

THE WALL STREET JOURNAL.

DOW JONES | News Corp

MONDAY, JULY 24, 2017 ~ VOL. XLI NO. 228

WSJ.com

ASIA EDITION

As of 4 p.m. ET

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NIKKEI 20099.75 ▼ 0.22%

STOXX 600 380.16 ▼ 1.02%

BRENT 48.06 ▼ 2.52%

GOLD 1254.30 ▲ 0.76%

EURO 1.1661 ▲ 0.25%

DLR ¥111.18 ▼ 0.65%

What's News

Business & Finance

China reined in one of its brashest conglomerates with Xi's approval, barring state-owned banks from making new loans to Dalian Wanda to help fuel the property company's foreign expansion. **A1**

♦ Investors have been rushing out of China's tech stocks and instead pouring into large, government-backed enterprises. **B1**

♦ OPEC is having intensive talks ahead of a gathering Monday with allies about threats to an output deal that has failed to raise crude prices. **B8**

♦ Boeing cut over 6,000 jobs in the first half, its fastest pace in a decade as its stock hits new highs. **B1**

♦ Reliance's chairman said his company has developed a web-enabled mobile phone for the masses that will 'effectively cost zero.' **B4**

♦ GE told investors they'd have to wait four months to hear the new CEO's strategy for boosting results, sending shares lower. **B1**

♦ Two Norwegian firms are taking the lead in the race to build the world's first crewless, autonomously operated ship. **B4**

♦ The U.S. is toughening its scrutiny of Chinese deals, throwing a number of take-over bids into question. **B7**

♦ Robot developers are close to getting a machine to pick up a toy and put it in a box. **B1**

World-Wide

♦ Japan's growing military cooperation with India is moving slowly as the two nations struggle to contain China's expanding ambitions in the Indian Ocean. **A1**

♦ The U.S. will ban Americans from traveling to North Korea starting next month, citing risks for visitors. **A4**

♦ The White House signaled support for legislation that would punish Russia for its interference in the election. **A5**

♦ Seoul urged Pyongyang to restart military talks after North Korea ignored the South Korean leader's first formal outreach since taking office in May. **A4**

♦ Israel stepped up security at a Jerusalem holy site, installing additional cameras after a weekend of violence over the issue of metal detectors. **A3**

♦ Trump's request for voter details is fueling tensions between state election officials and federal authorities alongside debate over cybersecurity. **A5**

♦ The communications team shake-up at the White House highlights divisions in the administration. **A5**

♦ A Brooklyn trial will offer a rare look into the mechanics of how cybercriminals take control of computers to carry out attacks. **A7**

♦ Philippine lawmakers approved extending martial law in the southern island of Mindanao. **A4**

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China: RMB28.00; Hong Kong: HK\$23.00;
Indonesia: Rp25,000 (incl PPN);
Japan: Yen620 (incl JCT); Korea: Won4,000;
Malaysia: RM750; Singapore: \$55.00 (incl GST)

KDN PP 9315/10/2012 (03275); MCI (P)
NO. 066/01/2017; SK MENPEN RI NO. 01/
SK/MENPEN/SCJ/1998 TGL 4 SEPT 1998

ISSN 0377-9920 4.12.2.8

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Tour de France Riders Power Into Paris in Grand Finale



Xi Backs Limits On Deals Overseas

BY LINGLING WEI
AND CHAO DENG

BEIJING—China's government reined in one of its brashest conglomerates with the approval of President Xi Jinping, according to people with knowledge of the action—a sign that the broader government clampdown on large private companies comes from the top of China's leadership.

The measures, with President Xi's previously unreported approval last month, bar state-owned banks from making new loans to property giant Dalian Wanda Group to help fuel its foreign expansion.

The cutoff in bank financing for the company's foreign investments highlights Beijing's changing view of a series of Wanda's recent overseas acquisitions as irrational and overpriced, these people say.

Targeted along with Wanda are HNA Group Co., Anbang Insurance Group and Fosun International Ltd.—which had reputations for well-cultivated political ties.

"It feels like an avalanche," said Jingzhou Tao, a lawyer at Dechert LLP in Beijing who does mergers work. "This is sending a shock wave through the business community."

Since 2015, the four companies completed a combined \$55 billion in overseas acquisitions—or 18% of Chinese companies' total. In recent days, Wanda's billionaire founder Wang Jianlin has been shrinking his empire by selling assets

Please see WANDA page A2

♦ U.S. panel toughens scrutiny of Chinese deals..... B7

Tall Order in Tense Waters

While China takes aim at Indian Ocean, Tokyo and New Delhi struggle to contain it

BY DANIEL STACEY
AND ALASTAIR GALE

BAY OF BENGAL—Japan recently dispatched the largest warship it has built since World War II to a naval exercise here to signal its heightened commitment, alongside India and the U.S., to counter

China's expanding ambitions in the Indian Ocean.

The problem, however, is that Japan's growing cooperation with India is moving slowly and tentatively, while China has moved by leaps and bounds in developing vital ports and facilities in other countries around the Indian Ocean in recent years.

Japan's relationship with India has become increasingly important in the effort to contain China amid uncertainty in both countries over the extent of the U.S. military's commit-

ment to the region.

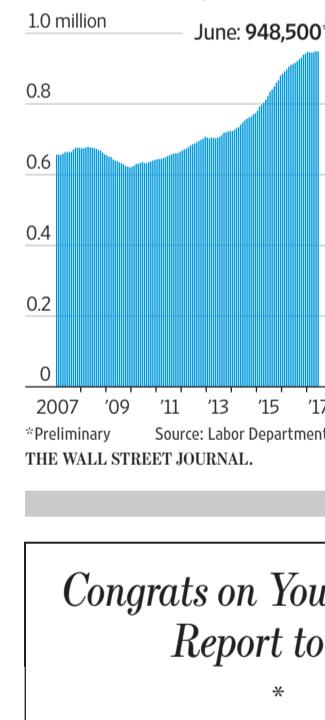
Japan, an island nation that relies heavily on seaborne trade and free sea lanes, has been beefing up its maritime defense forces and trying to forge stronger security ties with India through offers to build vital infrastructure and sell it amphibious aircraft and other military equipment.

Japanese officials have expressed growing concern that tensions in the South and East China Seas could spread to the Indian Ocean, jeopardizing the country's important trade

links with fast-growing nations in Africa, as well as with Middle Eastern countries that supply Japan with around 90% of its crude-oil needs.

But cooperating with India has proved incremental and challenging. This month, the U.S., Japan and India held their annual Malabar joint naval exercises, involving subs, destroyers and jet fighters. Hailed as one the effort's most celebrated achievements was the successful sale and transfer of small amounts of fuel by the

Please see NAVIES page A2



WALL STREET TURNS LANDLORD

Big investors transform suburban neighborhoods, making single-family homes into rentals

BY RYAN DEZEMBER
AND LAURA KUSISTO

SPRING HILL, Tenn.—When real-estate agent Don Nugent listed a three-bedroom, two-bath house here on Jo Ann Drive, offers came immediately, including a \$208,000 one from a couple with a young child looking for their first home.

A competing bid was too attractive to pass up. American Homes 4 Rent, a public company that had been scooping up homes in the neighborhood, offered the same amount—but all cash, no inspection required.

Twelve hours after the house went on the market in April, the Agoura Hills, Calif.-based real-estate investment trust

signed a contract. About a month later, it put the house back on the market, this time for rent, for \$1,575 a month.

A new breed of homeowners has arrived in this middle-class suburb of Nashville and in many other communities around the U.S.: big investment firms in the business of offering single-family homes for rent. Their appearance has shaken up sales and rental markets and, in some neighborhoods, sparked rent increases.

On Jo Ann Drive alone, American Homes 4 Rent owns seven homes, property records indicate. In all of Spring Hill, four firms—American Homes, Colony Starwood Homes, Progress Residential and Streetlane Homes—own nearly 700 houses, ac-

cording to tax rolls. That amounts to about 5% of all the houses in town, a 2016 census indicates, and roughly three-quarters of those available for rent, according to Lisa Wurth, president of the local Realtors' association.

Those four companies and others like them have become big landlords in other Nashville suburbs, and in neighborhoods outside Atlanta, Phoenix and a couple dozen other metropolitan areas. All told, big investors have spent some \$40 billion buying about 200,000 houses, renovating them and building rental-management businesses, estimates real-estate research firm Green Street Advisors LLC.

The buying spree amounts to a huge Please see HOMES page A6

Congrats on Your Newborn! Please Report to 'Mom Jail'

* * *

New mothers face a month of pampering in China. Some try to escape.

Ye Zhen changed out of her pajamas and into street clothes, tucked a baseball cap over her head and slipped out the door of her room.

With her accomplice husband by her side, she walked past the guard posted in the hallway, keeping her head down and taking care to avoid eye contact. Moments later she strolled out into the Shanghai sunshine, a free woman.

Ms. Ye had escaped, but not from a jail or prison. She had busted out of a yuezi center, a Chinese facility where new mothers spend a month taking things easy after giving birth.

The centers are all the rage among Chinese moms who can afford the \$15,000 or so it costs for round-the-clock pampering by nannies, health-care profes-

sionals and nutrition specialists. The centers provide a modern spin on the traditional at-home yuezi, when new mothers stay in bed and let others take care of the cooking, cleaning and child care.

Confinement is part of the bargain, as centers help mothers avoid the perils and germs of the outside world. The new yuezi centers try to ease the ordeal with posh accommodations rivaling those of high-end hotels. Indeed, some yuezi centers are located on leased floors of luxury hotels.

New mothers know before check-in that they won't be allowed to come and go as they please. Even so, some inmates struggle to stay put for a month.

"My daughter and I got meticulous care, but it was like a

Please see MOMS page A6

INSIDE



BOEING KEEPS CUTTING JOBS AS SHARES RISE

BUSINESS & FINANCE, B1



WHY BOOM HAS ENDED FOR VINYL

LIFE & ARTS, A8

Steep Climb in U.S. College Cost Eases

By JOSH MITCHELL

U.S. college tuition is growing at the slowest pace in decades, following a nearly 40% rise over the past three decades that fueled middle class anxieties and a surge in student debt.

Tuition at college and graduate school—after scholarships and grants are factored in—rose 1.9% in the year through June, broadly in line with overall inflation, Labor Department figures show.

By contrast, from 1990 through last year, tuition grew an average 6% a year, more than double the rate of inflation. In that time, the average annual cost for a four-year private college, including living expenses, rose 161% to about \$27,500, according to the College Board.

Some schools are offering more discounts and are cutting prices.

Abundant supply is running up against demand constraints. The number of two-year and four-year colleges increased 33% between 1990 and

2012 to 4,726, Education Department data show.

But college enrollment is down more than 4% from a peak in 2010, partly because a healthy job market means fewer people are going back to school to learn new skills.

Longer-running economic and demographic shifts also are at play.

Lower birthrates and the aging of baby boomer children have reduced the pool of traditional college-age Americans. The number of new high-school graduates grew 18% between 2000 and 2010 but only 2% in the first seven years of this decade, Education Department data show.

Another factor: Congress last increased the maximum amount undergraduates could borrow from the government in 2008.

Some economists have concluded that schools raise prices along with increases in federal financial aid. A clampdown on aid, in turn, could limit the ability of schools to charge more.

Please see COSTS page A7

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Japan: Yen620 (incl JCT); Korea: Won4,000;

Malaysia: RM750; Singapore: \$55.00 (incl GST)

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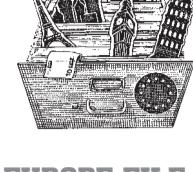
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WORLD NEWS

Markets Risk Shock If No Brexit Deal Is Struck



EUROPE FILE

By Simon Nixon

mental progress through two rounds of negotiations on the path to a negotiated divorce.

Crucially, the U.K. government has finally accepted there is no chance the U.K. can negotiate both this divorce agreement and a new free-trade agreement with the EU in the 20 months before the U.K. leaves the EU.

When it comes to European crises, the markets have learned that it is always wise to bet on a deal. But Brexit may be different.

Other than a sharp devaluation in sterling in the immediate aftermath of last year's referendum, markets have remained remarkably steady through a year of political turmoil.

Yet Britain will quit the EU in March 2019 whether there is a deal or not—and the market may be underestimating the risk of a deal not being reached in time.

True, since Prime Minister Theresa May's botched election gamble in June, London has made a series of compromises which have allowed the two sides to make some incre-



Prime Minister Theresa May headed to Parliament on Wednesday.

forced businesses to re-engineer supply chains and the government was obliged to establish a multitude of new regulators, agencies and international agreements. This approach would also lead to the reintroduction of a hard border in Ireland, which both sides want to avoid.

In public, the government has yet to acknowledge this dilemma exists. Officially, it is still hoping to achieve a "have your cake and eat it" Brexit in which the U.K. maintains frictionless trade with the EU while restricting EU migration and securing its own bilateral trade deals.

But privately, Downing Street admits this is impossible—and that it needs to set out its choice soon if the Brexit process is to remain on track. Its problem is that while it could accept the U.K. being a rule-taker in some sectors, such as chemicals—and could even contemplate indirect jurisdiction of the European Court of Justice via an alternative supranational dispute resolution mechanism such as the European Free Trade Association court—it couldn't accept the U.K. being a rule-taker in

on this, there can be no deal.

Boiled down, the U.K.'s dilemma lies in choosing whether post-Brexit Britain should be a rule-taker or rule-maker.

Does the U.K. want a "deep and special partnership with the EU," as Mrs. May claims, in which case it will need to remain closely bound by EU rules over which it will no longer have any say, while continuing to pay into the EU budget and allowing EU citizens preferential rights to work in the U.K.?

Or is the U.K.'s priority to "take back control of our

borders, our money and our laws," as Mrs. May also claims, which would mean a more detached relationship?

The rule-taker option would minimize the economic disruption of Brexit but would leave the country vulnerable to future changes in EU rules and would reduce the U.K.'s scope to seek its own independent trade deals—a political priority for Brexiters.

The rule-maker option would give the U.K. more control, but at the expense of potentially severe medium-term disruption as new barriers to trade with the EU

sectors such as financial services. Yet the EU has rejected such "cherry-picking."

If there is no easy way forward, could Brexit be reversed instead? That looks difficult, too, not least because the opposition Labour Party is split three ways. Some would welcome a second referendum, but the party's hard-left leadership sees in Brexit an opportunity to advance a socialist agenda impossible under EU rules, and erstwhile pro-Europeans who represent traditional working-class constituencies that backed Brexit now believe the priority must be to limit EU migration.

Even opponents of Brexit agree that there would be no point in holding a second referendum without a clear shift in public opinion combined with evidence that the EU was willing to offer a fresh deal on migration. As things stand, neither of those conditions look like being met.

That leaves the U.K. in a dark place. The market is clearly right to believe that a deal is the rational outcome. But what if the deeply divided U.K. political system, faced with no good options, is no longer capable of rational decision-making?

NAVIES

Continued from Page One

Indian navy to a Japanese ship.

The fuel sale was a "very historic event" that demonstrated increased trust between the countries, said Rear Adm. Yoshihiro Goka, Japan's commander for the exercises, speaking with The Wall Street Journal aboard the USS Nimitz.

U.S. officials said they also purchased fuel from India's navy, the first use of a logistics-sharing agreement signed last August with India that marked a major shift away from India's decades of military neutrality toward the U.S.

"We are increasingly operating at further ranges from our own shores, and our integral logistics are quite stretched," said Rear Adm. Biswajit Dasgupta, India's commander for the exercise.

India's baby steps toward a deeper and more meaningful partnership with Japan and the U.S. come as the country is being confronted by China's rapid progress in the region. Experts say India has long believed its vast land and sea borders were best left undeveloped to avoid providing useful infrastructure for potential invaders. Now, with China building highways along India's Himalayan border and constructing ports in neighboring countries, India is facing the reality that it needs to spend heavily to keep up.

Key strategic sites in the Andaman and Nicobar Islands, an Indian archipelago at the eastern gateway to the Indian Ocean, haven't been developed, even as China has forged ahead with new ports in Pakistan and Sri Lanka.

The U.S. has been largely



Bulking Up in The Indian Ocean

As China expands its military profile in the region, Japan is joining India and the U.S. in trying to counter it with a greater naval presence there.

■ China ■ India ■ Japan
■ United States

■ Diego Garcia Base

Diego Garcia Base

500 miles

500 km

THE WALL STREET JOURNAL.

WORLD NEWS

Resentment Festers in the Wake of ISIS

Baghdad struggles to regain trust, rebuild war zones following Islamic State battles

By MARIA ABI-HABIB

RAMADI, Iraq—Latifah Rasheed is the 74-year-old matriarch of a Sunni Arab family that lived, until one year ago, under Islamic State rule. A son and two grandsons fought for Islamic State and were killed by the Iraqi forces who wrested their town from the extremists.

Mrs. Rasheed and her surviving sons and grandsons said they were prepared to embrace a new Iraq under the Shiite-led government in Baghdad—but Shiite militias guarding their town said they would arrest the men if they return.

"If we're unable to return home, we'll join whatever comes after Islamic State," said Mrs. Rasheed, who is now living with 13 family members in a one-bedroom home on the outskirts of Baghdad. On the day she spoke to *EDS* July 13, a double suicide attack killed nine pro-government forces in her town, Garma, about 35 miles east of Ramadi.

Such is the challenge Iraq faces in rebuilding cities and towns liberated from Islamic State amid a cycle of sectarianism that shows little sign of ending and an insurgency that remains active across much of the country.

Iraqis from the Sunni Arab minority have been on the outside of power since the 2003 ouster of Saddam Hussein's regime—an upheaval that ushered in the multiple reincarnations of Sunni insurgency that spawned Islamic State.

Three years ago, when Islamic State took over about 40% of Iraqi territory, its gains were restricted to Iraq's three Sunni-majority provinces.

With the recent recapture of the city of Mosul, Sunni lands



Latifah Rasheed in a home she shares with 13 relatives. 'If we're unable to return home, we'll join whatever comes after Islamic State.'

have now been largely retaken. Yet one-third of the country's seven million Sunni Arabs have been displaced. Some are blocked from returning at checkpoints manned by Shiite or Kurdish militias screening for militants. Others are prevented from returning because of Islamic State mines.

Many more have no homes to return to, after the militants and the battles to remove them destroyed their towns.

"Islamic State flourishes in poverty and desperation," said Ibrahim al-Awsaj, mayor of the Sunni city of Ramadi, which was retaken from the Sunni extremists more than a year ago. "We'll see a second, third or fourth version of Islamic State."

The mayor rattled off the problems his city has faced since it was retaken 1½ years ago. Around 80% of infrastructure remains damaged, includ-

ing 40,000 of the city's 63,000 residential units.

In this climate, said Mr. Awsaj, who is Sunni, thousands of war widows are struggling to feed their children, many of them sons and daughters of Islamic State fighters. That leaves families vulnerable to insurgents who have drafted child soldiers and lured the destitute by offering salaries.

Government officials say rebuilding has been slow because of a lack of federal funds and international aid. Prime Minister Haider al-Abadi said this month that the government is working at maximum capacity to return the displaced.

U.S. Col. Ryan Dillon, the spokesman for the U.S.-led campaign to beat Islamic State, praised what he said were Mr. Abadi's efforts to involve all ethnicities and religions in reunification and reconstruction.

For many Sunnis, Baghdad isn't doing enough. "This government is a complete failure.

The only thing it's good for is corruption and sectarianism," Mrs. Rasheed said. That view has helped fuel multiple incarnations of Sunni insurgency.

The Iraqi government is working to regain the population's trust to fight off future radicalism by employing local residents to help with reconstruction.

"With Islamic State, Iraqis have learned their lesson. Islamic State ended in destruction and Iraqis won't let themselves be cheated again," said Dr. Majda Mohamed, spokeswoman for a special task force designed to stabilize post-Islamic State areas.

Baghdad doesn't have enough money to rebuild war zones. The economy is heavily dependent on oil and the global slump in

prices left the central government without enough revenue.

About \$210 million has been put into Iraq's reconstruction fund since it was created in 2015, far from the \$100 billion that the government estimates is needed. In some places where reconstruction has started, residents said corruption is seeping into the process.

Saad Hamadi, 33, clears Ramadi's streets of the postwar detritus. As a city employee, he is supposed to be paid 15,000 Iraqi dinars a day, or about \$13. He said he usually gets 10,000 dinars because the municipality charges him to use their tools. That, he says, is illegal.

"We already lack services and then we see that we are victims of corruption," said Mr. Hamadi. "The people talk, but no one listens to us."

—Ghassan Adnan contributed to this article.

Sunni Discontent Fueled Militants

Ex-Saddam-era officers established insurgency

After the 2003 U.S.-led invasion, a group of Iraqi and foreign fighters emerged as al Qaeda in Iraq. The group was soon infused with military officers forced by the U.S. from their posts, with thousands of government officials, because they were members of former President Saddam Hussein's Baath Party.

Disgruntled security officers established the insurgency that haunts Iraq to this day.

The insurgents killed thousands of U.S. and Iraqi troops before the group was severely weakened by 2007 and melted back into the population.

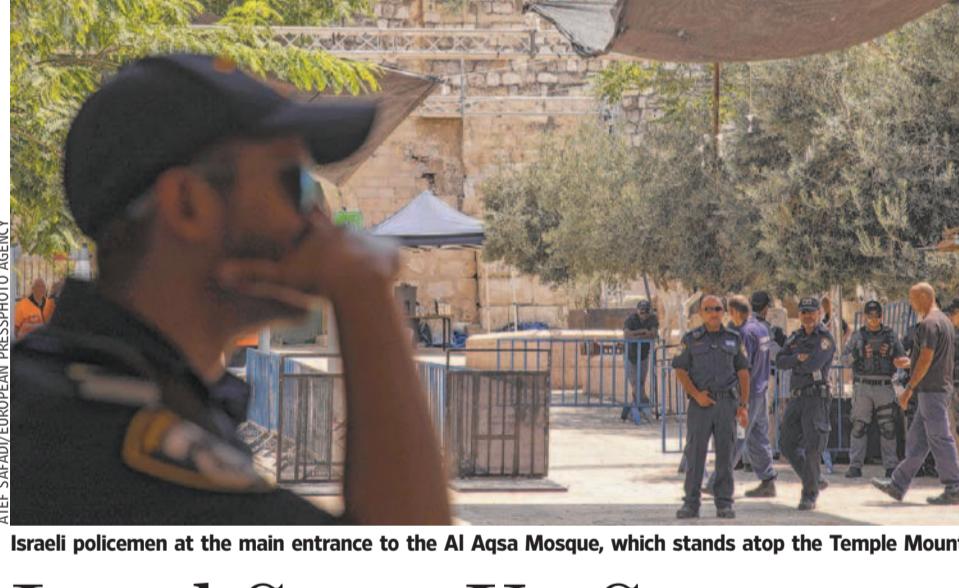
In the years that followed, they pursued a low-level insurgency while maintaining ties to local Sunni communities.

Sunni discontent with the government continued to fester, and in 2013, Sunni insurgents took advantage of antigovernment protests in parts of Iraq. They called themselves "tribal revolutionaries"—then, in 2014 unfurled their black banners and morphed into Islamic State.

As the group sought to set up a religious empire across Iraq and Syria, it presented itself as the protector of a minority under siege.

Three years of war against Islamic State have done little to heal the divides between majority Shiites and the sizable Sunni Arab and Kurdish minorities.

—Maria Abi-Habib



Israeli policemen at the main entrance to the Al Aqsa Mosque, which stands atop the Temple Mount.

Israel Steps Up Security After Violence at Shrine

By RORY JONES

Israel is doubling down in its standoff with Palestinian and Muslim religious authorities over the use of metal detectors at one of Jerusalem's holiest shrines, installing additional cameras at the site after a weekend of bloodshed over the controversial issue.

Israeli police on Sunday added the surveillance equipment to the existing metal detectors at the main entrance to the ancient shrine compound known to Muslims as the Noble Sanctuary and Jews as the Temple Mount, an Israeli official said.

Israel installed the detectors last week after Arab gunmen shot dead two Israeli policemen at the site, located in Jerusalem's Old City. That attack led Israeli authorities to close the Temple Mount to all Muslim men under the age of 50 during the following week's Friday prayers. Tension over the site then sparked violence across the city.

"The checkpoints will stay," Tzachi Hanegbi, a minister in Prime Minister Benjamin Netanyahu's government, told Army Radio. "The government of Israel isn't willing to put up with acts of murder."

Attempts by the Palestinian Authority to cut ties with Israel would only damage that body's own security and economic interests, Israeli defense minister Avigdor Lieberman warned Sunday.

In governing parts of the

West Bank, the Palestinian Authority is deeply intertwined with Israel.

Security services from both sides work closely and thousands of Palestinians cross from the West Bank to Israel each day for work, making a permanent break in ties unrealistic.

The latest confrontation at the Temple Mount strikes at the heart of a longstanding dispute over who holds ultimate sovereignty over it.

Israel captured the area from Jordan in the 1967 Arab-Israeli war, but allowed the Waqf, a Jordanian religious authority, to continue to administer the site. Palestinians, meanwhile, want the compound as part of the capital of a future independent state.

"We oppose all means Israel implements at the entrance to the Al Aqsa Mosque including metal detectors," the Waqf said in a statement Sunday, referring to the mosque that stands atop the Temple Mount.

Israeli security forces on Friday clashed with thousands of Palestinians protesting the metal detectors, arguing that they don't provide additional security and undermine the shrine's holiness. Three Palestinians were killed, Palestinian authorities said.



LET'S BUILD THE NEW CLARK INTERNATIONAL AIRPORT TERMINAL ASIA'S NEXT PREMIER GATEWAY

INVITATION TO PRE-QUALIFY AND BID

The Bases Conversion and Development Authority (BCDA), in cooperation with the Department of Transportation (DOTr), is inviting interested parties to qualify and bid for the Engineering, Procurement & Construction (EPC) Contract for the design, engineering and construction of the Clark International Airport Facilities, including the development of a new passenger terminal.

BIDDING INFORMATION

Bidding is open to all interested parties, whether local or foreign, subject to conditions for eligibility under the Invitation to Bid Documents.

Interested bidders may purchase the (i) Invitation to Pre-Qualify and Bid (ITP), (ii) Project Information and Memoranda (PIM) and the (iii) Instructions to Bidders (ITB) including its annexes at the BCDA Head Office, 2nd Floor, Bonifacio Technology Center, 31st St., corner 2nd Avenue, Bonifacio Global City, Taguig City, Metro Manila, Philippines. The PIM and the ITB (including Annexes) will be available by 10 August 2017.

The Invitation to Pre-Qualify and Bid may be purchased for a non-refundable fee of One Million Pesos (PhP1,000,000.00).

Invitation Documents will be publicly available at www.bcdagov.ph

Interested parties must submit all Pre-Qualification and Bid Documents on the date and time provided in the ITB (including Annexes or supplement bulletins), at the BCDA Corporate Center, 2nd Floor Bonifacio Technology Center, 31st St., corner 2nd Avenue, Bonifacio Global City, Taguig City, Metro Manila, Philippines.

BCDA shall reserve the right to reject any or all bids, declare a failure of bidding, modify the Invitation Documents or any aspect thereof anytime, and/or not award the EPC Contract for any reason whatsoever and without need to explain to any party.

WORLD NEWS

U.S. to Ban Tourist Visits to North Korea

BY JONATHAN CHENG
AND FELICIA SCHWARTZ

The U.S. will ban American citizens from traveling to North Korea starting next month, the State Department said Friday, citing growing risks to Americans who venture into the country.

Secretary of State Rex Tillerson authorized the decision "due to mounting concerns over the serious risk of arrest and long-term detention under North Korea's system of law enforcement," State Department spokeswoman Heather Nauert said.

The travel ban comes just weeks after U.S. college student Otto Warmbier, who was detained while on a tour in Pyongyang last year, died after he returned home in June with a severe brain injury.

Mr. Tillerson had told lawmakers after Mr. Warmbier's death that he was considering a ban. The State Department said Friday those seeking to travel to North Korea for limited humanitarian or other purposes could apply for an exception by using so-called special validation passports. Otherwise, American passports will be considered invalid for use in traveling to or through North Korea.

The ban will take effect in late August, 30 days after the State Department publishes public notice, which Ms. Nauert said will occur next week.

The ban was signaled earlier Friday by tour operators. The two largest travel companies involved in taking Western tourists to the isolated country, China-based Koryo Tours and Young Pioneer Tours, said they learned of the impending ban from the Swedish embassy in Pyongyang, which handles U.S. diplomatic affairs in North Korea and had contacted them separately by phone to inform them of the U.S. decision.

Officers at both companies said the Swedish Embassy told them the U.S. would make the announcement on Thursday next week. Violating the ban would lead to the U.S. government invalidating the traveler's passport, Young Pioneer said it was told.

Young Pioneer stopped bringing U.S. tourists to North Korea last month following the death of Mr. Warmbier, who went to North Korea in late 2015 on a tour organized by the company.

At least three Americans are being held in North Korea, though none was a tourist. Two are tied to a Chris-

tian university in Pyongyang. At least 16 American citizens have been detained in North Korea over the past decade, according to the State Department.

About 5,000 Western tourists visit North Korea each year, with roughly one-fifth of them U.S. citizens, according to Simon Cockerell, general manager of Koryo Tours, which has been bringing visitors to North Korea since 1993.

Tourists visiting North Korea aren't typically allowed to travel independently and gen-

erally join group tours, where they are closely chaperoned by representatives of official state entities.

Tourism companies catering to the demands of tourists with less-conventional tastes have sprung up in recent years in the U.S., Europe, China and Australia. Most tours to North Korea last between three days and two weeks and are focused on Pyongyang, though some have included activities such as train travel, skiing and surfing.

Mr. Cockerell said Friday that the travel ban would be

"a big blow to us," and it would likely reduce the willingness of other Western nations to travel to North Korea.

U.K.-incorporated Koryo Tours accounts for about 40% of the overall volume of Western tourists to North Korea, he estimates. Mr. Cockerell criticized the U.S. decision.

"All interactions between North Koreans and Americans, who are very much demonized in the country, will grind to a halt, and the North Koreans will only be left with their own media to portray Ameri-

cans as they like," he said.

Some travelers in the U.S. said they thought a ban would be unfair to Americans curious to learn about the closed society.

"I think it's an overreach on the part of the American government," said Stacy Stone, 28, of Chattanooga, Tenn., who spent two weeks in North Korea in October, traveling with U.K.-based tour operator Secret Compass. "They need to allow American citizens to make their own choice."

—Kris Maher contributed to this article.



A tourist takes a photograph in a subway station in the North Korean capital, Pyongyang, on Sunday. About 5,000 Western tourists visit North Korea each year.

WORLD WATCH



REST FOR THE WEARY: The Hong Kong Observatory raised its alert as a strengthening Typhoon Roke approached the eastern part of the city, stopping basic service, but then lowered it as it weakened. A man rested at a ferry pier on Sunday ahead of the storm.

SOUTH KOREA

Legislature Boosts Budget by \$10 Billion

South Korea's National Assembly passed a nearly \$10 billion supplementary budget after a contentious week of legislative debate, approving a key component of the new left-leaning president's plan to boost Asia's fourth-largest economy through public-sector hiring.

President Moon Jae-in, who took office in May after his predecessor was forced from office in March following a national corruption scandal, has pledged to create 810,000 new public-sector jobs over his five-year term. Saturday's agreement will provide budget support for 2,575 public-sector positions, including police and airport personnel.

The approval of the supplementary budget, which totals roughly 11 trillion Korean won, comes as South Korea faces slowing growth at its large conglomerates, an economic standoff with its biggest trading partner China, a declining population and growing concerns of U.S. trade protectionism.

Domestically, South Korea is tackling challenges from youth

unemployment, an issue Mr. Moon has said could become a "national disaster" unless urgently addressed. Half of the roughly 1 million unemployed workers are between 15 and 29 years old.

—Eun-Young Jeong

PHILIPPINES

Manila Extends Mindanao Martial Law

The Philippine Congress has overwhelmingly approved the president's appeal for martial law in the southern island of Mindanao to be extended to the end of the year, a boost to the massive offensive aimed at quelling a two-month siege by Islamic State-linked militants.

House of Representatives Speaker Pantaleon Alvarez said senators and House members voted 261-18 to grant President Rodrigo Duterte's request in a special joint session Saturday.

The military chief of staff warned during the session that aside from the siege in Marawi, extremists could stage similar attacks in other southern cities.

More than 500 people have been killed and about half a million displaced by the fighting.

—Associated Press

AUSTRALIA

Central Bank Sought To Calm Rate Worry

The deputy governor of Australia's central bank tried to hose down overheating market speculation that the Reserve Bank of Australia has signaled rate increases to come, the latest indication of concern at the RBA over reaction to meeting minutes released earlier this week.

In a speech to business leaders in Adelaide, RBA Deputy Gov. Guy Debelle said there were no new policy conclusions to be drawn from discussions over the nominal neutral cash rate that came to light in the minutes released Tuesday.

In the minutes from its July 4 policy, the RBA said it estimated the neutral cash rate for ensuring stable growth of the economy and prices to be 3.5%, 200 basis points above the current record low rate of 1.5%.

Currency and bond traders took the comments as a signal the RBA was starting a discussion about the looseness of monetary policy, sending the Australian dollar to its highest levels in more than two years.

—James Glynn

GREECE

Two Tourists Die in Island Earthquake

Experts examined the damage to cultural monuments and infrastructure on the eastern island of Kos after a powerful earthquake killed two tourists and injured nearly 500 people in the Aegean Sea region stretching to Turkey's sprawling coast.

Residents and tourists were still jittery as a series of aftershocks rocked the island. A tremor measuring a preliminary 4.4 magnitude struck at 8:09 p.m. Saturday, sending residents and restaurant customers scurrying toward the middle of the town's main square, as far away as possible from buildings.

Sixteen minutes later, a second 4.6-magnitude tremor struck, the Athens Geodynamics Institute reported.

Hundreds of residents and tourists spent Friday night sleeping outdoors on the island, too afraid to return to their homes or hotels after the quake early Friday. Many camped out in parks and olive groves, or slept in their cars or on beach and swimming pool lounge chairs.

—Associated Press

Pyongyang Snubs A Seoul Opening

BY JONATHAN CHENG

SEOUL—South Korea urged North Korea to "respond quickly" to a proposal to restart military talks between the two sides after Pyongyang ignored South Korean President Moon Jae-in's first formal outreach to its northern rival since taking office in May.

Mr. Moon's proposal last Monday, to meet at a truce village between the two Koreas on Friday, went unacknowledged by North Korea.

Mr. Moon's proposal to start talks came after he delivered a sweeping policy speech in Berlin this month calling for more engagement with North Korea, a central policy of his. Mr. Moon is the first South Korean president in nearly a decade to advocate close ties with Pyongyang.

In addition to military talks, Mr. Moon has also called for restarting reunions of families separated by the Korean War in the early 1950s. Mr. Moon has also advocated the reopening of a joint inter-Korean industrial park and cooperation between the two sides at the Winter Olympics, which are scheduled to take place in South Korea early next year.

Mr. Moon's dovish approach to inter-Korean relations comes as the U.S., the United Nations Security Council and the European Union weigh tougher sanctions on North Korea following the country's test-launch of an interconti-

nental ballistic missile capable of reaching parts of the U.S.

The U.N.'s Food and Agriculture Organization warned of food shortages in North Korea after months of drought, which it called the country's worst since 2001.

Scott Snyder, a senior fellow for Korea studies at the Council on Foreign Relations, said that while Mr. Moon is following a previous playbook that led to summit meetings between North Korea's then-leader Kim Jong Il and his South Korean counterparts, current North Korean leader Kim Jong Un doesn't seem to be as receptive to Seoul's advances.

Silence follows South Korean president's first offer of talks since taking office in May.

Mr. Snyder said it might be more productive for South Korea to work on building trust with North Korea behind the scenes, "rather than continuing to put forward public balloons that the North Koreans seem to be popping."

Tomas Ojea Quintana, the United Nations' special rapporteur for North Korea human rights, on Friday urged more patience, adding that "any process of engagement might take time."



A South Korean officer in the truce village of Panmunjom, where South Korea proposed holding talks with North Korea.

U.S. NEWS

Request for Voter Details Rattles States

Frustrations mount over federal demand; cybersecurity is also fuel for debate

By ALEXA CORSE

State election officials often fly under the radar, and many prefer it that way. But an unusual records demand from President Donald Trump's election-integrity commission, along with an intensifying debate over cybersecurity, is thrusting these officials into the spotlight.

And, on both fronts, tensions have arisen with federal authorities.

U.S. and state officials say they want fair and accessible elections. But in interviews, state officials described frustrations as the two sides debate the best way to cooperate.

"These federal efforts are causing a lot of alarm at the state level, particularly for chief election officials," said Kay Stimson, a spokeswoman for the nonpartisan National Association of Secretaries of State.

"It's bipartisan," she added.

On July 19, the election-integrity commission, chaired by Vice President Mike Pence and formally called the Presidential Advisory Commission on Election Integrity, held its first meeting in Washington, D.C.

Last month, state officials of both parties criticized the

panel's request for voters' personal information, to the extent permitted by state law, sent in a letter to all 50 states by commission Vice Chairman Kris Kobach.

Several states said their laws prevented them from providing all the requested information, and expressed concerns about privacy and data-sharing. Others said they viewed the request as potential federal interference in what they say is by rights a state matter.

"They can go jump in the Gulf of Mexico, and Mississippi is a great state to launch from," said Delbert Hosemann, Mississippi Secretary of State and a Republican.

Since then, the commission has asked states to wait on submitting the voter records until U.S. District Judge Colleen Kollar-Kotelly in Washington, D.C., issues a ruling in a lawsuit filed by a privacy advocacy group over the panel's request.

Mr. Trump has made unsubstantiated claims that fraud was the reason that Democrat Hillary Clinton won the popular vote in the 2016 election. Independent experts say there is no evidence to support that. Also recently, Department of Homeland Security official Jeanette Manfra said that there is evidence hackers may have targeted several state election systems during the 2016 election, causing alarm in state capitals and Washington about the voting process.



The Presidential Advisory Commission on Election Integrity had its first meeting this month.

At a meeting of the commission last week, Mr. Trump questioned states' decisions to hold back information. "If any state does not want to share this information, one has to wonder what they are worried about, and I asked the vice president, I asked the commission, what are they worried about?" Mr. Trump said. "There's something, there always is."

The commission asked only for information that is in many cases already publicly available and isn't trying to violate vot-

ers' privacy, said Bill Gardner, New Hampshire Secretary of State and a Democrat, who also is a member on the panel.

Tensions between federal and state authorities are also evident in a back-and-forth over Washington's attempts to help the states guard their election systems against cyberintrusions.

Homeland Security Secretary John Kelly said recently, at the Aspen Security Forum in Colorado, that states that refuse federal cybersecurity help for their election systems are

"nuts."

"All of the input I get from all of the states are, 'We don't want you involved in our election process,'" Mr. Kelly said.

DHS began offering cybersecurity assistance to state and local officials last August, as U.S. intelligence and law-enforcement agencies detected potential hacking attempts against election systems.

By the November election, 33 states and 36 cities and counties had used DHS tools or sought advice from the agency, Jeh Johnson, the former secre-

tary of homeland security, told the House Intelligence Committee last month.

In January, Mr. Johnson formally designated election systems "critical infrastructure," which federal officials said would help DHS prioritize election security efforts.

But state officials said it isn't clear whether the designation will affect how they run elections. Several state officials said they are worried that states would provide information to DHS but might not get timely intelligence about potential threats in return.

"There is certainly some tension," said Edgardo Cortés, commissioner of the Virginia Department of Elections. "This is new for everyone, so it's going to take some time for everyone to work well together."

Still, Tre Hargett, Tennessee's secretary of state, said that Mr. Kelly "made clear the door was open for states to ask for assistance."

State officials met with federal representatives earlier this month at a conference of the National Association of Secretaries of State in Indianapolis. DHS official Robert Kolasky, who attended the meeting, said the department is working to answer questions about organizing a "coordinating council" for information-sharing, and whether some state officials would be eligible for security clearances to view classified threat information.

White House Backs Sanctions Bill

By NATALIE ANDREWS

WASHINGTON—The White House supports legislation that would punish Russia for its interference in the 2016 election, a spokeswoman said Sunday, despite its previous objection to measures restricting the president's power to remove sanctions on Moscow.

Congressional negotiators reached a deal late Friday to advance the bill, previous versions of which White House spokeswoman Sarah Huckabee Sanders had said contained provisions that eroded the president's power to conduct diplomacy. President Donald Trump has said he wants to improve America's relationship with Russia and has been slow to embrace the conclusion of intelligence agencies that Moscow meddled in the election.

But on Sunday, Ms. Sanders said on ABC's "This Week" that necessary changes had been made to the legislation. "Look, the administration is supportive of being tough on Russia, particularly in putting these sanctions in place," she said.

Anthony Scaramucci, who on Friday was named White House communications director, was more cautious about the president's direction while speaking on CNN's "State of the Union." Mr. Scaramucci said Mr. Trump "hasn't made the decision yet to sign that bill," but suggested he wasn't sure what would happen because it was his "second or third day on the job."

The White House didn't immediately respond to a request to clarify.

The House is slated to vote Tuesday on a package of sanctions against Russia, Iran and



Guidance released by House Majority Leader Kevin McCarthy showed the vote is expected Tuesday.

North Korea, according to guidance released by House Majority Leader Kevin McCarthy (R., Calif.). The new Russian sanctions, which passed the Senate last month in a 98-2 vote, have been held up in the House over disputes about a provision that would have prevented the House minority from introducing legislation to block the president if he chose to remove the sanctions.

The new deal is a compromise between Republican and Democratic leaders. It also makes some concessions to oil-and-gas companies.

"Those who threaten America and our interests should take notice—your actions have consequences," Mr. McCarthy's Twitter account posted Saturday.

The compromise legislation, which must pass the House and

Senate, would tighten restrictions on the extension of credit to Russian entities and limit Russian businesses in the energy and defense sectors from partnering with U.S. citizens. It also would require the president to seek Congress's permission to relax any sanctions against Russia.

The bill would allow a senator to bring up a resolution of disapproval if the administration moves to lift the sanctions, and it would expedite House consideration of such a resolution once it passes the Senate.

Passing the bill before the August recess would give lawmakers a bipartisan victory to take to constituents back home, as they continue to tussle over health care and a tax overhaul. The legislation is expected to move forward, as the deal was negotiated by both parties and

a similar North Korea sanctions bill passed the House in May with overwhelming bipartisan support.

The White House response to the bill is being closely watched, because despite the administration's previous criticism of the legislation, a failure to sign it could prompt criticism that Mr. Trump is siding with President Vladimir Putin amid investigations into the Russian interference in the election and into possible ties between Mr. Trump's associates and Russia.

Russia has denied interfering in the election. Mr. Trump has said there was no collusion between his campaign and Russia and has called questions about campaign associates' ties to Russia a "witch hunt."

—Michael C. Bender contributed to this article.

GOP Health Stumbles Upset Party Base

By JANET HOOK
AND JIM CARLTON

The GOP drive to remake the U.S. health-care system, which fueled the party's rise to power in the past eight years, is becoming a political liability for Republicans, whose inability so far to pass a sweeping health bill in the Senate has angered many conservatives and could weigh on the party in next year's elections, interviews with voters and political leaders in three states show.

While Senate GOP leaders are preparing a long-shot rescue effort next week, the collapse of legislation to repeal and replace the Affordable Care Act would mark a failure to deliver on a longstanding promise to ditch the Obama-era law, due to differences among lawmakers about what a replacement plan should look like.

"We're already five years too

late," said Don Tatro, executive director of the Builders Association of Northern Nevada. "I am disappointed it's gone this long."

At the same time, some senators have been wary of backing a bill that would sharply curb Medicaid spending and boost the ranks of the uninsured. The pressure is especially intense for the party's two most vulnerable Senate incumbents up for re-election in 2018, Dean Heller of Nevada and Jeff Flake of Arizona, who have been targets of President Donald Trump for crossing him on health care and other issues.

For senators in safer seats, such as Sen. Ted Cruz of Texas, the political consequences are less immediate. Mr. Cruz is considered likely to win re-election, but even he is worried about blowback from Republicans angry that the party has not accomplished more with the broad

power in Congress and the White House that voters have given it.

Republicans hold a 52-48 margin in the Senate and a more comfortable margin in the House.

"The hard-fought gains of the last eight years have come to naught because a handful of Republican senators don't see that they're part of a team," said Paul Simpson, chairman of Texas' Harris County GOP, who said there is growing concern that GOP discontent would depress turnout during the 2018 midterms.

Mr. Cruz, in an interview, said he believed he was in a strong position in Texas, but he warned that the consequences of failure to deliver on the party's signature health-care promise could be "catastrophic."

"We could lose control of both houses of Congress," he said. "There will be severe elec-

toral consequences."

Strategists from both parties believe that health care will be a far more important issue in the 2018 midterm elections than the controversy over allegations that Mr. Trump's presidential campaign had improper ties to Russia.

The Republicans most at risk of backlash from the base may have some political breathing room: Those who have most openly broken from the party to derail Senate action—including Sens. Susan Collins of Maine, Lisa Murkowski of Alaska and Shelley Moore Capito of West Virginia—are not up for re-election until 2020 or 2022.

For senators facing voters next year, another political danger looms: They risk provoking the vengeance of Mr. Trump, who has demanded that the Senate try one more time this week to revive legislation to overhaul the ACA.

Trump's Media Staff Shift Signals Divide

By PETER NICHOLAS
AND MICHAEL C. BENDER

President Donald Trump's communications team shake-up Friday capped the rise and fall of one of the White House's most recognizable faces, press secretary Sean Spicer, and underscored the president's deep dissatisfaction with the team and his willingness to take action to fix it.

The changes also point to divisions in the White House, where top officials clashed over the hiring of former New York hedge-fund investor Anthony Scaramucci as communications director.

In a long-simmering staff shuffle, Mr. Scaramucci took over a 35-person team that has often struggled to push through a message amid rapidly moving events and a stream of tweets from a president who relishes the reach of social media.

Mr. Spicer's deputy, Sarah Huckabee Sanders, will succeed him, putting her behind the lectern for daily press briefings that, on days they are televised, command audiences rivalling those of TV soap operas.

Mr. Scaramucci's appointment was backed by Jared Kushner, the president's son-in-law and senior adviser, and opposed by Reince Priebus, the White House Chief of Staff, according to people familiar with the matter.

The hiring unsettles, at least in the short term, a West Wing chain of command that has been beset by constant competitions for power. Mr. Scaramucci said he would be reporting directly to Mr. Trump.

Until now, the communications team was largely under the influence of Mr. Priebus, who had stocked it with Republican National Committee aides who worked for him when he was party chairman. By installing Mr. Scaramucci in the job, Mr. Trump is in essence diluting Mr. Priebus's power base.

The new appointment also strengthens the position of Mr. Kushner, presumably giving

him a new internal ally.

Mr. Spicer, during his six-month stint as press secretary, became something of a mini-celebrity, famously satirized on NBC's "Saturday Night Live" by comedian Melissa McCarthy.

Ms. McCarthy's portrayal was a hit with many viewers but not in the West Wing, where aides privately worried that Mr. Spicer was getting unwanted attention distracting from the White House's agenda.

Mr. Spicer's tenure drew criticism from the get-go when he claimed on the president's first full day in office that more people had witnessed the inauguration—"in person and around the globe"—than any in history.

Pictures taken of the event showed that the crowd was smaller than that of former President Barack Obama's inauguration in 2009.

Over time, Mr. Spicer's public role diminished. The White House began barring TV cameras from the briefings and Ms. Sanders picked up more of his duties.

Mr. Scaramucci, 53 years old, comes to the job without the years of government or campaign communications experience that his predecessors had.

But a few parts of his résumé clearly appealed to Mr. Trump, an avid cable-news viewer: He is a polished TV figure, having been a contributor to Fox Business Network. He also tangled successfully with CNN, a network that Mr. Trump and other White House officials view as an antagonist.

Last month, CNN retracted a story it had written about Mr. Scaramucci. Three CNN staffers resigned, a development Mr. Trump highlighted on Twitter.

In his debut in the White House press briefing room Friday, Mr. Scaramucci was pressed by reporters on whether he would reopen press briefings to TV cameras. He made no commitments.

"I obviously am committed to being transparent because I'm standing here," he said.



Mr. Scaramucci is the new White House communications director.

IN DEPTH

HOMES

Continued from Page One
bet that the homeownership rate, which currently is hovering around a five-decade low, will stay low and that rents will continue to rise. The investors also are wagering that many people no longer see owning a home as an essential part of the American dream.

"People are realizing that houses are not necessarily the best places to store wealth," says Michael Cook, operations chief at closely held Streetlane Homes, which owns about 4,000 houses.

For many years, the rental-home business was dominated by small businesses and mom-and-pop investors, most of whom owned just a property or two. Big investment firms concentrated on other real-estate sectors—apartment buildings, office towers and shopping centers—reasoning that single-family homes were too difficult to acquire en masse and unwieldy to manage and maintain.

Big Buyers

That all began to change during the financial crisis a decade ago. Swaths of suburbia were sold on courthouse steps after millions of Americans defaulted on mortgages. Veteran real-estate investors raced to buy tens of thousands of deeply discounted houses, often sight unseen. The big buyers included investors Thomas Barrack Jr. and Barry Sternlicht—who later merged their rental-home holdings to create Colony Starwood—Blackstone Group LP, the world's largest private-equity firm, and self-storage magnate B. Wayne Hughes, who is behind American Homes.

On the first Tuesday of each month during the crisis, investors sent bidders to foreclosure auctions around Atlanta, where the foreclosure rate exceeded 3% in 2011, according to real-estate data firm CoreLogic Inc. Similar scenes played out in Phoenix, where the foreclosure rate hit 5% in late 2010, and in Las Vegas, where it reached nearly 10%.

Big investors pay cash and never fuss over the carpet or paint color.

The big investors accumulated tens of thousands of houses around those cities and others, including Dallas, Chicago and all over Florida, then got to work sprucing them up to rent. Often, renovations were major. Invitation Homes Inc., the company Blackstone created to manage its rental homes and took public in January, says it spent an average of \$25,000 fixing up each of the foreclosed homes it bought.

The bulk-buying brought blighted properties back to life and helped speed the recovery of some of the regions hardest hit by the housing crisis. Executives at the investment firms say they offer homes in good school districts to families that may not be able to buy in those neighborhoods because of damaged credit and tighter post-crisis lending standards.

One of those firms, Progress Residential, is owned by a pri-



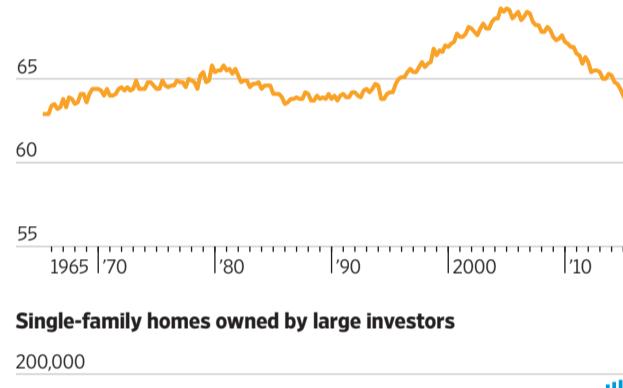
LIVE SHARRETT FOR THE WALL STREET JOURNAL

Four big companies have bought nearly 700 single-family homes in Spring Hill, Tenn., about 5% of all the houses in town.

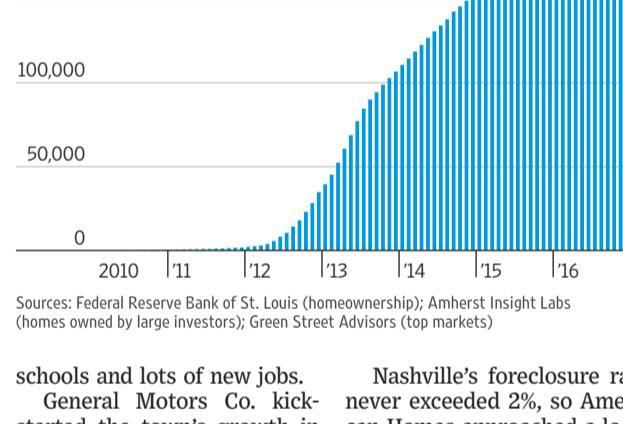
Home Rental Goes Corporate

As the U.S. homeownership rate has declined, big investors have gotten into the business of buying single-family homes and offering them for rent.

U.S. homeownership rate



Single-family homes owned by large investors



Sources: Federal Reserve Bank of St. Louis (homeownership); Amherst Insight Labs (homes owned by large investors); Green Street Advisors (top markets)

Top markets for five of the largest single-family-home rental companies, June estimate

Atlanta	24,075 homes for rent
Tampa-St. Petersburg	14,100
Phoenix	13,300
Miami/Ft. Lauderdale	10,925
Charlotte	10,750
Orlando	9,075
Dallas	8,825
Houston	8,200
Chicago	5,750
Las Vegas	5,400

THE WALL STREET JOURNAL.

schools and lots of new jobs.

General Motors Co. kick-started the town's growth in 1990 when it opened a vast plant for its now-defunct Saturn brand. The population has grown from about 1,500 back then to some 36,000 today, with subdivisions covering what had once been farmland.

American Homes arrived in 2012, the year after it was founded by Mr. Hughes, now 83 years old, who made billions in the self-storage business, and David Singelyn, who is the company's chief executive. Mr. Hughes told one of his earliest investors, Alaska's state oil fund, that he imagined the sort of tenants he wanted—families with school-age children—and then went looking for suitable houses in good school districts.

They have deep pockets and are dispassionate buyers, paying with cash and never fussing over the carpet or paint color.

Spring Hill is about an hour's drive south of downtown Nashville. It has attracted investors for the same reasons families flock there: top-rated

Nashville's foreclosure rate never exceeded 2%, so American Homes approached a local builder, John Maher, who had been renting unsold homes in his subdivisions. The company bought about 50 homes from him and later paid about \$10 million for 42 rental homes in the area from local landlord Bruce McNeilage and his partners. Then it enlisted local brokers to find more.

Colony Starwood and Progress followed. The proliferation of rental homes spooked owners in some neighborhoods. A few subdivisions voted on whether cap the number of homes that could be rented, but the proposals failed.

"People want to sell their homes to the highest bidder, no matter who it is, and they want

to be able to rent their home," says Jamie Shipley, president of the Wakefield Homeowners Association, which governs a subdivision with 11% of homes owned by big investors.

Rent increases

Soon after American Homes closed its deal with Mr. McNeilage it increased rents on some properties by hundreds of dollars a month, say Mr. McNeilage and some of his former tenants.

"People who were on month-to-month leases got a real rude awakening," he says.

American Homes, which owns more than 48,000 houses nationwide, controls nearly half of Spring Hill's rental homes, leaving aggrieved renters limited choices. "If you want to be

in that subdivision and have your kids go to that elementary school, you have to deal with them," Mr. McNeilage says.

Jack Corrigan, American Homes' operations chief, says rent increases for tenants renewing leases average 3% to 3.5%, and the company generally restricts larger hikes to new leases. "We try to be very reasonable with all of our tenants," he says.

When Aaron Waldie moved to Spring Hill for a job in the finance department of a new hospital, he and his wife, Jessica, intended to use profits from selling their California home to buy a new house. Despite offering thousands of dollars above asking prices, the couple lost several bidding wars and settled for a rental owned by Colony Starwood. "It's a lot more expensive than homeownership," he said.

To assess how rents sought by Spring Hill's big four corporate owners compare with the monthly costs of owning the same properties, The Wall Street Journal analyzed information from the companies' marketing materials and county sales records for 27 homes purchased by the four since the beginning of March. The analysis—which assumed 10% down payments and 30-year fixed-rate mortgages, plus taxes and insurance—found the posted rents on those homes averaged 32% more than the monthly ownership cost.

The average rent for 148 single-family homes in Spring Hill owned by the big four landlords was about \$1,773 a month, according to online listings since April viewed by the Journal. Other landlords also have raised rents, brokers say.

"The rent is crazy," says Bruce Hull, Spring Hill's vice mayor and owner of a local home-inspection business. "It hasn't been that long since you could get a three bedroom, two bath for \$1,000 a month."

At a recent conference in New York, Mr. Singelyn, the American Homes CEO, told investors that the average household income declared by those applying to rent from American Homes had risen to \$91,000, from \$86,000 a year earlier.

"Their wherewithal to pay rent today as well as pay rent in the future, with increases, is sufficient," he said. "It's just up to us to educate tenants on a new way, that there will be annual rent increases. This has been a very passively managed industry for 30, 40 years up until institutional players came in."

When rents are significantly higher than the cost of ownership, renters tend to become house hunters. Builders who were sidelined during the recession are rushing to catch up to demand. Spring Hill issued more than 1,100 residential building permits for single-family homes since 2015, and over the past year its planning commission has rezoned and subdivided properties to accommodate thousands more, according to municipal records.

David Bowater and his fiancée were priced out of Spring Hill when the rent on their two-bedroom townhouse rose to about \$1,100, from \$875, over four years. "It's cheaper to buy at this point," he says.

After bidding on six homes, they won the seventh, which was farther into the countryside. "I just hope the bubble doesn't burst and our loan goes upside down," he says.

jing center. "But we need to know their reasons and then issue an exit permit."

Ms. Ye, the Shanghai woman who escaped her yuezi, said she didn't think the staff would grant her permission to leave. Her reason for going home: She missed her pet poodle, An'An.

Thus she found herself stealthily exiting the facility, posing as a guest who had been visiting. With her newborn safely tucked away in the center's nursery, Ms. Ye spent a joyful hour at home playing with An'An. She said she returned before dinner, and no one noticed. Emboldened, Ms. Ye managed two more yuezi breaks during her monthlong stay. Even that wasn't enough.

Ms. Ye had recently launched a clothing design firm and said she couldn't afford to let the business slide. She began convening staff meetings in her yuezi room. "Seeing my staff come and go, the nanny was dumbfounded," Ms. Ye recalled. "She tried to convince me to rest more, but eventually gave up."

—Fanfan Wang in Beijing

MOMS

Continued from Page One
well-equipped prison," said Ms. Ye, 33 years old. "I wanted to behave well so that they would release me earlier."

Food is a common complaint. By long tradition, there are many things women can and can't do during their month of rest, and what they eat is carefully regulated. Oily and salty foods are out, lest they cause breast-feeding mothers to give newborns indigestion.

Ren Xiaojing, a Beijing lawyer, checked herself into a palatial postpartum yuezi in a two-story mansion on the outskirts of the capital after giving birth to her second child. Ms. Ren, 36, says she lost her appetite after being served yet another in a series of bland lunches: steamed carrots, fried pig liver with black sesame oil, wheat buns and fish soup.

To Chinese taste buds accustomed to a riot of flavor, it was barely edible. Taking pity, Ms. Ren's mother brought her

salted preserved duck eggs to boost her appetite.

Lu Xiaolan said she got food cravings halfway into her yuezi in Shanghai. She begged her husband to sneak in Papa John's pizza topped with sausage and bacon. "I heated it up in a microwave after midnight," said Ms. Lu, 27, who works for an internet finance company. "It smelled and tasted so good."

Chen Lihui tried to stick to her yuezi meals, worrying that if she ate the wrong food, her baby twins might become allergic to her breast milk. But after days of bland meals, she could stand it no more. She begged friends to sneak in boxes of qingtuan, or dumplings stuffed with fillings such as red bean paste and pork floss, a popular Shanghai street food. Ms. Chen, 31, indulged in qingtuan, but limited herself to that. "Sometimes I had cravings, but for the sake of breast-feeding, I didn't dare to eat whatever I wanted," said Ms. Chen, a marketing manager in Shanghai.

The practice of yuezi is centuries old. By custom, the

woman stays at home and is tended to by her mother-in-law, since wives typically move in with their husbands' families. These guardians of tradition enforce a long list of yuezi don'ts: no showers, no hair-washing, no watching TV, no crying, and no cold food.

Sex? Don't even ask.

As an alternative, post-childbirth centers have been popping up all over China in the past several years, spurred in

part by Beijing's decision to end the one-child policy—making large numbers of professionals, entrepreneurs and other women of means eligible for one more go at child bearing.

Many of these women live in typically cramped Chinese apartments, where the prospect of a month confined with two children, a husband and elders is too much to bear.

"The yuezi was even worse than the childbirth," said

Wang Song, 34, an executive at a Beijing energy company, who stayed at home after the birth of her first child. Ms. Wang recalls soaking in sweat as her parents forced her to stay in bed under a mountain of blankets, lest she catch a chill.

"My mom is a retired doctor, but some of her knowledge is outdated," said Ms. Wang. "My mother-in-law also has her ideas of what's good for me. It's really tiresome just to deal with the relationships."

After the birth of her second child, Ms. Wang checked into a Beijing center, where she enjoyed a private room equipped with an air purifier and imported bassinet, attended to round-the-clock by nurses and nannies. Best of all, from Ms. Wang's point of view: Her relatives went back to their own homes at night.

Yuezi center staffers also tend to be a bit more lax on the rules than mothers-in-law. "We understand that some new moms would want to watch a movie or go shopping from time to time," said Wei Hua, an administrator at a Bei-

jing center. "But we need to know their reasons and then issue an exit permit."

Ms. Ye, the Shanghai woman who escaped her yuezi, said she didn't think the staff would grant her permission to leave. Her reason for going home: She missed her pet poodle, An'An.

Thus she found herself stealthily exiting the facility, posing as a guest who had been visiting. With her newborn safely tucked away in the center's nursery, Ms. Ye spent a joyful hour at home playing with An'An. She said she returned before dinner, and no one noticed. Emboldened, Ms. Ye managed two more yuezi breaks during her monthlong stay. Even that wasn't enough.

Ms. Ye had recently launched a clothing design firm and said she couldn't afford to let the business slide. She began convening staff meetings in her yuezi room. "Seeing my staff come and go, the nanny was dumbfounded," Ms. Ye recalled. "She tried to convince me to rest more, but eventually gave up."

—Fanfan Wang in Beijing

YE ZHEN



Ye Zhen eats lunch while her daughter sleeps in a yuezi center.

woman stays at home and is tended to by her mother-in-law, since wives typically move in with their husbands' families. These guardians of tradition enforce a long list of yuezi don'ts: no showers, no hair-washing, no watching TV, no crying, and no cold food.

Sex? Don't even ask.

As an alternative, post-childbirth centers have been popping up all over China in the past several years, spurred in

part by Beijing's decision to end the one-child policy—making large numbers of professionals, entrepreneurs and other women of means eligible for one more go at child bearing.

Many of these women live in typically cramped Chinese apartments, where the prospect of a month confined with two children, a husband and elders is too much to bear.

"The yuezi was even worse than the childbirth," said

U.S. NEWS

Trial to Reveal World of 'Botnet' Hackers

By NICOLE HONG

An accused hacker will head to Brooklyn federal court in a trial that will offer a rare look into the mechanics of how cybercriminals take control of computers to carry out large-scale attacks.

In a trial that starts Monday, prosecutors will accuse Fabio Gasperini, a 34-year-old Italian citizen living in Rome, of directing a network of computer servers around the world to carry out "click fraud," in which hackers defraud advertising companies by getting payment for fake clicks on online ads.

Law-enforcement officials believe this is the first click fraud case in the U.S. to go to trial, despite the fact that it has been a growing problem for years in the advertising industry.

Mr. Gasperini, an information technology professional who was arrested in Amsterdam last year and extradited to the U.S., has pleaded not guilty to five charges, including computer intrusion and wire fraud. If convicted on all counts, Mr. Gasperini could face up to 70 years in prison.

Simone Bertolini, Mr. Gasperini's lawyer, sought to dismiss the case before trial, arguing the alleged crime didn't have enough of a connection to the U.S. "It's basically government overreaching to civil matters abroad," Mr. Bertolini said.

The trial will give jurors a detailed look at how attackers infect a network of computers with malicious software. Such



ROBERT CONNELLY/BLOOMBERG/MEDIA GETTY IMAGES

Prosecutors in New York charged Fabio Gasperini with computer intrusion and wire fraud, among other charges. His trial begins Monday.

networks, known as botnets, allow hackers to remotely control the computers and command them for criminal purposes, including to steal banking credentials, launch denial-of-service attacks and transmit viruses.

Law-enforcement officials say botnets play an increasing role in a wide range of crimes, heightening concerns that U.S. laws lag too far behind cybercriminals. Botnets have fueled a

surge in ransomware—which encrypts and hijacks files on a computer system and demands money in exchange for decrypting them—attacks that have crippled computers and businesses around the world.

Justice Department officials have urged Congress in recent years to modernize laws that fight cybercrime, including to criminalize the renting and selling of botnets. The primary

computer-hacking statute in the U.S., which was used to charge Mr. Gasperini, was passed in the 1980s and hasn't been amended since 2008.

In this case, prosecutors say Mr. Gasperini illegally installed malicious software on servers around the world, including in the U.S., that gave him remote access, constituting a botnet. Mr. Gasperini then installed computer scripts that caused

the servers to automatically "click" on website ads, appearing to advertising companies as clicks from human customers, according to the indictment.

Mr. Gasperini registered various websites in his name and contracted with an online advertising company in Italy to earn money every time an ad on one of his websites received a click, prosecutors say.

Beyond advertising compa-

nies, Mr. Gasperini is also accused of defrauding U.S. businesses that were paying for advertisements.

The trial testimony could feature some major U.S. companies. In a court filing last week, the defense asked the judge to stop jurors from hearing any evidence related to approximately two dozen companies, including Walt Disney Co., Procter & Gamble Co. and Nike Inc. Representatives for the companies didn't respond to requests for comment.

The filing didn't specify what evidence is connected to these companies, and the government has declined to comment. The companies weren't named in the indictment.

Based on court filings, Mr. Gasperini's defense will likely use their own technical experts at trial to undermine the government's forensic evidence and raise questions about the authenticity of online communications.

"Anyone can open an email account with any name," Mr. Bertolini wrote in a court filing.

The government hasn't stated how much Mr. Gasperini profited from the alleged scheme. The indictment says Mr. Gasperini obtained information worth more than \$5,000, but prosecutors wrote in a court filing that they are "not obligated to allege a loss amount."

Mr. Gasperini's lawyer said the government has no proof Mr. Gasperini took any information of value.

Baltimore Homicide Rate Roils City's Leadership

By SCOTT CALVERT

BALTIMORE—For the Rev. Donté Hickman, the recent spurt of violence in his church's East Baltimore neighborhood—where six people have been killed since April—is disheartening.

"We thought we ended the fires that were burning, but those fires have turned into gunfire," he said, referring to riots after the 2015 death of Freddie Gray from injuries the 25-year-old man sustained in police custody.

While Chicago gets more attention as being the center of urban crime in the U.S., Baltimore has long had a higher rate of homicide, and near-daily killings in 2017 have produced a nearly 20% increase in homicides from a year ago. With 193 homicides in a city of 615,000 people, Baltimore is on track for its highest per capita homicide rate on record and one of the highest in the U.S. in years.

Other cities like New Orleans and Philadelphia are also contending with double-digit percentage surges in homicides. In Charlotte, N.C., homicides are up about 70%. After soaring last year, killings in Chicago are running 5% higher.

"We still see homicide numbers that are well beyond what they were even four years ago in a number of our cities," said Darrel Stephens, executive director of the Major Cities Chiefs

Association, which represents police chiefs from the nation's largest cities. "We just don't want to go back to the days of the '90s with the levels of violence we had."

This year is the third in a row with elevated violent-crime levels in a number of U.S. cities, though not all have experienced consistently high murder counts and violent crime nationwide remains well below 1990s levels, said University of Missouri-St. Louis criminologist Richard Rosenfeld. New York and Los Angeles have fewer homicides than Baltimore despite having several times its population.

Officials point fingers over sustained violence that mirrors some other cities.

"Baltimore has always been in the top tier of cities when it comes to lethal violence, but the surge especially this year is quite worrisome," he said. "Baltimore is an extreme example of what I think is a broader problem."

The spree in Baltimore, which police say is fueled partly by gang warfare over drug turf, has sparked a tense debate among officials about how to tamp down the violence. Mary-

land Gov. Larry Hogan, who deployed National Guard troops to Baltimore to quell the April 2015 riots, has had pointed words for police, prosecutors and judges.

"We're not doing as many arrests as we used to, and the ones that are getting arrested are not being prosecuted by the state's attorney," the Republican governor said in a recent radio interview. "The ones the prosecutors do take, the court system is not giving them the time that they should get—they're letting them back on the streets to commit crimes again."

Baltimore's chief prosecutor, State's Attorney Marilyn Mosby, a Democrat, defended her office's record. She said prosecutors work closely with police in her office's gun-violence enforcement division and seek the strongest sentences possible in cases involving violence.

Police Commissioner Kevin Davis, echoed by Mayor Catherine Pugh, has called on judges to give tougher sentences for gun crimes. The police department analyzed 605 gun-related convictions since the beginning of 2016 and found 56% of defendants had more than half their prison sentence suspended—meaning they wouldn't have to serve that time if they meet probation requirements.

The original sentences in the 339 cases averaged six years. Many of the convictions were for possessing a handgun with-

out a state-issued license or carry permit, or for being a felon illegally possessing a firearm.

"They're emboldened because they're not being held accountable for the crimes they commit," Mr. Davis said of gun offenders.

A spokesman for the judiciary didn't respond to requests for comment on the analysis but said sentences are guided by many factors, including appeals court rulings and the Constitution.

Mayor Pugh, a Democrat who took office in December, is pushing for a mandatory one-year sentence for illegal handgun possession within 100 yards of a school, church, park, public building or other public

place of assembly—a description that would cover much of the city. The proposal has drawn criticism from some City Council members who question whether it would deter criminals.

Meanwhile, gun arrests in Baltimore are down roughly 30% from last year. Mr. Davis points to his decision to dismantle a centralized gun unit after seven officers were federally charged with racketeering.

"The simple fact is we're not arresting people with guns, we don't have as many gun arrests," said City Councilman Brandon Scott.

Gene Ryan, president of the local Fraternal Order of Police union, said one factor is hesitancy by officers who remain

disillusioned by the prosecution of their six colleagues who were criminally charged in Mr. Gray's death. None of the six were convicted. Mr. Gray didn't have a gun when he was arrested for alleged illegal knife possession.

"It's certainly in the officers' minds: Could I wind up being charged and being put in jail for doing my job?" Mr. Ryan said.

Hanging over the debate is a court-enforced process to overhaul the Baltimore Police Department.

The city and federal government agreed to a consent decree in January after a Justice Department report alleged longstanding unconstitutional practices. An independent monitor hasn't yet been chosen to manage the overhaul, which a federal judge will oversee.

COSTS

Continued from Page One

Some of these trends may persist.

The number of high-school graduates is projected to remain flat through 2023, according to an analysis by the Western Interstate Commission for Higher Education. White graduates, the most likely among races to attend college, are expected to decline over this period.

"The competition is bigger now than it has been, and I think we have more informed consumers," said Sarah Kottich, chief financial officer at College of Saint Mary in Omaha, Neb.

The small private women's college cut out-of-pocket tuition 10% for the coming year, to an average of \$14,600 after aid, its first reduction in at least two decades.

Officials made the move after analyzing research from SLM Corp.'s Sallie Mae, a private student lender, showing high prices are a major factor

Higher Education Inflation

College and graduate-school tuitions rose rapidly in recent decades but are now growing roughly in line with overall inflation.

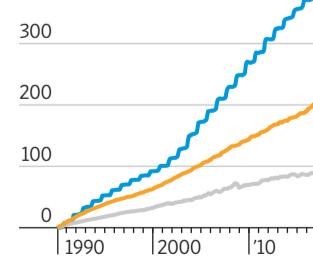
College tuition, change from a year earlier



for students when they eliminate schools from their searches, Ms. Kottich said.

Moody's Investors Service projects shifting consumer behavior will restrain pricing for years. "We don't think we will return any time soon to some of the double-digit increases we saw postrecession," Moody's analyst Susan

Prices, change since 1990



Fitzgerald said.

But other factors could keep cost pressures rising. George Pernsteiner, head of State Higher Education Executive Officers, a trade group that tracks state funding for schools, notes that many states are on track to experience budget crunches as the population ages and health-

care and public pension costs rise. That could squeeze public support for schools.

Moreover, the number of schools is declining in response to oversupply, particularly among for-profit schools, a trend that could reduce competition and increase pricing leverage for schools that remain open.

For now, the shakeout is hitting private schools hardest. For-profit trade schools and many private nonprofit colleges are under pressure to justify high prices, particularly because some graduates are failing to land high-paying jobs.

The broad decline in undergraduate enrollment since 2010 has been concentrated mostly among small nonprofit colleges, for-profit trade schools and public community colleges, federal data show.

Public four-year colleges, which teach the majority of bachelor's candidates in the nation and tend to be cheaper than private schools, are benefiting from increases in direct state funding as tax revenues improve.

That has eased schools' need to raise prices on students. During the recession, the reverse occurred. States cut funding to plug budget gaps and colleges raised tuition to offset the cuts.

State officials have also pressured schools, through legislation and public speeches, to rein in prices, and they are admitting more international students to boost revenues.

The average cost of attending the University of Washington in Seattle fell two years ago, in part due to state legislative mandates to ease tuition. Average tuition and living expenses stood at \$10,100, after scholarships and grants, in 2015, down 3% from two years earlier.

A school spokeswoman said one factor was that more students were living at home to avoid room-and-board payments.

College remains a daunting expense for many households. Moreover, because tuition levels were high to begin with, even small percentage increases can translate into

large dollar amounts.

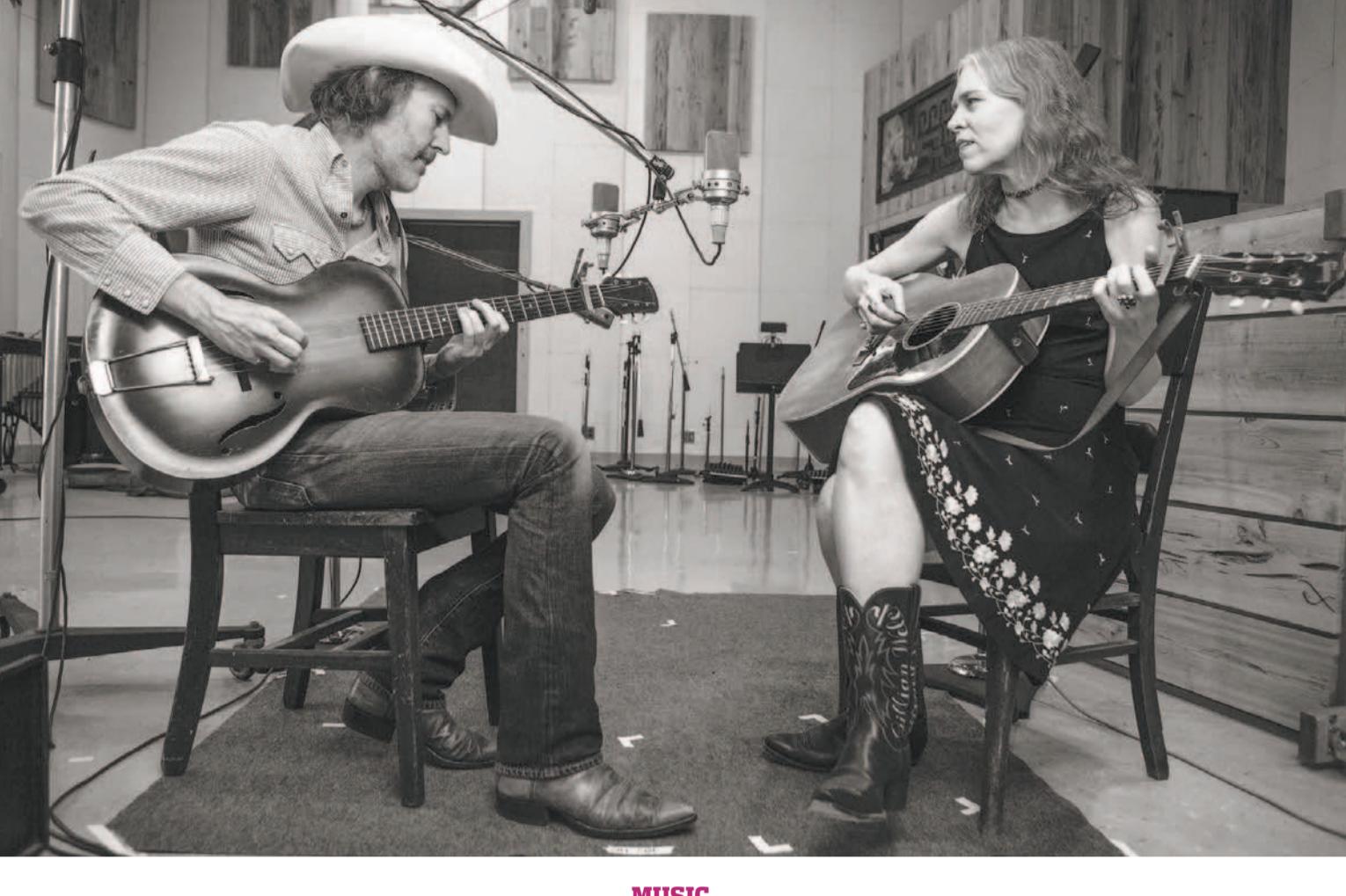
Most undergraduates take on student loans, and graduate owing an average \$30,000, according to the nonprofit advocacy group the Institute for College Access & Success.

The sharp rise in tuition and student debt in the past generation stoked concerns that college became out of reach for many families.

A Federal Reserve survey released in May showed 37% of Americans age 30 and younger who hadn't attended college said it was too expensive. About 43% of those who attended but dropped out pointed to the cost.

Two-thirds of private colleges that experienced enrollment declines over the past three years pointed to price sensitivity among prospective students as an important factor, according to the National Association of College and University Business Officers. The group said discounting, or the practice of schools offering scholarships and other forms of aid to reduce tuition, reached a record this year.

LIFE & ARTS



FROM TOP: DAVID MCCLISTER FOR THE WALL STREET JOURNAL; BISHOP MARCUSSEN

MUSIC

Why Vinyl's Latest Boom Is Over

As purists complain about low quality and high prices, vinyl sales taper off;
Gillian Welch and David Rawlings cut their own records

BY NEIL SHAH

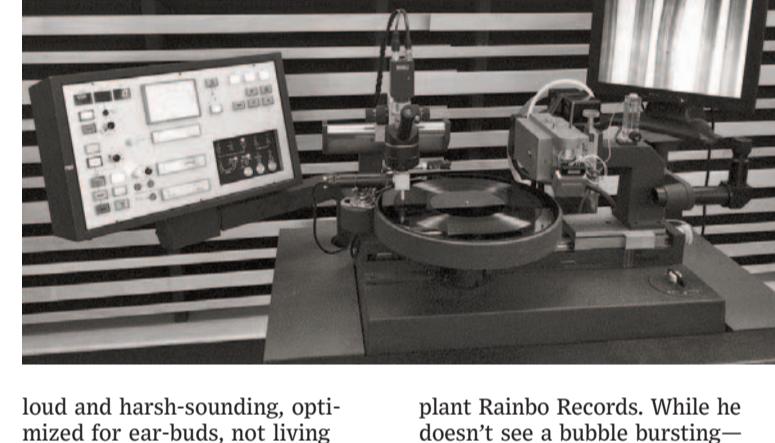
FOLK MUSIC DUO Gillian Welch and David Rawlings were frustrated by the quality of vinyl LPs being produced today. So they decided to cut their records themselves.

"What people do nowadays is take a digital file and just run vinyl off that," says Mr. Rawlings, a lanky musician who plays a 1935 Epiphone Olympic guitar. "In my mind, if we were going to do it, I wanted to do it the way the records I love were made—from analog tapes."

The Nashville-based singer-songwriters, who gained fame with "O Brother, Where Art Thou" in 2000, spent \$100,000 to buy their own record-cutting contraption in 2013. The cutting lathe makes the master copy of a record—the one sent to a pressing plant for mass reproduction. The couple's first LP, a re-issue of their 2011 Grammy-nominated "The Harrow & the Harvest," arrives July 28.

Ms. Welch and Mr. Rawlings have gone to extreme lengths to solve a problem many music aficionados say is an open secret in the music industry: Behind the resurgence of vinyl records in recent years, the quality of new LPs often stinks.

Old LPs were cut from analog tapes—that's why they sound so high quality. But the majority of today's new and re-issued vinyl albums—around 80% or more, several experts estimate—start from digital files, even lower-quality CDs. These digital files are often



loud and harsh-sounding, optimized for ear-buds, not living rooms. So the new vinyl LP is sometimes inferior to what a consumer hears on a CD.

"They're re-issuing [old albums] and not using the original tapes" to save time and money, says Michael Fremer, editor of Analog-Planet.com and one of America's leading audio authorities. "They have the tapes. They could take them out and have it done right—by a good engineer. They don't."

As more consumers discover this disconnect, vinyl sales are starting to slow. In the first half of 2015, sales of vinyl records jumped 38% compared to the same period the prior year, to 5.6 million units, Nielsen Music data show. A year later, growth slowed to 12%. This year, sales rose a modest 2%. "It's flattening out," says Steve Sheldon, president of Los Angeles pressing

plant Rainbo Records. While he doesn't see a bubble bursting—plants are busy—he believes vinyl is "getting close to plateauing."

When labels advertise a re-issued classic as mastered from the original analog tapes, the source can be more complicated. Sometimes they are a hodge-podge of digital and analog. Often "labels are kind of hiding what's really happening," says Russell Elevado, a veteran studio engineer and producer who has earned two Grammys working with R&B singer D'Angelo.

Mr. Rawlings says a Netherlands-based label, Music On Vinyl, used a CD to make vinyl copies of Ms. Welch's 2003 album "Soul Journey," getting a license from Warner Music Group. Ms. Welch and Mr. Rawlings, who didn't have rights to release the album in the U.K., found out when fans saw the vinyl selling on the Internet. They successfully

convinced Music On Vinyl to destroy the 500 copies that had been pressed, reimbursing the firm 3,300 euros for its costs. "This is commonplace," Mr. Rawlings says. A representative of Music On Vinyl could not be reached.

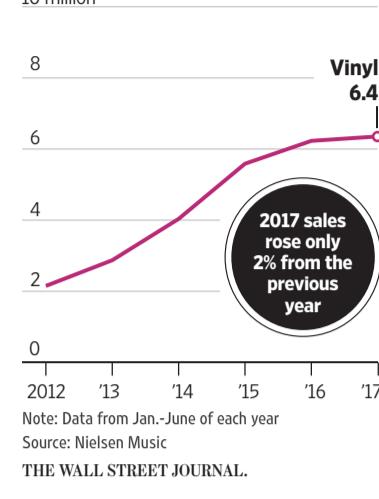
Major labels say they use original analog masters when possible. Sometimes tapes are too brittle to be used to make a vinyl master. Low-quality re-issues may be the result of less-reputable labels that can't afford to shell out big bucks for engineering and record-pressing, says Billy Fields, a veteran vinyl expert at Warner Music Group. Universal Music Group and Sony Music Entertainment, the two other leading music companies, didn't make anyone available to comment.

Today's digital files can sound fantastic—especially for hip-hop and dance music. But engineers say they need to be mastered separately for vinyl in order to have the right sound. To meet deadlines for releasing new albums, labels can't always cut vinyl to the absolute best audio quality, says Mr. Fields, who declined to discuss specific examples on the record because it might alienate others in the industry.

Another culprit for vinyl's slowdown is cost: Mr. Sheldon estimates vinyl has gone up four to six dollars per album in recent years. So-called "180-gram" or "audiophile" records, marketed as higher quality, can cost

Vinyl Sales Sputter

The surge in sales of vinyl records over the past several years is slowing.



THE WALL STREET JOURNAL.

\$30 to \$40. Their heaviness makes them more stable during playing, Mr. Sheldon says, and such records might last longer. But any sound differences are "very marginal."

As low-quality vinyl proliferates, Ms. Welch and Mr. Rawlings are taking the high road.

It took five years to get their record-cutting equipment up and running. Once they bought their lathe, they found a tech who gave up his job at a particle accelerator for the new job. "The scientists who developed how to cut good stereo were the brightest people in our country at that time," Mr. Rawlings says. With their trusted mastering engineer Stephen Marcussen, the team customized the lathe for Ms. Welch and Mr. Rawlings' sparse, haunting acoustic music.

Songs are generally recorded in a studio digitally today. (In Ms. Welch and Mr. Rawlings' case, they chose to record using analog tape.) A mastering engineer then fine-tunes the recorded music to ensure the album, often the product of myriad studios, sounds consistent. Using a lathe, the music is engraved onto a "lacquer," the technical term for the master copy from which copies are pressed in plants.

The goal is to put as much sonic information on the record as possible. A high-quality LP can give listeners the sensation of instruments or sounds occupying different points in space—a "three-dimensional" quality that Mr. Fremer says evokes a live performance. Ms. Welch likens it to the difference between "fresh basil and dried basil."

The vinyl version of "The Harrow & the Harvest" is "mesmerizing," says Mr. Fremer, who heard a test copy. On Aug. 11, the couple, which often records as "Gillian Welch," will release a new album, "Poor David's Almanack," under the "David Rawlings" name, before re-releasing more old albums. Having launched a label and souped up a derelict Nashville studio years ago, they may cut and re-issue albums by other artists, they said, effectively becoming a full-service, vertically-integrated—if tiny—old-school music company.

Ms. Welch and Mr. Rawlings, whose careers took off as the CD era crashed into the age of iTunes, feel like putting out vinyl now brings them full circle. "It's like an author who has only ever released an e-Book," Mr. Rawlings says. "You see a book in print and bound and you feel like you've finally done what you were aiming to do."

PLAYLIST | By Mario Livio

SLOW DANCING IN ISRAEL

Mario Livio, 72, is an astrophysicist and the author of six books, including his latest, "Why? What Makes Us Curious" (Simon & Schuster). He spoke with Marc Myers.

Before the 1967 Six-Day War, life in Tel Aviv, Israel, was anxious but hopeful. I was 15 in 1960 when I first heard the Platters' "**ONLY YOU (AND YOU ALONE)**" on the radio. We didn't have television, so I hadn't seen them yet on a variety show. I only knew that their voices sounded beautiful.

In the early '60s, we had parties in our neighborhood on Friday nights. About 20 or 30 teens would get together at a friend's house, when parents were out, and dance to records.

Most of the dancing was slow. Sofie was a friend who lived a few blocks from me, and we had grown up together. At these parties, we often paired up to dance.

"Only You" was a big party record. The title song opens with a measure of bluesy electric guitar chords followed by a one-beat pause. Then this powerful, velvety male voice comes on and takes your breath away.

"Only you can make this world seem bright / only you can make the darkness bright / only you and you alone can thrill me like you do."

Tony Williams, whose name I didn't know at the time, was the lead vocalist. He had a high voice that he could break in places to make a romantic point. The rest of the group sang harmony.

The song had come out in the States in 1955, but we didn't know that at the time, nor did we care. For us, it was a timeless song by a man singing openly about love and devotion.

As the years went on, many of us from the parties continued to see each other regularly. Sofie and I entered military service at about the same time, though we served in different units. We also were at the Hebrew University together.

At some point, Sofie and I took a trip together to the Dead Sea and went from being friends to being a couple. In 1968, we married.

At home today in the States, I still have a CD of the Platters. I rarely put it on, but when I do, Sofie and I stop what we're doing and dance to "Only You." The way we used to, in Tel Aviv.



THE PLATTERS on stage circa 1955.

GETTY IMAGES

LIFE & ARTS

WHAT'S YOUR WORKOUT? | By Jen Murphy

A Fitness Plan for Braving Arctic Waves

Photographer Chris Burkard mixes climbing, yoga and bodysurfing to prep for shooting remote, frigid coastal areas

TO CAPTURE HIS award-winning photos, Chris Burkard has learned to find joy in Arctic waters and blizzard-like conditions. The 31-year-old self-taught photographer has a predilection for shooting surf in some of the world's stormiest, most remote coasts.

"I guess you could say I've made a career out of being able to suffer," he says. His personal and commercial projects, for clients such as **Sony**, the North Face and **Jeep**, have taken him to the Faeroe Islands, Alaska, Iceland, Norway, Canada, New Zealand and Russia.

For his film "Under an Arctic Sky," which is touring now and will be available online Sept. 5, Mr. Burkard and six surfers traveled to Iceland, hunting for waves through winter storms. Ocean temperatures hovered around 35 degrees, which the Pismo Beach, Calif.-based photographer considers "not terribly cold."

"Getting out of the water was the most brutal part," he says. "With windchill, the air was minus-20 degrees. Our wetsuits turned into blocks of ice."

It takes strength to snap just the right image. Mr. Burkard often finds himself treading water while dodging icebergs or trekking across waist-high snowbanks while he carries 100 pounds of camera equipment.

Mr. Burkard credits a mix of climbing, bodysurfing and yoga with keeping him mentally and physically fit enough to get the jaw-dropping shots that have earned him 2.7 million Instagram followers. "All three activities sharpen body awareness, which is crucial to my job," he says. "A lot of times I'm trekking or climbing over slippery rocks or even rappelling on a mountain with my camera."

His wife, Breanna, introduced him to yoga six years ago. "Yoga keeps me sane," he says. "We focus so much on physical health, but yoga also contributes to my mental health. I find myself in a lot of gnarly situations where I'm out of my comfort zone. If I can breathe through them, I can stay calm and sometimes even find happiness in that moment."

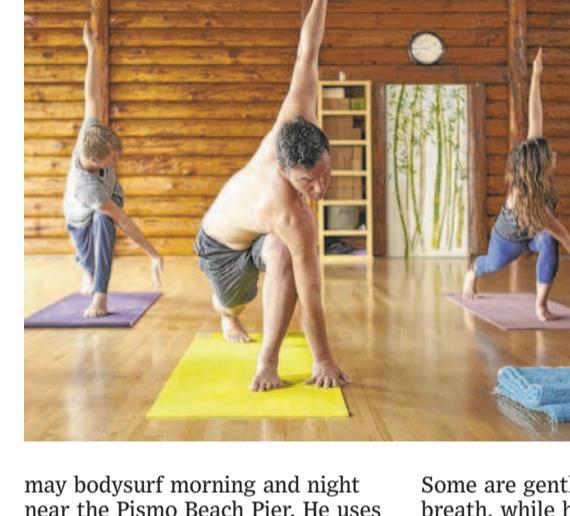
The Workout

When home, Mr. Burkard tries to climb, bodysurf and practice yoga daily. He first started rock climbing in Yosemite National Park. These days he does the majority of his climbing at an indoor rock gym or on the climbing wall in his office to maintain upper-body strength.

In the fall, peak surf season, he



JOSHUA CURRY FOR THE WALL STREET JOURNAL



Photographer Chris Burkard bodysurfs in the ocean at Pismo Beach, Calif., above, practices climbing, left, and does yoga, far left, to stay fit for his work trips.

ably-harvested salmon and tuna into meals. Breakfast is usually oats with chia seeds and fruit, or a green smoothie with hemp protein. Eggs, avocado and brown rice are a frequent lunch.

Mr. Burkard will stray from his diet when he travels. "Food connects people. I never want to limit my experience or be inhospitable," he says. "I've eaten reindeer, whale, seal." He has a weakness for gummy candy. "I could crush a bag of **Haribo** sour gummies," he says.

The Gear & Cost

"I'm a function-over-fashion kind of guy," Mr. Burkard says. He is sponsored by Prana. "They make my go-to yoga and climbing pants," he says. He is a fan of La Sportiva trail sneakers and Black Diamond climbing shoes and clothing.

A drop-in class at Harmony House Yoga in Pismo Beach costs \$18. A monthly membership at Slo-Op Climbing in nearby San Luis Obispo costs \$55. He travels with a lacrosse ball to roll out tight muscles and a Thera Cane, a DIY therapeutic massage tool (retail \$40).

ENTERTAINMENT | By Ben Fritz

COMIC-CON'S COOLER SIBLING

San Diego

THE SUN WAS starting to set on the first day of Comic-Con and sisters Alison and Valerie Taylor and their friend Iman Fayek were having the time of their lives—without having actually gone inside the world's biggest pop-culture convention.

As they waited in a line stretching two city blocks to see props, costumes, and augmented-reality experiences from the Netflix shows "Stranger Things" and "The Defenders," as well as its coming Will Smith movie "Bright," the Chico, Calif., college students rattled off what else they'd enjoyed in San Diego that day. Among their favorites were promotions for USA Network's "Mr. Robot," Comedy Central's "Broad City" and Amazon.com's comic-book adaptation "The Tick."

For several years, Hollywood studios and networks have been building elaborate installations, called "activations" by marketing executives, in hotels, tents and fields around the San Diego Convention Center to hype movies and TV shows. The center is crowded and space is at a premium, forcing companies to venture outside in their ever-escalating quest for fan attention.

This year may be something of a tipping point, though, as nearly all the most buzzed-about and popular experiences during Comic-Con aren't technically part of Comic-Con. Yes, panels where stars and creators answer questions and show new trailers are still part of the official programming. But for fans—who have numbered 167,000 at past Comic-Cons—aiming to feel as if they're being transported inside their favorite movies and TV

shows, the thing to do is walk around downtown San Diego.

Mile High Comics, one of the largest comic-book stores in the U.S., opted not to lease space to sell its wares at Comic-Con for the first time in 44 years in part because there are too many distractions beyond the show floor, company president Chuck Rozanski wrote in a newsletter.

"When you can see 'Game of Thrones,' 'Pokémon,' and hundreds of other exhibits across from the convention hall, why bother going into the hall?" Mr. Rozanski wrote.

Perhaps the most elaborate installation this year is for "Blade Runner 2049," which comes out in October. Fans waited more than an hour in the heat to try a virtual-reality game tied to the sequel to the 1982 sci-fi cult classic. After the game ended, they entered a 12,800-square-foot space designed to look like a city street in dystopian Los Angeles, complete with a crashed flying car, neon lights, a bar and 34 actors playing future residents, including police who "test" whether visitors are humans or "replicant" robots.

While some of these events were impressive because of their scale, others were popular because they were hard to get into and gave the lucky few a unique experience. "Mr. Robot" fans were offered clues to an elaborate puzzle inside replicas of a restaurant and bank from the show. Those patient and skilled enough to solve it ended up in a dark room where they answered questions from a masked actor, received a recorded phone call from the show's co-star B.D. Wong and got to peek at photo-

tos offering hints about the coming third season.

A promotion for "Westworld," HBO's sci-fi Western show, accommodated only 12 visitors an hour. The visitors, who had to secure advance reservations, landed a personal interview to help figure out what type of cowboy they would be. Then, fitted out in 10-gallon hats, they entered a recreation of a saloon from the show where actors portraying bartenders and a prostitute talked to them and served cocktails.

Photo ops were ubiquitous at these events, whether with swords from "Game of Thrones" or hungry zombies from "The Walking Dead," as were pleadings from staffers to share the pictures on social media with promotional hashtags.

Several gave visitors RFID wristbands to keep track of what they did and, presumably, gather information for future marketing. Ama-



Fans flocked to attractions for 'Blade Runner 2049,' above, and 'Game of Thrones,' that were not in the San Diego Convention Center but nearby.



zon quizzed visitors on their way into and out of the "Tick" experience on their knowledge of and feelings about the show and the company's video-streaming service.

Perhaps the people most happy about the array of pop-culture experiences throughout San Diego this week were those who didn't get a Comic-Con badge, which

costs \$220 for four days.

Tyler Corcoran was waiting in line for the "Bank of E," part of the "Mr. Robot" experience, after ending his work day. The programmer said he has never been inside Comic-Con but planned to spend the evening soaking up all the entertainment around it, for which no badge was needed.

FROM TOP: ERIC CHARBONNEAU/ASSOCIATED PRESS

OPINION

REVIEW & OUTLOOK

Trump's Nafta Stakes

President Trump campaigned on tearing up Nafta, but maybe he's learning on the job. The White House last week rolled out its objectives for renegotiating the North American Free Trade Agreement that could allow him to claim victory without doing too much protectionist damage.

The President has blamed Nafta for U.S. manufacturers moving jobs to Mexico. In April Mr. Trump came close to terminating the deal before cooler heads in the Administration persuaded him that withdrawing would be a disaster for U.S. businesses, especially farmers.

Nafta has helped American businesses stay competitive and prevented a larger exodus of jobs overseas by integrating cross-border supply chains. Consider Cummins, which makes the engine for Chrysler's RAM truck outside Columbus, Ind. Cummins exports its engines to a Chrysler plant in Mexico, where the trucks are assembled and sent back to the states. Prior to Nafta, Mexico imposed tariffs as high as 20% on automotive imports as well as local-content requirements of 80% that shut out U.S. suppliers like Cummins.

American inputs make up 40% of Mexican products exported to the U.S. Since 2007 U.S. exports of auto parts to Mexico have more than doubled. Nafta has enabled U.S. auto makers to compete with the Japanese, and many cars assembled in Mexico with American parts are shipped to Asia and Europe. Another example of cross-border integration: Canadian manufacturers use U.S. scrap metal, coal and iron to produce steel slab and coil for American vehicles, airplanes and public works.

Some of Nafta's biggest winners are American farmers. Nafta cut Mexico's high agricultural tariffs—ranging from 15% on soybeans and processed vegetables to 215% on corn—to zero on most products. U.S. exports of feedstock to Mexico have soared. Soybean sales to Mexico have quintupled since Nafta was finalized in 1993. Farm and ranch exports to Mexico and Canada have more than quadrupled.

It's true that Canada's supply-managed dairy system remains walled off from competition, and pricing policies discriminate against such U.S. products as a milk-protein used to make cheese. Canada also maintains high tariffs on U.S. poultry, eggs and wine. Mr. Trump should seek to ease these trade barriers in return for giving up some U.S. farm subsidies.

A major focus of U.S. Trade Representative Robert Lighthizer's agenda will be e-commerce,

How to renegotiate the treaty without blowing up the U.S. economy.

financial services, telecommunications and intellectual property. This recognizes that trade in services is growing fast and an area in which the U.S. has a significant comparative advantage. For instance, the Administration says it aims to "secure commitments not to impose customs duties on digital products" and to prevent restrictions on sending and storing data.

The Administration will also try to "strengthen the rules of origin," which require a certain share of products to be sourced in North America—e.g., 62.5% for autos—to qualify for preferential trade treatment. One risk of raising the thresholds is that manufacturers may decide it makes more sense to move abroad and pay an import tariff.

Canada and Mexico adopted many of the Administration's objectives in the stillborn Trans-Pacific Partnership, so the biggest sticking points will likely be trade remedies. Mr. Lighthizer has called for eliminating Nafta's "global safeguard exclusion" to allow the U.S. to take action if a surge of imports imperils its domestic industries. He also wants to let the U.S. "impose measures based on third country dumping." So the U.S. could, say, levy duties on Mexican products with Chinese steel, though such actions would likely be challenged and invite retaliatory tariffs.

Nafta allows investors to arbitrate disputes with foreign governments. The Administration is targeting this system as some on the right claim that it undermines U.S. sovereignty. Unions also hate arbitration because it reduces the risk of investing in Canada and Mexico. But the system has protected American investors from arbitrary policies, and the U.S. government has never lost a case.

The White House wants to conclude negotiations by the end of this year, though they could drag on if it tries to back Canada and Mexico into protectionist corners. While the President may think he has the whip hand, the U.S. can't afford to jilt its neighbors. Mexico is currently renegotiating its 2000 trade accord with the European Union to boost its trade in services and agriculture. It is also seeking to reduce its dependence on U.S. agriculture. During 2017's first four months, Mexican imports of U.S. soybean meal fell 15%. Canada has just concluded a deal with Europe.

If Mr. Trump wants a political victory, he'll push to further open Mexican and Canadian markets rather than impose trade barriers that hurt American businesses and consumers.

Joseph Rago

These columns are a collaborative effort, but some writers collaborate more than others. No one contributed more in his meteor of a career than Joseph Rago, who died last week at age 34. The anonymous nature of these columns means that readers will soon miss him without knowing how much they had read and learned from him.

From a middle-class family in Falmouth, Mass., Joe majored in history at Dartmouth and edited the Dartmouth Review. His work caught our eye not for its politics but for the prose. Even as young as he was, he knew how to put together a sentence to persuade without lecturing. This has taken some of us a lifetime to learn.

Joe joined the editorial page as a Bartley Fellow in 2005, and we hired him on the spot. He edited op-eds at first and began writing editorials in 2007. Not counting his profiles and other features, Joe wrote 1,353 Wall Street Journal editorials, including his last one on Wednesday, "The ObamaCare Republicans," which carried his signature punch: Argument built on facts and quotes, with irony and sardonic wit as polemical leavening. (A sample of his work appears nearby.)

Joe wrote about many subjects—Amazon and antitrust, Apple and privacy, the limits of

Our late colleague knew more about the subject and wrote better too.

the Constitution's Commerce Clause, the follies of Congress and presidential politics, energy, trade, taxes and more. But his particular contribution was on health care and the long debate over ObamaCare.

On this and other issues he was a reporter's opinion writer: He read everything on the subject, from academic literature on insurance markets to scientific papers on new drugs as he fought the Food and Drug Administration for faster approvals for patients. He had sources from industry, Capitol Hill, think tanks and HHS.

Joe had to persuade himself of what he thought before he could write to persuade others. He won a Pulitzer Prize in 2011 for his health-care editorials, but he knew it is folly to write for prizes. Joe wrote for readers.

We can say from experience that Joe was also a capital comrade-in-arms, a colleague you could disagree with and still join for a beer. He could argue about Donald Trump without making it a showdown about your personal character. This is admirable in any age, but especially in these polarizing times.

Our friend Roger Kimball of The New Criterion, who also published Joe, called him an "allegro spirit," and it fits. We mourn his passing but take consolation that his work made the world a better, freer place.

Jeff Sessions Hangs In There

The White House said Thursday that President Trump still has confidence in Attorney General Jeff Sessions, but the better question is whether Mr. Sessions still has confidence in the President. Mr. Trump needs the AG at this point more than the reverse.

Mr. Trump is like no other President, and he proved it on Wednesday by telling the New York Times that he would never have tapped Mr. Sessions for AG if he had known he would recuse himself from the investigation into Russia's 2016 campaign meddling. "He should have told me before he took the job and I would have picked somebody else," Mr. Trump said, but Mr. Sessions didn't know at the time he would be presented with such a choice. He did so after news came out that he had met with the Russian ambassador during the campaign, and Mr. Sessions didn't want any political doubt hanging over the investigation.

Mr. Trump is understandably upset about the special-counsel probe into Russia, but Deputy AG Rod Rosenstein didn't appoint counsel Robert Mueller until months after Mr. Sessions recused himself. The political trigger

Trump needs the Attorney General more than he realizes.

for the special counsel appointment was Mr. Trump's dismissal of FBI Director James Comey followed by his tweet implying that he had tapes of his meetings with Mr. Comey.

Mr. Sessions might have resigned after this presidential outburst, but we're glad he didn't. The AG said Wednesday he'd serve "as long as that

is appropriate" and that "we love this job." We have our policy differences with the AG, but no one doubts that he is a man of integrity who will defend the Justice Department against improper political interference.

Mr. Trump has shown he isn't bound by political norms, and he needs advisers like Mr. Sessions to say when one of his impulses would be a mistake. The same goes on national security with Defense Secretary Jim Mattis, or on economic policy with adviser Gary Cohn.

Working for a President who can be as willful and rash as Mr. Trump can't be easy, and some advisers may find it impossible over time. But Mr. Trump needs people who can protect him and the country from his worst instincts, and if Mr. Sessions quits, Mr. Trump might not find anyone else who'll take the job.

Is Tesla Too Big to Fail?



BUSINESS WORLD
By Holman W. Jenkins, Jr.

Even as Wall Street bulls tout Tesla's stock, almost a conspiracy of silence has surrounded the most interesting questions. One of these concerns what happens when 300,000 customers who deposited \$1,000 each for the forthcoming Tesla Model 3 learn that the \$7,500 federal tax credit will expire before they can get their hands on it.

Now we know. Tesla may not be too big to fail as far as the federal government is concerned, but it certainly is too big to fail as far as California politicians are concerned.

As enthusiast site GreenCarReports.com says frankly of AB 1184, a bill recently passed by the state Assembly and awaiting Senate action: "CA bill would make up for federal electric-car incentives as they expire."

Yep, the law clearly is designed to help an electric-vehicle manufacturer about to exhaust the federal credit, a category that includes only Tesla. (The credit starts phasing out with the 200,000th car sold.) The bill specifies a car that gets at least 200 miles a charge—as the new Tesla Model 3, at 215 miles, just does.

The proposed law is suspiciously friendly toward a luxury brand going up against BMW and Mercedes. It aims to bridge the price gap between an electric vehicle and a comparable gasoline-powered car.

For a high-end car, the rebate could be \$10,000, \$20,000 or even \$30,000. In a state that accounts for half of all electric-vehicle sales, this vig would be determined by politically appointed airway regulators.

Of all the emails that make me chuckle, the best are those from Tesla owners who say taxpayer rebates don't matter. They'd buy the car anyway. Apparently they think Tesla founder Elon Musk is leaving money on the table in dealings with them. If his customers would buy without the \$7,500 federal rebate, he'd be a fool not to raise the price by \$7,500 and capture the value of the tax credit for Tesla.

He's no fool. All state-sponsored benefits, including HOV privileges, end up in Tesla prices. They go straight to Mr. Musk's bottom line.

A company like Tesla could only happen in California—or maybe Vladimir Putin's Russia.

Let's see, then-Rep. Henry Waxman and state Treasurer Bill Lockyer strong-armed Toyota into providing Tesla its giant local factory on the cheap. Hardly a year passes without Mr. Lockyer or his successor signing off on fresh tax favors. These include \$174 million in sales-tax suspensions for Tesla's equipment purchases via a state agency pretending to be the purchaser.

Tesla has banked tens of millions from California's existing green-car re-

bates, and hundreds of millions in state zero-emissions credits. When Nevada outbid California for a battery plant in 2014, the Sacramento Bee instructed the faithful: "That shouldn't happen again." Expect local Democrats to dig deep when Mr. Musk goes shopping for his promised truck plant later this year.

In desperation, EV promoters point out that these sums don't come close to the \$550 billion in annual subsidies the oil industry allegedly receives. This figure, which comes from the International Energy Agency, mostly consists of the implicit value of cheap oil products that countries like Iran and Venezuela dump on their domestic citizens.

Yes, these subsidies are abominable, but they are at the expense of the oil industry. They are also at the expense of energy users in the rest of the world. The price of gasoline to the rest of us would be lower, making electric cars less attractive, if these handouts were stopped.

California can't stop tossing taxpayer money at the electric-vehicle wunderkind.

AB 1184 must still pass the California Senate. It still needs funding through the state cap-and-trade program, thereby shifting its cost to other energy users. Gov. Jerry Brown still needs to sign the bill—Mr. Brown who recently decided his swan song will be a global climate conference in San Francisco in September 2018, where he can be expected to tout California's green-car leadership.

Perhaps not accidentally, the bill would take effect the same month, landing just as Tesla might be facing its Waterloo over the federal credit's disappearance for Model 3 customers.

But here's where we must eat a little crow. Seven years ago, we cautioned against the idea that Mr. Musk's California "political allies-of-the-moment" represent some kind of commitment to the company's long-term success."

We were obviously wrong. California Democrats have so lashed themselves to Tesla, there's no amount of taxpayer money they won't spend to keep it afloat.

No, the company isn't a bankruptcy risk as long as investors keep supplying fresh capital to let it make and sell cars at a loss. But Tesla has always been, in large measure, a public-policy bet. The shares have been on a shaky ride lately amid Mr. Musk's Model 3 Hail Mary. AB 1184 may be just the signal investors need that California's deep pockets are behind the company—at least until they're not.

* * *

Joe Rago was a particular friend and sounding board for this column. He will be deeply missed.

In the Netherlands, the Doctor Will Kill You Now

By Kees van der Staaij

In 2002 the Netherlands became the first country to legalize euthanasia and physician-assisted suicide for those suffering deadly diseases or in the last stages of life. Not long after the legislation was enacted, eligibility was expanded to include those experiencing psychological suffering or dementia. Today pressure is mounting for the Dutch government to legalize a "euthanasia pill" for those who aren't ill, but simply consider their lives to be "full."

Proponents of assisted suicide continue to claim that safeguards already built into Dutch law are sufficient to reduce the risk of abuse. They point out that medical professionals are required to assess whether a person's suffering is indeed unbearable and hopeless.

These safeguards do exist. In practice, however, they are hard to enforce. A poignant illustration was recently aired on Dutch television. An older woman stricken with semantic dementia had lost her ability to use words to convey meaning. "Upsy-daisy, let's go," she said.

Both her husband and her physician at the end-of-life clinic interpreted her words to mean, "I want to die." A review committee judged her euthanasia was in accordance both with the law and her earlier written instructions, an outcome very few would have imagined possible as recently as 10 years ago.

Such episodes have many Dutch people worried about the erosion of protections for the socially vulnerable and medically fragile. A broad and heated public debate recently flared about whether doctors may administer fatal drugs to those with severe dementia based on a previously signed "advance directive."

In several controversial cases, assisted suicide wasn't directly discussed with patients who were incapable of affirming earlier written death wishes. In one case, a doctor slipped a dementia patient a sleeping pill in some apple sauce so that he could be easily taken home and given a deadly injection.

Hundreds of Dutch physicians signed a declaration outlining their moral objection to these increasingly common

practices. Nonetheless, the Dutch government stands by its claim that the law permits doctors to end such patients' lives. Meanwhile, the Dutch Right to Die Society, a national euthanasia lobby, keeps pressing to take further steps, arguing that individuals should have the option to "step out of life."

But is this argument really convincing? Those seeking death because their lives are "full" are often haunted by loneliness and despair. Some elderly people fear bothering their children with their social and medical needs. They don't want to be perceived as burdensome.

Legalizing the euthanasia pill could put even more pressure on the vulnerable, disabled and elderly. More than 60% of geriatric-care specialists already say they have felt pressure from patients' family members to euthanize elderly relatives. Will the day come when society considers it entirely normal—even "natural"—for people who grow old or become sick simply to pop the pill and disappear? If so, those who desire to continue living in spite of society's expectations will have some serious explaining to do.

All of this clearly shows the slippery slope of the euthanasia path. Contrary to the emphatic advice of a special advisory committee chaired by a prominent member of a liberal-democratic party, the departing Dutch government wishes to expand and extend the euthanasia law to those who consider their lives to be full. The pressing question is where the slope ends and the abyss begins. Will those with intellectual disabilities or physical defects also be "empowered" to step out of life? Will those battling thoughts of suicide be encouraged to opt for a "dignified death" in place of excellent psychiatric care?

The government's most fundamental task is to protect its citizens. The Dutch government, to its credit, often speaks out when fundamental human rights are under threat around the world. Now that the fundamental right to life is under threat in the Netherlands, it's time for others to speak out about the Dutch culture of euthanasia.

Mr. van der Staaij is a member of the Dutch Parliament.

OPINION

How Jerusalem's Top Cop Keeps the Peace

By Judith Miller

Jerusalem

Three Arab Israelis opened fire Friday on Jerusalem's Temple Mount, a holy site for Jews, Muslims and Christians. Two Israeli policemen were killed, as were the attackers. For the first time in decades, Israel closed the compound on a Friday, Islam's holy day. By Sunday it had reopened, with security cameras in place and temporary metal detectors to screen worshippers.

As this article went to press, Palestinian protests against the new security policies were escalating, with three reported dead. But this violence and the terrorism that sparked it are both notable for their rarity. In a region beset by war and political turmoil, Israel and its capital in particular have remained relatively calm. That's thanks in part to radical changes in counterterrorism policing led by Maj. Gen. Yoram Halevy, 54, commander of the Israeli Police's Jerusalem district.

Terrorism is way down in Israel's capital, thanks in part to better relations between police and the Palestinian community.

One of the force's most experienced officers, Gen. Halevy has for the past 17 months overseen the police's counterterrorism mission in Jerusalem, including roughly 5,000 officers of the Israeli Police and the Border Police. A Jerusalem-born son of Iraqi Jews, he speaks fluent Arabic and has worked undercover in Arab communities. In an interview only days before the Temple Mount attack, he discussed some of his reforms publicly for the first time and explained why he thinks they are reducing both violence and civilian tolerance of it.

"Anyone can chase down and arrest terrorists. That's the easy part," he tells me through a translator, though he speaks some English. "Denying terrorists the civilian support they crave and need to operate is a far tougher challenge."

The most effective way of mitigating Palestinian hatred, he adds, is to "empower the silent civilian majority, which is sick and tired of the violence, but afraid to say so." That, he says, is his overarching goal.

The numbers are impressive. In 2015 there were 43 terrorist attacks in Jerusalem; the Temple Mount shooting was only the ninth so far this year. Two years ago there were 33 stabbings in the city and six deaths due to deliberate car-rammings; this year those counts stand at six and one, re-

spectively. The number of stone-throwing incidents has dropped 15% this past year alone.

Government figures that include the neighboring West Bank are equally encouraging. The year ending last September averaged 38 major attacks a month in what Israel calls Judea and Samaria. That's down this year to 10 a month, a 73% drop.

Gen. Halevy meets me in his office, which adjoins the Western Wall, a symbol of the eternal Jewish presence in this disputed city. Tapping the plaster wall near his desk, he observes that Judaism's most sacred stones lie just beneath. His window looks down on the pilgrims from around the world who come to pray and tuck notes into gaps between the thick slabs of ancient limestone.

On the other side of the historic divide are the tens of thousands of Muslims who pray at the Temple Mount each Friday—numbers that swell to as many as 240,000 during the month of Ramadan.

"There are extremists on both sides of this wall," Gen. Halevy says, referring not only to Islamist terrorist groups like Hamas but also Jewish zealots like the one who killed former Prime Minister Yitzhak Rabin. "But the law applies to all equally."

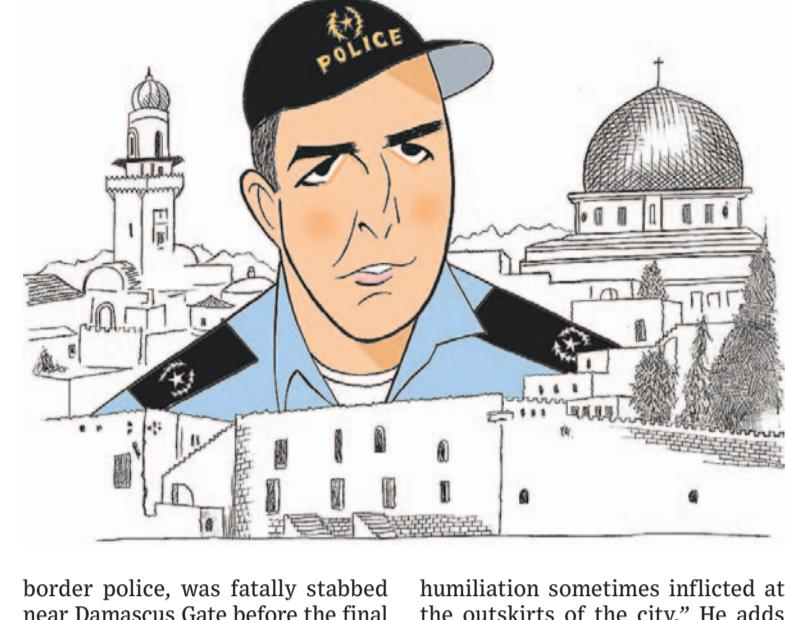
He has worked to instill that ethos in his overwhelmingly Jewish force. In the past, when Palestinians attacked Israelis, he says, officers considered the suspects "enemies," even after they had been cleared of wrongdoing. Questioning by police often meant gratuitous humiliation for men whose culture prizes honor: "Fathers were interrogated and berated in front of sons; sons in front of fathers."

Through police retraining, Gen. Halevy has worked to end what he calls the "system of humiliation." Now officers are taught how to minimize personal dishonor during questioning. Suspects who are cleared receive an explanation of why they had fallen under suspicion—and, if appropriate, an apology. Then, in what Gen. Halevy describes as "phase two" of an interrogation, the police ask: "How can I help you?"

Officers under Gen. Halevy's command make a point of getting to know the community. In the past, too many Jerusalemites, especially Palestinians, never encountered the police until after a protest, stone-throwing or other attack. Those encounters tended to produce hostility, even though Palestinian merchants, government workers and civilians have the most to lose when violence triggers closures.

Now, he says, thanks in part to the changes in policing, "people are increasingly speaking out against the violence and signaling a lack of support for such attacks."

Last month, after Hadas Malka, a 23-year-old sergeant major in the



KEN FALLIN

border police, was fatally stabbed near Damascus Gate before the final week of Ramadan, Jerusalem remained calm. Military and police special forces were deployed to prevent further attacks, but "there were no riots or protests in the city," Gen. Halevy recalls. "Nor were there celebrations or glorification of the three Palestinians who killed her and were then killed themselves. It was the quietest Ramadan in Jerusalem on record."

Gen. Halevy has opened a police unit within a new community center that serves Palestinians by issuing permits, identity cards and driver's licenses and provides fire, ambulance and other essential services. Two or three more are expected to open in the coming year.

The first "combined civilian service center" is in the Shuafat refugee camp, on the border between Jerusalem and the West Bank—traditionally a difficult area for Israeli law enforcement. Many Palestinians who never would approach a police station are willing to seek help at these community centers, Gen. Halevy says: "Last week a woman was hysterical because her son had not come home." Officers drove her around the neighborhood for hours until they found him.

The police also tried to ease the security burden on Palestinians who came from the West Bank to Jerusalem for prayer during Ramadan. Before Gen. Halevy took command, those who lacked blue Israeli identity cards endured grueling checks at the city limits. At the request of the Israel Defense Forces, during this Ramadan the police, working with the Palestinian Authority, began conducting security checks in Ramallah and Bethlehem, then transporting Palestinians to Jerusalem by bus.

"They go straight to the Temple Mount," Gen. Halevy says, "arriving without agitation, frustration or the

humiliation sometimes inflicted at the outskirts of the city." He adds that no one who entered the city on a prayer bus has perpetrated a terror attack.

If Jerusalem's Palestinian residents are now treated with greater respect, they also know that their community will pay a heavy price for terrorism or violence: "Whenever stones or firebombs are thrown at Israeli forces, traffic on that street is stopped and shops are closed," Gen. Halevy says. "Merchants and homeowners near the incident are questioned. People in that neighborhood know they have a lot to lose."

After Malka's murder, Israel canceled all permits for Palestinian family visits in Jerusalem during Ramadan, affecting between 100,000 and 300,000 people. That was in addition to Israel's usual practice of prohibiting males age 12 to 40 from visiting the Temple Mount during the holy month.

Punishment can be particularly severe for a terrorist's relatives. In addition to sealing or destroying the family home, the police now bring the full force of Israeli law to bear against anyone in the terrorist's *hamula*—extended family—who celebrates the murder of Israelis or contemplates attacks to avenge the dead kin.

"We think that collective punishment does not stop terror," Gen. Halevy says. "But if, after monitoring family members, we conclude that some relatives are determined to incite more violence or plot revenge, we delay their permits to open a business or insure homes or property. We fine them and their property for minor infractions of rules and take other legal steps to let the community know that inciting or committing violence will be punished."

What Israeli police aren't permitted to do is confiscate a suspect's Israeli identity card. "That would be an effective deterrent," Gen. Halevy allows, "but it is not legal."

The goal of retribution, he says, is "predictability": "We want the community to know that the police will protect them when needed, and punish them when warranted. Consistency leads to public trust in the system."

To supplement Gen. Halevy's efforts, the government has installed more surveillance cameras on roads and at sensitive sites in Jerusalem and other cities, according to Gilad Erdan, Israel's minister of public security.

To help the police track stolen cars, which terrorists often use in attacks, the government plans to install some 500 cameras that read license plates. And to help detect suspicious activity in public places, the government has installed expensive new facial-recognition cameras—some at Damascus Gate, for instance, where Malka was killed. In addition, the police have doubled their Muslim ranks in the past year, to 4% from 2%. (About 17% of Israelis are Muslim.)

Palestinian officials are unimpressed by such changes. Violent incidents may be down, but tension on the ground is rising, says Elias Zanani, a policy adviser and media consultant for the Palestinian Authority. "We are partners with Israel in combating terrorism, which threatens us all," he tells me. "But we're losing ground because there are ultimately no military solutions to terror... Terrorism and violence are side effects of the disease, which is the absence of hope for a peaceful political solution."

Three days after the Temple Mount attack, Palestinian, Jordanian and Muslim religious officials condemned the metal detectors and other security measures as an effort by Israel to change the site's political status quo and consolidate control. At least three Palestinians were reported killed Friday when protesters hurled bottles and rocks at police in Jerusalem and the West Bank.

Gen. Halevy has not backed down. He is focused not on politics, he says, but on fighting terror through effective policing. Counterterrorism will be "a generation's work," he says, particularly in the internet age and in Jerusalem: "In no other city can you cross a national border on foot in 10 minutes."

As we leave his office, Gen. Halevy silently inspects a group of young police and border-patrol officers donning flak jackets and loading their weapons in preparation for patrol duty. The responsibility, the commander sighs, is a heavy one. To remind the police of that duty, a Hebrew banner hangs in their assembly hall: "Generations have dreamed of coming to Jerusalem. We have the honor of protecting it."

Ms. Miller is a contributing editor of City Journal, which will post a longer version of this article on its website Monday.

Joseph Rago's Wit and Wisdom

this is the greatest nation that ever existed, still is. It's really the only really democratic country in the world..." . . .

Mr. Wolfe has a habit of using experience and anecdote to gird an argument or shade a meaning, and he carries on like this for some time. Then, abruptly: "I really love this country. I just marvel at how good it is, and obviously it's the simple principle of freedom."

Dartmouth's 'Hostile' Environment
Op-ed, May 5, 2008

Even at—or especially at—putatively superior schools, students are spoiled for choice when it comes to professors who share [liberal] ideologies . . . The main result is to make coursework pathetically easy. Like filling in a Mad Libs, just patch something together about "interrogating heteronormativity," or whatever, and wait for the returns to start rolling in.

"I'm very democratic," he says after a time. "I think I'm the most democratic writer whom I know personally, though I don't know all writers of course." Silence. "I also believe in the United States. I think

I once wrote a term paper for a lit-crit course where I "deconstructed" the MTV program "Pimp My Ride." A typical passage: "Each episode is a text of inescapable complexity . . . Our received notions of what constitutes a ride are constantly subverted and undermined." It received an A.

The ObamaCare Crossroads
Editorial, March 20, 2010

Democrats are on the cusp of a profound and historic mistake, comparable in our view to the Smoot-Hawley tariff and FDR's National Industrial Recovery Act. Everyone is preoccupied now with the politics, but ultimately at stake on Sunday is the kind of country America will be. . . .

In our world of infinite wants but finite resources, there are only two ways to allocate any good or service: either through prices and the choices of millions of individuals, or through central government planning and political discretion. This choice is inexorable. Stripped of its romantic illusions, ObamaCare is really about who commands the country's medical resources. . . .

A self-governing democracy can of course decide that it wants to become this kind of super-welfare state. But if the year-long debate over ObamaCare has proven anything, it is that Americans want no such thing. . . . The ugliness of the bill, and of its passage, means that some or all of it might be repealable, but far better not to make the tragic mistake in the first place.

Obama's Running Mate
Editorial, May 12, 2011

Like Mr. Obama's reform, RomneyCare was predicated on the illusion that insurance would be less expensive if everyone were covered. Even if this theory were plausible, it is not true in Massachusetts today. So as costs continue to climb, Mr. Romney's Democratic successor wants to create a

central board of political appointees to decide how much doctors and hospitals should be paid for thousands of services.

The Romney camp blames all this on a failure of execution, not of design. But by this cause-and-effect standard, Mr. Romney could push someone out of an airplane and blame the ground for killing him. Once government takes on the direct or implicit liability of paying for health care for everyone, the only way to afford it is through raw political control of all medical decisions.

Hillary's Financial Footing
Editorial, April 15, 2014

In the Arab world throwing a shoe is considered an insult, and George W. Bush famously had one hurled at him during a Baghdad press conference in 2008. Less explicable was the pump thrown at Hillary Clinton last week during a speech at a Las Vegas casino.

"Is that somebody throwing something at me? Is that part of Cirque du Soleil?" Mrs. Clinton quipped after dodging the projectile. "My goodness, I didn't know that solid waste management was so controversial."

Mrs. Clinton ought to pay a visit to New Jersey, but—hold on: solid waste management? Yes, Mrs. Clinton was speaking at the Institute of Scrap Recycling Industries convention. According to the trade group's Twitter account, she told the crowd that "#recycling can stimulate the economy/ offering real value/ helping economic recovery."

This insight cost the recyclers north of \$200,000 or \$250,000 . . . We don't begrudge anyone making a buck, though it is amusing to see the Clintons getting rich off the same 1% that President Obama's Democratic Party blames for most of mankind's ills, at least in election years. As for the latest in flying footwear, the National Shoe Retailers Association has its annual conference in Florida this November.

Perhaps Mrs. Clinton's agent should put in a request for the keynote.

The Political John Roberts
Editorial, June 26, 2015

For the second time in three years, Chief Justice John Roberts has rewritten the Affordable Care Act in order to save it. Beyond its implications for health care, the Court's 6-3 ruling in *King v. Burwell* is a landmark that betrays the Chief's vow to be "an umpire," not a legislator in robes. He stands revealed as a most political Justice. . . .

Justice Scalia quips acidly that "we should start calling this law SCOTUScare," but the better term is RobertsCare. By volunteering as Nancy Pelosi's copy editor, he is making her infamous line about passing the law to find out what's in it even more true than she knew at the time.

The Donald and The Barack
Editorial, March 12, 2016

As Mr. Obama tells it, all of this reflexive Obama bashing created an environment where somebody like a Donald Trump can thrive. He's just doing more of what has been done for the last seven and a half years." In other words, Republicans didn't clean up the standing water in their own backyard and now they're complaining about mosquitoes.

One irony is that even as Mr. Obama denied any liability for Mr. Trump, he lapsed into the same rhetorical habit that helped fuel the businessman's ascent. For Mr. Obama, principled opposition to his policies is always illegitimate or motivated by bad faith.

Like the President's nonstop moral lectures about "our values" and "who we are as Americans," by which he means liberal values and who we are as Democrats, he reads his critics out of politics. No wonder so many Americans feel disenfranchised and powerless.



Dartmouth's 'Hostile' Environment
Op-ed, May 5, 2008

Even at—or especially at—putatively superior schools, students are spoiled for choice when it comes to professors who share [liberal] ideologies . . . The main result is to make coursework pathetically easy. Like filling in a Mad Libs, just patch something together about "interrogating heteronormativity," or whatever, and wait for the returns to start rolling in.

The ObamaCare Crossroads
Editorial, March 20, 2010

Democrats are on the cusp of a profound and historic mistake, comparable in our view to the Smoot-Hawley tariff and FDR's National Industrial Recovery Act. Everyone is preoccupied now with the politics, but ultimately at stake on Sunday is the kind of country America will be. . . .

In our world of infinite wants but finite resources, there are only two ways to allocate any good or service: either through prices and the choices of millions of individuals, or through central government planning and political discretion. This choice is inexorable. Stripped of its romantic illusions, ObamaCare is really about who commands the country's medical resources. . . .

Obama's Running Mate
Editorial, May 12, 2011

Like Mr. Obama's reform, RomneyCare was predicated on the illusion that insurance would be less expensive if everyone were covered. Even if this theory were plausible, it is not true in Massachusetts today. So as costs continue to climb, Mr. Romney's Democratic successor wants to create a

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

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LIFE & ARTS

ART REVIEW

In the Restless Innovator's Studio

Two focused exhibitions reveal Helen Frankenthaler's relentless urge to experiment

BY KAREN WILKIN

Williamstown, Mass.
'THE ONLY RULE.' Helen Frankenthaler often said, "is that there are no rules," a dictum reflected in her notable adventurousness in the studio. Over her long working life—born in 1928, she died in 2011—she made paintings, works on paper and sculptures; worked in ceramic; designed ballet sets and costumes; and explored a wide gamut of printmaking techniques—among other things.

This summer, two concurrent exhibitions at the Clark Art Institute offer a glimpse into this restless innovator's responses to different materials, approaches and methods. "No Rules: Helen Frankenthaler Woodcuts," organized by Jay A. Clarke, the Clark's curator of prints, drawings and photographs, and installed in the Manton Center, surveys the artist's transformative use of a time-honored medium through 17 large-scale works, from her first woodcut, made in 1973, to her last, printed in 2009. The title comes from an admonition in a 1994 interview to "Go against the rules or ignore the rules, that is what invention is about." In the Tadao Ando-designed Lunder Center at Stone Hill, "As in Nature: Helen Frankenthaler Paintings" assembles 12 major canvases from 1951 to 1992 for a staccato overview of her evolution, organized by guest curator Alexandra Schwartz. Both exhibitions, which bring together works from the Helen Frankenthaler Foundation, the Louis-Dreyfus Family Collection, and the Williams College Museum of Art, are spectacular.



Helen Frankenthaler's 'Abstract Landscape' (1951), above, and 'Essence Mulberry' (1977), right

maker.") We meet the tough, truculent painter of the ocean-gray "Tethys" (1981), with its hovering, dense ovals, the playful author of the sharp-edged "Scorpio" (1987), with its discs and bubbles, and the brooding creator of the stormy, thickly brushed "Barometer" (1992), one of her last canvases.

Occasionally, as is typical of Frankenthaler, elusive images seem to assert themselves and then subside into the abstract construction of unnameable hues. The exhibition's curator interprets this as evidence of a struggle between abstraction and references to nature, an idea she supports by identifying presumed allusions to landscape in the paintings, prompted by Frankenthaler's titles. (In fact, the artist attached titles after the fact, choosing them from an ongoing list of possibilities.) As a thesis, this view is somewhat over-determined. That Frankenthaler was acutely aware of everything around her, both in nature and the built-environment, among many other things, is hardly news. Neither is the fact that her feelings about experiences of all kinds informed her work, as is true for many artists. But both "No Rules" and "As in Nature" are full of wonderful works to be studied and savored. For nature, there are the Clark's walking trails through the Berkshire landscape.

Ms. Wilkin is an independent curator and critic.

No Rules: Helen Frankenthaler Woodcuts

As in Nature: Helen Frankenthaler Paintings

Clark Art Institute, through Sept. 24

Frankenthaler relished the challenges and exchanges of ideas inherent in the collaborative printmaking process. Excited by the unexpected and by new discoveries, she used multiple proofs to explore possibilities. Even when working with traditionally trained Japanese woodcut artisans, she was deeply involved, from start to finish, rather than making images for "translation," as was usual. As a result, her woodcuts (like all her prints) enlarge the boundaries of the discipline. They depend on unprecedented contrasts of transparency and opacity,

pools of layered color, delicate drawing, and gestures usually associated with painting, played against woodgrain and a variety of paper textures.

Among the most striking works in "No Rules" are the deceptively economical "Essence Mulberry" (1977), with its stand-off between saturated red-purple and the warm tan of handmade paper, and the virtuoso "Madame Butterfly" (2000), with its subtle vertical divisions, like memories of the folds of a Japanese screen, and fluid runs of transparent color; this 6 1/2-foot-wide master-

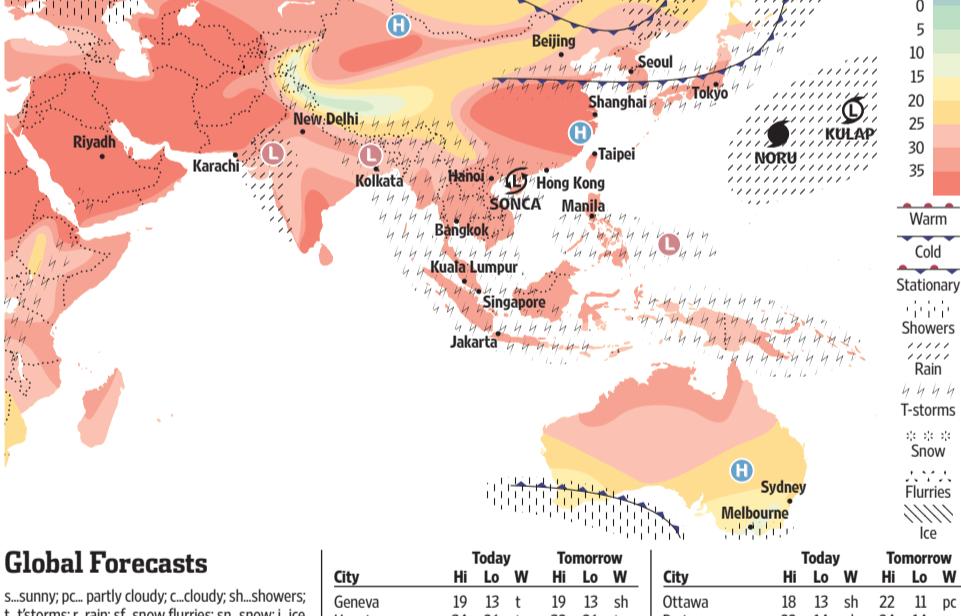
work, we learn, required 102 colors, 46 woodblocks, and three sheets of paper. Six gorgeous prints from the series "Tales of Genji" (1998), each roughly 4 feet square, are equally arresting, with their "painterly" compositions and luminous hues, produced with anything from 34 to 53 colors and 12 to 21 blocks, plus stencils. The ravishing works in "No Rules" both affirm Frankenthaler's pre-eminence as a printmaker and permanently alter our conception of what a woodcut can be.

"As in Nature" allows us to follow some of Frankenthaler-

acher's dominant painting concerns over five decades, beginning with the Miró and De Kooning-influenced "Abstract Landscape" (1951), a muscular, airy improvisation by an ambitious 22-year-old Bennington graduate who was pitting herself against the best art on view in her native New York and already finding her own voice. We see her preternatural alertness to the expressive character of her materials in early paintings breathed into being with her influential method of staining with thinned-out oil paint, and in crisper, more nuanced, later compositions in acrylic. We admire the lyrical, operatic Frankenthaler in the enormous, radiant "Off White Square" (1973), with its sweeps of pink, mauve-gray and yellow animated by the pulse between the eponymous white square and a half-hidden darker one.

(Frankenthaler always described herself as "a space-

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
Amsterdam	18	14	r	20	13	pc
Anchorage	18	13	c	17	12	c
Athens	35	26	s	35	26	s
Atlanta	32	23	t	32	23	t
Bahrain	46	30	s	46	29	s
Baltimore	33	21	pc	29	18	pc
Bangkok	34	27	t	33	26	t
Beijing	28	22	c	28	21	c
Berlin	24	15	pc	19	15	r
Bogota	20	11	c	18	9	r
Boise	37	20	pc	34	19	pc
Boston	18	16	r	19	15	sh
Brussels	19	13	r	20	12	pc
Buenos Aires	16	8	r	16	13	pc
Cairo	37	25	s	38	26	s
Calgary	20	10	s	24	11	s
Caracas	32	27	pc	32	27	pc
Charlotte	34	22	t	34	22	t
Chicago	25	17	pc	28	19	pc
Dallas	37	26	t	38	27	s
Denver	34	18	pc	34	17	s
Detroit	26	16	pc	27	17	s
Dubai	43	33	s	42	34	s
Dublin	22	12	pc	21	15	pc
Edinburgh	21	10	pc	19	10	pc
Frankfurt	21	13	r	21	14	r

City	Today			Tomorrow		
	Hi	Lo	W	Hi	Lo	W
Geneva	19	13	t	19	13	sh
Hanoi	34	26	t	32	26	t
Havana	33	24	pc	33	24	pc
Hong Kong	32	27	sh	33	27	pc
Honolulu	31	25	sh	31	25	t
Istanbul	31	22	s	32	24	s
Jakarta	32	25	pc	32	24	pc
Johannesburg	19	6	s	18	5	s
Kansas City	32	22	s	34	24	pc
Las Vegas	36	24	t	35	28	t
Lima	21	16	pc	21	15	pc
London	20	13	pc	24	15	pc
Los Angeles	28	19	pc	27	19	pc
Madrid	33	18	s	32	18	s
Manila	30	26	t	30	26	t
Melbourne	15	9	pc	16	9	sh
Mexico City	24	14	pc	23	13	pc
Miami	33	27	t	33	27	pc
Milan	28	18	t	31	17	s
Minneapolis	26	19	pc	32	23	pc
Monterey	36	22	pc	36	22	pc
Montreal	18	13	sh	22	13	pc
Moscow	22	15	pc	22	15	pc
Mumbai	30	27	r	31	27	r
Nashville	33	24	pc	33	23	t
New Delhi	33	27	pc	34	27	pc
New Orleans	33	25	t	33	24	pc
New York City	23	19	r	25	19	c
Washington, D.C.	34	24	pc	31	22	pc
Zurich	20	12	t	18	12	pc

The WSJ Daily Crossword | Edited by Mike Shenk



SHOWER ROOM | By Zhouqin Burnikel

Across	Down
1 Missing from military roll call	29 Casino, to gamblers
5 Minor fights	30 "Back in Black" rockers
10 In (stuck)	31 Sturgeon eggs
14 Carrying current	32 "___ la Douce"
15 Shooter Shaquille	33 Game that goes into overtime, e.g.
16 "Gone With the Wind" estate	36 Crow cry
17 Meteor shower?	38 Medium for Matisse
19 Med. plan providers	39 Neighbor of Isr.
20 One of the noble gases	41 Purple smoothie berry
21 Somme summer	43 Cyber Monday come-ons
22 Provides with hay, say	45 Freeport-based retailer
23 Long-eared equine	46 Tightly defined
24 "Full Frontal With Samantha Bee" network	47 Sauvignon
26 Bread and butter, for two	48 Verizon
28 Cold shower?	acquisition of 2015
30 Nonreactive, chemically	49 Big commotion
32 They hoot at night	52 Suspect's excuse
34 "The March King"	54 Galley tool
36 Baltimore seafood favorite	56 Castile-born folk hero
37 "Smooth Operator" singer	58 Place
39 "Smoothe" singer	59 Baby shower?
40 "Who ___ to judge?"	61 Assemble-it-yourself furniture seller
41 Writer Kingsley	62 Chucklehead
42 "Bye Bye Bye" boy band	63 Spoken
43 "Samantha Bee" network	64 Plant with fronds
44 April shower?	65 Big shrimp
	66 Contrary girl of rhyme

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

29 Casino, to gamblers

30 "Back in Black" rockers

31 Sturgeon eggs

32 "___ la Douce"

33 Game that goes into overtime, e.g.

36 Crow cry

38 Medium for Matisse

39 Neighbor of Isr.

41 Purple smoothie berry

43 Cyber Monday come-ons

45 Freeport-based retailer

46 T

BUSINESS & FINANCE

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THE WALL STREET JOURNAL.

Monday, July 24, 2017 | B1

Yen vs. Dollar 111.1840 ▼ 0.65%

Hang Seng 26706.09 ▼ 0.13%

Gold 1254.30 ▲ 0.76%

WTI crude 45.77 ▼ 2.45%

10-Year JGB yield 0.071%

10-Year Treasury yield 2.232%

Investors Flee China Tech Stocks

SHANGHAI—Tech shares have been on a tear this year, driving up stock markets around the world. One market, however, has been a notable exception to this trend: China.

Investors have been rushing out of the country's domestically listed technology companies in droves. The tech-heavy ChiNext Price Index, the main gauge of a Shenzhen-based board established in 2009 to showcase China's small-capitalization companies, is among the worst-performing benchmarks globally in 2017, having fallen 14%.

Instead, investors have been plowing money into some of China's largest, often government-backed companies. The SSE 50 Index, which tracks the 50 most valuable companies listed in Shanghai, has surged 15% this year to its

highest level since July 2015, while a gauge of the top 200 listed state-owned enterprises, or SOEs, in China is up 13%.

This divergence between sectors is likely to persist, traders and analysts said. Measures by Chinese regulators to cool speculation in local markets favor relatively safe, state-backed company stocks, they said. The recent inclusion of nearly 200 large Chinese companies in index provider MSCI Inc.'s main benchmarks could also draw more funds to those shares.

Moreover, Chinese President Xi Jinping has made the overhaul of SOEs and the creation of "national champion" companies that can compete globally a policy priority.

The shift in investor appetite has helped stabilize China's stock markets after a

Small-Cap Swoon

Monthly turnover rate on the ChiNext board has dived as investors ditch small-cap stocks.



Source: Wind Info
THE WALL STREET JOURNAL.

tumultuous couple of years. Shanghai's main benchmark index, dominated by large state-owned companies, is up 3% this year. Nine of China's

10 biggest listed companies have risen more than 15%, led by Ping An Insurance (Group) Co., the country's largest insurer by market value, and state-owned China Merchants Bank Co.

However, some market observers said they fear the concentration of investment flows into large state-owned companies risks propping up areas of China's so-called old economy such as big banks and heavy industry, which have easy access to funding. State-owned companies absorb about half of all bank credit in China, according to the International Monetary Fund. Meanwhile, capital is being drained from privately owned companies in faster-growing sectors that should be core to the country's economic development.

"We are seeing a fundamental shift in political priorities away from encouraging financial innovation to guarding against systemic risks," said Jacky Zhang, an analyst at BOC International. "Risk appetite across all types of investors has decreased dramatically....Institutions are huddling together in a handful of stocks regardless of their actual growth potential."

To be sure, China's most valuable tech companies have benefited from this year's global boom, but they are listed only outside mainland China. E-commerce company **Alibaba Group Holding Ltd.** has soared 73% on the New York Stock Exchange so far this year, while Hong Kong-listed **Tencent Holdings Ltd.** has jumped 57% year to date. The drop in mainland Please see **SHARES** page B2

Boeing Pushes On With Job Cuts

By DOUG CAMERON

Boeing Co. is cutting workers at its fastest clip in more than a decade.

The aerospace giant shed more than 6,000 staff during the first half of the year, some 4% of its workforce through a mix of attrition, buyouts and layoffs, most of them at its big jetliner plants in Washington state.

Boeing has said it needs to improve efficiency and rely on more factory automation to build the next generation of aircraft as it works through an order book of more than 5,700 jets.

Executives said the cost-cutting drive was crucial to remain competitive with **Airbus SE**. Boeing's European rival has in recent years claimed more than half of the market for single-aisle workhorse jets, tilting the balance of what had been an evenly balanced duopoly for two decades.

The job cuts at the world's largest airline manufacturer by revenue are most pronounced in Washington state, home to two of its three commercial jet-assembly plants. Washington's employment department said Boeing has issued layoff notices to 1,251 staff in the state this year, with the latest batch of cuts starting on July 21.

Over the past four years, Boeing has reduced its Seattle-area workforce by more than 20,000 people, according to company records.

The scale of the cuts have drawn fire from Boeing unions, which are concerned the company is diluting its engineering skills at a time when it is boosting aircraft production and transitioning to new models of two of its best-selling jets.

While focused on the Seattle area, the job cuts also have extended to the plant in North Charleston, S.C., where President Donald Trump attended the February rollout of the new 787-10 Dreamliner, extolling plans to boost U.S. manufacturing jobs.

Four months later, Boeing said it planned to lay off around 200 workers at the facility, adding to 700 who had taken buyouts. Employment at Boeing's Charleston-area facilities dropped to around 7,300 at the end of June from a peak of over 8,000 at the end of 2015.

Richard Aboulafia, an aerospace consultant at Teal Group, said Boeing's warming relationship with Mr. Trump after a rocky start over the Air Force One replacement program helped provide some political cover for the job cuts. In December, Mr. Trump called for the cancellation of the order for a new Air Force One from Boeing, citing the cost.

The analyst also questioned Boeing's contention that cuts are needed to keep pace with Airbus. "Competition is pretty much the same as it's been for years," said Mr. Aboulafia, who views them as an opportunity. Please see **JOBS** page B2



Mechanical engineer Parker Heyl adjusts a robotic arm at RightHand Robotics' test facility in Somerville, Mass.

Robots Picking, Retailers Grinning

Automated advances are needed to help distribution centers keep pace with strong online sales

By BRIAN BASKIN

Robot developers say they are close to a breakthrough—getting a machine to pick up a toy and put it in a box.

It is a simple task for a child, but it has been a significant hurdle for retailers automating one of the most labor-intensive aspects of e-commerce: grabbing items off shelves and packing them for shipping.

Several companies including Saks Fifth Avenue owner **Hudson's Bay Co.** and Chinese online retailer **JD.com Inc.** have recently begun testing robotic "pickers" in their distribution centers. Some robotics companies say their ma-

chines can move gadgets, toys and consumer products 50% faster than human workers.

Retailers and logistics companies are counting on the new advances to help them keep pace with explosive growth in online sales and pressure to ship faster. U.S. e-commerce revenues hit \$390 billion last year, nearly twice as much as in 2011, according to the U.S. Census Bureau. Sales are rising even faster in China, India and other developing countries.

That is propelling a global hiring spree of people to process those orders. U.S. warehouses added 262,000 jobs over the past five years, with nearly 950,000 people working

in the sector, according to the Labor Department. Labor shortages are becoming more common, particularly during the holiday rush, and wages are climbing.

Picking is the biggest labor cost in most e-commerce distribution centers, and among the least automated. Swapping in robots could cut the labor cost of fulfilling online orders by 20%, said Marc Wulfraat, president of consulting firm MWPV International Inc.

"When you're talking about hundreds of millions of units, those numbers can be very significant," he said. "It's going to be a significant edge for whoever gets there first."

Until recently, robots had to

be trained to identify and grab each item, which is impractical in a distribution center that might stock an ever-changing array of millions of products.

Automation companies such as **Kuka AG**, **Dematic Corp.** and **Honeywell International Inc.** unit Intelligrated, as well as startups like **RightHand Robotics Inc.** and **IAM Robotics LLC** are working on automating picking.

In RightHand Robotics' test facility in Somerville, Mass., mechanical arms hunt around the clock through bins containing packages of baby wipes, jars of peanut butter and other products. Each attempt—successful or not—

Please see **ROBOTS** page B2

GE, Its Outlook Hazy, Asks Investors to Wait

By THOMAS GRYTA

General Electric Co., a company in transition that also is changing its CEO, told investors Friday that they'd have to wait four months to hear the new boss's strategy for boosting results.

GE investors, who have missed out on the broader stock market's rally, were in no mood to be patient. Shares of the Boston-based conglomerate fell nearly 3% on Friday, leaving the stock 18% below where it started the year.

GE's profits under pressure, improved its cash flow and ramped up cost-cutting efforts—two areas of investor concern—in Chief Executive Jeff Immelt's last quarter at the helm. The bad news from investors' point of view was that GE tempered profit expectations for the current year and said investors would have to wait until mid-November for CEO-designate John Flannery to discuss the outlook for 2018.

In the first Cold War, the U.S., China and the Soviet Union fought proxy wars rather than confront one another directly. In Cold War 2.0, we still have those—Syria and whatever is brewing in North Korea come to mind—but much of the proxy fighting now happens online. The result is significant collateral damage for businesses that aren't even a

Please see **MIMS** page B4

Mirror Image

GE's shares have lagged behind the broader market and shares of smaller industrial conglomerate Honeywell.

Year-to-date performance



Source: FactSet
THE WALL STREET JOURNAL.

It is unusual for a big company, especially one such as GE that is being pressured by an activist investor to improve its performance, to ask shareholders and customers to wait

so long to learn about its game plan.

"This is a strange situation," said Nicholas Heymann, analyst with William Blair & Co. "This increases the duration of the

period of uncertainty."

On a conference call Friday, analyst Deane Dray of RBC Capital Markets asked if GE would be in "limbo" until November. Mr. Flannery said the financial framework for 2017 is set and that he is "not worried that we're going to be, you know, dead in the water in the meantime." Mr. Immelt will step down at the end of this month after 16 years as CEO.

GE is under increasing pressure to show that its pivot away from financial services, big bets on the oil industry and a renewed focus on making jet engines and power turbines would be good for investors.

Shares fell 2.9% to \$25.91 each in Friday trading.

Mr. Flannery, who formerly ran GE's health-care unit, is meeting with small groups of investors and visiting the business units of the roughly 300,000-person company. Jeffrey Bornstein, GE's chief financial officer, defended the

Please see **GE** page B2

INSIDE



U.S. PUTS CHINESE DEALS ON ICE

FINANCE & MARKETS, B7

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GE

Continued from the prior page timeline in an interview and said the company would have to "play through" any uncertainty created by a review that includes "testing everything we believe."

"The notion that [Mr. Flannery] is going to get his arms around this in a month is a fallacy," Mr. Bornstein said in an interview. "I don't think asking for four or five months to do this is asking a lot."

On Friday, GE backed its prior 2017 projection of earnings of \$1.60 to \$1.70 a share and organic sales growth of 3% to 5%, but it warned that profit

Both General Electric and Honeywell are facing pressure from activist investors.

would be on the weak side. "Given our outlook on oil and gas and power, we are trending to the bottom end of the range," Mr. Bornstein said on the conference call.

Analysts are skeptical that GE will reach a goal of delivering \$2 a share in profit in 2018, but the company said an updated target wouldn't come until after Mr. Flannery's review.

"This was almost like a funeral dirge today. There was nothing positive," said Brian Langenberg, industry strategist at Langenberg & Co. "I can't think of anything in November that is going to make me thrilled."

Meanwhile, industrial conglomerate **Honeywell International Inc.** on Friday reported a

stronger quarterly profit and raised the low end of its 2017 earnings outlook. The company is also conducting a review of its portfolio under new CEO Darius Adamczyk, which it expects to complete in late September or early October.

"We are very conscious of not letting this slow us down," said Chief Financial Officer Tom Szlosek in an interview. "We think we do a good job of keeping our businesses out of it."

Strength in its aerospace division as well as its home and building-technologies business helped Honeywell's latest results. The company's profit rose 6% to \$1.4 billion in the second quarter, while revenue climbed about 1% to \$10.08 billion.

Honeywell shares gained 1% to \$136.35 Friday, leaving it up 18% on the year.

Both GE and Honeywell are facing pressure from activist investors. GE pledged to boost its cost-cutting program earlier this year after discussions with Trian Fund Management LP, which has been frustrated by missed profit goals at GE.

Third Point LLC has called on Honeywell to explore selling or splitting off its aerospace business.

Over 1,800 Boeing employees have accepted voluntary buyouts so far this year, with 3,000 taking that route in 2016, according to its two largest unions.

Boeing declined to comment on the unions' numbers and said its work to increase efficiency is continuing. "Employment reductions will come

through a combination of attrition, leaving open positions unfilled, voluntary layoff program and in some cases, involuntary layoffs," the company said.

Boeing hasn't detailed how many more jobs it may cut, but the existing pace has prompted local Seattle-area officials in March to seek an emergency grant from the Labor Department, said Dot Fallihee, interim chief executive of the Workforce Development Council of Seattle-King County. Ms. Fallihee said it would share over \$300,000 with neighboring Snohomish County to support around 1,000 displaced Boeing workers with benefits such as retraining.

The job cuts have led some critics to question tax breaks the company is receiving from Washington state as it moves some work elsewhere in the U.S. and prepares to open a new center in China to complete work on jetliners destined for that market.

However, the congressman

representing the area housing Boeing's big plants said the move into China reflected its status as a multinational company, even if it is the state's

largest employer. "Aerospace is bigger than Boeing," said Rep. Rick Larsen (D., Wash.), noting the state is home to 1,800 aerospace suppliers.

ADVERTISEMENT

Legal Notices

BANKRUPTCIES

UNITED STATES BANKRUPTCY COURT SOUTHERN DISTRICT OF NEW YORK

In re: CGG HOLDING (U.S.) INC., et al. Chapter 11 Case No. 17-11637 (Jointly Administered)

The debtors in these chapter 11 cases, along with the last four digits of each debtor's federal tax identification number, are as follows: CGG Holding (U.S.) Inc. (6762); CGG Holding B.V. (4673); CGG Marine B.V. (1518); CGG Holding I (UK) Limited (2086); CGG Holding II (UK) Limited (2105); CGG Services (U.S.) Inc. (3790); Alithia Resources Inc. (5147); Viking Maritime Inc. (7405); CGG Land (U.S.) Inc. (2437); Sercel Inc. (6968); Sercel-GRC Corp. (1837); Sercel Canada Ltd. (9968); CGG Canada Services Ltd. (4132); and CGG Marine Resources Norge AS (7825). The location of the debtors' and their non-debtor affiliates' global corporate headquarters is Tour Maine-Montparnasse 33, Avenue du Maine, B.P. 191, 75755 Paris Cedex 15, France.

Official Form 309F (For Corporations or Partnerships)

Notice of Chapter 11 Bankruptcy Case 12/15

For the debtor listed above, a case has been filed under chapter 11 of the Bankruptcy Code. An order for relief has been entered.

This notice has important information about the meeting of creditors, debtors, and trustees, including information about the meeting of creditors and deadlines. Read both pages carefully.

The filing of this case imposed an automatic stay against most collection activities. Creditors that creditors generally may not take action to collect debts from the debtor or the debtor's property. For example, while the stay is in effect, creditors cannot sue the debtor or garnish assets of the debtor, otherwise try to collect from the debtor. Creditors cannot demand repayment from the debtor by mail, phone, or otherwise. Creditors who violate the stay can be required to pay actual and punitive damages and attorney's fees.

Confirmation of a chapter 11 plan may result in a discharge of debt. A creditor who wants to have a particular debt excepted from discharge may be required to file a complaint in the bankruptcy clerk's office within the deadline specified in this notice. (See line 11 below for more information.)

To protect your rights, consult an attorney. All documents filed in the case may be inspected at the bankruptcy clerk's office at the address listed below or through PACER (Public Access to Court Electronic Records) at www.pacer.gov.

The staff of the bankruptcy clerk's office cannot give legal advice.

Do not file this notice with any other court in the case.

4. Debtors' full names: CGG Holding (U.S.) Inc.; CGG Holding B.V.; CGG Marine B.V.; CGG Holding I (UK) Limited; CGG Holding II (UK) Limited; CGG Services (U.S.) Inc.; Alithia Resources Inc.; Viking Maritime Inc.; CGG Land (U.S.) Inc.; Sercel Inc.; Sercel-GRC Corp.; Sercel Canada Ltd.; CGG Canada Services Ltd.; CGG Veritas Services Norge AS

5. All other names used in the last 8 years: CGG Veritas Holding (U.S.) Inc., CGG Veritas Services Holding (U.S.) Inc., CGGVeritas Services (U.S.) Inc., Geophysical Corporation, Digicon Geophysical Corp., CGGVeritas Land (U.S.) Inc., Veritas DGC Land Inc., CGGVeritas Services Holding B.V., CGGVeritas Services (U.K) Holding B.V., CGGVeritas Marine B.V., Sercel Acquisition Corp., Geophysical Research Company, LLC, Seismic Company of America, Inc.

6. Address: 10300 Town Park Drive, Houston, Texas 77072

7. Debtor's attorney, Name and address: Alan W. Kornberg, Paul Weiss, Ritskind, Wharton & Garrison LLP, 1285 Avenue of the Americas, New York, 10019-6064, Court phone: (212) 373-3000, Email: akornberg@pwrlaw.com, pbhermann@pwrlaw.com, ishumeida@pwrlaw.com.

8. Bankruptcy clerk's office: Clerk of the United States Bankruptcy Court, One Bowling Green, New York, New York 10004-1408. Hours open:

BUSINESS & FINANCE

Siemens, Bombardier Explore Deal

BY BEN DUMMETT
AND JACQUIE McNISH

Siemens AG and **Bombardier Inc.** are in advanced talks to combine their train-making businesses, according to people familiar with the matter, as they face stiffer competition from consolidating rivals in China.

Germany's Siemens, one of the world's biggest industrial conglomerates, and Canada's Bombardier, which is also a major plane maker, are discussing possibly creating two joint ventures from their train operations. One unit, controlled by Siemens, would hold the signaling operations of the two companies. The second, which Bombardier would majority own, would oversee the rolling-stock operations. Signaling equipment is used to keep trains clear of each other, and rolling stock centers on train manufacturing.

The joint ventures would have combined annual sales of about €15 billion, roughly \$17.5 billion, based on 2016 results of both companies' train divisions, according to a person familiar with the talks.

The companies expect to reach a deal in the next couple of weeks, though a person familiar with the negotiations said there are still some key issues that need to be resolved. As in all complex merger nego-



Employees work on a train car at a Bombardier production hall in Bautzen, Germany, last month.

tiations, talks could collapse without an agreement. The discussions were previously reported by Bloomberg.

The talks come at a time when the 2015 merger of Chinese train makers CSR Corp. and China CNR is forcing rivals to gain scale, which enables them to boost results by cutting costs and winning additional customers. In 2016, Bombardier's transportation business reported its revenue fell 9% from a year earlier to \$7.57 billion. Earnings before

interest and taxes, a profit measure, also fell. Siemens's train business has fared better, as its revenue and profit grew in its fiscal year ended Sept. 30. Still, orders declined 23% in the year.

Siemens is the leading supplier of train-signaling equipment, accounting for about 25% of the global market, compared with Bombardier's estimated 10% share, according to a recent report by the National Bank of Canada. The report said overlap between the two

companies' rolling-stock businesses could "present some challenges" with competition authorities. The train-manufacturing arms of Bombardier and Siemens are both based in Germany, where the two rank as the country's largest suppliers, the report said.

Bombardier had signaled as far back as 2015 that it was considering a possible joint venture amid consolidation in the sector.

—Christopher Alessi contributed to this article.

SHARES

Continued from the prior page China's tech stocks has been linked to Beijing's clampdown on speculative investment fueled by heavy borrowing. China's central bank has raised several money-market interest rates multiple times this year, and ordered banks to cut back on selling highly leveraged investment products.

Much of the money borrowed to bet on stocks had previously flowed into small-cap companies listed in Shenzhen, China's second-largest stock market. "One popular saying in the startup circle in 2015-2016 was that floating shares on the ChiNext was the

next best thing to printing your own money," said Wendy Liu, head of China equity research at Nomura.

According to exchange data, ChiNext-listed companies, more than half of which are in the tech or telecommunications sectors, still on average trade at 47 times their earnings—a measure commonly used by investors to assess a stock's value. That is far below the 140 times earnings at which they traded at the height of the 2015 bull market, but high when compared with Nasdaq-listed stocks, which on average trade at 26 times.

A flood of new companies coming to market has further undermined stock prices. China's stock-market regulator greenlighted 225 initial public

offerings in the first half of 2017, more than double the number a year earlier.

However, tech companies have also suffered weak earnings and corporate scandals. Four of the 10 largest companies on the ChiNext board have warned of declines in first-half earnings, according to Wind Information Co.

LeEco Holdings, acknowledged in November that LeEco had overreached by expanding from streaming video into electric cars and smartphones, leading to a cash crunch.

In April, LeEco suspended

trading in its shares, saying it was reviewing possible restructuring strategies. Last week, the video subsidiary said its stock would remain halted for as long as three more months. Before the shares were suspended, they were off 40% since November.

Shares of **Shanghai Amarsoft Information & Technology Co.** have plunged 90% since 2015, when regulators opened an investigation into the software developer for suspected collusion with brokers to issue misleading reports about the company. The following year, Amarsoft said it was fined for violations of the law. The company didn't immediately respond to requests for comment.

—Yifan Xie

JOBS

Continued from the prior page tunistic move to boost profits and stoke the share buybacks that have propelled Boeing shares to record highs.

The stock is up about 36% so far this year, valuing the company at close to \$129 billion. Boeing reports second-quarter earnings on July 26.

Over 1,800 Boeing employees have accepted voluntary buyouts so far this year, with 3,000 taking that route in 2016, according to its two largest unions.

Boeing declined to comment on the unions' numbers and said its work to increase efficiency is continuing. "Employment reductions will come

through a combination of attrition, leaving open positions unfilled, voluntary layoff program and in some cases, involuntary layoffs," the company said.

Boeing hasn't detailed how many more jobs it may cut, but the existing pace has prompted local Seattle-area officials in March to seek an emergency grant from the Labor Department, said Dot Fallihee, interim chief executive of the Workforce Development Council of Seattle-King County. Ms. Fallihee said it would share over \$300,000 with neighboring Snohomish County to support around 1,000 displaced Boeing workers with benefits such as retraining.

BUSINESS NEWS

Smokeless Tobacco Is Winning Fans

By JENNIFER MALONEY

Tobacco companies want U.S. regulators to bless smokeless tobacco as a safer alternative to smoking, as cigarette consumption in the country falls. In its campaign, Big Tobacco has unusual supporters: some public-health advocates.

Many scientists agree that moist, smokeless tobacco, including chewing and dipping tobacco, is significantly less harmful than cigarettes. But rather than encouraging the country's 37 million smokers to switch to less-risky products, U.S. health officials have so far stuck with an abstinence-only message to the public.

Online fact sheets published by the Centers for Disease Control and Prevention, the Food and Drug Administration and the National Cancer Institute list multiple health risks associated with smokeless tobacco—including cancers of the mouth, esophagus, and pancreas—but give no sign it is less harmful than cigarettes. "There is no safe form of tobacco," the cancer institute says on its website.

"The 'not safe' message is not enough," said Lynn Kozlowski, a public health professor at the State University of New York at Buffalo.

Mr. Kozlowski is one of several academics and public-

health experts advocating for U.S. health agencies to provide the public with information on the relative risks of tobacco products.

"The risk of tragedy from keeping people in the dark is much greater than the risk of tragedy from informing people," he said.

The Truth Initiative, a U.S. antismoking group, has embraced the so-called harm reduction approach, encouraging smokers who are unable to quit to switch to products such as Swedish-style tobacco pouches called snus or "properly regulated" e-cigarettes.

The debate is coming to a head as the Food and Drug Administration considers whether to approve new marketing claims for smokeless tobacco and other products.

In April, Reynolds American Inc. submitted applications to market six styles of Camel Snus tobacco pouches as being less harmful than cigarettes. Philip Morris International Inc. also has an application pending for a new device that heats tobacco instead of burning it. The FDA is expected to decide next year whether Philip Morris can say on labels and in marketing materials that switching from cigarettes to its IQOS device significantly cuts exposure to harmful chemicals and the risk of to-

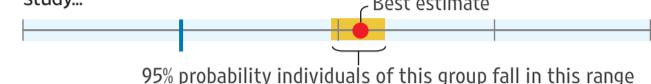
Turning Over a New Leaf

An industry analysis of a big U.S. government survey shows smokeless-tobacco products are less deadly than cigarettes.

People who never used tobacco were the mortality-rate baseline...



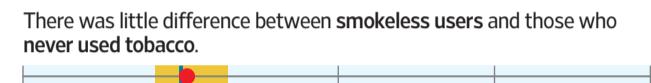
Cigarette smokers were more than two times as likely to die during the study...



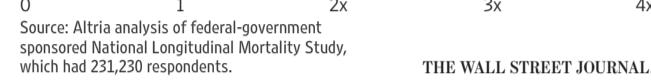
Smokers who also used dip or chewing tobacco had about the same risk...



The risk was lower for people who had quit smoking and switched to smokeless tobacco...



There was little difference between smokeless users and those who never used tobacco...



Source: Altria analysis of federal-government sponsored National Longitudinal Mortality Study, which had 231,230 respondents.

THE WALL STREET JOURNAL

bacco-related diseases.

"Newer and more novel forms of delivering nicotine...could be incredibly helpful to curtail cigarette smoking if [smokers] completely switched," said Mitch Zeller, director of the FDA's Center for Tobacco Products. He declined to discuss

any pending health-claim applications but noted smokeless tobacco poses lower health risks.

"At the end of the day, it's not nicotine that causes disease and death," he said. "Shouldn't we be thinking about various forms of nicotine delivery?"

The FDA will make its deci-

sion after recommendations are made by agency scientists and an independent advisory board.

Smokeless tobacco in the U.S. has been associated with oral cancer, heart disease and other illnesses in multiple studies. But what kills 480,000 people in the U.S. each year is cigarette smoke. Federal officials caution that publicizing the relative risks of smokeless tobacco could lead to greater uptake among youth.

"The best way to fully protect yourself from these risks is to completely quit the use of any tobacco products," said Brian King, a deputy director in the CDC's Office on Smoking and Health.

A federal law passed in 2009 made it illegal for tobacco companies to make health claims unless given permission by the FDA. In December, the agency partially rejected an application by **Swedish Match North America** Inc. to market its General brand tobacco pouches as less harmful than cigarettes. The FDA invited Swedish Match to revise its proposed health claims.

In Sweden, the smoking rate has fallen to 7%—the lowest in the European Union—as many men switched to snus. Men in Sweden now have a lower tobacco-related death rate than in any other EU country.

NASA Finds Ways to Avert Battery Fires

By ANDY PASZTOR

NASA research to prevent catastrophic fires on vehicles and space suits in orbit is expected soon to make personal robots, audio gear and other electronics safer on the ground.

Researchers, regulators and some electronics makers say the space agency is developing some of the most promising solutions to keep lithium-ion power packs from overheating and sparking fires. Working with closely held **Kulr Technology** Corp., the National Aeronautics and Space Administration is developing systems that wedge heat-absorbing carbon-fiber materials and even tiny water reservoirs between the battery cells to head off blazes.

NASA's initial goal was to prevent fiery accidents from lithium-battery malfunctions in space suits. The first modified suits are scheduled to be sent to the international space station in coming months.

The fire-prevention designs under development by NASA and Kulr aren't meant for laptops or smartphones, but they are set to be used in consumer products such as centralized audio controls for homes and **Ubtech Robotics** Corp.'s Lynx, a new humanoid robot. Lynx features **Amazon.com** Inc.'s Alexa digital assistant and is slated to go on sale this summer.

Ubtech, a rapidly growing Chinese robot maker, is in the final stages of testing the Lynx robots, which will offer facial-recognition capabilities. Ubtech already relies on Kulr to safeguard robots sold by major U.S. retailers such as **Best Buy** Co. and **Costco Wholesale** Corp.

Kulr Chief Executive Michael Mo said the company is far enough along to start assessing commercial applications, ranging from medical devices to drones to electrical systems on airliners.

BMW Denies VW Claims of Possible Antitrust Violations

By WILLIAM BOSTON

Of course this also applies to diesel vehicles," BMW said in a statement.

The comments come after Volkswagen, Germany's largest car maker, alerted European antitrust authorities about a year ago to discussions between itself and its main German rivals, a person familiar with the situation said.

"The European Commission and the Bundeskartellamt have received information on this matter, which is currently being assessed by the Commission," a European Commission spokes-

person said in a statement. "It is premature at this stage to speculate further."

A spokesman for Germany's federal cartel office on Sunday declined to comment further on the Commission's investigation into anticompetitive behavior by the participants. The office said it had been looking into possible steel-price fixing by car makers and suppliers since last summer.

The decision by VW to lift the veil on behavior it thinks could have been illegal was part of an effort by management to review past practices and invite

closer scrutiny by authorities after a diesel emissions-cheating scandal engulfed the company, the person said.

The German car maker's new management discovered documents during the course of a German antitrust investigation into steel-price fixing in 2016 it thought might constitute collusion by companies including VW, BMW, **Porsche**, **Audi** and **Daimler**.

In a letter sent to the European Commission in mid-2016, Volkswagen provided details of years of discussions between

car makers to find common positions on a range of technologies, including the diesel emissions systems at the center of the emissions-cheating scandal, the person, a high-ranking auto industry executive, said on condition of anonymity.

In the latest diesel-emissions development, Audi said on Friday it was offering an "update program" for up to 850,000 cars with six- and eight-cylinder diesel engines to add new software.

—Zeke Turner, Emre Peker and Andrea Thomas contributed to this article.

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TECHNOLOGY

Norway Leads Race for Crewless Ships

Domestic firms Yara and Kongsberg are developing a 'Tesla of the Seas' cargo vessel

By COSTAS PARIS

OSLO—Two Norwegian companies are taking the lead in the race to build the world's first crewless, autonomously operated ship, an advance that could mark a turning point in seaborne trade.

Dubbed by shipping executives the "Tesla of the Seas," the Yara Birkeland now under development is scheduled in late 2018 to start carrying fertilizer 37 miles down a fiord from a production facility to the port of Larvik. Using the Global Positioning System, radar, cameras and sensors it is designed to maneuver itself around other vessels and to dock on its own.

The vessel will cost \$25 million, about three times as much as a conventional container ship of its size, but its backers say without need for fuel or crew it promises to cut annual operating costs by as much as 90%. The 100-container ship is scheduled to be

in the water toward the end of next year, though initially it will be tested with a human at the controls.

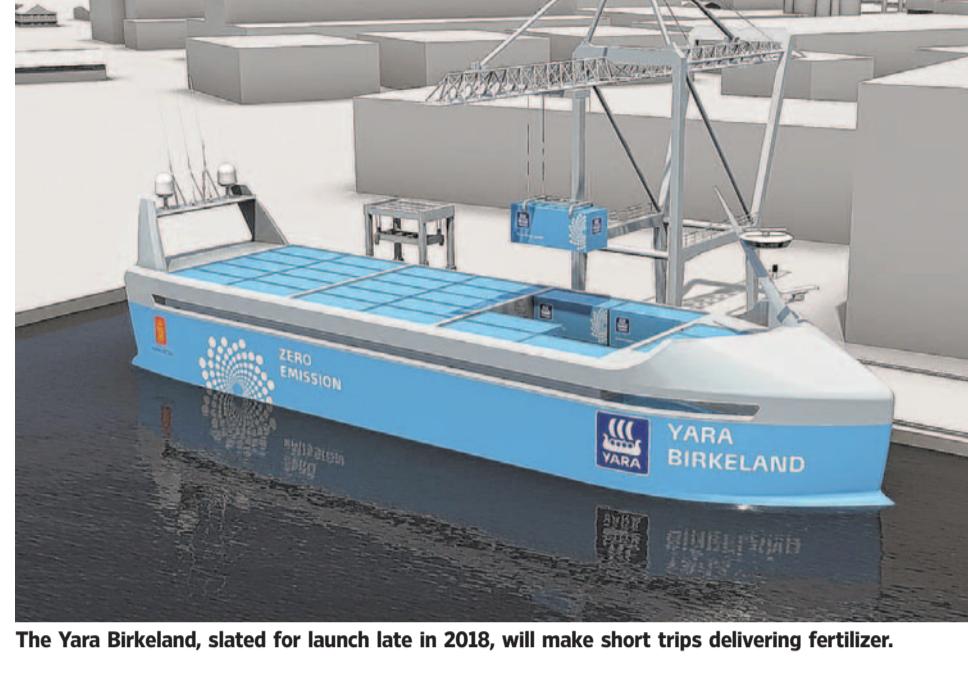
The Birkeland is being jointly developed by agriculture firm **Yara International ASA** and Kongsberg Gruppen ASA, which builds guidance systems for civilian and military uses.

Petter Ostbo, Yara's head of production who leads the electric-ship project, said the company would look to invest in bigger ships and use them for longer routes once international regulations are in place for crewless vessels. "Maybe even move our fertilizer from Holland all the way to Brazil," he said.

The International Maritime Organization, which regulates maritime travel, doesn't expect legislation governing crewless ships to be in place before 2020.

Shipping executives say autonomous vessels will be popular for short sea routes, but doubt they will replace ocean-going ships that move thousands of containers across continents and have an average crew of around 25 people.

"It's not a matter of technology, which is already there,



The Yara Birkeland, slated for launch late in 2018, will make short trips delivering fertilizer.

but a business case," said Lars Jensen, chief executive of SeaIntelligence Consulting in Copenhagen. "Autonomous ships are expensive to begin with, and have to be built very robust, because if they break down, the cost of getting a team to fix them in the middle of the ocean will be very high."

In addition to reducing fuel and labor costs, the Birkeland project is being pitched as a way to cut emissions. The ship is expected to replace 40,000 truck drives a year through urban areas in southern Norway, the companies say.

Ship operators increasingly are being asked to introduce cleaner fuels when sailing

close to populated coastal areas especially in the U.S. and Europe.

"We want to go zero emission," said Mr. Ostbo. "Even if some say climate change is not reality, it's a business reality because clean sources of energy are more affordable than fossil fuels."

The Birkeland will become

autonomous in stages. At first, a single container will be used as a manned bridge on board. Then the bridge will be moved to shore and become a remote-operation center. The ship will eventually run fully on its own, under supervision from shore, in 2020.

"When the bridge goes on land, it will be something like flying a drone from a command center," said Kongsberg's chief executive, Geir Haoy. "It will be GPS navigation and lots of high-tech cameras to see what's going on around the ship."

The Norwegians aren't alone in looking into autonomous shipping. British manufacturer **Rolls-Royce Holding PLC** is investing in similar technology and plans to launch robotic ships by 2020. The first vessels will likely be tugboats and ferries, with cargo ships that can sail through international waters, to follow.

"Once the regulation is in place, I can see this spreading fast," Mr. Haoy said. "There is a lot of interest from operators of coastal tankers, fish-transport vessels and supply ships that are knocking on our door."

India to Get Phone for the Masses

By NEWLEY PURNELL

NEW DELHI—India's richest man said Friday that his cellular company has developed an inexpensive, web-enabled mobile phone, a move that could shake up the country's handset market and force some of the world's leading phone makers to slash prices to stay competitive.

Mukesh Ambani, the chairman of **Reliance Industries Ltd.**, told attendees at the firm's annual general meeting that the device, which resembles a simpler mobile phone but can handle high-speed 4G mobile data connections, will "effectively cost zero," as users will be required only to put down a 1,500 rupee (\$23) security deposit, which can be refunded after three years.

Unlimited mobile data on the phone from **Reliance Jio Infocomm Ltd.** will cost 153 rupees a month, with free voice calls and text messages.

The "truly revolutionary phone," dubbed the JioPhone, "will transform the lives" of the hundreds of millions of Indians who now use so-called feature phones with limited functionality, Mr. Ambani said. Feature phones are primarily



Reliance's new wireless service has been piling up subscribers. An advertisement for Jio in Mumbai last year.

designed for voice calls and sending text messages.

The JioPhone will offer a physical keyboard rather than a smartphone-like touch screen and allow easier access to the internet through voice recognition to "end digital exclusion in India," he said.

Last year Mr. Ambani started offering cut-rate mobile services to promote his new carrier, which he said now has more than 125 million subscribers.

Market leader Bharti Airtel Ltd. had about 275 million subscribers as of May, according to the Telecom Regulatory

Authority of India.

"Reliance can now reach out to the next hundred million users," who are less affluent and need more-affordable phones and data, said Tarun Pathak, an analyst at Counterpoint Research.

Competing telecommunications firms have scrambled to slash prices on data in the wake of Jio's launch, with Vodafone Group, another major player in India, saying in March it would merge its embattled Indian business with a local rival, Idea Cellular Ltd.

While they boast large subscriber bases, telecommuni-

cations companies in India are contending with average revenue per user of less than \$2 a month, ranking the market among the world's lowest by that metric, Telecom Regulatory Authority data shows.

The JioPhone's inexpensive data may appeal to many of the approximately 400 million people in India who now use traditional feature phones, Mr. Pathak said.

Consumers pay an average of about \$23 for feature phones in India, with many users paying about \$2 a month for voice and text messages, according to Counterpoint data. That is in line with the price of Jio's new device.

India's low-end mobile phone market is dominated by phones from South Korea's Samsung Electronics Co. and Indian makers such as Lava International Ltd. and Micromax Informatics Ltd., Mr. Pathak said.

"It's a category where the least amount of innovation has happened," he said, meaning the JioPhone has a good chance of poaching users looking to upgrade.

The JioPhone will be available from September, Mr. Ambani said.

Lyft Intends to Create A Driverless-Car Unit

By GREG BENINGER

When **Uber Technologies Inc.** embarked on a costly mission to develop self-driving vehicles, ride-hailing competitor **Lyft Inc.** set a different course, relying on partnerships for what many believe is the future of urban transportation.

Now Lyft is raising the ante at a vulnerable time for its rival.

The San Francisco company

on Friday said it is forming its own autonomous-car development division, to be staffed by hundreds of engineers and technicians at a new office in the heart of Silicon Valley. Lyft said it would be developing its own software and hardware to enable vehicles to maneuver without a human at the wheel, while the company also works to attract new partners that can plug their own self-driving cars into its grid.

"We want to take a proactive role into pushing the industry into a more open environment," Raj Kapoor, Lyft's chief strategy officer, said at a media event. "The only way to do that is to go deeper and to develop these technologies."

The new division marks a shift for Lyft, which had favored partnerships with self-driving vehicle developers including **Alphabet Inc.'s Waymo**, **NuTonomy Inc.**, **General Motors Co.** and **Tata Motors Ltd.'s Jaguar Land Rover**. While Lyft has kept many details of those deals under wraps, it had signaled it would leave the development of those cars and underlying technology to the manufacturers, which promised to provide the vehicles to Lyft's network in the coming years.

Later this year, NuTonomy and GM plan to test their cars on Lyft's network.

Lyft executives insist their efforts to develop driverless cars won't conflict with those partnerships. But the move indicates Lyft is hedging its bets as an increasing array of tech companies and auto makers jockey for position as the multitrillion-dollar U.S. automotive industry evolves. Many technologists see autonomous vehicles saving lives by reducing human error and lowering the costs of transportation, but it isn't clear who will own the cars or how they will be managed and operated. Self-driving technology is still unproven and will take years to perfect and to receive regulatory approval.

"While these players started a long time ago, the technology has evolved since then," said Luc Vincent, Lyft's vice president of engineering.

"We can build on the current technology and move faster."

As Lyft plants its flag, Uber's self-driving operation is reeling after the company fired the division's head in the wake of a lawsuit from Waymo that alleges the ride-hailing company conspired with the executive, Anthony Levandowski, to steal design secrets.

Uber, which denies the allegations, has sought to be a leader in self-driving cars, rolling out tests in Pittsburgh, San Francisco and Tempe, Ariz.

Lyft is opening a new office in Palo Alto, Calif., and hopes that base will help it attract engineering talent, said Director of Product Taggart Matthiesen. He said the company plans to hire "hundreds" for the new division.

BUSINESS WATCH

CARDINAL HEALTH

Company Considers Its Options in China

Cardinal Health Inc. is exploring the sale of its China distribution operations, marking a potential exit from a fast-growing pharmaceuticals market.

In a note to investors last week, the U.S. company said it was exploring strategic alternatives for Cardinal Health China, citing investment costs. The Shanghai-based unit distributes branded and generic drugs and operates direct-to-patient specialty pharmacies. It employs about 2,300 people across China.

Reuters reported earlier about Cardinal Health's plans and that it had drawn interest from firms willing to pay as much as \$1.5 billion in a deal.

In 2010, Cardinal extended its reach in China when it acquired Zuellig Pharma China, the country's largest drug importer, for \$470 million, including debt. Zuellig had annual sales exceeding \$1 billion at the time.

—Anne Steele

and Joseph Walker

AMAZON, WHOLE FOODS

Firms Look to Avoid A Lengthy Review

Amazon.com Inc. and **Whole Foods Market Inc.** are giving U.S. antitrust enforcers more time to complete an early review of their planned tie-up, a strategy that companies sometimes use in a bid to head off a potentially lengthy government investigation.

The government's initial 30-day clock for reviewing the \$13.7 billion Amazon-Whole Foods deal, announced in mid-June and notified to regulators on June 23, was winding down. But in a corporate filing Friday, Whole Foods said Amazon would refile documents seeking government approval this week, effectively restarting the clock. Representatives for Amazon and Whole Foods didn't respond to requests for comment. Companies are required to provide advanced notice of their transactions to the Federal Trade Commission and the Justice Department, which share antitrust authority.

—Brent Kendall



A private clinic in Kiev, Ukraine, one of many institutions disrupted by a June cyberattack.

EREN LUKATSKY/ASSOCIATED PRESS

From Army Clerk To Leader of AIG

Duperreault returns to the insurer with plans to expand, increase use of data analytics

BY LESLIE SCISM

It would be hard to find anyone in insurance with a longer resume than **American International Group Inc.**'s new chief executive, Brian Duperreault.

Mr. Duperreault started as an actuarial trainee at AIG in 1973, straight out of a postcollege stint in the U.S. Army. He rose through the company's ranks to become a senior executive, before leaving in 1994. Over the past 23 years, he has turned one niche offshore insurer into a large and diversified company, become CEO of a big industry brokerage and co-founded his own insurance firm.

In returning to AIG, his plan is straightforward: expand AIG.

He thinks the company has shrunk enough after unloading a series of businesses to help repay a nearly \$185 billion U.S. government bailout and then selling more assets to finance share buybacks. Mr. Duperreault wants to expand in part through acquisitions as well as AIG's life and personal lines insurance businesses, particularly internationally.

"I [was] looking at my alma mater having issues," the 70-year-old said in his first extensive interview since taking the AIG job in May. "My head was saying, 'Don't do it,' because I had a great job. But my heart was telling me otherwise."

Over the past few weeks,

Mr. Duperreault has brought in executives from outside the company and plans to increase use of data science and predictive analytics, particularly as a way to expand sales to midsized businesses.

Many of AIG's 56,400 employees are now meeting Mr. Duperreault for the first time through town halls in New York, Boston, Chicago, London and Dublin, so far. Among things they are learning: Their new boss has deep faith. A Roman Catholic who was educated by nuns in Trenton, N.J., he later attended the Jesuit-run **St. Joseph's University** in Philadelphia.

"Faith and family are the two things I wanted them to understand about me," he said. "The most important element of running a company is doing the right thing, and faith gives one the courage to do that."

Mr. Duperreault said he speaks publicly of his religious side "when I am being asked about who I am." He has publicly thanked God for his successes and keeps a Bible in his office for "when I feel that I have to read it."

Mr. Duperreault didn't initially aim for an insurance career. He went to St. Joe's to study chemistry, but "I just wasn't any good at lab work."

He majored in math, then after college he enlisted in the Army during the Vietnam War and spent three years doing clerical work at Fort Knox, Ky.

Upon discharge, job choices were limited with a stalled U.S. economy. Actuaries were in demand.

"I didn't know anything about actuarial science," he said. "All I know is, I needed a

job."

He was hired at AIG, then a midsized property-casualty insurer, in the early stages of its transformation into one of the world's largest financial-services firms by its CEO, Maurice R. "Hank" Greenberg.

Mr. Duperreault's first assignment was to create divorce insurance that would guarantee income should a marriage fail. While that product wasn't launched, he eventually became a key lieutenant of the legendarily hard-charging Mr. Greenberg.

Mr. Duperreault said he left AIG in 1994 to determine if he had "the wherewithal to stand alone and succeed" without Mr. Greenberg.

In an interview, Mr. Greenberg said he is pleased to see Mr. Duperreault back at AIG, calling him "a good choice." Mr. Greenberg left AIG in 2005 and now runs insurance and investment firm **Starr Cos.**

Mr. Duperreault succeeded Peter Hancock, who lost his hold on the CEO job earlier this year after delaying profit-improvement deadlines. Mr. Hancock had been narrowing AIG's focus through divestitures.

"I think Brian is wise in getting rid of that liquidation strategy," said Mr. Greenberg, referring to Mr. Hancock's divestitures. Turning around AIG "will take time, and you have to have a strategy to differentiate AIG from other companies. He's had a lot of training, been in the industry a long time. But time will tell."

Mr. Duperreault's first job outside of AIG was as CEO of ACE Ltd., which back then was a liability-insurance specialist. The job returned him to his

just is what it is."

History shows that periods of low volatility can last surprisingly long and aren't necessarily harbingers of bad markets to come. After multiyear periods when stocks barely fluctuated, returns have sometimes been poor, as they were after the 1929 crash, the mid-1970s and the early part of the last decade. But calm markets have also preceded or coincided with periods of robust returns, as in the 1950s, the late 1990s and now, at least so far.

You might be tempted to bet against a continuation of today's calm by buying an exchange-traded fund designed to profit if volatility jumps up. But, for complicated technical reasons, such funds can deviate wildly from the underlying performance of the VIX, sometimes delivering blood-curdling losses. Avoid that.

Viewed over the longer term, the recent calm is even less unusual. Counting July as if it were already over, all seven months of 2017 do rank among the least volatile on record, but they are far from the historical extremes, according to William Schwert, a finance professor at the University of Rochester.

February—statistically, the dullest point in the market's doldrums this year—was only the 18th-least volatile among the 1,586

months since reliable data became available in 1885. So far, July is the 44th-least volatile month on record.

The early 1950s, mid-1960s and the mid-1990s, among many other periods, had volatility at least as low as today's.

Is volatility too low for the market's own good? Does that mean that we're in a bubble that's bound to burst?

"I don't think it means anything," says Prof. Schwert, who has been studying volatility for more than 30 years. "There's no way to determine whether volatility is too high or too low. It

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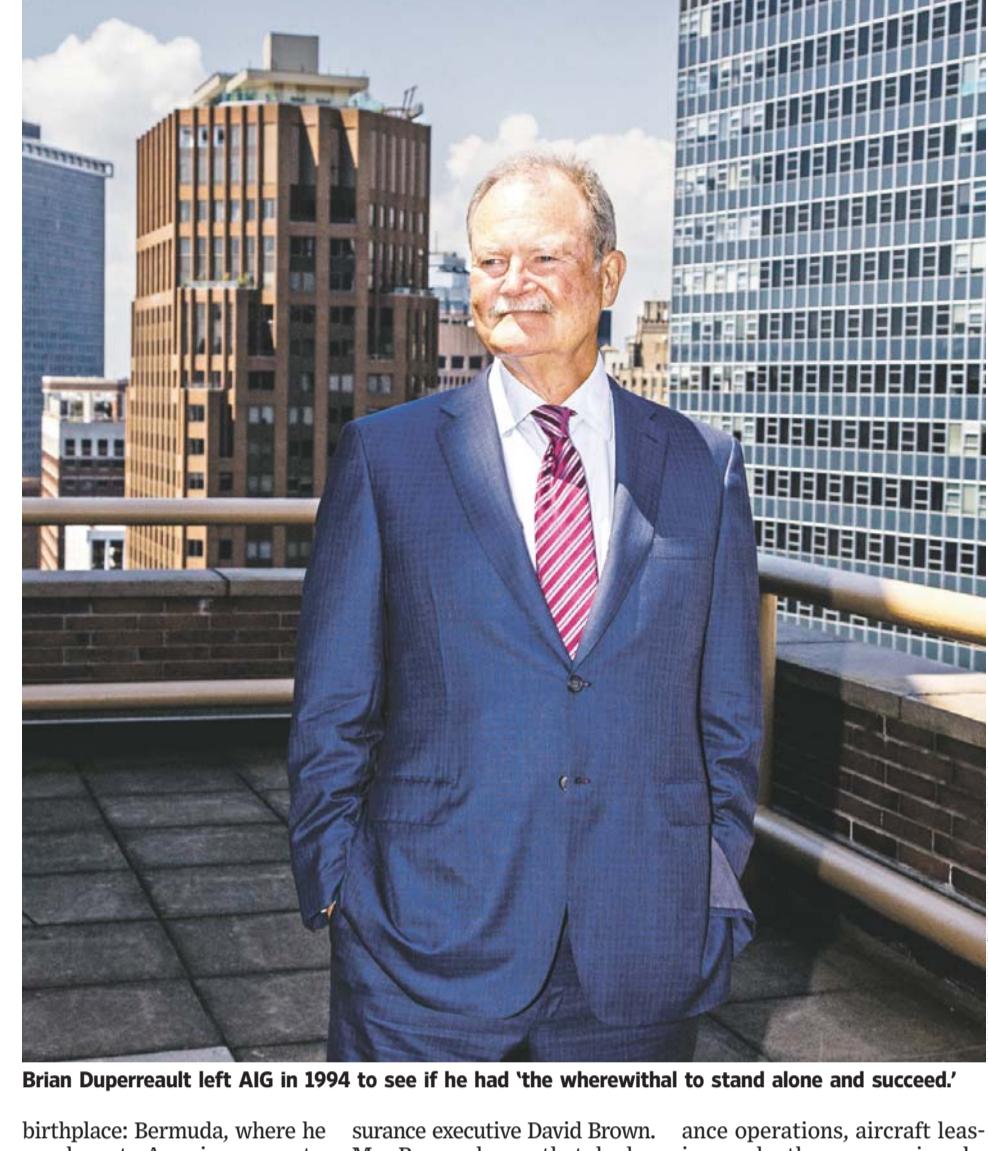
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birthplace: Bermuda, where he was born to American parents.

Over the next decade, he diversified and expanded ACE through acquisitions. In 2004, he stepped down as CEO and became nonexecutive chairman.

In 2008, he became CEO of then-struggling brokerage and consulting firm Marsh & McLennan Cos. He cut costs, strengthened management and acquired smaller firms to bolster growth. He left in 2012.

The following year, while on a dinner cruise in Hamilton, Bermuda, he mentioned still having "gas in the tank" to in-

surance executive David Brown. Mr. Brown knew that hedge fund Two Sigma Investments, a leader in quantitative analysis, was looking to get into insurance, and he put Mr. Duperreault in contact with them.

That led to Mr. Duperreault co-founding **Hamilton Insurance Group** in 2013 with Two Sigma's principals. As part of Mr. Duperreault's new job, a Two Sigma affiliate aims to work with AIG on an insurance platform.

AIG today is far different than the firm Mr. Duperreault left in 1994. Gone to repay its bailout are Asian life-insur-

ance operations, aircraft leasing and other crown jewels. Also gone are some former rivals such as Aetna Inc. and Cigna Corp., which divested property-casualty units. New competition has emerged, including Chubb Ltd. That insurer is the former ACE and is run by Hank Greenberg's son Evan, who succeeded Mr. Duperreault at ACE.

"You need to have great rivalries to make you better," Mr. Duperreault said. "So it's actually a wonderful thing, in a way, that they're out there and they're so good because it's going to make us better."

THE INTELLIGENT INVESTOR | By Jason Zweig

Volatility Quandary: 'It Just Is What It Is'

One of the oldest adages on Wall Street is that investors are always worried about something. This summer, the markets are writing a corollary to that old rule: When investors can't find anything worth worrying about, they worry about why no one seems to be worrying enough.

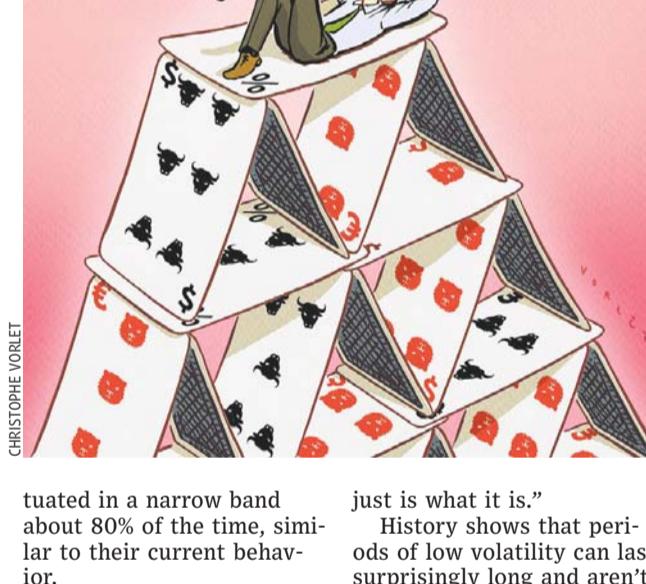
"The global market's ongoing low volatility should be unsettling for investors," portfolio manager Brian Singer of William Blair & Co. wrote this month, and just about every investor I've spoken to in the past few weeks has echoed that idea.

Tax overhaul is stalled, global alliances are fraying, the health-care plan is in the emergency room—yet U.S. stocks are not only at records but fluctuating less (by some measures) than at any time since 1993. It's that calm that is making many portfolio managers jittery.

I'm not so sure how much you should worry about all this.

Yes, the CBOE Volatility Index or VIX, the measure of stock-price fluctuation often called the "fear gauge," is brushing lows set nearly a quarter-century ago. However, futures contracts expiring in 2018, a way to bet on the direction the VIX will head over the next year, are at prices much closer to historically normal levels. That implies traders believe today's extraordinary calm won't last much longer, says Joanne Hill, head of research and strategy at CBOE Vest Financial, an investment-advisory firm in McLean, Va.

The VIX dates back only about 30 years. Since 1950, according to an analysis by the BlackRock Investment Institute, stocks have fluc-



tuated in a narrow band about 80% of the time, similar to their current behavior.

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China Boosts Insurance Brokers

By DONATO PAOLO MANCINI

Global insurance brokers are dwarfed by insurers themselves in terms of size, but an analyst report suggests a shift toward service-based economies in emerging markets, especially China, will mean that the growth of the brokerage market will remain robust for years to come.

The global insurance-brokerage market is projected to reach a value of \$54.8 billion in 2021, according to the report released Thursday by the market analyst MarketLine. The sector expanded at a compound annual rate of 7% from 2012 to 2016, MarketLine said, reaching a value of \$42.8 billion this year.

Insurance brokers act on behalf of buyers, differing from insurance agents. Brokers have no authority to issue policies, typically offering risk management, claim-reduction strategies and other services.

"Brokerage is nowhere near as prevalent in Asia as it is in

North America, but the emerging demand for insurance products based on rising income and economic acceleration of countries within the region has stimulated the sector's growth there," said Nicholas Wyatt, project leader for MarketLine.

"Nowhere has this been more apparent than in China."

China has gradually transitioned to an increasingly service-based economy in recent years. Insurance has been a key part of this transformation. The number of insurance institutions rose to 194 in 2015 from 180 in 2014, according to China's National Statistics Bureau, and the total number of people employed in the sector rose by more than 100,000 over the same period.

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FUND NAME GF AT LB DATE CR NAV YTD %RETURN-2YR

Chartered Asset Management Pte Ltd - Tel No: 65-6835-8866 Fax No: 65-6835-8866 CAM-CIF Limited OT MUS 07/14 USD 305319.25 11 3.8 -0.5

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■ Website: <http://www.valuepartners-group.com> Tel (852) 2143 0688

China A-Share Fund Cls A AUD H OT HKG 07/20 AUD 13.74 16.5 17.5 1.6

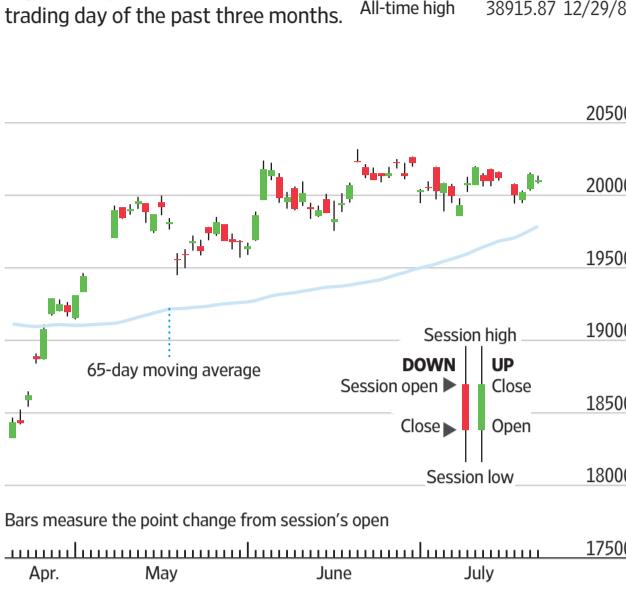
MARKETS DIGEST

Data as of Friday, July 21, 2017

Nikkei 225 Index

20099.75 ▼ 44.84, or 0.22%

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



Bars measure the point change from session's open

Apr. May June July

17500 18000 18500 19000 19500 20000 20500

STOXX 600 Index

380.16 ▼ 3.91, or 1.02%

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



Apr. May June July

365 370 375 380 385 390 395

S&P 500 Index

4 p.m. New York time

Last 24.35 24.87

P/E estimate * 18.87 18.39

Dividend yield 1.97 2.12

All-time high: 2473.83, 07/19/17

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

Year-to-date

52-wk high/low

All-time high

4/15/15

396.45 328.80

414.06

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FINANCE & MARKETS

U.S. Panel Brakes Chinese Acquisitions

CFIUS has held up a string of transactions amid concerns about national security

The U.S. is toughening its scrutiny of Chinese deals, throwing a number of high-profile takeover bids into question

By Kate O'Keeffe
in Washington
and Julie Steinberg
in Hong Kong

tion and helping spur a huge case backlog, according to people familiar with the process.

The Committee on Foreign Investment in the U.S. has signaled there are significant obstacles facing the proposed \$1.2 billion purchase of Dallas-based payments firm MoneyGram International Inc. by Ant Financial Services Group, controlled by Chinese billionaire and Alibaba Group Holding Ltd. co-founder Jack Ma, some of the people said.

The committee, known as CFIUS, didn't approve the deal by a recent deadline, the people said. Ant refiled its application, and Mr. Ma has continued a charm campaign that included a meeting Tuesday with 20 U.S. and Chinese executives at the U.S. Department of Commerce.

The backers of at least four other Chinese deals have recently refiled or said they would refile applications to the committee after failing to get approval within the roughly two-and-a-half-month review period, according to public disclosures.

At least two of them have taken the unusual step of refiling twice to try to address the committee's concerns—China Oceanwide Holdings Group Co., which last year announced a \$2.7 billion takeover of Richmond, Va.-based insurer Genworth Financial Inc., and Chinese-government backed Canyon Bridge Capital Partners, which last year announced a \$1.3 billion plan to



Jack Ma in Detroit last month. An Alibaba affiliate's bid for a U.S. payments firm faces obstacles.

take over Portland, Ore.-based Lattice Semiconductor Corp.

Though refiled deals can still be approved, delays can be symptomatic of committee concerns, said people familiar with the process.

At least one smaller Chinese deal to buy a U.S. Wi-Fi hotspot business collapsed last month after failing three times to get approval.

Reviews are stretching on for many deals, including one by Chinese conglomerate HNA Group Co. to buy a controlling stake in hedge-fund investing firm SkyBridge Capital from financier Anthony Scaramucci, who on Friday was named White House communications director. People involved in the CFIUS process say many of their deals are facing months-long delays.

Deal makers say CFIUS—a multiagency committee led by the U.S. Treasury whose task is to screen foreign investments for national-security concerns—is growing increasingly wary of Chinese companies. A recent buying spree

pushed China's announced overseas investments to a record \$221 billion last year, including \$66 billion in the U.S., according to Dealogic.

Critics in Congress and some government agencies say Chinese investment poses disproportionate risks to national

only continued to intensify during the current administration.

Lawmakers and the Treasury are considering changes to the review process that could further tighten scrutiny on Chinese investment. Chinese deal makers are battling similar concerns from European regulators as well.

Rising trade tensions between China and the U.S. also could be contributing to increased hesitation by the committee, lawyers and bankers say. High-level trade talks between the two countries ended Wednesday without any concrete agreements, and President Donald Trump has said he would consider leveraging trade to get China's help reigning in North Korea.

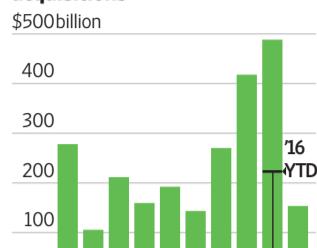
"A deal that might not otherwise raise much concern could raise serious concern if it's being done by a Chinese company," said Peter Alfano, a lawyer at Squire Patton Boggs who maintains a database of publicly disclosed CFIUS activity.

The committee is also re-

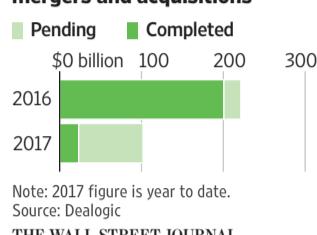
Slowdown

A Chinese M&A wave has slowed amid rising opposition in Washington.

U.S. inbound mergers and acquisitions



Announced Chinese outbound mergers and acquisitions



Note: 2017 figure is year to date.
Source: Dealogic

THE WALL STREET JOURNAL.

Reviews take a maximum of 75 days, including an investigative period in which the committee may ask for more information. If companies aren't approved in that period, they can tweak their deals to address concerns and refile their submissions. Preliminary discussions with the committee are dragging on too, lasting as long as six weeks, said a person familiar with the process.

For the Ant and China Oceanwide deals, the committee is concerned about the prospect of giving Chinese companies access to Americans' personal data, said people familiar with the discussions. In the past, the committee likely would have approved such deals without much disruption, but it has grown more sensitive to personal-data issues after a cyberattack on the U.S. Office of Personnel Management that U.S. intelligence said in 2015 it suspected China was behind, these people said. China has denied the accusation.

Ant and MoneyGram officials have said MoneyGram would continue storing what little personal data it collects at a secure facility in Minneapolis.

Most sensitive are Chinese investments in technology, particularly semiconductors—seen by the U.S. as a potential economic and military threat. In December, Mr. Obama nixed the purchase of German semiconductor-equipment supplier Aixtron SE by a Chinese investment fund, following an investigation by CFIUS, which was looking into the deal because Aixtron has U.S. assets.

That doesn't bode well for Canyon Bridge's deal for Lattice, even though Lattice has said it doesn't make military-grade technology. After recently failing again to win CFIUS approval, the companies discussed taking the deal to Mr. Trump to test his views on Chinese investment, according to people familiar with the matter. They ultimately decided to refile their application.

—Peg Brickley contributed to this article.

A new financial advisor ranking from Barron's and The Australian

T H E

M O N E Y

M A K E R S

Australia's
Top 50
Financial
Advisors

barrons.com/asia

BARRON'S

THE AUSTRALIAN

MARKETS

Short Sellers Retreat as Shares Surge

A gauge of bets against stocks is at a four-year low even as warning signs persist

By BEN EISEN
AND AKANE OTANI

Times are tough for skeptics of the bull market.

Flummoxed by the endurance of a 2017 rally that produced its 27th S&P 500 record last week, investors are backing off bets that major indexes are headed downward.

Bets against the SPDR S&P 500 exchange-traded fund, the largest ETF tracking the broad index, fell to \$38.9 billion in the week ended July 14, the lowest level of short interest since May 2013, and remained near those levels last week, according to financial-analytics firm S3 Partners. Short sellers borrow shares and sell them, expecting to repurchase them at lower prices and collect the difference as profit.

Bearish investors say they are scaling back on these bets, not because their view of the

market has fundamentally changed but because it is difficult to stick to a money-losing strategy when it seems stocks can only go up.

They believe the market moves are at odds with an economy that remains lukewarm as it enters its ninth year of growth, stock valuations that are historically high and a delay of business-friendly policies in Washington like tax cuts and infrastructure spending.

"There seems to be an overall view that people are invincible, that things will always go up, that there are no risks and no matter what goes on, no matter what foolishness is in play, people don't care," said Marc Cohodes, whose hedge fund focused on shorting stocks closed in 2008.

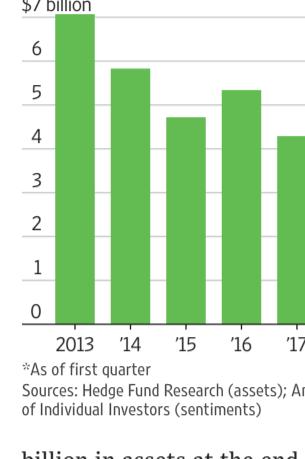
Mr. Cohodes is now a chicken farmer based in California. He shorts a handful of individual stocks personally, but isn't focused on the broader market.

The practice of shorting companies is also going by the wayside as stocks continue to notch records. Short-biased hedge funds had \$4.3

Short End of the Stick

Rising share prices have hit funds focused on short selling, reducing the ranks of bearish investors at a time when sentiment is growing more bullish.

Estimated assets in short-biased hedge funds

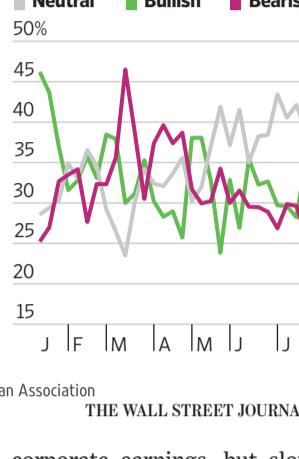


*As of first quarter
Sources: Hedge Fund Research (assets); American Association of Individual Investors (sentiments)

billion in assets at the end of March, down from \$7.1 billion at the end of 2013, according to HFR Inc.

The difficulty for stock-market bears stems from a Goldilocks-like market environment, in which the economy is expanding fast enough to support

Breakdown of surveyed investors by sentiment



THE WALL STREET JOURNAL.

corporate earnings, but slow enough for the Federal Reserve to keep rates relatively low. Years of low rates and easy-money policies have boosted stocks, defying forecasts for a steep, prolonged downturn.

"The shorts have been frustrated now for quite a while,"

said Scott Miner, global chief investment officer at Guggenheim Partners, which has \$260 billion in assets under management. The scenarios that might lead to a payout for market bears—an economic recession or a sharp rise in interest rates—don't seem imminent, either, Mr. Miner added.

In one sign of capitulation among the bears, stock pullbacks have been getting shorter.

This year, there have been two times when the S&P 500 has closed down 1% or more. After these two sell-offs, it has taken stocks an average of 14.5 days to recoup losses. That is well below the 25.5 days it took on average to bounce back from stretches of 1%-plus sell-offs in 2016 and the 80 days it took to rebound in 2015, according to an analysis by WSJ Market Data Group.

"The danger is that you're too early getting out," said Ernesto Ramos, head of equities at BMO Global Asset Management, which has \$246 billion under management.

The issue for investors, Mr. Ramos said, is that there re-

main few compelling alternatives to stocks.

Bond yields have remained stubbornly low this year, with the yield on the 10-year Treasury note ending Friday at 2.232%, down from 2.446% at the end of 2016.

At the same time, many who are invested in stocks are wary of signs that the bull market's days are numbered.

While signs of a housing bubble in the middle part of the last decade were abundant, indications that borrowing by companies will lead to a wave of defaults are more nuanced, said Albert Edwards, a strategist at Société Générale SA. Mr. Edwards has been bearish for most of the bull market and believes a corporate-debt binge will ultimately lead to a deeper bear market than in the 2008 financial crisis.

"It's much harder this time to see the corporate-debt excesses," he said. "It's not a headline catcher. You have to be a bit geeky to pull apart the data and analyze it."

—Peter Levin
and Charley Grant
contributed to this article.

OPEC Grapples With Growing Threats to Oil Deal

By GEORGI KANTCHEV

ST. PETERSBURG, Russia—OPEC said Sunday it was having "intensive consultations" ahead of a gathering Monday with big oil-producing allies about growing threats to an output deal that has failed to raise crude prices.

Saudi Arabian energy minister Khalid al-Falih cut short his vacation to come to St. Petersburg to meet with his Russian counterpart, Alexander Novak, said Mohammad Barkindo, the secretary-general of the Organization of the Petroleum Exporting Countries. The two men will preside over a gathering of several OPEC and

non-OPEC producers Monday designed to shore up support for their efforts to limit global oil output. "We will discuss the situation on the market," Mr. Novak told reporters.

Among the topics, he said, will be production from Libya and Nigeria. The two OPEC members, which were exempted from a deal struck last year to withhold about 2% of global oil supplies from the market, have recently raised output. Saudi Arabia is the de facto leader of the 14-nation OPEC group, while Russia is the world's top producer and leader of a faction of 10 non-OPEC producers that pledged to cut output.

The deal was intended to draw down a global oversupply of oil that sent prices to historically low levels. Instead, oil supplies have drained slower than expected and prices have remained mired below \$50 a barrel.

One of the main reasons is largely out of OPEC and Russian control: U.S. producers.

Shale drillers—who work on shorter-term projects than traditional oil producers—took advantage quickly when oil prices briefly rose last year after the OPEC deal, sending more crude into global supply. They have also learned to drill at lower prices, and U.S. production has maintained its upward swing even as prices have remained depressed this year.

OPEC members have repeatedly ruled out making deeper production cuts. While that action would likely raise prices, it would probably also allow shale drillers to ramp up output even more, reducing OPEC market share and eventually killing any rally.

"Market dynamics have been challenging," Mr. Barkindo told reporters. "They have been almost challenging established economic theory."

Mr. Falih arrived here Saturday and has taken meetings with delegations from Libya and Nigeria, which have been ramping up output. Both countries were left out of the production-cutting deal because civil strife had crippled their oil industries, but recent gains have led to calls to limit their output.

It was part of a flurry of activity ahead of Monday's meetings. Mr. Falih was also scheduled to meet with officials from OPEC member Algeria, while Kuwait's oil minister, Issam A. Almarzooq, was holding a series of phone consultations over the weekend with oil ministers from OPEC and non-OPEC producing countries," OPEC said in a news release describing the activity as "intensive."



Saudi Arabian energy minister Khalid al-Falih
AKOS STILLER/BLOOMBERG NEWS

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How Markets Could Exit Shadows

The European Central Bank has reached the same spot the Federal Reserve reached four years ago. For financial markets on both sides of the Atlantic, it is an event that comes with consequences.

In May 2013, then-Fed Chairman Ben Bernanke told Congress the central bank later that year might begin tapering its asset purchases—remarks that sent Treasury yields sharply higher, and ultimately forced the Fed to push back its plans. The ECB is keen not to relive the so-called taper tantrum. Following its meeting on Thursday, President Mario Draghi took care to not lay out any timetable for when the ECB will start reducing purchases.

But, as with the Fed in 2013, an improving economy is putting the ECB on the path to eventually ending its bond purchases and, if nothing goes badly awry, tightening. Throughout that process, even as its benchmark interest rate remains stuck at zero, financial markets will need to undergo a substantial adjustment.

Europe's Turn?



ECB's shadow interest rate

Sources: Jing Cynthia Wu; Zuma Press (photo)

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European Central Bank headquarters in Frankfurt

month, the ECB shadow rate is deeply negative.

The lowest the comparable U.S. shadow rate reached was minus-3% in mid-2014, when the Fed was in the midst of tapering. From there it climbed, reaching the zero level in November 2015—the month before the Fed raised rates for the first time. It was a period when the yield on 10-year Treasuries remained low, not least because bond purchases by other central

banks were draining the supply of long-term government bonds available to investors.

But it was also a period that coincided with a sharply stronger dollar. In effect, adjustments that in the past, when global markets weren't as integrated, might have flowed through into higher long-term rates showed up in exchange rates instead. Ultimately, the dollar's strength caused problems. In early 2016, for example, worries emerged that emerging-market debtors wouldn't be able to repay dollar loans.

As European credit markets adjust for an eventual ECB tightening, and as the ECB shadow rate rises, the euro may rise sharply against other currencies, including the dollar. In contrast to what happened during the Fed's shadow rate rise, long-term bond yields also could move higher since there will be one less central bank draining supply. The world that investors find themselves in will look a lot different than the one they are in now. —Justin Lahart

OVERHEARD

Geely Rally Is Running Out of Road

Geely Automobile, one of China's most prominent auto makers, has been the gift that kept on giving for investors, with its shares up nearly threefold in the past year despite cooling sentiment in China's car market.

On the surface, all looks well. Geely, which shares a parent company with Volvo, earlier this month told investors it expects first-half profit to double. Surging sales of its small sport-utility vehicle models have driven its overall car sales up 90% this year.

Under the hood, though, there are signs of frailty. Geely's hopes of becoming a truly global car maker have been stymied by choppy exports.

A new 50-50 venture with Volvo is Geely's latest meant to keep growth on track. Under plans announced Thursday, Geely will tap demand from tech-savvy, luxury global car buyers drawn to its connectivity features. But there will be costs. For example, the joint venture is acquiring intellectual property to develop the cars, which could hit future profit as amortization charges kick in. The newly created entity will also have to pay royalties to an affiliated research center. Such costs along with higher production expenses could erode margins.

Investors already appear skeptical: Geely's Hong Kong shares fell 4.6% Friday as they digested the news. That still leaves Geely as one of the most expensive auto makers in the world, trading at 16.5 times forward earnings, compared with Asian peers trading at 9.2 times. After Friday's tap on the brakes, Geely's share price may struggle to accelerate again.

—Anjani Trivedi

BHP Sees Hungry Planet; Elliott Sees a New Shale Debacle

Having just written off more than \$10 billion in U.S. shale investments, BHP Billiton looks poised to make a big move in the oversupplied potassium fertilizer business. Activist shareholder Elliott Management isn't impressed.

After BHP's chief potash analyst wrote a bullish blog item on the commodity's outlook, Elliott warned in a terse statement that the comments sounded "alarmingly familiar." Elliott is already leading a shareholder movement to push BHP out of the U.S. oil business and increase returns, which it says have lagged behind its main competitor, Rio Tinto.

Deutsche Bank estimates the massive Jansen mine the company is building in Saskatchewan, Canada, could ultimately cost \$13 billion to develop. BHP has yet to make a final call on further investment to complete the project, but Chief Executive Andrew Mackenzie said in May that management could seek board approval as soon as next year.

There is little doubt potash is risky. But Elliott is wrong to draw a direct analogy between it and shale. BHP's main mistake there was investing at the top of the commodity bubble in a new, technical sector in which it had little experience.

By contrast, potash prices are down by more than half

from their 2008 and 2009 highs, and the mining technology is established. BHP has long argued it needs to diversify to smooth out its earnings, but iron ore and oil are subject to many of the same demand drivers:

namely, Chinese industry and construction. Fertilizer, ultimately driven by food demand, does offer the company diversification. And while China's construction boom is slowing structurally, the world's growing food needs look to be a surer bet.

The main worry with potash isn't demand, but supply: By most estimates the market will be saturated for the next decade. BHP's proj-

ect wouldn't come online until the mid-2020s; margins might be unimpressive for the first few years. The best

hope for substantial profits earlier on would be big mine closures from competitors now—a possibility if potash prices remain low.

Finally, there is always technological risk with such long-term projects: Just ask Canadian oil-sands producers if they would have invested had they known that the Americans would figure out a way to profitably squeeze oil out of shale basins.

Big mining companies need to keep investing—that is unavoidable. The key questions are always when, and in what. Potash in 2017 makes more sense than shale in 2011, but it's still a risky bet.

—Nathaniel Taplin

Green Thumb

Potash price per metric ton

\$600

450

300

150

0

1990 2000 2010

Source: CEIC

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