THE WALL STREET JOURNAL.

Hotel Lounges You'll Actually Want to Visit

PERSONAL JOURNAL | A8

Merkel's Road To Moral Surrender

OPINION | A10

DOW JONES | News Corp * *

WEDNESDAY, APRIL 20, 2016 ~ VOL. XXXIV NO. 56

WSJ.com EUROPE EDITION

DJIA 18053.60 ▲ 0.27% S&P 500 2100.80 ▲ 0.31% NIKKEI 16874.44 ▲ 3.68% STOXX 600 349.24 ▲ 1.46% OIL 41.08 ▲ 3.27% GOLD 1253.00 ▲ 1.57% EURO 1.1373 ▲ 0.51% DLR ¥109.14 ▲ 0.30%

Revenue Trouble Hits U.S. Banks

Goldman results point up sector's difficulties; postcrisis rules pinch

By Justin Baer And Peter Rudegeair

Goldman Sachs Group Inc. reported sharp drops in first-quarter profit and revenue, highlighting the fundamental problem facing Wall Street: It isn't making enough money.

After five of the six biggest U.S. banks posted shrinking revenue in the quarter from a year earlier, analysts are starting to raise tough questions about the future ability of big investment banks to generate the same revenue they used to.

Goldman's revenue fall of 40% was the sharpest among the banks. Morgan Stanley on Monday posted a revenue drop of 21%, following declines of 3% to 11% at bigger, more diversified banks that also have large consumer-lending businesses.

Making matters worse for Wall Street-focused firms like Goldman, two huge factors hindering their revenue of late are largely outside of their control.

First, on trading desks, big banks are less able to take risks with their own money, thanks to postcrisis regulations that aim to reduce the risk that banks will contribute to future financial crises. That means banks are dependent on outside investors for trading revenue, which can dry up in periods when markets fall sharply, as they did in January and February.

Deal makers also need companies to want to raise money in debt and stock markets. That activity also largely dried up for Wall Street firms during the first quarter.

"The operating environment this quarter presented a

Please see BANKS page A2

Presidential Front-Runners Have Their Say at the Ballot Box

EDUARDO MUNOZ ALVAREZ/AGENCE FRANCE-PRESSE/GETTY IMAGES (LEFT); ANDREW KELLY/REUTERS

Democratic leader Hillary Clinton and Republican counterpart Donald Trump voted in Tuesday's primary in New York, their home state.

Fight Over Delegate Rules Escalates

By Aaron Zitner

Voters have gone to the polls in droves during the Republican primaries, putting turnout on a record pace, yet the decision about who will be the ultimate nominee is increasingly likely to rest with fewer than 2,500 party insiders.

That has put GOP leaders in a historic and potentially explosive bind: Explaining that while Donald Trump has the most votes—some 1.9 million more than his closest rival—the rules could allow those officials to nominate someone else.

Democrats face their own challenges. Hillary Clinton's commanding lead is built in part on party officials known as superdelegates, rather than raw votes.

As the pace of voting picks up, with New Yorkers headed to the polls Tuesday and balloting in five Eastern states next week, both parties face pressure to explain why the outcome of primary elections may be overtaken by party rules that give outsize powers to party leaders and delegates.

"This is a turning point for American political parties," said Elaine Kamarck, a former Clinton administration official and veteran of Democratic policy debates. After this, she predicts, the parties will either cede "even more power to the ordinary voter" or "go back to the days when this is purely a party business."

The squeeze is particularly strong on the Republican side.

Please see RACE page A7

INSIDE MALAYSIA'S BIG SCANDAL

Confidant of prime minister controlled hundreds of millions in 1MDB funds; '681 American pies'

By Tom Wright And Bradley Hope

In March 2013, a young Malaysian financier sent a heads-up to an employee at a Kuala Lumpur bank that "681 American pies" would soon be arriving from overseas.

The sender, Jho Low, emphasized the need for secrecy, according to a transcript of BlackBerry instant messages reviewed by The Wall Street Journal. The employee, he wrote, should tell the bank's chief executive that "PM" didn't want his name, address or identity-card number to appear on the transaction.

Within days, $681 million arrived in two transfers at AmBank Bhd. to be deposited in the personal account of Malaysian Prime Minister Najib Razak, according to documents seen by the Journal.

Global investigators believe those transfers represent a portion of the money diverted from a Malaysian state economic-development fund called 1MDB over several years, according to people familiar with probes in two countries. As they dig deeper, investigators have increased their estimates of siphoned funds to as much as $6 billion, a sharp increase from a few months ago, said a person familiar with one country's probe.

Mr. Low has been in Mr. Najib's inner circle, a family friend, according to people who know the prime minister. At several pivotal moments, Mr. Low's actions, influence and connections have been vital to the alleged diversion of 1MDB funds, a Journal examination found. Investigators describe Mr. Low as playing a central role, with the prime minister his "enabler," according to the people familiar with probes in two countries.

In addition, according to these people and to investigative documents, Mr. Low himself was the recipient of 1MDB funds, with control over hun-

Please see LOW page A6

Taliban Attack Kills at Least 28

OMAR SOBHANI/REUTERS

IN HARM'S WAY: Afghan security personnel carry an injured compatriot after an assault on a government compound in Kabul. A3

'Star Wars' Devotees Feel the Force of George Lucas

* * *

Upset with director's changes to original trilogy, fans seek restoration

By Ben Fritz

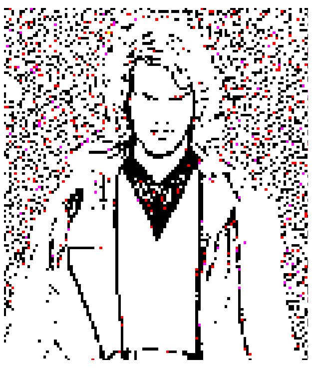
For most "Star Wars" fans, the recent DVD release of the blockbuster hit "The Force Awakens" was a cause for celebration.

But to some hard-core fans of the Force, the biggest "Star Wars" release this year is version 2.5 of "Return of the Jedi: Despecialized Edition." It is the latest in one obsessed young Czech's six-year stab at undoing every change director George Lucas has made to the original trilogy since the release of his "Special Editions" in 1997.

" 'The Force Awakens' is a blast, but for me the Despecialized Editions are more exciting," said Jonathan Mangis, a 43-year-old Oregon resident who has read more than 60 "Star Wars" tie-in books. "It's the answer to all of the fans' disgruntlement."

Perhaps no pop-culture

Please see FANS page A6



Anakin Skywalker

Doha Deal Failure Hurts Oil Nations

Saudi Arabia's decision to reject an international plan to limit oil output could push other big producers to the brink almost two years into a historic crude-price slump.

By Benoit Faucon, Selina Williams and Summer Said

Saudi Arabia, the world's largest exporter of crude, scuttled the hopes of countries like Russia, Venezuela and Angola, which wanted a deal that would freeze production at January levels and begin regulating the global glut of oil that has sunk prices. Nearly half of the countries sitting at the table in recent days in Doha—Iraq, Nigeria, Angola, Ecuador, Venezuela and Azerbaijan, among others—are seeking financial support from international backers.

In Venezuela, where President Nicolás Maduro trumpeted the oil-producer talks as a first step toward fiscal recovery, the economy is set to contract again this year as petroleum revenues dwindle. The cash crunch has hurt power generation, prompting the government to declare a national holiday Monday to conserve energy usage and to consider a time-zone change.

Without naming any country, Venezuela's oil minister Eulogio del Pino said last-minute decisions had "sabotaged" the summit. But speaking to reporters on the side of a conference in Moscow on Monday, he said the drop in oil "prices could be so pronounced that this reality may force us to meet again," according to the website of the state-run oil company Petróleos de Venezuela SA.

In Russia, where the government was among the architects of the Doha talks, oil minister Alexander Novak said the failure to reach a deal would delay a recovery in oil prices to mid-2017. Senior Russian government officials had been counting on higher oil

Please see OIL page A2

◆ India is the new oil battleground.......... B5
◆ Streetwise: The magic number for the price of oil.......... B5
◆ Supply outages spark global scramble.......... B6

What's News

Business & Finance

Goldman's profit slid 60% on a 40% drop in revenue, highlighting the challenges facing the investment-banking sector. A1

◆ **Saudi Arabia's decision** to reject a plan to limit oil output could push other big producers to the brink. A1

◆ **The EU is set** to charge Google for allegedly abusing the dominance of its Android mobile operating system. B1

◆ **Intel said** it plans to cut up to 12,000 jobs as it seeks to transition away from a computer-based company. B1

◆ **UBS's Weber warned** that central banks in Europe and Japan have reached the limits of monetary stimulus. B5

◆ **Yahoo swung** to a loss in the first quarter as its revenue dropped by 11%. B2

◆ **Argentina returned** to the global debt market with a record $16.5 billion emerging-market bond sale. B5

◆ **The U.S. told VW** to refrain from releasing details of an emissions investigation as the Justice Department pursues its own probe. B1

◆ **BMW has lost** the core team behind its electric vehicles to a Chinese startup. B2

World-Wide

◆ **Republican leaders** face pressure to explain why the choice of a nominee is likely to rest with party insiders amid high voter turnout. A1

◆ **NATO's head called** the interceptions of a U.S. plane and ship last week by Russian aircraft unsafe and highlight the need for talks. A4

◆ **Belgium charged** a second Brussels attack suspect with a role in the Paris attacks and warned the nation remains under threat. A4

◆ **Taliban militants** struck a security compound in Kabul, killing at least 28, in the deadliest attack on the Afghan capital since August. A3

◆ **Syrian warplanes** killed scores of people in stepped-up airstrikes on rebels, as the opposition broke off its participation in peace talks. A3

◆ **Five Germans were held** on suspicion of attacking migrants and belonging to a right-wing terror group. A4

◆ **The U.S. Senate approved** a bill that beefs up airport security and promotes uses of commercial drones. A7

◆ **Cuba's Communist Party** re-elected Raúl Castro and the party's hard-line ideologue to its two top posts. A5

Inside

WORLD A2

China's Problem With Excess

CONTENTS

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

9 779219 986139 16

An Example of China's Problem With Excess

CHINA'S WORLD
ANDREW BROWNE

YUQUAN, China—Just about the last thing China needs right now is another cement plant.

Unused stocks have been piling up since the massively overbuilt real-estate market cratered in 2014. Demand will likely never fully recover; city skylines are dotted with cranes swinging idly atop half-finished apartment blocks. Alarmed, Beijing has declared that reducing overcapacity in industries like steel and cement is a national priority. There's even a slogan for it: "supply-side reform."

Yet here in the industrial northeast, Tangshan Jidong Cement, a state enterprise with domestically listed shares, has begun work on a giant 7,200-ton-a-day facility. Bulldozers have ripped a wide gash across low hills to make way for a factory that is likely to exacerbate an already epic glut of cement used to make concrete.

This project—and others like it—helps to explain why signs of an economic pickup in China this year are unlikely to last.

The rebound is supported by struggling local governments desperate for a short-term lift to growth, even if that means encouraging investment in industries linked to construction that are all in monumental surplus.

Their recklessness defies the central government's efforts to rebalance the economy toward services and consumption. Local officials are masterful at subverting edicts from mandarins in the capital. In the case of cement, new capacity must be justified by closing outdated plants, but the process is full of loopholes.

Construction of the Jidong plant in Heilongjiang province is a windfall for the local community. Restaurants are serving up platters of sizzling sausages, a local delicacy, to Jidong contractors in hard hats. A plant this size will bring prestige, tax revenue and employment.

ASSOCIATED PRESS

A new cement plant in China's industrial northeast exemplifies how the country's state planners are unable to curb overcapacity.

The cement industry, however, is in despair at the new arrival. "It's totally unreasonable," laments an executive at the China Cement Association. Jidong, which reported losses of $260 million last year as cement prices plunged, didn't respond to questions.

Why would a money-losing enterprise expand capacity in a rapidly shrinking market? The association executive explains a possible rationale: The company may figure that its technologically advanced plant will become the most efficient—and lowest-cost—producer in the region, stealing market share from rivals. It may also calculate that by the time the plant is up and running, some competitors will have gone out of business.

"This is a kind of gambling," says the association executive.

The guaranteed outcome will be further downward pressure on cement prices, and mounting financial distress across the industry.

But Beijing must bear some of the blame as it continues to rely on bureaucratic engineering rather than market forces and sends mixed signals about its commitment to reducing industrial capacity.

Ultimately, a credit-fueled race to the bottom is the product of a political system that demands rapid growth regardless of the ups and downs of the business cycle. Communist Party legitimacy depends upon it. And although President Xi Jinping has pledged to give market forces a "decisive role," his administration has just unveiled an economic blueprint that leaves the basic logic of the system untouched.

To achieve the requisite level of GDP growth under the 13th Five-Year Plan—at least 6.5% a year—China will push semiconductors rather than steel, cloud computing over cement, clean-energy vehicles before polluting glass works. As in the past, though, the state will guide the way.

Scott Kennedy, an expert on Chinese industrial policy at the Center for Strategic and International Studies, a Washington think tank, warns that these new areas of focus will become just as prone to overcapacity as the old ones, adding to the problems of economies that compete against Chinese manufacturers.

"The problem will spread," says Mr. Kennedy. "What we will get is growth with volatility."

Chinese liberal reformers had been arguing for a wholesale retreat of the state from industry and more corporate bankruptcies in unprofitable sectors. But state planners have largely ignored their counsel.

Meanwhile, the cement industry lurches deeper into trouble. China accounted for 57% of global production last year. In just two years, 2011 and 2012, China churned out as much cement as the U.S. in the entire 20th century.

Yet, a recent report by the European Chamber of Commerce in China said that despite efforts by the central government to reduce cement overcapacity, the measures "have so far only managed to slow down the rate at which the problem is expanding." About one-quarter of China's cement capacity is idle.

The levels of waste aren't likely to shrink. As long as China clings to its old growth playbook, today's cement problem will be tomorrow's computer-chip crisis.

—Olivia Fuyao Geng contributed to this article.

OECD Says Employment Is Back to Precrisis Level

BY PAUL HANNON

The share of working-age people in advanced economies who have jobs finally returned to precrisis levels in the final three months of 2015, the Organization for Economic Cooperation and Development said Tuesday.

The employment rate fell sharply in the aftermath of the 2008 financial crisis, bottoming out in late 2010. It has been rising slowly but steadily if slowly since then.

But at the end of last year, 66.5% of the population aged 15 to 64 years was employed, the same level as in the second quarter of 2008, months before the collapse of Lehman Brothers.

While the rise in the employment rate to precrisis levels after more than seven years is an indication that the global economy continues to recover from that trauma, it also serves as a reminder of how damaging the crisis was.

The OECD figures also point to large differences in the extent of the recovery across various advanced economies, with Japan, Germany and the U.K. having exceeded precrisis employment rates, while the U.S. and the eurozone as a whole have yet to cross that threshold.

Eurozone members that were worst affected by the currency area's subsequent government-debt crisis were furthest away from returning to 2008 levels of employment.

Among OECD members, Greece has furthest to go, with an employment rate at the end of 2015 that was more than 10 percentage points lower than in the second quarter of 2008, and with almost half of the working-age population without jobs.

Portugal's employment rate was four percentage points lower, and Spain's more than six points lower.

Even Ireland, which has been the fastest-growing developed economy for the past two years, is still more than four points off its precrisis employment level.

By contrast, there have been large increases in employment rates in many Central and Eastern European countries, led by Hungary. It saw its employment rate rise to 64.7% at the end of last year, from 56.3% in the second quarter of 2008. Poland, the Czech Republic and the Slovak Republic also recorded sizable rises.

KOSTAS TSIRONIS/BLOOMBERG NEWS

Job seekers in Athens last year. Almost half of Greece's working-age population was jobless at year's end.

OIL

Continued from Page One

prices to lift the country out of recession. Now, instead of a freeze in production this year, "we expect growth in production compared with 2015," Mr. Novak said.

Russia's economy contracted 3.7% in 2015 amid weaker oil prices and Western sanctions. The central bank forecasts gross domestic product to shrink a further 1.5% this year.

Angola, a member of the 13-nation Organization of the Petroleum Exporting Countries, is seeking financial aid from the International Monetary Fund as it prepares for a critical political transition.

Saudi oil officials are said to be 'well aware that they have lost their credibility.'

"The government of Angola is aware that the high reliance on the oil sector represents a vulnerability to the public finances and the economy more broadly," the finance ministry said this month.

Azerbaijan, which relies on oil and gas exports for 75% of its revenues and supported the Doha talks, has also held talks with the IMF on a possible bailout. Nigeria, an OPEC member with inflation at nearly 13%, is holding talks with the World Bank to help it close a forecast $11 billion budget deficit this year.

In Kazakhstan, where the government relies on oil for around half of its revenue, the IMF forecast GDP growth of 0.1% this year, compared with 1.2% in 2015 and 6% in 2013 before oil prices started falling.

Meanwhile, vulnerable oil producers are starting to pump less petroleum because they lack money to make investments in the energy sector.

Venezuelan crude production is down by 46,000 barrels a day in March compared with its 2014 average. In Nigeria, a new wave of sabotage has taken 189,000 barrels a day offline in the period.

Kazakhstan's oil output is expected to decline this year for the third year in a row because of spending cuts and delays in launching output at the giant Kashagan oil field. Azerbaijan's production is also expected to fall this year, mostly because of declines at the BP PLC-operated ACG oil field.

In contrast, Saudi Arabia is in a better position to ride out low prices. The kingdom still held foreign reserves worth $582 billion as of late February, according to the IMF, and plans to set up a sovereign fund worth $2 trillion. The kingdom also has the ability to boost production by two million barrels a day at will, according to the International Energy Agency, the bulk of the world's available spare production capacity.

The Saudis had signaled they were ready to make a deal in Doha over the weekend. The plans changed at the last minute, a day after Deputy Crown Prince Mohammed bin Salman told Bloomberg that the kingdom wouldn't make a deal unless Iran also constrained its production. Iran and Saudi Arabia are longtime rivals for power and influence in the Middle East.

Olivier Jakob, an analyst at Switzerland-based energy consultancy Petromatrix, said Saudi oil minister Ali al-Naimi would have lost credibility with Russia and others in what would have been a symbolic first step which could have led to greater OPEC and non-OPEC cooperation in the future.

A Persian Gulf oil official familiar with Saudi thinking said the kingdom's oil officials are "well aware that they have lost their credibility."

"But the kingdom is not totally shutting the door on further cooperation in the future," the official said, noting there could be renewed talks on oil production "when the picture in the market is clearer."

BANKS

Continued from Page One

broad range of challenges, resulting in headwinds across virtually every one of our businesses," Goldman Chief Executive Officer Lloyd Blankfein said.

Goldman took the expected big hit in its bond-trading business, a unit called "fixed income, currencies and commodities" that carried Goldman's results in many years of the past two decades.

But it also was walloped in other areas, including "investing and lending," a relatively new unit in which Goldman takes stakes in private and public companies, usually for years at a time.

The bank said net revenue in the investing and lending unit fell 95%. Last year, the unit brought in revenue of around $1.7 billion in the first quarter. This time around revenue was just $87 million.

Despite numerous problems for banks this year—difficult trading conditions, a pause in deals, stubbornly low interest rates—the KBW Nasdaq Bank Index rallied about 7% over the past week through Monday as investors decided things weren't as grim as analysts predicted or as many investors feared when stocks reached their recent bottom in February.

Goldman became the latest of the big six banks to beat earnings estimates despite sharply lower results. J.P. Morgan Chase & Co., Citigroup Inc., Bank of America Corp. and Wells Fargo & Co., as well as Morgan Stanley, also topped analysts' earnings forecasts in the past week. It was the first time all six banks exceeded the consensus earnings estimates since 2013, according to data from Thomson Reuters.

Wall Street's outlook for bank earnings had darkened throughout the first quarter, and estimates continued to drop even after it ended. Goldman shares were up about 2.1% in late afternoon trading in New York on Tuesday, but were down about 10% so far in 2016.

The Wall Street firm's net income fell 60% to $1.14 billion, or $2.68 a share, from $2.84 billion, or $5.94 a share, a year earlier. That surpassed the average estimate of $2.45 a share among analysts surveyed by Thomson Reuters.

Revenue, however, dropped more than expected, falling 40% to $6.34 billion from $10.62 billion. Analysts had projected revenue would be $6.73 billion.

Trading revenue fell 37% to $3.44 billion from $5.46 billion in the first quarter of 2015, which was a particularly strong period for Goldman. In the past week, other large U.S. banks reported trading results that ranged from a decline of 11% at J.P. Morgan Chase to a drop of 34% at Morgan Stanley.

Goldman's fixed income, currency and commodity trading revenue fell 47% to $1.66 billion from $3.13 billion a year earlier, with all of its major businesses in this unit performing worse. Stock-trading revenue fell 23% to $1.78 billion from $2.33 billion, mostly because of weakness in cash equities and equity derivatives.

The firm has zeroed in on cost-cutting efforts to try to keep profits as high as possible through the slump in revenue. Total expenses fell 29% to $4.76 billion mostly thanks to a 40% reduction in compensation and benefits costs.

Goldman said total expenses were at a seven-year low, excluding compensation costs. One unit that has been hit hard is fixed-income trading, where about 8% of employees have been trimmed this year, a person familiar with the matter said.

Analysts' initial focus was on the sharper-than-expected revenue drop.

"Relative to their peers, it's a disappointing quarter," said Steve Chubak, an analyst with Nomura Holdings Inc. "While they did do a good job managing costs, the revenue miss was really the disappointment to us."

Mr. Chubak noted that Goldman used a lower tax rate than expected, and took a gain related to the buyback of its preferred shares. Absent those factors, Goldman would have earned about $2.23 a share, or 45 cents less than its reported number, Mr. Chubak said.

Investment-banking revenue fell 23% to $1.46 billion from $1.91 billion in the first quarter of 2015.

Goldman, Wall Street's top adviser on mergers and acquisitions, reported revenue of $771 million from that business during the first quarter, down 20% from $961 million a year earlier.

RICHARD DREW/ASSOCIATED PRESS

Goldman Sachs shares have fallen about 10% since the start of 2016.

CORRECTIONS & AMPLIFICATIONS

Nick Stern, head of a residential construction management and general contracting firm, purchased a four-unit apartment building in New York's West Village with three tenants in place. A photo caption with a Mansion article in the April 1-3 edition about converting multiunit dwellings into single-family homes incorrectly said Mr. Stern's building had two tenants in place.

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

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

Thorold Barker, Editor, Europe
Bruce Orwall, Senior Editor, Europe
Cicely K. Dyson, News Editor, Europe
Margaret de Streel, International Editions Editor
Darren Everson, Deputy International Editor

Joseph C. Sternberg, Editorial Page Editor

Anna Foot, Advertising Sales
Jacky Lo, Circulation Sales
Stuart Wood, Operations
Jonathan Wright, Commercial Partnerships

Katie Vanneck-Smith,
Global Managing Director & Publisher

Advertising through Dow Jones Advertising Sales: Hong Kong: 852-2831 2504; Singapore: 65-6415 4300; Tokyo: 81-3 6269-2701; Frankfurt: 49 69 29725390; London: 44 207 842 9600; Paris: 33 1 40 17 17 01; New York: 1-212 659 2176

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

Registered as a newspaper at the Post Office. Trademarks appearing herein are used under license from Dow Jones & Co.

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

NEED ASSISTANCE WITH YOUR SUBSCRIPTION?
By web: http://services.wsje.com
By email: subs.wsje@dowjones.com
By phone: +44(0)20 3426 1313

Taliban Attack Kills Dozens in Kabul

Militants hit security compound in deadliest strike on Afghan capital since August

By Jessica Donati And Ehsanullah Amiri

KABUL—Taliban militants attacked a government security compound in Kabul with a truck bomb and guns on Tuesday, killing at least 28 people and wounding more than 300 others in the deadliest attack in the Afghan capital since August.

The coordinated assault on the facility, which houses the agency charged with protecting top government officials and visiting dignitaries, took place just a week after the Taliban declared the start of their fighting season against the Afghan government and its Western allies.

Taliban fighters detonated the explosives-packed minivan during morning rush hour, destroying the compound's outer wall and enabling two Taliban gunmen disguised in military uniforms to enter the agency's offices and continue shooting, authorities said.

Following the deployment of elite police units and hours of gunfire, the militants were killed.

HEDAYATULLAH AMID/EUROPEAN PRESSPHOTO AGENCY

A man carried a girl who was injured in Tuesday's suicide bombing in Kabul, part of Taliban attacks that left at least 28 people dead.

A Kabul police spokesman, Abdul Basir Mujahid, said government security forces were working to secure other areas of the capital where despite heavy fortifications and checkpoints, the Taliban regularly succeed in carrying out attacks.

The initial blast shook buildings more than a mile away and shattered windows for blocks. Some nearby buildings also collapsed under the force of the blast, trapping their residents in rubble.

Hospitals around the capital were inundated with casualties, many of them civilians, with the health ministry saying most of the wounded suffered light injuries from flying shrapnel and debris. A majority of the 65 patients admitted at a military hospital for treatment were employees of the protection unit.

Mr. Mujahid said Tuesday's attack was a testament to the strength of the Taliban, not the weakness of the police and army.

"If we prevent a dozen attacks, one takes place successfully, because we're in a fight with a strong enemy," he said.

Security has deteriorated in Kabul in the past year, with U.S. security officials in Afghanistan recording more than 60 bombings in the second half of 2015, including an increase in the use of truck bombs.

In August, three separate blasts killed more than 50 people and wounded hundreds of others. One of those attacks breached the outer walls of a U.S. Special Forces base, killing one service member.

In December, a truck bomb hit compounds used by U.S. government contractors, flattening security walls and buildings, and leaving a 49-foot deep crater. Two people were killed and nearly 40 others were wounded.

"The United States condemns in the strongest terms the attack today in Kabul that killed dozens of Afghans and wounded many more," said John Kirby, the State Department's spokesman. "This incident underscores the harm the Taliban and other violent extremists continue to inflict on the Afghan people."

Fighting in Afghanistan typically subsides in the winter and escalates in the summer, when warmer weather makes it easier for the group to mobilize fighters. But this year, fighting between government and insurgent forces continued in parts of the country during the winter months.

—Habib Khan Totakhil contributed to this article.

Syrian Warplanes Hit Rebels as Peace Talks Falter

By Nour Malas in Beirut and Sam Dagher in Geneva

Government warplanes killed scores of people in stepped-up airstrikes against rebels in northern and central Syria on Tuesday, according to residents and antigovernment activists, a day after opposition representatives suspended their participation in peace talks in Geneva.

A limited truce in Syria, brokered by the U.S. and Russia in late February, has unraveled in recent weeks, with government forces escalating attacks on several fronts and rebels relaunching operations around the northern city of Aleppo.

Riad Hijab, a top opposition negotiator in Geneva, declared the truce dead on Tuesday. "There is no cease-fire on the ground at all. It's over," he said.

Mr. Hijab also advised rebels not to abandon their weapons as long as Syrian President Bashar al-Assad remains in power.

Citing widening attacks by government forces, the opposition negotiating group on Monday broke off its participation in the third round of the United Nations-mediated Geneva peace talks.

Under pressure from Western supporters not to withdraw completely from the talks, Mr. Hijab said that while his delegation wouldn't attend meetings at U.N. headquarters in Geneva, some members would remain for consultations with U.N. officials and diplomats from countries that support the opposition.

The most intense bombings on Tuesday were in Idlib, the northern province where moderate, Western-backed rebels are vying for power with extremist factions, including al Qaeda's arm in Syria, Nusra Front.

Airstrikes in the province killed at least 60 people and wounded 150 others, antigovernment activists and monitoring groups said.

Syrian government media didn't report the bombings in Idlib. The regime has said it is fighting Nusra Front terrorists in the province.

—Dana Ballout in Beirut contributed to this article.

NATO Chief Calls Russia Moves Unsafe

Atlantic alliance to confront Moscow over risky maneuvers at first meeting in years

BY JULIAN E. BARNES

BRUSSELS—The interceptions of a U.S. Air Force plane and a Navy destroyer by Russian warplanes last week were unsafe and highlight the need for discussion between Russia and the Western allies, the head of the North Atlantic Treaty Organization said.

Jens Stoltenberg, the NATO secretary-general, on Tuesday said the alliance would discuss Russia's risky military maneuvers and related issues when allied ambassadors meet with Russian officials Wednesday.

The meeting of the NATO-Russia Council in Brussels will be the first since June 2014, when the alliance cut off practical cooperation with Moscow following the annexation of Ukraine's Crimean peninsula.

"The incidents we have seen in the Baltic Sea over the last week with the unprofessional and unsafe behavior of Russian planes close to an American ship and an American plane underline the importance of open military lines of communication, predictability and risk reduction," Mr. Stoltenberg said in Luxembourg, where European Union defense ministers were meeting.

According to the U.S. account, Russian warplanes and a military helicopter repeatedly buzzed the USS Donald Cook, as it carried out operations in the Baltic Sea on April 11 and 12. In another incident on Thursday, a Russian fighter plane flew over the top of a U.S. reconnaissance plane.

U.S. military officials said they are protesting the incidents.

The Russian military has disputed the U.S. accounts of the interceptions. Russian officials also have criticized U.S. forces for operating closer to Russia's borders.

The U.S. ship and plane were operating in international waters and airspace. But there is little doubt the incidents were warnings by the Russian military for the U.S. to keep its forces away from Kaliningrad, the Russian exclave that is home to military bases.

In a round table with reporters last week, Alexander Grushko, Moscow's ambassador to NATO, accused the alliance of building up forces in Poland and the Baltic region, an increase he said was unjustified.

NATO, Mr. Grushko said, was abandoning the idea that security isn't guaranteed by deploying more tanks. The Western allies, he added, are in violation of a 1997 agreement not to permanently station substantial numbers of combat forces in Eastern Europe.

"It was a common assumption that European security could not be based on more military assets, but, on the contrary, on restraint," Mr. Grushko said.

Mr. Stoltenberg disputed the idea that NATO was the aggressor or had triggered an arms race in the Baltic. NATO's reinforcement in Eastern Europe, he said, was a response to Russia's aggression in Ukraine. The former Soviet republic isn't a NATO member but borders on several.

"NATO does not seek a new Cold War," Mr. Stoltenberg said.

JOHN THYS/AGENCE FRANCE-PRESSE/GETTY IMAGES

NATO Secretary-General Jens Stoltenberg arriving at an EU meeting Tuesday in Luxembourg.

European Union Looks to Counter 'Hybrid' War

BRUSSELS—European defense ministers on Tuesday backed the creation of a new group to help synthesize information and identify threats from so-called hybrid warfare, an initiative some officials believe could lead to stepped-up cooperation on terrorism.

The "fusion center" is designed to help the European Union better share information across institutions and member states about threats from hybrid warfare, a term used to describe a mixture of conventional and unconventional fighting, and potentially create an early-warning system.

Russia's strategy in Crimea and Ukraine has relied heavily on hybrid tactics.

Officials say the term is equally applicable to the kind of attacks employed by Islamic State and other terrorist organizations in the Middle East.

The EU has been working with North Atlantic Treaty Organization as the groups try to coordinate on new strategies.

—Julian E. Barnes

Belgians Say Terror Threat Persists

BY VALENTINA POP

BRUSSELS—Belgian officials warned that the country remained at risk of a new attack, as prosecutors charged another Brussels attack suspect for alleged involvement in the November terror spree in Paris.

A spokesman for the federal prosecutor said Tuesday that Osama Krayem—charged with terrorist murders after being accused of being a second attacker in last month's Brussels subway bombing—was also charged in connection with the Paris attacks.

Meanwhile, the threat of another attack remains "serious and possible," even though the recent arrests of several terror suspects has destabilized the network behind the Paris and Brussels attacks, said Paul Van Tigchelt, head of the country's threat analysis authority known as OCAM.

The prosecutor's spokesman wouldn't give further details on how Mr. Krayem, a Swedish national, was connected with the Paris probe. Mr. Krayem was arrested earlier this month after being filmed with one of the Brussels suicide bombers in the city's subway system. Authorities allege he also purchased the luggage used for the bombs at Brussels airport.

Prosecutors said a Paris attack suspect arrested last month, Salah Abdeslam, picked Mr. Krayem up in Germany in October after he posed as a refugee and used a fake identity to travel from Syria back to Europe.

Of the suspects in custody, only Mohamed Abrini—who Belgium's federal prosecutors say has admitted to being the third attacker at the Brussels airport, leaving a bomb at the site and fleeing—has also been charged in connection with both probes. Mr. Abrini, a longtime friend of Mr. Abdeslam, was filmed in a French gas station together with Mr. Abdeslam one day before the Paris attacks, in one of the cars used in the attacks, the prosecutors added.

Several of the dead attackers have also been linked to both plots. Najim Laachraoui, one of the suicide bombers at Brussels airport, is believed to have been the bomb maker for both attacks. The other two suicide bombers in the Brussels attacks, Khalid and Ibrahim el-Bakraoui, had used fake names to rent hide-out safe houses used by the Paris attackers, prosecutors said.

Recent intelligence suggests Islamic State fighters are returning to Europe from Syria to mount attacks, Mr. Van Tigchelt said Tuesday, four weeks after the bombings that claimed the lives of 32 victims and injured more than 300 people in Brussels.

In addition, he said the intelligence indicated people also continued to want to leave Belgium for Syria.

"We are trying to apprehend them, dismantle all cells and protect our citizens," he said. "But a zero risk does not exist so the terror alert level needs to be maintained at an exceptionally high level," Mr. Van Tigchelt said.

Peter De Waele, a spokesman for the Belgian federal police, said the high alert level resulted in more than 50 bomb alerts since the March 22 attacks, which all turned out to be false. "If we ask people to be vigilant, this is the risk," he said, adding that prank calls can be punished with up to two years in jail.

Mr. De Waele said that authorities were aiming to identify by all victims from the Brussels attacks by the end of the week. He said that the process was taking so long because some of the remains risk containing parts of the three suicide bombers who committed the attacks.

"Only then will we be able to confirm it there are no further victims," he added.

YVES HERMAN/REUTERS

Security forces stand guard outside a Brussels courthouse, where two suspects in the March attacks appeared last week.

Five Germans Held In Migrant Attacks

BY RUTH BENDER

BERLIN—German prosecutors detained five people suspected of attacking asylum seekers and belonging to a right-wing terrorist group, the latest in authorities' efforts to grapple with mounting anti-foreigner sentiment after the arrival of more than a million migrants last year.

The five Germans, between the ages of 18 and 38, are suspected of playing a role in forming the "Freital Group," a terror group that prosecutors say attacked migrant camps with explosive devices and planned further assaults.

A total of eight people are suspected of setting up the group in July last year. The group is named after a suburb of Dresden that has been the scene of a series of violent attacks on migrants. Four of the members are suspected of attempted murder, the federal prosecutor's office said.

Fears over how Germany will cope with the vast tide of migrants who have poured into the country have coincided with a surge in violent attacks against migrant shelters, indicating that Germany's far-right movement has become more active after years of decline.

In 2015, the number of arson attempts and other attacks on migrant shelters in Germany surged to 1,029 from 199 in 2014, according to statistics from the interior ministry. Police determined extremist right-wing motives were behind 920 of the reported attacks, the ministry said.

The wave of violence has accelerated since the start of the year, even as the number of incoming migrants has waned. Authorities count 337 attacks so far in 2016.

The federal prosecutor said the "Freital Group," is suspected of orchestrating three attacks: two on migrant shelters in Freital and one against a housing project in Dresden. The attacks took place last fall when the influx of migrants to Germany was at its peak, as some 10,000 people were arriving daily.

In one attack in late October, seven members of the group are suspected of having set off powerful firecrackers on three windows of an asylum shelter, injuring one man, the prosecutors said. The attacks on migrants haven't led to any deaths.

The federal prosecutors said the group is suspected of having planned more attacks. Police found more than 100 powerful firecrackers in searches in the eastern German state of Saxony, whose capital is Dresden.

EU Plans More Unified Effort on Digitization

BY NATALIA DROZDIAK

BRUSSELS—The European Union rolled out plans to link up its various national initiatives on digitizing industry, in a bid to help the continent's manufacturers retain their technological edge.

The European Commission said Tuesday that it would set up a new governance framework in which national governments and industry would hold regular meetings to coordinate the EU's 30 national and regional digitization initiatives, which include Germany's Industry 4.0 and the Netherlands' Smart Industry.

The EU also pledged to boost both private and public investment in the area via strategic partnerships.

"It will stimulate commerce, it will make life easier, it will allow connected cars to cross borders," said European Commission Vice-President Andrus Ansip, who is in charge of coordinating the bloc's digital plans.

Tuesday's plans make up part of 16 initiatives announced by the commission last year to harmonize digital rules across the bloc's 28 countries.

Europe is a world leader in digitizing industry, particularly with automated cars, Mr. Ansip said, but digital divisions within the bloc are a hurdle to further advances. While some countries are transforming at a good clip, he said, others are lagging behind with their traditional industries, especially construction, textiles and steel.

The EU says it expects digitization of goods and services to add more than €110 billion ($124 billion) of revenue annually for Europe's industries over the next five years.

The commission will also speed up the development of common standards for 5G communication networks, which the EU says is crucial for connected cars.

The EU also said it would adopt legislation encouraging the free flow of data across borders and clarifying the ownership of data generated by smart devices. Companies are collecting more data as devices from fitness trackers to smoke detectors to electric meters are connected to the Web, creating the "Internet of Things." The data can help businesses operate more efficiently.

The EU is also aiming to cut red tape by allowing businesses to submit paperwork to authorities in just one member country, even if they operate in several. The commission said it would test the project and explore establishing a similar system for citizens submitting data.

World Watch

UNITED KINGDOM

Officials Stay at Odds On Remaining in EU

Bank of England Gov. Mark Carney issued a fresh set of warnings about the risks to the U.K. economy if voters choose to leave the European Union, while a senior government minister talked up the benefits.

The difference in views highlights how the economy has become a battleground in a debate over EU membership as Britons prepare to vote on the question in a referendum June 23.

In testimony to lawmakers in the House of Lords, Parliament's upper chamber, Mr. Carney said a vote in favor of exiting the EU could lead to "an extended period of uncertainty about the economic outlook" in Britain, with the potential to hit trade, investment and growth.

It could also hurt asset prices and the supply of credit in the economy, as well as make it more expensive for the U.K. to finance the shortfall between its earnings from overseas and its spending, the governor said.

Proponents of so-called Brexit challenged the Treasury's conclusions, arguing that Treasury chief George Osborne, Prime Minister David Cameron and others campaigning to keep Britain in the EU are overstating the risks and underplaying the benefits of quitting the 28-member bloc.

Michael Gove, a senior government minister who supports a British exit from the EU, accused his opponents of treating voters "like children, unfit to be trusted and easily scared by ghost stories."

He spelled out a list of potential benefits to the U.K. of quitting the bloc, including reducing red tape and savings from no longer having to pay into the EU budget.

—Jason Douglas

SPAIN

Police Allege Man Called for Attacks

Police said they arrested a Moroccan man with alleged strong links to Islamic State group and who was allegedly pushing for attacks to be carried out in Spain and elsewhere in Europe.

Police said the man was arrested in Palma de Mallorca city on the Mediterranean island of Mallorca where he lived.

They said the detainee poses "a clear threat to national security," given that he used the Internet to promote recruitment for Islamic State, help send potential combatants abroad and encouraged attacks in Spain and elsewhere in Europe. It said he maintained close contact with Islamic State leaders in Syria.

Spanish police have arrested dozens of suspected jihadist recruiters in recent years.

—Associated Press

JAPAN

Prison Is Used As Quake Shelter

A prison in Japan's Kumamoto prefecture is serving as a temporary shelter for some of the tens of thousands of people still displaced by two major earthquakes last week.

Kumamoto Prison opened its doors to the public after a 7.3-magnitude earthquake struck the region early Saturday, 28 hours after a 6.5-magnitude quake, said Koichi Shima, an official at the Justice Ministry.

He said 110 people were staying in the prison's dojo, or martial-arts hall. The dojo is separated by a fence from the main prison facility, he said.

—Jun Hongo

KAZUHIRO NOGI/AGENCE FRANCE-PRESSE/GETTY IMAGES

A man carried a portrait of his deceased mother, which was discovered in a collapsed house in Mashiki, Kumamoto prefecture on Tuesday. More than 500 aftershocks have rocked Kumamoto and other parts of central Kyushu since April 14, displacing thousands of people and stoking fears that houses not damaged in the two major quakes could yet be affected.

Brazil Speaker Under Fire

Leader of effort to unseat president faces criticism over his own ethical conduct

By Reed Johnson And Luciana Magalhaes

UESLEI MARCELINO/REUTERS

Mr. Cunha, center, spoke on Sunday in congress as critics raised a banner reading 'Cunha out.'

SÃO PAULO—The impeachment of Brazil's President Dilma Rousseff is exposing members of all the country's major parties to heightened criticism, but none more so than Eduardo Cunha, speaker of the lower house and the man who launched the effort.

While Mr. Cunha and his pro-impeachment allies seek to cast Ms. Rousseff's government in the worst possible light, his opponents are trying to delegitimize the proceedings by turning a spotlight on the ethical conduct of Mr. Cunha and his supporters.

Even as the Chamber of Deputies voted overwhelmingly on Sunday to impeach the unpopular leftist president, the raucous voting session turned into something of an unofficial referendum on Mr. Cunha. Several lawmakers used their allotted time during the voice vote to pillory the speaker, who has been indicted on a charge of pocketing millions in funds plundered from Brazil's state-owned oil company and hiding the money in overseas accounts. Mr. Cunha has long denied wrongdoing.

"Eduardo Cunha, you are a gangster," said Deputy Glauber Braga, a member of the Socialism and Liberty Party, known as PSOL, before casting his vote against impeachment.

His PSOL colleague, Jean Wyllys, a Rio de Janeiro deputy, also fired a rhetorical broadside toward Mr. Cunha before casting his "no" vote.

"I am embarrassed to participate in this farce, this indirect election conducted by a thief," said Mr. Wyllys, who closed his remarks by shouting "Scumbags!" at the pro-impeachment leadership.

Mr. Cunha announced on Monday he may file criminal charges in Brazil's Supreme Court against an unspecified number of federal deputies who upbraided him during the six-hour session.

"It's kind of a blame game now, trying to sling mud at one another and see who survives at the end," said João Augusto de Castro Neves, a Latin America specialist with the Eurasia Group.

"The whole political system is somewhat tainted by the whole corruption scandal. That's one of the reasons why the political system has been so far unable to solve the crisis," Mr. Neves said.

According to a nonprofit called Transparência Brasil, 60% of Brazil's federal legislators have been convicted or are under investigation for crimes including corruption, electoral fraud and assault. A number of legislators who voted for impeachment Sunday have been implicated in a massive corruption scandal centered on state oil company Petróleo Brasileiro SA, known as Petrobras.

That has many Brazilians questioning how Congress can sit in judgment of Ms. Rousseff, who is accused of manipulating public accounts to mask a growing budget deficit.

Brazil's Senate is expected to vote by no later than May 17 on whether or not to hold an impeachment trial for Ms. Rousseff, according to an aide to Senate President Renan Calheiros. If the Senate votes to accept the case, Vice President Michel Temer will become Brazil's acting president for a maximum of 180 calendar days until a final verdict is reached.

Ms. Rousseff has vehemently denied wrongdoing, and lashed out at her opponents as attempting to topple her in a coup. In her first public appearance following the impeachment vote, the president on Monday alluded to Mr. Cunha's legal predicament without actually naming him.

"There is no accusation of misuse of public money against me [or] illicit enrichment," she said. "I was not accused of having accounts abroad."

Mr. Cunha's chances of punishing his critics are slim. Brazilian legislators enjoy broad protections against charges of defamation and slander while speaking during congressional sessions.

Veteran observers of the capital say Mr. Cunha is attempting to portray himself as a victim, while warning his detractors that he is still very much in charge despite his legal woes.

"It is a threat, it is a way to pressure," said Ivar Hartmann, a constitutional law expert at the Getúlio Vargas Foundation in Rio de Janeiro.

Prosecutors have charged Mr. Cunha with corruption and money laundering in connection with the Petrobras scandal that has implicated many Brazilian politicians and business leaders.

But Mr. Cunha so far eluded all efforts by colleagues to remove him from his post. Last month, Brazil's Supreme Court agreed to accept the charges against Mr. Cunha, but no trial date has been set. The high court is the only body that can prosecute sitting politicians, a process that can takes years.

Argentine Judge Indicts Associate Of Ex-President

By Taos Turner


PABLO ELIAS/AGENCE FRANCE-PRESSE/GETTY IMAGES

Building magnate Lázaro Báez was among those indicted.

BUENOS AIRES—A federal judge in Argentina has indicted a top government contractor and business associate of former President Cristina Kirchner on money-laundering charges.

Judge Sebastián Casanello indicted Lázaro Báez and five others in connection with an investigation into allegations that Mr. Báez plotted with federal officials to steal millions of dollars from the state by overbilling public-works projects granted between 2003 and 2015.

Earlier this month, the judge had Mr. Báez and his accountant, Sebastián Pérez Gadin, arrested in connection with the investigation. Mr. Casanello ordered that the two remain in jail. Neither Mr. Báez nor Mr. Pérez Gadin could be reached for comment. Mr. Báez has denied the allegations. In an interview with The Wall Street Journal in 2014, he said the probe was part of a campaign to harm his firms and discredit the Kirchner administration.

The judge also ordered the arrest of a lawyer with close ties to the two. The lawyer, Jorge Chueco, went missing last week and federal investigators say he may have left the country.

In a 122-page ruling released late Monday, the judge also prohibited the former head of Argentina's tax collection agency, Ricardo Echegaray, and another former tax agency official from leaving the country. Mr. Casanello called for both former officials to testify in the case.

Mr. Báez has long been a close friend and business associate of the Kirchner family. He created his flagship construction company, Austral Construcciones, just days before Mrs. Kirchner's late husband and predecessor, Néstor, became president in 2003.

The company won hundreds of millions of dollars worth of government contracts, some of which, current officials say, were never completed.

Officials of Mrs. Kirchner's administration have said the allegations are politically motivated. Mr. Báez shares hotel- and property-business dealings with the Kirchner family.

Earlier this month, a prosecutor requested that Mrs. Kirchner be investigated in connection with the case.

That came after the prosecutor and Mr. Casanello received testimony from Leonardo Fariña, an associate of Mr. Báez who claimed to have direct knowledge of how he conspired with government officials and federal agencies to carry out "a systematic plan to steal money from federal coffers" by overbilling infrastructure projects.

Castro Re-Elected By Party In Cuba

By José de Córdoba

Cuba's Communist Party reelected Raúl Castro and the party's hard-line ideologue to its two top posts Tuesday, in a sign the government would move slowly with economic reforms.

Fidel Castro, Cuba's 89-year-old retired leader, made a rare public appearance on the last day of the four-day congress, which ratified his younger brother Raúl, 84, and José Ramón Machado Ventura, 85, as the first secretary and second secretary of the island's ruling Communist Party. The two men were last elected to their posts in 2011.

Mr. Machado Ventura is regarded as one of the top leaders of the hard-line faction within the Cuban regime that has opposed the modest economic changes implemented by Raúl Castro during the past five years.

The congress took place less than a month after President Barack Obama said the U.S. was ending more than 50 years of Cold War animosity during a historic visit to Havana.

Since the visit, Cuban officials, including Raúl Castro, have said the U.S. has changed its tactics but not its goal of undermining the Cuban regime. Officials have called for greater vigilance by party members against attempts to weaken national unity.

"Instead of taking Obama's visit as a chance to open up and speed up the transition to a younger generation, they have circled the wagons," said Ted Henken, a Cuba expert at Baruch College in New York.

Three years ago, Raúl Castro said he would step down as president of the Council of State, the nation's leading governing body, in 2018.

At the time, Miguel Díaz-Canel, a former education minister, was appointed first vice president of the Council of State in a move widely seen as tipping him to succeed Mr. Castro.


RODRIGO ABD/ASSOCIATED PRESS (TOP); EMILIO D. GARCIA/ASSOCIATED PRESS

Several families in Manta, Ecuador, awoke on Tuesday morning after having had to sleep outside their homes, which were destroyed by earthquake on the weekend. Below, Pablo Córdoba, in his hospital bed, celebrated his rescue almost two days after he was trapped in the rubble of the hotel where he worked in Portoviejo.

Survivor Pulled From Rubble After 40 Hours

By Sara Schaefer Muñoz

PORTOVIEJO, Ecuador—When the five-story hotel El Gato collapsed here in a spectacular pile of wires and twisted steel during Saturday's devastating earthquake, everyone inside was presumed dead.

Then, nearly two days later, the wife of the hotel's receptionist received a phone call. "I'm alive," her husband, Pablo Córdoba, said on his cellphone from his trapped position in the rubble.

Ecuadorean rescue teams rushed to the site. Within hours, rescuers and an elite search unit of Colombian firefighters gently lifted Mr. Córdoba, 51 years old, out of the wreckage he was buried under for more than 40 hours.

It was a rare moment of hope and elation for Ecuadoreans amid the country's rising death toll, which had reached 413 by Monday evening.

"I was under the collapsed cement floor with this much space between the floor and my head," said Mr. Córdoba, showing the length of his hand, during an interview from his hospital bed. "I closed my eyes and tried to relax. I knew panicking was the worst thing I could do."

At one point, Mr. Córdoba said, he was certain he saw a piece of candy floating in front of his face. Only when he reached out to grab it did he realize he was hallucinating.

He had his cellphone in his pocket, but service was down. When it returned Monday around 1 p.m.—nearly two full days after the 7.8 magnitude quake that wrought damage along Ecuador's coast—he called his wife with the fraction of battery he had left.

Rescue teams who came to the scene used sniffer dogs and a machine that detects vibrations to find him, eventually lifting him out of the suffocating heat of the wreckage about three hours later.

"We had tears in our eyes," said Jackson Lesmes, one of the 65 search-and-rescue firefighters from Bogotá, Colombia, who arrived Sunday to this hard-hit coastal city to offer their help.

Reclining in his bed at a nearby Portoviejo hospital and beaming behind a bristly mustache, Mr. Córdoba—who said he prayed, yelled for help and even drank drops of his own urine during the seemingly endless hours under the wreckage—said he felt fine apart from some bruises and deep gashes in his back.

"It's a miracle, he is really a miracle," cried nurses and other patients who gathered in the bright emergency room to greet Mr. Córdoba as he was wheeled out of the X-ray area.

Portoviejo's downtown, where El Gato hotel stood, was pummeled by the quake. Dozens of buildings tilt askew, crushed cars line the streets, and cement, cables and glass from buildings spill into cordoned-off streets.

"Our downtown looks like Syria," said Portoviejo resident Xavier Avellán, 42, referring to the devastation wrought by that country's years of war. "We've never lived anything like this."

Officials told local media that search-and-rescue operations were still being carried out to find people trapped under the rubble. But increasingly grim workers said they were mostly discovering corpses.

Residents in the city were handing out bread and meat pastries to families sleeping under tents.

On Monday night, many parts of Portoviejo remained in darkness. Residents, frightened by the faint aftershocks that continued to rock the city, dragged mattresses onto sidewalks or porches to sleep in the humid air and evade further building collapse.

In his bed at the local hospital, Mr. Córdoba held the hand of his wife, Sonia. "I wasn't afraid because when I was trapped I told God I committed my soul to him," he said. "But it wasn't my time."

FANS

Continued from Page One

franchise has inspired as much passion over the years as Mr. Lucas's "Star Wars," whose seven live-action movies have grossed $6.6 billion at the box office. Many fans cite the original trilogy as hugely influential and re-watch it annually, if not more often.

They brought the same passion to their disdain for Mr. Lucas's prequel trilogy released between 1999 and 2005, as well as changes he made to the originals in the theatrical "Special Editions" and DVD releases.

The creator of the "Despecialized Editions," a 27-year-old Prague resident known online as "Harmy," is trying to restore the movies to their original condition while also making them look good on a modern TV. Since 2010, he has been removing computer-generated effects, tweaking lightsaber colors, and making it clear once again that Han shot first.

He has spent thousands of hours, he said, in cafes and his home office altering the movies frame by frame to re-create the versions seen in theaters in 1977, 1980 and 1983.

"I was just trying stuff out and I shared it with a few people on [an online forum] and it became more and more popular and got a little out of hand," said Harmy, whose real name is Petr Harmacek, speaking via Skype from a home office lined with Star Wars DVD boxed sets.

He has even found himself in ontological debates about details as obscure as how laser shots should look, because existing prints are faded. "No one knows perfectly what the original colors are anymore," Mr. Harmacek said.

A college student studying to be an English teacher when he started, Mr. Harmacek said he spent many 16-hour days on his first effort, the Despecialized "Star Wars" 1.0, that hit the Internet in 2010. There have since been three more versions of the original, two of "The Empire Strikes Back" and two of "Return of the Jedi."

Downloading them requires knowledge of peer-to-peer file sharing networks, though online guides exist for the uninitiated.

Distributing altered versions of the movies is illegal, but Lucasfilm, owned by Walt Disney Co., doesn't pursue charges unless people are doing so for profit, said a person with knowledge of the matter.

Mr. Harmacek distributes his Despecialized Editions free and encourages viewers to also buy legal versions of "Star Wars." Download numbers aren't available, but he has more than 32,000 likes on Facebook.

"Fans are an incredibly important part of our legacy and we never cease to be amazed by the passion and creativity they bring to all things 'Star Wars,'" said a Lucasfilm spokeswoman.

Mr. Lucas made hundreds of changes in the Special Editions and subsequent DVD releases and refused for years to release original versions of the first three movies to watch at home.

Some changes infuriated fans. Among the most reviled: showing an alien named Greedo shoot at Han Solo before Harrison Ford's character returned fire; the placement of a computer-generated Jabba the Hutt into "Star Wars"; and the insertion of actor Hayden Christensen, who played a young Anakin Skywalker in the prequel trilogy, as his character's ghost at the end of "Jedi."

In a 2004 interview with the Associated Press, Mr. Lucas said of fans unhappy with his changes, "[T]his is the movie I wanted it to be, and I'm sorry you saw half a completed film and fell in love with it."

Mr. Lucas declined to comment for this article.

Other movies have been re-released with changes, such as Ridley Scott's "Blade Runner," but typically the original remains available. "Star Wars" is rare in that Mr. Lucas has sought to largely erase the versions first released in theaters, said Henry Jenkins, a professor of communication at the University of Southern California.

"What motivates fans is a desire to reclaim a text that from their point of view was unjustly discarded by George Lucas himself," said Mr. Jenkins. "Lucas only has moral authority insofar as the culture grants it to him."

In 2006, the director acceded to fans' wishes by including the original cuts as bonuses on a DVD release.

But fans, who refer to these as the GOUT—George's Original Unaltered Trilogy—weren't pleased. The movies were the same versions released on LaserDisc in 1993 and weren't upgraded for modern televisions and sound systems, as is often done with older films.

"I think Lucas really wanted to be able to say, 'Here you go, this is what you wanted. It looks like crap—I told you,'" Mr. Harmacek said.

The Lucasfilm spokeswoman said that notion is false.

Others have done their own "Star Wars" upgrades. An anonymous online group recently released the "Silver Screen Edition" of the original movie by removing dirt and hair from an original 35mm print.

Perhaps the most dedicated is Adrian Sayce, of Northampton, England, who is disabled and has made "Star Wars: Revisited" his full-time pursuit.

Rather than just upgrading visuals and undoing changes, Mr. Sayce, known online as "Adywan," is re-creating visual-effects shots that don't look good enough in high-definition upgrades, complete with his own hand-created miniatures.

Mr. Sayce, 48, said his wife has been extraordinarily patient as he has re-created planets from a galaxy far, far away—in their home.

"I don't know any other woman who would let me take our dining room and turn that into a miniature swampland," he said.

Mr. Harmacek, meanwhile, will release version 3.0 of "The Empire Strikes Back: Despecialized Edition" soon and said his restoration project will likely continue indefinitely.

"My hope is that Disney will just come out with the original versions on Blu-ray and then I will be able to stop," he said.

Lucasfilm currently has no plans to release the original version of "Star Wars," said a person familiar with the matter.

LUCASFILM LTD./EVERETT COLLECTION

Harrison Ford talks to a digitally created Jabba the Hutt in the 1997 Special Edition of 'Star Wars.' Jabba wasn't in the original 1977 version.

LOW

Continued from Page One

dreds of millions of dollars.

Mr. Low has denied any wrongdoing. He also has said he was only an occasional and unofficial adviser to 1MDB, which stands for 1Malaysia Development Bhd. The fund has denied wrongdoing as well, and has said it didn't pay any money to Mr. Najib's accounts.

Mr. Najib has said he did nothing wrong and derived no personal gain from transfers into his account. Earlier this year, Malaysia's attorney general said the $681 million deposited in the prime minister's account was a legal donation from a member of the Saudi Arabian royal family, most of which was later returned, and cleared Mr. Najib of wrongdoing.

AmBank didn't respond to a request to comment.

As 1MDB sought partners for its investments, Mr. Low provided business connections in Saudi Arabia and the United Arab Emirates, some of them cultivated in his student years. Global investigators believe that some of these contacts ultimately became part of the diversion of 1MDB money via a web of offshore companies registered in lightly regulated places such as the British Virgin Islands.

Along the way, Mr. Low, 34 years old, appears to have amassed riches as some 1MDB money landed in accounts held by him and members of his family, according to bank records and people familiar with investigations. He became a jet-setter, partying in Las Vegas nightclubs, buying luxury properties on both U.S. coasts, amassing a collection of modern art and befriending Hollywood celebrities.

One was Leonardo DiCaprio, whom Mr. Low introduced to a stepson of Prime Minister Najib, named Riza Aziz. The connection helped a film company the stepson co-owned produce the 2013 DiCaprio film "The Wolf of Wall Street," which was financed with money that originated with 1MDB, according to documents and people familiar with investigations in two countries.

The production company has said it had no reason to believe the source of its financing was irregular and has said it is seeking to repay the financing. Mr. DiCaprio and his representatives didn't respond to requests to comment.

Mr. Low, whose full name is Low Taek Jho, is soft-spoken, portly and charming, people who know him say. He grew up in the Malaysian state of Penang, where his businessman father was affluent enough to send him to the elite Harrow school in the U.K. and the undergraduate program at the University of Pennsylvania's Wharton School.

At Wharton, the young Mr. Low cast himself as a kind of "prince," said a person who studied with him. Once, to impress visiting friends, he borrowed a yacht berthed in Penang from a rich friend of his father's and replaced the photos on board with those of his own family, said another acquaintance.

'Win tons' of money

While at Wharton, Mr. Low cut an ostentatious figure, renting a convertible Lexus and organizing an elaborate party at a nightclub, according to the fellow student at the time. There he set up his first company, Wynton Group. He called the name a play on "win tons" of money, one associate said.

Mr. Low drew on school connections from Abu Dhabi, Saudi Arabia and Kuwait to finance an initial $25 million of capital, he told The Star, a Malaysian newspaper, in 2010.

It was in London that he met Mr. Najib's stepson, Mr. Aziz, who is a few years his senior. Their friendship developed after they spent time together among wealthy Malaysians in a gated complex in the exclusive Kensington neighborhood, where Mr. Najib's family has a house, according to one of the people who know Mr. Low.

He became close to his friend's mother, Rosmah Mansor. At the time, her second husband, Mr. Najib, was deputy prime minister of Malaysia. At a party at Mr. Najib's official residence in Kuala Lumpur that included several Abu Dhabi officials, Ms. Rosmah thanked Mr. Low for bringing Middle Eastern investment to Malaysia, according to a person who was there. A lawyer for Ms. Rosmah declined to comment.

Mr. Najib became prime minister in 2009. That year, Mr. Low played a role in setting up a sovereign-wealth fund for the oil-rich state of Terengganu in northeastern Malaysia.

Soon after, the state's sultan decided not to progress with the fund, which already had raised $1.7 billion through Islamic bonds. Mr. Najib turned the fund into a federal entity: 1MDB. He became chairman of its board of advisers, a perch from which he had extensive influence over the fund's operations, according to 1MDB board minutes.

Mr. Najib announced the launch of 1MDB while on a state visit to Abu Dhabi in 2009, promising to lure foreign investment and create jobs for Malaysians. Mr. Low, not yet 30, also traveled to the United Arab Emirates at the time and projected the air of a "minister of investments," said a Dubai-based banker who met him.

Mr. Low turned to his network of Middle Eastern contacts to find partners for the fund's investment projects. One of 1MDB's first joint ventures was with PetroSaudi International Ltd., an oil company part-owned by a Saudi prince.

Mr. Low facilitated the transaction and, although an informal adviser to 1MDB, represented the prince at a 1MDB board meeting in 2009 that voted on the formation of the joint venture, according to testimony by members of 1MDB's management and board of directors to a Malaysian parliamentary committee.

DEBBY WONG/CORBIS

Jho Low has been in the inner circle of Malaysian Prime Minister Najib Razak.

The venture's stated purpose was to invest in energy projects. The Malaysian parliamentary committee's report found, however, that about $1 billion in 1MDB money meant for the joint venture was instead sent to the bank account of another company.

That company, Good Star Ltd., was set up by Mr. Low and registered in the Seychelles, said a person aware of 1MDB's dealings. Then, between 2011 and 2013, a total of $529 million moved from Good Star into a corporate bank account Mr. Low controlled in Singapore, according to a Singapore police investigation.

A lawyer for PetroSaudi said all joint-venture funds were properly accounted for, and all capital 1MDB invested in the venture has been returned.

From Good Star, according to global investigation documents, Mr. Low sent most of the $529 million to various accounts in Singapore, Luxembourg, Switzerland and Malaysia, several of them held by family members, including his father, Low Hock Peng. Attempts to reach the elder Mr. Low were unsuccessful.

Mr. Low, the son, went on a spending spree from those accounts, bank records indicate. For instance, they show that in a series of transactions in September 2012, he sent out millions of dollars in what appear to be payments to air-charter companies and casinos in the U.S., including $4 million in transfers to Las Vegas Sands.

By that time, Mr. Low's name was popping up in tabloid reports. One said he laid out hundreds of thousands of dollars at a New York nightclub, including sending bottles of Cristal champagne to actress Lindsay Lohan's table, and lived in a $100,000-a-month Manhattan apartment.

Mr. Low claimed his lifestyle was paid for by his rich friends from Harrow and Wharton. In the interview with The Star in Malaysia, he described himself as a "concierge service" for his associates.

Meanwhile, he continued pursuing business in the Middle East. In 2011, Mr. Low teamed up with an Abu Dhabi state-owned fund, Aabar Investments PJS, in an unsuccessful bid for a group of luxury hotels in London, including Claridge's, according to documents from a subsequent U.K. court case.

A year later, Aabar and 1MDB entered into their own arrangement. Aabar's parent, an Abu Dhabi sovereign-wealth fund, guaranteed bonds issued by 1MDB. In return, 1MDB agreed to make a payment to Aabar as collateral for the risk, according to 1MDB financial statements.

Rather than send money to Aabar, however, the 1MDB fund ended up transferring $3.5 billion to a different company with a name nearly identical to Aabar's, according to the report by Malaysia's parliamentary committee.

Some of that money in turn was transferred, via intermediaries, to a shell company called Tanore Finance Corp., registered in the British Virgin Islands, investigators in two countries believe.

The beneficial owner of Tanore when it was first set up was Tan Kim Loong, a young Malaysian business associate of Mr. Low's, according to people familiar with the matter. Attempts to reach Mr. Tan were unsuccessful.

Global investigators believe it was from Tanore that $681 million was transferred to Malaysian Prime Minister Najib's accounts at AmBank in March 2013, according to the people familiar with the investigations.

Restricted access

In all, more than $1 billion was deposited in the prime minister's accounts over several years, including $200 million from a Saudi individual and the Saudi finance ministry, according to Malaysian investigative documents. Last week, the kingdom's foreign minister told a TV interviewer he was aware of a Saudi donation, without giving details such as the donor, date or size.

Mr. Low, in his March 2013 instant messages to the AmBank employee in Kuala Lumpur, wrote that access to the account inside the bank "shld also be restricted n tracked so if someone took pic n access the a/c, we will know."

He and the bank employee discussed moving the money in several transfers to lessen the impact such a large inflow of dollars might have on Malaysia's currency, the ringgit. The AmBank employee didn't respond to a request to comment.

Later, Mr. Najib sent millions of dollars from the account to local politicians ahead of national elections in the spring of 2013, which his party narrowly won. Mr. Low helped campaign in Penang, his home state, and directed how the political financing was spent, according to a politician in Malaysia's ruling coalition.

The prime minister, over a few years, also spent at least $15 million of money linked to 1MDB on personal expenses, including jewelry and clothes, according to bank records reviewed by the Journal.

Mr. Low, too, continued to spend lavishly. He bought multimillion-dollar homes in New York and Los Angeles, using shell companies, and later resold them to a company controlled by the prime minister's stepson, according to sales records reviewed by the Journal and people familiar with the matter.

In 2013, Mr. Low bought a 7,718-square-foot penthouse in Singapore for more than $30 million and a smaller apartment in the same complex, according to real-estate records.

He became a major collector of 20th-century art, amassing what dealers consider to be a collection worth $300 million.

He also donated millions of dollars to a panther conservation group, a cancer hospital and the United Nations.

In 2014, when Mr. Low expressed interest in purchasing Reebok from Adidas AG, he told the Journal in an interview that his family's wealth stood at $1.75 billion, the result of a fortune built in Thailand in the 1960s and 1970s by his Chinese-born grandfather.

In recent months, Mr. Low has moved to liquidate some of his assets. Earlier this year, he sold a Picasso and Monet at a combined loss of millions of dollars, dealers say.

Singapore authorities have frozen millions of dollars Mr. Low held at the Singapore branch of Swiss private bank BSI SA, according to investigation documents. The bank declined to comment.

Global investigators have had a hard time tracking down the peripatetic Mr. Low. according to those familiar with the probes. He recently has traveled between Abu Dhabi, Hong Kong, Taipei and London, according to people familiar with the matter.

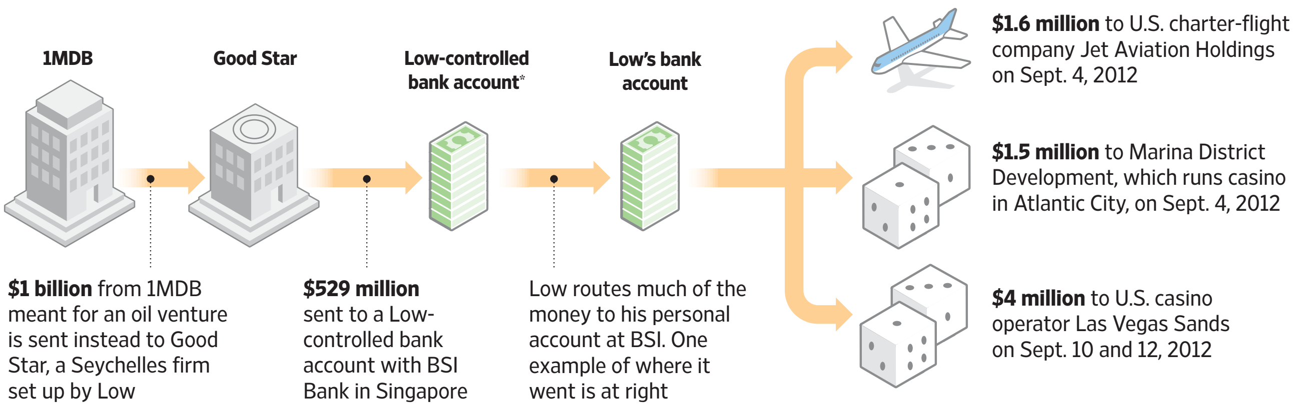
At times he has traveled for several days on a 300-foot yacht called Equanimity, said people familiar with his movements. It isn't clear who owns it.

Last summer, when the 1MDB scandal was just heating up, Mr. Low couldn't be found for several days, said people who tried to reach him. They later learned he was on an Arctic expedition.

—Kelly Crow contributed to this article.

Funds Rerouted

Hundreds of millions of dollars from Malaysian fund 1MDB landed in accounts controlled by financier Jho Low. Here is how one set of transactions worked.



*Account of Abu Dhabi Kuwait Malaysia Investment Corp.
Sources: Global investigations; Malaysian parliament; Singapore police report; people familiar with the matter.
THE WALL STREET JOURNAL.

Security in Focus as FAA Bill Clears Senate

BY ANDY PASZTOR

The Senate on Tuesday voted 95-3 to approve a Federal Aviation Administration reauthorization bill that beefs up airport security, promotes widespread use of commercial drones and streamlines certification of new safety systems for private planes.

The measure, which from the outset prompted strong bipartisan support, also increases consumer protections for passengers and strengthens cybersecurity safeguards for both airborne and ground systems while paving the way for tougher mental-health screening of commercial pilots.

But, as expected, it doesn't follow the lead of House Republicans who want to shift the agency's air-traffic-control system and some 38,000 employees to an independent, nonprofit corporation.

The vote to set the FAA's direction through the fall of 2017 underscored the broad consensus about avoiding another series of shorter extensions that in previous years bedeviled agency managers and stalled some important programs.

Many of the provisions tightening vetting of airport employees and beefing up public safety in areas before security screenings are partly a reaction to recent terrorist attacks, particularly last month's bombing of Brussels's main international airport and the suspected bombing of a Russian airliner over Egypt four months earlier.

Other parts of the final package reflect pent-up industry and consumer demand for expanding drone flights nationwide, including an aggressive timetable to permit package deliveries by unmanned aircraft within two years.

Overall, the final language reflects the Senate's determination to enact a more moderate bill than legislation pending on the other side of Capitol Hill, by rejecting House GOP ambitions for a sweeping overhaul of the structure and financing of the air-traffic-control network. The House Transportation and Infrastructure Committee previously approved a multiyear bill featuring such changes, but its prospects are increasingly uncertain.

Even some staunch supporters of the House legislation recently acknowledged that the Senate's strategy of hammering out a more limited bill—calling for an 18-month extension and making incremental changes to everything from bomb-detection equipment used overseas to greater disclosure of U.S. ticketing fees—appears likely to prevail.

TED S. WARREN/ASSOCIATED PRESS

A worker at Seattle-Tacoma International Airport marking the back of a security-screening line.

Sen. John Thune, the South Dakota Republican and chairman of the Committee on Commerce, Science and Transportation, which drafted the measure, has said it contains "the most passenger friendly provisions, the most significant aviation-safety reforms and the most comprehensive aviation-safety enhancements" of any FAA bill "in recent memory."

Sen. Bill Nelson of Florida, the ranking Democrat on the panel, said: "We've given the House a good bipartisan blueprint to follow, and one that they ought to pass easily."

Mr. Nelson said House insistence on adding "controversial measures could put the bill in jeopardy and result in a big loss for consumers and for the safety of the flying public."

The White House has raised objections to the relatively short 18-month time span and ambitious deadlines to incorporate unmanned aircraft into U.S. airspace, but industry officials and lawmakers have said the Obama administration is likely to accept the Senate's policy choices. With the FAA's funding and program authority due to expire in July, all sides are under pressure to avoid a repeat of interim extensions.

During roughly two weeks of debate, the Senate rejected amendments for increased legroom in jetliners, as well as longer mandatory rest periods for cargo pilots. But in a victory for pilot-union leaders, the Senate bill incorporates language calling for jetliner manufacturers to install additional cockpit security barriers.

Similar to the House bill, Senators want to ensure that passengers receive a refund for fees when checked bags are delayed or missing, or for money paid for specific seat assignments that end up being unavailable.

Despite Tuesday's vote, Rep. Bill Shuster, the Pennsylvania Republican who is chairman of the House transportation panel, responded with a statement reiterating the desire to continue seeking major air-traffic-control changes. Such a move, he said, "is absolutely necessary to end the unacceptable status quo at the FAA and to ensure the future of America's aviation system. I look forward to working with the Senate to complete a final bill this Congress."

House Democrats are largely opposed to wholesale air-traffic-control changes, with some powerful GOP committee chairmen in the House joining the fight against Mr. Shuster's measure.

—Kristina Peterson contributed to this article.

RACE

Continued from Page One

Turnout this year is up 57% over 2012, and viewership for the party's debates has set records. Voters in two of the most populous states, New York and California, are taking a rare, prominent role in the primary campaign as arbiters of the outcome.

But party leaders who have cheered the high turnout are now under fire to explain a process that could deprive Mr. Trump of the nomination despite his large lead in both delegates and overall votes.

Mr. Trump leads the GOP pack with 744 delegates—493 short of the 1,237 needed to clinch the nomination.

To clinch the nomination, Mr. Trump would have to win an estimated 69% of the remaining bound delegates—those obligated to vote for the winner of a primary or caucus on the first ballot. New York allocates the fourth-largest cache of Republican delegates. The largest set of delegates isn't awarded until June 7, when California votes.

Republican party leaders say that if no candidate wins a majority of delegates during the primaries, the national convention will follow long-established rules for finding a nominee who has majority support. But the fair course, a large majority of voters say, is to give the nomination to whoever won the most support from the most voters.

Nearly two-thirds of Republicans believe the nomination should go to Mr. Trump if he wins the most primary votes, even if he hasn't won a majority of delegates, a Wall Street Journal/NBC News poll found this week.

"People vote for the candidate of their choice, and that's how a democracy should be run—not a backdoor nomination," said James P. Ward, a retired federal employee in Wantagh, N.Y. While he supports Sen. Ted Cruz for the GOP nomination, Mr. Ward says Mr. Trump "has run the course and is entitled to his due."

SPENCER PLATT/GETTY IMAGES

Republican presidential front-runner Donald Trump, gesturing, claims that party insiders have 'rigged' the delegate-selection process.

Adding to the pressure on GOP leaders is Mr. Trump's increasingly sharp complaints that while his primary victories reflect the will of the voters, the process for selecting convention delegates is "rigged" by party insiders who oppose him.

"The risk for the Republican Party is that they alienate the very people who are the most motivated to come out and support a Republican nominee," said Amy Walter, an analyst with the nonpartisan Cook Political Report.

Among Democrats, a parallel debate about the balance between primary voters and party insiders has broken out over the role of superdelegates, the party officials and activists who can vote at the convention for whomever they choose. Mrs. Clinton's lead over Vermont Sen. Bernie Sanders among superdelegates—estimated at 469 to 31—is far larger than her percentage lead in raw votes.

Going into the New York balloting, the former secretary of state held an overall delegate lead over Mr. Sanders of 1,758 to 1,076, with 2,383 delegates needed to win the nomination.

Some Democrats say superdelegates should be scrapped so that the process relies only on primary and caucus results. That is the position of Rep. Ron Kind (D., Wis.), a superdelegate himself, who believes the system risks undermining the will of the voters.

The nominating rules are under more challenge than at any point since the turbulent 1968 Democratic convention in Chicago, when anti-Vietnam War activists protested that they had been shut out of the nominating process. That triggered changes within both parties that gave voters a larger voice through primaries and caucuses.

Parties now hold fewer "beauty contests"—primaries that are only advisory—and more contests that commit convention delegates to back candidates based on the results of primaries and caucuses. Missouri Republicans, for example, held a nonbinding contest in 2012 but a binding primary this year. Turnout nearly tripled.

Cable television and social media are also boosting engagement, in part because of Mr. Trump's ability to capture attention. In 2015 alone, Facebook says, some 78 million people commented or clicked on political material on the social network some 1.7 billion times.

"They're saying, 'I want a process that reflects me, not that controls me,' " said Democratic pollster Peter D. Hart. " 'I've voted, I've watched on TV, I've been part of it and now you're going to tell me that you're going to run an inside game? Forget it.' "

Polling suggests such opinions are widespread: In the Journal/NBC News poll, a large share of GOP voters who didn't name Mr. Trump as their top choice for president nonetheless said the candidate with the most votes should be the nominee.

Those opinions could add fuel to Mr. Trump's complaint that the delegate selection process has been unfair in states such as Colorado, where party officials opted not to hold a caucus or primary to test the will of voters, and a state convention chose Cruz supporters as delegates to the national convention.

U.S. Watch

SUPREME COURT

Poll: Support Rises For Vote on Nominee

Public support for a Senate vote this year to fill a two-month old Supreme Court vacancy has increased since the White House picked Judge Merrick Garland for the seat, a new Wall Street Journal/NBC poll has found.

The share of voters who would prefer that the Senate vote this year rose to 52% in April, up from 48% in the first week of March, when President Barack Obama was still deciding whom to nominate.

Of those polled, roughly three-fourths of Democrats sided with the White House in preferring that the Senate hold a vote this year, a continuation of a sentiment that has been prevalent since the death of Justice Antonin Scalia in February.

But notably, the poll suggested that Republican opposition to such a vote is starting to erode. Some 24% of Republicans in the survey preferred that the Senate vote this year, up from 16% in March. A slight majority of Republicans—56%—favored waiting to vote until a new president could pick a successor for Justice Scalia, down from 69% in March.

The poll of 1,000 registered voters was conducted April 10-14 and has a margin of error of plus or minus 3.1 percentage points.

—Siobhan Hughes

WORKFORCE

Group Expects Labor Supply to Fall Short

The U.S. is at risk of running out of occupational therapists, railroad engineers, mathematicians, machinists and other workers, potentially leaving the economy in a long-term slump.

"In the next 10 to 15 years, we expect U.S. employers to demand more labor than will be available, which will, in turn, constrain overall economic growth," the Conference Board said in a report released Tuesday.

The corporate-research organization believes the U.S. is fast approaching full employment and sees few signs the population of working-age Americans will grow enough to fill the ranks left by retirees and rising demand from employers.

The Conference Board examined and ranked 457 occupations in its analysis.

—Jeffrey Sparshott

States Are Warned Over Medicaid Cuts

BY STEPHANIE ARMOUR

The Obama administration on Tuesday warned states that halting Medicaid funding to organizations because they provide abortion services could put them in violation of federal law, putting pressure on states to restore funding they have stripped from Planned Parenthood Federation of America.

The guidance, outlined in a letter from the Centers for Medicare and Medicaid Services, explains to state Medicaid directors that Medicaid beneficiaries may obtain services, including family planning, from any qualified provider.

States that terminate their Medicaid-provider agreements with Planned Parenthood affiliates because they offer abortions may be in violation of that law because they are restricting access by not permitting recipients to get services from providers of their choice.

Ten states have taken action to curtail Medicaid funding to Planned Parenthood in the wake of a series of undercover videos released by an anti-abortion group, the Center for Medical Progress. The videos showed Planned Parenthood officials discussing the procurement of fetal tissue from abortions for medical research.

"Providing the full range of women's health services neither disqualifies a provider from participating in the Medicaid program, nor is the provision of such services inconsistent with the best interests of the beneficiary, and shall not be grounds for a state's action against a provider in the Medicaid program," the letter said.

Medicaid is an insurance program for the poor. Alabama, Arkansas, Kansas, Louisiana, Oklahoma and Texas have notified Planned Parenthood that they were terminating the group's participation in their states' Medicaid programs.

Florida recently passed legislation to cut off funding, and bills that would do the same are moving through the legislatures in Arizona and Missouri. Wisconsin's Legislature passed a bill authorizing the state's Medicaid agency to reduce Medicaid provider rates for family-planning providers who also perform abortions rather than prohibit Medicaid funding altogether, according to the federal government.

BRIAN CAHN/ZUMA PRESS

States were cautioned about cutting funds for abortion providers.

The CMS has contacted states individually that cut off federal funding to remind them of their obligation to ensure that Medicaid beneficiaries continue to have access to services provided by any willing provider, according to federal officials.

Planned Parenthood affiliates have filed lawsuits against a number of states over the cuts. Lawsuits in Arkansas, Louisiana and Texas are still under way, and an Alabama court held that the state's termination of funding violated the free choice of provider provision, according to the federal government.

The federal government hasn't filed a lawsuit over the cuts. But in a sign that a lawsuit is a possibility, the Justice Department has filed statements of interest in federal district court and federal appellate court in the case concerning Louisiana.

Hotels Upgrade Their Club Lounges


THE RITZ-CARLTON HOTEL COMPANY, LLC

The Club Lounge at the Ritz-Carlton, Philadelphia serves free food and drinks (including champagne) all day in a recently renovated room with views of the city.


HILTON LOS CABOS BEACH & GOLF RESORT

Guests staying in La Vista Club rooms at the Hilton Los Cabos Beach & Golf Resort in Mexico get reserved day beds with prime sea views.


THE LANGHAM LONDON

The Langham in London more than tripled the size of its Club Lounge in response to customer demand.


ROSEWOOD HOTELS & RESORTS

Guests wanting access to the Manor Club at Rosewood Beijing pay about 40% over regular room rates.

Improving food, drinks and amenities that extend to the pool and beach

By Andrea Petersen

The hotel club lounge—with its free food and dedicated concierges—is getting an upgrade.

Facing increased competition, hotels are making their lounges bigger and the food and drink better. They are finding that customers are increasingly willing to pay a hefty premium—sometimes hundreds of dollars—for the perk.

"It isn't just someone looking for free breakfast and two free gin-and-tonics in the evening," says Marc Brugger, managing director of Rosewood Beijing, which opened at the end of 2014. Guests, he says, want privacy and more personalized service.

The hotel's Manor Club lounge has three fireplaces, a pool table and an outdoor terrace and serves breakfast, afternoon tea and cocktails with top-shelf liquor. Guests, who also have butler service, pay about 40% over the typical room rate for access. Rosewood Hotels and Resorts also has a Manor Club in its Abu Dhabi property and is planning them in several others.

The action in club lounges is coming as hotels are increasingly catering to their biggest spenders. They have been building more luxury suites and villas and offering more elaborate extras.

Hotels have also seen the success of so-called hotel-within-a-hotel projects that house a more boutique-like property within a larger hotel. These are particularly popular in Las Vegas.

Marriott International's Ritz-Carlton brand has spruced up its Club lounge offerings in recent years. It has beefed up the training of its concierges, made the food less fussy and complex and added local wines. The new clubs also have kitchens attached to them, so food is fresher.

"Sometimes we used to have scrambled eggs made in the basement of the hotel, and by the time they arrived, they were like cement," says Herve Humler, Ritz-Carlton's president.

On a recent Saturday afternoon, just two couples were sitting in the gracious, wood-paneled Club lounge at the Ritz-Carlton, Philadelphia. No one was touching the row of sandwiches or plates of sweets. In the shadow of a tall silver vase filled with pink orchids, Julia and Scott McIlvaine of Ocean City, N.J., were lounging on a sofa, sipping champagne and taking a selfie. It was their first time staying on a club floor.

At breakfast the next morning, Neal Buchalter ate a bagel while his 15-year-old daughter Emily dug into pancakes and bacon. Mr. Buchalter says he usually pays extra to stay in a club floor room at the Philadelphia Ritz-Carlton.

"We don't have to wait in line to get a seat," at the hotel restaurant, says the 49-year-old executive at a medical device company from Short Hills, N.J. "I can just grab a bite."

Emily says she likes to use the lounge as an escape when the room she's sharing with her 17-year-old sister starts feeling cramped. "There's extra space to relax in," says Emily, who was traveling with her family to compete in a dance competition.

At big business hotels, club lounges have historically been a free perk for guests with elite status in hotel reward programs. But in reality, the lounges were sometimes marred by crowds, noisy children and mediocre meals.

Now, even those are being revamped. Marriott International is replacing the executive lounges at many of its flagship Marriott brand properties with new M Club Lounges. The new spaces are 33% to 50% larger, have fancier food and drinks like craft beers on tap, and are open all hours. (Older lounges were often closed on weekends or overnight.)

Access to the executive lounges at the JW Marriott brand's city hotels is offered as a free perk to Gold and Platinum members of its Marriott Rewards program. The brand recently introduced more elaborate Griffin Clubs at resort properties in San Jose del Cabo, Mexico and Phoenix that even frequent guests have to pay for.

At the JW Marriott Los Cabos Beach Resort & Spa, Griffin Club guests have a private pool, reserved cabanas on the beach and free food and booze in the lounge. The price is an extra $100 to $200 a day. (Most JWs charge for alcohol in their executive lounges.) Hilton has introduced something similar, La Vista Club, at its Cabo San Lucas, Mexico property.

But an increasingly diverse clientele in the club floor lounge can cause conflict. And the most divisive guests are the smallest ones.

Hilton Worldwide says more of its hotels are instituting no-children hours in their club lounges. Since earlier this year, the executive lounge at the Hilton Crystal City in Arlington, Va., is adults-only between 5 p.m. and 10 p.m. When the Langham in London built its new lounge, which opened in June 2015, it created a separate area for families with children tucked away at the side of the club. There are candy jars, and when children arrive, employees bring out games and iPads. "We wanted to make sure [the lounge] didn't become a playground," says Bob van den Oord, managing director of the hotel.

Independent Bookstores Are Opening With New Tactics

By Jeffrey A. Trachtenberg

Soon after Dane Neller bought New York City bookseller Shakespeare & Co. last May, he shut the doors and built the bookstore where he wanted to shop.

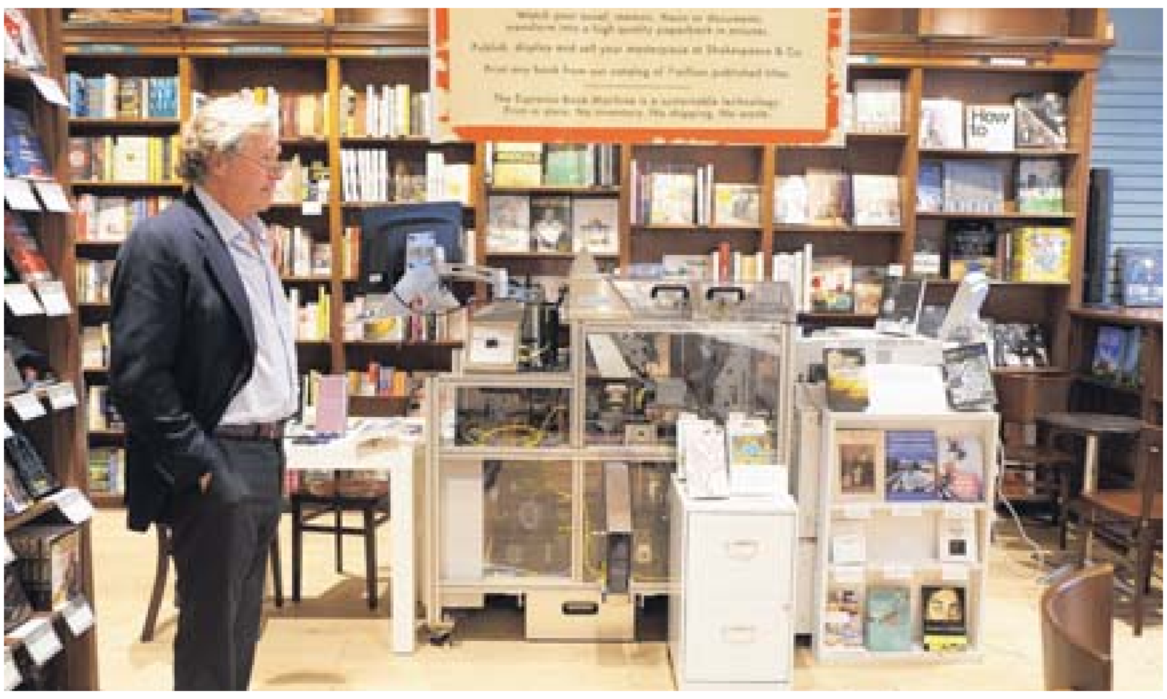
"The old ways have to be reinvented," says Mr. Neller, the retailer's major investor, declining to disclose the purchase price. "People want to hang out, they want to talk, they want intimacy. But the store has to be productive."

Only a few years back, some wondered if bookstores would survive the twin threats of heavily discounted online titles and easy-to-download e-books. But the tide of digital book sales has begun to slow, spurring entrepreneurs to reimagine the physical bookstore, in ways that can compete with the Web without having to match its lowest prices.

Mr. Neller, for example, is also chief executive of a company that makes a desk-sized device called the Espresso Book Machine, which prints new paperbacks in five minutes or less. An $85,000 unit is featured prominently at Shakespeare & Co.

"It's the secret sauce," says Mr. Neller. "The machine enables a bookstore to have a much smaller footprint."

These are heady days for independent booksellers, whose ranks have grown to 1,712 bookstores operating in 2,227 locations in 2015, compared with 1,410 bookstores in 1,660 locations in 2010, according to the American Booksellers Association. Even Amazon.com Inc. has opened a bookstore in Seattle and has a second planned for La Jolla, Calif.


ALLISON SCOTT/THE WALL STREET JOURNAL

At Shakespeare & Co. Booksellers in New York City, owner Dane Neller checks out the Espresso Book Machine, a device in the store which prints paperback books.

Independent bookstores' big rivals have fared less well. Barnes & Noble Inc. has shrunk to 640 stores today from 726 at the close of its January 2009 fiscal year.

After Mr. Neller got done tinkering with Shakespeare & Co., the store, on Manhattan's Upper East Side, had a distinctly different look. Space inside the store dedicated to books has been cut by nearly 40% to 1,200 square feet. Titles on the shelves, however, are turning more rapidly. As a result, Mr. Neller says book sales from September through the end of March are up 10% compared with the same period when the store was under different ownership.

He attributes the gains to better-chosen titles, increased store traffic attracted by the store's new cafe and the Espresso machine.

"It's early days, but you don't have to lay out as much money for inventory," Mr. Neller says. "Too many books are sent back because of over-ordering."

Bookstores of the future may well feature other cool technology that makes book shopping easier while expanding choices, such as that found in a 4,300-square-foot bookstore operated by W&G Foyle Ltd. in Birmingham, England.

The store, which opened last fall with a modest 15,000 titles, is tapping the Internet to satisfy requests for books that aren't on its shelves. Tablet-carrying staffers take customer orders for the more than 1 million titles that Foyle's sells on its website. The sales staff has the flexibility to complete a sale without going to a cash register.

Foyle's also can send coupons to the smartphones of customers entering any of its six stores. So far, though, it has held off doing so because of privacy concerns. "People don't want to be tracked," says Paul Currie, chief executive of W&G Foyle.

"We may start with a coupon that says, 'Come in and have a coffee on us,' " he says.

The bookstore's main floor, a modest 2,000 square feet, offers traditional categories such as travel, children and hardcover best-sellers, only in more limited quantities. "The key is moving inventory," says Mr. Neller. "Bookstores often overstock because books are returnable. But you need velocity of sales to generate profitability."

Mr. Neller says the Espresso Book Machine serves two purposes. On the self-publishing side, customers can use it to print family histories, novels or poetry. Shakespeare & Co. offers these author-customers publishing packages priced from $149 to $549; they set their own cover prices for their books.

The machine also can access and print more than 7 million previously published titles. . Many are out of copyright; the rest are primarily older titles from traditional publishers.

Other booksellers have had mixed experiences with the Espresso. The Northshire Bookstore in Manchester, Vt., no longer has a machine. It was hard to maintain and publishers didn't make current titles available, says Chris Morrow, co-owner.

The Winning Method | The World Health Organization recommends a six-step technique for hand washing and applying sanitizer.

1 Rub hands together palm to palm.
2 Right palm over back of left hand, interlacing fingers, and vice versa.
3 Palm to palm with interlaced fingers.
4 Backs of fingers to opposing palms with interlocked fingers.
5 Clasp right thumb in left palm for rotational rubbing and vice versa.
6 Using fingertips, do rotational rubbing in palm of opposite hand.

Source: The World Health Organization

Jess Kuronen/THE WALL STREET JOURNAL.

The Right Way to Wash Hands: A Scientific Inquiry

By Sumathi Reddy

YOUR HEALTH

What's the best way to wash your hands?

The world's two leading public-health bodies list different instructions on their websites for getting your hands clean. A new study found that the six-step hand-hygiene technique recommended by the World Health Organization (WHO) killed greater numbers of germs than the more general, three-step instructions of the U.S. Centers for Disease Control and Prevention.

Still, the outcome of the throw-down isn't clean-cut. The CDC says its hand-cleaning method isn't different from that of the WHO, it is just less specific. "We're on the same page here. We just do not get into that kind of detail in our guideline," says Clifford McDonald, a CDC medical epidemiologist.

The study—published online last week in the journal Infection Control & Hospital Epidemiology—looked specifically at the use of alcohol-based hand rub, or sanitizer, by doctors and nurses in a hospital. The technique is similar to hand washing with soap and water. But hand sanitizer is often used in hospitals and other health-care settings to prevent the transmission of infections because it is faster.

The WHO method includes interlacing the fingers and rubbing palm to palm, and focusing on the backs of the fingers. It also involves rubbing the thumb creases and pressing the fingertips into the palms.

"It's quite a complex maneuver, I describe it as a ballet dance," says Jacqui Reilly, a professor of infection prevention at Glasgow Caledonian University in Scotland and lead author of the study.

In the randomized controlled trial of 120 doctors and nurses, the researchers found that many fewer bacteria remained on the hands of those who used the WHO method compared with others following the more general CDC instructions.

The result was a surprise. "Our theory at the start was, 'Do we really need to make hand hygiene so complicated?'" says Dr. Reilly. The answer is yes, they found out. "The six-step method in our study was demonstrated to be superior," she says.

The researchers also measured hand-cleaning compliance rates and the amount of time each method took. The six-step method took on average 42.5 seconds to complete, versus 35 seconds for the more general, three-step instructions. Only 65% of the study participants who were instructed to use the six-step method did it properly, even though they were observed and had instructions in front of them. By contrast, compliance for those using the three-step method was 100%.

Still, more bacteria were killed using the six-step method, even when it wasn't done properly, says Dr. Reilly. This may be because the three-step technique often missed

GETTY IMAGES

'Must hand washing be complicated?' asked a researcher. His discovery: yes.

bacteria that were on the back of the index and middle fingers of the right hand, she says. The researchers used an ultraviolet light box to measure how well the sanitizer was distributed across the hands.

Hand-cleaning in a hospital setting is a major public-health issue because of the potential to spread infections. Studies have found that only 40% to 50% of most hospital workers wash their hands when they are supposed to.

The WHO's six-step method was created in 2009 for health-care settings, but more than 50 countries, and some U.S. states, have used it in national hand-hygiene campaigns, says Benedetta Allegranzi, acting coordinator of the WHO's infection, prevention, and control global unit in Geneva. "If you go to museums in Canada you find the posters in the toilet," she says, as an example.

Dr. Allegranzi says the WHO technique aims to make sure the parts of the hand that potentially could infect a patient easily, such as the palms, fingers and fingertips, are thoroughly cleaned.

"There are spaces between the nails and skin which can harbor germs more easily," she says. "The WHO technique is meant to cover all surfaces and all spaces." Dr. Allegranzi says the organization hasn't received major concerns about the number of steps and time it takes to follow the hand-cleaning method.

Dr. McDonald, of the CDC, says the agency next month is launching a new hand-hygiene campaign that will emphasize the importance of not missing certain parts of the hand, such as the fingers, fingernails and crevices. "I think this study focuses on how important it is to get people to cover all of their hands," he says.

At Vanderbilt University Medical Center, about 250 trained observers monitor each unit in the hospital and outpatient clinics to ensure staff wash their hands when they're supposed to, and remind them when they don't. Since the hand-hygiene program started seven years ago, hand-cleaning compliance rates have gone to 96% from less than 50%, and infection rates have dropped significantly, says Tom Talbot, Vanderbilt's chief hospital epidemiologist.

Vanderbilt staff are trained annually on hand washing basics and the importance of reminding each other. The method used is the more simple three-step method, Dr. Talbot says.

"I think in practice folks wouldn't adhere to the six steps unless you're tracking and monitoring it," he says. And although the study showed a significant reduction in bacteria with the six steps, whether that is clinically relevant in terms of reducing infections isn't known, Dr. Talbot says. He also says the few seconds difference between the two methods could make a difference in time-sensitive areas, such as the emergency room.

OPINION

REVIEW & OUTLOOK

Trump's Bully Pulpit

Donald Trump says he wants to unite the U.S. Republican Party, but he keeps acting as if he's mounting a hostile takeover. He's now threatening to blow up the party's July convention because he and his campaign were too lazy or inept to understand the 50 state nomination rules.

His threats to blow up the July convention are a sign of weakness.

That's the story behind Mr. Trump's complaints that the party's nominating rules are "rigged" against him. "It's a crooked system. It's 100% corrupt," the front-runner howled on Sunday and on a Monday op-ed on these pages. He added on Sunday that he hopes a contested GOP convention in July "doesn't involve violence." Thanks for the warning.

Mr. Trump is upset that he's being outhustled in winning delegates, and that he may fall short of the 1,237 he needs to win a majority in July. His latest embarrassment came at the Wyoming state convention on Saturday as Ted Cruz won the 14 delegates up for grabs. Mr. Cruz was the only candidate to show up in Casper, where he added to the nine (of 12 available) delegates awarded last month at county meetings. Mr. Trump, who said he didn't want to "waste money going to Wyoming," now claims Mr. Cruz won thanks to "party bosses."

This is the same line the New Yorker leveled at the Colorado GOP, which also uses county and state conventions (rather than a popular vote) to elect delegates, and which recently awarded Mr. Cruz a delegate sweep. Yet both state processes were transparent and well known to all campaigns since last year.

Any registered Republican in Wyoming was welcome to vote for delegates at the precinct caucuses—which kicked off the wider state nomination process—and many did. GOP turnout on Super Tuesday in places like Laramie County was up some 400%. It's true these caucuses favor partisans willing to participate, but that's true of caucuses and primaries in every state. Even with this year's high voter turnout, most primaries are being decided by at most 30% of registered Republicans. Does that make Mr. Trump's victories in South Carolina or Florida less legitimate?

Mr. Trump has arguably benefitted more than other candidates from the GOP's delegate-selection system. He has won about 37% of all votes cast yet he has won closer to 45% of the delegates. That's due to his success in states that award delegates on a winner-take-all or winner-take-most basis. States that allocate delegates proportionally better reflect actual vote totals, but you don't hear Mr. Trump complaining about that.

Then there's Mr. Trump's gripe that delegates pledged to him (or to former candidates) may desert him after the first convention ballot. These state rules are also long-standing and transparent. The party has to nominate someone, and the point of unbinding delegates is to let a party majority coalesce around a nominee, rather than sit in permanent deadlock.

None of this would even be a problem if Mr. Trump were consolidating GOP support like previous front-runners at this stage of the nomination race. He's likely to win easily in his home state of New York on Tuesday, but his threats and bullying have also hardened opposition to his candidacy. His real problem is that millions of Republicans increasingly fear he'd lose in a November landslide.

According to the latest WSJ poll of registered voters, an astounding 65% of the public have an unfavorable view of Mr. Trump. Subtract the 24% who like him, and his net unfavorable rating is minus-41%. That's lower even than Hillary Clinton, who has a net unfavorable of minus-24%. Mr. Cruz is at minus-23%.

Mr. Trump has shown little capacity for—or even interest in—improving his image. This is the real reason he may lose the nomination in Cleveland if he can't win on the first ballot.

Members of the Republican National Committee are meeting in Florida this week, and Mr. Trump is badgering them to change the rules to let him win with a plurality of delegates. The party shouldn't give in to his intimidation. The GOP is a private institution whose purpose is to nominate a candidate who can win an election to further party ideals. If a candidate like Mr. Trump can't win a party majority, he has no chance at winning a majority of the country.

Cardinal Bernie

In the 1600s the sculptor Bernini had Pope Urban VIII as his benefactor. Today Bernie Sanders wants to claim Pope Francis. In the pope's second foray into U.S. presidential politics—the first was to suggest Donald Trump is not a Christian—Francis met with the Democratic Party's socialist underdog on Saturday.

Mr. Sanders's audience was granted after he participated in a Vatican conference celebrating the 25th anniversary of Pope John Paul II's encyclical Centesimus Annus. In his remarks on the encyclical, Mr. Sanders used his Vatican pulpit to declare that "the issue of wealth and income inequality" is "the great moral issue of our time."

The irony is that Senator Sanders seems to be completely unaware that Centesimus Annus was one of the most pro-market documents ever to come out of the Vatican. While it certainly carries warnings about a capitalism unbounded by law and a healthy culture, it also spoke eloquently of the "human rights to private initiative, to ownership of property and to freedom in the economic sector." It also recognized that the ultimate source of wealth is not material but the human mind.

As for socialism, the encyclical was unsparing. Pope John Paul II agreed with earlier popes that socialism fails as a political system because it is rooted in the denial of freedom. So perhaps it's useful for Mr. Sanders to spend time with Centesimus Annus, assuming he reads enough to see its denunciations of socialism and appreciation for what human creativity can accomplish in a free-market economy.

Bursting China's Credit Bubble

Yang Hua, the chairman of Dongbei Special Steel Group in the northeastern Chinese city of Dalian, committed suicide on March 24. Four days later the company failed to make a $131 million bond payment and missed two more payments since then. The defaults of Dongbei and at least six other companies so far this year have jolted the Chinese bond market. Prices fell, yields rose and new issues were cancelled. While this will help the market mature in the long run, it also exposes deeper weaknesses in China's financial system.

Defaults are the first step to market-based allocation of capital.

Until recently, state-owned companies unable to pay bond-holders could expect central or local governments to bail them out. This encouraged investors to believe Chinese securities were virtually risk-free, and over the past year they pushed down the yield spread between corporate and sovereign bonds to the lowest level since 2007.

After the bubble in the Chinese stock market popped in June, investors seeking safer returns flooded into bonds. That in turn led companies to issue $3.6 trillion of new bonds last year, almost double the 2014 amount, even as the economy slowed and profits fell.

Now this second bubble is starting to deflate. The government vowed to cull "zombie companies" dependent on banks to give them new loans so they can make payments on old ones. State-owned China Development Bank helped finance Dongbei Special Steel's expansion, but so far it has limited its involvement to coordinating meetings of creditors.

Many of China's most troubled companies are in heavy industries that benefited from the government's post-2008 stimulus program. Beijing encouraged banks to lend generously to property developers and government vehicles to build new roads and airports. That boosted growth figures and employment, but now companies that provided the steel, cement and coal can't repay their debts.

Shanxi Huayu Energy, which defaulted on April 6, is notable because it is half owned by the giant China National Coal Group. China Railway Materials recently suspended trading in its bonds as it tries to reschedule loans. The company is controlled by the central government's State-owned Assets Supervision and Administration Commission. A few months ago it seemed highly unlikely that companies with that kind of government backing would default.

China investors of a certain age will remember a similar episode in 1999, when the government of Guangdong, the country's richest province, allowed its main investment vehicle, Guangdong International Trust and Investment Corporation, to default on $4.7 billion in loans. Gitic ultimately went bankrupt and creditors recovered pennies on the dollar, teaching a generation of investors that state ownership is no guarantee of repayment.

Beijing deserves credit for dispelling the moral hazard that crept back into its debt markets, even if it waited too long to do so. The question now is whether it can restructure the companies in a transparent and market-oriented manner.

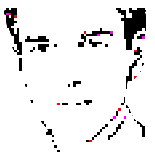
Bond-holders represent a fraction of the debt that Chinese companies have accumulated over the past few years. Total social financing, the central bank's measure of credit in the economy, grew by 15.8% in March to $22.4 trillion, of which new corporate bond issuance accounted for $107.5 billion. Corporate debt is now around 160% of GDP, compared to 70% in the U.S.

China's banks officially report that their bad loans account for a mere 1.7% of total assets. But that understates a growing problem. The country still lacks the legal and regulatory framework to handle the looming round of defaults and bankruptcies.

In 1999 Beijing recapitalized the four largest state banks by hiving off their bad loans into asset-management companies, which recovered some of the debt through debt-for-equity swaps and negotiated settlements. This time the process will be more complicated. The banks themselves need to resolve bad debt as it surfaces instead of letting it fester until it causes a crisis.

The recent defaults and the bond market's gyrations are a warning to Beijing that failure to address this challenge could undermine confidence in its financial system at a dangerous time.

Angela Merkel's Road To Moral Surrender



GLOBAL VIEW
By Bret Stephens

How does European humanitarianism become a road to moral surrender? In Germany, they're beginning to find out.

Jan Böhmermann is a German political satirist—think of a younger version of Jon Stewart—who, on his TV show last month, read aloud a lewd poem about Recep Tayyip Erdogan. The verse was replete with mocking references to the Turkish president's anatomy, his alleged relations with farm animals, and his mistreatment of religious and ethnic minorities.

Was it funny? My wife, who's German, puts it in the category of "so puerile you laugh." But Mr. Böhmermann had a serious point, explicitly framing his poem as an example of *Schmähkritik*, or abusive criticism, and therefore not necessarily protected by German law. His larger aim was to test the limits of free speech, much as the American comedian George Carlin did in the 1970s with his notorious "seven words you can't say on TV."

The ploy succeeded too well. The Turkish foreign ministry made a formal request of the German government to prosecute Mr. Böhmermann under a Wilhelmine-era law (known as Section 103 and previously used by the Shah of Iran and Augusto Pinochet of Chile) forbidding insults against foreign leaders. Mr. Erdogan has also filed a private suit against the comedian, who is now under police protection in consideration of the recent fates of European satirists who ran afoul of Muslim sensitivities.

None of this is surprising: The Turkish government is pursuing nearly 2,000 criminal cases against Turkish citizens accused of insulting Mr. Erdogan, some of which involve school-age children who posted material on Facebook. Mr. Erdogan's bodyguards also recently roughed up some demonstrators protesting him in Washington. It's in the nature of political thuggery to recognize no boundaries, moral or territorial.

It's also in the nature of the liberal West constantly to seek an accommodation with the thugs. ZDF, the German public broadcaster that carries Mr. Böhmermann's show, immediately pulled the offending clip from its website, though it promises to foot his legal bills. German Chancellor Angela Merkel told Turkish Prime Minister Ahmet Davutoglu that she found the poem "deliberately hurtful," a comment her spokesman went out of his way to disclose.

More damagingly, the chancellor allowed the criminal case to go forward when she had the legal authority to stop it, claiming the judiciary is where the matter rightly belongs while promising to repeal the law under which the suit was brought. This is supposed to be the height of pragmatism, a way of mollifying Mr. Erdogan even as it's unlikely that a German court will impose much of a penalty on Mr. Böhmermann.

But hiding behind judicial skirts does nothing to disguise Mrs. Merkel's more craven calculation, which is her need to placate Mr. Erdogan after he agreed last month to keep refugees from flooding Europe through Turkey in exchange for billions in financial aid and visa-free travel for Turks in Europe. A deal is supposed to be a deal, but the Turkish president is not the sort to stay (politically) bribed. Hence the need to appease him in the coin of a comedian's prosecution.

What begins in small concessions of principle generally leads to greater concessions. Germany might soon repeal Section 103 and Mr. Böhmermann may well be vindicated in court. But by now Mr. Erdogan knows that nothing is so morally flexible as a Western politician desperate to avoid a tough choice, so expect him to find new avenues to impose his will, and his values, on a pliable Europe.

Germany's recklessly humanitarian leader betrays her country's liberal values.

That goes especially for Mrs. Merkel, who spent much of 2015 riding a wave of liberal congratulation (capped by being named Time's Person of the Year) for her willingness to accept a million Middle Eastern refugees, no questions asked. Now those refugees, some of them ill-behaved, are provoking a political backlash of a sort that stirs uneasy German memories, and the chancellor needs the political easy way out from the consequences of her reckless humanitarianism. That turns out to mean a betrayal of the very liberal values she claims to champion.

The larger question is how far Mrs. Merkel and other European leaders are willing to bend to the likes of Mr. Erdogan and other autocrats. The deal with Turkey, Der Spiegel noted this week, "is more than just a piece of paper to Merkel—it's proof that the refugee crisis can be solved with means other than barbed wire." But what does it say about Mrs. Merkel's fitness as a political leader that she would sooner risk the free-speech rights of German citizens than tend to the necessary if sometimes ugly business of national self-preservation?

To their credit, Germany's left-leaning Social Democrats, who are in a coalition government with Mrs. Merkel's Christian Democrats, have opposed her capitulation to Mr. Erdogan. In France, too, it is the Socialist Party of François Hollande and Manuel Valls that has been most clear-eyed about the need to stand firm for the core values of a secular state. In today's Europe, that's the key test of leadership, one that Mrs. Merkel is failing.

Write bstephens@wsj.com.

LETTERS TO THE EDITOR

Germany's Energy Transformation Works

Your editorial "Winded in Germany" (April 14) fails to mention that the expensive years of the *Energiewende* are over. While the share of renewable energies in electricity consumption has risen significantly to 33% from 25%, the overall expenses have not.

This is due to the significant reduction in costs. The price for solar and wind power is at 7 euro cents to 8 euro cents a kilowatt hour, making it competitive with new coal plants.

For this reason, the new draft of the renewable energy law foresees a continuous expansion of wind and solar energy, based on market-based auctions. The objective is to reach a renewable-energies share of 40% to 45% by 2025. With recent successes, this objective may be reached even earlier.

This is why some members of the German government want to reduce the expansion of on-shore wind farms. But even then, there will be more wind than solar expansion.

Energiewende is no disaster. The German industry is the most competitive in Europe. Ninety percent of Germany's citizens support the Energiewende. And with only 12 minutes of power shortages a year, Germany's energy supply is extremely reliable.

Renewables are booming in California, New York, Texas—even China. This is not limited to Germany. This is a global trend.

PATRICK GRAICHEN
Executive Director,
Agora Energiewende
Berlin

Taxman: There's One for You, 19 for Me, Yeah

Reihan Salam doesn't mention the sticker shock many Americans have experienced when buying goods and services in countries with a value-added tax ("Taxation Without Exasperation," Review, April 11). Lest we think that only "rich market democracies" have such taxes, we should carefully research how consumption taxes work in Brazil, an emerging market economy, where products cost far more than they do in the U.S. partly due to consumption taxes.

It's exhausting to hear about all the different tax schemes during every election cycle. I'd much prefer to hear how someone is going to have the political courage to finally cut the size of government so Americans don't need all these taxes, no matter what form they take. The real crux of our tax exasperation is a spending problem from a government that has grown too big and promised too much to too many for far too long.

ELLEN SANDLES
New York

Mr. Salam writes fondly of Australia's VAT. However, Australians pay dramatically more for just about anything Americans buy priced under $50, and the closer one gets to $1, it is double or triple the price. I agree that the U.S. needs a smarter and simpler system of taxation, but a VAT is the wrong way. The result will be that we all soon will be paying $1 per banana like the Australians, and contrary to the article's claim, no one will know what we are paying in taxes. A VAT would undermine consumption and isn't in our best interest. We need a flat tax.

KEN RATKOVICH
Bloomfield Hills, Mich.

The VAT is the only way conservatives can tax poor people who have no net income subject to the income tax.

DAVID BEANBLOSSOM
Greenville, S.C.

Letters intended for publication should be addressed to: The Editor, 1211 Avenue of the Americas, New York, NY 10036, or emailed to wsj.ltrs@wsj.com. Please include your city and state. All letters are subject to editing, and unpublished letters can be neither acknowledged nor returned.

Impeachment Won't Save Brazil

By Ruchir Sharma

Brazilian investors and citizens alike are happily anticipating the arrival of "anybody but Dilma." Since late January, despite the country's crushing recession, Brazilian stocks are up more than 50% in dollar terms, inspired by the campaign to topple President Dilma Rousseff, who was impeached on Sunday by the lower house of Brazil's Congress for allegedly violating financial-responsibility laws.

Government spending, eating up 41% of GDP, is smothering the economy of the still-emerging nation.

Nations often break out of economic malaise after a crisis wakes up the populace to the need for change, and a charismatic reformer is elected. The problem in Brazil is that it has elected charismatic reformers before. They include Ms. Rousseff's predecessor and fellow Workers' Party stalwart, Luiz Inácio Lula da Silva, who along with other party members has been implicated in a multibillion-dollar corruption scandal involving alleged kickbacks from the state-run oil company, Petrobras, and some of the country's largest construction firms.

While Brazil had a relatively strong run of growth under "Lula," the gains made during his administration (2003-10) have been largely wiped out by the current downturn, now in its third year.

But the hopes for an economic recovery under "anybody but Dilma" largely overlook what really makes Brazil run—commodities. Brazil's GDP growth rate has fallen to minus-3.5% last year from 7.5% in 2010. This decline followed the collapse in commodity prices that began in 2011, the same year Ms. Rousseff took office.

Brazil has been riding the ups and downs of prices for its main exports—including iron ore, sugar and soybeans—for more than a century. Though this is true for other commodity exporters too, the link between commodity prices and economic growth is particularly strong in Brazil. Today the average Brazilian income is about 16% of the U.S. average, with basically no gain for 100 years.

Even more striking, since the mid-1980s Brazil has seen its GDP growth rate track commodity prices more closely than any other nation in the world. Brazil's fortunes are so closely tied to the global commodity cycle in part because so little works inside the country. The private economy produces some internationally competitive companies in auto parts, aerospace and other industries, but they thrive by dodging a growing bureaucracy that smothers the rest.

Spending by local, regional and national governments amounts to 41% of Brazil's GDP, the largest for any country in its middle-income class, and a scale close to those of much richer European welfare states such as Germany and Norway. Brazilians face the heaviest tax burden of any emerging country, with collections amounting to 35% of GDP. The widespread sense that they get a lousy return in public services is another reason for mass protests against Ms. Rousseff. Meanwhile, her collapsing political capital has derailed her belated effort to contain a crippling budget deficit, which is of her own making.

ZUMA PRESS

In São Paulo, watching the broadcast of the impeachment vote in Brazil's lower house on April 17.

Under Lula, Brazil ran a consistent surplus, which morphed under Ms. Rousseff into a deficit equal to 10% of GDP, the highest in the world. Her approval rating has collapsed to 11% from a high of 60% in 2013. She is the only major world leader whose approval rating last year fell below Brazil's inflation rate of 10%, which has been fueled by heavy government spending.

Even if Ms. Rousseff or other leaders were inclined to push serious reform, it's doubtful they will have the political capital to make the radical changes needed to put the welfare-state genie back in the bottle. The budget is very rigid, most of it going to salaries and legally mandated social entitlements, which are growing.

Over the past 15 years, public pensions have increased to 7% of GDP from 3%. Brazilian men typically retire at age 54 and women at 52, earlier than in any major European country, drawn into the golden years by generous benefits. On average, Brazil pays pensioners 90% of their final salary, compared with an average of 60% in developed countries.

The basic issue for Brazil is that heavy state spending tends to push up interest rates and borrowing costs, depress private investment and defer any shift away from commodities. Under Lula and Ms. Rousseff, Brazil has grown more reliant on soybeans, with commodities now accounting for 67% of exports, up from 46% in 2000. Brazil's manufacturing industries remain anemic, representing only 11% of the economy, near the bottom of emerging-economy rankings.

The Brazilian Workers' Party came to power with Lula's election in 2002, and it can be blamed for failing to move the economy beyond soybeans and other commodities. Ms. Rousseff has taken a step backward, abandoning even the budget discipline practiced by the Lula government. Under her administration, Brazil's average income has fallen to $8,000 from $13,000 in 2011. But as the impeachment case moves to a vote in the Senate, it is premature to get too excited about "anybody but Dilma."

To revive and diversify the economy and control government spending, it would take an unusually powerful reformer—a Brazilian Deng Xiaoping—with the clout to begin reversing the growth of the outsize welfare state. Until then, global commodity prices will trump everything else in determining the country's fate.

Mr. Sharma, head of emerging markets and chief global strategist at Morgan Stanley Investment Management, is the author of "The Rise and Fall of Nations" coming in June from Norton.

Securing Peace With Trade and Diplomacy

By Chuck Hagel And Bob Kerrey

In the middle of a U.S. presidential campaign full of bombastic rhetoric, it is worth pausing to note recent ceremonies marking the 50th anniversary of America's entry into the Vietnam War. The gradual military buildup in Vietnam means there is no firm date for the start of America's involvement, but the war and its aftermath merit fresh attention. That is especially true when America will elect a new president and commander in chief whose leadership will be crucial in a volatile world.

We served in the Vietnam War at the peak of American involvement, when the U.S. had more than 500,000 soldiers, most of them drafted, in Vietnam. We saw the courage, suffering and commitment of American soldiers. More than 2.5 million served, and more than 58,000 gave their lives. Hundreds of thousands were wounded, and hundreds were taken prisoner or missing in action. Vietnamese civilian and military casualties were at least 20 times greater by the time the conflict ended in 1975.

The years of the Vietnam War defined a generation and influenced and changed America. It profoundly affected the nation's culture and politics. No corner of society was untouched. The war framed and informed a generation and forced the questioning of institutional thinking, particularly in foreign policy.

Nations, like individuals, are products of their experiences. People are conditioned by experiences and can either learn and adapt or keep making the same fundamental mistakes. The lessons of Vietnam and its aftermath are especially instructive today.

Beware the simple applause line or bumper-sticker slogan or tweet from political candidates. Beware those who seem to think that diplomacy and compromise aren't essential ingredients of a lasting peace. The statesmen who built the new economic and political order following World War II, and who sustained the nation's long and expensive containment of the Soviet Union, insisted that global trade and multilateral institutions were critical parts of securing global peace and prosperity.

That approach also characterized the era that followed the American sacrifices of the Vietnam era. After the war, the U.S. welcomed 1.5 million Vietnamese refugees—immigrants who have prospered and added tremendous economic, social and political value to the country. Critics who warned against the policy have been proved wrong.

Presidential candidates on both sides seem to have forgotten the lessons of the post-Vietnam War era.

Vietnamese Communist leaders who are now trying to build that nation's economy should take note: All that was needed for their countrymen to produce such success in the U.S. was economic and political freedom.

After the war, America also began the hard work of making a lasting peace with Vietnam. Consider what the U.S. has done to preserve the peace in Southeast Asia since the Vietnam War ended. In negotiations during the administrations of Republican President George H.W. Bush and Democratic President Bill Clinton, skilled American diplomats helped broker a peace between Vietnam and Cambodia in their long-running conflict, and a road map to the normalization of relations between the U.S. and Vietnam was begun.

Supported by congressional veterans of the war led by Sens. John McCain and John Kerry, the U.S. legalized trade with Vietnam and signed a bilateral trade agreement, and sent a former prisoner of war, Pete Peterson, to Vietnam as the first U.S. ambassador to that country. A Vietnamese higher-education project backed by the U.S. State Department's Fulbright program continues to this day.

Four presidents—two Republicans and two Democrats—have sustained this effort. The bipartisan nature of the story has lately taken an unfortunate turn with leading presidential candidates of both parties opposing the Trans-Pacific Partnership trade agreement, which includes Vietnam among its signatories.

In Barbara Tuchman's award-winning 1984 book, "The March of Folly: From Troy to Vietnam," the historian (who died in 1989) ends by writing: "A last folly was the absence of reflective thought about the nature of what we were doing, about effectiveness in relation to the object sought, about balance of possible gain as against loss and against harm both to the ally and to the United States. Absence of intelligent thinking in rulership is another of the universals, and raises the question whether in modern states there is something about political and bureaucratic life that subdues the functioning of intellect in favor of 'working the levers' without regard to rational expectations. This would seem to be an ongoing prospect." Wise words at the time, and even wiser words today.

Mr. Hagel, a recipient of two Purple Hearts for service in Vietnam, is a former secretary of defense. Mr. Kerrey is a recipient of the Medal of Honor for service in Vietnam and, like Mr. Hagel, a former U.S. senator from Nebraska.

Betting on Southeast Asia's E-Commerce Boom

By Florian Hoppe And Sebastien Lamy

Southeast Asia is the new frontier for e-commerce. Alibaba announced this week that it would pay $1 billion for a majority stake in regional online marketplace Lazada. Late last year, China's JD.com set up shop in Indonesia. Japan's SoftBank, along with Sequoia Capital and SB Pan-Asia Fund, invested $100 million in Tokopedia, Indonesia's largest online marketplace. The list grows bigger every day.

The rate of digital adoption in Southeast Asia is unmatched. The Philippines sends more texts than any other country, and Jakarta is the world's No. 1 city for tweets. There are more than 250 million smartphone users in the region.

The online marketplace is still small. Only one in four consumers over the age of 16 has ever made an online purchase, according to a survey conducted by Bain & Company and Google of more than 6,000 consumers in Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. Southeast Asia's online retail penetration level is 3%, representing only about $6 billion in sales. China and the U.S. boast penetration levels of 14%, with online sales exceeding $250 billion.

But the market is approaching a tipping point. According to our survey, 100 million consumers in Southeast Asia have made a digital purchase, but 150 million have researched products or engaged with sellers online. Some industries are already starting to score big: Twenty-four percent of all clothing and footwear and 18% of all travel are now purchased online.

Southeast Asia still faces many challenges. As cash-strapped Lazada's experience shows in building a user base in six diverse emerging markets, providing incentives for merchants and spending on marketing and other upfront costs are difficult.

For one, the region encompasses a range of ethnicities, languages, consumer preferences and regulations. For example, Indonesian law doesn't allow foreign direct investment in local retail e-commerce companies. Southeast Asia also lacks a solid regional payment and logistics infrastructure, which were the foundation for China's astounding digital-retail growth.

In addition, surveyed consumers don't yet fully trust e-commerce platforms, feel concerned about the lack of touch-and-feel and have trouble finding the products they want. These complaints about early-stage e-commerce markets are typical. Given the sizable and digitally sophisticated population, the region's broad acceptance of e-commerce is inevitable.

Southeast Asia is a unique e-commerce market. Consumers here are technology leapfrogs. Outside of tier-one cities, many have bypassed PCs, accessing digital platforms primarily through mobile phones. In Thailand, 85% of consumers not living in major metropolitan hubs use mobile devices for their online purchases.

Southeast Asian online shoppers also frequent a large number of sites. In Singapore, no fewer than 12 platforms serve 90% of the market.

As a result of this fragmentation, shoppers are more likely to head first to search engines when looking for products as opposed to checking company websites. They show little loyalty to retailers and shop via social media. More than 80% of the region's digital consumers use social media such as Instagram to research products or otherwise connect with sellers. Since sales via social media comprise up to 30% of all transactions, companies are rapidly expanding their services to attract consumers.

The region's online retail market is growing rapidly, but its diversity and fragmentation present unique challenges.

In many markets, consumers venture into online retail from physical shopping in search of the cheapest deal. That isn't the case in Southeast Asia, where the online experience or choices available are more important, according to our survey.

Also unlike many other markets, where most payments are made via noncash methods such as credit cards and door delivery is preferred, Southeast Asians desire other methods for payment and delivery.

More than one-third of all consumers surveyed in top cities and outlying areas favored paying cash on delivery. Door-to-door delivery is preferred in tier-one cities, but online consumers in other areas preferred to pick up their purchases.

When we measured customer advocacy, local and regional players emerged as the early winners, in large part because they provide a better-tailored experience for local consumers than global competitors offer. Regional leaders such as Lazada have built local logistics footprints in each market to increase delivery reliability.

Local start-ups are also breaking new ground: Singapore-based Uskoop consolidates purchases from U.S. retailers to offer consumers steep discounts on delivery fees.

E-commerce is a fast-moving game and major forces are changing the rules. Forward-thinking retailers are investing to maximize the potential of both physical and digital channels. Social-media companies are continually experimenting with expanding the bounds of social commerce. And global players that once stood on the sidelines are now poised to compete in Southeast Asia.

Companies hoping to win need to define their engagement model now: where and how to invest, and what approaches to take to manage the complex market.

For incumbents, there are three basic rules. First, it's no longer a game of wait-and-see, experimentation or small bets. It is time to set direction and bet big. Second, winning means taking a nuanced approach and finding the right local partners to serve each market category, segment and geography.

Finally, thriving will take many years. Digitizing a traditional business requires acquiring the right capabilities—not easy in talent-scarce Southeast Asia—and fundamentally changing the company's operating model. Making the most of Southeast Asia's potential will take nothing less.

Mr. Hoppe is a partner in Bain & Company's Singapore office and a member of the firm's technology practice. Mr. Lamy is also a partner in Bain's Singapore office and a member of the consumer products and retail practices. They co-lead Bain's digital practice in Southeast Asia.

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

EDITORIAL AND CORPORATE HEADQUARTERS:
1211 Avenue of the Americas, New York, N.Y., 10036
Telephone 1-800-DOWJONES

DOW JONES | News Corp

Little Tramp, Big Footprint

REVIEW
PETER COWIE

Vevey, Switzerland

AFTER MANY YEARS of struggle and persistence of vision, a vibrant, often surprising tribute to Charlie Chaplin has arisen near this town in western Switzerland perhaps best known as the headquarters of Nestlé. It was here in December 1952—at a time when his sympathies were being questioned in the McCarthy-era U.S.—that Chaplin and his wife, Oona O'Neill, found and immediately adored the Manoir de Ban, nestled in the countryside above Lake Geneva. It became the home where Chaplin would write and compose for the final quarter-century of his life.

Chaplin's World has been in development for more than 15 years. Financing came not just from a $7 million loan from the municipality of Corsier-sur-Vevey to purchase the Manoir de Ban in 2002, but also from the Compagnie des Alpes and its affiliate Musée Grevin, best known for its waxworks. Yves Durand, a cinephile and passionate admirer of Chaplin, worked with Philippe Meylan, a Swiss architect, to perfect the original concept. Up to 300,000 visitors are expected each year.

The manor house where Chaplin's family lived has been renovated but kept very much as it was, so that visitors can pass from room to room and see Chaplin's desk and other furniture, his books and memorabilia, and the piano at which he composed the music for films like "The Circus" and "The Kid."

Eugene Chaplin, named after his maternal grandfather, the playwright Eugene O'Neill, stands by the French windows overlooking the 37-acre grounds with its vista of snow-fringed mountains. "What we have here," he says, "is a compromise between a family museum and something that is more alive." And what brings Chaplin's World alive is the purpose-built Studio, a cavernous structure of 14,500 square feet that re-creates Chaplin's studios in Hollywood. As the visitor enters this complex, a short documentary is shown in a 150-seat theater and then the screen rises and you walk down a slope into a full-size replica of "Easy Street," the one-size-fits-all set that Chaplin built in his studios in

FABRICE COFFRINI/AGENCE FRANCE-PRESSE/GETTY IMAGES; DENIS BALIBOUSE/REUTERS

Charlie Chaplin's hat and cane displayed in a showcase at Chaplin's World (above); the Manoir de Ban (below).

the winter of 1916-17 at a cost of $10,000 (more than $200,000 today). Off to one side is a replica of the south London bedroom that Chaplin shared in childhood with his mother, Hannah, and his brother Sydney, and which inspired the attic set in "The Kid." A meticulous reconstruction of his editing room underlines how Chaplin took charge of every stage of production.

Downstairs, on a massive set, the mountain hut from "The Gold Rush" is perched on a rocky slope and, when visitors stand inside, the whole cabin rocks just as it did during the storm in the film. The idea is that people should participate in various scenes—sitting next to the blind girl in "City Lights," or lying like Charlie amid the infernal cog-wheels of the Machine Age in "Modern Times." Wax figures are placed strategically throughout the exhibit: Chaplin himself in various poses; Eric Campbell, the heavy of those early Chaplin comedies; close friend Douglas Fairbanks Sr.; co-star Claire Bloom; and also personalities who either admired Chaplin or knew him well, such as Federico Fellini, Sophia Loren and Woody Allen. In one of the drollest moments, Albert Einstein pops up—and he did, after all, attend the premiere of "City Lights."

This sleek and functional Studio complex somehow allies with the graceful design of the manor house to celebrate the two essential elements in the career of Chaplin—his work and his domestic life.

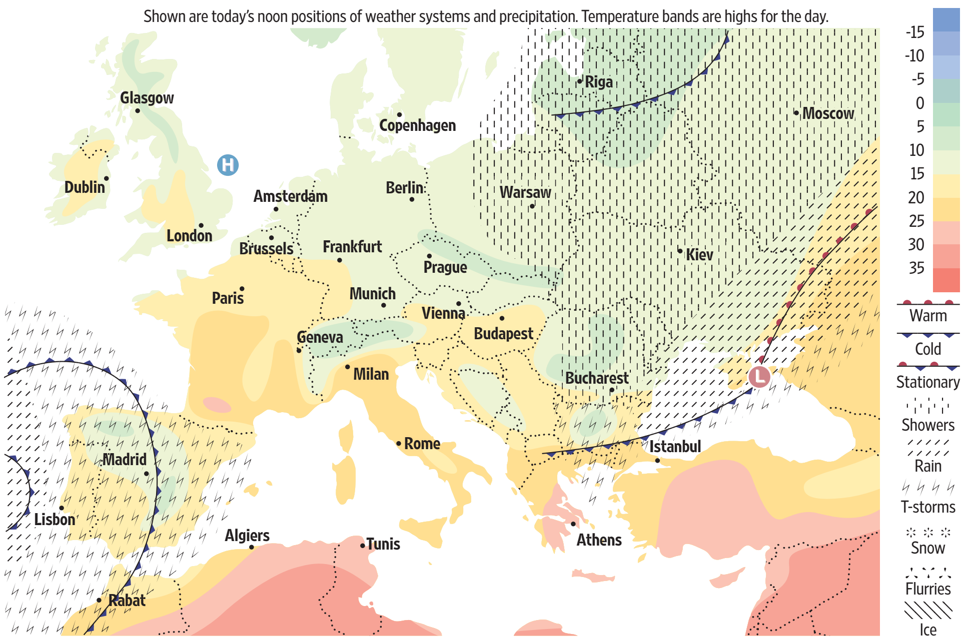
Chaplin's World could so easily have become Chaplin Land. But theme-park raucousness and vulgarity have no place here thanks to the involvement of the family. Instead, the often witty exhibit pays homage first and foremost to Chaplin's prodigious energy—handling every aspect of the filmmaking process, traveling far and wide, leaving his mark on the 20th century, and yet never forgetting his gift for the gag. Eugene Chaplin reflects that his father "would probably be horrified" at the idea of what's happening here in his name, but "if the museum is still attracting thousands of visitors after 10 years or more, then I think he would be very happy."

Mr. Cowie has written numerous books on the cinema, and was formerly international publishing director of Variety.

Weather

AccuWeather.com

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



Global Forecasts

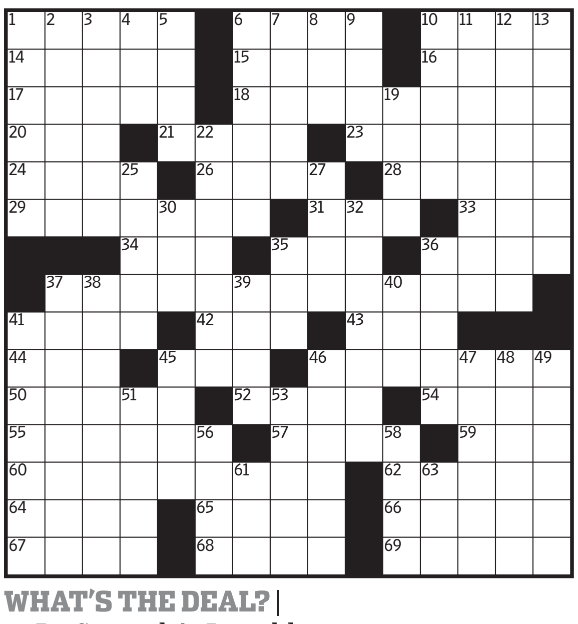
s...sunny; pc... partly cloudy; c...cloudy; sh...showers; t...t'storms; r...rain; sf...snow flurries; sn...snow; i...ice

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Amsterdam	13	4	s	15	6	pc
Anchorage	10	1	pc	13	4	s
Athens	27	16	pc	21	12	s
Atlanta	28	15	pc	26	17	c
Baghdad	33	17	s	35	20	s
Baltimore	21	7	s	24	15	pc
Bangkok	37	30	pc	37	29	t
Beijing	27	9	s	30	11	s
Berlin	12	2	s	13	4	s
Bogota	21	11	c	20	11	r
Boise	27	13	pc	29	16	pc
Boston	13	6	s	20	10	pc
Brussels	13	5	pc	16	7	pc
Buenos Aires	21	12	pc	21	9	s
Cairo	35	20	s	36	20	s
Calgary	20	5	pc	23	4	pc
Caracas	31	26	pc	31	26	pc
Charlotte	26	13	s	27	16	c
Chicago	22	13	sh	20	7	sh
Dallas	26	15	t	23	13	t
Denver	12	1	c	17	4	s
Detroit	19	10	pc	20	10	sh
Dubai	30	22	s	30	23	pc
Dublin	13	5	s	12	7	pc
Edinburgh	14	4	s	14	4	pc
Frankfurt	15	4	s	18	6	pc

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Geneva	19	8	pc	21	10	pc
Hanoi	29	23	c	31	25	c
Havana	28	18	s	30	19	t
Hong Kong	29	24	t	29	25	sh
Honolulu	29	22	pc	29	22	sh
Houston	24	18	t	26	16	t
Istanbul	24	12	pc	17	11	r
Jakarta	32	24	c	33	25	t
Johannesburg	26	14	s	26	13	t
Kansas City	19	9	t	20	9	pc
Las Vegas	33	18	s	33	19	s
Lima	26	19	s	26	19	c
London	14	7	pc	15	7	pc
Los Angeles	27	13	s	25	13	pc
Madrid	14	7	t	18	8	t
Manila	34	26	s	35	27	s
Melbourne	27	19	pc	21	13	sh
Mexico City	24	11	pc	23	11	t
Miami	27	22	s	28	23	pc
Milan	22	9	pc	21	12	pc
Minneapolis	20	11	c	21	6	pc
Monterrey	31	17	t	32	16	t
Montreal	13	1	s	19	10	sh
Moscow	13	1	r	11	3	sn
Mumbai	33	28	pc	33	27	pc
Nashville	26	15	c	22	15	t
New Delhi	42	26	pc	41	25	pc
New Orleans	27	19	c	25	19	t
New York City	19	8	s	22	14	pc
Omaha	16	9	r	22	6	pc
Orlando	28	16	pc	29	18	pc

City	Today Hi	Today Lo	Today W	Tomorrow Hi	Tomorrow Lo	Tomorrow W
Ottawa	15	1	s	19	9	sh
Paris	18	9	pc	20	11	pc
Philadelphia	21	9	s	24	16	pc
Phoenix	35	19	s	35	20	s
Pittsburgh	24	12	s	22	13	sh
Port-au-Prince	35	22	s	34	23	t
Portland, Ore.	28	12	pc	25	13	c
Rio de Janeiro	32	25	s	33	26	s
Riyadh	29	19	pc	32	21	pc
Rome	23	10	pc	22	12	pc
Salt Lake City	23	10	s	27	13	s
San Diego	26	16	s	24	16	pc
San Francisco	22	14	pc	20	14	pc
San Juan	28	25	sh	28	25	t
Santiago	20	10	s	21	12	s
Santo Domingo	32	21	pc	32	22	t
Sao Paulo	32	20	pc	31	21	s
Seattle	26	13	s	23	12	c
Seoul	18	11	c	20	9	pc
Shanghai	22	16	sh	24	16	pc
Singapore	32	26	pc	33	26	pc
Stockholm	10	0	pc	12	2	sh
Sydney	24	16	pc	25	17	pc
Taipei	30	21	pc	31	22	pc
Tehran	21	10	s	24	12	s
Tel Aviv	33	19	s	29	17	pc
Tokyo	18	15	s	20	15	r
Toronto	14	4	s	16	11	sh
Vancouver	21	10	s	18	9	pc
Washington, D.C.	22	10	s	25	18	pc
Zurich	17	4	pc	19	8	pc

The WSJ Daily Crossword | Edited by Mike Shenk



WHAT'S THE DEAL? | By Samuel A. Donaldson

Across

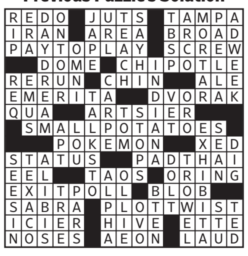
1 3-3, in Texas hold 'em
6 Leaves home?
10 Site of a canted campanile
14 Vision-correcting option
15 Linen shade
16 Some TVs
17 Tibia's terminus
18 4-4, in Texas hold 'em
20 Booker T.'s backup group
21 The T in telegraphy?
23 Sarajevo setting
24 Oscar nominee for "Moneyball"
26 Resonant disk
28 Song that starts "And now, the end is near"
29 8-8, in Texas hold 'em
31 Site for an ibex
33 Was full of baloney?
34 Not 100 percent
35 Letters on Hartsfield–Jackson-bound luggage tags
36 Competed
37 A-A, in Texas hold 'em
41 Truth alternative
42 Haggard novel
43 Contraction for Key
44 Currency exchange abbr.
45 Home of the SEC's Tigers
46 K-K, in Texas hold 'em
50 Subject
52 Woman of the future
54 Piggy bank feature
55 2001 #1 hit for Jennifer Lopez
57 King canine
59 "Black-ish" father
60 J-J, in Texas hold 'em
62 Garnett of the Timberwolves
64 Curricular segment
65 Editor's "never mind"
66 Queen's decree
67 Clark's Smallville love
68 Crafty website
69 2-2, in Texas hold 'em

Down

1 Workshop holders
2 Celebrated, as the new year
3 Requests one's presence at
4 Keane on the funny pages
5 Timetable, for short
6 Curricular segment
7 Magnate Carl
8 X-ray's cousin
9 Future tulip, say
10 Written in a matter-of-fact manner
11 "No rush"
12 Fills to the gills
13 Tested for purity
19 Nonsense word in a 1961 Barry Mann hit
22 Forever youthful
25 How the careful think
27 Persian in Peru
30 Jan. honoree
32 "Mama Said Knock You Out" singer
35 Is for more than one person?
36 Stop, drop and roll, e.g.
37 Soft shawl
38 Calls Domino's, say
39 Gorilla
40 Home of the Royal Botanic Gardens
41 Conscientious
45 Jacob's first wife
46 Like a curmudgeon
47 Where "Equus" premiered
48 "A fellow of infinite jest," according to Hamlet
49 Surgical inserts
51 Conductor Zubin
53 Harold in FDR's cabinet
56 Give the slip
58 Rubber-stamped
61 Giant nicknamed "Master Melvin"
63 End of a professorial address

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

Previous Puzzle's Solution



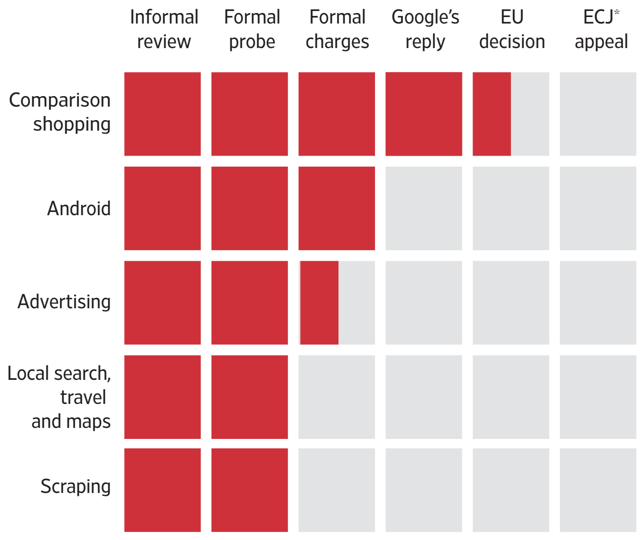
Farmers Turn Into Techies
Tinkerers build their own tools at lower cost TECHNOLOGY | B3

UBS's Weber Warns on Easing
MARKETS | B5

EU to Charge Google Over Apps

EU Antitrust Probes Into Google

A scorecard of where each case stands. Halfway marks mean the commission is advancing towards the next stage.



*European Court of Justice
Source: European Commission, staff reports
THE WALL STREET JOURNAL.

By Natalia Drozdiak And Sam Schechner

BRUSSELS—The European Union is set to issue formal antitrust charges against **Alphabet** Inc.'s Google for allegedly abusing the dominance of its Android mobile-operating system, three people familiar with the matter said, potentially threatening Google's position in the fast-growing mobile-advertising market.

The European Commission, the bloc's antitrust watchdog, will issue a so-called statement of objections detailing the charges against Google on Wednesday, the people said.

The charges are expected to center on Google's insistence that smartphone makers and mobile carriers using Android load a folder of Google apps on their devices if they offer any of the company's services—including search—on their phones. The manufacturers also load their own apps on the devices.

The antitrust case represents one of the most serious challenges Google has yet faced from regulators, threatening an online-advertising machine that generated more than $67 billion in revenue last year. In 2016 research firm eMarketer predicts Google will earn roughly $34 billion in net mobile ad revenue, more than half its total net advertising income.

As Internet users have migrated from desktops to mobile devices, Android has been central to Google's strategy, creating an ecosystem that encourages handset makers and phone carriers to install Google apps, so that users continue to see the ads that Google sells.

Android accounts for 59% of operating systems used on smartphones in the U.S., but in Western Europe that percentage rises to 71%, according to research firm IDC.

The EU charges come as the growth of Google's core advertising business continues to outstrip analysts' expectations, particularly on mobile devices.

Google has attributed its results in part to strong growth in its mobile search business.

"This case has the potential to dramatically alter how they [Google] run their business," said Brian Wieser, a senior analyst at Pivotal Research. "Investors don't tend to pay nearly as much attention as they should."

Google declined to comment.

EU competition chief Margrethe Vestager opened a formal investigation into Google's conduct with its Android operating system last April, when she also filed separate formal charges against the company for allegedly skewing its search results to favor its own shop-

Please see GOOGLE page B3

U.S. Asks VW to Sit On Probe Findings

By Devlin Barrett And Aruna Viswanatha

The U.S. Justice Department has told **Volkswagen** AG to refrain from publicly releasing results of an independent investigation into cheating on diesel-emissions tests to keep confidential names and events key to the federal government's probes.

The request to keep investigative details under wraps could complicate the car maker's efforts to provide answers to shareholders, dealers and car buyers. The Justice Department has told lawyers for the firm that making any interim findings public would hamstring efforts to pursue potential criminal charges and a multibillion-dollar fine, according to people familiar with the matter.

As recently as last month, Volkswagen had promised to make public details of an investigation being conducted on the company's behalf by the law firm Jones Day. The investigation is still ongoing and not yet nearing completion, said people familiar with the matter.

U.S. is concerned public release of names or facts could jeopardize its probe.

Volkswagen admitted last September to installing so-called defeat-device software on certain diesel-powered Audi, Jetta, Golf and Passat vehicles, allowing them to pollute more on the road than during government emissions tests.

"The Jones Day investigators are sifting through enormous amounts of data," Europe's largest car maker said on March 2. "Volkswagen will report preliminary results of the investigation in the second half of April."

At the time, Volkswagen said 102 terabytes of data had been secured by its investigators, the equivalent of about 50 million books.

On Tuesday, Volkswagen told The Wall Street Journal that it is uncertain about its public disclosures regarding the investigation. "Concerning the communication about the investigation of the diesel topic, we are currently in intensive discussions," the company said in a statement. "We will comment further in the second half of April."

The Justice Department is concerned that if certain names or facts are made public, it could make it more difficult for civil and criminal authorities to determine what

Please see VW page B2

Indian Drugmakers Target Niche Markets

Firms aim to develop new treatments for ailments ignored by industry leaders

By Suryatapa Bhattacharya

NEW DELHI—India's leading pharmaceutical companies, which have grown to dominate the generic-drug market, are hoping to squeeze billions in additional sales out of gaps in the U.S. market by developing niche treatments for ailments ignored by industry leaders.

While the companies still make most of their money selling inexpensive generic drugs, they are trying to climb the profitable product ladder by spending more on research and development to create their own bespoke mixtures of drugs, new delivery systems and even improving on blockbuster drugs that have gone off patent. As a result, they are applying for drug approvals with the U.S. Food and Drug Administration at an unprecedented rate.

Close to a third of all FDA applications in the nine months through September were by India's multibillion-dollar pharmaceutical industry, which accounts for 40% of generic drugs sold in the U.S. That figure, the latest tally available, is up from 19% during the same period a year earlier.

Some of this increase reflects a rise in these revived and tweaked varieties of drugs rather than plain generics, experts said.

"The generics game is all about launching products fast but the bigger picture is about launching new products," said Nilesh Gupta, managing director of Mumbai-based pharmaceutical company **Lupin** Ltd.

To move from the copycat game into new drugs, Lupin increased its research-and-development spending by 17% to $168 million in 2015. It is now developing a new injection to treat some less common cancers and a nasal spray to better treat some types of pulmonary diseases, analysts said. The company's U.S.-based laboratories in Florida and New Jersey are also working to improve AllerNaze, a nasal spray that treats allergies, according to a company spokesman.

India's largest drugmaker by sales, **Sun Pharmaceutical Industries** Ltd., this month received approval for an eye drop to treat swelling and prevent pain in patients undergoing cataract surgery. In 2014 it received approval for a new injection formulation of the off-patent molecule decitabine, which is used to treat a rare blood disease known as myelodysplastic syndrome.

Dr. Reddy's Laboratories, India's second-largest drugmaker by sales, this year received FDA approval for a spray for treating a skin condition called plaque psoriasis, as well as an injection for migraine headaches.

The injection uses an off-patent triptan molecule, which reduces vascular swelling. By lowering the standard dose and delivering the treatment in a syringe, Dr. Reddy's is targeting a specific group of mi-

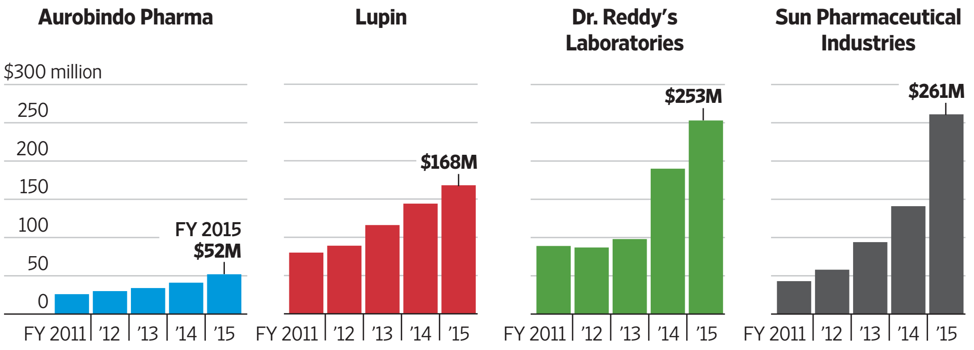
Please see INDIA page B4

DHIRAJ SINGH/BLOOMBERG NEWS

Mumbai-based Lupin increased its R&D spending by 17% last year. Above, the company's pharmaceutical plant in Goa, India.

Research Ramps Up

Top four Indian pharma companies' spending on research and development



Source: India Ratings & Research
THE WALL STREET JOURNAL.

Intel to Cut Up to 12,000 Jobs

By Tess Stynes

Intel Corp. said it plans to reduce its global workforce by up to 12,000 jobs, or 11% of its workforce, as the semiconductor giant seeks to transition away from a computer-based company.

"These actions drive long-term change to further establish Intel as the leader for the smart, connected world," Chief Executive Brian Krzanich said in an email to employees. The chip maker had a global workforce of 107,300 employees at the end of 2015, according to a regulatory filing.

For decades, Intel has been the primary provider of chips for personal computers. As PC sales have slowed, the chip maker has focused more on providing the computing power for specialized chips and server systems.

Intel said Tuesday that the job cuts are part of the company's restructuring away from a computer-based company to one that powers the cloud and billions of connected computing devices.

Intel also said its chief financial officer, Stacy Smith, will transition to a new role leading sales, manufacturing and operations, once the company identifies a successor to Mr. Smith. The company has begun an executive search that will include internal and external candidates.

The company announced the changes with its first-quarter results.

Revenue in Intel's client computing group, which includes chips for PCs and mobile devices, rose 1.7% to $7.55 billion as volume decreased 15% and average selling prices improved by 19%.

In the company's data center group, an area the company has been looking to grow and includes chips for servers, sales rose 8.6% to $4 billion on volume growth of 13%, slightly offset by a 3% decline in average selling prices.

Overall, Intel reported a profit of $2.05 billion, or 42 cents a share, up from $1.99 billion, or 41 cents a share, a year earlier. Excluding certain items, the company reported per-share earnings of 54 cents.

Revenue increased to $13.7 billion from $12.78 billion. The company expected $14 billion, plus or minus $500 million. Analysts expected revenue of $13.83 billion.

Aircraft Makers' Payrolls Shrink Amid Cost Pressures

By Robert Wall

The world's biggest aircraft makers, **Boeing** Co. and **Airbus Group SE**, are enjoying record order books, but for employees at the companies and their suppliers the good times are over.

Customers are growing increasingly frugal, making it harder for the two rivals to secure lucrative deals, as appetite wanes for some of their most-profitable planes.

Last month, Boeing said it would eliminate 4,000 jobs at its commercial airplane unit and might cut more. **Rolls-Royce Holdings** PLC is shedding 2,600 positions in its aircraft-engine business. General Electric Co. this year said it would lay off more than 300 people working on jet engines.

Last week, aluminum giant **Alcoa** Inc., which bet heavily on supplying the aerospace industry, said it had cut 600 jobs at its unit that makes aircraft parts, and planned to chop 400 more. The company might eliminate another 1,000 positions, said Chief Executive Klaus Kleinfeld, after Alcoa lowered its 2016 sales and profit targets for the unit.

Airbus, the No. 2 plane maker behind Boeing, also pared its workforce. Its plane-making unit employed about 78,800 workers at the end of 2013. It ended 2015 with 72,800 people on its payroll, company data show.

On the face of it, the out-

Please see JOBS page B2

CHRIS RATCLIFFE/BLOOMBERG NEWS

Rolls-Royce is shedding 2,600 jobs in its jet-engine business.

INDEX TO BUSINESSES

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

INDEX TO PEOPLE

BUSINESS NEWS

AB InBev to Sell Two Brands

By Ian Walker

PAUL BEATY/ASSOCIATED PRESS

AB InBev beers sold last year at Wrigley Field in Chicago. The company has accepted an offer from Asahi for Peroni and Grolsch in an effort to win approval for its pending acquisition of SABMiller.

Anheuser-Busch InBev NV accepted an offer valued at around $2.9 billion from **Asahi Group Holdings** Ltd. for European premium brands Peroni and Grolsch, a key step in the Belgian brewer's effort to get regulatory approval for its pending acquisition of **SABMiller** PLC.

AB InBev said on Tuesday that the deal with Japan's Asahi is conditional upon the completion of the company's roughly $108 billion deal for SABMiller.

Besides Peroni and Grolsch, the deal with Asahi includes British craft beer Meantime and businesses in Italy, the Netherlands and the U.K. All of those brands are assets of SABMiller.

Asahi, which made its binding cash offer for the brands in February, is hoping to significantly widen its international footprint by taking advantage of AB InBev's need to sell European assets to secure European regulatory approval for the SABMiller acquisition.

The AB InBev-SABMiller merger would create the world's biggest beer group with about 30% of the global beer market. The deal, announced in November, has drawn scrutiny from antitrust regulators in Europe, the U.S. and other markets.

In buying the SABMiller assets, Asahi is making its biggest overseas acquisition and the largest in Japan's beverage and liquor industry since Suntory Holdings Ltd. bought Beam Inc., owner of the Jim Beam brand, for about $13.6 billion in 2014.

The agreement with Asahi is the latest in a number of asset disposals that AB InBev has negotiated as the planned merger with SABMiller triggers a bout of consolidation in the global beer sector.

Last month, AB InBev agreed to sell SABMiller's Chinese beer business to China Resources Beer Holdings Co., as it seeks Chinese regulatory approval.

In the U.S., AB InBev negotiated a sale of SABMiller's interest in MillerCoors LLC to Molson Coors Brewing Co.

AB InBev aims to complete the deal in the second half of this year.

Heineken NV and Carlsberg A/S, the world's third- and fourth-largest brewers by volume, respectively, have mostly sat out of the recent consolidation game.

Yahoo Posts a Loss As Revenue Falls 11%

By Douglas MacMillan

Suitors for **Yahoo** Inc. got a reminder of the challenges facing the struggling Web business on Tuesday when it reported first-quarter results.

The company said revenue fell 11% to $1.09 billion from $1.23 billion a year earlier; the result was in line with analysts' expectations. Yahoo posted a loss of $99.2 million, or 10 cents a share, a year earlier it had a profit of 2 cents a share. On an adjusted basis, earnings were 8 cents a share, down from 15 cents a share a year earlier and higher than analysts' estimates of 7 cents.

Yahoo, which received preliminary bids from a handful of potential buyers on Monday, didn't offer new information about the process in its earnings release on Tuesday, with Chief Executive Marissa Mayer saying only that the company "made substantial progress towards potential strategic alternatives" during the quarter. The company didn't identify any of the bidders or disclose any further details about the auction process.

Yahoo is under pressure to show progress toward a sale by the time the company holds its annual shareholder meeting this summer, when investors will likely vote on Starboard Value LP's proposal to replace the entire nine-person board with a new slate of directors.

Verizon Communications Inc. was among a handful of firms expected to move ahead with a bid in time for the company's preliminary deadline, people familiar with the matter told The Wall Street Journal. Private-equity firms Bain Capital, TPG, Advent International, and Silver Lake are among the buyout firms who have expressed interest in a deal, people familiar with the process said.

Yahoo's ability to fetch a high price for its assets may be hampered by its declining performance. Revenue from its core business of display ads fell 0.8% to $463 million. Revenue from search ads fell 9.3% to $491.9 million.

The company has worked to reduce costs by trimming staff and shuttering products, including seven digital magazines.

Yahoo's shares were up 1.4% at $36.84 in after-hours trading on Nasdaq.

Adidas Case Against Puma Is Dismissed

By Ellen Emmerentze Jervell

FRANKFURT—A German court on Tuesday dismissed **Adidas** AG's attempt to stop rival **Puma** SE from using a shoe-sole technology similar to the one used in Adidas's popular "boost" series.

The regional court in Düsseldorf said Adidas couldn't stop Puma's sale of its foamy "nrgy" shoe soles that are used in sports shoes, despite its similarity to Adidas's own technology.

Tuesday's decision marked the latest in a string of disputes between the two sporting goods companies who come from the same Bavarian town and were founded following a family conflict 70 years ago.

An Adidas spokeswoman said the company does "not agree" with the court decision and that it will "continue to vigorously protect our rights and...take action in case of infringements."

Puma said it was "happy," and that the decision would help it expand its market position.

The disputed technology, which Adidas calls "boost" and Puma calls "nrgy," originally was developed in cooperation with German chemicals company **BASF** SE.

The material consists of small balls of proprietary plastic melted together into a lightweight, spongy sole.

Both sportswear companies say they worked with BASF in early development of the technology.

In 2011 Adidas struck a deal with BASF, allowing it to launch the sole technology exclusively. The first "boost" shoe made its debut in February 2013, and Adidas claimed the technology was superior to all other running shoe sole materials.

"Boost" has been a strong sales driver for Adidas and is featured in many of its shoe categories, including running, basketball, baseball, snowboarding, and golf.

Puma in 2014 began cooperating with American manufacturer and chemicals company **Huntsman** Corp. to create a similar technology for its own use. Puma launched its "nrgy" sole-running shoes last year.

Puma said Tuesday it also has sued Adidas for the use of the "boost" material, because it "hurt the protected design" that Puma developed with BASF in 2009. That separate proceeding is ongoing.

JOBS

Continued from the prior page
look should be rosy for the more than one million employees involved in producing airliners. Boeing has a backlog of about 5,800 planes. Airbus has deals for over 6,700 airliners it still needs to build.

Both plane makers are cranking up production of their most popular planes to satisfy strong demand from airlines. Combined, they are on track to build more than 1,800 planes a year by 2020, compared with 1,397 in 2015.

At the same time, fierce competition, savvier customers and economic headwinds are adding to the pressure to cut costs. Delta Air Lines Inc. is considering secondhand planes to help it expand its fleet. Willie Walsh, CEO of British Airways parent International Consolidated Airlines Group SA, has said the company may rent used long-range jets because new ones are too costly.

Analysts said airlines that splurged on more efficient but costlier planes when fuel prices were high are no longer willing to pay a premium now that oil prices have fallen. That is forcing the aircraft makers to offer discounts to win business.

Ray Conner, the boss of Boeing's jetliner unit, told employees that "price carries more weight than ever in sales campaigns." The U.S. company said it would try to avoid involuntary layoffs.

The drive to shrink payrolls comes as Airbus, Boeing and their suppliers are shifting from years of designing and developing the newest planes to building them efficiently.

With development of many of its new aircraft engines completed, GE said it "will be unable to maintain its level of 4,352 engineers in the U.S." GE plans to cut 307 jobs after offering voluntary early retirement to some engineers and shifting others into new jobs.

An Airbus spokeswoman said that "over the last few years we required an exceptionally high engineering workforce level due to several, overlapping new aircraft developments. With the bulk of the work for these major new aircraft developments behind us, we are coming back in the next few years to a regular level of engineering workload."

New planes puts a squeeze on profits as companies try to figure out how to build them as economically as those they have produced for years.

Airbus has cut production of the profitable A330 widebody while boosting its output of the new A350 long-range jet, which isn't expected to make money for a few years. Boeing is building fewer 777 long-range jets ahead of the introduction of an improved version around the end of the decade.

"The market is going through a transition given an unprecedented level of new-model introductions," said Alcoa's Mr. Kleinfeld, leading to lower orders for legacy models. Alcoa cut this year's target margin for adjusted earnings before interest, taxes, depreciation and amortization for its unit that makes plane parts.

Even so, hiring hasn't stopped. Airbus said it expects to recruit over 1,000 workers this year, roughly on par with 2015. Around 80% of the new employees will be helping to build more planes.

BMW Loses the Team Behind Its Electric Cars

By William Boston

BERLIN—**BMW** AG has lost the core development team of its i3 and i8 electric vehicle line to **Future Mobility** Corp., a Chinese startup backed by **Tencent Holdings**, as the German premium brand struggles to come up with a convincing answer to **Tesla Motors** Inc.

Carsten Breitfeld, a 20-year BMW veteran who developed the company's i8 plug-in hybrid sports car, left the Munich-based car maker in February to become chief executive of the Chinese electric car company.

Now, three key executives from the "BMW i" electric car group are following him.

Dirk Abendroth, who developed electric powertrains for the i-series; Benoit Jacob, who was head of design at BMW i; and Henrik Wenders, head of BMW i product management, will take up positions at Future Mobility, according to two people familiar with the situation.

BMW declined to comment on whether the executives had departed. The executives weren't immediately available for comment.

The defections come as BMW and other premium brand manufacturers are struggling with weak sales of their electric vehicles and a growing threat from new rivals in the nascent electric car market.

BMW unveiled the i3 battery electric vehicle at the Frankfurt Motor Show in 2011 and began selling the vehicle two years later. The i3, marketed as an ecological city car, was soon followed by the futuristic i8 plug-in hybrid sports car.

But sales haven't lived up to the hype, and BMW has slowed development of future models. Last year, BMW sold 24,057 i3 models, and 5,456 i8 models, a 66% increase in BMW i division sales.

Wieland Bruch, a BMW spokesman, said the BMW i products have been very successful in their individual market segments. The i8 is the best-selling plug-in sports car, he said in an email.

But the defection of BMW i's core development team suggests that BMW's strategy of developing niche products at a time when Tesla is moving into the mass market could make it harder for BMW to attract and retain young talent in the future.

After launching with much fanfare in 2013, the i3 has changed little and there are few plans for further development of the brand.

The i3 will get a new battery extending its range and a open-top derivative of the i8 is also planned. But a long-awaited third model in the i-series won't be launched before 2020, Chief Executive Harald Krüger said recently.

VW

PAUL J. RICHARDS/AGENCE FRANCE-PRESSE/GETTY IMAGES

VW has postponed the publication of its 2015 earnings twice.

Continued from the prior page
happened, according to people familiar with the conversations. Employees or witnesses identified by the company might become reluctant to talk, for example, the people said.

The company has said it would brief its board on Friday and report results of the Jones Day investigation into how nearly 600,000 of its cars ended up violating clean-air laws.

The delay comes as Volkswagen is embroiled in legal proceedings in the U.S. and Germany, including criminal investigations into fraud allegations, more than 500 civil lawsuits and a U.S. Federal Trade Commission inquiry into whether Volkswagen's advertising for "clean diesel" constituted fraud in advertising.

The request from the Justice Department isn't a formal order, but it puts pressure on the company to comply. Companies viewed as uncooperative by the department can face harsher penalties in resolving any charges.

The new development is the latest indication that the car maker won't be able to quickly move beyond the scandal that has consumed it since last year.

Volkswagen has already postponed the publication of its 2015 earnings twice and delayed its annual shareholder meeting. The company is now scheduled to release its full-year earnings report on April 28.

Last month, Volkswagen sought an extension on a court-imposed deadline to provide an update on how the company plans to fix the emissions software in existing cars. For now, the auto maker still faces a Thursday deadline to reach an agreement with regulators on a fix and report it to the court, but it is unclear if it will meet that deadline.

A spokeswoman for the Environmental Protection Agency, which made the allegations against the company public in September and is working with the company to come up with a solution, declined to comment.

In response to a civil lawsuit in Germany, Volkswagen has said the diesel-engine software was calibrated to cheat by a small group of engineers in 2006 without the knowledge of top executives. But it said its senior executives were aware of the so-called defeat devices for nearly a year and a half before admitting their existence to U.S. regulators.

The withholding of additional details could be helpful to the government in another way. When General Motors Co. released a report in 2014 amid a federal probe into how it handled problems with its ignition switches, it led to tough questions about why the government decided against charging any of the individuals identified by investigators as knowing about the problem.

General Motors admitted to criminal wrongdoing last September and paid $900 million to resolve charges that it schemed to conceal the deadly safety defect from U.S. regulators. No individuals were charged in connection with the investigation.

—William Boston contributed to this article.

Encryption Issue Vexes Lawmakers

By Devlin Barrett And Damian Paletta

U.S. lawmakers struggled on Tuesday for answers to the standoff over encryption between law-enforcement agencies and technology companies, saying they hoped a middle road could be found between security and privacy.

The debate over encryption between Washington and Silicon Valley has intensified over the past year. Absent a solution from Congress, courts are left for now to issue rulings on a case-by-case basis.

Rep. Tim Murphy, who chaired Tuesday's hearing of a House Energy and Commerce subcommittee, said that choosing one side or the other in the debate "feels like a lose-lose proposition."

Since August 2014, law-enforcement officials have been increasingly concerned about the deployment of default encryption on cellphones and other devices, making it impossible in many cases for investigators to pull possible evidence from phones used by crime suspects or victims.

The issue came to a head two months ago when the Federal Bureau of Investigation sought a court order to force **Apple** Inc. to help unlock the iPhone belonging to a shooter in the San Bernardino, Calif., terror attacks. Apple resisted, saying that complying with the order would entail creating software that would make millions of iPhones less secure.

The FBI, with the help of an undisclosed third party, was later able to crack the phone on its own and backed off the case. But the broader fight over encrypted phones and other technology continues.

Some lawmakers have suggested draft legislation that would require technology firms to have the ability to decrypt their customers' data. So far, Congress and the White House have shown little enthusiasm for that approach.

Amy Hess, a senior FBI official, told lawmakers on Tuesday that investigations are still like searching for a needle in a haystack, but "the haystack has gotten bigger."

Apple general counsel Bruce Sewell, meanwhile, sought to knock down rumors about the company sharing source code with foreign governments.

Farmers Harvest Homegrown Tech

Robot tractors, apps for monitoring soil designed by tinkerers forced to pinch pennies

By Jacob Bunge

Manitoba farmer Matt Reimer, above, uses a laptop to control an autonomous tractor, a system he built. At right, he checks the voltage on a grain-bin sensor that he also created.

TIM SMITH FOR THE WALL STREET JOURNAL (2)

The green tractor trundling across a Manitoba field with an empty cab looks like it's on a collision course with Matt Reimer's combine—until it neatly turns to pull alongside so he can pour freshly harvested wheat into its trailer.

The robot tractor isn't a prototype or top-of-the-line showpiece. It's an eight-year-old John Deere that the 30-year-old Mr. Reimer modified with drone parts, open-source software and a **Microsoft** Corp. tablet.

All told, those items cost him about $8,000. He said that's about how much he saved on wages for drivers helping with last year's harvest.

Mr. Reimer's alterations, which he hopes to replicate for other farmers this year, are part of a technology revolution sweeping North America's breadbasket. Farmers, many of them self-taught, are building their own robotic equipment, satellite-navigation networks and mobile applications, moving their tinkering projects out of machine sheds and behind a computer screen.

This homespun hacking—which sometimes leapfrogs innovations by big equipment companies like **Deere** & Co. and navigation specialists such as **Trimble Navigation** Ltd.—reflects dwindling farm incomes, the low price of electronic hardware and, sometimes, off-season boredom.

Such projects eventually could compete for farmers' dollars in the farm-technology market, which generates an estimated $2 billion in annual sales, according to data and research firm IBISWorld.

"Even if they release [autonomous tractors] next year, it's probably going to be 15 years before that technology trickles down to every farm," said Mr. Reimer, referring to the big farm-equipment companies.

Moreover, his version would be "a lot cheaper than if somebody's got five to 10 engineers working full-time on something like this," he said, adding that his system doesn't require altering Deere's software or coding.

The engineering-school dropout says he picked up programming from online forums and coursework archived on the Massachusetts Institute of Technology's website, though he said he didn't complete that program either.

Technology already is firmly rooted in modern farming, allowing a shrinking number of farmers to oversee more acres. Advances like auto-steering tractors have freed some farmers to trade futures contracts and gripe about the weather on their smartphones from inside a tractor cab, pausing only to turn and stop their machines.

Defectors from Silicon Valley powerhouses like **Google** Inc. and **Yahoo** Inc. are building software to analyze soil and manage fertilizer use.

Some farmers can build their own tools, suited to their farms, at lower cost, they say.

A three-year slump in major crop prices, however, threatens the big bet on farm technology by companies like Deere, **Monsanto** Co. and **DuPont** Co., which have sunk hundreds of millions of dollars into precision-guided planters and algorithm-powered advice on managing crops—plus cloud-based systems to manage the data.

Sliding prices for everything from meat to melons has U.S. net farm income on pace to fall to $54.8 billion this year, down 56% from 2013 and the lowest level since 2002, according to government forecasters.

Kinze Manufacturing Inc., an Iowa-based farm-equipment maker, is working on driverless tractors, including a system that allows several to load grain on the same field. Kinze continues to invest in the research, but Phil Jennings, service manager at the company, said turning a profit from such cutting-edge machinery gets harder when the price of corn, the most widely grown U.S. crop, is at less than half its summer 2012 peak.

With less money to spend, some farmers say they can build their own tools, suited to their farms, at a lower cost.

"Poverty is the mother of invention," said Jim Poyzer, 65, who returned to farming six years ago after a few decades in computer programming. During the winter months four years ago Mr. Poyzer began tinkering with a microprocessor, eventually developing a system to monitor and adjust how many seeds his planter places in his fields near Boone, Iowa. The system tailors the flow of seeds to the soil's ability to produce healthy crops.

He estimates the system's cost at about $750, compared with commercial versions that retail for around $5,000, and says it helped him save about $1,000 a year on seeds. "That's not much, but farmers are trying to optimize everything," he said.

Mr. Poyzer is working on other projects, like a solar-powered sensor to monitor soil temperature that he says could help him get a jump on planting.

Some companies, including Deere, have taken steps to prevent anyone from modifying the software that runs their equipment, and also warn that altering a tractor's systems could put farmers and workers at risk. Deere uses copyrights and other intellectual-property measures to protect its software.

"We always have producers wanting to build on top of those solutions. I think it's a great thing," said Cory Reed, head of Deere's intelligent solutions group. But when it comes to Deere's software, Mr. Reed said, "there has to be a limit, both for regulatory safety and for proprietary reasons.

Deere doesn't object if farmers create their own systems to work with Deere equipment, without altering the company's embedded software, so long as these meet industry standards, he said.

Some farmers-turned-techies aim to reap profits on their innovations. Dirt Tech, a startup run by two farmers and two software engineers, is developing a range of mobile applications that help map soil fertility across farmers' fields, or mark rocks to avoid damage to machinery or allow for yanking them out. The Elbow Lake, Minn., company's apps have been downloaded more than 4,500 times.

"We really enjoy solving these problems," said Ben Brutlag, a co-founder of the company who raises corn, soybeans and sugar beets near Wendell, Minn. But, he said, "we're definitely trying to make some better money at it."

GOOGLE

Continued from page B1

ping service—accusations the company denies.

For each of the formal charges issued against Android and the shopping service, the EU could impose fines as high as 10% of the company's annual global revenue, which for Google would amount to fines of around $7 billion for each charge. Google could seek to negotiate a settlement in both cases.

In its contracts, Google requires phone makers to pre-install a folder of 11 apps within one flick of the home screen.

Earlier this week, Ms. Vestager said that the case concerned Google was shutting out rival app developers with these contracts because its strategy prevented consumers from letting them decide for themselves which apps to download.

Google responded saying consumers have the last word about which apps they want. But some telecom firms and hardware makers reject that argument.

"When users don't even know there is a competitor, how do we compete?" asked one EU telecom executive, who has supported the case.

Google's relationship with Android is different from that of Apple Inc.'s with its iOS.

Google doesn't make all Android phones, so this opens it to complaints from third parties such as handset makers and phone operators that sell their own white-label phones.

Meanwhile, Canada's Competition Bureau on Tuesday said it had ended a multiyear investigation into Google after finding little evidence that the technology company engaged in anticompetitive behavior.

Canada's antitrust watchdog started a formal probe into Google's advertising and search practices in 2013.

The Competition Bureau said it found support for one allegation against Google related to its use of clauses in some contracts that hurt advertisers, but that the company changed those clauses in 2013 after similar concerns were raised in the U.S.

The EU's potential charges are partly rooted in Google's fraught relationship with European telecom companies, which have lobbied behind the scenes for regulators to file charges, telecom executives say.

Carriers have wrestled with Google over topics ranging from heavy bandwidth use to the terms of revenue-sharing agreements for advertisements that the firms' mobile subscribers see and click on.

Telecom executives argue Google's promotion of its own apps makes it difficult for them to promote their own apps for video or email, restricting them from selling their own advertisements and reducing their leverage in revenue-share negotiations with Google.

Handset makers also complain that it is hard to differentiate themselves from their rivals because they don't have as much freedom to pick and choose which apps are placed on the devices.

Google executives respond that phone companies or manufacturers aren't prohibited from including their own apps on an Android phone, and that competition is just "one click away." And if the carriers or handset makers don't want the apps, they don't have to load them, Google executives say.

Some companies have decided to forgo Google apps, but it has been a difficult road.

Business Watch

HARLEY-DAVIDSON

Overseas Sales Offset U.S. Weakness

Higher sales of motorcycles overseas aided by increased spending on marketing of new models helped **Harley-Davidson** Inc. offset lackluster first-quarter sales of bikes in the U.S.

The company topped first-quarter sales and profit expectations and backed its earlier projections for motorcycle shipments this year.

The Milwaukee-based company delivered on its strategy to boost sales outside of the U.S. as international motorcycle sales volume rose 4.5% from last year. In the U.S., where Harley's market-leading share is in under pressure from foreign motorcycle builders, first-quarter sales fell 0.5% from last year.

The strong U.S. dollar against other currencies has made motorcycles from Japan and Europe cheaper for customers in the U.S. Harley Tuesday said that it has countered the increased competition with more marketing of its bikes, particularly models aimed at younger people who are new to motorcycle riding or haven't previously owned a motorcycle.

The company said first-quarter spending on marketing increased more than 50% from last year and it anticipates spending 65% more on marketing this year over 2015.

Overall, for the quarter Harley-Davidson reported net income of $250.5 million, or $1.36 a share, down from $269.9 million, or $1.27 a share, in the prior-year period. Revenue rose 4.4% to $1.58 billion.

—Bob Tita

SEAN PROCTOR/BLOOMBERG NEWS

Higher international sales helped Harley offset lackluster first-quarter sales of bikes in the U.S.

DANONE

Strong Euro Strains Dairy Maker's Sales

French dairy maker **Danone** SA said Tuesday that first-quarter sales dropped 3% as the strengthening euro curbed revenue in emerging markets.

Danone, which manufactures Activia yogurt and Evian water, said sales fell to €5.3 billion ($5.98 billion) from €5.5 billion in the first three months of the year, in line with analyst estimates according to a company-compiled consensus.

Stripping out currency shifts, acquisitions and disposals, sales rose 3.5%, in line with the company's full-year sales target as the company's four business units posted growth.

Danone Chief Executive Emmanuel Faber, who took the reins of the company in October 2014, has vowed to deliver "strong, profitable and sustainable growth" by 2020, reviewing its business in China and restructuring its fresh-dairy unit where he has cut costs and focused on its most popular brands.

—Nick Kostov

ROCHE HOLDING

Cancer, Immunology Drugs Boost Revenue

Roche Holding AG on Tuesday reported an increase in first-quarter revenue following strong sales of its cancer and immunology drugs.

Basel, Switzerland-based Roche said sales for the three months ended March 31 rose 5% to 12.41 billion Swiss francs ($12.88 billion), from 11.83 billion francs a year earlier. At constant exchange rates, sales increased 4%. That beat analysts' forecasts of 12.28 billion francs, largely because of a stronger-than-expected performance from Tamiflu, boosted by a late flu season in the U.S. The flu medicine generated 367 million francs in revenue, well above the 244 million francs that analysts had expected.

The company said sales of its pharmaceuticals increased to 9.8 billion francs from 9.32 billion francs a year earlier. Revenue from its diagnostics division rose to 2.61 billion francs from 2.51 billion francs. Roche doesn't report profit figures at the quarterly stage of the year.

—Denise Roland

Theranos Faces Criminal Investigation

Questions pertain to whether U.S. blood lab misled investors about its technology

Federal prosecutors in the U.S. have launched a criminal investigation into whether **Theranos** Inc. misled investors about the state of its technology and operations, according to people familiar with the matter.

By Christopher Weaver, John Carreyrou and Michael Siconolfi

Walgreens Boots Alliance Inc. and the New York State Department of Health have received subpoenas in recent weeks seeking documents and testimony about representations made to them by the Palo Alto, Calif., blood-testing company, some of the people said.

Walgreens has been Theranos's main conduit to consumers since the companies announced a partnership in 2013 that now includes 40 Theranos wellness centers at drugstores in Arizona. The New York agency received an application from Theranos for a laboratory license in the state.

People familiar with the matter said the subpoenas seek broad information about how Theranos described its technologies and the progress it was making developing those technologies.

Investigators are also examining whether Theranos misled government officials, which can be a crime under federal law, some of the people said.

Such subpoenas don't necessarily mean prosecutors are actively seeking an indictment. People familiar with the matter said the investigation is at an early stage.

In addition to the criminal probe, the Securities and Exchange Commission is examining whether Theranos made deceptive statements to investors when it solicited funding, according to people familiar with the matter. Theranos was valued at $9 billion in a funding round in 2014 and the majority stake of Elizabeth Holmes, the startup's founder and chief executive, at more than half that.

In a written statement, Theranos said: "The company continues to work closely with regulators and is cooperating fully with all investigations."

NIKKI RITCHER FOR THE WALL STREET JOURNAL

Theranos founder and Chief Executive Elizabeth Holmes, shown in Laguna Beach, Calif., in October.

SEC spokeswoman Judith Burns declined to comment, as did Justice Department spokesman Peter Carr and Abraham Simmons, an assistant U.S. attorney in San Francisco, where the federal investigation is being conducted.

Walgreens spokesman Michael Polzin also declined to comment. New York health-department spokesman J.P. O'Hare didn't respond to requests for comment.

Since launching Theranos in 2003, Ms. Holmes has set out to revolutionize the blood-testing industry. Before the company made changes to its website earlier this year, the website cited "breakthrough advancements" that made it possible to run "the full range" of lab tests on a few drops of blood pricked from a finger.

In October, The Wall Street Journal reported that Theranos did the vast majority of more than 200 tests it offered to consumers on traditional lab machines purchased from other companies. The Journal also reported that some former employees doubted the accuracy of a small number of tests run on the devices Theranos invented, code-named Edison.

Theranos has declined to say how many tests or which ones it runs on commercial machines. The company has said its technology has the capability to handle a broad range of tests.

Federal officials began requesting information about Theranos in January and February, according to the people familiar with the matter. Those informal requests were followed by grand-jury subpoenas from a federal court in San Francisco in March, the people said. Agents from the Federal Bureau of Investigation and U.S. Postal Inspection Service are assisting in the investigation, the people said.

The news release issued when the Walgreens deal was announced said consumers "will be able to access less invasive and more affordable clinician-directed lab testing, from a blood sample as small as a few drops, or 1/1,000 the size of a typical blood draw."

As part of the deal, Walgreens has invested at least $50 million into Theranos, according to people familiar with the matter. In January, though, Walgreens notified Theranos that it intends to terminate the partnership unless the company quickly fixes problems found in a federal inspection completed in November at Theranos's lab in Newark, Calif.

—Jean Eaglesham contributed to this article.

INDIA

Continued from page B1

graine sufferers who are unable to swallow a pill when they are hit by an attack.

Indian drug companies need to develop their own drugs if they ever want to graduate from the highly competitive and increasingly commoditized generics market.

"They need new drugs and new molecules to grow," said Sreenivasa Prasanna, an analyst with India Ratings & Research, a unit of Fitch Group.

Creating new drugs from previously known molecules significantly cuts the cost and time it takes to create a drug because safety records already exist. That makes it cost-effective for the Indian companies to develop the drugs, even though they will only be targeting a small market.

To bring new drugs to market, Indian companies are starting with popular drugs that have gone off patent and tweaking them.

Dr. Reddy's spent around $25 million developing its migraine injection and was able to get it from concept to market in less than five years. Trying to develop its own drug from scratch would have cost 10 times as much and taken up to 15 years, industry experts say.

Indian companies are also hoping to gain a foothold in the new drug market by targeting small niches of need where there is less competition.

"When we design these products, we are looking at a very specific market," said Raghav Chari, vice president of proprietary products at Princeton, N.J.-based Promius Pharma LLC, a subsidiary of Dr. Reddy's. "It's a different research-and-development philosophy."

Dr. Reddy's predicts it will eventually get more than $100 million in annual sales from the migraine injection and the skin spray it is developing.

That isn't much for the generic global giants like the U.K.'s Mylan NV and Israel's **Teva Pharmaceutical Industries** Ltd., but a few midsize hits of that size could mean a significant increase in sales for their smaller Indian competitors.

Indian companies are starting with popular drugs that have gone off patent.

Dr. Reddy's is trying to "create a basket of $100 million products," said Mr. Chari. "Five of these give us half a billion in sales."

Getting doctors to prescribe the revamped drugs may be a challenge, analysts warn. Indian drug companies known for selling popular generics may struggle to manage the nuances of marketing a specialized drug in the U.S., where a strong team of researchers, marketing and salespeople is needed to build the appetite for little-known drugs.

"It is critical to have R&D in the U.S.," said Ken Phelps, president of Cincinnati-based **Camargo Pharmaceutical Services**, a consultant for drug companies. "It's very important for marketing that clinical studies engage U.S. doctors, their opinions and [that] the companies understand what's going to be used to market the drugs." Doctors who prescribe such niche drugs largely base their opinion on clinical studies conducted by their peers.

Indian companies also will have to tread carefully to avoid looking like they are gouging their customers by creating expensive branded products out of inexpensive generics. So far, Indian companies have generally kept their new products affordable as they look to establish their brands, said Mr. Prasanna, at India Ratings & Research. But they may try to go for more profits and raise prices eventually, he said.

MONEY & INVESTING

Second-Tier Malls Have Investor Fans
THE PROPERTY REPORT | B9

Negative Rates Aren't Positive for Nippon Life
INSURANCE | B10

As of 4 p.m. ET | EUR/GBP 0.7906 ▼ 0.25% | YEN/DLR ¥109.14 ▲ 0.30% | GOLD 1253.00 ▲ 1.57% | OIL 41.08 ▲ 3.27% | 3-MONTH LIBOR 0.63485% | 10-YR TREAS ▼ 3/32 yield 1.783%

DIBYANGSHU SARKAR/AGENCE FRANCE-PRESSE/GETTY IMAGES

Oil demand in India is expected to grow 4.2% a year over the next five years, versus 3.4% growth in China. Pictured, traffic in Kolkata.

India Is the New Front in Crude

By Selina Williams And Summer Said

Russia is opening a new front in its battle for a bigger share of the global oil market: India.

Later this year, Russian state-controlled oil giant OAO **Rosneft** plans to start sending its first regular deliveries of crude to India's second-largest oil refinery. That follows the company's decision to buy a big stake in India's **Essar Oil**, which owns the refinery and a network of about 2,000 gas stations. The purchase is set to be completed this year.

The deal gives Russia a small but strategic beachhead in what is becoming one of the most important crude-oil markets in the world. Saudi Arabia dominates the market in India, supplying about one-fifth of India's imports, according to data from consultancy FGE. But the kingdom faces growing competition from Russia and Iran as they and other big producers, including Iraq and Kuwait, battle for customers in an environment of low prices.

The world's biggest oil producers have jostled to outpump and underprice each other to woo customers in markets around the world. The competition has contributed to a drastic drop in the price of crude over nearly two years, triggered in part by rising U.S. output from shale oil.

In past periods of oversupply, the Organization of the Petroleum Exporting Countries, a cartel that pumps a bit more than one-in-three barrels produced each day around the world, stepped in to throttle back output to buoy prices. In late 2014, the cartel said it wouldn't cut back this time because that would risk losing market share, as Russia and other non-OPEC producers continued to pump flat out.

More recently, OPEC and some other oil-producing nations, including Russia, seemed on the verge of agreeing on a freeze in production that might help bolster prices. But no deal was reached at a meeting on Sunday in Qatar.

India, which relies on imports for about three-fourths of its oil demand, is the world's third-largest energy consumer, behind China and

Please see RUSSIA page B6

◆ Governments scramble to address outages B6

UBS's Weber Warns About Easy Money

By Tom Fairless

WASHINGTON—**UBS Group** AG Chairman Axel Weber, the former president of Germany's **Bundesbank**, warned that central banks in Europe and Japan have reached the limits of monetary stimulus, weighing into an increasingly fractious debate in Germany over the **European Central Bank**'s easy-money policies.

"We are now at a point...probably [where] the net benefits of further monetary easing, in particular in Europe but also in Japan, are outweighed by the costs and side effects," Mr. Weber said on the sidelines of the spring meetings of the International Monetary Fund and World Bank.

He warned that negative interest rates "are only possible for a very short time and in close proximity to zero," and said he doubts that the ECB's bond-purchase program will bolster economic growth and inflation.

The comments from one of Germany's top economists came amid mounting criticism in Germany of the ECB's €1.5 trillion ($1.7 trillion) stimulus, which has been expanded aggressively since December.

Allies of Chancellor Angela Merkel over the weekend called for a German to succeed Mario Draghi as ECB president when his term ends in 2019.

The ECB urgently needs "a change of direction, more German handwriting," Bavaria's finance minister, Markus Soeder, a member of Ms. Merkel's Bavarian sister party, told Germany's Bild newspaper.

Mr. Weber was considered a lead contender in early 2011 for the ECB's top job, which has never been held by a German. Instead, he resigned amid a dispute over the ECB's bond purchases, leaving the field open for Mr. Draghi.

Many of the ECB's recent decisions have been strongly criticized in Germany, including the quantitative-easing program in began last year. But the criticism has grown louder in recent weeks following its decision in March to initiate sweeping rate cuts, additional bond purchases and cheap loans for banks.

The ECB's deposit rate, charged for parking funds with the central bank, now stands at minus-0.4%.

Mr. Weber warned that the financial system wasn't designed to handle negative interest rates.

Please see WEBER page B10

◆ Heard: Helicopter money is seductive B10

Argentina Bond Sale A Record

By Carolyn Cui And Julie Wernau

Argentina returned to the global debt market for the first time in 15 years on Tuesday with the largest-ever emerging-market bond sale.

The government originally marketed a deal of between $10 billion and $15 billion, but it sold $16.5 billion after finding overwhelming investor demand. Underwriters for the offering received $70 billion in orders for the debt, according to people familiar with the matter.

The debt sale was Argentina's first since defaulting in 2001. The country ended a 15-year dispute with some bondholders when it agreed to settle in February with a group of U.S. hedge funds and other holdout creditors.

According to data provider Dealogic, the issuance is the largest on record in emerging markets, above Brazilian state oil company Petróleo Brasileiro SA's $11 billion corporate-bond sale in 2013.

Argentina sold four offerings at yields up to 8%, according to people familiar with the pricing. The government sold $2.75 billion of three-year notes at a 6.25% yield, $4.5 billion of five-year notes at a 6.875% yield, and $6.5 billion of 10-year notes at a 7.5% yield. The $2.75 billion of 30-year notes priced with an 8% yield.

Those yields are below levels the government initially discussed, and some investors had said they wouldn't buy the notes at those rates. But overwhelming demand for the issuance helped drive up prices and push down yields, analysts said. In another sign of strong demand, investors with bond allocations were receiving offers to buy those bonds on Tuesday above the levels at which they were priced.

Visa Chips Away at Checkout Transaction Time

By Robin Sidel

Shoppers may soon get back a few extra seconds at checkout.

In response to complaints about the waiting time caused by new chip-enabled credit and debit cards, **Visa** Inc. said Tuesday it is introducing software that will shave as many as 18 seconds off the time it takes to make a payment.

The nation's biggest retailer also has taken steps to be faster. **Wal-Mart Stores** Inc. has lopped 11 seconds off chip-card transaction time, a spokesman said. Among other things, the Bentonville, Ark., company has eliminated a prompt that asked shoppers to confirm the amount of the transaction.

The moves are a reflection of the widespread consternation that has greeted the new cards, which offer better security than the older ones but require more technology that slows transaction speeds.

Take Frank McGinnis, who says he grits his teeth whenever he has to wait 10 or 20 seconds for his transaction to be processed using his chip-enabled debit card at a store.

"It sounds negligible in number but it's significant in terms of mental well-being or calmness or whatever you want to call it," Mr. McGinnis says. He says he gets especially frustrated when he makes a quick stop on his way home from work in Poughkeepsie, N.Y.

The delays also have caused aggravation among merchants, who benefit from getting customers through checkout as efficiently as possible.

"Overall, there was some merchant dissatisfaction with how long it was taking to process the transaction," Ellen Richey, Visa's vice chairman of risk and public policy, said in an interview.

The new Visa software will reduce the amount of time the card must be in the reader. It allows the chip card to be inserted and removed from the terminal while an order is still being rung up by a cashier. The transaction amount isn't authorized by the card issuer until it is complete, but the change allows the customer to put the card away more quickly.

Financial institutions have shipped hundreds of millions of the new debit-and-credit cards to consumers over the past year as part of an industrywide effort to cut down on counterfeit fraud. The cards are embedded with a computer chip that provides a unique code for each transaction instead of relying on static data that are contained on the back of cards with a traditional magnetic strip.

The chip cards won't stop thieves from hacking into a merchant's payment system, but any stolen card information is essentially useless because the data change each time the card is used.

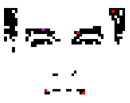
Many shoppers who are accustomed to swiping their

Please see CHIP page B6

ABEL URIBE/TRIBUNE NEWS SERVICE/ZUMA PRESS

Chip cards offer better security but require more technology.

'Magic Number' for Oil Price



STREETWISE
JAMES MACKINTOSH

Here is a number to focus on: $50. That is per barrel, the price of Brent crude oil at which falling prices started to hurt rather than help shares and other risky assets.

Monday's 6% fall and rebound in oil pushed equities down and back up, once again demonstrating its importance. Brent prices rose 2.6% to $44.03 Tuesday, well within sight of $50.

Despite the obvious impact on Monday, there are some signs that the influence of oil on other assets may be fading. If the price keeps going up, the question isn't only whether it will carry on, but whether more expensive oil will continue to be good news for shares.

The answer depends to a large extent on the explanation for why the link was so tight to begin with. Wind back to last summer, when Brent tumbled below $50 and stayed down at levels not reached since the depths of the financial crisis. As it fell toward $50,the price became more important to shares—and not only to stocks in oil companies and airlines, which normally suffer and benefit the most, respectively, from cheap oil.

The main reason: spillover effects from spending cuts and defaults at energy companies. The speed of the oil decline led to rapid retrenchment in capital spending and widespread job cuts, both with knock-on effects on the real economy. At the same time, a sharp rise in defaults created fear of financial contagion from shale drillers which had financed their operations with a flood of junk bonds and from commodity-dependent emerging-market companies with excessive debt.

As oil has risen again, those fears have receded. There still is little sign that Americans are spending more of the money they save from cheaper fuel, something economists had assumed would boost growth. But the pressure for even deeper cuts by oil companies has reduced.

"If oil stays around $40, the correlations will continue to break down," says Andrew Milligan, head of global strategy at insurance group Standard Life.

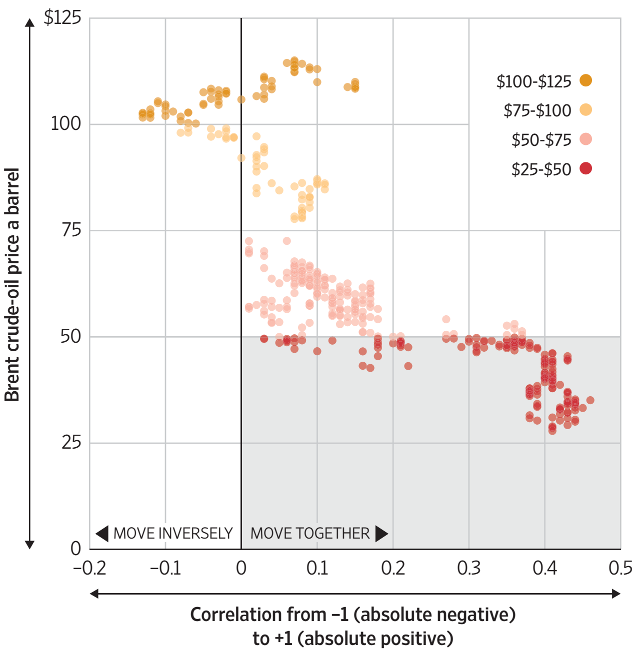
This isn't merely about the importance of Big Oil to major indexes. Even stripping out energy stocks, the tendency of the S&P 500 to move together with oil in-

Please see STREET page B6

Crude Analysis

From June 2014 to January 2016, oil moved more closely with stocks when crude was below $50 a barrel.

Correlation between Brent crude and the S&P 500, excluding energy and materials



Source: International Monetary Fund

THE WALL STREET JOURNAL.

Tech Slide Eats Into Stock Gains

By Aaron Kuriloff
And Riva Gold

U.S. stocks pared gains Tuesday as weak earnings reports dragged down technology shares.

The Dow industrials have climbed for five of the past six trading days and risen more than 15% from their lows on Feb. 11. The rally has been spurred by confidence in continued growth in the U.S. economy, a recovery in oil prices and the likelihood that U.S. interest rates will remain low.

TUESDAY'S MARKETS

Some traders said now that the rebound from February's lows have carried major U.S. indexes to near record highs, further gains will require signs of growth in corporate earnings.

"I see a lot of relieved asset managers, but I don't see a lot of conviction," said Tom Carter, managing director at brokerage firm JonesTrading. "It's hard to imagine this thing going much higher without positive earnings growth," he added.

The Dow Jones Industrial Average climbed 49.44 points, or 0.3%, to 18053.60, a day after closing above 18000 for the first time since July.

The S&P 500 rose 0.3% to 2100.80, hitting 2100 for the first time this year.

Energy and materials shares gained the most in the S&P 500, as U.S. crude oil rose 3.3% to settle at $41.08 a barrel. Analysts said prices got a boost Tuesday from a strike by oil workers in Kuwait, alleviating supply pressure.

Transocean climbed 9.5% and **Freeport-McMoRan** rose 8.9% by late afternoon.

The Dow industrials pared early gains after rising as much as 99 points. Shares of **Goldman Sachs Group** climbed 2.3% after the bank said its quarterly revenue fell 40%, a better result than analysts expected.

Better-than-feared results from banks have helped boost indexes in recent sessions and in late afternoon, the KBW Nasdaq Bank Index of large U.S. commercial lenders was on pace to finish Tuesday up more than 20% from mid-February lows.

The index was still down around 6.5% this year, as banks have struggled with difficult trading conditions and low interest rates.

Shares of **International Business Machines** fell 5.8% after the company on Monday reported a 4.6% slide in first-quarter revenue and a 13.5% decline in profit.

Technology shares fell the most in the S&P 500, dropping 0.7% by late afternoon. The tech-heavy Nasdaq Composite Index fell 0.4% to 4940.33.

Netflix shares lost 13% after the streaming-video service provided a disappointing forecast for its international business Monday that heightened analysts' concerns about slowing expansion in the U.S.

"I thought we were going to rally, but I didn't think we were going to hit 18000," said Kent Engelke, chief economic strategist at Capitol Securities Management Inc.

Mr. Engelke said he has recently sold some of his junk-bond holdings that had rallied since mid-February and used the proceeds to buy energy and value stocks.

The Stoxx Europe 600 rose 1.5% to 349.24 following an upbeat session in Asia. Rising commodity prices boosted shares of mining and energy companies in Europe and helped send shares in Australia to a three-month high.

Shares of **L'Oréal** were among the top performers on Tuesday, jumping 5% after the French cosmetics giant said like-for-like sales grew 4.2% in the first quarter.

Shares in Japan also reversed Monday's steep drops after the yen stabilized against the U.S. dollar and concerns about the financial impact of recent earthquakes in Japan eased. Japan's **Nikkei Stock Average** ended 3.7% higher.

The dollar has declined by nearly 10% against the yen this year, weighing on Japanese exporters and causing Bank of Japan Gov. Haruhiko Kuroda to hint at the possibility of further stimulus measures in a recent Wall Street Journal interview. The dollar was at ¥109.11 up from ¥108.82 late Monday in New York.

MARLENE AWAAD/BLOOMBERG NEWS

Shares of L'Oréal rose 5% after the company said like-for-like sales grew 4.2% in the first quarter.

STREET

Continued from the prior page

creased sharply as the crude price dropped, as the International Monetary Fund showed last week.

The correlation between Brent, the global oil benchmark, and the S&P 500 still is exceptionally high on multimonth measures. But earlier this month the 10-day correlation reached its lowest since last July, when the price of Brent stood at $56 a barrel.

The effects of the oil price are tricky to analyze because so much depends on the cause. Oil is driven both by supply issues—such as the weekend meeting of members of the Organization of the Petroleum Exporting Countries and Russia in Qatar, where ministers failed to negotiate a production freeze—and by global demand.

If demand rises, a higher price might be good news for risky assets as it reflects strength in the global economy. In 2009, in the aftermath of the financial crisis, shares and oil soared together and the correlation between the two was close to perfect.

On the other hand, if the oil price rises because of a supply shock, it can hammer risky assets. In 1990, the first Gulf War tripled the price of oil, and shares suffered badly, with correlations that were almost exactly inverse.

The recent rise in oil doesn't neatly fit either model (although this week's rise was helped by a Kuwaiti oil-worker strike). Instead, it seems to be mostly about reduced fear of extreme outcomes for the economy. Worries earlier this year about recession, China and financial stress receded, helped by signs that lower oil prices were stimulating demand.

But the traditional interpretations may come back into play as $50 draws closer. After the political standoff between Saudi Arabia and Iran at OPEC, it seems unlikely that the cartel will slice production. That leaves the best hope for higher prices with the demand side, if the economy were to start showing signs of strength. Better-off consumers should mean gains for stocks, so there is little to worry about from such a demand-driven oil price rise. That is especially true as partly drilled shale wells can quickly be finished off, keeping a cap on prices and further reducing the financial stress in the shale sector.

Such a self-reinforcing positive cycle remains no more than hope.

But even if oil merely stays roughly where it stands today, investors in stocks should at least be able to stop worrying so much about crude prices and Middle Eastern politics and put their focus where it should be, on earnings and valuations.

Oil-Supply Outages Spark Global Scramble

LONDON—Oil-producing governments across the world are scrambling to address petroleum outages that have taken nearly 2 million barrels a day off the market and sent crude prices rallying.

By Benoit Faucon,
Summer Said
and Selina Williams

The outages have been caused by an oil-worker strike in Kuwait, alleged pipeline sabotage in Nigeria and payment disputes in Iraqi Kurdistan. The missing oil supply—about 1.85 million barrels a day—has essentially brought the oil market's supply back into balance with demand, if only temporarily, and raised questions about big producers' ability to quickly ramp up during supply outages.

The situation offers a glimpse of what the oil market would look like if the current glut were to end after nearly two years of weighing on prices. Oil demand is expected to average 94.8 million barrels a day in the first quarter of 2016, compared with oil supply of 96.4 million barrels a day.

Brent crude, the global benchmark, rose 2.6% Tuesday to $44.03 a barrel on ICE Futures Europe. U.S. prices rose 3.3% to $41.08 on the New York Mercantile Exchange.

The rally occurred just two days after big oil producers failed to reach a deal in Qatar to limit production, a development that sent prices down until traders shifted their focus to the supply shortages.

"This is definitely the famous canary in the coal mine telling us something about the state of the oil market. It is telling us that the oil market is more in balance than widely assumed," said Bjarne Schieldrop, chief commodities analyst at SEB, a leading Nordic corporate bank.

Oil-producing governments said they were working to resume pumping as soon as possible.

In Kuwait, where oil workers upset over apparent pay cuts and plans to privatize parts of the energy industry went on strike last weekend, the government has threatened the strikers with legal action. The military reportedly has taken over some production sites and reopened them after workers disabled them.

State-run **Kuwait National Petroleum** Co. regrouped staff at its most critical production sites and got output back up to 1.5 million barrels a day, Chief Executive Mohammad Al-Mutairi told state-run news agency KUNA on Monday. That is still only about half of the previous level of 2.8 million barrels a day reported by the member of the Organization of the Petroleum Exporting Countries.

The Kuwaiti oil company has been authorized to recruit contractors from abroad to operate some of its facilities.

In Nigeria, another OPEC member, Italy's **Eni** SpA said Tuesday it resumed pumping its Brass River crude in the Niger Delta, whose output normally is about 140,000 barrels a day. The production had been disrupted after a pipeline caught fire in an area where oil theft is frequent.

About 300,000 barrels a day of Nigerian crude were still offline, according to Nigerian news accounts, because of a late February oil spill at a terminal run by a **Royal Dutch Shell** PLC joint venture. Shell confirmed the outage but declined to comment further.

In Iraq, the central government has said it stopped pumping about 150,000 barrels a day in March from the giant Kirkuk fields in the north into the main export pipeline following a dispute with an autonomous Kurdish authority that controls the pipeline transporting the oil.

The shift to a tighter market could get worse in coming months. Oversupply is set to shrink from 1.5 million barrels a day in the first half of the year to 0.2 million barrels a day in the second half, according to the International Energy Agency, at a time producers are facing further supply risks.

The disruptions come as oil supplies outside OPEC are set to decline this year by an estimated 700,000 barrels a day, driven by a slump in U.S. shale-oil production. At the same time, several of OPEC's members are pumping at capacity, reducing the cartel's ability to ramp up production when there is a shortage of crude.

The difference between what a country is pumping now and what it could theoretically pump is known as "spare capacity," a number that fell by about 100,000 barrels a day to 3.13 million barrels a day in March from the beginning of the year, according to the IEA.

In Saudi Arabia, spare capacity stands at about 2 million barrels a day, but the amount it could immediately ramp up to is only about 500,000 barrels a day, Olivier Jakob, head of Swiss-based consultancy Petromatrix, said in a note Tuesday.

The price rally may have been tempered by the world's huge inventories of stored oil—crude that was bought at low prices and stored until it could be sold for higher prices. Commercial oil stocks in industrialized countries in February stood at about 3 billion barrels, according to OPEC, though that is still about 352 million barrels above the latest five-year average.

"We are back in an environment where the only spare capacity left is in storage tanks, and if those barrels start to be used then the crude-oil structure tightens, which in turn provides some flat price support," Mr. Jakob said in a note.

YASSER AL-ZAYYAT/AGENCE FRANCE-PRESSE/GETTY IMAGES

Kuwaiti oil workers outside their union headquarters on Sunday.

CHIP

Continued from the prior page

card in a reader in an instant have been flummoxed by the new method that requires them to insert the card into the reader and leave it there until the transaction is finished.

But it isn't just shopper fumbling that makes the transactions more time-consuming. The length of the transactions also varies among merchants based on how the payment terminals are configured, the speed of the connection, and whether the terminals prompt the shopper on how to make the payment, merchants and payment executives say.

A study conducted by JDA Software Group Inc. found that using a chip card typically added eight to 12 seconds per checkout process, because of the actual transaction, "fumble time" and the time it took the cashier to instruct shoppers on how to use new machines.

The study used two different card-reading machines at an unnamed specialty retailer that has more than 4,000 stores.

"It's reasonable to think the machine is adding about four to six seconds," says Marty Reynolds, vice president of retail solutions for the supply-chain and labor-software firm that counts many large retailers as clients.

The extra time also can be costly to merchants. At the retailer tested by JDA, the additional transaction time will add $3.2 million annually to labor costs if the eight-second machines are used, Mr. Reynolds says.

Visa says its new software will be free to card processors, who will then decide whether to charge their merchant customers for it. It doesn't require hardware changes, or alterations to the cards that are now in consumers' wallets."

For now, the software is available only for Visa transactions, but the card network says rivals will be permitted to customize its technology for their own brands.

Starting last October, merchants who haven't upgraded their payment terminals to accept chip cards must foot the bill for counterfeit transactions. Those costs previously were borne by the card-issuing financial institution.

—Sarah Nassauer contributed to this article.

RUSSIA

Continued from the prior page

the U.S. It imports about four million barrels of crude a day, and consumption appears likely to rise.

While U.S. and European energy demand is expected to stagnate or decline, and as China shifts away from energy-intensive, heavy manufacturing to a more consumer-focused economy, oil demand in India is expected to grow 4.2% a year over the next five years. That contrasts to 3.4% growth in China.

By 2040, the International Energy Agency says that India's oil imports could nearly double, to around 7.2 million barrels a day, spurred by a growing population and a modernizing economy.

"Everybody is trying to get a big stake in India—it is the biggest growing market in Asia," said Amrita Sen, chief oil analyst at London-based consultancy Energy Aspects.

Rosneft's deal to supply Essar would translate into a roughly 5% share of imports, putting it about on par with Iran, another big, long-term India supplier.

The Russian oil company's boss, Igor Sechin, has said the deals between Rosneft and Essar, along with recent stake sales in its prized east Siberian oil fields to Indian companies, were strategic agreements that give the Russian company access to the Indian market and build a bridge between the two countries.

"China's role has diminished, but the share of India, other Asian countries and Africa are gradually growing," Mr. Sechin told oil executives in a speech in London in February.

Russia has pushed hard into China, too, at the expense of Saudi Arabia, and it is also gaining market share in South Korea and Japan, according to FGE.

Saudi Arabia, on the other hand, has tried to replace Russian crude in some European markets, though it has had little success so far.

Executives of state-controlled **Saudi Arabian Oil** Co., better known as Saudi Aramco, are responding with a charm offensive in India. It plans to open an office in India this year and Aramco executives have started talking to key buyers there before issuing monthly prices for the crude they will be taking, according a person familiar with the matter.

"Aramco is changing its attitude toward its customers," this person said. "Before, it was a take-it-or-leave-it attitude, but now Aramco wants to be closer to its buyers." Aramco is also looking into investing in a new refinery in India, this person said.

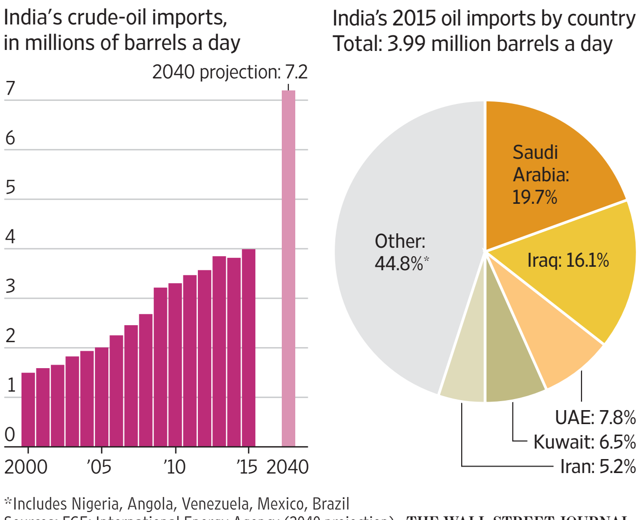
Representatives of Aramco and the Saudi oil ministry didn't return requests for comment.

Other players are considering expansion in India. In October, Ali Kardor, head of investments at the **National Iranian Oil** Co., said the state oil company was in early talks to buy a stake in an Indian refinery of its own.

"India is the market the world is looking at in the future," Dharmendra Pradhan, India's minister of state for petroleum and natural gas, said in an interview last month.

—Vibhuti Agarwal and Benoit Faucon contributed to this article.

India Rising



*Includes Nigeria, Angola, Venezuela, Mexico, Brazil
Sources: FGE; International Energy Agency (2040 projection) THE WALL STREET JOURNAL.

FN CUSTOM STUDIO

FINANCIAL NEWS WEB CAST

WHY CLOUD? WHY NOT CLOUD.

Cloud technology is transforming the way we do business. Migrating to the cloud can make a business more efficient, improve cash flow and feed innovation. But what are the challenges of moving systems over to the cloud, real or perceived, and how can they be overcome?

Join a panel of senior industry experts as they discuss how to implement the cloud for maximum benefit.

Charlie Corbett
Associate Editor,
FN Custom Studios

Alex Hilton
Chief Executive,
Cloud Industry Forum

Daryl Szebesta
Vice President for Cloud
Transformations, Oracle

Paul Simmonds
CEO, Global
Identity Foundation

Watch on Demand at
www.efinancialnews.com/whycloud

Sponsored by
ORACLE

MARKETS DIGEST

Nikkei 225 Index

16874.44 ▲598.49, or 3.68%

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

Year-to-date	▼11.34%	
52-wk high/low	20868.03	14952.61
All-time high	38915.87	12/29/89

Bars measure the point change from session's open

STOXX 600 Index

349.24 ▲5.04, or 1.46%

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

Year-to-date	▼4.53%	
52-wk high/low	412.42	303.58
All-time high	414.06	4/15/15

S&P 500 Index

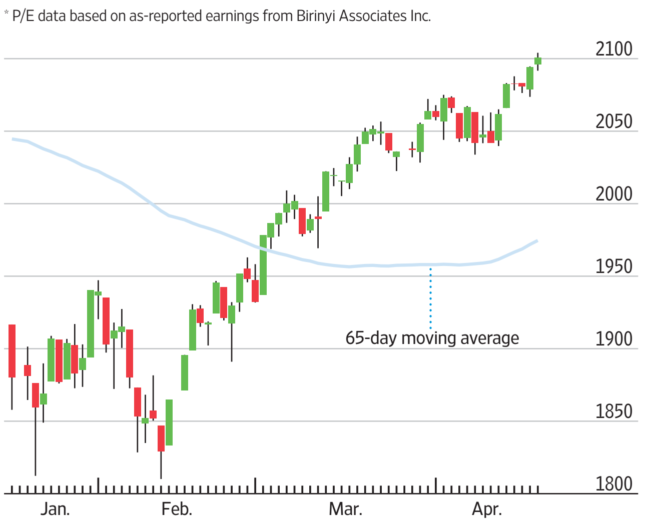
Data as of 4 p.m. New York time

2100.80 ▲6.46, or 0.31%

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

	Last	Year ago
Trailing P/E ratio *	24.15	20.87
P/E estimate *	18.50	17.61
Dividend yield	2.19	1.99
All-time high:	2130.82, 05/21/15	

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



International Stock Indexes

Data as of 4 p.m. New York time

Region/Country	Index	Latest Close	Latest NetChg	Latest % chg	52-Week Range Low	52-Week Range High	YTD % chg
World	**The Global Dow**	2404.61	34.98	1.48	2033.03	2643.78	2.9
	MSCI EAFE	1711.94	35.09	2.09	1471.88	1956.39	−0.3
	MSCI EM USD	854.66	10.98	1.30	691.21	1067.74	7.6
Americas	**DJ Americas**	505.36	2.48	0.49	433.38	525.25	3.7
Brazil	**Sao Paulo Bovespa**	53837.25	943.17	1.78	37046.07	58574.79	24.2
Canada	**S&P/TSX Comp**	13865.20	145.38	1.06	11531.22	15483.12	6.6
Mexico	**IPC All-Share**	45784.26	761.63	1.69	39256.58	46307.61	6.5
Chile	**Santiago IPSA**	3168.25	19.56	0.62	2730.24	3361.36	7.6
U.S.	**DJIA**	18053.60	49.44	0.27	15370.33	18351.36	3.6
	Nasdaq Composite	4940.33	−19.69	−0.40	4209.76	5231.94	−1.3
	S&P 500	2100.80	6.46	0.31	1810.10	2134.72	2.8
	CBOE Volatility	13.34	−0.01	−0.07	10.88	53.29	−26.7
EMEA	**Stoxx Europe 600**	349.24	5.04	1.46	303.58	412.42	−4.5
	Stoxx Europe 50	2924.78	42.60	1.48	2556.96	3584.02	−5.7
Austria	**ATX**	2338.24	26.77	1.16	1929.73	2695.57	−2.4
Belgium	**Bel-20**	3497.63	30.81	0.89	3117.61	3868.91	−5.5
France	**CAC 40**	4566.48	59.64	1.32	3892.46	5283.71	−1.5
Germany	**DAX**	10349.59	229.28	2.27	8699.29	12079.03	−3.7
Greece	**ATG**	578.85	4.48	0.78	420.82	857.92	−8.3
Hungary	**BUX**	27271.78	190.06	0.70	20452.90	27380.85	14.0
Israel	**Tel Aviv**	1502.66	9.81	0.66	1383.34	1728.89	−1.7
Italy	**FTSE MIB**	18447.98	89.73	0.49	15773.00	24157.39	−13.9
Netherlands	**AEX**	456.46	5.65	1.25	378.53	510.55	3.3
Poland	**WIG**	48596.34	401.28	0.83	41747.01	57460.44	4.6
Russia	**RTS Index**	926.64	27.06	3.01	607.14	1092.52	22.4
Spain	**IBEX 35**	8971.30	89.70	1.01	7746.30	11684.60	−6.0
Sweden	**SX All Share**	495.75	9.08	1.86	432.78	564.90	−1.9
Switzerland	**Swiss Market**	8152.76	108.16	1.34	7425.05	9537.90	−7.5
South Africa	**Johannesburg All Share**	53380.94	214.35	0.40	45975.78	55355.12	5.3
Turkey	**BIST 100**	86250.97	−92.68	−0.11	68230.47	88651.88	20.2
U.K.	**FTSE 100**	6405.35	51.83	0.82	5499.51	7122.74	2.6
Asia-Pacific	**DJ Asia-Pacific TSM**	1399.99	25.64	1.87	1188.42	1621.10	0.7
Australia	**S&P/ASX 200**	5188.80	51.70	1.01	4765.30	5982.70	−2.0
China	**Shanghai Composite**	3042.82	9.16	0.30	2655.66	5166.35	−14.0
Hong Kong	**Hang Seng**	21436.21	274.71	1.30	18319.58	28442.75	−2.2
India	**S&P BSE Sensex**	25816.36	...	Closed	22951.83	28504.93	−1.2
Japan	**Nikkei Stock Avg**	16874.44	598.49	3.68	14952.61	20868.03	−11.3
Singapore	**Straits Times**	2951.81	34.06	1.17	2532.70	3515.85	2.4
South Korea	**Kospi**	2011.36	2.26	0.11	1829.81	2173.41	2.6
Taiwan	**Weighted**	8633.72	−32.29	−0.37	7410.34	9973.12	3.5

Source: SIX Financial Information; WSJ Market Data Group

Global government bonds

Latest, month-ago and year-ago yields and spreads over or under U.S. Treasurys on benchmark two-year and 10-year government bonds around the world. Data as of 3 p.m. ET

Coupon	Country/ Maturity, in years	Yield	Spread Over Treasurys, in basis points: Latest	Previous	Month Ago	Year ago	Yield: Previous	Month ago	Year ago
3.250	**Australia** 2	2.003	125.0	121.2	110.9	130.5	1.957	1.948	1.817
4.250	10	2.566	78.3	72.9	68.5	49.7	2.501	2.563	2.361
3.500	**Belgium** 2	-0.465	-121.9	-120.2	-125.5	-69.4	-0.456	-0.415	-0.182
0.800	10	0.417	-136.6	-136.3	-141.3	-158.1	0.409	0.465	0.283
4.250	**France** 2	-0.460	-121.3	-118.8	-124.7	-68.5	-0.442	-0.408	-0.173
0.500	10	0.520	-126.3	-126.8	-131.5	-149.5	0.504	0.563	0.369
0.500	**Germany** 2	-0.489	-124.2	-123.7	-131.2	-77.7	-0.492	-0.473	-0.265
0.500	10	0.172	-161.1	-160.9	-166.4	-178.5	0.163	0.214	0.079
4.500	**Italy** 2	0.002	-75.1	-73.2	-83.4	-37.8	0.014	0.005	0.134
2.000	10	1.411	-37.2	-41.7	-60.2	-41.0	1.356	1.276	1.454
0.100	**Japan** 2	-0.261	-101.4	-99.5	-105.1	-50.6	-0.250	-0.212	0.006
0.100	10	-0.129	-191.2	-188.3	-196.9	-155.7	-0.111	-0.092	0.307
0.500	**Netherlands** 2	-0.522	-127.5	-126.1	-132.8	-72.0	-0.516	-0.488	-0.208
0.250	10	0.264	-151.8	-151.7	-156.2	-170.2	0.255	0.316	0.162
4.350	**Portugal** 2	0.255	-49.8	-45.2	-55.5	-46.0	0.294	0.284	0.052
2.875	10	2.954	117.1	119.0	86.3	14.1	2.962	2.741	2.005
4.500	**Spain** 2	-0.035	-78.8	-77.2	-80.0	-41.8	-0.027	0.040	0.094
1.950	10	1.539	-24.4	-28.0	-43.7	-43.2	1.492	1.440	1.432
4.250	**Sweden** 2	-0.409	-116.2	-116.9	-146.8	-85.5	-0.424	-0.629	-0.343
1.000	10	0.786	-99.7	-100.3	-132.8	-163.5	0.770	0.549	0.229
1.250	**U.K.** 2	0.477	-27.6	-27.0	-36.9	8.4	0.475	0.471	0.596
2.000	10	1.509	-27.4	-29.3	-42.6	-25.5	1.479	1.452	1.608
0.875	**U.S.** 2	0.753	...	...	...	...	0.746	0.839	0.512
1.625	10	1.783	...	...	...	...	1.772	1.878	1.864

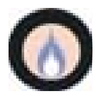
Commodities

Prices of futures contracts with the most open interest — 3:30 p.m. New York time

EXCHANGE LEGEND: CBOT: Chicago Board of Trade; **CME:** Chicago Mercantile Exchange; **ICE-US:** ICE Futures U.S.; **MDEX:** Bursa Malaysia Derivatives Berhad; **TCE:** Tokyo Commodity Exchange; **COMEX:** Commodity Exchange; **LME:** London Metal Exchange; **NYMEX:** New York Mercantile Exchange; **ICE-EU:** ICE Futures Europe. *Data as of 4/18/2016

Commodity	Exchange	Last price	One-Day Change Net	One-Day Change Percentage	Year high	Year low
Corn (cents/bu.)	CBOT	389.50	4.50	1.17%	390.75	351.25
Soybeans (cents/bu.)	CBOT	991.75	28.75	2.99	996.00	862.00
Wheat (cents/bu.)	CBOT	492.50	11.50	2.39	499.00	449.50
Live cattle (cents/lb.)	CME	118.500	-0.675	-0.57%	131.350	117.800
Cocoa ($/ton)	ICE-US	3,077	36	1.18	3,211	2,746
Coffee (cents/lb.)	ICE-US	127.75	1.80	1.43	138.20	115.35
Sugar (cents/lb.)	ICE-US	15.43	-0.11	-0.71	16.63	12.68
Cotton (cents/lb.)	ICE-US	63.14	0.91	1.46	64.92	54.33
Robusta coffee ($/ton)	ICE-EU	1561.00	6.00	0.39	1,597.00	1,372.00

Commodity	Exchange	Last price	One-Day Change Net	One-Day Change Percentage	Year high	Year low
Copper ($/lb.)	COMEX	2.2310	0.0580	2.67	2.3290	1.9580
Gold ($/troy oz.)	COMEX	1253.00	18.00	1.46	1,287.80	1,063.00
Silver ($/troy oz.)	COMEX	16.970	0.717	4.41	17.110	13.760
Aluminum ($/mt)*	LME	1,555.50	10.00	0.65	1,588.50	1,451.50
Tin ($/mt)*	LME	17,200.00	40.00	0.23	17,500.00	13,225.00
Copper ($/mt)*	LME	4,778.00	-9.00	-0.19	5,070.50	4,320.50
Lead ($/mt)*	LME	1,718.00	-1.00	-0.06	1,888.00	1,598.00
Zinc ($/mt)*	LME	1,900.00	35.50	1.90	1,900.00	1,467.00
Nickel ($/mt)*	LME	8,995.00	75.00	0.84	9,400.00	7,750.00
Rubber (Y.01/ton)	TCE	192.20	2.30	1.21	192.90	175.10



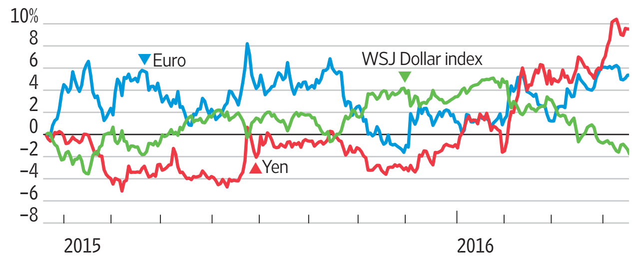
Commodity	Exchange	Last price	One-Day Change Net	One-Day Change Percentage	Year high	Year low
Palm oil (MYR/mt)	MDEX	2688.00	20.00	0.75	2,780.00	2,405.00
Crude oil ($/bbl.)	NYMEX	42.46	1.27	3.08	43.69	30.79
NY Harbor ULSD ($/gal.)	NYMEX	1.2747	0.0311	2.50	1.2983	0.9161
RBOB gasoline ($/gal.)	NYMEX	1.4995	0.0442	3.04	1.5723	1.1528
Natural gas ($/mmBtu)	NYMEX	2.188	0.143	6.99	2.5930	1.8440
Brent crude ($/bbl.)	ICE-EU	43.84	1.07	2.50	44.90	30.02
Gas oil ($/ton)	ICE-EU	377.50	7.25	1.96	384.00	266.50

Sources: SIX Financial Information; WSJ Market Data Group

Currencies

London close on April 19

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



Country/currency	Tue in US$	Tue per US$	US$ vs, YTD chg (%)
Americas			
Argentina peso-a	0.0707	14.1400	**9.3**
Brazil real	0.2820	3.5466	**-10.5**
Canada dollar	0.7895	1.2667	**-8.5**
Chile peso	0.001518	658.60	**-7.1**
Colombia peso	0.0003449	2899.65	**-8.7**
Ecuador US dollar-f	1	1	**unch**
Mexico peso-a	0.0577	17.3214	**0.7**
Peru sol	0.3083	3.2435	**-5.0**
Uruguay peso-e	0.0314	31.880	**6.6**
Venezuela bolivar	0.100137	9.99	**58.4**
Asia-Pacific			
Australia dollar	0.7799	1.2822	**-6.6**
China yuan	0.1549	6.4578	**-0.5**

Country/currency	Tue in US$	Tue per US$	US$ vs, YTD chg (%)
Hong Kong dollar	0.1289	7.7555	**0.1**
India rupee	0.0151	66.1540	**-0.1**
Indonesia rupiah	0.0000764	13094	**-5.4**
Japan yen	0.009162	109.14	**-9.3**
Kazakhstan tenge	0.002933	340.92	**0.6**
Macau pataca	0.1252	7.9886	**-0.2**
Malaysia ringgit-c	0.2600	3.8468	**-10.6**
New Zealand dollar	0.7026	1.4233	**-2.7**
Pakistan rupee	0.0095	104.800	**-0.1**
Philippines peso	0.0217	46.104	**-1.6**
Singapore dollar	0.7475	1.3378	**-5.7**
South Korea won	0.0008865	1128.00	**-4.1**
Sri Lanka rupee	0.0068871	145.20	**0.7**
Taiwan dollar	0.03110	32.156	**-2.3**
Thailand baht	0.02869	34.850	**-3.3**

Country/currency	Tue in US$	Tue per US$	US$ vs, YTD chg (%)
Europe			
Bulgaria lev	0.5812	1.7206	**-4.4**
Croatia kuna	0.1516	6.598	**-5.9**
Euro zone euro	1.1373	0.8793	**-4.5**
Czech Rep. koruna-b	0.0421	23.763	**-4.5**
Denmark krone	0.1528	6.5455	**-4.8**
Hungary forint	0.003673	272.26	**-6.3**
Iceland krona	0.008085	123.69	**-5.0**
Norway krone	0.1232	8.1191	**-8.2**
Poland zloty	0.2645	3.7802	**-3.7**
Russia ruble-d	0.01524	65.595	**-8.8**
Sweden krona	0.1237	8.0826	**-4.3**
Switzerland franc	1.0411	0.9605	**-4.1**
Turkey lira	0.3532	2.8313	**-3.0**
Ukraine hryvnia	0.0392	25.4885	**6.2**
U.K. pound	1.4384	0.6952	**2.4**
Middle East/Africa			
Bahrain dinar	2.6527	0.3770	**-0.03**
Egypt pound-a	0.1126	8.8796	**13.4**
Israel shekel	0.2659	3.7612	**-3.4**
Kuwait dinar	3.3166	0.3015	**-0.6**
Oman sul rial	2.5974	0.3850	**0.01**
Qatar rial	0.2746	3.642	**-0.01**
Saudi Arabia riyal	0.2666	3.7503	**-0.1**
South Africa rand	0.0698	14.3225	**-7.5**

	Close	Net Chg	% Chg	YTD % Chg
WSJ Dollar Index	85.64	−0.37	−0.43	**−5.02**

Sources: Tullett Prebon, WSJ Market Data Group

Cross rates

London close on Apr 19

	USD	GBP	CHF	JPY	HKD	EUR	CDN	AUD
Australia	1.2822	1.8446	1.3351	0.0117	0.1653	1.4583	1.0127	...
Canada	1.2667	1.8216	1.3189	0.0116	0.1633	1.4402	...	0.9875
Euro	0.8793	1.2649	0.9157	0.0081	0.1134	...	0.6943	0.6858
Hong Kong	7.7555	11.1562	8.0761	0.0711	...	8.8200	6.1227	6.0485
Japan	109.1420	156.9900	113.6400	...	14.0720	124.1000	86.1767	85.1000
Switzerland	0.9605	1.3815	...	0.0088	0.1238	1.0921	0.7582	0.7490
U.K.	0.6952	...	0.7239	0.0064	0.0896	0.7906	0.5489	0.5421
U.S.	...	1.4384	1.0411	0.0092	0.1289	1.1373	0.7895	0.7799

Source: Tullett Prebon

Key Rates

	Latest	52 wks ago
Libor		
One month	**0.44115%**	0.18150%
Three month	**0.63485**	0.27725
Six month	**0.90365**	0.40565
One year	**1.22470**	0.70090
Euro Libor		
One month	**-0.34671%**	-0.04857%
Three month	**-0.26800**	-0.00500
Six month	**-0.15443**	0.06000
One year	**-0.02814**	0.18000
Euribor		
One month	**-0.34300%**	-0.03400%
Three month	**-0.25000**	-0.00100
Six month	**-0.13900**	0.06900
One year	**-0.01100**	0.17600
Yen Libor		
One month	**0.22714%**	0.23714%
Three month	**0.54321**	0.38571
Six month	**0.87929**	0.53929
One year	**1.27220**	0.84214
	Offer	
Eurodollars		
One month	**0.5000%**	0.4000%
Three month	**0.6500**	0.5500
Six month	**0.9000**	0.8000
One year	**1.2500**	1.1500
	Latest	52 wks ago
Prime rates		
U.S.	**3.50%**	3.25%
Canada	**2.70**	2.85
Japan	**1.475**	1.475
Hong Kong	**5.00**	5.00
Policy rates		
ECB	**0.00%**	0.05%
Britain	**0.50**	0.50
Switzerland	**0.50**	0.50
Australia	**2.00**	2.25
U.S. discount	**1.00**	0.75
Fed-funds target	**0.25**	0.00
Call money	**2.25**	2.00
Overnight repurchase rates		
U.S.	**0.43%**	0.21%
Euro zone	**n.a.**	n.a.

Sources: WSJ Market Data Group, SIX Financial Information, Tullett Prebon

Top Stock Listings

4 p.m. New York time

Asia Titans

Cur	Stock	Sym	Last	% Chg	YTD% Chg
HK$	AIAGroup	1299	45.10	1.12	-3.22
¥	AstellasPharma	4503	1512.50	1.17	-12.65
AU$	AustNZBk	ANZ	24.06	1.52	-13.86
AU$	BHP	BHP	19.67	5.19	10.13
HK$	BankofChina	3988	3.26	2.19	-5.78
HK$	CKHutchison	0001	97.40	-0.05	-6.70
HK$	CNOOC	0883	9.79	2.30	21.31
¥	Canon	7751	3329.00	2.87	-9.41
¥	CentralJapanRwy	9022	20175	2.52	-6.60
HK$	ChinaConstructBk	0939	5.08	1.20	-4.33
HK$	ChinaLifeInsurance	2628	19.60	1.24	-21.91
HK$	ChinaMobile	0941	89.55	-0.50	2.34
AU$	CmwlthBkAust	CBA	74.70	0.70	-12.66
¥	EastJapanRailway	9020	10140	4.39	-11.44
¥	Fanuc	6954	18360	3.82	-12.90
¥	Hitachi	6501	523.80	4.41	-24.25
TW$	Hon Hai Precisn	2317	81.50	-1.33	0.87
¥	HondaMotor	7267	3078.00	4.46	-21.28
KR₩	HyundaiMtr	005380	153000	-0.65	2.68
HK$	Ind&Comml	1398	4.38	2.34	-6.41
¥	JapanTobacco	2914	4762.00	3.79	6.51
¥	KDDI	9433	3214.00	4.52	1.90
¥	Mitsubishi	8058	1946.00	2.85	-4.04
¥	MitsuUFJFin	8306	544.90	6.68	-28.03
¥	Mitsui	8031	1333.00	2.70	-7.78
¥	Mizuho Fin	8411	171.20	6.40	-29.69
¥	NTTDoCoMo	9437	2719.00	1.89	9.46
AU$	NatAustBnk	NAB	27.20	2.45	-9.93
¥	NipponStl&SmtmoMtl	5401	2405.00	3.13	-0.46
¥	NipponTeleg	9432	4978.00	0.79	2.94
¥	NissanMotor	7201	1026.00	3.57	-19.81
¥	NomuraHldgs	8604	508.10	3.61	-25.18
¥	Panasonic	6752	995.90	4.47	-19.72
HK$	PetroChina	0857	5.43	3.82	6.68
HK$	PingAnInsofChina	2318	37.90	1.34	-11.66
$	RelianceIndsGDR	RIGD	32.05	0.47	4.74
AU$	RioTinto	RIO	49.29	3.88	10.24
KR₩	SamsungElectronics	005930	1288000	-0.85	2.22
¥	Seven&IHldgs	3382	4783.00	1.20	-14.63
¥	SoftBankGroup	9984	5998.00	4.15	-2.30
¥	SumitomoMitsui	8316	3588.00	5.84	-22.10
HK$	SunHngKaiPrp	0016	98.00	0.72	4.53
TW$	TaiwanSemiMfg	2330	157.50	-0.32	10.14
¥	TakedaPharm	4502	5321.00	1.24	-12.27
HK$	TencentHoldings	0700	165.70	...	8.51
¥	TokioMarineHldg	8766	3685.00	4.13	-21.80
¥	ToyotaMtr	7203	5680.00	3.90	-24.15
AU$	Wesfarmers	WES	40.82	-0.75	-1.90
AU$	WestpacBanking	WBC	30.55	0.36	-8.97
AU$	Woolworths	WOW	22.14	-0.23	-9.63

Stoxx 50

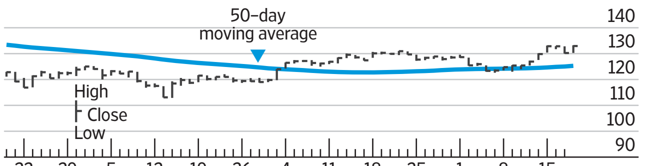
Cur	Stock	Sym	Last	% Chg	YTD% Chg
CHF	ABB	ABBN	19.53	1.35	8.74
€	AXA	CS	22.40	1.38	-11.22
€	AirLiquide	AI	105.00	2.39	1.30
€	Allianz	ALV	151.35	2.09	-7.56
€	Anheuser Busch	ABI	115.45	2.67	0.92
£	AstraZeneca	AZN	4160.00	-0.19	-9.89
€	BASF	BAS	69.99	2.22	-1.03
€	BNP Paribas	BNP	45.63	-0.22	-12.64
£	BT Group	BT.A	451.10	-0.84	-4.37
€	BancoBilVizAr	BBVA	6.02	0.91	-9.82
€	BancoSantander	SAN	4.17	1.04	-8.53
£	Barclays	BARC	167.80	0.06	-23.34
€	Bayer	BAYN	109.65	2.91	-5.31
£	BP	BP.	362.95	2.03	2.53
£	BritishAmTob	BATS	4281.00	0.01	13.52
CHF	FinRichemont	CFR	65.30	1.08	-9.43
CHF	CreditSuisse	CSGN	14.75	1.44	-32.00
€	Daimler	DAI	65.64	3.35	-15.39
€	DeutscheBank	DBK	15.64	0.10	-30.57
€	DeutscheTelekom	DTE	16.12	2.64	-3.39
£	Diageo	DGE	1946.50	1.20	4.85
€	ENI	ENI	13.67	1.26	-0.94
£	GlaxoSmithKline	GSK	1501.00	-0.60	9.32
£	HSBC Hldgs	HSBA	454.05	1.28	-15.32
€	INGGroep	INGA	11.18	0.59	-10.24
£	ImperialBrands	IMB	3770.00	-0.55	5.12
€	IntesaSanpaolo	ISP	2.42	-1.63	-21.63
€	LVMHMoetHennessy	MC	153.45	2.27	5.90
£	LloydsBankingGroup	LLOY	67.85	-0.88	-7.14
€	LOreal	OR	168.50	5.02	8.50
£	NationalGrid	NG.	1007.00	0.15	7.41
CHF	Nestle	NESN	73.95	1.16	-0.13
CHF	Novartis	NOVN	74.15	0.47	-14.57
DKK	NovoNordiskB	NOVO-B	377.80	1.94	-5.53
£	Prudential	PRU	1425.50	2.74	-6.89
£	ReckittBenckiser	RB.	6974.00	1.54	11.03
£	RioTinto	RIO	2333.00	2.84	17.86
CHF	RocheHldgctf	ROG	254.40	1.96	-7.96
£	RoyDtchShell A	RDSA	1800.50	-0.19	17.99
€	SAP	SAP	71.03	1.40	-3.20
€	Sanofi	SAN	77.71	0.41	-1.13
€	SchneiderElectric	SU	55.80	-0.13	6.16
€	Siemens	SIE	95.39	1.85	6.13
€	Telefonica	TEF	9.76	3.10	-4.66
€	Total	FP	42.88	1.51	4.97
CHF	UBSGroup	UBSG	15.87	1.80	-18.70
€	Unilever	UNA	41.50	2.66	3.48
£	Unilever	ULVR	3331.00	1.59	13.82
£	VodafoneGroup	VOD	232.35	1.75	5.14
CHF	ZurichInsurance	ZURN	216.20	2.61	-16.33

DJIA

Cur	Stock	Sym	Last	% Chg	YTD% Chg
$	AmericanExpress	AXP	63.57	1.57	-8.60
$	Apple	AAPL	106.93	-0.51	1.59
$	Boeing	BA	132.68	0.54	-8.24
$	Caterpillar	CAT	80.39	1.44	18.29
$	Chevron	CVX	100.50	1.82	11.72
$	CiscoSystems	CSCO	28.33	0.50	4.33
$	CocaCola	KO	46.61	0.84	8.50
$	Disney	DIS	102.64	1.14	-2.32
$	DuPont	DD	65.69	1.53	-1.37
$	ExxonMobil	XOM	86.22	0.51	10.61
$	GenElec	GE	31.15	0.29	...
$	GoldmanSachs	GS	162.65	2.28	-9.75
$	HomeDepot	HD	135.44	-0.99	2.41
$	Intel	INTC	31.60	-0.16	-8.27
$	IBM	IBM	143.98	-5.61	4.62
$	JPMorganChase	JPM	63.32	1.69	-4.10
$	JohnsJohns	JNJ	112.68	1.58	9.70
$	McDonalds	MCD	128.86	0.01	9.07
$	Merck	MRK	56.87	0.64	7.67
$	Microsoft	MSFT	56.39	-0.12	1.64
$	NikeClB	NKE	59.56	-0.02	-4.70
$	Pfizer	PFE	32.89	0.86	1.89
$	Procter&Gamble	PG	83.30	0.57	4.90
$	3M	MMM	169.65	0.06	12.62
$	TravelersCos	TRV	116.26	0.22	3.01
$	UnitedTech	UTX	100.05	-0.12	9.30
$	UnitedHealthGroup	UNH	130.54	2.14	10.97
$	VISA	V	80.83	-0.76	4.23
$	Verizon	VZ	52.07	0.66	12.66
$	WalMart	WMT	69.75	-0.16	13.78

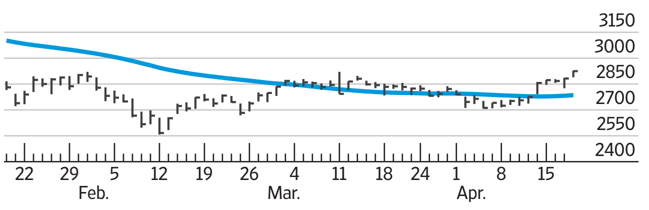
Asia Titans 50

Last: **132.93** ▲ 2.70, or 2.07% — YTD ▼ 2.4%



Stoxx 50

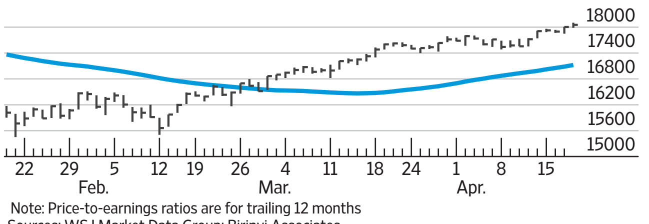
Last: **2924.78** ▲ 42.60, or 1.48% — YTD ▼ 5.7%



Dow Jones Industrial Average

P/E: 18

Last: **18053.60** ▲ 49.44, or 0.27% — YTD ▲ 3.6%



Note: Price-to-earnings ratios are for trailing 12 months
Sources: WSJ Market Data Group; Birinyi Associates

THE PROPERTY REPORT

Second-Tier Malls Do Have Their Fans

By Liam Pleven


Liberty University, led by Jerry Falwell Jr., paid about $33 million for a 75% stake in River Ridge Mall in Virginia.

SAM O'KEEFE/ASSOCIATED PRESS

A diverse group of investors, including a U.S. hedge fund, a Canadian alternative-asset manager and an evangelical Christian university led by Jerry Falwell Jr., are making big bets on beaten-down shopping centers.

Mall owners such as **Simon Property Group** and **General Growth Properties** Inc. in recent years have been shifting their focus to prime properties in desirable locations that generate heavy foot traffic and are attractive to high-end retailers.

That has opened a door for investors who believe the value of second-tier malls has fallen too far, amid growing fears of e-commerce and worries over the supply of retail space.

Such buyers argue that brick-and-mortar malls serve as community hubs in smaller markets even if those malls don't generate the same sales as rivals in wealthy suburbs. Higher sales often translate into higher rents. And in large metropolitan areas, older malls that have fallen out of fashion often sit on valuable real estate, they contend.

Farallon Capital Management LLC of San Francisco last month bought three malls in small Southern cities, along with a fourth mall last fall, in Valdosta, Ga. None of the malls generated more than $370 in sales a square foot, according to a person familiar with the matter. High-end properties can pull in roughly triple that amount.

Toronto-based Brookfield Asset Management, meanwhile, agreed in February to pay a 35% premium for Rouse Properties Inc., which owns 36 properties, including a number of lower-productivity malls, in a deal set to close this year. And last month, Mr. Falwell's Liberty University paid about $33 million for a 75% stake in River Ridge Mall, next to its Lynchburg, Va., campus.

"It will never be what I call an 'A' mall," Mr. Falwell said. But it is the only regional mall within more than 50 miles, and the university expects to upgrade the property and sell it in a few years, he said. "We'll be able to make a substantial profit," Mr. Falwell said. The university and the community will benefit from having a more appealing property as a neighbor, he said.

Liberty has about $1.3 billion in investments, including other real estate, according to Mr. Falwell. Less than 30% is in equities, he said.

Mall-industry giants are moving in the opposite direction. Simon Property Group, General Growth Properties and Taubman Centers Inc. have been shedding less-productive malls in recent years. The largest mall landlords now own mostly higher-end properties such as New York's Roosevelt Field, which boasts a Neiman Marcus.

These so-called A malls are often seen as less vulnerable to online shopping. They tend to be in densely populated, affluent areas and filled with stores and restaurants that consumers flock to. The owners often spend large sums to renovate and maintain the properties, and the payoff is a steady stream of income.

Stock-market investors favor the strategy. Simon and General Growth shares are up 7.5% and 7.8% this year, respectively, through Monday's close, according to FactSet. Owners of "B" malls are faring less well. WP Glimcher Inc. is down 4.3% and CBL & Associates Properties Inc., which sold the stake in the Lynchburg mall, is down 2.8%.

Owning weaker malls is seen as riskier. Newer properties can lure away retailers and shoppers, and foot traffic can steadily decline. Unlike office buildings that can attract tenants by lowering rents, a dying mall might not find takers at any price, analysts say.

"It just goes dark," said Tad Philipp, director of commercial-real-estate research at Moody's Investors Service. Experts believe many less-productive malls will close in years ahead.

The high stakes can make lenders wary, Mr. Philipp said. Last year, the 10 biggest losses on loans backed by malls and packaged into commercial-mortgage-backed securities totaled $530 million, according to Trepp LLC, which tracks such loans. Some losses exceeded the outstanding loan balance.

Yet analysts say many less-productive malls have a future. "It's important to distinguish among 'B' malls," said Brian Kingston, chief executive of Brookfield Property Partners, an affiliate of Brookfield Asset Management that already owns about a third of Rouse's outstanding shares.

Only an enclosed mall in a smaller market can have a dominant position, for example. Farallon, which managed $19.5 billion as of the beginning of the year, said that was part of the appeal of the three malls it bought last month, two in Alabama and one in Virginia.

In such situations, sales per square foot might not be the key indicator, said Rich Moore, a senior analyst at RBC Capital Markets. "There are $200-per-square-foot malls that you can make work, that you can make into moneymaking machines," he said.

Singapore Is Struggling With Glut of Office Space

By Jake Maxwell Watts And P.R. Venkat


Forecast demand for 2016 doesn't meet even half the projected supply of new office space.

EDGAR SU/REUTERS

SINGAPORE—Singapore's busy skyline is getting more crowded as the supply of office space surges, driving prices lower as developers scramble to attract a dwindling number of prospective tenants.

On the fringes of the city-state's central business district, the state investment funds of Singapore and Malaysia are close to completing two huge new complexes with a combined 2.5 million square feet of premium office space.

Not far away, Singapore developer **GuocoLand** Ltd. is just months away from opening the first floors of Tanjong Pagar Centre, which will be the city's tallest building at 64 stories high. That will add 890,000 feet to the mix.

A rebound in growth after the 2008 global financial crisis prompted many developers to take up new projects at the same time that government-linked construction began. But now, as those projects are coming onstream, demand is beginning to sag. Renewed weakness in the global economy has prompted banks to cut staff and office space, while other businesses are looking to shrink as global trade remains weak.

That is raising concerns about how all this new office space is going to be filled. Forecast demand for 2016 doesn't meet even half the projected supply.

Standard Chartered PLC recently gave up four of the 24 floors of Marina Bay Financial Centre it originally occupied in 2011 as it looks to consolidate its properties in Singapore.

Australia & New Zealand Banking Group Ltd. and **Royal Bank of Scotland** PLC are renegotiating with their landlords in Ocean Financial Centre and One Raffles Quay, respectively, as prices fall.

The slumping resources sector also has cut back on space. Australian miner BHP Billiton Ltd. last year gave up four of its 11 floors of offices at Singapore's premium Marina Bay Financial Centre following efforts to cut costs.

Even Alphabet Inc.'s Google is leaving the city center this year as it looks for a larger property away from the central business district.

"A lot of the supply is coming in at a time when demand is starting to become lackluster," said Sigrid Zialcita, managing director of Asian research at property-services company Cushman & Wakefield in Singapore. "This is a market that is able to absorb 1.5 to two million square feet [annually]," she said. "Right now there are challenges to even reaching that level."

Last month, Daiwa Capital Markets downgraded its rating on Singapore office trusts to "negative" from "neutral," estimating that vacancy rates in the central business district are likely to rise to 9.6% in 2016, double the rate in 2015.

Prices for central-business-district prime space fell 14% in 2015, according to data provided by Daiwa, which projects a further 5.4% decline this year.

The sharp increase in new space this year is largely due to projects being developed by the Singaporean and Malaysian state investment funds Temasek Holdings Pvt. Ltd. and Khazanah Nasional Bhd.

Under a joint venture called M+S, the two companies are building a giant new office and premium residential complex called Marina One on land near the central business district, which belonged to Malaysia until 2010. That year, the two countries agreed to return the land to Singapore in exchange for a Malaysian stake in the new development.

The Marina One complex will add about 1.9 million square feet of premium office space to the market, although not all of it will be available this year. The other Temasek-Khazanah project is a giant multiuse complex called Duo, which will inject another 570,000 square feet of space into the market.

Billionaire Zell Warns of U.S. Recession

By Janet Morrissey


Sam Zell called the top of the last commercial-property cycle.

CHRIS GOODNEY/BLOOMBERG NEWS

Billionaire investor Sam Zell, who correctly called the top of the last commercial real-estate cycle, is predicting global problems will likely push the U.S. into a recession in the next year.

While the U.S. is humming along fine at the moment, Mr. Zell warned that it isn't immune to problems in the world economy. Those problems include low oil prices, falling import demand from emerging economies, volatile financial markets, deflation, possible negative interest rates and currency exchange rate fluctuations, he said.

"I'm not being pessimistic, I'm being realistic," he said last week at a real-estate conference in New York. The U.S. economy is now "in the ninth inning," he said.

In 2007, Mr. Zell famously sold his **Equity Office Properties Trust** in a $39 billion deal just before the market crashed. He also made a fortune buying discounted assets in the wake of the recession in the early 1990s, a strategy that earned him the sobriquet of the "grave dancer."

But other real-estate investors who also have amassed admirable track records have a less dire outlook. "It's definitely too early to call the end here," said Jonathan Gray, global head of real estate at **Blackstone Group**, at the same real-estate conference. "Growth will continue to be there—just not as strong as seen in the past."

This isn't the first time Mr. Zell has talked about a recession. In 2012, he warned that corporate enterprises were delaying projects and other capital expenditures, indicating a lack of confidence in the economy. He also said the government's quantitative-easing economic stimulus program had created an excess flow of capital, where too much capital was chasing after too few opportunities. "It's very hard not to assume that we're on the cusp of going back into a recession," he said in a 2012 interview with CNBC.

Real-estate investors are more than ever polishing up their crystal balls because commercial-property values have been on a mostly uninterrupted upward march since 2009. Over the past year, concerns over when and how much the Federal Reserve will raise interest rates have taken a toll on real-estate investment trust prices.

Some REIT CEOs said they are preparing for a downturn—though many believe it is still on the distant horizon.

"We've been deleveraging like most of our peers have, and positioning ourselves so that when the recession hits, we have capital to go out and acquire at good prices," said James Connor, CEO of Duke Realty.

Mr. Connor said he expects a correction at some point, just not likely in the next year.

When the recession does hit, Mr. Zell believes it will be a "significantly milder version" than the previous one. In the real-estate world, he noted, companies have far less leverage today than in 2007, which will make it easier to weather the downturn.

Mr. Zell has been selling properties in his Equity Residential and Equity Commonwealth portfolios. Over the past 18 months, he sold $3.5 billion of Equity Commonwealth properties, and, in January, he sold a 23,000-unit Equity Residential portfolio for about $5.4 billion. Mr. Zell said the Equity Residential sale was part of a restructuring aimed at selling properties in suburban markets to focus on densely populated ones.

Grosvenor Sees Bumps Ahead for Real Estate

By Art Patnaude

A major U.K. landlord warned that the boom in global real estate is coming to an end.

London-based **Grosvenor Group**, which manages investments on behalf of the Duke of Westminster, said in its annual report Tuesday that years of rising property values could be set to reverse.

While it isn't possible to predict when the market will turn, "it is only a matter of time," Nicholas Scarles, group finance director, said in the 2015 report.

Real-estate investment surged after the 2008 financial crisis, pushing values of commercial and residential property to records in cities around the world. Amid low interest rates, returns in property looked attractive compared with other asset classes.

Stock-market volatility, low oil prices and political uncertainty have damped demand. High-end housing markets in cities such as London and New York have softened in the past year.

Commercial-property transaction volumes totaled $1.2 trillion in 2015, down 2% from 2014, according to data provider Real Capital Analytics.

Grosvenor is continuing to "expect and plan for a slowdown, particularly in high-end commercial and residential property," Mr. Scarles said. Other historic landlords in Britain have also been preparing for a downturn.

For Grosvenor, preparation includes selling assets and pursuing development opportunities expected to mature during the next market upturn, Mr. Scarles said.

In addition to high property values, "there is a risk that sustained low oil prices could lead to sovereign-wealth funds reducing investment in high-end commercial and residential property in London and elsewhere," he said. "All of this points to a correction in the near future."

Grosvenor manages a £6.7 billion ($8.4 billion) property portfolio spanning Hong Kong to San Francisco.

"While we have seen performance above the cycle average in each of the years since the financial crisis, we anticipate the next few years will bring a more-challenging environment," Mr. Scarles said.

HEARD ON THE STREET

Ashmore's Stock Has Run Too Far

Investors have rediscovered the pull of emerging markets and suitably they also have been piling back into **Ashmore Group**, the specialist fund manager.

The funny thing is its shares have been attracting money far more than its funds. This should make prospective shareholders cautious.

Despite some political troubles, things started to improve for emerging markets in mid-January and currencies such as the Russian ruble, Brazilian real and South African rand all are up strongly against the dollar now. J.P. Morgan's emerging-market bond index is up 6.5% so far this year, while the MSCI emerging markets stock index has outperformed its global equivalent by 5.5%.

But if things are looking up in emerging-markets debt, Ashmore's business is yet to feel the benefit. The group saw another period of net outflows from its funds in the quarter to March 31, which it reported Tuesday, its seventh consecutive quarter of withdrawals.

But since late January, Ashmore's stock has jumped more than 50%, easily outperforming emerging markets focused rival Aberdeen Asset Management and far outstripping banks such as HSBC and Standard Chartered.

Ashmore now trades at more than 20 times forecast earnings for 2016, way ahead of its highest level in the past three years, the 18.6 times forward earnings level of summer 2014, and easily beating valuations of peers.

Until the fund flows start to reverse, this recovery rally looks to have gone far enough. *—Paul J. Davies*

Is Helicopter Money on Its Way?

That didn't take long. No sooner had President Mario Draghi unveiled the European Central Bank's latest easing effort after March's policy meeting than he was asked about helicopter money. Expect more of the same this week.

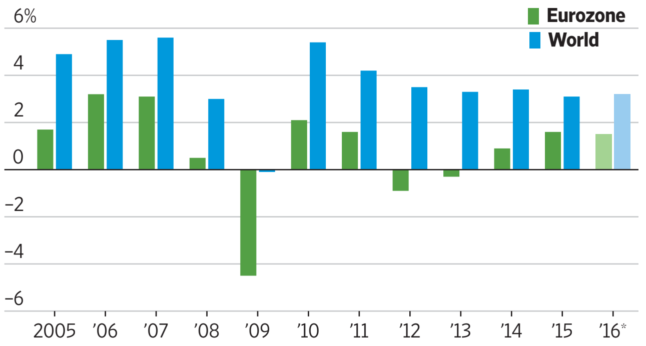
In the short term, markets will be looking Thursday for more detail on the ECB's planned corporate-bond purchases. Issuance has picked up and the spread between corporate and government bond yields has narrowed, but key questions on the size and composition of the program remain unanswered.

In the longer term, the focus is likely to be on further ECB options, including helicopter money—essentially, direct injections of cash into the economy by the central bank. The prospect is a remote and radical one for now; the debate is theoretical, not practical.

But that the discussion is even taking place is noteworthy. It marks dissatisfaction with the sluggish nature of the economy and its recovery since the crisis.

Slower for Longer

Annual change in gross domestic product



*Forecast
Source: International Monetary Fund THE WALL STREET JOURNAL.

The ECB faces a particular problem in the criticism coming from Germany, amid warnings that monetary policy has hit its limits. It would be risky for a central bank to agree with that idea.

The notion of helicopter money is enticing in an environment in which more liquidity and lower rates offer diminishing returns, and fiscal policy is politically taboo. In its most radical form, the central bank would distribute cash directly to the population, without taking any matching asset on its balance sheet. One way to think of this is as similar to an injection of fresh equity—a way to repair stretched finances.

There would be no upfront debt for governments to take on as a result. The cost would instead be borne over time from future income generated by the central bank. That relies on the assumption that a central bank, unlike commercial banks and companies, can run with a hole in its balance sheet because it can create money. The hope would be one of greater spending today, or if consumers pay down debt, expectations of greater activity tomorrow. Inflation expectations would likely rise.

Or so the thinking goes. Helicopter money's seductive nature is also reason to mistrust it. Politically, it would introduce fresh tensions into a eurozone already riddled by them. Logistically, it could prove tricky. And it could induce fresh inertia on economic reform.

For the foreseeable future, the ECB will almost certainly stick with its calls for governments to do their bit to get the eurozone economy up to speed. As long as they are recalcitrant, the question of whether central bankers will have to do more won't go away. *—Richard Barley*

What Will the Bank of Japan Think of Next?

For the Bank of Japan, it is no longer if, but how.

Bank of Japan Gov. Haruhiko Kuroda all but promised more easing in an interview Monday with The Wall Street Journal, saying, "without hesitation we would adopt additional monetary easing" if deemed necessary.

He most likely deems it very necessary, for two reasons. The first is the yen's remarkable strengthening in recent months, which has put downward pressure on prices and thrown a major obstacle in front of the BOJ's 2% inflation target.

The second is the BOJ's credibility. It is at stake after the central bank's last surprise move—implementing negative interest rates in January—seemed to backfire, causing the yen to strength-en further. Time may prove negative rates effective. But for now, negativity in rates has simply created negativity about central banks.

> When the BOJ next meets, expect the unexpected—like massive equity purchases.

When the BOJ next meets April 28, it will be looking to prove it still can move markets in the right direction. So expect something unexpected—like massive equity purchases. The BOJ already scoops up ¥3 trillion ($27.57 billion) in ETFs each year as part of its broader ¥80 trillion program. HSBC's Izumi Devalier figures that could jump to ¥10 trillion. The BOJ also could take a cue from the European Central Bank and venture further into corporate bonds.

That doesn't mean investors should rule out another interest-rate cut. Mr. Kuroda may prefer to wait and see how the first cut plays out rather than double down so quickly.

One thing Mr. Kuroda seems to have ruled out for now: so-called helicopter money, or direct government debt monetization.

Of course Mr. Kuroda declared himself against negative rates weeks before announcing them.

Alas, perhaps the biggest move to restore confidence is out of the BOJ's hands: canceling a rise in the value-added tax set to take effect in April 2017. That is up to Prime Minister Shinzo Abe.

There are inklings the prime minister may acquiesce. But unless the tax is shelved, any further BOJ easing may face another weak reception. *—Alex Frangos*

OVERHEARD

Primark's new Boston store sells so many candles "you'd think they didn't have electricity," joked **George Weston**, chief executive of London-listed parent company **Associated British Foods**, Tuesday. At least Bostonians seem to enjoy the luxury of heated bedrooms: demand for flannel pajamas was so weak Primark had to ship its inventory to Spain.

Such are the "learnings" of the fashion chain's expansion across the Atlantic. It has two stores so far and three more due to open in the U.S. Northeast before the August fiscal year-end. Trading is "encouraging" but financial details were thin.

U.K. high streets share few brands with U.S. main streets. The failure of **Tesco**'s U.S. proposition, Fresh & Easy, and **Marks & Spencer**'s ignominious sale of Brooks Brothers a decade earlier, serve as warnings to ambitious executives like Mr. Weston.

Mr. Weston's anecdotes are designed to reassure investors that Primark is adapting fast to local market conditions. But the successes chalked up by Primark's key European rivals, **H&M** and Zara owner **Inditex**, may offer investors more comfort. Cheap fashion seems to be a proposition that works stateside.

The bigger question for Primark, which accounts for nearly two-thirds of ABF's profits, is how long it can continue to shun e-commerce.

Primark's like-for-like sales fell 1% in the first half. Store openings in Germany and the Netherlands were partly to blame, but a rainy Christmas also may have driven sales online—and therefore into the hands of rivals.

Banking on foot traffic leaves Primark more exposed than peers to the vagaries of the weather. Better to buy an umbrella.

Nippon Life Chief Isn't Positive on Negative Rates

By Kosaku Narioka

TOKYO—The head of Japan's biggest private life insurer, **Nippon Life Insurance** Co., said negative interest rates are hurting the company's sales and bottom line, joining a growing chorus of influential people criticizing the central bank's latest aggressive easing policy.

Yoshinobu Tsutsui, president of Nippon Life, said it has become more difficult to sell yen-denominated products, especially those designed for investment and savings, as the company is forced to push returns lower. Earlier this month the insurer suspended sales of one such product that had generated 350 billion yen ($3.2 billion) in revenue during the nine months through December.

"We are not able to respond to the demand from our customers. We are also seeing a significant impact on our earnings," Mr. Tsutsui said in an interview with The Wall Street Journal.

The executive said he expects declines in total revenue and profit at Nippon Life for the fiscal year that began April 1. He called on the Bank of Japan to carefully examine the effectiveness of negative interest rates and their drawbacks.

Mr. Tsutsui is the latest Japanese business leader to complain about what they say is a financial and banking system increasingly skewed by negative interest rates. Banks are seeing their profit squeezed, and trading has plunged in Japan's money markets, where big banks and others usually park excess cash to earn some interest.

The Bank of Japan implemented a negative rate of 0.1% on some commercial banks' reserves in February to drive commercial interest rates even lower, hoping to stimulate lending and push investors into riskier assets.

Nippon Life President Yoshinobu Tsutsui expects declines in revenue and profit this fiscal year.

The move came amid signs that the effects of years of unprecedented quantitative easing, including a weaker yen and higher inflation expectations, were beginning to unwind.

BOJ Gov. Haruhiko Kuroda and other central-bank officials spent much time in the weeks following addressing an unexpected backlash among politicians, business leaders and the public. Mr. Kuroda was called to parliament repeatedly to answer questions about the negative-rate policy.

The central banker has defended the BOJ's policies, saying recently that three years of aggressive monetary easing—first substantial asset purchases and more recently negative rates—had pushed rates on housing and corporate loans lower, and that action should stimulate investment.

He said the impact on banks would be marginal, and that it was "technically and theoretically" possible to push rates down at least as far as minus-0.4%.

"But that does not mean that we will or we should," he told The Wall Street Journal in a recent interview.

Nobuyuki Hirano, president of **Mitsubishi UFJ Financial Group** Inc., Japan's biggest bank, said he sees things differently. He said last week that the negative-interest policy had caused households and businesses to rein in spending because of growing uncertainty over the future.

"There is no guarantee that lowering interest rates encourages corporate capital expenditures or expedites the shift of household financial assets from savings to investment," Mr. Hirano said.

Mr. Tsutsui said Nippon Life hasn't seen a rise in borrowing from businesses.

To be sure, negative rates have pushed yields on Japanese government bonds and other bonds with longer maturities sharply lower, driving the benchmark 10-year yield into negative territory. But that makes it difficult, if not impossible, for insurers who rely on bond investments to secure stable returns at rates that are higher than those on the products they sell.

Mr. Tsutsui said Nippon Life will continue to diversify its portfolio, focusing on foreign debt, corporate bonds and other nontraditional investments such as infrastructure and venture capital.

Nippon Life has a more-diversified portfolio, ranging from private equity to real estate, than many of its Japanese rivals.

Of Nippon Life's total assets of ¥63 trillion as of December, 30% was in Japanese government bonds and 12% was in loans.

Mr. Tsutsui said that if the central bank decides to take additional easing steps, increasing its purchases of exchange-traded funds would be more appropriate than charging a higher rate on bank reserves or buying more government bonds, which would likely push down yields further and risk more interference with the proper functioning of the government-bond market.

WEBER

Continued from page B5

terest rates, and that such policies "can substantially change the behavior of consumers and savers" if they persist for a long period.

He also criticized the ECB's decision to pay banks to borrow under a new series of four-year loans for banks, scheduled to begin in June.

The payment will be available if banks meet certain criteria on net lending to the economy.

"It is the subsidy that is not sensible," Mr. Weber said.

Top ECB officials, including Mr. Draghi, have stressed in recent days that they are ready to unleash even more stimulus if needed, including fresh rate cuts.

Those statements appear to have rankled Berlin. German Finance Minister Wolfgang Schäuble last week urged central banks to exit easy-money policies and argued that the ECB was partly to blame for the rise of a new anti-immigration party, the Alternative for Germany.

The global economic community has largely sided with the ECB. In a news release over the weekend, Group of 20 finance ministers and central-bank governors called on policy makers to use all available tools to bolster growth, including monetary policy.

IMF Managing Director Christine Lagarde said this month that subzero interest rates were "net positives" for the global economy.

Even Jens Weidmann, Mr. Weber's successor as Bundesbank president, has sprung to the ECB's defense, arguing in Washington on Friday that the central bank's policies are appropriate for the eurozone as a whole.

But banks, particularly in Germany, have complained loudly that subzero rates act as a tax, because they can't easily be passed on to customers.

Mr. Weber said the scope for future rate cuts may be limited.

Banks in Switzerland—which has introduced negative rates for some bank deposits—have increased the costs of loans to offset losses from negative rates, he said. Switzerland's deposit rate of minus-0.75% is "probably close to the limit of how negative interest rates can go without causing a run on cash," Mr. Weber said.

He also questioned the ability of the U.S. Federal Reserve to raise interest rates while other major central banks have moved in the opposite direction. "Since the Fed cannot completely uncouple [from other economies], it is likely that there is going to be a more-cautious policy response in the United States, because otherwise there would be a stronger appreciation of the U.S. dollar," he said.

In the medium to long term, the Fed might risk falling behind the curve on rate increases, Mr. Weber said. But "at the moment there are no clear indications of that."

Finance Watch

EMIRATES NBD

Bank's Net Rises Despite Oil's Fall

Dubai's largest bank, Emirates NBD, reported an 8% rise in first-quarter net profit as provisions against bad loans fell despite economic woes that have resulted from lower oil prices.

ENBD's profit rose 8% to 1.81 billion U.A.E. dirhams ($492 million) from 1.67 billion dirhams in the same period in 2015. Revenue inched up 2%. Provisions fell almost a quarter to 829 million dirhams. *—Nicolas Parasie*

U.S.

Hedge Funds' Debt Enters the Spotlight

Top U.S. regulators are set to focus on borrowing by the hedge-fund industry, particularly large funds.

The Financial Stability Oversight Council voted unanimously Monday to endorse a 27-page "update" of its more-than-two-year review of financial-stability risks tied to asset management.

Treasury Secretary Jacob Lew said the council has found leverage in the hedge-fund industry appears to be concentrated at larger funds, though he cautioned greater leverage doesn't necessarily imply greater risk.

"The need for further analysis or information sharing is clear," Mr. Lew said. He added that the oversight council would form a working group to study risks in hedge funds.

— Ryan Tracy