.S. adults frequently read or watch news, sports or other content online. Sixty-one percent use search engines; 52% purchase items online, and 48% check or post on social media. Smaller percentages store photos, grocery lists and other items.

The broadband internet access that enables these activities is precisely what makes broadband an "information service" under the statute. It is impossible to make use of popular video-rich information applications on today's internet using old-fashioned dial-up access because of the need for higher speeds and lower latency.

As it turns out, the FCC had it right for nearly 20 years. The long-

standing bipartisan agreement in favor of light-touch regulation fueled the explosive growth of the internet. The FCC under Chairmen Reed Hundt, William Kennard, Michael Powell, Kevin Martin and Julius Genachowski were each correct when they declared or affirmed broadband as an information service.

The FCC under Tom Wheeler was wrong when it reversed these precedents two years ago to start regulating broadband as a telecom service.

The monopoly-style regulation imported by Mr. Wheeler from the days of rotary phones is both unnecessary to ensure an open internet and highly inappropriate in today's competitive, innovative broadband marketplace. Reclassification in 2015 hurt investment in broadband networks and innovation in the broadband ecosystem.

Because of that decision, some communities and consumers didn't receive broadband investments as quickly or as expansively as they could and should have.

Returning to the longstanding light-touch framework will offer many benefits to Americans by encouraging investment in broadband networks. Flourishing LTE and 5G broadband networks, in turn, will spur job growth and accelerate our economy.

And by taking this important step now, the FCC will encourage Congress to do its job and modernize the Telecommunications Act for the broadband era, developing and passing bipartisan legislation that ensures the open internet, protects consumers and maintains investment in the nation's high-speed broadband networks.

Mr. Mehlman, a lobbyist, served as assistant commerce secretary for technology policy in the George W. Bush administration.

THE WALL STREET JOURNAL.

PUBLISHED SINCE 1889 BY DOW JONES & COMPANY

Rupert Murdoch
Executive Chairman, News Corp

Gerard Baker
Editor in Chief

Matthew J. Murray
Deputy Editor in Chief

DEPUTY MANAGING EDITORS:

Michael W. Miller, Senior Deputy;

Thorold Barker, Europe; Paul Beckett,

Washington; Andrew Dowell, Asia;

Christine Glancy, Operations;

Jennifer J. Hicks, Digital;

Neal Lipschutz, Standards; Alex Martin, News;

Shazna Nessa, Visuals; Ann Podd, Initiatives;

Matthew Rose, Enterprise;

Stephen Wisniewski, Professional News

Paul A. Gigot, Editor of the Editorial Page;

Daniel Henninger, Deputy Editor, Editorial Page

WALL STREET JOURNAL MANAGEMENT:

Suzi Watford, Marketing and Circulation;

Joseph B. Vincent, Operations;

Larry L. Hoffman, Production

Robert Thomson
Chief Executive Officer, News Corp

William Lewis
Chief Executive Officer and Publisher

DOW JONES MANAGEMENT:

Mark Musgrave, Chief People Officer;

Edward Roussel, Innovation & Communications;

Anna Sedgley, Chief Operating Officer & CFO;

Katie Vannec-Smith, President

LIFE & ARTS



PETER FOLEY FOR THE WALL STREET JOURNAL



Nina Cheng plays pickup games at James J. Walker Park in New York's Greenwich Village neighborhood once a week.

last September once every two weeks is the norm.

"Squash is a great way to be social in New York City," she says. She meets friends before or after work for 45-minute games. "I have more lower-body strength, so squash helps work my upper body," she says.

She uses a longboard skateboard to commute around Manhattan and tries to go kitesurfing three to four times a year.

The Diet

Ms. Cheng starts her day with tea and eggs she gets from her mother, who lives in Milford, Conn. "My mom has chickens, so I have a nonstop supply of eggs," she says. She eats lunch at home, usually steamed vegetables with olive oil and Sriracha. She snacks on fruit throughout the day.

She dines out most nights. "I love good food and have an eat-something-delicious-and-work-off-the-calories-later mentality," she says. Her favorite splurges are malty beers, the ricotta and beet donut at the Doughnut Project and the black label burger from Minetta Tavern. She has a pint of Sambazon açai sorbet almost nightly. She takes collagen supplements.

The Gear & Cost

Her JDH X79 TT Low Bow stick retails for \$395. Her Dita turf shoes cost \$65. She wears Nike tennis skirts (\$50). Club dues are \$10 a game.

The Playlist

"I don't like music with a lot of lyrics," she says.

Techno and electro-pop bands like Berlin are on her workout playlist.

WHAT'S YOUR WORKOUT? | By Jen Murphy

She's Sticking With Field Hockey

After playing the sport in college, a designer finds the game she loves in the middle of New York

NINA CHENG may design feather earrings and fur-covered iPhone cases, but don't call her girlie. The founder of Wild and Woolly accessories isn't scared of grass-stained knees or bruised shins when she plays the sport she loves, field hockey.

Ms. Cheng knows how to handle a stick. She played field hockey, ice hockey and lacrosse in high school and one year of Division I field hockey at Colgate University, in Hamilton, N.Y., as well as a season with the Hampstead and Westminster Hockey Club in London.

When she transitioned from college to her professional career in

Manhattan in 2008, she joined a gym. "I found it frustrating to be around people purely working out for vanity," she says. She tried group classes but balked at the price. "A lot of classes cost \$40 for 40 minutes, and the workouts, like spinning, were so stationary. I'd rather be doing something more dynamic and exhilarating."

Craving the camaraderie of college sports, Ms. Cheng, 31, joined the Greenwich Field Hockey Club in New York City, and took up squash, a sport she played her senior year of college. Ms. Cheng says both sports challenge her hand-eye coordination. But she

particularly likes the skills challenge of field hockey.

"It's a very three-dimensional sport," she says. "You can only use one side of the stick, but you can do so much with it, like lift the ball into the air or do a dribble move and lift the ball over your opponent's stick. You don't get that creativity in spin class."

The Workout

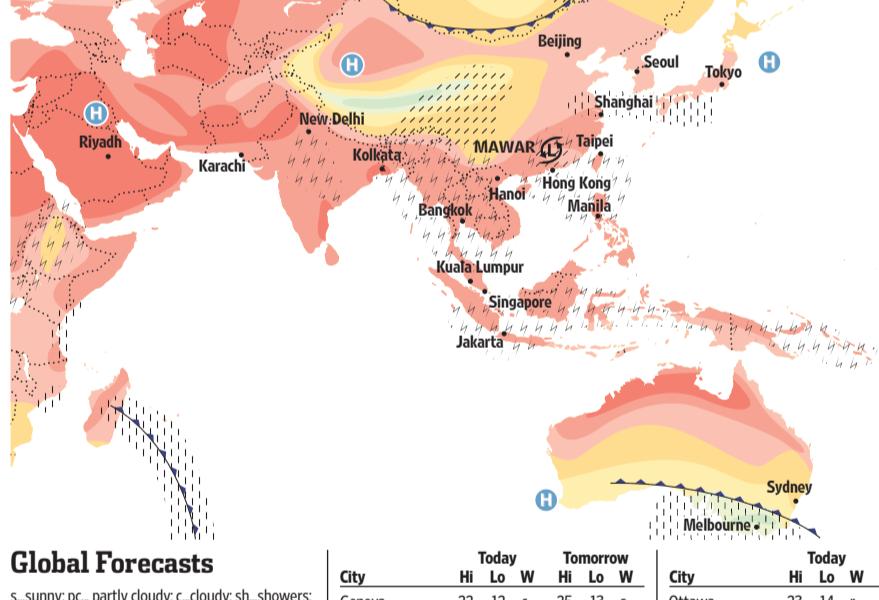
Ms. Cheng plays coed pickup field hockey games with her club once a week at James J. Walker Park in Greenwich Village. Playing forward like she does can be exhausting. She keeps running most of the

game. Plus, she says, "you're constantly in a crouched position, so you really work your glutes and core. If I haven't cross-trained that week, I'm extremely sore after a game." On weekends she goes to a park to practice dribbling, shooting and stick work.

She plays pickup games year-round and usually competes in regional and national competitions as well. The pickups games move indoors for games during winter months.

Ms. Cheng was playing squash two to three times a week, but since launching Wild and Woolly

Weather



Global Forecasts

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

City	Today			Tomorrow		
	Hi	Lo	W	Hi	Lo	W
Geneva	22	12	c	25	13	s
Hanoi	33	27	c	34	26	t
Havana	32	23	pc	32	23	pc
Hong Kong	31	28	r	32	27	c
Honolulu	30	23	sh	30	23	pc
Houston	33	22	pc	32	23	t
Istanbul	27	20	s	26	19	s
Jakarta	33	25	pc	33	24	t
Johannesburg	22	7	s	23	8	s
Kansas City	32	15	s	23	10	pc
Kansas City	32	15	s	23	10	pc
Kuala Lumpur	29	19	s	31	19	s
Bangkok	34	26	pc	34	26	t
Beijing	29	21	pc	30	17	pc
Berlin	19	10	pc	21	13	pc
Bogota	21	6	c	21	8	pc
Boise	38	19	s	36	19	s
Boston	27	19	s	30	19	s
Brussels	20	15	c	23	13	c
Buenos Aires	15	6	pc	17	10	s
Cairo	36	24	s	36	23	s
Calgary	20	6	s	24	9	s
Caracas	32	25	pc	32	26	pc
Charlotte	31	18	s	32	20	pc
Chicago	29	14	pc	22	9	pc
Dallas	35	24	pc	33	18	pc
Denver	33	12	s	22	9	pc
Detroit	29	14	t	22	10	c
Dubai	41	32	s	41	32	s
Dublin	19	11	pc	17	10	c
Edinburgh	19	12	r	16	9	r
Frankfurt	22	12	pc	24	15	pc

AccuWeather.com

The WSJ Daily Crossword | Edited by Mike Shenk



AUDIO DETAILS | By Tracey Gordimer

Across

- 1 Task that can't be ignored
7 Work commissioned by the khedive of Egypt
11 Ger. invaded it in June 1941
15 Smell
19 Goya, e.g.
20 Puzzling problem
21 Fillable bread
22 Surrender
23 Muenster monger's business?
25 Result of an offshore oil leak?
27 Rand division
28 Manner of moving
29 Rhineland siren
31 Frame of Felix, e.g.
32 Geometry calculation
33 Where potatoes were first cultivated
35 Smelly
36 Dispense with
38 Settled
40 Distinguishing feature
42 Report holder
43 Call's counterpart
46 Snowboarding bro?
- 50 Group of families, in ancient Rome
51 Sambusa flavoring
53 Some kitchen compost
54 Roof rim
56 Fraiser's brother
57 Grazing spot
58 C changers
62 Division d'un ballet
63 Starts a set
65 Tureen accompanier
66 Manning in MetLife Stadium
67 Attack by space invaders?
69 Retirement watch, perhaps?
71 Victorian, e.g.
72 Prevents access to
73 Savage sorts
74 Pay to play
75 Serengeti grazer
77 Stands for funerals
78 Frighten
79 Manxman, e.g.
80 One might be chased by its owner
82 Cowboy star Lash
83 Rascal Flatts, for one
86 Wearing an ultra-sheer outfit?
89 Beastly abode
90 Jeremy of "The Hurt Locker"
92 Charlton's "Touch of Evil" director
93 Prepare to be shot
95 Local group
96 Irritated state
97 Chemise material
100 A bit over 4,000 square meters
104 Knight's title in "Game of Thrones"
105 Redgrave with an Oscar, a Tony and a pair of Emmys
107 In that case
109 Mustard and Taurus?
110 Mustang and Taurus?
112 Something that won't sprout if it's planted?
115 Lion's pride
116 "Ritorna vincitor!" for one
117 Care
118 Word on some franc notes
119 Different
120 Bank
121 Hotel visit
122 Teacher of TV's "Sweatogs"

Down

- 1 City whose population triples once a year
2 Gabriel Byrne's "Excalibur" role
3 Embarrassing outburst
4 Greek consonants
5 Start of a Midwestern state capital name
6 Marjoram's cousin
7 Unpleasantly bitter
8 Beyond bitter
9 Lemon
10 Turning jump
11 Dresses down
12 Feature of "guilt" but not "gilt"
13 Earn a restraining order, perhaps
14 Election lead-up
15 Canadians' Thanksgiving mo.
16 Set's crime against Osiris
17 Like the 1979 gas crisis rationing
18 Some country dancers
24 Knock quite a few back
26 Smallest of the ratites
30 Cointreau flavoring
34 Finished a deck
37 Brat's opposite
39 Iowa State setting
41 Magician's props
42 Royal constables
43 Wonder drug
44 Animal opposite the English lion on the Royal Arms
45 Attacks with a lance
47 Do some voice work
48 "I Told You So" singer Randy
49 Ramone who wrote "Rockaway Beach"
52 Come across as
- 55 Square root of sechzehn
58 Delivers by the wagonload
59 Dr. McCoy's first name
60 Facial in every detail
61 Jazz band members
62 Academic
64 Blows up
65 Dern and Linney
68 Resort setting
69 Minos and Ariadne, e.g.
70 Fancy affair
73 Fancy affair
76 Lodge (motel chain)
77 Hikes
78 Brewpub choices
80 Star of 1953's "Calamity Jane"
81 Spiky flower popular with butterflies
83 Scammer's words
84 Paper extension
85 Like some dungeon denizens
87 "Sir, I love you more than words can wield the matter" speaker
88 "It's a long story"
91 One of a sinful septet
94 Falls miserably
96 Bother a bedmate
98 Skybox setting
99 Boudoir wear
101 Breastplate's place
102 Confectioner H.B.
103 Rear-__ (driving mishap)
106 Way off
107 You can bank on them
111 Garden visitor
112 Single, say
114 Florida Georgia Line, for one

Previous Puzzle's Solution

WAFTS	SCALP	ABA
AMORE	CAMEO	PAM
SPRING	ARBOR	ENO
PUG	DEM	INTEENDS
SPOUSE	IAN	
FORMAL	MOTION	
ADDON	ONTION	NBA
LOINS	ROGEN	PEON
END	CAGE	ASSEA
CABBA	GAGER	OLIVE
ARM	OOLD	SAW
ACTRESS	LOU	ADO
FILT	LIKEAPRAYER	
ATL	ORION	ELSES
RYE	TENSE	STORE

The contest answer is SWEDEN. The answer to each of the four asterisked clues is the type of word hidden in one of the theme entries. From top to bottom: (Greta) GARBO was an ACTRESS; MALMO is a CITY; ABBA was a BAND; and IKEA is a STORE. All of the hidden names originated in Sweden.

Share Your Favorite WSJ Articles from WSJ.com



THE WALL STREET JOURNAL.

Read ambitiously

BUSINESS & FINANCE

© 2017 Dow Jones & Company. All Rights Reserved.

THE WALL STREET JOURNAL.

Monday, September 4, 2017 | B1

Yen vs. Dollar 110.1200 ▲ 0.13% Hang Seng 27953.16 ▼ 0.06%

Gold 1324.50 ▲ 0.63%

WTI crude 47.29 ▲ 0.13%

10-Year JGB yield 0.0003%

10-Year Treasury yield 2.157%

Huawei to Take On iPhone

By DAN STRUMPF

Chinese telecom giant **Huawei Technologies Co.** launched a new chipset with built-in artificial-intelligence capabilities to power its next-generation smartphones and take on rivals **Apple Inc.** and **Samsung Electronics Co.**

Though Huawei is well known in the smartphone business—it is No. 3 worldwide behind Apple and Samsung—it is lesser known as a maker of chips for its own phones. The company says its new Kirin 970 chip will power its forthcoming Mate 10 smartphone, set to launch next

month to compete against the coming 10th-anniversary iPhone.

Huawei's new chipset was unveiled Saturday at the IFA electronics trade show in Berlin. It comes as the company has been pouring resources into the more profitable high-end phone market, long dominated by Apple. Its current flagship phone, the P10, launched this year with a base price of \$685.

The Shenzhen-based company has said the Mate 10 will have improved camera and battery life. It also said the new Kirin chipset will power stronger image-recognition

abilities and other camera features on its phones.

While Huawei's rivals are likely working on chip up-

New AI-equipped chipset will power Mate 10 device, in challenge to Apple.

grades as well, "making AI computation faster and more efficient will give Huawei an edge, if it can demonstrate improved performance or battery

life when conducting everyday tasks," said Tim Coulling, analyst at electronics-research firm Canalsys.

Huawei has been steadily gaining market share from rivals in the smartphone wars. In China, where Apple has been losing ground, Huawei recaptured the top spot from Chinese brand Oppo in the first quarter, according to Canalsys.

Globally, it had 10% of the market in the first quarter, according to Canalsys, behind Samsung's 23% and Apple's 15%. While it is a major player in Europe, its sales remain low in the U.S.

Putting on the Brakes

Smaller Chinese banks' expansion has slowed as Beijing forces them to dial back borrowing from other lenders.

Total asset growth at smaller, regional lenders*



*Growth at joint-stock and city commercial banks

Note: 2017 is only through July; 10 trillion yuan = \$1.5 trillion

Sources: Wind Info (total asset growth); People's Bank of China (interbank borrowing)

THE WALL STREET JOURNAL.

Beijing Pinches Smaller Lenders

By CHAO DENG

BEIJING—The future is dimming for smaller Chinese banks, as moves by Beijing to curb financial risks force these lenders to back off from a wave of financial experimentation that had given them new ways to expand.

In recent years, regulators kept interest rates in the interbank market relatively low, allowing lenders to borrow cheaply from one another. Smaller banks, without the substantial deposits of their larger brethren, seized the opportunity to raise funds they plowed into higher-yielding investments, making money on the difference in interest.

Smaller lenders facilitated a shuttling of capital between banks, as well as to securities and insurance firms. This opened up new financing channels in China's economy, which was one way Beijing had hoped to encourage growth. However, borrowers that benefited from smaller banks' newfound capital often had riskier profiles: They were players more likely to pay higher interest rates on loans, including property developers and already heavily indebted local governments.

The loans the smaller banks took from their peers were often short-term, requiring frequent refinancing and raising the risk of a potential funding crunch because investments that banks made often had longer maturities.

"Small, medium-sized banks brought in competition but also risk," said Yulia Wan, an analyst at Moody's Investors Service. "The more layers of different types of products, the less transparent the system got."

Economists have long warned about China's use of debt to fuel economic growth. As the financial system grew increasingly convoluted, it became harder for regulators to assess companies and banks' true liabilities and ensure banks set aside enough capital to guard against risk.

Regulators have raised interest rates in the interbank market twice this year, making

it more costly for banks to borrow from their peers. Recently, it also began scrutinizing short-term instruments that smaller banks have issued in the interbank market.

"From the regulators' point of view, banks haven't been innovating but finding tricky ways to get around rules," said Qiang Liao, an analyst with Standard & Poor's.

The tightening has hurt smaller, often regional lenders. Their assets, which include loans and investments, grew 13% in July from a year earlier, roughly half the pace of their expansion in early 2016, according to the data provider Wind Information Co.

Banks overall are dialing back their interbank exposure, according to China's banking regulator, which said interbank borrowing by commercial banks fell 1.8 trillion yuan (\$275 billion) during the first half of the year, a drop of 2.3% from the end of last year. The China Banking Regulatory Commission didn't give a total or offer historical figures but said it was the first drop since 2010.

Asset growth at China's five largest banks has been slower than at smaller banks, at an annualized 9% in July, but steadier, according to Wind Information.

Large banks are weathering the regulatory tightening better, as they often act as lenders to small banks and stand to benefit from higher rates in the interbank market. **Industrial & Commercial Bank of China Ltd.**, the nation's largest lender by assets, said its interest income from extending credit to peer lenders surged 75% in the first half compared with a year earlier.

Meanwhile, net interest margins—the spread between what banks charge on loans and what they pay for deposits—have fallen at smaller and midsize banks. At **China Minsheng Banking Corp.**, the measure of profitability fell to 1.4% in the first half from 1.74% last year. The midsize lender said it reduced interbank borrowings by 17% during

Please see BANK page B2



Visitors inspect a model of the dam at Krasnoyarsk Hydroelectric Plant. There is a surplus of cheap electricity available in Russia.

Siberia Is Primed for Digital Era

En+ harnesses Soviet-era infrastructure in frigid region to develop its data-storage project

By JAMES MARSON

IRKUTSK, Russia—As President Vladimir Putin drives this country to leap into the digital age, the cold temperatures and powerful rivers of Siberia have become an asset for one well-placed company.

Here in southern Siberia, energy-and-aluminum giant En+ Group has entered the data-storage market, feeding on industrial-scale power plants for equipment that runs hot and needs to be kept cool.

"It's the ideal location," said Chief Executive Maxim Sokov. "Power is cheap, and the cooling is free."

Siberia's rivers have for decades generated electricity for Russia's aluminum industry, the second-largest after China's. With electricity output exceeding demand, En+ is harnessing the excess, establishing a center here in May

that it envisions as the first in a network of modules under the brand "Clouds of Siberia."

Mr. Putin has called for the Russian economy to go digital, and demand is increasing from state bodies that handle the data of Russia's gigantic bureaucracy.

En+ isn't the only company hoping to capitalize on Soviet-era infrastructure in the digital era. **Rosenergoatom**, the state nuclear-power generator, said it is planning to open a data center at its Kalinin Nuclear Power Station, northwest of Moscow, in 2018.

En+, which is considering an initial public offering, according to people familiar with the matter, is also looking at export potential. The company is in talks with Chinese, South Korean and Japanese companies to store their data, according to Aleksandr Sgrebny, who heads the com-

Irkutsk data-storage facility has the second-highest rating on an international scale for physical and network security and reliability.

Data centers tend to be built near the sources of demand, but improved network speeds and computing infrastructure mean companies can look further afield. The equipment is best kept in rooms at around 70 degrees—often requiring expensive, energy-intensive cooling systems. Iceland, too, is touting its cheap energy and cool climate as natural advantages for its own data centers.

In Irkutsk, the average annual temperature is just above freezing. Even in the mild summers, the world's largest freshwater lake, Baikal, acts like a cooling system, Mr. Sgrebny said.

En+ says all the necessary infrastructure is in place for Please see DATA page B4

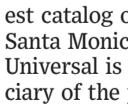
Please see DATA page B4

THE WALL STREET JOURNAL.

Map: RUSSIA Irkutsk 500 miles 500 km
Moscow

HEARD ON THE STREET | By Stephen Wilmot

Pause Before Investing in Music



Universal Music Group is booming. It is a pity you can't invest in it without

risking money on the other parts of quixotically managed media group **Vivendi**.

Owner of the world's largest catalog of music rights, Santa Monica, Calif.-based Universal is a prime beneficiary of the popularity of streaming services like Apple Music and Spotify. First-half like-for-like revenue rose 14% year over year, led by 45% growth in subscription and streaming revenue, according to results published late Thursday by its French parent.

Having signed licensing agreements with **Spotify** and Chinese tech company **Tencent Holdings**, Universal is working closely with the new

digital distributors.

Having declined since the late 1990s, the recorded-music industry reached a nadir in 2014. Last year, global revenue rose 5.9% to \$15.7 billion, a quarter of which came from streaming subscriptions.

The profit is made by the rights owners, not the ultra-competitive streamers: Universal's first-half operating margin reached 10.7%.

It is a shame, then, that investors have no way to get pure stock-market exposure to the music business. Second-ranked Sony Music accounts for less than a 10th of **Sony**'s overall sales, while

Warner Music was taken private in 2011 by industrialist Leonard Blavatnik.

Vivendi, which saw its

shares rise 5.2% Friday, might seem the best bet as Universal now accounts for half of

revenue. But the other half is unappealing, and its overall strategy dubious. There is an old-fashioned French cable-TV service that continues to face declining revenue; a videogame company that barely breaks even; a stake in Italy's former state telecom monopoly; and, following a takeover in July, a listed advertising agency. Dominant shareholder Vincent Bolloré has offered little explanation for this mix beyond vague talk of media-industry "convergence."

Investors may be better off waiting until Universal is spun off. Vivendi's management hints that an IPO is the most likely eventual outcome, but hasn't set a date. This is understandable given the early stage of the music industry's recovery. Still, Mr. Bolloré needs to act while the beat is pumping.

Vivendi, which saw its shares rise 5.2% Friday, might seem the best bet as Universal now accounts for half of

the music industry's recovery. Still, Mr. Bolloré needs to act while the beat is pumping.

Talking up transparency is

BY TRIPP MICKLE

The battle for artificial-intelligence expertise is forcing **Apple Inc.** to grapple with its famous penchant for secrecy, as tech companies seek to woo talent in a discipline known for its openness.

The technology giant this year has been trying to draw attention—but only so much—to its efforts to develop artificial intelligence, or AI, a term that generally describes software that enables computers to learn and improve functions on their own.

Apple launched a public blog in July to talk about its work, for example, and has allowed its researchers to speak at several conferences on artificial intelligence, including a TED Talk in April by Tom Gruber, co-creator of Apple's Siri voice assistant, that was posted on YouTube last month.

Talking up transparency is

Apple launched a public blog in July to talk about its work.

soft Corp. and Facebook Inc. have been racing for years to gather talent in the field—largely by recruiting Ph.D. students and professors from university computer-science programs. Those academics say they want to join companies but still publish regularly, present research and discuss their work.

"We come from a community where we share ideas and get credit for it and a lot of us would be very unhappy to give that up," said Noah Goodman, a Stanford University professor of computer science. He works with a research division of Uber Technologies Inc. where he enjoys those perks.

Indeed many big tech companies have embraced academia's relative transparency. They have aggressively recruited top researchers over the years such as Yann LeCun of New York University, who

Please see APPLE page B2

Secretive Apple Is Opening Up

STEPHEN LAW/REUTERS



Apple launched a public blog in July to talk about its work.

unusual for a company whose chief executive, Tim Cook, once joked that it is more secretive than the Central Intelligence Agency.

The shift is driven by AI's growing importance in areas like self-driving cars and voice assistants such as Siri. Rivals including Alphabet Inc., Micro-

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.

A	HP.....B8
Alphabet Inc. Cl C.....B4	Huawei Technologies.....B1,B4
Amazon.com.....B4	Roku.....B5
Apple.....B1,B4	Rosenergoatom.....B1
B	Industrial & Commercial Bank of China.....B1
Bank of Ningbo A.....B2	International Energy Agency.....B2
Banque Internationale à Luxembourg.....B8	JBS SA.....B4
C	J&F Investimentos.....B4
Calvin Klein.....A8	Samsung Electronics.....B1,B4
Celgene.....B2	Sears Holdings.....B4
China Merchants Bank.....B2	Siemens.....B3
China Minsheng Banking A.....B1	Social Finance.....B5
E	Sony.....B1,B4
Eldorado Brasil Celulose.....B4	Spotify.....B1
E.ON.....B3	Tencent Holdings.....B1
F - G	Tesla.....B4
Fiat Chrysler Automobile.....B3	Toyota Motor.....B3
Ford Motor.....B3,B4	Uber Technologies.....B8
General Motors.....B3	United Rusal.....B4
H	Vestas Wind Systems.....B3
Havelock London.....B5	Vivendi.....B1
Honda Motor.....B3	Wal-Mart Stores.....B4
PVH.....B8	Warner Music.....B1
Winton Group.....B5	

INDEX TO PEOPLE

B	H	S
Bedall, Matthew.....B5	Huefner, Felix.....B7	Salakhutdinov, Ruslan.....B2
Blavatnik, Leonard.....B1	Khan, Hamza.....B8	Taylor, Tom.....B4
Bollor , Vincent.....B1	Land, Kate.....B5	Trump, Donald.....A5
C	Musk, Elon.....B8	Whitman, Meg.....B8
Charles, Brandon.....B5	O	Woodson, Patrick.....B3
E - F	Obama, Barack.....A5	Wren, Alasdair.....B5
Elder, Janet.....B4		
Federighi, Craig.....B4		
G		
Gruber, Tom.....B1		

BANK

Continued from the prior page
the first half of the year.

At **Bank of Ningbo** Co., a small city bank in the province of Zhejiang, net interest margin also fell sharply. Its interbank borrowings were down 26% during the first half of the year.

With reduced access to cheap funding, smaller banks are finding it harder to expand.

China Citic Bank Corp., a midsize lender, is even retrenching slightly. Last week, it posted a 4.7% decrease in assets at the end of June compared with half a year earlier.

The bank said it hasn't relied heavily on business in the interbank market, although finding new sources of funding is a challenge. "It's difficult to further expand proprietary deposits," said Fang Heying, the lender's vice president.

Some smaller banks are also earning less fee income as they dial back on sales of high-yielding wealth-management products. The outstanding

amount of wealth-management products sold between banks declined by 2 trillion yuan (\$305 billion) in the first half of 2017, according to the banking regulator.

At midsize **China Merchants Bank** Co., sales from wealth-management products to other lenders declined 61% from a year earlier in the first half.

Beijing is giving smaller lenders time to adjust to avoid a potential liquidity crunch. Real interest rates have already gone up, as banks pass on higher costs to their borrowers.

"The government is unlikely to tighten further in the coming months," said Chen Shujin, an analyst with Huatai Securities Co.

Still, authorities have stressed they are committed to reigning in financial risks.

China's banking regulator said at a recent news conference that tighter oversight was a matter of the right pacing. "It won't be done in one go," said department head Xiao Yaqianqi.

—Grace Zhu contributed to this article.



The auto maker was one of the first to release an all-electric vehicle. Now, its Leaf is largely overshadowed by brands like Tesla.

Nissan to Launch New Leaf

Revamped version of electric car addresses earlier issues relating to range figures, style

By SEAN MCCLAIN

TOKYO—Nissan Motor Co. was a path-breaker in electric vehicles for the mass market, but for nearly seven years the masses mostly ignored it.

This week, Nissan hopes to inspire car buyers to turn to their new Leaf.

THE WEEK AHEAD On Tuesday in the U.S., the company will release a revised version of its Leaf all-electric car that will travel farther on a charge and add autonomous-driving features while keeping the relatively low price of the current model, which starts at \$30,000.

"We have high expectations for the new Leaf," Nissan Chief Executive Hiroto Saikawa told shareholders in June, describing it as the core of the company's strategy to persuade average customers to adopt next-generation vehicles.

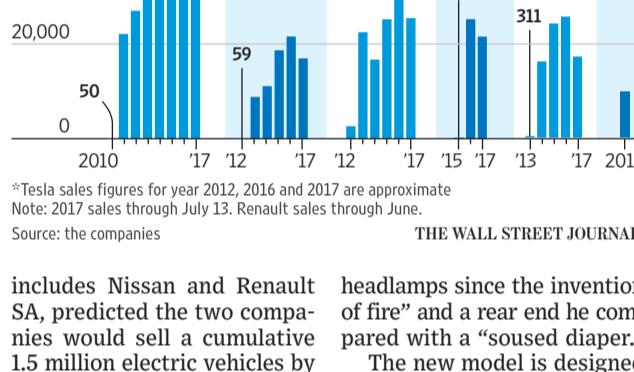
For all the hype about electric vehicles, they still represent only roughly 1% of the global market, according to **International Energy Agency** estimates. That isn't what Nissan expected when it introduced the inaugural version of the Leaf in December 2010.

At the time, Carlos Ghosn, the head of the alliance that

Slowing Down

Sales of Nissan's Leaf have slowed as the number of electric cars overall has grown.

Annual sales of major electric models since their launch date



*Tesla sales figures for year 2012, 2016 and 2017 are approximate.

Note: 2017 sales through July 13. Renault sales through June.

Source: the companies

includes Nissan and Renault SA, predicted the two companies would sell a cumulative 1.5 million electric vehicles by 2016, led by the Leaf. He also predicted that electric vehicles would account for 10% of global sales by 2020.

The actual cumulative figure to date: 490,000.

What happened? Low gasoline prices were one factor keeping a lid on demand for environmentally friendly vehicles, but the original Leaf had its own problems. Its range, even after updates, was only 107 miles on a full charge, making it ill-suited to road trips.

The style touches also never really caught on, with

The Wall Street Journal's Dan Neil raising his eyebrows at "the biggest, most ridiculous

headlamps since the invention of fire" and a rear end he compared with a "soosed diaper."

The new model is designed to address those issues. Although Nissan hasn't released the improved range figures, it says the new Leaf will alleviate range anxiety in Europe and Japan, where commutes are shorter on average than in the U.S.

The vehicle will also come equipped with Nissan's ProPilot autonomous driving suite, which can navigate the vehicle within a single lane and in stop-and-go traffic. The new Leaf will be the first model to get Nissan's self-parking system. And Nissan has hinted it will perform more like an electric car than the old Leaf, which was tuned to resemble a

conventional gasoline-powered family car.

The focus on performance points to Nissan's biggest threat, one it didn't face in 2010: a mass-market car from Tesla Inc. Tesla has begun production of its \$35,000 Model 3 sedan, a vehicle that has more than double the range of the current Leaf.

Around one-half million people put down a \$1,000 deposit to reserve the Model 3. Meanwhile, Tesla's Model S, which starts at around \$70,000, is already selling nearly as many vehicles as the Leaf, despite the higher price.

"Now if people think of electric cars, they think of Tesla," said Julie Boote, an auto analyst at Pelham Smithers Associates.

Another competitor is General Motors Co.'s Chevrolet Bolt, which offers range on a full charge of more than 200 miles and a price tag starting at \$37,000. GM delivered only 9,500 to customers in the first seven months of this year, partly because of limited availability at dealerships.

For the moment, Nissan still enjoys a first-mover advantage in all-electric vehicles, given its experience and the lack of direct competition from most auto makers. But that advantage might not last long. Everyone from Toyota Motor Corp. to Daimler AG's Mercedes-Benz plans to introduce electric cars.

"In the future, they're just one among many others," said Ms. Boote.

Pfizer Revives Cancer Treatment at a Higher Price

By PETER LOFTUS



Drugmakers have taken heat for charging high prices for drugs.

FDA approved a pioneering leukemia treatment from **Novartis** AG that costs \$475,000 per patient, which some critics termed excessive but which the company defended as a responsible price in light of the treat-

ment's benefits.

Pfizer says the new price for the resurrected Mylotarg doesn't look as steep once inflation is factored in. Accounting for average annual U.S. medical-price inflation of about

3% as calculated by the government, the 2010 price would be about \$19,128 in today's dollars, Pfizer said. Company spokeswoman Sally Beatty added that the inflation rate for branded drugs is significantly higher by some estimates.

Ms. Beatty said the company arrived at the new price after consulting with doctors, insurers and patients to assess the drug's clinical and economic benefits. "Based on clinical data and real-world evidence, and support from oncologists, we believe Mylotarg has the potential to provide meaningful improvement to the majority of patients with AML," she said.

The American Cancer Society estimates there are about 21,380 new cases of acute myeloid leukemia—a particularly aggressive form of blood cancer—annually in the U.S., and about 10,590 deaths from the disease.

The FDA has recently approved some new drugs for AML, including **Celgene** Corp.'s Idhifa and Novartis's Rydapt, after many years without new treatment options for the disease.

The FDA first approved Mylotarg in 2000 to treat patients age 60 and older with a type of AML. After the drug's 2000 approval, additional patient studies failed to confirm its efficacy, and revealed an elevated risk of death of patients early in treatment. The FDA requested that Pfizer stop selling the drug in 2010. After the withdrawal, independent researchers tested different doses and other ways to make Mylotarg safer and more effective, with Pfizer providing the drug for testing purposes, the company said.

The results, which showed the drug improved certain measures of survival and in-

duced remission in some patients, led to Pfizer's application to bring the drug back to market.

The FDA on Friday approved a lower dose than the first version of Mylotarg, a different dosing schedule and in a slightly different patient population that includes pediatric patients.

One study of the new Mylotarg showed that adding it to chemotherapy helped newly diagnosed AML patients live an average of 17.3 months without complications, relapse or death from start of treatment, versus 9.5 months for chemotherapy alone, the FDA said. Another study found that patients receiving Mylotarg alone had a median overall survival of 4.9 months from the start of treatment, versus 3.6 months for patients on certain older drugs.

APPLE

Continued from the prior page joined Facebook in 2013, and Geoffrey Hinton of the University of Toronto, who joined Alphabet's Google unit in 2013. The companies together also have churned out hundreds of research papers over the past several years.

Apple was slow to follow, AI analysts and leading researchers say. And even since its public embrace of greater transparency, it has published a fraction of its competitors' research, and its scientists have avoided speaking about Apple-related research at conferences.

To date, the company has published portions of four peer-reviewed research papers on its blog, the Apple Machine

Learning Journal. The three posts published this year are attributed to the Siri team and don't name any individual researchers the way academic papers commonly do.

At a San Francisco conference in March on using AI in autonomous vehicles, Apple research scientist Charlie Tang gave a presentation on robotics—but the photo he showed was from Google. He didn't specifically mention any of Apple's work.

"We want to open communication with the [artificial intelligence] community," Mr. Tang said in an interview afterward before directing questions about that strategy to Apple executives.

Most Apple revenue comes from products like the iPhone or iPad, which are held in strict secrecy before their launch to protect innovations

and "overcoming that [culture] is difficult," said Jack Clark, who heads strategy at OpenAI, a nonprofit, artificial-intelligence research group. He added that Apple's blog was a positive step for the company.

An Apple spokesman declined to comment on Mr. Clark's remarks.

Though guarded about products, Apple is a longstanding member of industry standards groups like the World Wide Web Consortium and has contributed to open-source projects over the years.

Competitive concerns are one reason companies might want to be careful about discussing AI work. But Dr. Goodman of Stanford said companies generally don't need to worry about losing their competitive edge because the algorithms published in papers only work with proprietary

data and remain essentially locked.

Apple's continued restraint has stoked skepticism about its pledged transparency and doubts about its ability to recruit researchers. Tom Austin, an analyst in AI at research firm Gartner Inc., said Apple would struggle to "succeed with a strategy that's bottled up."

Apple in October named Carnegie Mellon University professor Ruslan Salakhutdinov as its director of AI research. He joined Carlos Guestrin, a University of Washington professor whose company Apple acquired in August 2016. Dr. Salakhutdinov announced at an artificial-intelligence conference in December that Apple intended to be more open and would start publishing. Cornell University Library published that month

Apple's first research paper since Dr. Salakhutdinov's arrival on improving graphic recognition.

In January, Apple joined Facebook, Microsoft and others as a member of the Part-

nership on AI, a group committed to developing best practices for research.

In an interview earlier this year, Dr. Salakhutdinov said Apple would publish more, but declined to say how much. "You can have quantity, but producing high quality re-

search is very important," he said.

Microsoft Research, Google and Facebook AI Research each have published more than 100 papers on artificial intelligence topics since January.

Dr. Goodman of Stanford said that contrast has made joining Apple feel "like a one-way move into industry whereas the AI labs like Google and Facebook feel more permeable."

Though Apple's public research

BUSINESS NEWS

Honda Reaches Takata Settlement

BY MIKE SPECTOR

Honda Motor Co. reached a \$605 million legal settlement covering vehicles with rupture-prone **Takata Corp.** air bags, the latest auto maker to agree to resolve claims in a long-running safety crisis linked to numerous deaths and injuries.

Honda reached the settlement over financial-loss claims affecting current and former owners and lessees of roughly 16.5 million vehicles in the U.S. equipped with the air bags, plaintiffs' lawyers said on Friday. The air bags risk exploding and spraying shrapnel.

The settlement, which doesn't cover personal injury claims, still requires a judge's approval as part of widespread litigation consolidated in a Miami federal court.

Honda will ultimately pay \$484 million after receiving a 20% discount on the settlement amount in consideration of the auto maker's current recall efforts, which include providing free rental or loaner vehicles to customers awaiting repairs, the company said. The outlay will include a fund of nearly \$200 million aimed at expanding upon the auto maker's current efforts to reach and encourage customers to visit dealerships to get air bags in Honda and Acura vehicles replaced, Honda said.

Auto makers including Nissan Motor Co., Toyota Motor Corp., Subaru Corp., Mazda Motor Corp. and **BMW AG** reached similar settlements earlier this year collectively totaling more than \$650 million.

Takata's air bags are linked to more than a dozen deaths and some 180 injuries globally.

The settlement's terms include reimbursement for certain expenses customers incur from the recalls and a possible residual payment of up to \$500, plaintiffs' lawyers said. They will receive rental cars while awaiting recall remedies and a support program for repairs and adjustments on replacement air-bag inflators, including an extended warranty, plaintiffs' lawyers said,

Car Sales Wheeze After Long Climb

August proves to be a mixed month for auto makers; GM, Toyota post strong growth

BY MIKE COLIAS
AND CHRISTINA ROGERS

U.S. auto industry sales continued to slump in August amid mounting signs that American car buyers have become more fickle following a long-year growth streak.

While **General Motors** Co. and **Toyota Motor** Corp. notched relatively strong gains, fueled in part by heavier discounting, others reported lower results, with some citing lost sales tied to Hurricane Harvey.

U.S. light-vehicle sales in August fell 1.9% from a year earlier, according to Autodata Corp. The industry's annualized selling pace, a measure of how sales are tracking for the full year, was 16.14 million last month, below analysts' expectations and down from 17.22 million a year ago. The weaker performance comes despite last month having an extra selling day.

GM's August sales jumped 7.4% from a year earlier, totaling 275,552 vehicles, as the Detroit giant deepened discounts on many SUV models, aiming to make room on dealer lots for newer versions.

The nation's largest auto maker cleared out much of the excess inventory that has been worrying investors this year, with stocks on dealership lots falling to an 88-day supply, from 104 days in July.

Ford Motor Co.'s sales slipped 2.1%, to 209,029 vehicles, as demand for SUVs cooled. Still, it reported a 15% surge in sales of pickup trucks, its biggest profit generator.

Fiat Chrysler Automobiles NV's August sales dropped 11%, to 172,773 vehicles, as five of its six brands reported declines. Sales for Jeep—FCA's highest-volume brand—fell 15%, while sales of its Ram pickups dropped 7%.

Shares of the Detroit auto makers rallied. GM and Ford shares were up 2.2% and 2.9%, respectively at Friday's close. FCA shares jumped 4.8% after Standard & Poor's revised its outlook for the stock to positive.

Strong auto sales have helped underpin the nation's



After setting a record in 2016, U.S. auto-industry sales have posted lower growth in each of the first eight months of this year.

Stop and Go

GM reported strong results but overall vehicle sales in the U.S. continued to struggle in August.

Vehicle sales by company

Company	Sales	Change from a year earlier
GM	275,326	7.4%
TOYOTA	227,625	6.8%
Ford	209,029	2.1%
FCA	172,773	11%
Honda	146,015	2.4%
Nissan	108,326	13%

*Seasonally adjusted

Sources: Autodata (sales); St. Louis Fed (selling rate)

Annualized selling rate*

20 million vehicles



THE WALL STREET JOURNAL.

economic recovery since the financial downturn, rising seven straight years to a record of more than 17.5 million vehicle sales in 2016. That streak is almost certain to end this year though, after the industry posted lower growth in each of the first eight months. August's seasonally adjusted annual selling pace was the slowest for the closely watched benchmark since October 2014.

Market watchers believe auto sales could get a lift in coming months as owners of vehicles lost to the flooding in Texas and Louisiana buy replacement cars. Between 500,000 and 1 million vehicles likely were totaled during the storm and subsequent flooding, according to Black Book, a research firm that compiles car

valuations.

August results were mixed for Japanese brands. Toyota's sales rose 6.8%, to 227,625 vehicles, while **Nissan Motor** Co.'s sales tumbled 13%, to 108,326 vehicles. **Honda Motor** Co.'s sales dipped 2.4%, to 146,015.

The muted August results could lead to some especially sweet deals for car shoppers visiting dealership lots for Labor Day promotions this week, typically one of the busiest selling periods for the car business.

Auto makers have been sitting on bloated inventories for months and are scrambling to purge their lots of current-year models to make way for fresher versions.

The car companies are be-

hind on the annual model changeover this year—an unusually high 91% of vehicles sold in the first half of August were from model-year 2017, according to research firm J.D. Power.

The lag could pressure auto makers' profitability because later-model vehicles generally entail lower discounts and thus carry higher profit margins.

GM's incentive spending rose sharply in August as the company cleared out older crossover SUVs to make way for the launch of several redesigned models. GM's SUV sales jumped 47% compared with a year earlier, while Ford's fell 11%.

Crossover SUVs, which ride on car platforms and return better fuel economy than truck-based SUVs, have be-

come a key battleground as car buyers migrate away from sedans. Auto makers "have gotten much more aggressive from an incentives and marketing standpoint" in SUVs, Nissan U.S. sale chief Judy Wheeler said in an interview.

Discounts have heated up as auto makers face declining sales in other categories.

A lull in Ford's new-model pipeline has left dealers with relatively stale crossover SUVs in their showrooms.

Toyota outsold Ford in August for the second straight month—a rarity—amid a sharp increase in SUV sales. Mark LaNeve, Ford's U.S. sales chief, said the car maker has new models coming, including a new full-size Expedition SUV and EcoSport small crossover.

U.S. Job Satisfaction on the Rise

BY LAUREN WEBER

Americans are happier at work than before, but they might just be settling for less.

For the first time since 2005, more than half of U.S. workers say they're satisfied with their jobs, according to the Conference Board, a research group. Employment is up, wages are finally rising and layoffs are near record lows, resulting in a more optimistic, contented workforce.

That buoyancy is giving Americans confidence to pull out their wallets. Consumer spending has risen every month this year, with a strong pickup in August, and the U.S. economy grew in the second quarter at its fastest pace in more than two years.

Yet the data also suggest U.S. workers have changing views of what makes a job good, and a decade of bruising job cuts, minimal raises and lean staffing has led them to lower their expectations, economists and labor-market experts say.

The average employee today shoulders more risk for her retirement and health care than in past generations, and enjoys less job security as the idea of a job for life has vanished. The traditional bond between employer and employee—in which companies provided job and retirement security in exchange for hard work and loyalty—has eroded so much that young workers today "don't even know what they're missing," says Rick Wartzman, a management expert and author of *"The End of Loyalty: The Rise and Fall of Good Jobs in America,"* released in May by PublicAffairs.

Almost 51% of employees say they are very satisfied or somewhat satisfied with their jobs, according to the Conference Board, which surveyed about 1,600 workers across the U.S. last November on various aspects of their work. Workers gave top ranking to their col-



Haley O'Donnell received eight weeks paid maternity leave.

leagues, commutes and job tasks, but were frustrated with promotion policies, bonus plans, training opportunities and performance-review processes.

American workers remain scarred by the Great Recession, which reset expectations for a whole generation, says Peter Cappelli, a management professor at the University of Pennsylvania's Wharton School of Business.

Unemployment reached a 25-year high of 10% in 2009, sending record numbers of Americans into long stretches of joblessness. Those who did remain in jobs were asked to do more with less, for smaller rewards.

In the dot-com period, we had M.B.A. students who literally were expecting to be millionaires within two or three years," Mr. Cappelli says, referring to the late-1990s tech bubble. "After 2009, we had people who were just glad to get any kind of job."

Now, with unemployment at 4.4% and wages showing signs

of lifting, workers are feeling greater peace of mind and fulfillment than they have in years, finding roles in line with their skills and ambitions.

Mechanical engineer David Hunt was let go from an engineering job in 2012 and spent the next five years unemployed or working short-term contracts.

When Mr. Hunt, who holds two master's degrees, was offered a job at a Boston-area high-tech company in June, the human-resources manager called him with "good" news and "bad" news about his salary.

We can't pay what you asked for, the manager told Mr. Hunt. Instead, the company offered 10% above that number.

Mr. Hunt now earns enough to support his family while his wife pursues a Ph.D. For the first time in years, he says, he's excited to go to work each day.

Worker satisfaction is mixed but improving in areas like wages and job security. Just over 52% of workers feel safe from a layoff, up six percentage points from 2011, and 41.6% say

they are pleased with their wages, up from 36.1% five years earlier, according to Conference Board.

Average hourly earnings are growing at a slow pace by historical standards—rising 2.5% from July 2016 to July 2017—but low inflation means paychecks are buying more and workers are feeling more flush.

Amid a continuing shift away from pensions toward 401(k) plans with unpredictable returns, satisfaction with retirement plans rose from 35% in 2011 to 37.3% in 2016, the Conference Board says, possibly reflecting higher 401(k) returns from stock investments.

Overall, Americans' sense of retirement security has dropped. In 1993, 73% of U.S. workers felt confident they could afford a comfortable retirement, according to the Employee Benefits Research Institute. In 2017, 60% felt that way.

Also falling in workers' esteem are health-insurance and family-leave plans. Employees are paying more for health care and coping with higher deductibles. And though some employers have enriched parental-leave benefits for white-collar workers, U.S. parents get less leave than their counterparts in other industrialized nations.

Haley O'Donnell, 33, was a manager in the corporate office of a Fortune 500 retailer a few years ago when one of her employees became a father. The company offered no paid paternity leave, and Ms. O'Donnell sent an angry letter to the chief executive. She never received a response.

Following a career switch, Ms. O'Donnell wrote a young-adult novel and now works part-time as a writer for **Armstrong & Associates**, Inc., a logistics consulting firm in Milwaukee. She recently had her first child and has eight weeks' paid maternity leave, a rare benefit for part-timers.

Wind Farm Weathers Blow From Storm

BY RUSSELL GOLD

For the first time in the history of the burgeoning U.S. wind industry, a wind farm got hit by a hurricane—and it was back producing power within days.

Harvey made landfall as a Category 4 hurricane with winds of more than 130 miles an hour a week ago Friday about 20 miles from the Papalote Creek Wind Farm near Corpus Christi, Texas.

One section of the onshore wind farm was producing electricity on Thursday and the other was expected to be back online on Friday, according to its owner, German power company E.ON SE.

The wind farm sustained the equivalent of a Category 1 hurricane.

"Papalote actually survived really well," said Patrick Woodson, chairman of E.ON's North American operations. The delay in restarting was mostly because the power lines were damaged, he said.

Weather gauges suggest the wind farm didn't take the brunt of the storm: they recorded sustained winds of 90 miles an hour, or the equivalent of a Category 1 hurricane on the Saffir-Simpson scale.

The wind farm has a total of 196 turbines and can generate 380 megawatts, making it a fairly large power generator. The turbines were made by **Vestas Wind Systems** A/S and **Siemens** AG.

The storm was the first major test of how U.S. wind-power in-

stallations, which now provide roughly 6% of the nation's electricity, hold up in hurricane-force winds.

Justin Sharp, a consultant and chairman of the American Meteorological Society's renewable-energy committee, said he wasn't surprised the wind farm survived. The turbines are designed to shut down and feather their blades when the wind gets too strong.

He said turbines would probably begin to fail when winds reached 140 miles an hour, with blades detaching and smashing into nearby towers. At those speeds, Dr. Sharp said, "all bets are off."

A Category 4 storm, super-typhoon Usagi, hit a Chinese wind farm in 2013 and did extensive damage.

Whether a wind farm can survive a hurricane is hardly an academic question. More are being built close to coastlines and offshore, where wind speeds tend to be strongest.

Dr. Sharp said he calculated that a wind farm build right on the Texas coast would have a 15% chance of facing a Category 4 or 5 hurricane in a 20-year lifespan.

"What we learned from Harvey is that the design being used right now and the operating rules work very well," said Julie Lundquist, a professor of atmospheric sciences at the University of Colorado Boulder. For a milder hurricane, this is a "success story."

She was the co-author of a recent study that found offshore wind farms would likely not withstand a direct hit from a Category 5 hurricane, the strongest. She and a student are now working to determine the probability that a particular offshore wind farm will experience such a storm.

TECHNOLOGY

WSJ.com/Tech

Alexa and Siri Escalate Battle

Apple, Amazon and rivals race to make their virtual assistants more powerful

BY LAURA STEVENS
AND TRIPP MICKLE

Apple Inc. and Amazon.com Inc. are bolstering the teams that run their Siri and Alexa virtual assistants, part of a string of recent moves by technology giants to step up competition in an area seen by many as the future of computing.

Amazon is adding hundreds of engineers to the Alexa program and giving it hiring preference over other divisions, according to people familiar with the company's thinking. It also has put Tom Taylor, a veteran Amazon executive known for building up high-growth divisions, in charge after the former Alexa chief retired.

Apple, meanwhile, has shifted oversight of its Siri system to Craig Federighi, its top software engineer, after five years under the leadership of another senior vice president, Eddy Cue. That move comes amid concerns that Siri, which popularized voice assistants when Apple introduced it in 2011, has lost ground to rivals including Alexa and Alphabet Inc.'s Google Assistant.

Voice-driven virtual assistants like Siri and Alexa, powered by artificial-intelligence technology, are rapidly gaining popularity by making it simpler for people to perform computing tasks from searching for information to shopping to turning on home lamps. More than 4 billion consumer devices by the end of 2017 will make use of some kind of digital assistant, according to IHS Markit, a market research firm.

Apple, Amazon, Google, Microsoft Corp. and Samsung Electronics Co. are racing to make their assistants more powerful and pervasive, in part by trying to embed them in more devices. Apple still has the greatest reach among voice assistants, with Siri accessed monthly on more than 375 million Apple devices across 36 countries. Amazon's introduction of the Alexa-powered Echo speaker nearly three years ago sparked a new land rush, prompting Apple in June to unveil a rival device, the HomePod, that goes on sale at the end of this year.



Amazon introduced the Alexa-powered Echo speaker about three years ago. The company currently dominates the market in the U.S.

The companies bring different strengths to the fight. Because of their dominance of the smartphone market, Apple, Google and Samsung have broad reach and enormous volumes of user data that they can use to train their assistants. Google,

currently dominates in smart speakers—it's Echo has about three-quarters of the U.S. market for such devices, with more than 11 million sold through the end of last year, according to analyst estimates.

Amazon also has been aggressively signing deals with other companies to add Alexa to products ranging from Ford Motor Co. cars to Sears Holdings Corp.'s Kenmore refrigerators. Samsung has outlined a similar vision for its recently launched assistant, called Bixby.

Google said last week that it would open its assistant to other speaker makers including Sony Corp., and to appliance makers like LG Electronics Inc., to incorporate the assistant into dryers and vacuums.

Google also is taking aim at Amazon's e-commerce stronghold with a partnership announced last month with Walmart Stores Inc. to let users of its Google Express shopping ser-

vice order from the retail giant by voice via Google's virtual assistant. Amazon announced a deal last week with Microsoft to link their virtual assistants so that people could, for example, use Alexa to access Microsoft's Cortana and check their calendars in Outlook.

Apple, in addition to rolling out a smart speaker, increasingly is enmeshing Siri in its Mac and iPhone operating systems, which Mr. Federighi also manages. His new role was noted on Friday in a change to his biography on Apple's website. An Apple spokeswoman confirmed the change but declined to comment further.

Gene Munster, head of research with Loup Ventures, said that Mr. Federighi brings more of a technical background than Mr. Cue, who heads internet software and services and is leading Apple's push into original video in Hollywood.

The ability to train assistants

effectively is critical to making them more accurate and effective in responding to queries.

Google's smart speaker, which responds to "OK, Google," now understands questions as well as Alexa, at about 95%, according to Loup Ventures research, which tested 800 questions on both systems. Google previously lagged behind in a February test, understanding about 77% of queries, versus 94% for Alexa. Google answered 65% of the questions correctly, compared with 54% for Alexa, although both improved.

Amazon has been accelerating the growth of its Alexa staff rapidly for years, and currently has nearly 1,500 openings mentioning Alexa on its job site.

Amazon's Mr. Taylor took charge in June and previously ran seller services, which has grown significantly over the past few years.

Amazon declined to comment on its Alexa strategy.

Instagram Hack Was Wider Than Thought

BY DEEPA SEETHARAMAN

Social-media app Instagram said a hack it disclosed this past week affected a larger number of users than it previously detected.

Instagram, owned by Facebook Inc., this past week said hackers stole email addresses and phone numbers—but not passwords—tied to some celebrity accounts.

On Friday, the photo- and video-sharing app said the theft affected regular users as well and wasn't just "targeted at high-profile users." Instagram reiterated that no passwords were stolen. The contact information was stolen after hackers exploited a bug in Instagram's software that the company says has since been patched up.

Instagram, which has 700 million monthly users, said it doesn't know which specific accounts were affected and said a "low percentage" of its users were affected, without providing more specific figures.

Stolen email addresses and phone numbers aren't as sensitive as passwords, because it typically takes a lot of work to gain control of a user's phone number or email account without the help of a stolen password, cybersecurity experts say. Gaining access to somebody's password could be more harmful. The stolen data are being sold online, according to Instagram. Some information was up for sale for \$10 through a database called Doxagram, which claimed to have some contact information for high-profile accounts including that of Facebook Chief Executive Mark Zuckerberg and pop star Rihanna.

"Out of an abundance of caution, we encourage you to be vigilant about the security of your account, and exercise caution if you observe any suspicious activity such as unrecognized incoming calls, texts, or emails," Instagram co-founder Mike Krieger said in a blog post.

—Robert McMillan contributed to this article.

BUSINESS WATCH

J&F INVESTIMENTOS JBS Owner Sells Paper-Pulp Maker

The holding company of troubled Brazil meatpacker JBS SA said Saturday it sold its paper-pulp maker Eldorado Brasil Celulose SA to Netherlands-based Paper Excellence for 15 billion reais (\$4.8 billion). The transaction is expected to take up to 12 months to be completed, the companies said Saturday.

Eldorado was one of the key assets owned by J&F Investimentos, the holding company that belongs to the family of brothers Wesley and Joesley Batista, who have admitted to bribing government officials for several years in exchange for favors.

Through their family holding company, J&F, the brothers have agreed to pay a fine of 10.3 billion reais to sign a leniency agreement with Brazilian prosecutors. J&F recently agreed to sell flip-flop maker Alpargatas SA, as well as dairy company Vigor Alimentos SA.

—Luciana Magalhaes

NEW YORK TIMES Publisher Looks to a New Funding Source

The New York Times is exploring another source of funding: philanthropy. The newspaper said one of its top editors, Janet Elder, will be setting up an operation to seek nonprofit funding that can help support ambitious newsroom projects.

The Times has enjoyed a surge in digital subscriptions and solid digital ad growth recently, but the company said nonprofit funding can provide greater flexibility. Publications like The Times have often done stand-alone projects with nonprofits or philanthropic organizations, but the new arrangement formalizes the process and signals a bigger commitment.

—Imani Moise

Tesla Faces Complaint on Labor Practices

BY TIM HIGGINS

The National Labor Relations Board filed a complaint Thursday against Tesla Inc. based on allegations of unfair labor practices from workers at the company's Fremont, Calif., factory.

The employees accuse Tesla of being required to sign overly broad nondisclosure agreements that prohibit them from raising safety concerns. They also allege the Silicon Valley electric-car maker harassed them during unionizing efforts.

A hearing before an administrative judge is scheduled for Nov. 14.

Tesla said the accusations in the complaint are without merit and accused the United Auto Workers union—which has sought to organize employees in Fremont—of filing complaints “only to generate

headlines.” Earlier this year, three workers and the union filed their claims with the NLRB against Tesla.

The NLRB complaint and brewing labor unrest at the Fremont factory threaten to disrupt Tesla just as it begins boosting production of the Model 3, a \$35,000 all-electric sedan aimed at attracting more customers than its luxury cars and sport-utility vehicles that typically sell for about \$100,000. Tesla Chief Executive Elon Musk cautioned in July that the effort to bring out the car would be “manufacturing hell” as the company learns to build the vehicle in large numbers.

In Thursday’s complaint, the NLRB’s arm in Oakland, Calif., said Tesla “has been interfering with, restraining and coercing employees in the exercise of their rights.” The complaint listed several instances that alleged company employees instructed workers to stop distributing union leaflets and told them not to discuss safety concerns with the union and co-workers.

“I knew the company couldn’t legally prevent us from speaking out about issues at the plant, but the confidentiality policy confused a lot of my co-workers and made them fear that they didn’t have certain rights,” Da-

vid Gonzalez, a Tesla production associate, said in a statement. “I’m proud of my co-workers who filed these charges and stood up for us.”

In an August statement, Tesla blasted the UAW. “Faced with declining membership, an overwhelming loss at a Nissan plant earlier this month, corruption charges that were recently leveled against union leaders who misused UAW funds, and failure to gain traction with our employees, it’s no surprise the union is feeling pressured to continue its publicity campaign against Tesla,” the company said.

The UAW has faced several setbacks in recent months, including failing to win enough votes to organize a Nissan Motor Co. factory in Mississippi and watching former members of its leadership be accused of misuse of worker-training funds.



Aleksandr Sgrebny, who heads En+'s data-center effort, inside the Irkutsk center. Big local businesses are already clients.



Fremont, Calif., workers allege harassment during unionizing efforts.

vid Gonzalez, a Tesla production associate, said in a statement. “I’m proud of my co-workers who filed these charges and stood up for us.”

In an August statement, Tesla blasted the UAW. “Faced with declining membership, an overwhelming loss at a Nissan plant earlier this month, corruption charges that were recently leveled against union leaders who misused UAW funds, and failure to gain traction with our employees, it’s no surprise the union is feeling pressured to continue its publicity campaign against Tesla,” the company said.

The UAW has faced several setbacks in recent months, including failing to win enough votes to organize a Nissan Motor Co. factory in Mississippi and watching former members of its leadership be accused of misuse of worker-training funds.

DATA

Continued from page B1

Clouds of Siberia, and that it will charge 25% to 40% less than its rivals in Moscow, where land and electricity are more expensive.

The company, controlled by billionaire tycoon Oleg Deripaska, generates around 8% of Russia's electricity. Its power assets include four huge, Soviet-era hydroelectric plants along the Angara River, which passes through Irkutsk, and the Yenisei River, which cuts through central Russia and empties into the Arctic Ocean.

But the power plants can produce about twice as much as is used, leaving plenty of cheap electricity available that the company wants to monetize.

The plants were built, starting in the 1950s, as part of efforts to transform Siberia into

an economic powerhouse. Aluminum titan Rusal, which En+ controls, uses the electricity to power its smelters.

After the collapse of the Soviet Union, demand for electricity fell as Russia's economy shrank. At the Krasnoyarsk Hydroelectric Plant, with a 400 ft.-high dam on the Yenisei that opened 45 years ago, only five of 12 generators were running on a recent day.

“There aren’t so many buyers, and it’s so cheap,” said Mikhail Kamenev, deputy head of production at the plant. He said electricity costs around 15 kopecks per kilowatt-hour, or around a quarter of a cent.

The data center in Irkutsk, at En+'s Thermal Power Station, is housed in a structure around the size of two shipping containers. Inside, eight racks of servers produced by Huawei Technologies Co. are powered by two electricity lines from the plant.

Local needs are helping drive demand for data storage, Mr. Sgrebny said. New counterterrorism laws scheduled to come into force next year will oblige telecom companies to store internet traffic and phone conversations for six months—a potential source of business, the company said. Big local businesses are already clients, said Mr. Sgrebny.

Mr. Sokov, the CEO, said his data centers could be more profitable than the aluminum business. While power generation accounts for 30% of the cost of making aluminum, for data centers the share is 50%, and close to 70% for blockchain, a digital ledger to efficiently share and track information related to contracts and transactions, he said.

“We’re creating our own demand” for power, said Mr. Sokov. “We are taking advantage of Soviet synergies.”

FINANCE & MARKETS

Storm Victims Check Fine Print

Most home-insurance policies in U.S. exclude flooding; shortfalls in coverage expected

BY LESLIE SCISM
AND NICOLE FRIEDMAN

Hundreds of thousands of Texas homeowners are expected to lack adequate insurance for repairing flooded houses, if they have it at all.

Many homeowners never examine details of the policies they buy, and it is only after a flood they learn the basics: Standard homeowners' policies provide payouts for damage from wind, fire, fallen trees and other storm-related events but not flooding. For that, people generally need to buy separate policies from the U.S. government, through its nearly 50-year-old National Flood Insurance Program.

As Houston residents started to return home Friday following Hurricane Harvey, many were for the first time checking the fine print on their insurance contracts and hoping for the best.

Among them was Andrea Womack, a 38-year-old mother of four. The carpet and some clothing in her one-story house in Houston's Settegast neighborhood were damaged by water. On Friday morning, Ms. Womack was waiting for an insurance company representative to come by and go through what was covered.

"I signed up for insurance awhile back, but on my papers it says it does not cover flood insurance. So I'm not sure" what will be covered, she said.

Early loss estimates are starting to show that Ms. Womack isn't alone.

Analytics firm CoreLogic has estimated total residential flood costs of \$25 billion to \$37 billion in 70 counties in Texas and Louisiana hit by Harvey. Of that, about 70%, or \$18 billion to \$27 billion, is



Sydney Truss hauled belongings out of his home, which flooded as Harvey dumped more than 50 inches of rain in parts of Texas.

uninsured.

Overall, households and businesses in Harris County, which includes Houston, held roughly 249,000 federal flood policies as of June 30, according to the Federal Emergency Management Agency. There are about 1.7 million housing units in the county.

Those homeowners who do have flood insurance are likely those whose mortgage lenders require it, said Etti Baranoff, an associate professor of insurance at Virginia Commonwealth University.

"The mortgage company checks if your home is in a flood zone or not, and they'll make you take" a policy out if so, she said.

Even so, those with the government flood policies aren't always made whole, she said. These policies pay out a maximum \$250,000 for rebuilding and \$100,000 for per-

sonal possessions.

Among homeowners with flood coverage are Sydney Truss and his wife, who live south of Houston in Friendswood, Texas.

When they were house hunting last year, the couple worried about possible flooding. So, before they settled on a home, they looked up whether it flooded during Tropical Storm Allison in 2001.

"That's kind of the storm Houstonians judge everything by," said Mr. Truss, 36 years old. "It did not flood during Allison." Even so, the couple's bank required them to get a federal flood policy.

"We're hearing you have to have [all the damaged items] to get insurance" claims paid, Mr. Truss said, surveying the piles of clothes, toys and books in his front yard. He said he was initially going to

wait until he heard from insurance officials before clearing out the house, but "it would be a disaster if we kept waiting any longer."

Standard homeowners' policies do pay for some damage from water—such as if it enters the house after the wind rips off the roof. But if water overflows a riverbank or gushes down a street to seep into a house, the homeowner can expect a claim to be rejected, according to industry lawyers.

The federal flood insurance program's payouts for Harvey appear on track to rival those made for superstorm Sandy in 2012, the U.S.'s third-costliest hurricane (behind Katrina in 2005 and Andrew in 1992). So far, 130,622 Sandy claims have cost the program \$8.4 billion, an average of \$64,331 apiece, according to the Insurance Information Institute trade

group.

Overall, private-market insurance payouts for Harvey are expected to be dominated by payments to business policyholders and range from \$10 billion to \$20 billion.

A frequent area of dispute after hurricanes has been how much an insurer ought to pay in instances in which both winds and flooding damaged a property. Those disputes could arise in coastal communities where Harvey landed as a Category 4 hurricane with its strongest winds.

"If there is a breath of wind and breath of storm surge, that ought to be enough to put in front of the Texas courts and ask for relief for these people," said David Wood, a policyholder lawyer for corporate clients at Barnes & Thornburg LLP in Los Angeles.

—Erin Ailworth contributed to this article.

Roku IPO Filing Has 2 Classes Of Stock

BY MARIA ARMENTAL
AND MAUREEN FARRELL

Roku Inc., which makes streaming-media devices and software, has filed preliminary documents for an initial public offering of shares.

The Wall Street Journal had previously reported the IPO plans, saying the California company targeted a valuation of roughly \$1 billion.

The documents, filed Friday with the Securities and Exchange Commission, don't offer much detail on Roku's planned IPO, beyond saying that the company seeks to trade on Nasdaq under the ticker ROKU.

The securities filing includes a figure of \$100 million for its issuance, but that figure is used to calculate filing fees and is often changed.

According to the filing, owners of Class B shares—including 51-year-old founder and Chief Executive Anthony Wood—would retain control based on voting power.

Class A shares, which would be sold to the public, would have one vote each, while Class B shares would have 10 votes.

Roku, which had worked on a possible IPO in 2014, was founded in 2002 and made its name through small boxes that hook up to televisions and stream video from services such as Hulu and Netflix Inc.

The company, however, has been shifting its business to draw more of its revenue from ads and revenue-sharing deals.

Roku still makes the majority of its revenue from sales of streaming players: \$117 million of the \$199.7 million in revenue it reported for the first half of 2017. Yet streaming players accounted for a smaller portion than in the year-ago period when they accounted for 73% of revenue.

The company said in the filing that it intends to grow profit by increasing the number of active accounts and how much it makes from each user. As of June 30, Roku said, it had 15.1 million monthly active accounts, up from 10.6 million in the year-ago period.

Roku, which has yet to make a profit, disclosed its loss for the first half of the year had narrowed to \$24.2 million, while revenue rose 23% to \$199.7 million.

Current investors include 21st Century Fox Inc., which shares common ownership with Wall Street Journal owner News Corp.

—Maureen Farrell contributed to this article.

SEC Ends Lawsuit Against Financier

BY MARIA ARMENTAL

Wall Street's top cop has dropped a civil lawsuit against a financier accused of manipulating the shares of companies he helped take public, after a judge had tossed out key evidence in a related criminal case.

The Securities and Exchange Commission's move Friday to drop the lawsuit—

SoFi Opens Sexual-Harassment Probe

BY PETER RUDEGEAIR

Online lender Social Finance Inc. said it has launched an outside investigation into claims that current and former female employees were sexually harassed at work, the latest Silicon Valley startup to face accusations about its behavior toward women.

The company, one of the most highly valued financial-technology firms in the U.S., announced the move Friday, a day after a former employee said in a court filing related to his wrongful-termination lawsuit that the company's CEO allowed "male employees to engage in inappropriate sexual conduct in the workplace."

SoFi has denied the specific allegations of that former worker, Brandon Charles. However, Chief Executive Mike Cagney said in a note to all employees Friday that as its lawyers were weighing a response to the lawsuit, they learned that several people are prepared to formally allege they had witnessed or had been the victims of "improper activity" at SoFi's operations center in Healdsburg, Calif.

"That kind of behavior has no place at SoFi, and we're not

going to tolerate it," Mr. Cagney wrote. He said SoFi's outside lawyers are reviewing the matter and that the company would bulk up its training and add ways for employees to give anonymous feedback on any issue.

The lawsuit and action by SoFi occur as questions swirl around the culture of the technology industry that have sparked debate about a lack of diversity and the treatment of women in typically male-dominated companies. In February, a former engineer at Uber Technologies Inc. said the company hadn't disciplined a manager who mistreated female employees.

That kicked off an investigation into Uber's operations and culture that ultimately led to the resignation of its chief executive, Travis Kalanick.

At SoFi, the August lawsuit filed against the company by Mr. Charles said he was wrongfully terminated for reporting that some managers had hidden errors made in processing loan applications. The legal action also claimed another manager had made sexual or inappropriate comments about women who worked at SoFi.

Mr. Charles's attorney couldn't be reached to com-

ment.

Mr. Charles amended his lawsuit on Thursday to include accusations that Mr. Cagney defamed him in a company-wide videoconference days after his original complaint was filed.

According to the amended lawsuit, Mr. Cagney told SoFi's staff that Mr. Charles was a liar and that SoFi would take "unspecified action" against him at a later date.

A SoFi spokesman said that the company had investigated Mr. Charles's claims internally and found them to have no merit.



A court filing accuses CEO Mike Cagney of allowing 'male employees to engage in inappropriate sexual conduct.'

Advertisement INTERNATIONAL INVESTMENT FUNDS

[Search by company, category or country at asia.wsj.com/funds]

MORNINGSTAR®

Data as shown is for information purposes only. No offer is being made by Morningstar, Ltd. or this publication. Funds shown aren't registered with the U.S. Securities and Exchange Commission and aren't available for sale to United States citizens and/or residents except as noted. Prices are in local currencies. All performance figures are calculated using the most recent prices available.

FUND NAME NAV -%RETURN- FUND NAME GF AT LB DATE CR NAV YTD 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-CF Limited OT MUS 08/25 USD 308835.70 2.2 -2.3 6.7

Fund information about listing your funds, please contact: Freda Fung tel: +852 2831 2504; email: reda.fung@wsj.com

Value Partners

Investing through discipline

Website: www.valuepartners-group.com Tel: 852 2143 0688

China A-Share Fund Cls A AUD H OT HKG 08/31 AUD 13.66 15.9 14.9 9.9

China A-Share Fund Cls A AUD M H OT HKG 08/31 AUD 12.58 15.1 14.4 5.9

China A-Share Fund Cls A CAD H OT HKG 08/31 CAD 12.56 15.0 13.5 8.2

China A-Share Fund Cls A EUR H OT HKG 08/31 EUR 13.31 14.5 12.6 7.7

China A-Share Fund Cls A GBP H OT HKG 08/31 GBP 13.16 14.2 12.3 9.5

China A-Share Fund Cls A NZD H OT HKG 08/31 NZD 13.59 14.7 13.3 21.0

China A-Share Fund Cls A USD H OT HKG 08/31 USD 13.98 25.4 19.8 11.2

China A-Share Fund Cls A NZD M H OT HKG 08/31 NZD 13.45 15.9 15.2 9.9

China A-Share Fund Cls A NZD D H OT HKG 08/31 NZD 12.04 20.9 20.4 5.4

China A-Share Fund Cts A RMH (OHN) OT HKG 08/31 OHN 14.78 17.9 17.4 11.9

China A-Share Fund Cts A USD (OHN) OT HKG 08/31 USD 13.85 24.4 18.9 10.6

China A-Share Fund Cts A USD H OT HKG 08/31 USD 13.39 15.2 14.0 8.6

China Greenchip-A Units AS EQ CYM 08/31 HKD 66.21 30.2 26.1 14.1

China Greenchip-A Units AUD H AS EQ CYM 08/31 AUD 11.23 30.7 26.9 14.9

China Greenchip-A Units CAD H AS EQ CYM 08/31 CAD 10.94 30.9 26.5 14.0

China Greenchip-A Units NZD H AS EQ CYM 08/31 NZD 11.50 30.4 26.9 15.2

China Greenchip-A Units USD AS EQ CYM 08/31 USD 10.91 29.6 25.5 13.8

China Greenchip-AQDls Units AS EQ CYM 08/31 HKD 11.93 29.8 25.7 14.0

GC HI Yield Inc.-Cts A MDLS GBP H OT CYM 08/31 GBP 9.58 6.4 9.8 12.4

GC HI Yield Inc.-Cts A MDLS AUD H OT CYM 08/31 AUD 9.15 7.6 11.6 14.3

GC HI Yield Inc.-Cts A MDLS CAD H OT CYM 08/31 CAD 9.20 7.0 10.7 12.9

GC HI Yield Inc.-Cts A MDLS NZD H OT CYM 08/31 NZD 15.32 8.3 12.1 13.8

GC HI Yield Inc.-Cts P MDLS sh OT CYM 08/31 SGD 10.07 6.9 10.5 13.4

GC HI Yield Inc.-Cts P MDLS Acc sh OT CYM 08/31 USD 15.25 7.3 11.1 13.3

GC HI Yield Inc.-Cts P MDLS Dis sh OT CYM 08/31 USD 9.22 7.4 11.1 13.3

GC HI Yield Inc.-Cts P MDL H OT CYM 08/31 EUR 10.01 6.0 9.1 11.6

Hi-Div Stk Cts A RMH H Acc OT HKG 08/31 OHN 12.48 24.8 22.2 14.4

Hi-Div Stk Cts A RMH USD Acc OT HKG 08/31 USD 14.29 16.7 18.0 12.5

Hi-Div Stk Cts A RMH USD sh OT HKG 08/31 USD 88.14 22.9 19.3 11.6

Hi-Div Stk Cts A2 AUD M H OT HKG 08/31 AUD 10.21 22.0 18.6 11.5

Hi-Div Stk Cts A2 CAD H M H OT HKG 08/31 CAD 10.36 21.6 17.6 10.3

Hi-Div Stk Cts A2 GBP H M H OT HKG 08/31 GBP 9.87 23.5 19.3 10.8

Hi-Div Stk Cts A2 HKD M H OT HKG 08/31 HKD 10.84 23.9 20.4 12.1

Hi-Div Stk Cts A2 MDS M H OT HKG 08/31 MDS 11.73 22.2 18.6 11.3

Hi-Div Stk Cts A2

MARKETS DIGEST

Data as of Friday, September 1, 2017

Nikkei 225 Index

19691.47 **▲ 45.23, or 0.23%**
High, low, open and close for each trading day of the past three months.



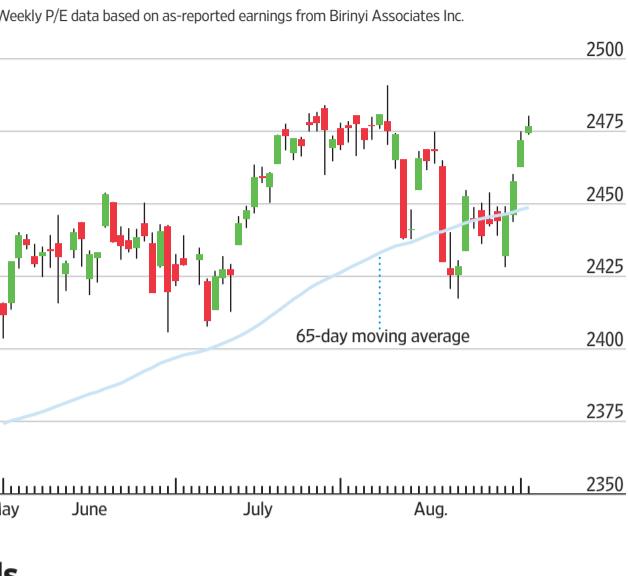
STOXX 600 Index

376.14 **▲ 2.26, or 0.60%**
High, low, open and close for each trading day of the past three months.



S&P 500 Index

2476.55 **▲ 4.90, or 0.20%**
High, low, open and close for each trading day of the past three months.



Bars measure the point change from session's open

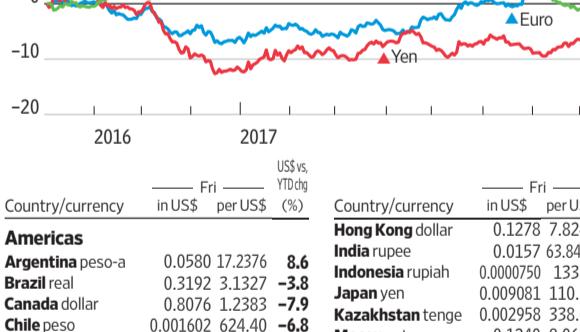
May June July Aug. June July Aug. May June July Aug.

International Stock Indexes

Region/Country	Index	Close	NetChg	% chg	52-Week Range	Low	Close	High	YTD % chg
World	The Global Dow	2852.47	7.58	▲ 0.27	2390.11	● 2878.99	12.7		
	MSCI EAFE	1938.37	7.55	▲ 0.39	1614.17	● 1955.39	15.1		
	MSCI EM USD	1091.36	3.66	▲ 0.34	838.96	● 1091.36	10.0		
Americas	DJ Americas	597.46	1.87	▲ 0.31	503.67	● 597.46	10.6		
Brazil	Sao Paulo Bovespa	71923.11	1088.06	▲ 1.54	56820.77	● 71923.11	19.4		
Canada	S&P/TSX Comp	15191.60	-20.27	-0.13	14349.10	● 15922.37	-0.6		
Mexico	IPC All-Share	51080.85	-129.63	-0.25	44364.17	● 51713.38	11.9		
Chile	Santiago IPSA	3930.32	15.77	▲ 0.40	3127.54	● 3932.62	21.9		
U.S.	DJIA	21987.56	39.46	▲ 0.18	17888.28	● 22118.42	11.3		
	Nasdaq Composite	6435.33	6.67	▲ 0.10	5046.37	● 6435.33	19.5		
	S&P 500	2476.55	4.90	▲ 0.20	2085.18	● 2480.91	10.6		
	CBOE Volatility	10.13	-0.46	-4.34	9.36	● 10.13	22.51	-27.8	
EMEA	Stoxx Europe 600	376.14	2.26	▲ 0.60	328.80	● 396.45	4.1		
	Stoxx Europe 50	3058.37	16.76	▲ 0.55	2730.05	● 3276.11	1.6		
France	CAC 40	5123.26	37.67	▲ 0.74	4332.45	● 5432.40	5.4		
Germany	DAX	12142.64	86.80	▲ 0.72	10259.13	● 12888.95	5.8		
Greece	ATG	818.66	-6.82	-0.83	551.93	● 858.08	27.2		
Israel	Tel Aviv	1400.94	...	Closed	1363.50	● 1478.96	-4.7		
Italy	FTSE MIB	21858.56	188.54	▲ 0.87	16134.71	● 22048.30	13.6		
Netherlands	AEX	518.18	2.14	▲ 0.41	439.07	● 536.26	7.2		
Russia	RTS Index	1100.58	4.74	▲ 0.43	960.32	● 1195.61	-4.5		
Spain	IBEX 35	10325.50	26.00	▲ 0.25	8607.10	● 11135.40	10.4		
Switzerland	Swiss Market	8941.62	16.17	▲ 0.18	7593.20	● 9176.99	8.8		
South Africa	Johannesburg All Share	56513.46	-8.65	-0.02	48935.90	● 56655.88	11.6		
Turkey	BIST 100	110010.49	...	Closed	72519.85	● 110423.11	40.8		
U.K.	FTSE 100	7438.50	7.88	▲ 0.11	6665.63	● 7547.63	4.1		
Asia-Pacific	S&P/ASX 200	5724.60	10.10	▲ 0.18	5156.60	● 5956.50	1.0		
Australia	Shanghai Composite	3367.12	6.31	▲ 0.19	2980.43	● 3367.12	8.5		
Hong Kong	Hang Seng	27953.16	-17.14	-0.06	21574.76	● 28094.61	27.1		
India	S&P BSE Sensex	31892.23	161.74	▲ 0.51	25751.14	● 32575.17	19.8		
Indonesia	Jakarta Composite	5864.06	...	Closed	5027.70	● 5915.36	10.7		
Japan	Nikkei Stock Avg	19691.47	45.23	▲ 0.23	16251.54	● 20230.41	3.0		
Malaysia	Kuala Lumpur Composite	1773.16	...	Closed	1616.64	● 1792.35	8.0		
New Zealand	S&P/NZX 50	7821.98	4.88	▲ 0.06	6664.21	● 7879.46	13.7		
Philippines	PSEI	7958.57	...	Closed	6563.67	● 8072.75	16.3		
Singapore	Straits Times	3277.26	...	Closed	2787.27	● 3354.71	13.8		
South Korea	Kospi	2357.69	-5.50	-0.23	1958.38	● 2451.53	16.3		
Taiwan	Weighted	10594.82	9.04	▲ 0.09	8902.30	● 10594.82	14.5		
Thailand	SET	1618.42	2.26	▲ 0.14	1406.18	● 1618.42	4.9		

Currencies

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



London close on Sept. 1

US\$ vs. Country/currency Fri YTD chg

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

Country/currency	Fri	YTD chg	Country/currency	Fri	YTD chg
Americas			Hong Kong dollar	0.1278	7.8243
Argentina peso-a	0.0580	17.2376	India rupee	0.0157	63.8450
Brazil real	0.3192	3.1327	Indonesia rupiah	0.000750	13338
Canada dollar	0.8076	1.2383	Japan yen	0.009081	110.12
Chile peso	0.001602	624.40	Kazakhstan tenge	0.002958	338.02
Peru so	0.3088	3.2385	Macau pataca	0.1240	8.0627
Uruguay peso-e	0.0349	28.680	Malaysia ringgit-c	0.2342	4.2705
Venezuela bolivar	0.099059	10.09	New Zealand dollar	0.7166	1.3955
Asia-Pacific			Pakistan rupee	0.0095105	105.15
Australia dollar	0.7979	1.2533	Philippines peso	0.0196	51.05
China yuan	0.1526	6.5551	Singapore dollar	0.7373	1.3563
			South Korea won	0.0008921	112.00
			Sri Lanka rupee	0.0065432	152.83
			Taiwan dollar	0.03322	30.10
			Thailand baht	0.03015	33.170
					-7.4

Source: Tullett Prebon, WSJ Market Data Group

Key Rates

Latest 52 wks ago

Cur Stock	Sym	Last	% Chg	YTD% Chg

<tbl_r cells="1" ix="2" maxcspan="5" max

FINANCE & MARKETS

In Germany, 'Locals' Top Exporters

Strong euro, robust national economy lift the stocks of firms with domestic focus

By MIKE BIRD

The German economy is famous as an export powerhouse, but this year, in the country's stock markets, the companies closest to home are outperforming their internationally focused peers by a mile.

The country's flagship stock index, the DAX, is up 5.8% for 2017. Meanwhile, the FTSE Local Germany Index has returned more than 20% since the year began.

The increasing strength of the euro and the still-improving picture for the German domestic economy have both helped drive a wedge between the two indexes.

Only stocks that receive 70% or more of their total revenue from their home countries are included in the FTSE

Local series, leaving out Germany's major export champions.

The DAX itself is dominated by companies that make most of their money abroad, with over 75% of revenue coming from outside Germany.

The outperformance of domestic-focused stocks began most clearly in May, when the trade-weighted euro—a measure of the common currency's value against the currencies of the eurozone's main trading partners—began to pick up sharply in the wake of France's presidential election.

That makes sense because Germany's major exporters see drawbacks from a stronger euro. A dollar in revenue translates into fewer euros, meaning lower profits. The stronger euro also makes German products more expensive for consumers outside the eurozone.

But the different performances of the two indexes isn't just down to the euro. In 2014 and 2015, when the euro fell by more than 10% against



A Claas factory in Harsewinkel, Germany. The country's domestic-focused stocks are outperforming their export-oriented peers.

the eurozone's main trading partners' currencies, the FTSE Local Germany's total return was practically identical to the DAX. In essence, Germany's strong national economy in those years helped domestic firms match the gains reaped by exporters that were enjoying the benefits of a cheap local currency.

Now that the euro has taken an upward trajectory, the

bouyant German economy is amplifying the differences between inward- and outward-focused businesses.

In the past four years, the recovery in domestic demand outstripped previous recoveries beginning in 1993, 1999, 2005 and 2009, according to UBS Group AG economist Felix Huefner. The German stocks UBS analysts favor have high exposure to German consum-

ers or real estate.

Household consumption rose 2.2% in the second quarter of 2017, compared with the year-earlier period, the strongest increase in over 10 years.

HSBC Holdings PLC economists cited the rise in consumption for raising their growth forecasts. The bank now expects a 2.2% rise in gross domestic product from "the German economic jagger-

naut" this year, up from the 1.8% expected previously.

There is no guarantee that Germany's home-focused stocks will keep outperforming, but many analysts are projecting further support for household spending, too.

Both the center-left Social Democrats and Chancellor Angela Merkel's center-right Christian Democrats have promised tax cuts.

Investors Stop Pulling Cash Out of U.S. Stock Market

By AKANE OTANI

Investors finally stepped back into the U.S. stock market again last week.

After pulling \$30 billion out

of equity funds

EQUITIES over a 10-week

span this summer, investors

put \$300 million back into the

funds for the seven days ended

Wednesday, according to Bank of

America Merrill Lynch data.

Stocks have ticked higher in

recent days as a fresh batch of economic data showing the U.S. consumer on strong footing helped investors look past renewed tensions between North Korea and the U.S.

Before the latest week, mutual funds and exchange-traded funds that invest in U.S. equities had posted their longest streak of withdrawals in 13 years—the latest indication to some analysts that investors were increasingly wary of the long U.S. stock rally.

There are plenty of reasons not to love the stock rally at the moment, investors say. Stocks are trading at higher-than-average valuations; economic data has shown lagging measures for inflation, wage growth and U.S. auto sales; and turbulence in Washington has cast doubt on the Trump administration's ability to push through policies such as tax cuts. While hopes for pro-business policies had helped U.S. stock indexes jump past their

international peers after Election Day, lately many investors have expressed a preference for stocks elsewhere that are trading at lower valuations. Japanese equity funds attracted inflows for the seventh consecutive week in the seven days ended Wednesday, data show.

Concerns about the durability of the U.S. stock rally has also kept many investors cautious heading into the end of the summer, while reigniting

demand for so-called haven assets such as gold, government bonds and their stock proxies.

The S&P 500 managed to eke out a monthly gain, but only just: The broad index finished August up 1.35 points, or less than 0.1%. Meanwhile, assets that investors consider safer stores of value rallied.

Shares of utilities companies, which many investors think of as bondlike because of their relatively hefty dividends, rose 2.7% in August. Gold jumped

3.9% to \$1,316.20 a troy ounce, finishing off the month at its highest level since September.

The true test of investors' appetite for stocks will come in coming weeks. Next, with Congress returning from recess, investors will have to contend with a number of risks, including coming debates over lifting the debt ceiling and passing a spending bill.

Signs of political gridlock could send investors fleeing from U.S. stock funds again.

The collage includes a table of stock data with columns for Last, CHG, % CHG, and Date. It features a line graph showing a sharp peak followed by a decline. Below the table is a chart titled 'Italy HICP YOY' with data for Survey: 0.10% and Actual: -0.10%. To the right is a screenshot of the WSJ Podcasts interface for 'Moneybeat', showing the episode 'Alphabet, Amazon, Facebook, Lead Tech's Earnings-Palooza'. Further right is an article titled 'CHINA'S NEXT TARGET: U.S. MICROCHIP HEGEMONY' by Bob Davis and Eva Dou, discussing the semiconductor industry's shift away from global competition. At the bottom right is an illustration of two balloons, one with the Chinese flag and one with the American flag, set against a circular background.

Insight Unbound

Experience the depth and breadth of markets coverage on WSJ digital

In a fast-changing world, the Journal's digital platforms keep you moving. From live analysis and in-depth research to podcasts and newsletters—the markets insight you need is always on with WSJ digital.

READ NOW AT WSJ.COM/MARKETS

THE WALL STREET JOURNAL.
Read ambitiously

MARKETS

Oil Outlook Grows Darker

Banks in survey again cut forecast amid doubts about OPEC and rising U.S. output

By MARINA FORCE

Banks have cut their forecasts on oil prices for a fourth consecutive month, as markets brace for more supply when OPEC's agreement to cap output is expected to end next year.

Members of the Organization of the Petroleum Exporting Countries renewed a deal with other crude-oil producers in May to withhold almost 2% of global oil supply. The accord is set to expire in March and concerns are mounting among investors as that date approaches, although Saudi Arabia and Russia are pushing to extend the deal for three more months.

A poll of 14 investment banks, surveyed by The Wall Street Journal at the end of August, predicted that Brent crude, the international benchmark, will average \$54 a barrel next year, down \$1 from the July survey. The banks expect West Texas Intermediate, the U.S. oil gauge, to average \$51 a barrel in 2018, down \$2 from the previous survey.

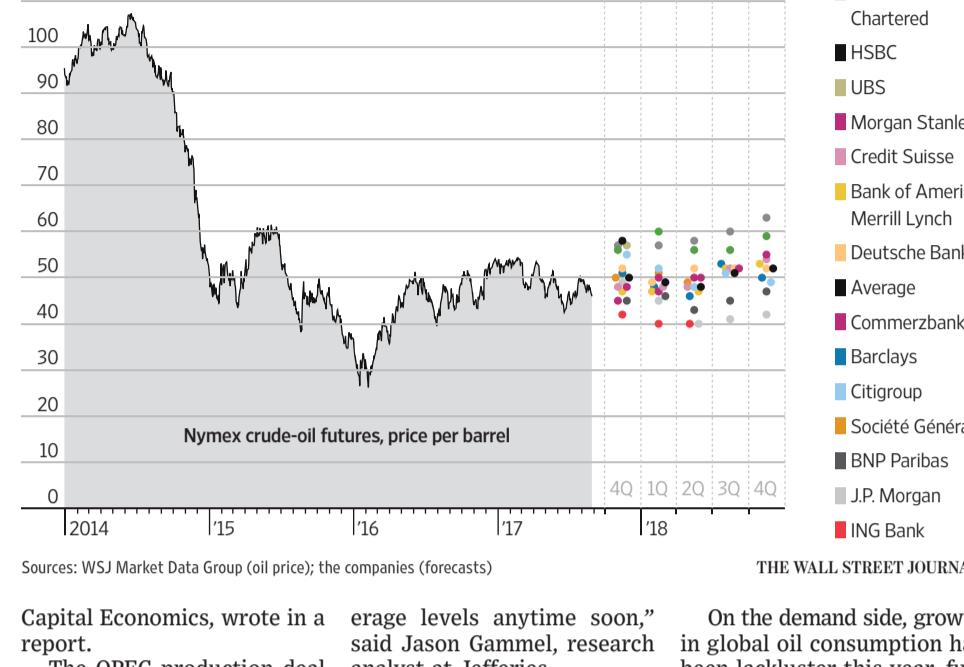
On Friday, Brent crude fell 0.2%, to \$52.75 a barrel, while West Texas Intermediate rose 0.1%, to \$47.29.

The survey was conducted before Hurricane Harvey crippled refineries on the U.S. Gulf Coast. Analysts say it is too early to predict what the longer-term impact of the storm will be, but it could have some beneficial effects on the oil price given that U.S. production has been hit.

"We still expect prices to fall back next year as the OPEC deal comes to an end and U.S. production growth accelerates again due to higher prices," Tom Pugh, commodities economist at

Looking Ahead at Oil Prices

Where investment banks in August's survey see the price of U.S. crude-oil futures in the next few quarters



Sources: WSJ Market Data Group (oil price); the companies (forecasts)

Capital Economics, wrote in a report.

The OPEC production deal is aimed at ending a global glut that has weighed on oil prices and shaken the economies of countries dependent on crude.

Market fundamentals have been going oil producers' way in recent months as inventory levels fall. On Wednesday, the U.S. Energy Information Administration reported that U.S. stockpiles, excluding the Strategic Petroleum Reserve, declined last week by 5.4 million barrels.

Stockpiles held by members of the Organization for Economic Cooperation and Development declined in May, according to the latest available data from the International Energy Agency.

Despite this bullish data, analysts don't believe prices will be heading much higher.

"While we estimate that a very modest undersupply will persist through the end of the year, OECD inventories are unlikely to return to five-year av-

erage levels anytime soon," said Jason Gammel, research analyst at Jefferies.

Analysts also say that without further output caps, production from OPEC and Russia may rise, flooding the markets with crude and potentially sinking prices. Even if the agreement was renewed, analysts doubt compliance with it would be guaranteed.

"We could see increasing dissatisfaction within individual members, who then will begin to overproduce on their quotas," said Hamza Khan, head of commodity strategy at ING Bank.

Indeed, many OPEC nations, which rely on oil for a substantial part of their budgets, are already failing short of their reduction targets.

Rising U.S. production, and increased supply from Libya and Nigeria, two OPEC members that are exempt from production caps, has added to the bearish sentiment about the market, said Carsten Fritsch, an analyst at Commerzbank AG.

On the demand side, growth in global oil consumption has been lackluster this year, further hampering efforts to reduce the glut.

"If you add higher supply with weaker demand growth, you end up with a market we believed is oversupplied and susceptible to lower prices," Mr. Khan said.

The banks in the survey expect prices to stay below \$60 a barrel in 2019. These analysts predict that Brent will average \$58.47 a barrel, down from \$76 a barrel in the August 2016 survey.

Analysts still see the U.S. shale industry as being key to the longer-term outlook for oil prices. Some predict that the country will produce just shy of 10 million barrels a day next year, from around 9.3 million now. That would be this industry's highest-ever annual average.

"We see continuing records being broken for U.S. production.... That limits the power and ability of OPEC to control oil prices," Mr. Fritsch said.

China Firm to Buy European Lender

By MARGOT PATRICK

Legend Holdings Corp. made one of China's biggest forays into European banking with an agreement to buy **Banque Internationale à Luxembourg SA** from its Qatari owners and turn it into an international banking brand.

Beijing-based Legend, best known for its stake in computer maker **Lenovo Group Ltd.**, said Friday that it would pay **Precision Capital SA** €1.48 billion (\$1.76 billion) for an 89.9% stake, valuing BIL at €1.6 billion. The Luxembourg government will continue holding the remaining shares.

BIL is Luxembourg's oldest privately owned bank, founded in 1856, when steel production dominated the grand duchy's economy. Legend Holdings Chairman Liu Chuanzhi said the plan is to take BIL beyond being a national champion and make the brand international, while keeping its base in Luxembourg.

Luxembourg, now reliant on financial services to power its economy, has become a hub for Chinese banks operating in Europe.

Only a few European banks have been bought by the Chinese, though. In 2014, China's **Haitong Securities Co. Ltd.**

bought the former Banco Espírito Santo investment-banking business for €379 million.

Precision Capital is a vehicle of Qatar's royal Al-Thani family. It bought the bank in 2011 when BIL's then-parent, Dexia, was selling assets to comply with requirements for a state bailout from France, Belgium and Luxembourg. The purchase price then valued the whole bank at €730 million.

BIL is Luxembourg's oldest privately owned bank, founded in 1856.

BIL had €37.7 billion in assets under management at the end of 2016 and total assets of €23.1 billion.

Legend is known for its portfolio of "new China" businesses in the consumer and financial sectors, seen as high growth because of the country's expanding consumer class.

The investment group already owns several financial services company in China and bought a stake in a U.K. pension insurer last year.



Legend's Liu Chuanzhi aims to make BIL's brand international.

BOBBY YIP/REUTERS

HEARD ON THE STREET

FINANCIAL ANALYSIS & COMMENTARY

WSJ.com/Heard

Email: heard@wsj.com

A Case for Selling the Swiss Franc

Even Lower, Even Longer

Consumer prices, change from a year earlier



Note: Eurozone inflation to August 2017, Swiss to July
Source: FactSet

of the bloc breaking up benefits the franc. Swiss outward investment flows, much of which traditionally landed in the eurozone, have collapsed since the crisis. As those fears fade, so should the franc. The first time the franc showed signs of weakening this year was in the wake of the French elections, won by the pro-Europe Emmanuel Macron.

The Swiss franc won't stop being a haven. When risk aversion rises, investors seem wired to embrace it. Italian elections next year could be a flashpoint. But unless there is a specific threat to eurozone cohesion, such reversals shouldn't prove too disruptive.

All that makes the Swiss franc a sell against the euro. Even if the franc falls from its current €0.875 to €0.83, a big move in currencies, it would only be at the highest level that the Swiss central bank allowed it to go in 2015. A further decline would make them happier.

Investors should go along for the ride. —Richard Barley

OVERHEARD

While they still beat car salespeople and members of Congress, the legal profession doesn't score very highly in public surveys about perceived ethics. Penny-ante tactics like this might be one reason why.

TD Bank branches in the U.S. used to be known for coin-counting machines called penny arcades, but they were removed over the past year or so. Blame a lawsuit that accused the bank of undercounting. While the bank didn't admit this happened, it chose not to litigate.

The 13 "class representatives" named in the lawsuit are set to receive awards not to exceed \$65,000. The lawyers have requested an award for their work not to exceed \$1,935,000. And the thousands of other customers allegedly shortchanged? The settlement should amount to at least 26 cents per \$100 exchanged, which, in the case of most customers, probably doesn't exceed the value of a first-class postage stamp.

Jobs Report Gives Boost To the Doves

Economists are famously said to worry whether what works in practice will also work in theory. Friday's modestly disappointing jobs report should put their minds at ease for now.

Before the revisions in August's report, five of the seven months through July had seen payroll growth of over 200,000 and the average of the preceding 12 months had been a robust 180,000, high figures so late in an economic recovery. According to a calculator maintained by the Federal Reserve Bank of Atlanta, a pace of just 166,000 jobs a month for the next 12 months would have taken the unemployment rate below 4%, a number not seen since the start of this century.

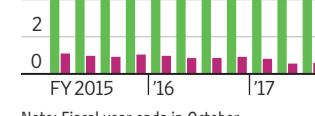
In that sense, then, August's payroll growth of just 156,000 and downward revisions to the past two months are a pause that refreshes. That could be seen immediately in the currency market as the dollar, which already was in a rut, fell sharply. Currencies weaken when economic data are awful—not the case now—and when the market reckons interest rates will fall or won't rise as much as believed.

Another blowout jobs number might have undercut doves on the Federal Open Market Committee who would like to slow down the pace of interest-rate increases until there were signs of stronger wage growth and inflation. Unemployment already is at the theoretical level that sparks price pressure. But if payroll growth is indeed cooling off, then the Fed can focus on hard data without worrying about labor-market slack and could well be on hold for the rest of 2017. —Spencer Jakab

Hewlett's Meg Whitman Has a Different Mess to Clean Up

Server Crash

Hewlett Packard operating results for enterprise group, quarterly



FY 2015 | '16 | '17

Note: Fiscal year ends in October
Source: FactSet

tic pileup.

So Ms. Whitman has some explaining to do, which hopefully will come during the company's fiscal third-quarter earnings call this

week. Hewlett Packard's stock price has fallen 7% following each of its last two quarterly reports. A slump in the sales of servers, data-storage gear and other enterprise tech hardware have put pressure on what is left of the business following the divestitures of its services and software divisions.

Ms. Whitman needs to show a way out of that slump, which won't be easy. Splitting from the computer-and-printer half nearly two years ago established Hewlett Packard Enterprise with a little over \$50 billion a year in annual revenue. The subsequent divestitures leave the enterprise group and fi-

nancial services units remaining, which are projected to generate about \$29 billion in combined revenue for the fiscal year ending in October, according to FactSet. That is down 6% from last year.

A big problem is servers, which will account for more than 40% of Hewlett Packard's revenue. Server sales for the six-month period ended April 30 slid more than 13% from the same period last year. Rival Dell, now private, has been pricing its own servers aggressively and has gained share. And Microsoft—Hewlett's largest customer—has been cutting back on server orders.

Hewlett Packard needs to stave off those declines, as well as show investors that the remaining business will still generate a healthy cash flow that can fund its dividend, buybacks and an acquisition campaign that has netted four companies already this year.

Ms. Whitman's flip-flop on the Uber job gave Hewlett Packard's investors and employees reason to question her commitment to the company. To win them back, Ms. Whitman has to prove she's either in it for the long haul or has a plan to put Hewlett Packard's wheel into other capable hands.

—Dan Gallagher