

THE WALL STREET JOURNAL.

DOW JONES | News Corp **

TUESDAY, APRIL 18, 2017 ~ VOL. XXXV NO. 54

WSJ.com EUROPE EDITION

DJIA 20636.92 ▲ 0.90%

NASDAQ 5856.79 ▲ 0.89%

NIKKEI 18355.26 ▲ 0.11%

STOXX 600 380.58 Closed

BRENT 55.36 ▼ 0.95%

GOLD 1289.40 ▲ 0.27%

EURO 1.0657 ▲ 0.41%

What's News

Business & Finance

Emerging markets could be at risk for a reversal as some investors cut back on their bets after a first-quarter buying spree. **A1**

◆ **China reported** first-quarter growth of 6.9%, its strongest in a year and a half, fueled in large part by government spending. **A1**

◆ **Chinese investors** are buying up risky debt, narrowing the yield gap between high-rated and low-rated bonds to the thinnest ever. **B1**

◆ **Google bought** 1,210 acres of land near Reno, Nev., for \$29.1 million to build a data center. **B1**

◆ **Netflix reported** that subscriber growth slowed in the first quarter, coming in below expectations. **B1**

◆ **Health insurers** are struggling to file plans for ACA exchanges amid mixed signals from the White House about their future. **B1**

◆ **PPG appealed** to Akzo shareholders to pressure the Dutch paint firm into talks over the U.S. rival's bid. **B8**

◆ **United said** higher fuel costs cut into its earnings but first-quarter profit still topped expectations. **B8**

◆ **Post agreed** to buy Weetabix in a deal expected to value the U.K. cereal firm at over \$1.76 billion. **B3**

◆ **A South Korean creditor** said it agreed on a proposed bailout package for Daewoo Shipbuilding. **B2**

◆ **China's Ant Financial** raised its bid for U.S. money-transfer firm MoneyGram to \$1.2 billion. **B9**

World-Wide

◆ **Turkey's vote** on a referendum to expand presidential power contravened Turkish law, international observers said. **A1**

◆ **Erdogan and EU officials** clashed over the handling of the vote, as calls in Europe grew to cut off accession talks with Turkey. **A3**

◆ **Pence warned** North Korea not to push Trump, calling U.S. strikes in Syria and Afghanistan an example of Washington's strength. **A5**

◆ **South Korea's former President Park** was indicted on 18 charges including bribery and coercion. **A5**

◆ **The EU and France have information** said to reveal the European Parliament's unwitting role in funding the National Front. **A4**

◆ **Trump is expected** to pick a former Bush Treasury official for a top regulatory post at the Fed. **A6**

◆ **Kushner is in talks** to sell his stake in a tech company as part of his efforts to separate himself from conflicts of interest. **A6**

◆ **Arkansas officials** are contesting legal rulings that blocked the state from carrying out its plan to execute at least six inmates. **A7**

◆ **A video on Facebook** that shows an apparent murder has brought renewed attention to the company's handling of content. **A6**

◆ **A trash heap** near Sri Lanka's capital Colombo collapsed, killing at least 29 people and possibly burying dozens more. **A4**

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



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WORLD NEWS

Trump Finds China's North Korean Blind Spot



CAPITAL JOURNAL
GERALD F. SEIB

North Koreans staged a provocative military parade of the missiles it is developing, and just hours after they staged a failed test of one such missile, the Chinese foreign ministry reiterated China's opposition to putting an American-built missile-defense system in South Korea.

That is disappointing, though perhaps not surprising. The Chinese position on this issue does, however, show that there remains a distance between the way the U.S. and China view the North Korean threat, which risks hindering the exertion of meaningful international pressure on Pyongyang.

The missile-defense system in question is the Terminal High Altitude Area Defense, or Thaad. It's a ground-based system designed to shoot down short- to medium-range ballistic missiles as they approach their targets.

In the middle of last year—that is to say, when Barack Obama was still president and well before the latest North Korean provocations—the U.S. and South Korea agreed to deploy Thaad as a deterrent against North Korea. The Pentagon said Thaad would be operated by American forces stationed in South Korea as a "defensive measure."

On Monday, Vice President Mike Pence, on a visit to South Korea, reiterated American plans to keep moving toward deployment, and was echoed in that sentiment

by South Korea's acting president, Hwang Kyo-ahn. Though South Korea's government is in flux thanks to a corruption crisis, Mr. Hwang sounded resolute on the Thaad question, calling for "early deployment and operation" and saying he is looking for American help in bringing to an end the "unfair actions" from China in response to it.

The "unfair actions" remark referred to the fact that the Chinese have begun economic reprisals against South Korea to punish it for its decision to accept the Thaad



President Donald Trump and Chinese President Xi Jinping at Mar-a-Lago in Florida this month.

ALEX BRANDON/ASSOCIATED PRESS

deployment on its soil. If it sounds illogical for China to punish South Korea for defending itself against what even the Chinese recognize as a real and immediate threat in the region—well, it is.

Mostly illogical, anyway. From the Chinese point of view, Thaad represents not just a defense system for South Korea but an intrusion of American technology that someday could be used to repress China militarily in some future superpower

showdown with the U.S.

The key to Thaad is its sophisticated radar system for spotting and tracking missiles once launched. That capability, the Chinese fear, could be useful to American troops in any military confrontation with China by helping the U.S. follow and neutralize Beijing's missiles. Given that Chinese strategic thinkers consider issues not just months or years but decades down the road, their concern isn't a surprise.

Still, this seems to be a case of the Chinese being

long-term wise and short-term foolish. The prospect of a working North Korean missile armed with nuclear warheads, and aimed at its neighbors as well as the U.S., is a far more real and immediate danger to the stability of China's neighborhood than is the prospect of some all-out military confrontation with the U.S.

The North Korean nuclear genie already is out of the bottle, in the sense that it has working nuclear explosive devices. The trick now is to contain that threat and, if possible, roll back the steps the North Koreans are taking, in a considerable hurry, to complete the transition from mere nuclear devices to nuclear weapons.

That is going to require convincing the North Koreans that the price they will pay for continuing down this path outweighs any strategic advantage they will gain, which is where escalating economic pressure from China is key. Eventually—though perhaps not at the moment—the strategy also probably will require a diplomatic component to give the North Koreans a face-saving escape route if they want to back away.

But a complete strategy also will require steps to convince the North Koreans that their new military toys won't have the power that Supreme Leader Kim Jong Un hopes they do. That's where Thaad comes in—and where China is still standing in the way.

where," said Mark Baker, emerging-markets fixed-income portfolio manager at Standard Life Investments in Hong Kong.

Long-running tensions between South African President Jacob Zuma and Finance Minister Pravin Gordhan erupted late last month, leading to the ouster of Mr. Gordhan and prompting S&P to downgrade the country's bonds to junk.

While the South African rand has tumbled 7.3% since March 24 in the wake of the political crisis, the losses would likely have been worse if there wasn't an underlying demand for yield.

The South Korean won has rallied 6.2% this year, despite a slowing economy, the ouster of the nation's president, and threats of missile tests by North Korea.

South Korea has been a big destination for foreigners' funds, with around \$4.7 billion going into its stocks and \$8.3 billion into bonds in the first quarter, Australia & New Zealand Banking Group Ltd. estimates. Foreign investors who want South Korean assets must first buy the currency.

A similar story is playing out in Taiwan, where the new Taiwan dollar has gained 6.8% against the U.S. dollar in 2017.

But even after taking into account global investors' desperation for yield, the money flows into South Korea and Taiwan don't entirely make sense, some analysts say.

Yields in South Korea and Taiwan are much lower than in other emerging markets and even some developed economies. Yields on the 10-year bonds in Korea and Taiwan are 2.194% and 1.03%, respectively, well below the 7.044% on 10-year debt in Indonesia and lower than the 2.237% on 10-year U.S. Treasurys.

FLows

Continued from Page One

long time: The MSCI Emerging Market Index fell three years straight before notching a gain in 2016.

With European elections looming and tension growing between the U.S. and North Korea, "there is elevated political risk on too many different fronts," said Thanos Bardas, a portfolio manager at Neuberger Berman. "Markets have moved up a lot. Now you can see the pendulum swinging in the other direction."

Neuberger Berman recently took profits on the Mexican peso and other emerging-market currencies, Mr. Bardas said. He intends to stay on the sidelines at least until the conclusion later this month of the first round of the presidential election in France, where the likelihood of success by far-left and far-right candidates has caused jitters among investors.

Some data justify the valuations in emerging markets: Chinese growth has steadied and Argentina appears to be slowly coming out of a recession. Global demand has buoyed exports, while higher U.S. tariffs have yet to materialize, helping boost sentiment toward trade-dependent developing economies.

But money rushing into assets of developing nations suggests a search for yield could be trumping traditional metrics like a country's economic and political outlook. Foreign investors poured an estimated net \$29.8 billion into emerging-market stocks and bonds in March, the highest monthly total since January 2015, according to the Institute of International Finance.

"There's this capital coming into emerging markets and it needs to be invested some-

THE WALL STREET JOURNAL

Europe Edition ISSN 0921-99

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Frankfurt: 49 69 29725390; London: 44 207

842 9600; Paris: 33 1 40 17 17 17;

New York: 1-212-659-2176

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

Registered as a newspaper at the Post Office.

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Blue Skies and Red Clay in Monaco



TIME TO HIT THE DIRT: On a gorgeous day at the Monte Carlo Masters men's tournament, Alexander Zverev, bottom, beat Andreas Seppi in the round of 64. Tennis's clay-court season is revving up as players prepare for the French Open, which begins May 28.

GROWTH

Continued from Page One
growth momentum in the quarter as services growth decelerated; and while retail sales grew by 10% in the quarter, this was slower than the 10.4% pace for all of 2016.

A plan announced this month for a new megacity a two-hour drive south of Beijing also is expected to benefit state-owned companies, including producers of steel, glass and cement. Small businesses in the area worry they will be forced to move to make way for state firms flooding in.

"The economy looks serene on the surface," said Eswar Prasad, former China head of the International Monetary Fund. But its reliance on old-growth levers at the expense of private drivers masks "rising system stresses and macroeconomic vulnerabilities," he added.

The strong start should see Beijing comfortably reach its target of "about 6.5%" growth this year, though economists widely expect a slowdown in

the second half of the year.

Casting a shadow over the economy after years of fiscal and monetary stimulus is China's rapidly rising debt load. Total debt is now at an estimated 277% of the economy, up from 125% at the end of 2008. Credit continues to expand significantly faster than economic growth despite Beijing's bid to address growing economic risk.

While new bank lending slowed in March from February, overall lending rose, showing that appetite for credit is strong and that many companies and property buyers are finding other ways to borrow.

China's property industry now accounts for between 25% and 30% of China's gross domestic product, including related industries such as construction, according to DBS, a Singapore-based bank.

Developers are starting to build again after clearing out some unsold inventory with the help of a stimulus-fueled property boom that started last year. Strong property sales led developers to replenish land holdings in major cities. But the outlook

also improved in smaller cities, many of which have long been ringed by blocks of empty apartments.

Shimao Property, a medium-size developer that specifically focused on clearing out its inventory last year, said it expects to build out projects in major cities next year and plans to start new construction

model is sustainable.

Even as credit expands, a preference among state-owned banks to lend to property developers and state companies crowds out private companies, economists say.

"We face real problems getting bank loans, and private loans are risky and expensive," said Liu Zheng, marketing manager with Yangxin Lumijiang Classical Furnishing Co. based in the eastern town of Yangxin. "So we've had little choice but to cut spending and pare investments."

National Bureau of Statistics spokesman Mao Shengyong told reporters on Monday that China's economy is stable and balanced, helped by improving private investment and strong contributions from consumption and services. "Our bottom line for GDP growth this year is 6.5%, but of course we should aim to do better," he added.

—Dominique Fong
and Liyan Qi
contributed to this article.

6.5%

China's approximate growth target for this year

totaling 9 million square meters (97 million square feet) this year, up from 7.4 million square meters last year.

Another developer, Times Property, also expects to increase its property investment. Its core markets are in the coastal manufacturing belt of southern China, but it also has projects in some smaller inland cities, such as the Hunan province capital of Changsha.

"The authorities have trou-

WORLD NEWS

Erdogan Win Sets Up Fight With Europe

Turkish president lashes out over ballot criticism as calls to cut off EU talks grow

By LAURENCE NORMAN

BRUSSELS—Turkish President Recep Tayyip Erdogan and senior European officials became embroiled on Monday in an immediate fight over the handling of the weekend's referendum, with Mr. Erdogan lashing out at the West for what he called its "crusader mentality" over the ballot.

The fight appeared to dim hope that Mr. Erdogan would seek to build bridges with European partners following a surprisingly narrow win in the vote. Instead, European Union officials may now have to make a swift call on a decision they feared was coming down the road on how to react to a further centralization of power in Mr. Erdogan's hands.

In Europe, there are growing calls to cut off EU accession talks with Turkey yet the bloc fears that doing so would see Turkey respond by slashing cooperation with Europe on a range of areas from stemming the inflow of Syrian refugees to counterterrorism work.

On Monday, the governments in Berlin and Paris urged Mr. Erdogan to reach out to domestic opponents following Sunday's close vote, which international observers said fell short of European standards.



Protesters shouted slogans and lit flares on Monday during a rally in Istanbul against the results of the referendum.

share their concerns. A summit was supposed to have taken place in the spring but was postponed.

Ahead of the referendum, Mr. Erdogan had charged the EU with meddling in Turkey's internal affairs as already-rocky relations with the bloc plummeted further. After European bans on Turkish ministers seeking to rally the "yes" vote abroad, Mr. Erdogan accused Germany and the Netherlands of Nazi-era practices.

Turkish officials had said relations with the EU could be tested after the referendum but predicted there would be no move that could affect ties with Washington.

The Trump administration had been hoping to win Mr. Erdogan's backing to deepen its cooperation in the fight against Islamic State with Syrian Kurdish forces that Turkey consider terrorists.

However, Washington's reaction to Mr. Erdogan's win was very cool. The State Department didn't congratulate the Turkish president and noted the OSCE's vote concerns. State Department spokesman Mark Toner urged Turkey "to protect the fundamental rights and freedoms of all its citizens."

"We encourage voters and parties on both sides to focus on working together for Turkey's future and to maintain a meaningful political dialogue," Mr. Toner said.

—Felicia Schwarz
and Margaret Coker
contributed to this article.

The head of the election observers mission of the Organization for Security and Cooperation in Europe, Tana de Zulueta, said Monday that while the election was technically "well administered," the "legal framework was inadequate for the holding of a genuinely democratic process." She added, "late changes in counting procedures undermined important safeguards and was in contradiction with the law."

German Chancellor Angela Merkel in a joint statement with her foreign minister said: "The tight referendum result

shows how deeply divided Turkish society is, and that means a big responsibility for the Turkish leadership and for President Erdogan personally."

France's foreign ministry called on Turkey to uphold its international commitments, including its Council of Europe obligations to respect the rule of law and the separation of powers. Officials reminded Mr. Erdogan, who in his victory speech on Sunday night talked of reviving the death penalty, that Turkey also must stay in line with the European Convention of Human Rights,

which bans the death penalty.

The central question for European officials now is whether to continue, freeze or even end more than a decade of EU accession talks with Turkey. The negotiations have made little progress recently but EU officials had been keen before Sunday's vote to leave the ball in Mr. Erdogan's court on whether to continue the talks.

However, with the issue of the death penalty and Mr. Erdogan signaling he will apply his new constitutional powers to the full, the EU may be forced to make a decision.

On Monday, a cross-party group of EU lawmakers voiced their concerns about the allegations of irregularities during the vote. More broadly, they warned in a statement that "the centralization of power through an executive presidency will deeply impact EU-Turkey relations."

The lawmakers said by handing additional powers to the president, Turkey is in danger of breaching the basic conditions for EU membership.

The group urged EU leaders to meet with the Turkish government as soon as possible to

Council, where officials recommended an extension of the state of emergency.

International election observers in Ankara issued a preliminary report alleging an array of irregularities, including what they called a contravention of electoral law, during the referendum campaign and the ballot-counting. The group, from the Organization for Security and Cooperation in Europe, said while the vote was "generally well administered," the referendum fell short of European standards and Turkish laws.

The U.S. State Department noted the OSCE's concerns about the vote, including voting-day irregularities and "an uneven playing field during the difficult campaign period."

The OSCE's report criticized the unusual decision

Sunday evening by the high electoral board to count all ballots despite numerous complaints during polling hours that voters had received ballot forms and envelopes lacking an official seal.

"While the technical aspects of the referendum were well administered and referendum day proceeded in an orderly



President Recep Tayyip Erdogan hailed the unofficial results.

manner, late changes in counting procedures undermined important safeguards and was in contradiction with the law," the head of the OSCE election observer mission, Tana de Zulueta, said.

Mr. Erdogan rejected the observers' conclusions.

"Know your place. We won't see, hear, or know the politically motivated reports you prepare. We will continue on our path," Mr. Erdogan said in his speech.

Turkey's Ministry of Foreign Affairs also criticized the report. "Saying that the referen-

dum fell below international standards is unacceptable," the ministry said, accusing the observers of bias.

Calls to Turkey's high electoral board rang unanswered Monday afternoon. Earlier Monday, the board's chairman said the contested ballots were valid, raising questions about what legal paths exist for the opposition to successfully contest the vote. The board would rule on any formal objections, and its decisions can't be appealed.

The OSCE report also highlighted a growing concern

about the integrity of the justice system in Turkey following a failed coup attempt in July 2016.

The electoral boards are administered by judges. Three of the 11 members of the high electoral board and the chairs of 221 lower electoral boards were purged and replaced since July, the observation mission said. Approximately one third of all judges have also been dismissed or detained in the same period.

The observers criticized Turkish electoral boards as lacking transparency, with board sessions closed to the public. Opposition parties weren't adequately represented on local polling station teams, the report said.

The referendum campaign,

meanwhile, unfolded on an "unlevel playing field," the observers said. Provincial governors used state-of-emergency laws to restrict freedom of assembly and expression, and restrictions on the media prevented opposition voices from reaching voters, they said.

Before the OSCE report was published, the main opposition Republican People's Party, or CHP, called for the referendum

results to be annulled. CHP officials were also planning to issue appeals to municipal, provincial and central electoral boards contesting as much as 60% of the votes.

Turkey will shift to the new presidential system after elections in November 2019, but two changes take effect before then. The referendum's approval makes the president immediately eligible to join a political party, allowing Mr. Erdogan to formally retake the helm of his Justice and Development Party after having resigned in 2014 to take the presidency. And 40 days after the results are officially published, a council that governs Turkey's judiciary will have fewer members, whose appointments will come under the control of the president and parliament.

According to the vote tallies, most voters rejected the referendum in Turkey's three largest cities, including Istanbul, Mr. Erdogan's hometown and Turkey's financial and cultural center, and Ankara, the capital. Mr. Erdogan or his party carried Istanbul, where he was previously mayor, in every election since 2002.

VOTE

Continued from Page One

ties. International election observers said the referendum campaign unfolded on "an unlevel playing field," citing the purge since July of some members of the high electoral board and their local units.

Mr. Erdogan's rivals say more than 2.5 million votes could have been compromised and said they were preparing formal objections to the outcome. It wasn't clear how they had arrived at that figure. While official vote totals won't be announced for at least 10 days, the unofficial results showed the referendum was rejected by a majority of residents of Istanbul and Ankara, Turkey's largest cities.

Approximately 85% of Turkey's 55 million eligible voters cast ballots in Sunday's referendum, considered one of the most important votes since the republic's founding in 1923.

Amid growing disquiet about the vote's legitimacy, the president on Monday presided over meetings of the cabinet and the National Security

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WORLD NEWS

EU Probes How Critics Use Its Funds

Three years ago, French presidential candidate Marine Le Pen was warned that her National Front party would be at financial risk unless its lawmakers could squeeze more funding from the European Parliament.

By Noemie Bissere in Paris and Laurence Norman in Brussels

"In the years to come...we will get by only if we accumulate savings thanks to the European Parliament and get additional transfers," party treasurer Wallerand de Saint-Just wrote in an email in June 2014.

The email is part of information gathered by European Union and French authorities that is said to reveal the unwitting role the Parliament may have played in funding the rise of politicians who aim to dismantle the 28-country alliance it serves, such as Ms. Le Pen, who is projected to advance past the first round of voting in the French election on April 23 but fall short of victory in the May 7 runoff.

Over the past decade, the Parliament has provided a platform to the National Front, the UK Independence Party and other anti-EU groups that have struggled to win representation at home. By winning seats in Parliament, these par-

ties gain access to EU money that is in part earmarked for parliamentary assistants but, EU and French investigators suspect, is redirected to domestic political activities.

According to a confidential 2016 report prepared by OLAF, the EU antifraud office, and reviewed by The Wall Street Journal, the National Front has used European Parliament funding to cut hefty checks to senior party officials and confidants of Ms. Le Pen.

In its report, OLAF said that in at least two cases, the actions of Ms. Le Pen and some of her aides could under French law amount to fraud.

OLAF referred its findings to French prosecutors who, a judicial official said Friday, recently requested that the European Parliament lift Ms. Le Pen's immunity. The Parliament is unlikely to lift Ms. Le Pen's immunity before voting begins, because it typically takes months for it to reach a decision in such cases.

Marcel Ceccaldi, a lawyer for Ms. Le Pen, called the OLAF report a "tissue of lies." Ms. Le Pen didn't respond to a request for comment. A second probe of the National Front's payments to assistants is expected to be completed soon.

When Ms. Le Pen was challenged during an April 4 presidential debate about her use of both parliamentary funds and



The European Parliament docks the pay of National Front lawmakers, including Marine Le Pen, to recover allegedly misused funds.

immunity, she struck a defiant tone. "Our assistants work against Europe, and I'm glad," she said.

National Front holds 22 of the 74 seats allotted to France in the European Parliament, but only two of the 577 seats in the French National Assembly. As head of a group of European nationalist parties in the European Parliament, Ms. Le Pen gets a prominent speaking spot during key debates.

That has given her the kind of "legitimacy that her father never had," said Jérôme Lavrilleux, a French EU lawmaker.

EU lawmakers are permitted to spend over €20,000 (\$21,000) a month to pay local and parliamentary assistants

in addition to their own salaries and expenses.

Last year, the European Parliament sought to recover €173,000 from Alliance for Direct Democracy in Europe, a party closely aligned with UKIP. The Parliament said ADDE had misused the funds to help former UKIP leader Nigel Farage in his failed 2015 bid to win a U.K. parliamentary seat. It also suspended a grant of several hundred thousand euros to ADDE. ADDE has challenged the ruling in EU courts, saying the money was legally spent on research.

In recent months, the European Parliament has tightened the rules for funding its members. The Parliament has also started docking the salaries of

several National Front lawmakers, including Ms. Le Pen and her father, to recoup around €1 million in funds it says were misspent on assistants.

The National Front lawmakers deny any misuse and are challenging the decisions in court. The OLAF report details how Le Pen aides juggled their political activities, allegedly drawing hefty salaries at the European Parliament without spending much time working on EU business there.

In 2009, Ms. Le Pen employed Thierry Léger for three months as a parliamentary assistant, the report said. During that period, he continued working as her father's bodyguard, according to Mr. Léger's 2012 autobiography.

In 2011, Ms. Le Pen gave him a new contract that ran from October to December at a monthly rate of €7,237 after taxes, according to the report. The average salary in France was €2,130 a month in 2011, and most European Parliament assistants are paid much less.

In a written response to OLAF, Ms. Le Pen said the 2011 contract was arranged with parliamentary authorities to settle money owed to National Front associates. Parliamentary officials denied any such arrangement, the report said.

Mr. Léger said he has been questioned by police but not charged, declining to comment further.

—Joshua Robinson contributed to this article.

The Quest to Restore an Empire

Anton Bakov has traveled the world looking for a place to revive Russia's Romanov dynasty

BY JAMES MARSON

Anton Bakov says he needs just a few square miles of land to restore the Russian Empire.

The millionaire businessman's search for a place to revive the Romanov dynasty that ruled Russia for 300 years has taken him from nearby Montenegro to the shores of western Africa and a Pacific archipelago 2,500 miles southwest of Hawaii.

"It's the duty of all patriots of Russia who remain faithful to the oath to the empire," says Mr. Bakov, who styles himself archchancellor of the Imperial Throne, a self-declared successor to the empire. "Alas, we are few."

A century after the revolution swept the Romanovs from power, polls show that restoring the monarchy is a minority faith. Russian President Vladimir Putin, for one, isn't in favor, his spokesman says. The Kremlin, which promotes a cautious and sometimes incongruous reverence for Russia's Soviet and imperial pasts, has kept commemoration of the centenary low-key.

Mr. Bakov, a former lawmaker who is now leader of the Monarchist Party of Russia, says that for now, he isn't trying to put the Romanovs back in the Kremlin. But he does want to restore their international legal status.

He created the Imperial Throne in 2011 and signed up 64-year-old German Prince Karl Emich of Leiningen, a scion of the Romanovs, as czar of the micronation. He scouted for land to locate the reborn

empire, and added a business element, aiming to sell parcels of land along with princely titles.

"It has to be profitable, else it won't work," he says.

Not all monarchists are happy about Mr. Bakov's plans. "It's mockery of the very idea of monarchy," said Alexander Zakatov, an aide to Maria Romanova, who styles herself grand duchess and head of the House of Romanov. "It's buffoonery, pure and simple."

Mr. Bakov, a roly-poly 51-year-old with a broad smile, has had business interests from real estate to an airport. He was a lawmaker for a liberal opposition party, but lost his place in parliament in 2007 as Mr. Putin tightened his grip on power. Mr. Bakov registered the Monarchist Party in 2012 after Russian politics unexpectedly opened up a bit. It flopped in local elections, but he then espied a chance to combine three passions: politics, monarchism and foreign adventures.

He recruited Prince Karl, who converted to Orthodoxy, adopted the name Nicholas III and wrote to Mr. Putin asking for land in Yekaterinburg, where Nicholas II and his close family were executed. The goal was to found a city state modeled on Vatican City.

No answer came, so Mr. Bakov widened his search. He bought a plot of land in Montenegro, a Balkan nation popular with wealthy Russians. But the government didn't embrace his empire-building plans. An attempt in



The Terem Palace in the Kremlin in Moscow, the main residence of the tsars in the 17th century. Below, Mr. Bakov and his wife in Kiribati, where he hopes to establish a reborn Russian Empire.

Gambia, in western Africa, also failed.

Mr. Bakov then hit upon a more-outlandish idea in a more-outlandish location: artificial islands in the tiny country of Gambia in western Africa.

That quest started badly. Mr. Bakov recalls how security officials detained him and his wife at the airport for six hours after the saber they brought as a gift for the president aroused suspicion.

The president provided them with a suite in a top hotel, a Bentley and six armed guards. But his apparent enthusiasm for the idea didn't translate into a deal, so the Bakovs flew home.

Last year, Mr. Bakov turned his attention to Kiri-

bati (pronounced Ki-ri-bas), an impoverished former British colony of some 100,000 inhabitants and 33 islands spread over an area as wide

as the U.S. mainland.

Mr. Bakov proposed that three uninhabited islands be given a special status as the Romanov Empire. Wealthy

clients could buy land plots and become princes, thus avoiding taxes, he says. The businessman would channel \$20 million into the budget every year for six years and invest \$230 million on Maldives island building a port, airport, power station and roads. He says the islands, which enjoy temperatures around 90 degrees year round, could become tourist havens.

He persuaded local political and religious leaders to back his plan, fell in love with seafood of all shapes and sizes and even, in the manner of empire-builders of earlier centuries, fended off inquisitive local wildlife when four crabs scurried into his hotel room.

However, opponents of the Kiribati plan appear to have the upper hand. Mr. Bakov says he was ready to sign an agreement when he was there in January. But when the president set off on a boat to inspect the three islands, Mr. Bakov says he "sensed a conspiracy brewing." A minister who used to be an eager drinking companion was unreachable. Then an email arrived from the government rejecting the proposal. The president's office says it was concerned Mr. Bakov wanted sovereign status for the islands, although the businessman says that isn't the case.

Mr. Bakov hasn't given up hope on the Kiribati option, but he is also willing to court serendipity. A recent surprise election defeat ousted the longtime president of Gambia, so Mr. Bakov is trying to pique the new leader's interest.

WORLD WATCH

SRI LANKA

Trash Heap Collapse Kills Dozens in Capital

Rescuers dug through heaps of mud and trash that collapsed onto homes near a garbage dump outside Sri Lanka's capital, killing at least 29 people and possibly burying dozens more.

Hundreds of people had been living in the working-class neighborhood on the fringe of the towering dump in Meethotamulla, a town near Colombo, when the huge mound collapsed Friday night during a celebration of the local new year, damaging

at least 150 homes.

By Monday morning, authorities had pulled 29 bodies from the debris, according to lawyer Nuwan Bopage, who has worked with residents to protest the dump. Authorities were unsure how many more people could be trapped, but about 30 were reported missing, the lawyer said.

The prime minister vowed over the weekend to shut down the dump, which has absorbed much of Colombo's garbage over several years amid heavy construction and renovations in the capital.

—Associated Press

ISRAEL

Palestinian Inmates Begin Hunger Strike

Hundreds of Palestinians in Israeli prisons began a hunger strike on Monday to demand better conditions, in a protest led by a detainee considered a candidate to become a future Palestinian leader.

More than 1,500 of about 6,500 Palestinians held by Israel joined the open-ended protest, activists said, the largest such strike in five years. Their demands included more contact with relatives and an end to Is-

rael's practice of detentions without trial.

The hunger strike was led by Marwan Barghouti, a prominent figure in Palestinian President Mahmoud Abbas's Fatah movement. Over the years, successive polls have indicated Mr. Barghouti is the most popular choice among Palestinians to succeed the 82-year-old Mr. Abbas who has not groomed a political heir.

Mr. Barghouti was arrested in 2002 for his role in a violent Palestinian uprising against Israeli occupation and is serving multiple life terms.

—Associated Press



Family members deliver the coffins of their dead in Colombo.

ISHARA S. KODIKARA/AGENCE FRANCE PRESSE/GETTY IMAGES

ISHARA S. KODIKARA/AGENCE FRANCE PRESSE/GETTY IMAGES

WORLD NEWS

Pence Gives a Warning to North Korea

Vice president says Pyongyang shouldn't underestimate the resolve of the U.S.

BY JONATHAN CHENG

SEOUL—U.S. Vice President Mike Pence warned North Korea not to push President Donald Trump, calling the recent American military strikes on Syria and Afghanistan an example of Washington's strength.

"North Korea would do well not to test his resolve or the strength of the armed forces of the United States," Mr. Pence said on Monday, after making an unannounced visit to the demilitarized zone that divides the Korean Peninsula.

Speaking alongside South Korea's acting president, Hwang Kyu-ahn, at his residence in Seoul, Mr. Pence pointed to recent unilateral airstrikes by the U.S., first with 59 Tomahawk missiles on an air base in Syria and later with one of the U.S.'s largest non-nuclear bombs in Afghanistan as a warning to North Korea.

"Just in the past two weeks, the world witnessed the strength and resolve of our new president in actions taken in Syria and in Afghanistan," Mr. Pence said, underscoring the "message of resolve" that he said he was bringing to Northeast Asia.

Mr. Pence, whose trip to South Korea follows those of Defense Secretary Jim Mattis and Secretary of State Rex Tillerson, emphasizes the priority that Mr. Trump has put on North Korea early in his administration.

The U.S. recently said it was



Vice President Mike Pence visited on Monday the village of Panmunjom in the demilitarized zone that divides the Korean Peninsula.

sending the aircraft carrier USS Carl Vinson toward the Korean Peninsula amid concerns about possible new weapons tests by North Korea.

Pyongyang's Korean Central News Agency responded to that decision on Monday by warning that North Korea would respond with a nuclear strike if "a single shell" was fired into the country's territory.

Under leader Kim Jong Un, North Korea's nuclear and missile programs are nearing the stage where the isolated country can threaten the continental U.S. with a nuclear-tipped long-range missile, experts say. Weeks before his inauguration, Mr. Trump said on Twitter that that "wouldn't happen."

But Pyongyang has pushed ahead with its missile program in recent weeks, testing eight missiles in five separate tests over the past 10 weeks, including one that fizzled out after it was launched on Sunday—while Mr. Pence was en route to Asia, as he noted on Monday.

A day before that test, North Korea had paraded what appeared to be at least one new intercontinental ballistic missile through the streets of central Pyongyang.

On Monday, Mr. Pence put the blame squarely on Pyongyang for the decades-long standoff over its weapons programs.

Over the course of more than two decades, Mr. Pence said, "every step of the way, North Korea answered our overtures with willful deception, broken promises and nuclear and missile tests."

Mr. Pence also directed some ire at China, a longtime ally of North Korea, who he

said had wrongly pressured South Korea for deploying a U.S. missile-defense system to counter North Korea.

Mr. Pence said the U.S. was troubled by what he called China's economic retaliation against South Korea for deploying the missile-defense system. Beijing opposes the missile system, partly because of its powerful radar, which reaches deep into northeast China.

"If China is unable to deal with North Korea, the United States and our allies will," he said.

JUNG YEON-JE/AGENCE FRANCE PRESSE/GETTY IMAGES

Asked about the remarks at a press briefing on Monday in Beijing, Chinese foreign-ministry spokesman Lu Kang said: "The effort that China has made to solve the peninsula's nuclear problem is obvious to all."

He added, "China is not the root of the problem."

Earlier in the day, at the DMZ, Mr. Pence warned North Korea that its military "should not mistake the resolve of the United States of America to stand with our allies," according to a pool report. "America has always sought peace through strength."

He also repeated the Trump administration's position that "all options are on the table" in dealing with North Korea.

During his meeting with Mr. Hwang, Mr. Pence called the U.S. alliance with South Korea ironclad and immutable, in words that appeared aimed to reassure a key ally.

"My message to the people of South Korea is this: We are with you 100%," Mr. Pence said.

The remarks follow a presidential campaign in which Mr. Trump demanded that South Korea and Japan pay more to support the tens of thousands of U.S. troops based in the two countries, comments that spurred worries in Seoul and Tokyo that Mr. Trump would de-emphasize the alliance.

"Under President Trump's leadership, I know our alliance will even be stronger," Mr. Pence said on Monday. He also promised that the U.S. would consult with South Korea and its leadership as it made decisions on how to proceed with North Korea.

—Lingling Wei in Beijing contributed to this article.

South Korea Ex-President Is Indicted for Bribery

BY EUN-YOUNG JEONG
AND JONATHAN CHENG

SEOUL—South Korean prosecutors indicted former President Park Geun-hye on 18 charges including bribery and coercion, taking aim at the central figure in a corruption scandal that has led to more than 30 indictments of high-profile government and business figures, including Samsung Group's de facto leader, Lee Jae-yong.

On Monday, South Korean prosecutors also indicted Shin Dong-bin, chairman of **Lotte Group**, South Korea's fifth-largest *chaebol* (conglomerate), on bribery charges. Mr. Shin is the second conglomerate head to be indicted in the scandal after Samsung's Mr. Lee, whose trial began this month. Lotte said it was "disappointed" by the indictment of Mr. Shin, saying the contributions were part of a corporate social-responsibility effort.

The charges against Ms. Park—centering around abuse of authority, coercion, leaking confidential government information, bribery and intervention-

ing in hiring—land just five weeks after she was removed from office by an 8-0 vote of the Constitutional Court. That vote, which stripped her of immunity from criminal prosecution, followed the National Assembly's overwhelming vote in December to impeach her.

For Ms. Park, who has been behind bars for more than two weeks awaiting an indictment, the formal charges set the stage for a trial that expected to begin in the coming weeks.

Ms. Park has previously denied wrongdoing. A snap election for a new president is set for May 9.

Prosecutors have said Ms. Park was the key player in a scandal that erupted after a local broadcaster reported in October that the president had shared classified government documents with a close friend, Choi Soon-sil. According to prosecutors, Ms. Choi was given 47 classified documents and used her access to the president to meddle in state affairs and to enrich herself.

They have said Ms. Park colluded with Ms. Choi and wrongfully exercised her au-

thority as president to extract 77.4 billion South Korean won (\$68 million) from 18 conglomerates for donations to two entities linked to Ms. Choi. Ms. Choi has denied wrongdoing.

Prosecutors said Monday that new evidence shows the two solicited an additional 7 billion won from Mr. Shin, the Lotte chairman, and 8.9 billion won from Chey Tae-won, chairman of South Korea's No. 3 chaebol, SK Group. The two conglomerates were also among the original 18.

According to prosecutors, Messrs. Shin and Chey, whose companies had been stripped of lucrative licenses to operate duty-free shops, had asked Ms. Park to grant new ones. In November, prosecutors raided the offices of SK and Lotte in connection with the scandal.

Lotte said the 7 billion won was sent back in a month, while SK said it ended up not providing the additional funds. Mr. Chey hasn't been indicted. An SK spokesman declined to comment on the allegations.

It is unclear how long it will be before a verdict. Ms. Park can be detained for up to six

months without one. According to Seoul Central District Court, more than a dozen cases tied to the scandal are under way.

In any case, the scandal will cast a shadow over the presidential campaign, which is expected to hinge on whether South Korean voters want to continue Ms. Park's policies, including a hard line on North Korea and a reliance on the chaebols to drive economic growth. Ms. Park also pushed through a controversial deal with Tokyo in late 2015 to resolve historical disputes between the two.

Moon Jae-in, who lost to

Ms. Park in the 2012 election, is the leading candidate to replace her. He has called for increased economic cooperation with North Korea, overhauls of the four biggest family-controlled chaebols—Samsung, Hyundai Motor, SK and LG—and a government expansion that would create 810,000 new government jobs.

Mr. Moon rode to the top of the polls on wave of public anger—large street demonstrations in central Seoul helped push Ms. Park out of office. But in recent weeks his lead has been eroded by the swift rise of Ahn Cheol-soo, a former po-

litical ally. He has struck a chord with voters looking for a centrist alternative to Mr. Moon, a polarizing figure mistrusted by many conservatives.

In an interview earlier this year, Mr. Moon said that he would consider visiting Pyongyang before he visits Washington if that would help resolve the North Korea issue. He later said his remarks were taken out of context. Mr. Moon, who was an aide to Roh Moo-hyun, left-leaning president from 2003 to 2008, also said in a recent book that South Korea should learn to say no to the U.S., a close ally.



Posters in Seoul that read 'arrest' show ex-President Park, her aides and businessmen close to her.

YAHN YOUNG-JEON/ASSOCIATED PRESS

China to Build a City as a Cure for Overcrowding in Beijing

BY DOMINIQUE FONG

XIONGAN NEW AREA, China—When the Chinese government announced plans this month for a new megacity a two-hour drive south of Beijing, gold fever erupted.

Fan Yushou, a 36-year-old businessman from Chongqing, about 1,100 miles away, hopped in his car and drove for 20 hours. Home prices in the area more than doubled after the April 1 announcement. Local media reported one Beijinger arrived with a trunk full of cash to buy apartments.

They all wanted a piece of the Xiongan New Area, billed in state media as an "ecocity" led by innovation and high tech set to rise from a swath of farmland and plastics factories—the epitome of the model of growth China aspires to.

The shot in the arm from building Xiongan—2 trillion yuan (\$290 billion) of public and private investment over the next 15 years, according to a Morgan Stanley estimate—is likely to benefit old-style economic players and sectors.

Farmland meets urban sprawl in northern Hebei province.

The construction will require large amounts of steel, glass and cement. More than 30 state-owned firms, including China Railway Construction and mining firm Metallurgical Corp. of China, have pledged involvement. China Shipbuilding Industry Corp. said it would move its headquarters to the Xiongan area.

Not joining the hype: Private businesses in the area, which fear they will have to give way

to the influx of state firms, usually the first to benefit in major Beijing undertakings, and often at the expense of entrepreneurs.

"We worry about our future since Day One after the plan was announced," said Wang Junsheng, the 47-year-old owner of a plastics company in the area. "If the government decides...to move us out, that will definitely be the end of [the area's] businesses."

State media laud Xiongan as

a new version of the southern city of Shenzhen or Shanghai's Pudong district, which both emerged in times of economic transition. Shenzhen evolved from a sleepy village to first an export factory hive and more recently a tech megalopolis packed with talent and private companies. Pudong is now a hub of finance and trade.

Other projects to build cities from scratch have misfired. The \$91 billion project of Caofeidian,

a deep-water port built on reclaimed land, is mired in debt, full of abandoned buildings. Its steel mill is unprofitable. Government investment projects in Binhai New Area in Tianjin have since stalled. Both Binhai and Caofeidian are near Xiongan.

While Shenzhen was built to draw foreign investment and take advantage of spillover from nearby Hong Kong, it is unclear what would make Xiongan, in a relatively isolated

part of Hebei province, throb with economic vibrancy.

There is of course the proximity to Beijing; a planned new rail line that will cut the commute there down to an hour. And a new international airport is being built midway between Xiongan and the center of Beijing.

Xiongan's creation comes at a time when the congested capital is looking to relocate businesses and as many as two million people and provides a convenient cure for Beijing's overcrowding. It also offers an economic showcase project as President Xi Jinping is looking to solidify his hold on power at a Communist Party congress at the end of the year.

Whether that is a recipe for success remains to be seen. In a project like Xiongan, "what really matters is whether a new growth model could emerge from there," said Larry Hu, a China economist for Macquarie Group. "You have to let market forces evolve like Shenzhen," he said.

—Liyan Qi contributed to this article.



Source: Oak Ridge National Laboratory's LandScan population data (population density)

THE WALL STREET JOURNAL

U.S. NEWS

House Race in Georgia Tests Democrats

Effort tries to make Trump focus in contest for Atlanta-area seat held by GOP for decades

By NATALIE ANDREWS

The special election Tuesday for a Georgia House seat will test whether newly energized Democrats can wrest from the Republicans a seat the GOP has held since Jimmy Carter was in the White House.

Democrats have raised unusually high sums in the race for Georgia's Sixth District, which former Rep. Tom Price vacated after President Donald Trump nominated him to be secretary of the Department of Health and Human Services. They aim to make the election a referendum on the president's first few months in office, while Republicans hope to force Tuesday's election to a runoff so its voters can unite around a single GOP candidate. Republicans have held the seat since Newt Gingrich won it in 1978.

Though polling has been sparse, heading into the race, Democrat Jon Ossoff, a documentary filmmaker and former congressional staffer, appears to have a commanding lead. "We don't have to wait until 2018—or 2020—to fight back against Donald Trump," he says on his website, asking visitors for donations. And people have given—the campaign raised \$8.3 million in the first quarter of 2017.

Mr. Ossoff is part of a field of 18 candidates, including 11 Republicans, in the election. The top two finishers in Tuesday's race, regardless of party,



ERIK S. LESSER/EUROPEAN PRESSPHOTO AGENCY

Democrat Jon Ossoff is among the candidates vying to fill the House seat Tom Price vacated when he joined President Donald Trump's administration as secretary of the Department of Health and Human Services.

will face one another in a June 20 runoff unless the top candidate wins more than 50% of the vote.

Leading the Republicans in a poll released Friday are Karen Handel, a former Georgia secretary of state, and former Republican state Sen. Judson Hill.

A poll of likely primary voters published Friday by Atlanta-based political firm Opinion Savvy puts the Democrat at 41.5%, followed by Ms. Handel at 21.2% and Mr. Hill at

11.3%.

A Republican aide involved in the race said he feared recent polls underestimated Democratic support because they aren't counting low-propensity voters who he expected would turn out for the competitive election and skew Democrat.

If the election proceeds to a runoff, the race resets. GOP voters would likely coalesce around the sole remaining candidate facing Mr. Ossoff. The National Republican Congressional Committee, which has focused on engaging Republican voters without backing a single candidate, would jump in to support the Republican.

Democrats need to pick up 24 seats in the 2018 midterms to win the House majority, and the district in suburban Atlanta is widely viewed as their best chance to win a seat in the series of special elections to replace House members who joined the Trump administration.

Republicans are favored in contests next month in Montana and South Carolina. A Republican won a Kansas special election last week.

On Sunday night, Mr. Trump posted on Twitter: "The recent Kansas election (Congress) was a really big media event, until the Republicans won. Now they play the same game with Georgia-BAD!"

Democrats hope the evolving demographics in the Georgia district favor Mr. Ossoff, especially as he isn't facing a

long-term incumbent well-known to voters.

Mr. Trump barely beat Democrat Hillary Clinton in the district in the presidential election, though Mr. Price won re-election in November with 62% of the vote.

A victory on Tuesday would buoy Democrats and give them hope ahead of the 2018 vote. But Republicans note 97% of Mr. Ossoff's first-quarter fundraising haul came from supporters outside the state, which they say is a sign that the energy may not be in his own district.

"You could just close your eyes and rip a page out of the Yellow Pages and pick a name and let them run unopposed and give them \$10 million and they'd win the primary on Tuesday," said Corry Bliss, executive director of the Congressional Leadership Fund, the House GOP leadership's super PAC fundraising committee. The group has spent \$3 million attacking Mr. Ossoff's record and has 90 staff members knocking on doors in the district.

The special election is also a test of how Mr. Trump's agenda is being received in districts with a high percentage of voters holding bachelor's degrees.

The district is one of the best-educated congressional districts in the country, making it an outlier for the Republican Party. In 2016, Mrs. Clinton won the top-10 most educated districts—with the exception of Georgia's Sixth District. To press that advantage, the Democratic Congressional Campaign Committee, House Democrats' campaign arm, is aiming advertising at college campuses.

Video of Murder Places Facebook in Spotlight

By DEEPA SEETHARAMAN

The video of an apparent murder posted on Facebook has brought renewed attention to the social-media company's handling of content on its platforms.

On Sunday, 37-year-old Steve Stephens posted a video of himself allegedly approaching an older man and shooting him in the head. He later went on Facebook Live, the broadcasting tool, to talk about this and other alleged crimes. It took Facebook several hours to remove the posts, according to various media reports.

"This is a horrific crime, and we do not allow this kind of content on Facebook," a spokeswoman for Facebook Inc., of Menlo Park, Calif., said in a statement. "We work hard to keep a safe environment on Facebook, and are in touch with law enforcement in emer-

gencies when there are direct threats to physical safety."

The video is among the most extreme examples of Facebook being used to promote or showcase violence. According to a tally by The Wall Street Journal, people have used Facebook Live to broadcast more than 60 sensitive videos, including murder, suicides and the beating in January of a mentally disabled teenager in Chicago.

But several violent episodes posted on Facebook over the past year have called into question the company's readiness to handle sensitive or violent content broadcast live on its platform, the subject of a Page One article in the Journal last month.

Current and former employees at Facebook have said its content-moderation teams are trained to remove offensive or violent live videos, such as beheadings and pornography. As

of earlier this year, live-video reports were handled by a small team of contractors working around the clock.

If a video hits a certain number of concurrent views, it is automatically sent to the contractors for review, according to people familiar with the matter and Facebook. But Facebook's guidelines are still evolving.

On Monday, Cleveland police asked residents in Pennsylvania, New York, Indiana and Michigan to be on alert for the suspected murderer.

Federal, state and local law-enforcement agencies were coordinating a search for Mr. Stephens, who allegedly killed Robert Godwin Sr. in Cleveland on Sunday. The Cleveland Division of Police said a murder warrant had been issued for Mr. Stephens and that they weren't aware of a motive for the killing.

"We're asking the public's

help in finding this guy," said Cleveland Police Chief Calvin Williams.

Mr. Williams said detectives spoke to Mr. Stephens on Sunday but were unable to persuade him to turn himself in. He said Mr. Stephens didn't have a criminal record.

In the video, Mr. Stephens gets out of his car and approaches Mr. Godwin, 74, who is walking on the sidewalk and carrying a plastic shopping bag. Mr. Stephens says the name of a woman and then says to Mr.

Godwin, "She's the reason why all this about to happen to you."

In the video, Mr. Stephens asks Mr. Godwin how old he is before appearing to point a gun at him. Mr. Godwin raises the shopping bag in front of his face as he tries to defend himself.

Mr. Stephens made multiple posts on Sunday, including broadcasting on Facebook Live. In one video clip, he says he has had a lot of anger and frustration. "I'm at the point where I snapped," he said. Mr. Stephens has claimed he killed

other people, but police hadn't verified those claims.

In a press conference Monday afternoon, local officials announced a \$50,000 reward for information leading to the capture of the suspect.

In a 2015 bankruptcy filing in U.S. Bankruptcy Court in the Northern District of Ohio, Mr. Stephens said he was about \$35,000 in debt. He said he had been a social worker for six years in Cleveland.

—Kris Maher contributed to this article.



JB REED/BLOOMBERG NEWS

Randal Quarles is expected to join the Fed as a banking regulator.

stepped down in April, served as the de facto vice chairman for supervision. The position is one of three vacancies on the Fed board.

Filling the position will give the Trump administration a significant opportunity to shape its financial regulation agenda.

Mr. Quarles said in a 2015

interview with Bloomberg TV that repealing the Dodd-Frank law altogether is "politically very difficult," but that significant changes to the law were worth considering. In some respects, he said, the regulatory overhaul was "not ambitious enough," while in other ways

it was overly ambitious."

Mr. Quarles is seen as less

ideological than other candidates the Trump administration had considered for the job.

That suggests the White

House could take a more con-

sidered approach to overhauling

the regulatory architecture

put in place by the Obama ad-

ministration and Mr. Tarullo.

In the same interview, Mr.

Quarles said he supported ef-

orts to create more predict-

able monetary policy by hav-

ing the Fed follow a simple

rule, or formula, to set inter-

est rates that uses measures

of inflation and economic

slack. At the time, he said the

Fed's approach to monetary policy was increasing uncertainty in the markets. "An important element of Republican thinking about monetary policy currently is that it ought to be more rules based," he said in the 2015 interview.

Officials in the Trump administration have said filling the vice chairman's job is a priority and broadened their search for the job in recent weeks. A leading contender for the position, GE Capital executive David Nason, took himself out of the running last month.

Mr. Quarles served at Treasury from 2001 to 2006, includ-

ing as undersecretary for

domestic finance in his final

two years at the department.

He was a partner of the Car-

lyle Group, one of the world's

largest private-equity firms.

He also served at the Treasury

in the administration of George H.W. Bush.

At least at the outset, Mr.

Trump's nominee probably

won't be able to exercise sig-

nificant influence over the

largest U.S. financial firms in

the same fashion as Mr. Tar-

ullo. Major regulatory deci-

sions will have to be approved

by Fed Chairwoman Janet Yel-

len, a defender of the Fed's

new regulatory regime. She

has said she intends to serve

out her term through February

2018, and Mr. Trump hasn't

ruled out reappointing her.

Kushner Is in Talks To Sell His Tech Stake

By PETER GRANT

WiredScore was valued at \$5 million to \$25 million.

Before the election, Mr. Kushner was best known for his real-estate investments through his family-controlled company. But he and other family members also invested in technology firms like WiredScore.

Launched in 2013, WiredScore evaluates office buildings for the speed and reliability of their internet connections. The firm got early support from then-Mayor Michael Bloomberg as part of his efforts to grow New York as a technology hub.

Earlier this year, Mr. Kushner said in a federal disclosure form that he was a managing member of WiredScore's owner, Broadband Proliferation Partners LLC. The form, which covered a bit more than one year, listed income from Broadband as \$4.5 million and stated that Mr. Kushner was "in the divestment process" with Broadband.

Richard Painter, the chief White House ethics lawyer under George W. Bush, said he would recommend that Mr. Kushner not be involved in negotiating the sale of his assets.

A White House spokeswoman didn't return calls for comment.

U.S. NEWS

Graveyard's Revival Sparks Controversy

BY JACOB GERSHMAN

For a Gulfport, Fla., woman, it started with a single grave.

With a shovel and a broom, Vanessa Gray walked into Lincoln Cemetery, a historically black graveyard near her home, in December 2015 and cleared away dirt and grass blotting out the burial ground of a long-dead local minister.

Over time, 23-year-old Ms. Gray started restoring other plots at the neglected cemetery, established in 1926 on a swampy tract of land on the other side of the tracks from an all-white cemetery in Pinellas County, near St. Petersburg, Fla.

She unearthed headstones, pulled weeds, mowed grass, and cleared away vines, pepper trees and scrub palms by the truckload. She picked up beer cans, tires, tarps and needles littering the nine-acre property.

A year later, she and a cadre of volunteers she recruited repaired hundreds of graves at the cemetery—one of the two in the lower Pinellas peninsula where black residents could bury their dead during the era

of segregation. Ms. Gray, who is white, also obtained a deed to the whole property from the cemetery's former owner.

At this point, the restoration turned into threats of litigation as a potential legal battle has begun to brew over the cemetery's fate.

Greater Mt. Zion AME Church, a black congregation in St. Petersburg, is contesting Ms. Gray's ownership. The Rev. Clarence Williams, the congregation's pastor, said he appreciates Ms. Gray's effort to rescue the cemetery from neglect, but said his organization holds the valid deed. He said the cemetery should belong to the St. Petersburg area's black community.

"Why would a young, white girl want to own a black cemetery with no resources to sustain it?" Mr. Williams said. "This isn't just about pulling weeds and cleaning up. It's about telling the story of those buried there. These cemeteries exist as the result of Jim Crow and the egregious laws," he said, referring to the racial caste system in the South from the 1870s through the 1960s.

Ms. Gray said she has

proven herself as a capable steward after the nonprofit organization she founded last year acquired the title. "When it comes to everyday maintenance and being out there," she said, she and her fellow volunteers are "the only ones maintaining the property."

The two sides have retained lawyers and say they are prepared to go to court.

Ms. Gray said her interest in the cemetery was sparked in 2015 while driving by the property and seeing its dilapidated state. She recalls soon returning to find dozens of headstones piled up by a tree and some burial vaults caved in, exposing remains.

"I had no idea it was a black cemetery when I started this," said Ms. Gray, who works as a waitress. "It was just a cemetery I visited when I was a little girl." Ms. Gray said the cemetery was in a state of decay even then.

All told, more than 6,000 people are interred in Lincoln Cemetery, including hundreds of veterans and a small number who fought in the Civil War.

By the 1950s, the cemetery



Vanessa Gray brushes off a grave at all-black Lincoln Cemetery in the St. Petersburg, Fla., area.

had fallen into disrepair, according to historians. "A lawn mower is the method for finding some resting places," read a local newspaper article from the 1960s headlined: "Lincoln Cemetery: Rest in Rubbish."

For decades the Alford family, heirs to a headstone manufacturer, owned Lincoln Cemetery and the land. But the family sold off the remaining plots years ago while upkeep expenses grew. In 2009, Richard Alford and his late wife sold the cemetery to an Atlanta man, Sarlie McKinnon III, who has family members bur-

ied at Lincoln. But in February, at Ms. Gray's request, Mr. Alford conveyed the land to her through a quitclaim deed, a legal document used to transfer property interest.

While Mr. McKinnon acquired the cemetery through a stock transfer, Ms. Gray's attorney said Mr. Alford still possessed control of the land. That preserved Mr. Alford's authority to sign the deed, her lawyer says.

Mr. McKinnon couldn't be reached for comment.

Tamara Felton-Howard, a lawyer retained by the church,

says Mr. Alford lacked the authority to sign the deed. And in March, a charity affiliated with the church obtained its own quitclaim deed signed by Mr. McKinnon.

The church has applied for a grant from the county to support the cemetery. In March, the Pinellas County Board of Commissioners said the grant money was on hold until the dispute was resolved.

Ultimately, a court may have to sort out which deed is valid. "We are looking at litigation at this point," Ms. Felton-Howard said.

Arkansas Seeks to Move Ahead With Executions

BY JACOB GERSHMAN

Arkansas officials are contesting legal rulings that blocked the state from carrying out its plan to put to death at least half a dozen inmates within a span of days.

The Arkansas attorney general's office is asking a federal appeals court in St. Louis to vacate a federal judge's Saturday order that put a series of back-to-back executions on hold. U.S. District Judge Kristine Baker granted eight condemned inmates a preliminary injunction over concern about the state's lethal-injection protocol.

At issue is the drug, midazolam, that will be used in the executions. It is supposed to anesthetize the inmate from the pain of two other drugs in the lethal-injection cocktail. Lawyers for inmates have argued that midazolam is too unreliable as a sedative, creating an "intolerable risk" of pain that violates the Eighth Amendment's ban on cruel and unusual punishment.

The legal showdown came in the final days before the first of the executions is scheduled to take place on Monday. In February, Republican Gov. Asa Hutchinson scheduled eight ex-



enough to cross their paths. Their guilt—and the justice of their sentences—is beyond dispute," her office wrote.

Delaying the executions "by even a few days—until after Arkansas' supply of midazolam expires—will make it impossible" for Arkansas to carry out the sentences, the emergency motion stated.

The state told the appeals court that Judge Baker's concerns with midazolam lacked sufficient scientific evidence and relied on a "few anecdotal accounts of executions in other states."

"We're hoping the Eighth Circuit affirms Judge Baker's ruling," said Jeffrey Rosenzweig, an Arkansas attorney who represents three of the inmates.

Originally, the state planned to execute eight men in 11 days. The figure dropped to seven after a federal judge stayed the execution of Jason McGehee because his execution was scheduled too soon after a state parole board had recommended clemency.

The state's Supreme Court also halted the execution of another inmate, convicted murderer Bruce Ward, whose lawyers questioned his sanity.

If the Eighth Circuit reverses the injunction, it alone wouldn't give the state a green light to proceed with the other executions.

The state must also knock down a temporary restraining order imposed by Pulaski County Circuit Judge Wendell Griffen in response to a lawsuit by pharmaceutical company McKesson Medical-Surgical Inc.

In a complaint, McKesson said it was misled by Arkansas when it supplied the state with another lethal-injection drug.

The company has since withdrawn its complaint, but Judge Griffen's order still stands.

The state has asked the Arkansas Supreme Court to reverse it and throw him off the case.

The state's appeal noted that on Friday, the same day Judge Griffen issued his ruling, he participated in anti-death-penalty rallies. At one protest in front of the governor's mansion, he was seen strapped to a cot in a simulation of a condemned prisoner on a gurney.

"Judge Griffen's conduct...makes it crystal clear that he cannot be considered impartial in matters related to the death penalty," the attorney general's office wrote.

U.S. WATCH

ECONOMY

Home-Builder Gauge Slips but Stays Strong

A gauge of U.S. home-builder confidence declined in April but remained elevated headed into the spring.

The National Association of Home Builders on Monday said its housing-market index fell 3 points to a seasonally adjusted 68 in April. It was 71 in March, the strongest reading since June 2005.

The index measures builder confidence in the market for new single-family homes.

Figures over 50 mean more builders see conditions as good than bad.

—Ben Leubsdorf

SUPREME COURT

Immigrants' Appeal on Deportation Denied

The Supreme Court rejected an appeal from detained immigrant mothers and their children who claim they will be persecuted if they are returned to their Latin American homelands.

The justices left in place a lower-court ruling that said the families didn't have a right to contest deportation in federal court.

Judge Baker wrote that the risk of pain is "exacerbated

when considering the fact that the state has scheduled eight executions over 11 days, despite the fact that the state has not executed an inmate since 2005."

Her 101-page opinion also weighed whether a firing squad, an execution method not permitted in Arkansas, might be a better alternative to lethal in-

jection.

Arkansas Attorney General Leslie Rutledge's office filed an emergency appeal of the injunction to the Eighth U.S. Circuit Court of Appeals, which has yet to rule.

"Appellees brutally murdered young mothers, children, and men who were unfortunate

enough to cross their paths. Their guilt—and the justice of their sentences—is beyond dispute," her office wrote.

Delaying the executions "by even a few days—until after Arkansas' supply of midazolam expires—will make it impossible" for Arkansas to carry out the sentences, the emergency motion stated.

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The company has since withdrawn its complaint, but Judge Griffen's order still stands.

The state has asked the Arkansas Supreme Court to reverse it and throw him off the case.

Warrants Shed Light on Probe of Prince's Death

BY KRIS MAHER

Nearly a year after Prince's death from an accidental drug overdose, investigators on Monday released 11 search warrants that opened a new window on the investigation into the source of powerful opioids found in his system and at the scene of his death.

The search warrants indicate that investigators have focused attention on a longtime bodyguard and a Minneapolis-area physician who prescribed pain medication to Prince shortly before his death.

The musician was found at his Paisley Park residence outside Minneapolis on April 21, 2016, with prescription painkillers in his possession. He was 57 years old and died on the day he was set to meet with the son of a well-known addiction specialist. An autopsy found that he died from an accidental overdose of the synthetic opioid fentanyl.

Investigators have tried to discover who provided those drugs to Prince. The investigation, led by the Carver County Sheriff's Department, is ongoing, and officials didn't provide an update Monday. The search warrants, from April through September 2016, were released following an October court order.

Police arriving at Prince's home the day he died found more than 100 pills in various locations, according to a search warrant from April 2016. The white, green and orange pills, some with markings denoting a combination of hy-

drocodone and acetaminophen, were found in a variety of CVS pharmacy bottles and others marked Bayer and Aleve.

Other pills were found in Prince's bedroom and in a suitcase with the name tag "Peter Bravestrong," which investigators said was a name the pop star used when he traveled.

Investigators sought search warrants to access Prince's Apple MacBook, Gmail accounts he used and cellphone records for his close associates, according to the documents released Monday. The search warrants don't say what investigators found when they accessed those sources.

But the search warrants show investigators have sought information on what Prince's longtime bodyguard Kirk Johnson and a Minnesota doctor, Michael Schulenberg, might have known about the pop star's use of painkillers

scripture/narcotic medication."

Neither Mr. Johnson nor Dr. Schulenberg could be reached to comment.

Investigators also said they conducted a search with the Drug Enforcement Administration and found that Prince had no prescriptions issued to him and that Mr. Johnson had only one for oxycodone, which had come from Dr. Schulenberg in April 2016. Investigators said it was prescribed on the same day Prince's plane made an emergency landing because he was overdosing.

In a request for a search warrant in September, a Minnesota law-enforcement officer wrote that "Prince did not have a regular doctor and that his most recent contact before Dr. Schulenberg were various doctors his managers would set up for him before a show so that Prince could receive a 'B12 injection' to 'feel better' before performing for a show."

In June, the Midwest Medical Examiner's Office in Ramsey, Minn., said Prince's death was an accident resulting from "self-administered fentanyl."

Fentanyl, a synthetic narcotic up to 50 times as powerful as heroin, has become a scourge in the opioid epidemic ravaging many states.

Fentanyl has long been used legally to treat people with severe pain, such as cancer patients. That form of the drug is sometimes diverted for illegal use. But increasingly, drug dealers are selling illicitly made fentanyl manufactured mainly in Mexico and China, according to the DEA.



The musician Prince was found dead at his home on April 21, 2016.

In Their Easter Bonnets



EGG ROLL: Children pushing eggs along during a race at the 139th White House Easter Egg Roll on the South Lawn of the White House in Washington on Monday.

SAUL LOEB/AGENCE FRANCE PRESSE/GETTY IMAGES

IN DEPTH

ARCONIC

Continued from Page One
vestor movement to vote Mr. Kleinfeld out of office at a May 16 shareholder meeting.

Mr. Kleinfeld and his defenders argued that the 59-year-old harnessed Alcoa's technical ability to create a high-tech manufacturer whose innovations for the likes of Boeing Co. and Ford Motor Co. ultimately will yield big gains. By creating two companies able to stand on their own—Arconic, a high-margin manufacturer and Alcoa, a commodity aluminum producer—he created more value for shareholders, they said.

"I see it like a living organism," Mr. Kleinfeld said in an interview at Arconic's Manhattan headquarters before he was pushed out. "The CEO who has been given the right to lead the company has the responsibility to ensure the future."

Elliott and its backers say Mr. Kleinfeld's grand plans haven't paid off. Alcoa shares fell 70% during Mr. Kleinfeld's tenure, from May 2008 until the Nov. 1 split. The S&P 500 rose more than 80% over the same period. Arconic says the company created more than \$8 billion in market value since its low in March 2009, besting its metals and mining peers.

The hedge fund said it plans to continue pushing its board fight even in the wake of Mr. Kleinfeld's departure.

Born in 1957 to East German refugees, Mr. Kleinfeld grew up in a working-class neighborhood near the Bremen shipyards. He earned a doctorate in

with aluminum, Boeing was experimenting with composite materials, plastics reinforced by carbon fibers, in its Dreamliner 787. The goal was a lighter, stronger aircraft.

In 2010, Mr. Kleinfeld invited Jim McNerney, then Boeing's CEO, to Alcoa's research facility near Pittsburgh. At a day-long meeting, engineering teams from both companies debated the use of composites and their potential flaws, such as vulnerability to lightning strikes and durability.

Mr. Kleinfeld prevailed. Today, Arconic manufactures both the Flite-Tite fasteners that connect the Dreamliner's wing to its fuselage and the wings' aluminum skeleton. Arconic makes \$6.5 million on each of the airplanes.

"In this business, things don't sustainably change overnight," said Mr. McNerney. "But when they do they change, it's for the 20- to 25-year life of the program."

Mr. Kleinfeld and his backers have said Arconic thrives on these relationships. The leaders of some of its biggest customers—General Electric Co., United Technologies Corp. and Boeing—say they're drawn to the company's commitment to research and development.

Arconic, in turn, gets its parts in the next generation of airplanes, jet engines and automobiles, which could be on the market for decades.

That is what happened when former Ford CEO Alan Mulally was converting Ford's iconic F-150 pickup to aluminum from steel to improve fuel economy by making it lighter.

Mr. Mulally personally



RYAN CHRISTOPHER JONES FOR THE WALL STREET JOURNAL

Klaus Kleinfeld, former Arconic chief executive, at the company's manufacturing plant in Kingston, N.Y.

Alcoa stock was still moving in tandem with commodity-grade aluminum prices. The stock climbed in 2014 but remained at less than half its all-time high. It began to drop again in early 2015. Mr. Kleinfeld announced the corporate split on Sept. 28, 2015.

At the same time, Elliott was amassing a sizable stake. The \$33 billion New York hedge fund founded by Paul Singer is among Wall Street's most persistent investors, famous for a successful 15-year crusade to get Argentina to pay up on its defaulted bonds.

The relationship was cordial at first. At a November 2015 meeting, Elliott employees praised Mr. Kleinfeld for building up the parts business but expressed concerns about its financial performance. Elliott was particularly focused on the aerospace business, which expanded dramatically with the Firth Rixson deal.

Mr. Kleinfeld had said he expected the acquisition to begin yielding gains in 2016. Days before its fourth-quarter earnings release that January, he learned that aerospace customers asked Alcoa to delay shipments. Alcoa expressed concerns about the aerospace industry without modifying its guidance for the business, known as engineered products and solutions business, or EPS.

On the Jan. 11 earnings call,

Tied to the Metal

Alcoa's performance remained closely tied to the price of aluminum even as CEO Klaus Kleinfeld tried to push the company more into high-tech parts manufacturing.

Performance since 2008



*Aluminum price is through April 14

Sources: FactSet (Alcoa, Arconic, S&P); LME (aluminum)

THE WALL STREET JOURNAL.

analysts asked Mr. Kleinfeld if Alcoa would hit its numbers. He responded that executives were "laser-beam focused" on what they could control. The stock dropped 9%.

Elliott asked for another meeting to discuss concerns about the profit forecasts. Mr. Kleinfeld said the only time he could spare was at the World Economic Forum, the annual summit of global elites in Davos, Switzerland, that he attends regularly.

Mr. Kleinfeld reassured Elliott portfolio manager Dave Miller and others that Alcoa was on the right track. The

company added three Elliott-backed directors a few weeks later at the hedge fund's request, and Elliott gave Mr. Kleinfeld a year to prove himself.

In April, Alcoa slashed its 2016 revenue guidance for the EPS group by \$1 billion, saying it expected the unit to bring in between \$6 billion to \$6.2 billion. The stock again ticked lower.

Three months later, when Alcoa announced its second-quarter results, analysts questioned the revised forecast. Mr. Kleinfeld told them he expected aerospace demand to rise.

First Pacific Advisors LLC and Orbis Investment Management Ltd., Arconic's fourth- and fifth-largest investors, respectively, publicly backed Elliott. Others privately support the change, according to people familiar with the matter.

For now, the hedge fund wants four additional board seats and has recommended Larry Lawson, who reined in spending and raised prices at Arconic rival Spirit AeroSystems Holdings Inc., to succeed Mr. Kleinfeld.

Monday, the board said Elliott should drop the fight and acknowledge the company has worked well for shareholders, a message Ms. Russo has been trying to spread for months.

"I lose sleep wondering, what am I missing here? How can you transform a company without being able to execute?" Ms. Russo said.

Elliott and its backers say Mr. Kleinfeld's grand plans haven't paid off.

strategic management and joined German conglomerate Siemens AG in 1987.

His work turning around the company's medical group and U.S. operations won him a promotion to CEO in 2005, at age 46. German media referred to him as "Wonder Boy."

Mr. Kleinfeld's career at Siemens ended two years later as a bribery scandal engulfed the company. He was never personally implicated but drew criticism for his oversight. He joined Alcoa, where he was a board member, and was named CEO in May 2008. At the time, Alcoa shares were trading near all-time highs.

Within months, the financial crisis sent aluminum prices plunging. Alcoa's stock fell 74% between mid-May and the end of October. Mr. Kleinfeld scrambled to shore up its finances.

Convinced a robust parts business could help the company better endure commodity-price swings, he turned his attention to aluminum parts. Since Alcoa's founders discovered how to extract the metal in 1886, the company pioneered dozens of aluminum products, including beverage cans, truck wheels and airplane components.

Changes in the aerospace industry threatened to upend the business. While commercial planes were still largely made

called Mr. Kleinfeld to ask for his advice, people familiar with the matter said. Mr. Kleinfeld jumped at the chance, eager to make the case for the greater use of aluminum in automobiles.

Ford wanted to join aluminum body panels with adhesives rather than rivets or welds. Alcoa's engineers demonstrated how an anticorrosion coating they had developed for beverage cans would allow an adhesive to create a strong bond.

Arconic's automotive unit is expected to generate \$1.3 billion in revenue in 2018, up from \$117 million in 2011.

Despite growth in the parts business, Alcoa's stock continued to lag the broader postcrisis recovery as surging aluminum output from China and the Middle East swamped the global market. Analysts speculated about an eventual breakup.

Mr. Kleinfeld resisted, referring to the combination of aluminum production and manufacturing as the "Alcoa advantage." In 2014, Alcoa bought Firth Rixson Ltd., a maker of forged metal parts for jet engines, from private-equity firm Oak Hill Capital Partners for about \$3 billion, including a roughly 2% stake in Alcoa. The next year, it paid \$1.8 billion for titanium supplier RTI International Metals Inc.

Russo, Hess Take Interim Helm

After the abrupt ouster of Chief Executive and Chairman Klaus Kleinfeld on Monday, **Arconic** Inc. directors David Hess and Patricia Russo stepped in to lead the metals manufacturing company on an interim basis. Here is what you need to know about them.

Ms. Russo, who will be taking over Mr. Kleinfeld's duties as chairman, has been lead director at Arconic since it became a stand-alone company after splitting from **Alcoa** Inc. late last year. She joined Alcoa

in 2008 after a stormy tenure as chief executive at telecom company **Alcatel-Lucent**.

Ms. Russo oversaw Lucent's merger with Paris-based Alcatel but struggled to integrate the two companies smoothly. Cost cuts proved harder than expected to accomplish, forcing the company to accept unprofitable contracts and lay off thousands of employees.

Eventually, infighting between the French and American leadership led Ms. Russo and then-Chairman Serge Tchuruk to be pushed out.

Ms. Russo has spent years leading various companies' boards. In addition to taking

the reins of Arconic's board, she is also chairman of Hewlett-Packard Enterprise Co. and sits on the boards of General Motors Co. and Merck & Co.

Mr. Hess, who will be interim CEO, began his career in industrials in 1979 but has been at Arconic only for a little over a month, arriving as the proxy fight with Elliott Management Corp. was heating up.

Mr. Hess joined the company from United Technologies Corp., where he served as a senior aerospace executive. Previously, he served as president of United's Pratt & Whitney division for four years.

—David Benoit and Bob Tita

KONG

Continued from Page One
regard as the embodiment of a mythical turtle that kept China's armies at bay for over 500 years, and which floated up dead in the lake last year.

"We need to erect a statue to Cu Rua quickly," said Mr. Duc, sweeping back his long gray hair as he rolled a cigarette. "Someone else might try to put up another statue of a monster instead."

Looking back, the premiere of "Kong: Skull Island" might have provided a few clues as to the turmoil to come.

As guests converged on the CGV Cinema in Ho Chi Minh City for the debut in March, a dancer swinging a torch accidentally set fire to a 16-foot-high model of Kong, sending cinemagoers screaming as flames billowed into the tropical night. Nobody was injured. Security teams put out the fire within a few minutes and the screening went ahead as scheduled.

If anything, the fire ignited more interest in director Jordan Vogt-Roberts's reboot of the King Kong legend.

Local officials in northern Vietnam where the film was

shot now use the film to draw in visitors. Tour companies are offering movie-tailored itineraries and "Kong Cruises" for visitors who want to see the big-screen locations for themselves. "The landscapes were stunning," said Nguyen Thi Phuong Thao, the billionaire founder of local airline VietJet. She reckoned it could spur more interest in the country.

Vietnam's Tourism Ministry even appointed Mr. Vogt-Roberts as its tourism ambassador for the next three years.

He had scouted various locations for the film, but only Vietnam had the atmosphere he was looking for. "You can only find these landscapes here; you can't find them anywhere else in the world," the thickly bearded director said at a ceremony in Hanoi as government officials in dark suits looked on approvingly and applauded.

Trouble was brewing, however. On March 3 the tourism ministry sent a memo to the Hanoi city government. It suggested erecting a life-size statue of Kong so visitors could take pictures of themselves next to it as well as collect brochures on some of the locations in the movie.

The backlash was immediate. Some people took to Face-

book, where they uploaded mocked-up images of Kong bathing in Hoan Kiem Lake or climbing famous landmarks around Hanoi and Ho Chi Minh City. Others posted messages slamming whoever came up with the plan for ignoring Vietnam's own legends and history.

Worse, Vietnam's tourism authorities had to contend with Mr. Duc and the rest of the turtle lobby. They argued that the lake is a sacred site imbued with an Arthurian-like legend that paints the turtle as a kind of supernatural guardian.

The story has it that a dragon king lent one of Vietnam's independence heroes a magical sword to drive out an invading Chinese army in the 15th century. Victorious, he

returned it to the turtle for safekeeping at Hoan Kiem Lake, which in Vietnamese means "The Lake of the Returned Sword."

Building a monument to some other beast is plain sacrilege, Mr. Duc said.

In another life, Kong and Cu Rua might have been friends.

The film portrays a team of scientists and soldiers who set off to explore an uncharted island toward the end of the Vietnam War. There they find a unique and terrifying ecosystem, dominated by huge, dinosaurlike beasts that a ragged castaway played by John C. Reilly calls Skull-Crawlers.

"I never said that name out loud before. It sounds stupid now that I say it. Just you call 'em whatever you want," his character says.

Eventually other members of the cast, including Tom Hiddleston, Brie Larson and Jing Tian, realize there is more to Kong than meets the eye.

It is the same with Cu Rua, Mr. Duc says.

As long as the turtle was healthy, it meant that Hanoi was still clean enough for humans, too. In recent years though, Cu Rua began to ail. Pollution was a contributing factor, Mr. Duc says.

The government enlisted Mr. Duc and other experts to catch and treat it in 2011. Among other things, they found that Great Grandfather Turtle was actually Great Grandmother Turtle. Mr. Duc estimated she

Meanwhile, Alcoa was locked in a battle with private-equity firm Oak Hill. Firth Rixson, the company Alcoa acquired from Oak Hill, wasn't meeting performance targets laid out in the deal, depriving Oak Hill of a bonus payment. Each side blamed the other. In August, Mr. Kleinfeld negotiated an unusual pact that locked Oak Hill into a two-year commitment to vote its shares for management.

In October, Alcoa cut the EPS unit's guidance for a second time, forecasting revenue of between \$5.6 billion and \$5.8 billion. The stock dropped 11%.

Arconic separated from Alcoa on Nov. 1, introducing itself to the public with a national advertising campaign built around the "Jets" videos. Print ads were plastered in New York City commuter trains and stations.

Elliott, short on patience, viewed the campaign as a waste of money. To them, the ads showed that Mr. Kleinfeld wasn't focused on boosting the bottom line.

The companies' post-split stock performance didn't help matters. Alcoa Corp., the spinout commodity producer, soared along with aluminum prices. Arconic flatlined.

On Jan. 9, three days after an agreement barring it from launching a public fight expired, the hedge fund sent a letter to Arconic's board saying Mr. Kleinfeld was "out of chances."

At a meeting the next day, Arconic offered to form a board committee that would focus on operations, a fix Elliott pushed at other companies. It wasn't enough for the hedge fund.

Ms. Russo, Arconic's lead independent director and now interim chairman, launched a review of Mr. Kleinfeld's performance, talking to executives, employees, customers and investors. She concluded Elliott failed to "peel back the onion" to fairly compare the sales of each Arconic product with comparable parts manufactured by its rivals.

The board informed Elliott it was unanimous in its support for Mr. Kleinfeld. Even the directors Elliott selected in early 2016 were in agreement.

On Jan. 31, moments before Mr. Kleinfeld kicked off Arconic's first earnings call as a stand-alone company, Elliott publicly called for his firing.

First Pacific Advisors LLC and Orbis Investment Management Ltd., Arconic's fourth- and fifth-largest investors, respectively, publicly backed Elliott. Others privately support the change, according to people familiar with the matter.

For now, the hedge fund wants four additional board seats and has recommended Larry Lawson, who reined in spending and raised prices at Arconic rival Spirit AeroSystems Holdings Inc., to succeed Mr. Kleinfeld.

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"I lose sleep wondering, what am I missing here? How can you transform a company without being able to execute?" Ms. Russo said.

was hundreds of years old. She weighed 360 pounds.

After Cu Rua turned up dead last year, some Vietnamese worried that a disaster would befall the country. It is already facing a number of challenges. The collapse of a cross-Pacific free trade pact is threatening to slow exports and Vietnam is again facing off against China, this time for control of atolls and reefs in the South China Sea.

Building a Kong statue now, Mr. Duc warned, would be tempting fate just a little too much.

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LIFE & ARTS

HEALTH

The Endangered ‘Good Doctor’

Renowned oncologist Burton Lee is remembered as a savior—and a tragic figure—by one of his patients

BY LUCETTE LAGNADO

Vero Beach, Fla.

AT A MEMORIAL SERVICE in this seaside community recently, I found myself walking down the aisle of a Protestant church, in a procession of family members honoring a local resident, Burton J. Lee III.

Dr. Lee wasn't my relative. He was my oncologist, ever since I was a teenager with Hodgkin's disease, a cancer of the lymph-node system. In the pew, I sat alongside Dr. Lee's widow, his children and stepchildren, sibling, half-siblings and twin sister.

A nationally renowned physician, Dr. Lee had worked for a U.S. president and helped change the country's policy on AIDS. He also had cared for me as if I were his own daughter over the course of four decades, from Memorial Sloan Kettering Cancer Center, where we met, to the White House, where he served as physician to George H.W. Bush, to a brief stint running a biotech firm, to a Florida retirement enclave where he insisted he wasn't retired.

Dr. Lee never ceased being my doctor—even decades after my disease went into remission. He was the physician I put my faith in for medical and non-medical decisions from the time I was a terrified 16-year-old to years later, when, as a young journalist, I flew to Washington for a checkup at the White House. I continued to see him in Vero Beach, where his living-room couch became the examining table.

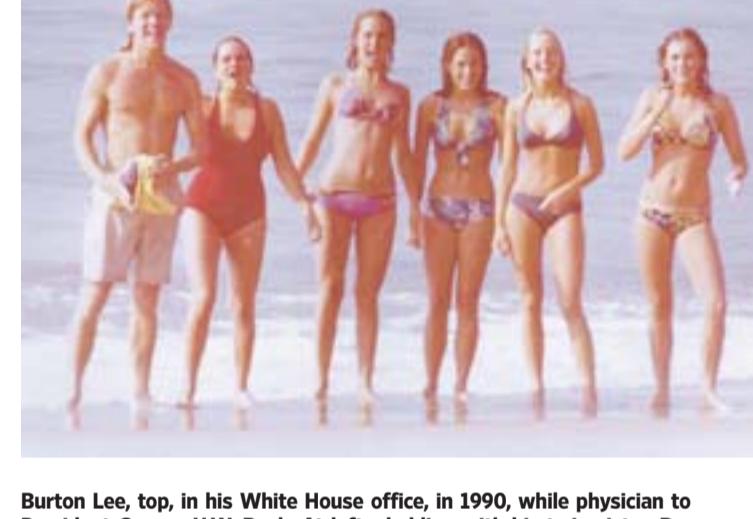
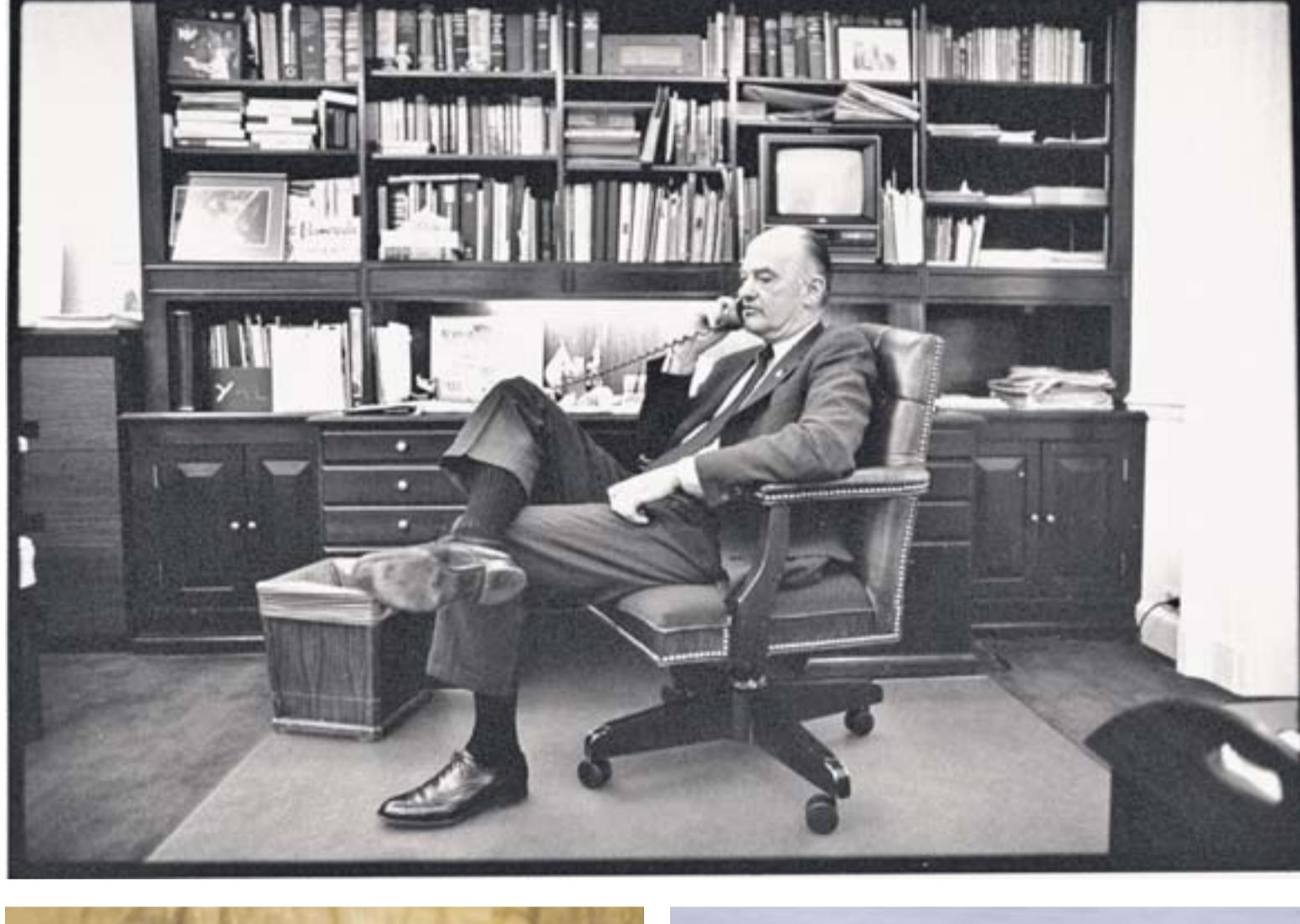
Dr. Lee embodied what the French call *le bon docteur*—“the good doctor” who is equally skilled in making a diagnosis as in figuring out the treatment, and one who befriends patients, seeing the human connection as essential to curing the disease. Today, that doctor-patient relationship is eroding in a world of ever-briefer consultations, clinical algorithms and electronic health records that keep physicians glued to a computer rather than focused on the patient. The high-achieving—and difficult—Dr. Lee took the time to treat body and soul, putting him at odds with a changing profession as well as some of his colleagues.

At the service, Paul Hetzel, a physician who had trained at Memorial Sloan Kettering and fallen under Dr. Lee's spell, recalled, “He taught me how to look at a patient and determine how they were doing without X-rays, CT scans and the like.” Later he told me that Dr. Lee emphasized the importance of knowing “more about the patient than their disease.”

Recent years have seen the culture of medicine change, Carol Bernstein, an associate professor of psychiatry at NYU School of Medicine, said in an interview. “There is no time anymore for the doctor to be with the patient.”

Concerned by how alienated doctors feel, the American College of Physicians is seeking to reduce those burdens. In a position paper published March 28 in the Annals of Internal Medicine, the organization wrote that mounting administrative tasks “divert time and focus from more clinically important activities of physicians and their staffs, such as providing actual care to patients and improving quality.”

Nitin S. Damle, president of the



CLOCKWISE FROM TOP: WILLIAM FOLEY/LIFE IMAGES COLLECTION/GTY IMAGES; ANN LEE FAMILY ARCHIVES; MARY JO BALKIND LEE FAMILY ARCHIVES

American College, says, “I think the joy of medicine is really the relationship with the patients over a long period of time.”

Time, of course, was what Dr. Lee never stinted on with me.

Studying the Patient

He treated me at Sloan Kettering's Lymphoma clinic, where Medicaid patients were seen. The first time we met, I peered at him suspiciously, a tall unsmiling man in gray flannel slacks and a shirt with rolled-up sleeves. If he was a doctor, why wasn't he wearing a white coat?

I was scared out of my wits—and it didn't help that he was looking at me intently. I didn't know that that was how he assessed a case, simply by studying a patient. But he calmed me with easy banter, asking not just about my symptoms, but also my favorite subjects in school, my hobbies and ambitions. I was a senior in high school; I was supposed to start college in the fall, though that was in question.

Dr. Lee and I weren't merely from different backgrounds but

different universes. He grew up on Manhattan's East Side, then moved to his grandfather's estate on Long Island. He went to Phillips Academy Andover, Yale and medical school at Columbia.

I was the daughter of Jewish immigrants from Egypt with few resources. At home in Brooklyn, my family was unraveling in the face of my illness. My dad became teary as he asked Dr. Lee to care for me. Dr. Lee, uncomfortable, ushered him out of the office. When my mother pleaded with Dr. Lee to take over my case, he warned that we couldn't afford him. Suddenly, he relented and declared he would become my personal physician.

“Madam, I will save your child,” he vowed.

From then on it was only he and I. No parents, no outsiders, no *buttinckys*. Dr. Lee controlled the course of my treatment with an iron hand. Years later, I befriended another patient of his, the actress and artist Kathryn Beckwith, who told me she had dubbed him “General Patton.”

But he also dealt with me—and my fragile teenage angst—with compassion. “You will go to college in the fall,” he declared when I asked what would become of me. He said it as if brooking no dissent. I felt hopeful for the first time in months.

He also fascinated me with glimpses of another, glamorous life. He loved to talk about his beautiful wife, Ann, from Nassau, the Bahamas. He would mention their home in Old Greenwich and trips to Martha's Vineyard.

Then there was the photograph on his desk of a row of girls in bikinis alongside a strapping guy. They were his kids, he said—five daughters and a son. I stared at the picture with longing, daydreaming about those attractive children and how lucky they were to have Dr. Lee as a father.

I didn't know about the pain and divorce, the fact that three of the children were from his first marriage and three were stepdaughters whom he was raising as his own.

Burton Lee, top, in his White House office, in 1990, while physician to President George H.W. Bush. At left, sledding with his twin sister, Rosamond, in New York's Central Park in the mid-1930s. Burton and Ann Lee's children, above, on Martha's Vineyard in 1974, and, below, in Vero Beach, Fla., in March.



A Physician in Exile

Some people saw Dr. Lee as difficult and cantankerous. While he had his fervent admirers, he occasionally clashed with colleagues and fought with those he felt were underperforming. I often thought he relished being a thorn in the side of authority figures.

At Sloan Kettering, he rose through the ranks to become the senior physician in the Lymphoma Service. An expert in Hodgkin's and multiple myeloma, he developed some of the earliest protocols that became standard treatment throughout the world, according to the hospital.

In the late 1980s, through connections to the Bush family, he was appointed under President Reagan to a special commission on AIDS. When President George H.W.

Bush appointed him physician to the President, Dr. Lee resigned from Sloan Kettering—a decision he came to regret. The cancer world was changing when he emerged from the White House.

Sloan Kettering, for example, was increasingly favoring scientists over old-fashioned clinicians like Dr. Lee. After a brief, unhappy

stint running a cancer program in

South Carolina, he never worked as an oncologist again.

In Vero Beach, he fought to improve health access for the poor, volunteering his services and urging other doctors to care for the uninsured.

“He was a purist. He held his views and expressed his views and there was no middle ground,” says Larry Norton, a deputy physician in chief for breast cancer programs at Sloan Kettering. Dr. Norton became my doctor some years ago.

After Dr. Lee's clashes at Sloan Kettering, within the Bush White House and then the Vero Beach medical community, I came to see him as a tragic figure, unable to do the work he loved: practice oncology. “I am a physician in exile,” he once told me.

Dr. Lee refused to say I was “cured” of Hodgkin's disease. Years later, I asked what determined whether someone's cancer would spread. He paused before answering, “Kismet.”

By then, he was fighting bladder cancer and some of his old bravado was gone. He was 86 when he died last November on the day after Thanksgiving.



Dr. Burton in 2007 flanked by Lucette Lagnado, right, and Kathryn Beckwith.

OPINION

REVIEW & OUTLOOK

Trump's Weak-Dollar Temptation

Donald Trump doesn't have many firm policy convictions, but one of them seems to be a mercantile faith in the virtue of a weak currency. The U.S. dollar "is getting too strong," Mr. Trump told our Journal colleagues on Wednesday. "That's hurting—that will hurt ultimately." Someone should tell him that weak-currency politicians tend to be losers.

One irony of his comments is that for weeks Mr. Trump had been celebrating the boost in economic confidence since his election, which has included a rise in the dollar. When investors have confidence in a country, they tend to put money into assets denominated in that country's currency. The "Trump reflation" in the dollar and stocks, which has since ebbed as the prospects for pro-growth reform seem more uncertain, was a good economic sign.

Mr. Trump's dollar-bashing is also highly unusual because even Presidents who favor dollar devaluation typically say the opposite. Or they say nothing at all, leaving the dollar commentary to the Treasury Secretary, whose mantra usually is "a strong dollar." And that makes sense. Why talk down the purchasing power of Americans?

A dollar-bashing President can also disrupt financial markets, as Mr. Trump's comments initially did on Wednesday. The greenback recovered, but currency markets are volatile and sharp movements can do serious harm at delicate financial times or take firms under if they've made the wrong currency bet.

Above all, dollar bashing can complicate the Federal Reserve's monetary policy. The Fed is currently in a tightening phase, which tends to support a stronger dollar, so Mr. Trump's comments are countercyclical.

But Mr. Trump also told the Journal that he might reappoint Fed Chair Janet Yellen when her term expires early next year. Ms. Yellen is known as a monetary dove who kept interest rates low throughout President Obama's second term. Most analysts interpreted that Yellen mention as a declaration that Mr. Trump wants the same treatment. But if Mr. Trump's policies succeed, growth will be faster and the Fed might have to raise rates more rapidly. The Fed and financial markets don't need a monetary kibitzer on Twitter.

If economics doesn't persuade Mr. Trump, perhaps modern presidential history will. Go-

ing back to Richard Nixon, the most economically successful Presidents have presided over strong-dollar eras.

Reagan and Clinton presided over a strong currency—and success.

Ronald Reagan's pro-growth policies attracted capital from around the world, and the greenback soared along with U.S. growth. Bill Clinton also saw rapid growth and a rising dollar that sent commodity prices like oil that are traded in dollars crashing. Gasoline at 90 cents a gallon might have saved him after impeachment.

On the other hand, Richard Nixon encouraged an easy-money Fed and took the U.S. off the Bretton-Woods gold standard. One result was rising inflation and an explosion in oil prices. Jimmy Carter's Treasury tried to talk down the dollar, and inflation grew worse.

George W. Bush didn't seek a weak dollar but he did preside over one as the Alan Greenspan-Ben Bernanke Fed kept rates too low for too long. Oil and commodity prices rose, making for meager gains in real incomes, while runaway housing prices set the stage for the financial mania, panic and crash.

Much of Barack Obama's tenure was also marked by a weak dollar as the Fed tried to steal economic demand from the rest of the world. But that policy never did raise growth much above 2% a year. The public's frustrations with slow growth and stagnant incomes set the stage for the rise of Bernie Sanders and Donald Trump in 2016.

We aren't saying that a strong dollar is the primary goal of U.S. economic policy. That goal is broad prosperity from strong and sustainable economic growth. Monetary policy should seek a stable dollar not "king dollar." But the by-product of better policies and faster growth might be a flood of capital into the U.S. and a stronger dollar. This isn't to be feared. If a strong dollar were politically damaging, both Reagan and Mr. Clinton would have been one-term Presidents.

Mr. Trump's policy challenge is coaxing faster growth from an economic expansion that is already long at nearly eight years and with relatively tight labor markets. The only way to lift growth above 3% for an extended period is by lifting business and capital investment. That requires deregulation and tax reform that boost supply-side incentives. Worry about that, not the dollar.

Erdogan's Tainted Triumph

Sunday's referendum to expand his presidential powers didn't go as Turkey's Recep Tayyip Erdogan had planned. The Islamist strongman had hoped for a rousing endorsement, but he won narrowly amid voting irregularities that will taint his victory. The result leaves Turkish society even more polarized and may produce more instability.

The pro-Erdogan camp won a mere 51.2% of the vote, according to the state-run news agency. More telling is that the referendum lost in Turkey's urban areas, including Ankara and even Istanbul, where Mr. Erdogan was mayor. The country's election board made a last-minute decision to accept ballots that didn't bear official stamps normally required to validate ballots. The secular Republican People's Party said that move and other verification problems cast doubt on the validity of some 2.5 million ballots.

Observers with the Council of Europe and the Organization for Security and Cooperation in Europe criticized the election board's decision. They also noted that civil-society groups had

been barred from holding campaign events, and Mr. Erdogan's camp dominated the media. All of this occurred amid Mr. Erdogan's crackdown on political opponents, journalists and independent judges since last July's failed coup against him.

The opposition says it will formally challenge the result, but overturning it is unlikely given Mr. Erdogan's control over public institutions. Barring a Turkish Spring uprising, Mr. Erdogan will consolidate even more power in the office of the president. The referendum would allow the 63-year-old to remain as president through 2029, and perhaps 2034.

All of this will complicate Turkey's relations with the West, as Mr. Erdogan advances his Vladimir Putin-like control. The U.S. will have to work with its NATO ally. But without more evidence the U.S. should resist demands to extradite Fethullah Gülen, the Pennsylvania-based imam Mr. Erdogan accuses of masterminding the summer putsch. Mr. Erdogan has staged his own internal coup by abusing the levers of democracy to create an Islamist authoritarian state.

America's Pizza Minders

The U.S. Food and Drug Administration can't possibly fulfill all of the responsibilities it claims to have, and here's one way the Trump Administration can set better priorities: Direct the agency to end its effort to inform Americans that pizza contains calories.

An FDA rule to take effect May 5 requires chain restaurants to post calorie counts on menus. The regulation also covers movie theaters, grocery stores, breweries and other establishments with more than 20 locations. The rule, required by the Affordable Care Act, has been revised and twice delayed in six years, mostly due to objections from a trade coalition called the American Pizza Community. (Regrettably, it doesn't issue membership cards.)

The more than 100-page rule, perhaps the longest meditation on fast food ever published, says that pizza purveyors must display per slice calorie ranges. Dominos offers 34 million potential combinations, and the number of pepperonis on a pizza can vary based on whether a customer also tosses on green peppers or something else. FDA suggests displaying verbiage like "pepperoni—200 added calories for a one-topping pizza" for every topping. Better have a calculator when ordering.

The regulation also defines menu to include advertisements or flyers that list a phone number or website for ordering—in other words, marketing material. The restaurant must certify that the store made "reasonable" efforts to ensure that calorie estimates are accurate, though the minds behind this rule don't sound like reliable arbiters of

reasonableness. The penalty for noncompliance is fines, jail or, this being America, class-action lawsuits.

The micromanaging extends to menu font and colors, which must be "the same color or in a color at least as conspicuous" as other types, according to FDA guidance. By the way,

none of this will help consumers eat less pizza: Most customers place orders online or over the phone, not from a menu board. Dominos offers an online Cal-O-Meter to help customers know what they're eating. Restaurants are already required to make this information available in stores and the web for those who wish to know.

The rule has also riled grocers who must label tuna sandwiches or other fresh foods where preparation isn't standardized. A supermarket trade association, the Food Marketing Institute, says compliance will cost at least \$1 billion and some grocers may decide to stop selling prepared foods.

A bill in the House would allow chains flexibility on where and how to display the counts, including online if most customers place orders on the web. The Senate has introduced companion legislation but skipped town last week and will almost certainly miss the May 5 enforcement date.

Meanwhile, the Trump Administration could direct the agency to delay or reconsider the rule until Congress acts. That would be a useful step in returning government to its core competencies, assuming any still exist, and allow Americans to make their own judgments about pizza.

The Impoverishment Of Politics in France



As part of a new worst-case scenario for France, the extreme left-wing candidate Jean-Luc Mélenchon is using a vocabulary of violence to warn the French about the wounds they face if he isn't elected president.

"You're going to be spitting blood if you elect those three," he said in a speech last week. Mr. Mélenchon was shouting out his version of the peril of putting any one of his campaign rivals—Marine Le Pen of the far right, reformist candidate Emmanuel Macron or the Gaullists' François Fillon—in the Elysée Palace.

It was the kind of language that scars French democracy and points to the country's political impoverishment. The blood-spitting phrase stood out all the more pertinently because new polling shows Mr. Mélenchon, with stronger momentum than his opponents, having a largely equal chance alongside Ms. Le Pen to survive Sunday's first-round election and make it to the final round two weeks later.

A head-to-head Mélenchon-Le Pen presidential clash is now plausible. It means a presidential victory by a French extremist, left or right. Virtually in common, even though they detest one another, each has devastating plans for the West: spending the groggy French economy into a deeper coma, partnership with Vladimir Putin's Russia, and exits from NATO, the European Union and the euro.

If a Mélenchon-Le Pen run-off becomes a sure thing Sunday—leaving a choice between plague and cholera, as the French say—a crisis could come the next day. Neither of the two has a program seriously considering French debt obligations. According to the news magazine Le Point, estimates in Paris of France's debt held by American and Asian investors runs to more than a trillion euros.

Mr. Mélenchon, at 65, seems to make up his economics in another world. But his chief campaign economist, Jacques Généreux, doesn't deny the prospect of an immediate financial shock. "If Mélenchon and Le Pen both reach the second round, the markets will overreact," Mr. Généreux told a French reporter. Then he offered this consolation: "When he wins the presidency things will quiet down because the markets will have escaped the worst."

But not from Mr. Mélenchon. Gaining support, the former Trotskyist feasted on the Socialist Party's weakness and absence of authority, and stroked the French tolerance for disruption dating back to the Jacobins and the French Revolution.

He reveres Robespierre, the leader of the revolution's Great Terror; admires Fidel Castro, the Cuban murderer; and supported Hugo Chávez, the Venezuelan dictator.

At the same time, the essayist Roger-Pol Droit, writing in the sober business newspaper Les Echos, leapt over the standard, extrasafe designation of Mr. Mélenchon and Ms. Le Pen as populists. Rather, he said, they represent the authoritarianism and rigidity that partially defines fascism.

In fact, Ms. Le Pen's slightly depressed polling results recently has diminished her status as an absolutely safe bet to get into the final round, although it remains a strong probability.

An explanation: In electoral terms, Ms. Le Pen had become domesticated, less deliberately divisive. In her attempts to broaden her base and sound "reasonable," she no longer stepped to the edge of political obscenity. Mr. Mélenchon, who initially profited from her cover as the presumed greater evil, set himself up as the real savior of the powerless against "the system," which, for him, includes the U.S. and Germany, plus "Rothschild bankers."

Playing catch-up, Ms. Le Pen retreated into repulsive politics, deciding to assert that France has no lingering responsibility for the roundup by French police of 13,000 Jews sent in 1942 from the Vel d'Hiv cycling arena to the concentration camps, the majority to Auschwitz.

Last week, she denounced the "systematic repentance" she said was forced on the French, and stuck the label of pro-Islamism on Mr. Macron, who the polls say would defeat either extremist—if, overcoming stagnant poll scores, he makes it to the final round on May 7.

But so much of the political soul of the French has gone missing. In the worst-case scenario, there is less than a week for them to find an honorable response to the challenge of holding on to their democracy.

LETTERS TO THE EDITOR

Is Dawa a Threat to Western Life and Law?

Regarding Tunku Varadarajan's "Islam's Most Eloquent Apostate" (April 10): I have a great deal of respect for Ayaan Hirsi Ali's bravery and willingness to speak her thoughts despite the risks. However, there is an obvious and fundamental flaw in her Popperian view of the world. Who will decide what is or isn't "intolerant" with respect to the "right not to tolerate the intolerant"?

I live in one of the most liberal cities in one of America's most liberal states, and what isn't tolerated in my neck of the world is most anything that doesn't support the local liberal hegemony. I cringe at the thought of imbuing these people with the legal right not to tolerate me.

America's Founding Fathers realized a long time ago that the only solution to this conundrum is to allow almost all speech, no matter how vile, and to punish only concrete actions that undermine the common good. In the fight with Islamism, the West has no alternative but to win the war of ideas through speech. In the long term, nothing else will be effective.

ARI TRACHTENBERG,

Newton Centre, Mass.

Why do so many on the political left in America deny that there is a fundamental ideological problem with Islam that transcends religious doctrine and faith? Would they be as tolerant of, say, Catholic extremists who advocated slaughtering anyone opposed to a restored Holy Roman Empire to govern the world?

Ms. Hirsi Ali argues that *dawa* is a faith-based cousin of communism, bent on liberating the world from freedoms that stand in the way of harmonious existence. A progressive cult that makes excuses for collectivist atrocities and failures and blocks Christianity is unable to see or admit parallels between the goals and methods of orthodox communists and Iowa Islamists.

As I read Ms. Hirsi Ali's diagnosis and warnings, a news flash reported that dozens of Coptic Christians in Egypt had been blown apart at Palm

Sunday services in church by bombs set off by Islamist militants. Ms. Hirsi Ali unfortunately hit the ugly nail on the head of a dissociative disorder that afflicts Islam and threatens the world.

GARY ROBERTSON
Tampa, Fla.

Perhaps we should start by reminding all naturalized U.S. citizens of the oath of allegiance they took as a prerequisite to gaining citizenship. Not only does their oath require all applicants for citizenship to support and defend the U.S. Constitution, they must also renounce the laws of their former countries of citizenship (including, but not limited to, Shariah law). Each applicant for citizenship must "declare, on oath, that I absolutely and entirely renounce and abjure all allegiance and fidelity to any foreign prince, potentate, state, or sovereignty, of whom or which I have heretofore been a subject or citizen; that I will support and defend the Constitution and laws of the United States of America against all enemies, foreign and domestic."

This policy should also apply to immigration. Immigrants (including Muslims) should be required to agree that, while they are in the U.S., the law of the U.S. and no other law (including Shariah law) will apply.

TIM KLENK
Fort Myers, Fla.

Those same progressives (LGBT, feminists, secularists) who belittle traditional Western values would be at the top of the Islamic hit list in an Islamic world. Can you name a more misogynistic institution than Islam?

DAVID STINSON
Mankato, Minn.

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OPINION

The Border-Adjustment Sleight of Hand

By Veronique de Rugy
And Daniel J. Mitchell

With Republicans in control of Capitol Hill and the White House, this should be an opportune time for major tax cuts to boost U.S. growth and competitiveness. But much of the reform energy is being dissipated in a counterproductive fight over the border-adjusted tax proposed by House Republicans.

The plan calls for dropping the top corporate-tax rate to 20% from 35%, while exempting exports and taxing imports. House Republicans have

The double levy on U.S. companies' overseas profits is the actual 'Made in America tax.'

latched onto the border-adjusted tax for a very practical and understandable reason. It supposedly would generate more than \$1 trillion of tax revenue over 10 years. That money could finance other parts of their agenda to generate growth, such as replacing today's onerous depreciation rules with immediate expensing.

Although their intentions are reasonable, this strategy is questionable. Start with the political blunder: Republican tax plans normally receive overwhelming support from the business community. But the border-adjusted tax has created deep divisions. Proponents claim border

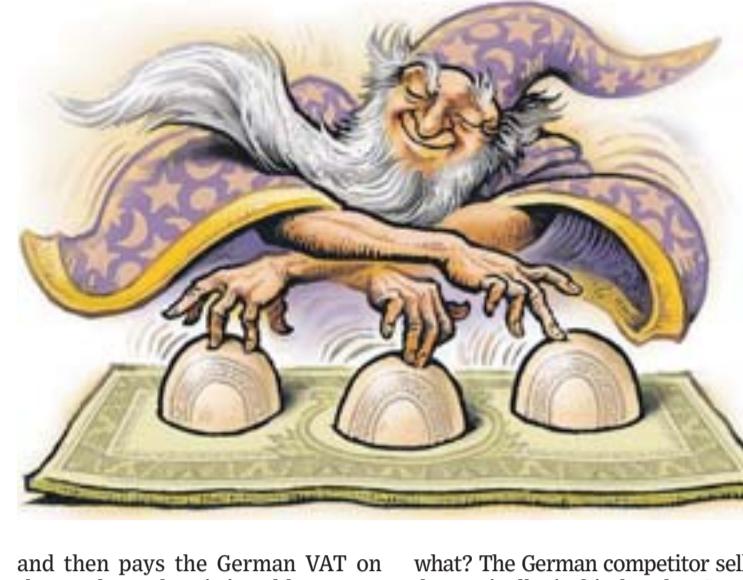
adjustability is not protectionist because it would automatically push up the value of the dollar, neutralizing the effect on trade. Importers don't have much faith in this theory and oppose the GOP plan.

Their concerns are legitimate. No country has ever imposed a border-adjusted corporate-income tax, so this is uncharted territory. But many countries have value-added taxes, or VATs, that are border-adjustable, and their experience might serve as a reasonable proxy.

A review of the empirical literature shows that currencies adjust when a VAT is applied, but they do so neither entirely nor quickly. Factors such as poor design or improper administration can get in the way.

If the currency adjustment were perfect, there should be no effect on trade volume. But research has shown that VATs are associated with both lower exports and imports. A 2005 academic study examined 136 nations and concluded: "Countries using VATs have one-third fewer exports than do countries not using VATs, and 10 percent greater VAT revenue is associated with two percent fewer exports."

Proponents of the border-adjusted tax also are using a dodgy sales pitch, saying that their plan will get rid of a "Made in America Tax." The claim is that VATs give foreign companies an advantage. Say a German company exports a product to the U.S. It doesn't pay the American corporate-income tax, and it receives a rebate on its German VAT payments. But an American company exporting to Germany has to pay both—it's subject to the U.S. corporate-income tax



PHIL FOSTER

and then pays the German VAT on the product when it is sold.

Sounds horribly unfair, right? Don't be fooled. Like magicians, those making this argument are distracting the unwary, hoping that nobody will notice the trick.

Here's the real story: What matters from a competitive perspective is whether the playing field is level—and it is. When the German company sells to customers in the U.S., it is subject to the German corporate-income tax. The competing American firm selling domestically pays the U.S. corporate-income tax. Neither is hit with a VAT. In other words, a level playing field.

What if an American company sells to a customer in Germany? The U.S. government imposes the corporate-income tax and the German government imposes a VAT. But guess

what? The German competitor selling domestically is hit by the German corporate-income tax and the German VAT. That's another level playing field. This explains why economists, on the right and left, repeatedly have debunked the idea that countries use VATs to boost their exports.

Companies can be disadvantaged, though, if their country's tax regime is onerous. One big plus for Americans is that Washington doesn't impose a VAT, which would enable government to grow. This is a major reason that the U.S. economy is more vibrant than Europe's. In Germany, the VAT raises so much tax revenue that the government consumes 44% of gross domestic product—compared with 38% in America.

On the other hand, America's top corporate-income tax of 35% is the

highest in the developed world. If state corporate-income taxes are added, the figure hits nearly 40%, according to the Congressional Budget Office. That compares very unfavorably with other nations. Europe's average top corporate rate is less than 19%, and the global average is less than 23%, according to the Tax Foundation. The damage is compounded because the U.S. has a "world-wide" tax system, putting an extra levy on income that American companies earn overseas. That's the real "Made in America Tax," and it's America's own fault.

The solution is to reduce the corporate rate and adopt a territorial tax system, taxing only profits earned at home, as almost all other Western countries do. The good news is that the House plan does both these things. The bad news is that the proposal is weighed down by the border-adjusted tax. Republicans should drop this controversial provision and focus on the policies that will boost growth.

To get the maximum bang for the buck, the final package should include restraints on spending—which doesn't even mean an absolute budget cut. If Congress simply limits the growth of outlays to about 2% a year, that would create enough fiscal space to balance the budget over 10 years and adopt a \$3 trillion tax cut. If Republicans want a win-win, dropping the border-adjusted tax is the way to get one.

Ms. de Rugy is a senior fellow at George Mason University's Mercatus Center. Mr. Mitchell is a senior fellow at the Cato Institute.

After Islamic State, the U.S. Military Could Help Keep Iraq Stable

By James Jeffrey

Iraqi Prime Minister Haider al-Abadi has called on the U.S. to deepen cooperation with Baghdad under the 2008 U.S.-Iraqi Strategic Framework Agreement. That makes sense. America has expended incalculable resources in Iraq, intervening militarily four times since 1990. Iraq is worth the effort—the center of the Middle East, with almost two-thirds of the oil and gas reserves of Saudi Arabia, abundant water, an educated population and a functioning democracy. But if the U.S. doesn't want to intervene again, assistance must be linked to maintaining a small military contingent there.

An American-Iraqi decision on keeping U.S. troops in the country must be taken soon, as the rationale for their current presence—to defeat Islamic State—will fade as it is destroyed. The justification for a longer-term presence would be to train and equip Iraqi forces and assist against Islamic State remnants. Strategically, it could also help keep Iraq independent of Iran.

The impending destruction of Islamic State as a "caliphate" will

rank with the 2003 Iraq war, the Arab Spring, the Iran nuclear agreement and Russian intervention in Syria as a regional game changer. The first four advanced the Iranian and Russian quest to upset the U.S.-led regional security order. But the defeat of Islamic State could help the U.S. reverse this trend.

To do so Washington must view the region differently. Since the Cold War the U.S. has treated Middle East challenges—Iran, Saddam Hussein, Syria, Yemen, terrorism and more—as discrete problems, not part of a larger endeavor. The U.S. assumed that the region's core, an American-led regional order, would endure.

Threats to that order from Iran, Russia and Sunni Islamists challenge this assumption. In this environment, Cold War principles—alliance solidarity and U.S. credibility—must be reinvigorated. Anything the U.S. does must support the strategy to contain Iran and combat Sunni extremists. The two are linked: Under Iranian influence, Damascus and Baghdad so oppressed their Sunni Arab populations that they turned to Islamic State.

Iraqis must be convinced that an American presence would support the fight against terrorism and ensure the Iraqi army doesn't implode as it did in Mosul in 2014. They must also be convinced that it would support Iraqi unity, by signaling to skeptical Sunni Arab and Kurdish minorities that the largely Shiite Baghdad government seeks

keeping a troop contingent in Iraq would support such a strategy. The Trump administration appears interested, but success is uncertain given that Iraq didn't allow the U.S. to extend forces in Iraq in 2011. Mr. Abadi appears supportive, but other political leaders, the public and Iran

A limited troop presence would support a strategy aimed at containing Iranian aggression.

are more or less opposed. To keep a troop presence, the U.S. will have to proceed on three avenues: "sell" the presence, link it to other assistance, and keep it noncontroversial.

Iraqis must be convinced that an American presence would support the fight against terrorism and ensure the Iraqi army doesn't implode as it did in Mosul in 2014. They must also be convinced that it would support Iraqi unity, by signaling to skeptical Sunni Arab and Kurdish minorities that the largely Shiite Baghdad government seeks

ties to the West. Also important is the perception that the U.S. supports Iraqi sovereignty, by signaling to Iran that Iraq will not become anyone's vassal state.

The U.S. will have to link economic assistance and diplomatic cooperation—in short, "tough love"—to clarify that in exchange for such help, Iraqi politicians have to be flexible on troops. U.S. support for Iraq beyond security has been remarkable: an \$15 billion loan led by the International Monetary Fund, mediation of disputes between Baghdad and Kurdistan, and the facilitation of oil production. The U.S. has a vital interest in preventing Iraq from descending into violence, enabling Iranian regional aggression, or spawning another terrorist movement, and that requires not just political and economic support but continued military ties.

But Iraq must also be reassured that a U.S. military presence would be acceptable to Iraqis. Based on the troop-extension talks with Iraq in 2011, the following would be politically acceptable.

First, the troop contingent should be limited and not permanent. The 5,000 troops contemplated in 2011

are likely the maximum politically sustainable. U.S. troops should also be part of an international contingent and stationed on Iraqi bases. The U.S. shouldn't again ask for Parliament-approved legal immunities for U.S. personnel, but rather extend the administrative status under which they now operate.

Second, the formal troop mission should focus on training and equipping Iraqi forces, and specific intelligence, counterterrorism and perhaps air-support functions. Everyone in the region would understand that such a presence would also help contain Iran and promote stability, but diplomacy requires that this not be explicit.

Third, the U.S. should be careful not to suggest that troops in Iraq are a combat force to project power into Syria or Iran against Baghdad's interests.

None of this guarantees that Iraq will allow such a military presence but it will make the choice easier. Stability in the entire region hangs on Iraq making the right one.

Mr. Jeffrey served as U.S. ambassador to Turkey (2008-10) and Iraq (2010-12).

The Truth Behind China's First-Quarter Numbers

By Michael Pettis

The first-quarter statistics released Monday seem to suggest the Chinese economy is healthy and booming. Gross domestic product rose by a greater-than-expected 6.9%, above the 6.8% achieved in the previous quarter and comfortably above 2017's GDP growth target of 6.5%. But a closer look at the figures points to a very different conclusion.

A year ago, debt was surging and growth falling away. So much capital was fleeing the country that even with a huge current-account surplus, the central bank's reserves eventually declined by nearly a quarter from their June 2014 peak.

Today sentiment has changed dramatically. Reserve levels have stabilized and economic growth is on track to meet Beijing's 2011 promise to double China's GDP between 2010

and 2020. There is even a growing consensus that the worst of China's adjustment is behind it, and that once Beijing gets debt under control, something on which banking regulators have clearly set their sights, China can enjoy another decade of 5% to 6% growth.

This guardedly optimistic narrative seems to have been confirmed by recent economic data. China's exports were reported last week to have increased in March by 16.4%, well above the consensus forecast of 5%. Imports were up too, by a stronger-than-expected 20.3%. This left China with a healthy trade surplus of \$23.93 billion, compared with February's \$9.15 billion deficit.

Credit and monetary data were more mixed. Regulators seem to have tightened their grip on China's banks and restrained loan growth in March to 1.02 trillion yuan (\$148 billion), below February's 1.17 trillion

yuan increase and well below expectations of 1.25 trillion yuan.

Total social financing, however, was up by 2.12 trillion yuan in March. This wider and more accurate measure of credit came in substantially higher than the consensus forecast of 1.5 trillion yuan.

Monday's first-quarter GDP figures look broadly consistent with the new consensus. After five years of decline, growth seems to have bottomed out, and while debt continues to grow too quickly, the regulators have successfully targeted credit growth in certain especially worrying sectors. With the right policies and, more importantly, the necessary resolve, Beijing might finally get debt under control, after which China can put its difficult economic adjustment behind it.

Unfortunately the new consensus misreads the Chinese economy just as badly as it did last year, when a crisis was expected. The GDP figures do not represent growth in the country's productive capacity. Rather it is growth in economic activity driven by debt.

Beijing has not been able to control credit expansion. It has only done so in targeted sectors by forcing greater credit growth elsewhere.

Debt overall must continue to accelerate in China because this is the only way to generate the additional demand needed to boost eco-

nomic activity to a level that is politically acceptable. But this is at least double the sustainable growth rate that can be organically generated from rising household income and needed investment. So growth in debt substantially exceeds growth in the country's debt-serving capacity.

It's easy to see the role debt plays. March's 2.12 trillion yuan increase in debt was part of the 7.01 trillion yuan increase in debt in the first

quarter of 2017, an amount equal to an astonishing 39% of the country's first-quarter GDP. Most of this increased lending went to fund a 13.6% increase in public-sector investment, much of it unproductive. It was this investment that drove economic activity in first quarter above China's sustainable growth rate.

For many years China has needed increasing amounts of debt to generate each unit of GDP growth, a phenomenon that Hyman Minsky explained is always present in the late stages of an investment bubble. This has locked China into a vicious circle.

Rising debt automatically forces down the sustainable growth rate because of the accumulation of financial distress effects caused by the debt. As it declines, the gap between the sustainable growth rate and China's GDP growth target has risen, requiring even greater credit expansion. Growth can rise or hold steady in the short term, in other words, but only through rising debt, and this inevitably reduces growth over the medium term.

For now China's GDP growth is largely driven by the political calendar. President Xi Jinping must consolidate economic decision making in the run-up to this year's Party Congress if he is to implement the difficult reforms that will break China out of its debt cycle. Higher growth early in the year will make this easier.

If Mr. Xi is successful in overcoming vested-interest opposition, however, GDP growth will probably decline to barely above 6% by year end, and will continue to decline sharply over the rest of this decade. The more rapidly it declines, the better for China.

Mr. Pettis is a finance professor at Peking University.

THE WALL STREET JOURNAL.

PUBLISHED SINCE 1889 BY DOW JONES & COMPANY

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Notable & Quotable: Opinions

From an

BUSINESS & FINANCE

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THE WALL STREET JOURNAL.

Tuesday, April 18, 2017 | B1

Euro vs. Dollar 1.0657 ▲ 0.41%

FTSE100 7327.59 Closed

Gold 1289.40 ▲ 0.27%

WTI crude 52.65 ▼ 1.00%

German Bund yield 0.191%

10-Year Treasury yield 2.248%

Caution Sign Blinks in China Debt

By SHEN HONG

SHANGHAI—China's riskiest corporate bonds are looking disproportionately expensive, a worrying sign that investors may be underestimating their risk as a tighter monetary policy and painful industrial restructuring weaken companies' ability to repay debt.

The gap between the average yields on five-year AA-rated and safer AAA-rated corporate bonds—a popular measure in China of how much more lower-graded debt issuers compensate investors for higher risk—has narrowed to its thinnest level on record. That so-called credit spread is now 0.49 percentage point, down from

around 0.90 point in late July, shortly before Beijing started reversing an easy-money policy that has kept its economy humming along at the expense of ballooning debt and inflated asset prices.

The popularity of bonds with low credit ratings in recent months, despite expectations of rising debt defaults and Beijing's pledge to reduce leverage in markets, is the latest example of the constant anomalies in the country's \$9 trillion bond market, which is the world's third-largest but remains underdeveloped.

Such an anomaly further distorts a market where longstanding flaws including the lack of a rigorous credit-rating system and proper pricing of

risk have weakened the ability of both bond issuers and investors to gauge their future risks more accurately, analysts say. Concerns about these problems remain a stumbling block for Beijing to attract strong foreign interest despite a landmark decision more than a year ago to open its bond market to global investors.

Reflecting the broader trend, the yield differential between the five-year bonds issued by Times Property Holdings, an AA-rated property developer, and Longhu Chongqing Enterprise Development Co., an AAA-rated industry peer, has shrunk to 1.32 percentage points from a high of 2.24 points in late July.

Please see BONDS page B2

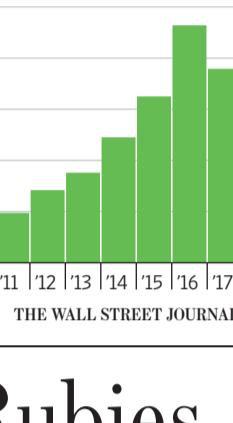
Underpriced Risk

The yield spread between China's riskiest and safer corporate bonds is the narrowest on record.

Five-year corporate bond-yield spread



Corporate bonds due to mature



Google Buys Land For a Data Center

Tesla Inc.'s "gigafactory" has a big new neighbor: Google.

Google last week bought land stretching across 1,210 acres at a private industrial park east of Reno, Nev., for

By Jack Nicas
in San Francisco
and Jim Carlton
in Reno, Nev.

\$29.1 million, according to people familiar with the deal and documents filed late Friday in Storey County, Nev.

The Alphabet Inc. unit aims eventually to build a data center at the 10,000-acre Tahoe Reno Industrial Center, according to these people. Google, which made the deal through a subsidiary called Silver Slate LLC—created in Delaware in August—has no immediate plans to build, according to a person close to the company.

The vacant desert tract near Electric Avenue is several miles south of the 3,200 acres where Tesla is building its \$5 billion battery factory, which could be the world's biggest building at 10 million square feet when it is completed in the next several years.

Once known for casinos and brothels, Reno is now attracting corporations drawn by its low costs, lenient permitting rules and relative proximity to Silicon Valley. Other big corporations that have recently built data centers, factories and distribution centers at the industrial park include Walmart Stores Inc. and eBay Inc.

Google is aggressively expanding its network of computers—likely already the biggest in the world—to support its core internet business and its push into selling computing power over the internet, known as cloud computing.

The company believes its cloud business could one day eclipse the advertising business that accounted for 88% of Alphabet's \$90 billion in sales last year. Google and cloud rivals Amazon.com Inc. and Microsoft Corp. are collectively spending billions of dollars each year on data centers, vast warehouses of computer servers.

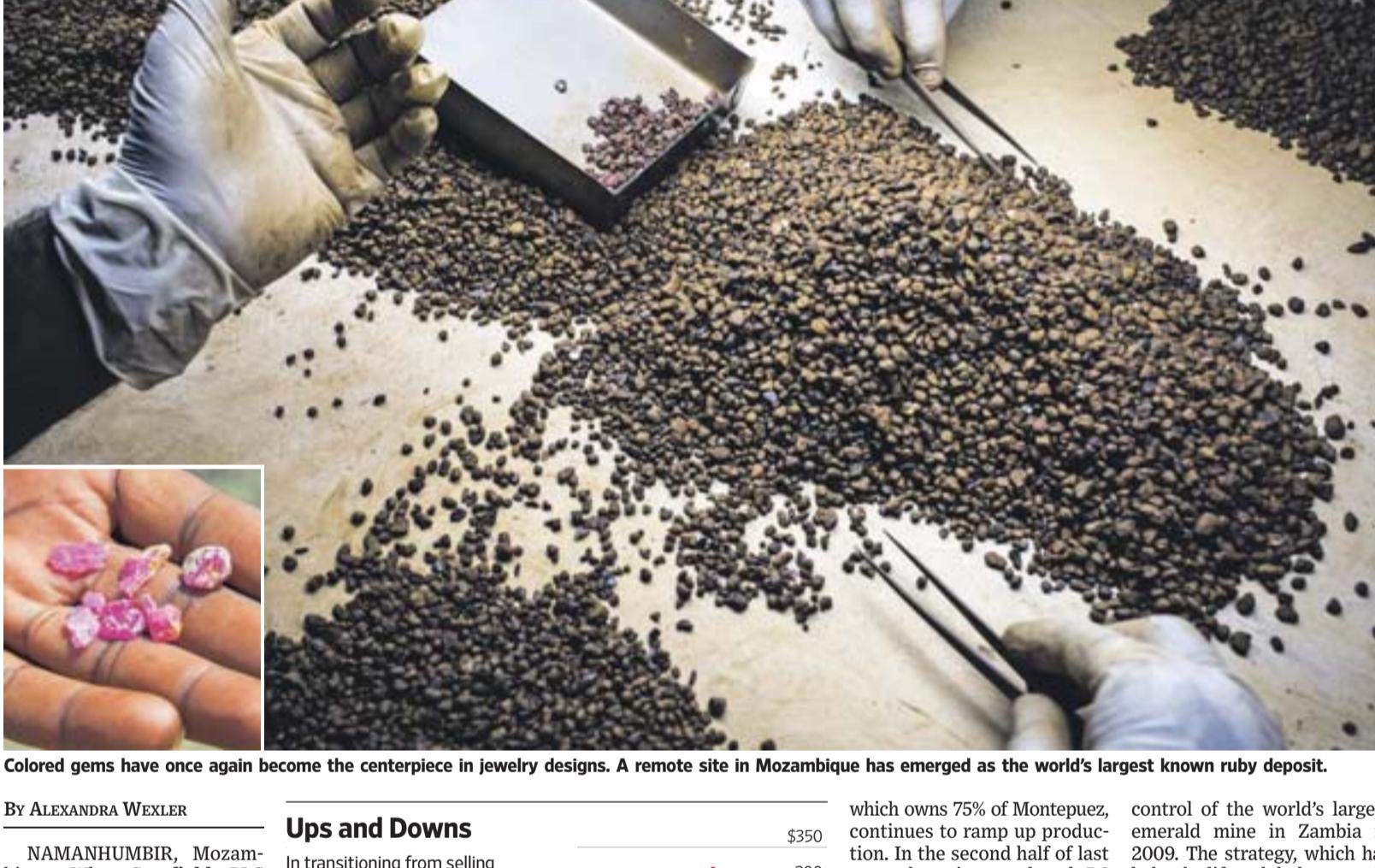
A Google data center near Reno would likely leverage new fiber-optic connections at the industrial park. Internet-infrastructure company Switch LP recently connected Silicon Valley, Los Angeles, Las Vegas and the Tahoe Reno Industrial Center with high-speed cable that can deliver data around the loop in less than 14 milliseconds, or thousandths of a second.

Some officials in Reno said rumors of Google's expansion there have swirled for two years. The deal was cloaked in secrecy, with some officials

Please see RENO page B2

Gemfields Seeks to Spark Boom for Rubies

Discovery of huge trove in Mozambique has mining company betting on renewed demand for the rare, expensive gem



JOHN WESSELS/AGENCE FRANCE PRESSE/GETTY IMAGES; GEMFIELDS (INSET)

Colored gems have once again become the centerpiece in jewelry designs. A remote site in Mozambique has emerged as the world's largest known ruby deposit.

By ALEXANDRA WEXLER

NAMANHUMBIR, Mozambique—When Gemfields PLC Chief Executive Ian Harebottle hosts visitors at the company's Montepuez ruby mine, he jokingly tells guests they're only allowed to have lunch if they can collect a handful of the rare red stones. No one ever goes hungry.

Machines need only dig 10 feet into the ground at this former hunting ground in northern Mozambique to unearth millions of carats of jewels each year. Once the top layers of soil are removed, dozens of glistening stones are visible to the naked eye, and guests can fondle the gems before depositing them into plastic bags

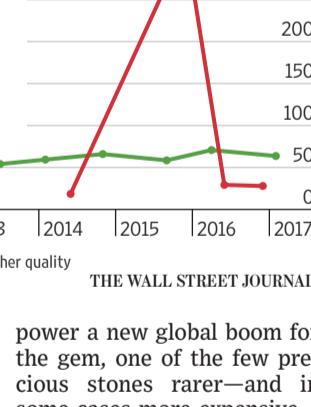
Ups and Downs

In transitioning from selling emeralds to rubies, Gemfields has had to figure out the best way to bundle the red stones for sale through trial and error. Average per carat sales value at auction:

Ruby and corundum*
Emerald and beryl†

Note: For rough stones *Mixed quality †Higher quality

Source: The company



which owns 75% of Montepuez, continues to ramp up production. In the second half of last year, the mine produced 5.6 million carats of ruby and parent-stone corundum, up from 2.1 million carats during the same period a year earlier.

"It's almost an embarrassment of riches," says Patrick Morton, an analyst at Macquarie Group Ltd. But to make good on the mine's promise, he says Gemfields needs "to marry the technical challenge of ramping up the mine with the need to develop demand to absorb all of this new production."

The supply chain, traditionally based in Southeast Asia, also needs an overhaul.

Gemfields has revived a playbook it used after taking

control of the world's largest emerald mine in Zambia in 2009. The strategy, which has helped lift global emerald prices 14-fold since 2009, according to company sales data, includes creating a new grading and auction system, plying designers with a constant stream of stones and aggressive marketing. The company spent \$15 million in the year ended June 2016 on ad campaigns featuring Hollywood actresses like Mila Kunis and Sophie Cookson.

The push comes at a time when colored gems have once again become the centerpiece in jewelry designs, whether it is Kate Middleton's sapphire engagement ring or the bright haute couture pieces that grace

Please see RUBY page B2

Insurers Scramble to Set Prices

By ANNA WILDE MATHEWS

With deadlines looming to file plans for next year's Affordable Care Act marketplaces, health insurers are struggling to respond to mixed signals from the Trump administration, forcing them to delay key business decisions and scour Twitter for hints from Washington about the law's future.

Insurers are set to meet Tuesday with Trump administration officials, and they are hoping for reassurance and greater clarity about the future of the exchanges. Some companies have just weeks, and in a few cases days, to file proposed 2018 rates with state regulators.

If the uncertainty continues, the companies say it will prod them toward more cautious strategies: bigger rate increases, and pullbacks or withdrawals because they can no



JOE RAEDLE/GETTY IMAGES

The Affordable Care Act, known as Obamacare, faces uncertainty.

longer stomach the risk.

At Sanford Health Plan,

which offers ACA plans in North and South Dakota, actuaries are using "multiple scenarios" in developing rates, said Kirk Zim-

mer, executive vice president. "We spend a lot of time looking at media and social media to see if we can glean any useful information," he said. "It's a struggle to keep up."

Minuteman Health, a non-profit insurer, will have to file proposed rates on its New Hampshire ACA plans by April 24. "It's a rough draft at best. We've told regulators,

"There's no way on earth we can price accurately right now," said Chief Executive Tom Policelli, who added the proposed rates are likely to be "quite high, and we will fine-tune as we go forward."

Insurers were whipsawed by the Trump administration's moves last week. President Donald Trump threatened to stop funding the ACA's cost-sharing reduction subsidies, which help lower-income ACA

Please see ACA page B2

Netflix Subscriptions Increase Less Quickly

By BOWDEYA TWEED AND SHALINI RAMACHANDRAN

Netflix Inc.'s subscriber growth slowed in the first quarter, falling short of expectations, though profit grew as the cost of content was lower than anticipated.

The Los Gatos, Calif., company reported 98.75 million total subscribers, up from 81.5 million a year ago. Analysts polled by Thomson Reuters expected 98.9 million subscribers overall. The company said in a letter to shareholders that it is on track to surpass 100 million subscribers this week.

The company added 3.53 million international subscribers in the quarter, missing its guidance of 3.7 million.

In the year-earlier quarter, it added 4.51 million interna-

tional customers. Its U.S. subscriber growth slowed, as it added 1.42 million customers, falling short of its target of 1.5 million. It added 2.23 million U.S. customers in the prior-year period.

Netflix ended the first quarter with 50.85 million U.S. customers and 47.9 million international customers. The streaming video company has been aggressively pursuing international expansion as its core U.S. market matures.

Over all, Netflix's first-quarter profit was \$178.2 million, or 40 cents a share. In the comparable 2016 period, the profit was \$27.7 million, or 6 cents per share.

Revenue rose 35% to \$2.64 billion. Analysts had projected earnings of 37 cents a share, with \$2.64 billion in revenue.

Heard on the Street

CHARLEY GRANT

Elliott Management Corp. that Arconic said "showed poor judgment."

News of the change might suggest a winding down of

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BUSINESS & FINANCE

Shipyard Creditor Backs Bailout

By KWANWOO JUN

SEOUL—South Korea's National Pension Service, a major creditor of the debt-ridden Daewoo Shipbuilding & Marine Engineering Co., said it has agreed on a newly proposed bailout package for the world's second-largest shipyard.

The decision Monday by NPS, one of the world's biggest pension funds, came hours before Daewoo's creditors began a two-day meeting to decide whether to convert massive debt into equity as part of the fresh 2.9 trillion Korean won (\$2.6 billion) rescue plan, and will likely set the tone for talks that will last until Tuesday.

The shipyard could go into receivership unless its lenders agree to the bailout that requires them to convert the majority of the \$14 billion in unpaid bondholdings into equity and roll over the remaining debt. The pension service holds about a quarter of Daewoo's outstanding bonds and more than 40% of its 440 billion won of debt, which is due for repayment this month.

The NPS said its decision to go ahead with the bailout was "based on its final judgment that accepting the debt-rescheduling plan will be more favorable in enhancing the



Daewoo Shipbuilding & Marine Engineering could go into receivership without a bailout package.

profits of the pension fund," rather than letting Daewoo go into receivership or bankruptcy.

The statement is something of a comedown for the NPS, which had earlier demanded a guarantee of full debt repayment, following weekend negotiations with Daewoo's largest shareholder, state-run Korea Development Bank, which is leading the bailout effort.

The financial trouble at Daewoo highlights the strug-

gles of the global shipbuilding industry as it reels from stagnating ship orders and a slowdown in China. The shipyard lost 2.7 trillion won in 2016, following a 3.3 trillion won loss a year earlier.

Korea Development Bank and Export-Import Bank of Korea unveiled the new rescue plan in March, which they said would improve Daewoo's cash flows. In 2015, they had provided a combined 4.2 trillion won in aid to the shipyard.

The latest bailout would allow Daewoo to stay afloat and fulfill about \$34 billion in orders for about 95 ships by 2020.

South Korea is home to some of the world's biggest shipyards. Since the global economic slowdown in 2008, they have been undergoing heavy overhauls as lower-cost Chinese rivals bite into profits. Shipbuilding accounts for 7% of Korea's exports and 5% of employment.

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HEARD

Continued from the prior page hostilities. Elliott, which owns 11.6% stake in the company and is running a proxy campaign against Arconic, had called in January for Mr. Kleinfeld to be ousted.

But everything except Mr. Kleinfeld's departure signals the feud is far from over. Arconic, recently spun out from Alcoa, said the exit of its CEO was mutually agreed upon and doesn't reflect flaws in the company's strategy or dissatisfaction with its performance. In a line that seemed to signal its intention to fight, Arconic said Elliott's "central objective—a CEO change—has been realized." It called Elliott's efforts "highly disruptive and distracting." Elliott fired back that Mr. Kleinfeld's departure was a "necessary first step" in a larger over-haul at Arconic.

Given Elliott's slate of demands, the CEO change won't be enough. Elliott is nominating four directors to Arconic's 13-person board.

Elliott also has called for greater capital investment in Arconic's higher-return business lines and cutting corporate costs to boost margins.

Arconic hasn't gotten off to a great start. The company cut its profit forecast twice last year, citing under-performance in its aerospace unit, as well as weakness in the North American heavy-duty truck market.

The interim CEO named by the board isn't exactly a concession to Elliott, which has its own pick for CEO. The board's choice is David Hess, formerly of United Technologies, who takes

over as interim chief while a committee hunts for a permanent replacement. Elliott had called for former Spirit AeroSystems CEO Larry Lawson to get the top job.

Arconic has far from surrendered in this fight. Elliott is highly unlikely to walk away. But Arconic was Mr. Kleinfeld's baby; with him out of the picture, the company may not battle Elliott with the same vigor.

The battle has claimed its first victim. There will likely be more.

BONDS

Continued from the prior page

China's central bank has made a series of moves since August—first cutting the supply of cheap short-term loans to banks and, more recently, twice raising the cost of such loans—to slow a debt-fueled investment boom.

"There's been no notable improvement in corporate fundamentals in China, so the recent spread tightening can only be a temporary phenomenon," said Ivan Chung, an analyst at Moody's Investors Service.

Compared with more developed Western markets, China has what some analysts consider an overly lenient domestic credit-rating system. The relatively safer domestic AAA

grade is typically enjoyed by the largest state-run firms, while the AA category covers a variety of much riskier bond issuers.

A confluence of factors is behind the tightening in credit spreads. They include a steadier Chinese currency and an easing of capital outflows, which have made investors more eager to take on risk.

There has also been a dearth of bonds. Pressured by rising costs, Chinese firms have issued a combined 917 billion yuan (\$133 billion) worth of new bonds so far this year, a sharp decline from 2.4 trillion yuan in the year-earlier period and 1.01 trillion yuan in 2015.

The scarcity of new bonds has left many investors with no choice but to turn to the secondary market for supply.

"But the recent drop in new

bond issuance is temporary too, because a massive amount of old bonds are due to mature this year, so there's large refinancing pressure for companies," said Wang Ying, an analyst at Fitch Ratings.

According to data provider Wind Info, a total of 3.79 trillion yuan worth of corporate bonds will mature this year, down from last year's record 4.64 trillion yuan but higher than 3.25 trillion yuan in 2015 and more than double that in 2013.

As Chinese banks scale back their lending in a weakening economy, many companies, especially private firms with limited access to bank loans, will be forced to return to the bond market to raise funds.

The exceptionally tight credit spreads are also a sign of investors' complacency about the hidden risk in lower-quality bonds.

The main buyers include trust firms, asset managers, brokerages and small banks that have issued so-called wealth-management products that promise investors much higher returns than bank deposits.

"In many cases the spread is too tight to reflect the worrisome fundamentals of the issuers, which adds to the systematic risk in the entire bond market," said Gu Weiyong, general manager of Ucon Investments, a Shanghai private-equity fund.

As interest rates rise and Beijing pushes ahead with efforts to cut overcapacity in sectors such as steel and coal, analysts expect credit risk to become more pronounced.

Eight Chinese companies have defaulted on their bonds so far this year, down from 11 in last year's period but well above just three in 2015.

ACA

Continued from the prior page

enrollees with costs such as deductibles, in an effort to prod Democrats to negotiate over a health bill. Insurers are also worried about the future of the ACA's mandate for people to have insurance, because they fear enforcement could be limited or eliminated.

But the administration also completed a rule designed to address some of insurers' concerns, saying it aimed to stabilize the marketplaces. Asked about the companies' uncertainty, a spokeswoman for the Department of Health and Human Services pointed to a statement the department issued last week that said, "The administration is currently deciding its position" on the cost-sharing subsidies. Congressional Democrats are also expected to push for the cost-sharing payments to be included in a spending bill that needs to pass by April 28 to keep the government running.

Health Care Service Corp., one of the biggest ACA-plan issuers, hopes to continue selling the policies in the five states where it is the Blue Cross Blue Shield insurer, which include Texas and Illi-

nois, said Senior Vice President Kurt Kossen, but "we haven't made any decisions in terms of our participation" for 2018. If the company doesn't have a clear answer on the mandate and the cost-sharing subsidies, it would have to include those costs in the rate proposals it does submit, he said, and that could raise premiums a "significant amount."

business decisions on whether we go forward or not in 2018," he said. "That is an open-ended question for us."

"You get to the point where you say, if we don't have the information, we can't go forward," said J. Mario Molina, chief executive of Molina Healthcare Inc., which offers ACA plans in nine states.

Insurers in at least two

pushed back to June. Insurers can still change their decisions later than that.

Half of insurers said they couldn't yet project what rates they would propose for ACA plans, according to a survey from consulting firm Oliver Wyman, a unit of Marsh & McLennan Cos. Of those that did, about one-quarter said they were considering increases of more than 20%, with the largest at 35%, while roughly half were considering hikes of 10%-20% and the rest were below 10%, according to the firm, which got responses from 24 exchange insurers for the poll performed in recent weeks.

Only one insurer said it planned to stop offering exchange plans. Among the companies that currently expect to stick with the business, about 13% said they were likely to reduce their geographic footprints. However, about 13% said they were considering expansion, and the remainder leaned toward keeping their same geographies.

Beth Fritchen, an actuary at Oliver Wyman, said the findings provide a limited snapshot, and developments in Washington could sharply alter insurers' views. "Anything could change," she said.

RUBY

Continued from the prior page the red carpet. Demand for rubies, long renowned for their durability and beauty, has risen. Further fueling interest, the U.S. in October lifted an eight-year ban on imports of all rubies mined in Myanmar, the traditional and most well-known source of the gem.

"The ruby in a fine quality and a large size is still the rarest large stone that exists in the world," says Marco Hadjibay, creative director at Bayco Jewels, a high-end New York designer. "Prices have kept jumping up."

While the market for rubies remains relatively small compared with diamonds, it is growing. A Gemfields ruby

auction in December achieved an average price of \$27.79 a carat, up from \$18.43 a carat in 2014. The company said total revenue from its Montepuez operation rose to \$50.3 million in the six months to Dec. 31, accounting for 60% of group revenue, versus 31% in the year-earlier period.

Montepuez's ruby rush has drawn illegal miners from across Mozambique and neighboring Tanzania. Scattered loosely in the earth, rubies are easier to mine than emeralds, which are embedded in rock. Eight years after the site was discovered, the streets of Na-manhurib are lined with small shops that Gemfields and townspeople say serve as fronts for ruby smuggling; some openly sell pans, shovels and picks for locals looking to lift gems from sites on or near

the mines.

"The biggest problem with the ruby mine is keeping the locals out of it," says Martin Potts, director of mining research at finnCap Ltd., a British investment bank and brokerage.

Crime in the region has increased, as have allegations of exploitation and human-rights violations after some miners died in accidents and shooting. Some reports have alleged that Gemfields has been negligent in its handling of illegal miners. The company denies any wrongdoing.

Another problem is the supply chain. For centuries, the ruby trade has been centered in Southeast Asia, with stones plucked from the earth in Myanmar by small, artisanal miners, then cut and polished in Thailand. In the industry, rubies from that origin are still

referred to as Burmese, Myanmar's colonial-era name. Because rubies have been so rare, Thai cutters and polishers rarely focused on volumes or economies of scale. As Gemfields looks to operate on a larger basis, the company says it is helping to ease Thai buyers' access to capital and guaranteeing a steady stream of stones.

Macquarie's Mr. Morton says short-term oversupply and creating desire at the consumer level are the biggest long-term challenges facing the company. "There is a sense that maybe the market is stable at this point," he says, referring to the most recent auction results for both emeralds and rubies, which were lower than previous sales. "That's certainly hurting demand."

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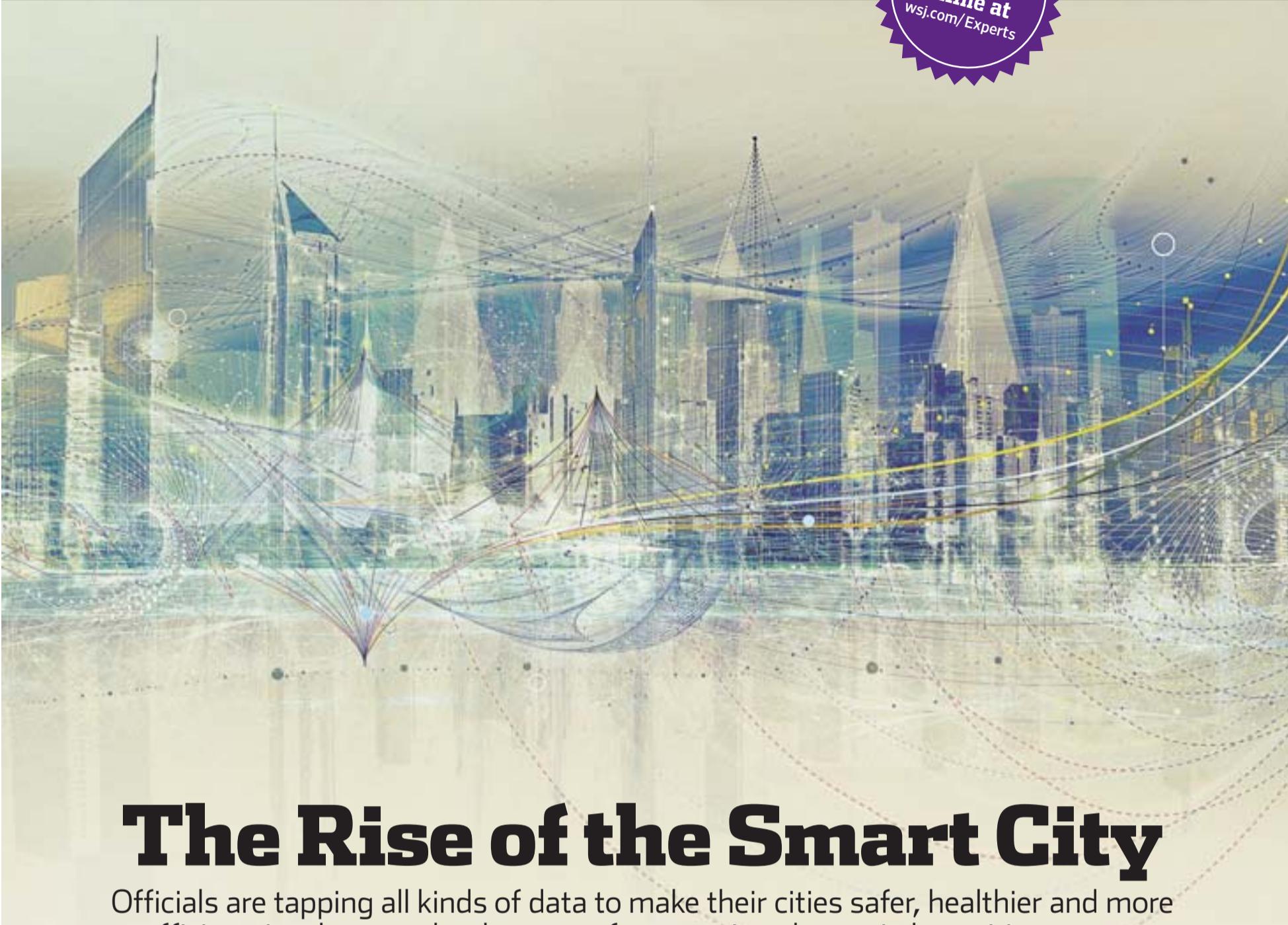
THE FUTURE OF CITIES

B4 | Tuesday, April 18, 2017

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The Rise of the Smart City

Officials are tapping all kinds of data to make their cities safer, healthier and more efficient, in what may be the start of a sweeping change in how cities are run

BY MICHAEL TOTTY

CITIES HAVE A WAY TO GO BEFORE THEY CAN
be considered geniuses. But they're getting smart pretty fast.

In just the past few years, mayors and other officials in cities across the U.S. have begun to draw on the reams of data at their disposal—about income, burglaries, traffic, fires, illnesses, parking citations and more—to tackle many of the problems of urban life. Whether it's making it easier for residents to find parking places, or guiding health inspectors to high-risk restaurants or giving smoke alarms to the households that are most likely to suffer fatal fires, big-data technologies are beginning to transform the way cities work.

Cities have just scratched the surface in using data to improve operations, but big changes are already under way in leading smart cities, says Stephen Goldsmith, a professor of government and director of the Innovations in Government Program at the Harvard Kennedy School. "In terms of city governance, we are at one of the most consequential periods in the last century," he says.

Although cities have been using data in various forms for decades, the modern practice of civic analytics has only begun to take off in the past few years, thanks to a host of technological changes. Among them: the growth of cloud computing, which dramatically lowers the costs of storing information; new developments in machine learning, which put advanced analytical tools in the hands of city officials; the Internet of Things and the rise of inexpensive sensors that can track a vast array of information such as gunshots, traffic or air pollution; and the widespread use of smartphone apps and mobile devices that enable citizens and city workers alike to monitor problems and feed information about them back to city hall.

All this data collection raises understandable privacy concerns. Most U.S. cities have policies designed to safeguard citizen privacy and prevent the release of information that might identify any one individual.

In theory, anyway. In reality, even when publicly available data is stripped of personally identifiable information, tech-savvy users can combine it with other data sets to figure out an awful lot of information about any individual. Widespread use of sensors and video can also present privacy risks unless precautions are taken. The technology "is forcing cities to confront questions of privacy that they haven't had to confront before," says Ben Green, a fellow at

deaths in building fires in 2015, the latest year for which data is available. The presence of smoke alarms is critical in preventing these deaths; the National Fire Protection Association, a nonprofit standards group, says a working fire alarm cuts the risk of dying in a home fire in half.

New Orleans, like most U.S. cities, has a program run by its Fire Department to distribute smoke detectors. But until recently, the program relied on residents to request an alarm. After a fire in which five people—three children, their mother and grandmother—perished, the department started looking for a way to make sure that they were getting alarms into homes where they could make a difference.

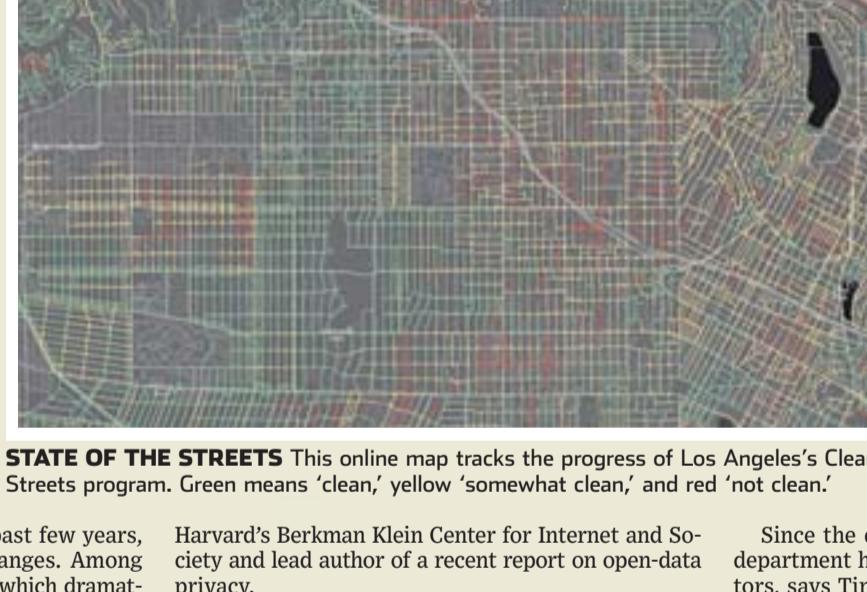
Oliver Wise, director of the city's Office of Performance and Accountability, had his data team tap two Census Bureau surveys to identify city blocks most likely to contain homes without smoke detectors and at the greatest risk for fire fatalities—those with young children or the elderly. They then used other data to zero in on neighborhoods with a history of house fires. Using advanced machine-learning techniques, Mr. Wise's office produced a map that showed those blocks where fire deaths were most likely to occur and where the Fire Department could target its smoke-detector distribution.

Since the data program began in early 2015, the department has installed about 18,000 smoke detectors, says Tim McConnell, chief of the New Orleans Fire Department. That compares with no more than 800 detectors a year under the older program. It is too early to tell how effective it has been at preventing fire deaths, Chief McConnell says, since they are so rare. But the program did have an early, notable success.

A few months after the program began, firefighters responded to a call in Central New Orleans. Arriving, the fire crew found three families—11 people in all—huddled on the lawn. The residents had been alerted by smoke detectors recently installed under the outreach program.

"That was just one of those stories where you go,

Please turn to the next page



CLEAN STREETS LA

STATE OF THE STREETS This online map tracks the progress of Los Angeles's Clean Streets program. Green means 'clean,' yellow 'somewhat clean,' and red 'not clean.'

Harvard's Berkman Klein Center for Internet and Society and lead author of a recent report on open-data privacy.

Still, cities are moving ahead, finding more ways to use the considerable amounts of data at their disposal. Here's a look at some of the ways the information revolution is changing the way cities are run—and the lives of its residents.

SPOTTING POTENTIAL PROBLEMS... BEFORE THEY OCCUR

Perhaps the most innovative way cities are employing data is to anticipate problems.

Consider the risk of death by fire. Although declining nationally, there still were 2,685 civilian

deaths in building fires in 2015, the latest year for which data is available. The presence of smoke alarms is critical in preventing these deaths; the National Fire Protection Association, a nonprofit standards group, says a working fire alarm cuts the risk of dying in a home fire in half.

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JOURNAL REPORT | THE FUTURE OF CITIES

When Robots Take to the Sidewalks

Startups in London and other places are testing machines to haul your stuff around the city

BY ERICA E. PHILLIPS

ON A SUNNY DAY in San Francisco's residential Potrero Hill neighborhood, a 3-foot-tall robot named Scrappy went out for a stroll.

Box-shaped, mounted on four rubber wheels and outfitted with a high-tech array of sensors and cameras, Scrappy is part of a team of robots surveying the sidewalk landscape for **Marble**, a robotics startup in San Francisco. For now, the robots are taking their walks with Marble executives or employees. Within a year, the company aims to have the majority of the city's sidewalks three-dimensionally mapped—allowing its small fleet to autonomously navigate the city, carrying everything from groceries to takeout, dry-cleaning and prescriptions to and from homes and businesses.

As Scrappy rolled around Jackson Playground, most of the park's patrons and passersby—human and canine—ignored the humble robot. But Kathy Piziali was intrigued.

"We've never run into a real robot before," said Ms. Piziali, who was taking her 3-year-old grandson to the playground.

Marble Chief Executive Matt Delaney imagines a future where few people will be able

to say that: Delivery robots will eliminate the need for many of the cars, trucks and vans on streets today, allowing cities to carve out much more space for pedestrians—many of whom will have their own personal robots in tow to carry things for them.

That vision might not fully come about for another generation or so, Mr. Delaney says, but he—like other entrepreneurs testing sidewalk robots in cities around the world—believes robots will be a common sight on city streets within a decade.

"This is what we've all been seeing in the science-fiction movies we watched growing up," says Siddharth Vanchitanathan, co-founder of **Propel-land**, a San Francisco-based technology and design firm.

Meeting the public

Other robot makers include **Dispatch**, also based in the San Francisco Bay Area; **Starship Technologies**, with headquarters in London and engineering based in Estonia; and Piaggio Fast Forward, a division of Italy's **Piaggio** SpA, known as the maker of Vespa scooters. Generally the companies say they plan to offer their robots for hire, rather than selling them outright, and for now they decline to disclose what



Starship Technologies has tested its delivery robot in more than 50 cities.

they would cost to purchase.

The robots are all essentially caddies on wheels, roughly the size of a laundry basket or two, big enough to carry small parcels and small enough to allow pedestrians to walk by. With tracking systems and cameras on all sides, they wouldn't necessarily be a target for thieves, developers say, because it would immediately be clear who took them and where they were headed.

The early designs are made for short trips carrying packages weighing up to 30 pounds or so. And while the robots aren't anything like humanoid, there's something undeniably captivating about them—particularly at first sight.

During a lunch-hour test run in Redwood City, Calif., last month, a Starship robot turned dozens of heads in a span of less than four blocks. Several people snapped pictures with their cellphones, and a few spoke directly to the robot.

"Lookin' good!" one young man said as he walked by.

"Come back here, you!" another man joked as the robot sallied forth at about 4 miles an hour.

But if you ask Henry Harris-Burland, marketing chief for Starship, that kind of attention is becoming increasingly rare. The firm has tested its robots in more than 50 cities. In one recent London outing on a busy day, Mr. Harris-Burland

says, "60% to 70% of people completely ignored the robot—I was quite offended!"

Kinks and skeptics

Developers and engineers say there might be a few kinks to work through as cities figure out legal parameters for robot use and robot makers tackle the many challenges city streets present. Programmers are still finessing the complexities of crossing the street, for example.

For now, many of the delivery robots can't enter buildings—dealing with the many types and sizes of doors and how to get through them is too big a challenge at this point. So one might see small crowds of

them waiting outside offices or apartment complexes at busy times of day. One idea developers have discussed is a separate elevator for robots in the highest-density buildings, but that's out of their hands.

There are skeptics. "I'm not sure what pressing problem these robots are supposed to solve for us," says Michael Manville, an urban-planning professor at the University of California, Los Angeles. "Do we seriously have a problem where people can't move stuff down sidewalks?" If the purpose is to ease traffic congestion, Mr. Manville says, cities could better accomplish that by charging for the use of certain busy roads, improving bicycle lanes, enacting a gas tax, or all of the above.

"I hate to think that excitement over what this technology could do would displace energy that could be used to employ existing and proven, albeit less exciting, ways to improve our cities," he says.

But developers are pressing ahead. Piaggio has several tests planned beginning later this year. Starship has parcel and takeout-delivery pilot programs going in several cities. And last week Marble announced the launch of a food-delivery partnership with Yelp's Eat24 delivery service in San Francisco.

"The thing we can't wait for is for it to be kind of commonplace," Mr. Delaney says. "It'd be an easier world if everything was just robots."

Ms. Phillips is a Wall Street Journal reporter in Los Angeles. She can be reached at erica.phillips@wsj.com.

Continued from the prior page
"This works," Chief McConnell says. "For us, it's a game changer."

Predictive analytics have also been used to improve restaurant health inspections in Chicago. The Department of Public Health relies on about three dozen inspectors to check for possible violations at more than 15,000 food establishments across the city. It needed a better way to prioritize inspections to make sure that places with potential critical violations—those that carry the greatest risk for the spread of food-borne illness—were examined before someone actually became sick.

The data team in the city's Department of Innovation and Technology developed an algorithm that looked at 11 variables, including whether the restaurant had previous violations, how long it has been in business (the longer, the better), the weather (violations are more likely when it's hot), even stats about nearby burglaries (which tells something about the neighborhood, though analysts aren't sure what).

With the tool, the health department could identify establishments that were most likely to have problems and move them up the list for inspection. After the algorithm went into use in 2015, a follow-up analysis found that inspectors were visiting restaurants with possible critical violations seven days sooner than before. Since then, its use has resulted in a 15% rise in the number of critical violations found, though the number of illness complaints—an imperfect measure of violations—has been flat.

SENSORS ON EVERYTHING

Just as individuals are flocking to Fitbits and other wearables to monitor their health, cities, too, are turning to sensors to track their own vital signs. Through this Internet of Things, sensor-equipped water pipes can identify leaks, electric meters can track power use, and parking meters can automatically flag violations.

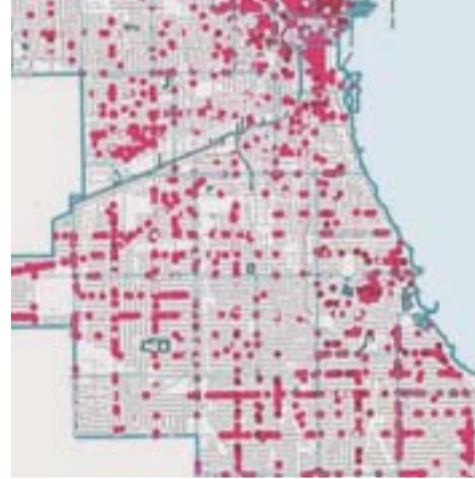
As part of a smart-city initiative, Kansas City, Mo., has installed computer-equipped sensors on streetlights along a 2.2-mile light-rail line that opened in March of last year. The city uses video from the sensors to gather information about traffic and available street parking along the corridor. The data is then made available on a public website that shows the location of streetcars, areas where traffic is moving slowly, and locations with open parking spots. It also provides an hourly traffic count in the corridor for the past day.

The sensors can even count foot traffic, which could assist entrepreneurs looking to open a new coffee shop or retail outlet, and help city officials estimate the size of crowds, which is useful in responding to public disturbances or in assigning cleanup crews after events like the city's 2015 World Series championship parade. Their ability to detect motion also can be used to adjust the LED streetlights so that they dim if no one is around and automatically brighten if cars or pedestrians pass by. The goal is to use data to "improve our efficiency of service and ascertain what services we ought to be providing," says Bob Bennett, Kansas City's chief innovation officer.

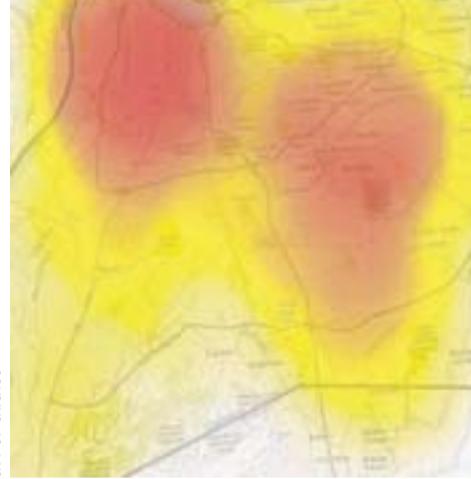
Cities are also putting sensors in the hands of citizens. In Louisville, Ky., a coalition of public, private and philanthropic organizations has provided more than 1,000 sensor-equipped inhalers to asthma sufferers to map where in the city poor air quality is triggering breathing problems. The tiny sensors, from Propeller Health, a Madison, Wis., medical-device company, have built-in GPS that collects time and location data with each puff of the inhaler.

The city is still completing its analysis of the data, but early findings were impressive, says Grace Simrall, Louisville's chief of civic innovation. For one thing, patients in the program saw measurable improvement, in part by

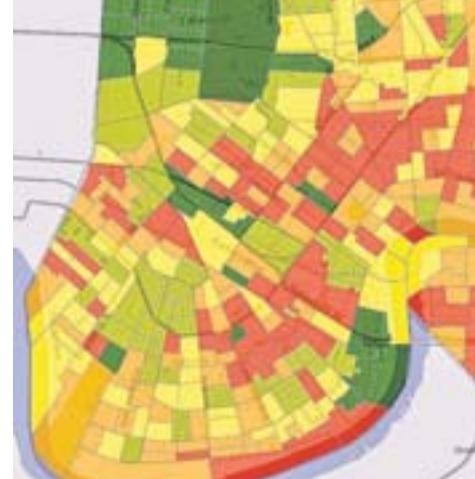
The Rise of the Smart City



CHECK, PLEASE To prioritize restaurant inspections, Chicago developed an algorithm to identify eateries most likely to have violations. The darker the pink, the higher the likelihood.



AIR TRIGGER Sensor-equipped asthma inhalers in Louisville that collect data on time and place of use have improved care for individuals and helped the city address problem areas.



FIRE RISK With census and other data, New Orleans mapped the combined risk of missing smoke alarms and fire deaths, helping officials target distribution of smoke detectors.



PARK HERE In Kansas City, Mo., sensors on streetlights along a new light-rail line gather information about traffic and available parking that the public can view online.

giving them a better understanding of their disease, and their physicians more information to devise treatment plans. And as expected, the data made it possible to show clusters of inhaler use and link it with air pollution.

In one case, sensor data spotlighted a congested road on the east side of town where inhaler use was three times as high as in other parts of the city. In response, the city planted a belt of trees separating the road from a nearby residential neighborhood; the plantings have resulted in a 60% reduction in particulate matter (which can aggravate breathing problems) behind the green belt.

CITIZENS AS DATA COLLECTORS

Using the public as data collectors isn't new—it's the idea behind 911 and 311 systems. But smartphone apps, in the hands of residents

and city workers, give cities new and more powerful ways to expand their data-collection efforts.

In Mobile, Ala., building-code inspectors armed with smartphones and Facebook Inc.'s Instagram photo-sharing app were able to inventory the city's 1,200 blighted properties in just eight days—a task that enforcement officers had previously considered impossible with the older paper-based systems of tracking blight. With Instagram, inspectors could snap a photo of a property and have it appear on a map, showing officials where dilapidated, abandoned or other problem properties are clustered.

The inventory was just the first step. Mobile's two-year-old Innovation Team, funded with a grant from Bloomberg Philanthropies, cross-referenced the data with other available property information—tax records, landmark status, out-of-state ownership—to compile a "blight index," a master profile of every prob-

lem property in the city. This made it possible to identify which property owners might need assistance in rehabbing their properties and which ones to cite for code violations. The city is wrapping up a second survey of blighted properties to measure the net change over the past year, says Jeff Carter, Innovation Team's executive director. "Instagram was phase one, and we would never have made it to phase two without it," Mr. Carter says.

Mobile data collection is also helping Los Angeles to clean up city streets. Teams from the city sanitation department use video and smartphones to document illegal dumping, abandoned bulky items and other trash problems. The teams can use an app to report problems needing immediate attention, but what was really noteworthy—especially for a city the size of L.A.—was that they were able to view and grade all 22,000 miles of the city's streets and alleyways.

The result has been to give officials and the public a better picture of garbage-plagued areas that can be targeted under Mayor Eric Garcetti's Clean Streets program. Data collected by the mobile teams is compiled in a detailed map of the city, with each street segment rated as being clean, somewhat clean and not clean. The city publishes the map online so that anyone can get a color-coded view of how streets rank for cleanliness.

The program, which recently finished its first full year, has resulted in an 80% reduction in the number of areas scored "not clean," says Lilian Coral, Los Angeles's chief data officer. The new data-driven approach not only has made it possible to better identify problem areas, Ms. Coral says, but it also has helped to reduce disparities in the city's cleanup efforts, which previously depended mainly on complaints to identify locations needing attention.

In Boston, meanwhile, the city has joined with Waze, a navigation app from Google that enables drivers to share traffic and road conditions in real time.

The Boston traffic-management center uses Waze data to supplement live feeds from its network of traffic cameras and sensors, getting a more detailed picture of what's happening on city streets. Messages from Waze users can alert the center to traffic problems—a double-parked truck or a fender-bender—as soon as they develop, allowing officials to respond more quickly.

Waze data also has helped the city to run low-cost experiments on possible traffic changes. For instance, to test how to best enforce "don't block the box" at congested intersections, the center took more than 20 problem intersections and assigned each one either a changing message sign, a police officer or no intervention at all. Using Waze data, analysts would then see which enforcement approach was most effective at reducing congestion. As it turns out, Waze's traffic-jam data didn't show that either approach made much difference in reducing congestion (which may reinforce the view of those who believe little can be done to eliminate traffic headaches).

The partnership, one of 250 that Waze has signed with cities around the world, also enables the city to feed street-closure and similar information into the Waze app, making it easier for drivers to reroute trips before they get stuck in traffic.

"When residents see a problem, sometimes their reaction is to call us, but more these days their instinct is to report it through an app like Waze or Yelp," says Andrew Therriault, Boston's chief data officer. "To be as responsive as possible to the public's needs, we need to listen to their input through whichever medium they choose to share it."

Mr. Totty, a former news editor for *The Journal Report* in San Francisco, can be reached at reports@wsj.com.

Flying Taxis? A Hyperloop? Dubai Is Thinking Big

The city has lofty goals for being the innovative transportation city of tomorrow



BY NICOLAS PARASIE

DUBAI—Transportation authorities here in the largest city in the United Arab Emirates are working on a novel solution for businesspeople stuck in traffic jams: flying, driverless drone taxis that will swoop in and swiftly take them to their destinations.

Dubai is looking at approving use of an autonomous drone that will carry one passenger short distances. The battery-powered flying taxi—built by Chinese drone maker Ehang Inc.—could be available for booking through an app as soon as this year, depending on how tests go, Dubai's transportation authority says.

The drone taxi has space for one person and a suitcase only. It flies typically at around 60 miles an hour and is linked to a control center on the ground. In case of emergency, the drone will land immediately in the nearest safe space. Dubai's authorities say that they have already examined the drone prototype and that it would be controlled through 4G mobile internet.

"Eventually, the drone will

be the method of transport for human beings," says Mohamed al-Gergawi, the United Arab Emirates minister of cabinet affairs and the future. "Science fiction is going to happen," he says.

Testing ground

The drone taxi is part of an ambitious effort by Dubai to be on the cutting edge of new transportation technologies, from passenger drones to a transit system that in theory could travel near the speed of sound. The goal is both to improve connectivity and boost the emirate's growing reputation as a global trade and tourism hub. As Persian Gulf countries facing lower oil revenues struggle to diversify their economies, Dubai hopes to strengthen its credentials as the region's center for finance, tourism and transportation.

"You cannot resist the changes that are going to happen in the future," Mr. Gergawi says. "Either you move and create the future, or it will be imposed on you."

The city already has the Burj Khalifa, the world's tallest building; palm-shaped, artificial islands off its coast; and,



Two Dubai transportation visions:
A Hyperloop from the city to Abu Dhabi, and a flying drone taxi.

HYPERLOOP ONE

EHANG

more recently, a canal that meanders under the city's main highway. It is constructing the world's biggest airport and has started work on a new tower that will exceed the Burj Khalifa in height. The drive to attract transportation innovators may represent a new stage in the emirate's push to grab part of the future for itself.

"There's a transition in Dubai from being consumers of innovation to be producers of innovation," says Hazem Galal, a partner at PwC and the global leader of its consulting business for cities and local governments.

Besides low taxes and an enviable location between East and West, Dubai offers tech companies a business-friendly environment where red tape is limited and regulations can be easily modified for prototypes.

"We decided that we are going to be the world's largest lab," says Mr. Gergawi.

In addition to drone taxis, the emirate plans to test self-driving vehicles. Tesla Inc., whose chief executive, Elon Musk, is a key backer of autonomous technology, launched its electric cars in Dubai earlier this year. Dubai's ruler, Sheikh Mohammed bin Rashid al-Maktoum, has set a target of making a quarter of domestic transport trips smart and driverless by 2030, which could generate \$6 billion a year in savings and economic benefits, Dubai officials say.

Even bigger in scale is the Hyperloop, another vision of Mr. Musk's. Dubai last year announced a deal with Hyperloop One Inc., a company developing Hyperloop technology, to explore linking Dubai with Abu

Dhabi in what would be a 12-minute ride averaging 375 mph in pods through low-pressure tubes. Currently the roughly 75-mile trip takes more than an hour by car. Every city in the Gulf region could eventually be reached in less than an hour if a full network is eventually rolled out, Hyperloop One executives say.

"It is an emirate that has a reputation for not only dreaming big but actually making things happen," says Rob Lloyd, chief executive of Hyperloop One. In a sign of Dubai's support for the Hyperloop project, its government-controlled global ports operator, DP World, invested \$50 million in Hyperloop One.

The Hyperloop project is still years away from transporting its first passengers. The company is working with

Dubai's Roads and Transport Authority to explore potential routes and how to integrate it with the emirate's existing transportation infrastructure, which includes mega-airports, eight-lane highways, a metro and tram system. Costs and financing sources are also still under discussion.

Mr. Lloyd says the Hyperloop—a prototype of which is now being tested in the Nevada desert—should be able to endure the Gulf region's hot summer temperatures and sandy conditions, playing down any early concerns about the technology's implementation in the region.

As a center of innovation, though, Dubai still lags behind places such as Silicon Valley, London and Singapore, says Mr. Galal of PwC. Indeed, Dubai's pursuit of technology innovations has at times been born out of necessity, to resolve some of the problems it faces. The city has undergone a drastic transformation in the past few decades as its economy and population boomed. But that growth has also coincided with greater traffic congestion and air pollution.

Fanfare and finance

Ambitious plans have also hit snags. Some projects announced to much fanfare, such as the world's largest mall and another set of artificial islands, have suffered delays or were stalled in the absence of financing. A proposed Persian Gulf-wide railway project has been put on hold as well.

In neighboring Abu Dhabi, Masdar City was designed to become the world's first carbon-neutral city. Plans there also called for a driverless transportation system. The project suffered many delays and has yet to be completed.

Still, Mr. Lloyd of Hyperloop says that Dubai has a good chance of becoming the first location where the Hyperloop will be introduced, and that it will help toward achieving the emirate's goals.

Says Mr. Lloyd, "No one wants to build a project that is an amusement ride."

Mr. Parasie is a reporter for The Wall Street Journal in Dubai. He can be reached at nicolas.parasie@wsj.com.

Cities See the Power of Good Design for Utility Structures

As hiding eyesores gets harder, there's more need to get creative with utilitarian facilities and integrate them with their surroundings

BY BARBARA SADICK

UTILITY AND public-works structures in cities traditionally have a pretty uniform reputation: They're ugly. But a new generation of projects are being designed to weave infrastructure into cities' social fabric, offering amenities and standing as works of public art.

As cities become more densely populated and land becomes scarcer, it's harder to hide eyesores. So there's more impetus to get creative with utilitarian facilities and integrate them with public spaces and neighborhoods.

"There's not only less space available as old industrial edges of cities become redeveloped, but there's also more of an expectation that infrastructure projects...contribute to a better public realm experience through their design," says Marie Law Adams, principal architect in the Boston firm Landing Studio and a lecturer in the department of urban studies at the Massachusetts Institute of Technology.

Here's a look at some of the new projects.

Denny Substation Seattle

Unlike most power substations, which wall themselves off from the surrounding neighborhood, Denny substation will invite passersby to interact with it.

A walkway loop accessible to the public will be 16 feet above the substation's ground level, overlooking Denny Way, city traffic, the Seattle skyline, a landscaped terrace and a dog park. People will be able to peer through portholes in parts of the substation's walls to see its inner workings. The glass and metal walls will



The Denny Substation in Seattle will encourage street life.



New York's Spring Street Salt Shed looks like a salt crystal.

slope inward, allowing more sunlight to reach the surrounding gardens and open spaces.

To encourage street life, the ground level will have retail space, and the site will have parking for food trucks and outdoor spaces for eating.

NBBJ in Seattle was hired in 2012 by Seattle City Light, a publicly owned utility, to build the substation. Currently under construction, the facility is scheduled to be fully operational next year.

Spring Street Salt Shed New York

Salt sheds are highly utilitarian structures. This one was built to house as much as 5,000 tons of salt to be used on the city's streets.

But the design, by Dattner Architects with WXY architecture and urban design, has been widely acclaimed as a building that enhances its Hudson Square neighborhood along the Hudson River in lower Manhattan.

Designed to look like a salt crystal, the structure has a tapered base that allows more space for pedestrians at street level. The facade complements an art deco Holland Tunnel vent shaft nearby.

The salt shed is surrounded by beds of laminated structural blue-green glass, like a pool filling the space between the sidewalk and the shed's overhanging walls. Day and night, light playing on the glass creates a sense of depth and reflects into the faceted walls of the shed.



At Sherbourne Common in Toronto, colorful cascades help aerate storm water.



Copenhill Waste to Energy Plant and ski slope, Copenhagen.

Copenhill/Amager Bakke Waste to Energy Plant Copenhagen

It's a first: a waste-to-energy plant that is also a ski slope.

This plant will convert 400,000 tons of waste annually from city residents and businesses into heat for 150,000 households and low-carbon electricity for 550,000 people.

Copenhill's exterior is wrapped in stacked aluminum bricks with openings between them, allowing daylight to stream into the building. The

roof will hold one of the world's largest year-round artificial ski slopes. The elevator to the top of the slope will give passengers a view of the plant's operations, and an observation deck will offer an unobstructed view of the surrounding area. For summertime use, the roof will have green forest areas and a hiking trail accessible from the bottom of the slope.

Designed by the Bjarke Ingels Group, Copenhill is located outside the center of Copenhagen in an industrial area that's evolving into a mix of uses. Construction began in 2013, with project completion expected by early next year.

Sherbourne Common Stormwater Treatment Facility

Toronto

This project transformed 2,000 acres of waterfront brownfield into public recreational space, integrating a storm-water treatment facility into a public park.

Water is filtered underground, then flows into a facility beneath a park pavilion for a disinfecting treatment from ultraviolet light. Next stop is three "light showers" created by Jill Anholt, a Vancouver artist, where cascades of water are aerated as they tumble down 30-foot-high stainless-steel mesh curtains.

Before the water heads into Lake Ontario, it passes through a water play area, with computer-controlled water jets that children use during the summer. In the winter, the same space becomes an ice-skating rink.

Sherbourne Common was designed by Phillips Farevaag Smallenberg of Vancouver.

Ms. Sadick is a writer in New York. Email her at reports@wsj.com.

JOURNAL REPORT | THE FUTURE OF CITIES

I Come From the Future

For Vancouver residents, seeing their city double as the favorite sci-fi setting for TV and film can be disorienting

BY ALEXANDRA SAMUEL

I'VE SEEN THE FUTURE, and it looks a lot like the view from my office.

That's because I live and work in Vancouver, British Columbia, the city Hollywood uses when it wants to peek a few decades (or centuries) ahead. When you watch a futuristic TV show like "Battlestar Galactica" or "Falling Skies," it was probably filmed in Vancouver. The same goes for futuristic movies like "Elysium" or "Tomorrowland."

You've probably seen the city saved by superheroes ("The Flash"), or read about it surviving climate change by virtue of its uniquely fortunate location ("The Water Knife"). Or maybe you've watched it meet a far less appealing fate—like being dominated by Nazis ("The Man in the High Castle") or destroyed by outlandish natural disasters ("2012").

So what's it like living in the future? Let's just say I feel like a real-life time traveler, living in 2017 but walking streets regularly cast as 2028 ("RoboCop"), 2067 ("Continuum") or 2166 ("Legends of Tomorrow"). The stores I shop in, the streets I drive, the performances I attend: They are all places I've seen filled with aliens, zombies or superheroes. Living on North America's favorite sci-fi set makes the future

seem nearer, and the fantastical seem plausible. It adds up to a very unreal reality.

Starting with X

Vancouver's current status as the home of sci-fi traces back to "The X-Files," which began filming here in the early 1990s, drawn by the city's abundant urban forests. The show helped train a local filmmaking industry with the expertise to pull off special effects, an expertise that deepened with the launch of "Stargate SG-1," a sci-fi show that ultimately grew into a three-series franchise.

The city's diverse landscapes and cityscapes helped solidify its popularity as a filming location. Its skyline of sleek glass towers can double as Hong Kong ("Arrow") or Japan ("Fantastic Four: Rise of the Silver Surfer"). When producers need a historic flashback, they can drop their time travelers into the historic buildings and alleys of Gastown and the Downtown Eastside.

The locations aren't the only appeal. The Canadian dollar has mostly been much lower than the U.S. dollar in recent decades, making Vancouver-based shoots a relative bargain. And policy makers have sweetened the deal with tax incentives.

In 2016, the city played host to the shoots of 47 different TV series,

according to CreativeBC, the government agency tasked with fostering British Columbia's film and TV industry. Of those, 27 were sci-fi, superhero, supernatural or fantasy shows—all genres that get audiences to suspend their disbelief and commit to an alternative reality.

All that fantasy in one city can make for a surreal experience. It gets tricky to navigate your own town once you forget which local buildings actually exist, and which are computer-generated imaginings you've seen on TV. Try remembering where you parked your car when you have seen this parking garage in five different futures. And if you think getting stuck in traffic feels annoying in a regular city, imagine crawling through the same streets you watched the Flash zip through the night before.

Apocalypse when?

Sometimes living amid this much sci-fi and supernatural action can be downright disturbing. Our company's first offices felt vaguely menacing, because "Dark Angel" had filmed all around us: I was used to seeing people snatched up from these very alleys for genetic experiments. When I walk past my husband's old office building I envision psychic super-gorillas (thank you, "Flash"), and when I go to the

butcher I picture zombies eating brains in the backroom (thank you, "iZombie").

Cohabiting with the ever-present shadow of the future can provoke thoughts that are less spooky and more weighty. Thanks to the nature of contemporary science fiction, most of it dystopian, we Vancouverites are challenged not only to consider what the future may hold, but also what we should do to address it.

Take the common sci-fi expectation that we are heading toward authoritarianism. Vancouver sees a lot of shows and movies based on this premise, many of them shot in or around buildings designed by local (and world-renowned) architect Arthur Erickson. The sleek lines of his modernist, concrete buildings clearly appeal to location scouts looking for iron-fisted settings. Erickson buildings have appeared as the base of a supervillain turned global dictator ("Legends of Tomorrow"), American Nazi headquarters ("The Man in the High Castle") and a futuristic prison run by androids ("Battlestar Galactica").

Once you see your daily landscape slip into fascism, even on screen, that dreaded future no longer feels so unimaginable—nor the security guard at the front door so benign. Indeed, since TV's dystopian functionaries are all played by local talent, a request delivered in a Canadian accent now sounds to me like it's backed by an implicit "...or we'll be taking you and your family somewhere."

There's a similar creepiness that comes from immersion in the possible end of the world. We've seen the end of the world unfold in these very streets by solar flare in "2012," "po-

lar shift" in "Absolute Zero" and alien nanobots in "The Day the Earth Stood Still."

Given the city's unique role, it's tempting to mine Vancouver sci-fi for clues about North America's future. Those clues point in very different directions, however. One future is suggested by the city we see on the screen. It's a future ruled by corporations from faceless, imposing towers; a future in which the technologies we create turn against us; a future in which genetic tinkering defines the very meaning of human.

But the fact that North America has pinned its fictional future on Vancouver suggests a more hopeful possibility. The abundant forests that first attracted "The X-Files" reflect a city in which the natural world is never far away, and urban encroachment is allowed to go only so far; a city in which quality of life and sustainability take precedence over material growth.

If it seems hard to reconcile these two futures, well, you haven't been watching enough Vancouver-made sci-fi. Think of them as alternative universes (as in "Sliders" or "The Flash"), alternative timelines ("Eureka") or alternative futures ("Legends of Tomorrow").

North America can travel into either of these futures, and if we seem to be heading too far down the darker path, we can always rewind and reset the timeline. All it takes is some ingenuity, a time machine and a filming permit.

Ms. Samuel is a technology researcher and the author of "Work Smarter With Social Media." Email her at reports@wsj.com.

CITY OF TOMORROW

| Some of the settings played by Vancouver-area locations in futuristic television shows and movies (TV shows except as noted)



LUCIFER (2015)

Supernatural auction house

DC'S LEGENDS OF TOMORROW (2016)

Time Council

CONTINUUM (2012)

Restaurant of the future



2 U.B.C. LEON AND THEA KOERNER U. CENTRE

THE MAGICIANS (2015) Infirmary

THE DAY THE EARTH STOOD STILL (MOVIE, 2008) Command Center



TOMORROWLAND (MOVIE, 2015)

Hall of Invention

DC'S LEGENDS OF TOMORROW (2016)

Hub City University

EUREKA (2006)

Galaxy Camp



4 MACMILLAN BLOEDEL BLDG.

X-MEN: THE LAST STAND (MOVIE, 2006)

Department of Mutant Affairs

THE MAN IN THE HIGH CASTLE (2015)

Nazi headquarters

CONTINUUM (2012)

Time-traveling terrorist target



5 MARINE BUILDING

THE FANTASTIC FOUR (MOVIE, 2005)

Superhero lab

THE FLASH (2014)

Bank

TIMELESS (2016)

Hotel

TIMECOP (MOVIE, 1994)

Time Enforcement Commission



1 Chan Centre for the Performing Arts
2 U.B.C. Leon and Thea Koerner University Centre
3 H.R. Macmillan Space Centre
4 Macmillan Bloedel Building
5 Marine Building
6 Arch Alley
7 Vancouver Public Library, Central Library
8 CBC Vancouver
9 Plaza of Nations
10 Vancouver Public Library, Central Library



6 ARCH ALLEY



10 QUADRANGLE, SIMON FRASER U.

STARGATE SG-1 (1997) Space terminal

X2 (MOVIE, 2003) Natural-history museum

SLIDERS (1995) Government sanctuary

DARK ANGEL (2000) Ambushes

CONTINUUM (2012) Time-traveler vs. time-traveler battle

IZOMBIE (2015) Drug-fueled run

BATTLESTAR GALACTICA (2004) Delphi Museum of Colonial History

Note: Years are when series and films debuted; they may not be when locations appeared in series.

Source: MovieMaps.org THE WALL STREET JOURNAL.

Pop-Up Homes Offer Fast Way to House Refugees in Germany

BY NINA ADAM

there are schools, shops and workplaces.

"We wanted to get away from residential segregation and create a culture of welcome," she says.

Easing tensions

Pop-up housing won't solve Europe's migrant-housing problem, nor is it meant to serve as long-term accommodation, because people are meant to stay there a while and then move on. But some urban planners say it can help ease the crunch in affordable city housing and deal with fluctuating refugee numbers, like the abrupt influx in 2015.

Germany has accepted the majority of asylum seekers who have entered the European Union in the recent past—most of them arriving in 2015 and early 2016. The new arrivals from the Middle East, Africa and Asia often end up in metropolitan areas, complicating urban planners' struggle to balance growth and quality of life.

To get them off to a good start, "they must be able to do the kind of things they are good at doing," says Doug Saunders, a British-Canadian author and an expert on rural-urban migration. Immigrants often work in shops or restaurants, or set up their own small businesses, things that are difficult to accomplish if



Refugees move into housing in Frankfurt that was built in about two months.

they are disconnected from urban cores. Homies can be part of a wider solution to integrate the newcomers, he says.

The roughly 320 migrants from Syria, Afghanistan, Iraq, Iran and Pakistan who live in Frankfurt's Bonames district are housed in these types of flexible homes, built in about two months on a former parking lot.

"It's great to have our own private space including a kitchen" and not depend on the food services used in the big shelters, says Givara Jujan, an archaeologist from Aleppo, Syria, who lives with his fam-

ily in one of the micro-apartments run by Diakonie Frankfurt, a nonprofit organization.

Speaking in halting German, he says he is glad to live close to a trolley-car stop, as he will soon start a technology training program in another part of town. His wife has already started a training program in a local kindergarten, while their 8-month-old toddler stays at a nearby day-care center.

A wider experiment

Affordable town-center housing isn't just a problem for refugees. Many students, pensioners and low-income earners struggle, too. In response, students at TU Darmstadt University have developed Cubity, a minimalist dormitory which, according to its inventors, follows the principle of sufficiency. "It's about saving energy and saving resources," says Anett-Maud Joppinen, a professor of architecture who spearheads the project. Apartment cubes of about 8 square yards each are stacked on two levels around a large living area, kitchen and lounge. Solar panels generate more energy than the 12 student residents use in the course of a year.

Ms. Adam is a Wall Street Journal senior reporter in Frankfurt. Email her at nina.adam@wsj.com.

BUSINESS NEWS

U.S. Plans Put Mexico Port at Risk

Shippers weigh impact of barriers to trade at a new high-tech terminal

By ROBBIE WHELAN

LÁZARO CÁRDENAS, Mexico—Latin America's most technologically advanced shipping terminal opened this month, with a ceremony attended by heads of state and shipping-industry royalty.

But the project faces an uncertain future as President Donald Trump weighs new trade barriers.

Major importers such as Wal-Mart Stores Inc., Samsung Electronics Co. and Target Corp. see Lázaro Cárdenas as a key link between Asia's factories and Mexico's growing middle class. They also hope to use the port as a backdoor to the U.S., bypassing congested West Coast ports via the "Nafta Railway," a network of track operated by U.S. railroad Kansas City Southern that can shuttle goods as far north as Memphis, Tenn.

APM Terminals, a unit of the world's biggest shipping company, A.P. Moller-Maersk, spent five years and \$568 million on the new terminal. APM hopes to spend up to \$900 million to expand capacity at the terminal to rival the Port of New York and New Jersey by the end of the next decade.

But what looked like a sure bet five years ago is less certain today. Mr. Trump has threatened to penalize manufacturers that move operations to Mexico and wants to renegotiate the North American Free Trade Agreement. Republicans in Congress have floated a "border-adjusted tax" that would raise the cost of imports.

Any of these measures could deal a blow to U.S.-Mexico trade, shipping companies and analysts say. Mexico's imports have grown more than 30% since 2010, according to the World Bank, and container volumes are up 60% in the past three years at Lázaro Cárdenas'



Importers see the port at Lázaro Cárdenas as a link between Asia and Mexico's middle class.

older facilities, according to trade data firm Panjiva. Auto parts make up a big part of those gains.

"The port is a microcosm of global trade flows," said Christopher Rogers, a research analyst with Panjiva. He added: "It's very exposed to the auto industry."

Danish conglomerate Maersk, which once touted the new terminal's "near-sourcing benefits," a reference to manufacturers producing goods in Mexico and selling them in the U.S., now says it is focusing more on using the port to import goods for Mexico's consumer market.

In an interview this month, Maersk Chief Executive Soren Skou said "the main purpose of the terminal is to be a gateway for the Mexico City market," with cross-border trade secondary.

"The U.S. administration has made a number of statements that impact our business on the positive side," Mr. Skou said. "Then there are the discussions about trade deals, and some of the rhetoric seems more protectionist...It's really hard for us

to judge how this will affect our business."

APM's terminal unloaded its first ship in February, and the port formally opened with a ceremony in early April attended by Mexico's president, Enrique Peña Nieto, and Danish Prime Minister Lars Løkke Rasmussen.

Mexico's government sees developing the port as a priority. In 2013, amid rising drug cartel violence and illegal smuggling, Mr. Peña Nieto deployed thousands of troops to the port and handed over its security to the navy, which still maintains a garrison there.

At the ceremony earlier this month, he called the terminal "a testimony to how Mexico has been growing, how it has become a trustworthy destination...that is crucial for the transit of goods bound for the important consumer market that is Mexico, and from here to other important consumer markets."

However, in recent months, Mexico's president also has said the country will pursue trade deals with Vietnam and Japan

and work more closely with China.

On a stiflingly hot morning in late March, giant cranes lifted hundreds of metal boxes from the container ship Charlotte Maersk amid the soft hum of robotic machinery.

The new terminal features towering 300-foot-tall ship-to-shore cranes that can span the largest container ships currently plying routes between Asia to North America.

The cranes can pluck two containers at a time from ships, then deposit them in piles. Robotic stacking cranes that run on electricity—rather than the usual diesel—use artificial intelligence to arrange the piles in the most time- and cost-efficient order. Such semiautomated systems are common at ports in the Netherlands and Singapore but have never been used in Latin America. The facility is expected to employ about 550 people—or 250 fewer than a similar-size terminal without automation—which makes for fewer accidents and lowers container handling costs by 20%, APM says.

Akzo Stakeholders Get Pitch From PPG

By BEN DUMMETT

PPG Industries Inc. appealed directly to Akzo Nobel NV shareholders, employees and customers to pressure the Dutch paint and chemicals maker into negotiations over the U.S. rival's \$24 billion takeover bid.

In an open letter to Akzo's stakeholders, PPG highlighted its stronger stock-market performance, its sales growth and its successful takeover record as reasons for negotiations to begin, arguing that the combined company would be stronger than two independent competitors.

PPG said it has generated a total shareholder return of 282% over the past 10 years, compared with Akzo's 87%, and has increased sales to \$15 billion from \$10 billion over that period.

The letter comes ahead of Akzo's plan this week to unveil its strategy to separate its specialty-chemicals business in a bid to boost the paint maker's stock price.

Some investors have argued that Akzo's stock price has traded at a discount in part because of the difficulty in valuing the paint and chemicals businesses as one company.

Akzo, whose brands include Dulux and Sikkens, is also expected to announce new financial projections.

Akzo's plan "will be more risky, create more uncertainty for Akzo Nobel employees...and create less value than our proposal," PPG said in its letter.

Akzo is unmoved. "We've already made our position regarding PPG's proposal very clear," said an Akzo spokesman. "We are looking forward to our investor event on Wednesday where we will be updating the market on our plans to create shareholder value."

Akzo is under increasing

pressure to appease investors after U.S. activist investor Elliott Management Corp. this month called for a special meeting of the Dutch company's shareholders to try to oust the chairman of the supervisory board, as Elliott and other investors push for sale talks to begin. Akzo said it would consider, though not guarantee, holding the meeting. But it also said it would reject any proposed agenda item seeking to dismiss Chairman Antony Burgmans.

Last month, Pittsburgh-based PPG initially bid €83 a share (\$88.37) for Akzo and then sweetened that offer to €88.72. Akzo rejected both as too low and argued that they didn't adequately take into account the interest of employees and customers.

Akzo's plan 'will be more risky, create more uncertainty... and create less value.'

Akzo shares closed up 1%, at €79.32 on Monday in Amsterdam, well below PPG's offer price, in a sign that investors aren't betting on a deal. Still, the stock price is up about 23% since PPG's initial offer, highlighting the pressure that management is under to come up with a plan that shareholders will support.

PPG, in its letter, countered Akzo's concerns about potential job losses in the Netherlands, noting it would continue to operate domestic plants and have employees in the regions where its paints are featured after any takeover.

PPG, whose brands include Pittsburgh Paints and Glidden, operates five facilities in the Netherlands and employs 1,000 people in that country.

Savvy Lawyer Fights United

By ANDREW TANGEL
AND SARA RANDAZZO

CHICAGO—This isn't the first time attorney Tom Demetrio has gone up against United Airlines.

Mr. Demetrio, who is representing the Kentucky doctor dragged off United Express Flight 3411 last week, has spent more than four decades suing on behalf of injured airline passengers, consumers and medical patients.

He previously faced the airline after one of its planes crashed in Sioux City, Iowa, in 1989, killing 110 passengers and injuring scores more.

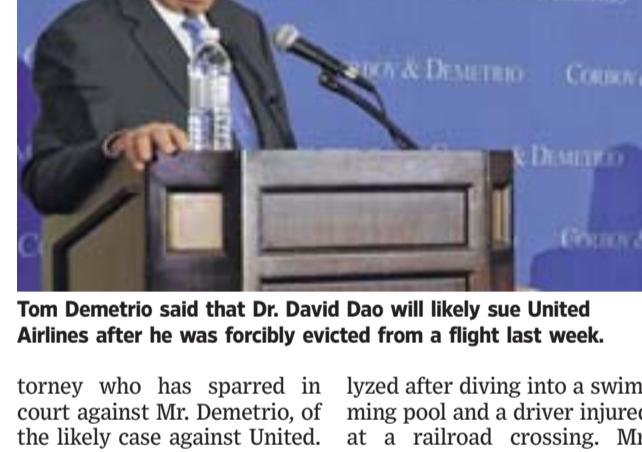
His firm, Corboy & Demetrio, won multimillion-dollar payouts for victims of the crash and their families, including a \$28 million jury verdict in 1994.

"We deal with people at their worst times in life, where they're devastated, both physically, mentally—and usually financially," Mr. Demetrio said in an interview at his office in Chicago. "The satisfaction is trying to better the quality of their life."

Mr. Demetrio landed Dr. David Dao's case by word-of-mouth. Dr. Dao's daughter, Crystal Dao Pepper, knows Chicago business lawyer Stephen Golan through her husband's family, both attorneys said. Mr. Golan contacted Mr. Demetrio's firm and the two are now handling the case together. That is a common progression in personal-injury cases, where the first call is often to a family lawyer or an attorney the plaintiff has used in the past.

Mr. Demetrio, 69 years old, is known among his peers in Chicago as plain-spoken and affable—as well as media savvy.

"He'll be a gentleman, but he'll make a very high demand and be tough to deal with," said Bill Johnson, a Chicago at-



Tom Demetrio said that Dr. David Dao will likely sue United Airlines after he was forcibly evicted from a flight last week.

torney who has sparred in court against Mr. Demetrio, of the likely case against United. "All this negative publicity just puts United behind the eight ball going in."

Mr. Demetrio has defended people injured by products or in medical mishaps, and National Football League players who suffered concussions and long-term brain damage. He represented the estate of Stevie Ray Vaughan after the blues guitarist died in a helicopter crash in 1990. He has secured multimillion-dollar payouts from juries and in private settlements.

He hasn't always won, of course: One loss came when a jury sided against his client, a patient who contracted HIV and hepatitis C from a kidney transplant. An appellate court later ordered a new trial, and the case was settled out of court.

Some experts say having media skills is key to taking on such well-publicized cases.

"A high-profile lawyer gets to be that only one way: They know how to use and manipulate the media to their benefit," said Brian Kabateck, a plaintiffs' lawyer in Los Angeles, speaking in general.

But lawyers who know Mr. Demetrio say his ability to tell a story and build a rapport with juries has made him formidable in court.

"He can speak for 'everyman'—that's the type of lawyer he is and that's why he's very successful with the jury," said C. Barry Montgomery, a Chicago attorney who has defended companies against Mr. Demetrio's lawsuits, including cases for a man who was para-

lyzed after diving into a swimming pool and a driver injured at a railroad crossing. Mr. Montgomery prevailed in both those cases.

However, portraying Dr. Dao as a surrogate for all passengers could be complicated by matters related to a 2004 prescription-drug conviction that led to a suspension of his medical license.

Dr. Dao told police that he couldn't leave the flight because he needed to get home to see patients.

Kentucky medical regulatory records show he is limited to practicing one day a week at the Elizabethtown, Ky., medical practice of Dr. Bill Godfrey. Dr. Godfrey said in an interview that Dr. Dao finished practicing there a few months ago.

Mr. Demetrio said Dr. Dao's history wasn't relevant to his case. He said Dr. Dao needed to be in his wife's office to work on paperwork related to returning to his practice full-time. Dr. Dao's wife, also a doctor, had patients to see the next day but he wasn't "going to get into a big long explanation with the stormtroopers," Mr. Demetrio said. "I don't blame him."

His firm has a reputation for driving hard to make settlement amounts public. "They know that reporting significant settlements is good advertising," Chicago defense lawyer Richard Donohue said. "I don't begrudge them that."

Mr. Demetrio said he generally pushes to disclose settlement amounts as a deterrent to future malpractice and negligence, and because the public has the right to know. Plaintiffs' attorneys "are the watchdogs," he said.

United Earnings Top Forecast

By EZEQUIEL MINAYA

United Continental Holdings Inc., which has faced a week of turbulence over the violent removal of a passenger, reported on Monday that while increased fuel costs cut into its latest quarterly profit, earnings still topped Wall Street's expectations.

The U.S.'s third-largest airline by traffic on Monday detailed results for its first quarter, which ended in March, before the controversy. The airline exceeded analysts' consensus for the fifth consecutive quarter.

But the report has attracted the focus of investors searching for signs of how United planned to soothe widespread outrage and whether the company would forecast any impact on the bottom line as it heads into the crucial summer travel season.

"It is obvious from recent experiences that we need to do a much better job serving

our customers," said Chief Executive Oscar Munoz in a prepared statement. "The incident that took place aboard Flight 3411 has been a humbling experience, and I take full responsibility."

The public-relations mess, which has become a lightning rod for dissatisfaction with customer service in the industry, was exacerbated by United's initial response, leading to calls for a boycott. The treatment of the forcibly bumped passenger, 69-year-old physician David Dao, has developed into the biggest test of Mr. Munoz's tumultuous 18-month tenure.

United has said it would review its policies for compensating bumped passengers by April 30 as part of a broader review.

Mr. Munoz went on to call the incident a "horrific" event after his initial response backed employees and called Dr. Dao's behavior "belligerent." United has also promised

to refund the fares of all customers aboard the flight.

Investors have so far appeared forgiving. United shares ended last week only 2% lower. On Monday, the company reported adjusted earnings of 41 cents a share on revenue of \$8.42 billion, above expectations of analysts surveyed by Thomson Reuters, who projected profit of 38 cents on sales of \$8.38 billion.

The airline has beaten consensus in all but two of the past 16 quarters. Higher fuel costs were expected to eat into first-quarter profit, according to analysts. On Monday the company posted quarterly profit of \$96 million, down from \$313 million a year earlier. Fuel expense rose 28% during the quarter to \$1.56 billion.

The spreading furor over Dr. Dao's treatment has intensified the focus on the airline and Mr. Munoz, who will face investors on a Tuesday conference call.

Balancing Act at Whole Foods

By ANNIE GASPARRO
AND HEATHER HADDON

Whole Foods Market Inc. wants to cut prices without sacrificing the local products that define its healthy image.

Investors are pushing the organic-food pioneer to boost profit by operating more like a big-box grocer. Some smaller suppliers and industry consultants say the shift to a more-centralized distribution structure and other changes risk compromising Whole Foods' ability to keep stocked with the latest foodie trends and hot local brands.

"Shifting to national buyers can certainly deliver cost savings to Whole Foods, but at what price to the soul of the banner?" said Jim Cusson of brand consultancy Theory House.

Many of the changes are being spearheaded by Don Clark, a former Target Corp. executive hired in November 2015 to run Whole Foods' grocery operations. The data analytics,

centralized purchasing and strict shelf-management know-how he brought from Target could save money that Whole Foods can use to lower its relatively high prices, addressing a key customer complaint. But matching its competitors on price could also mean limiting how often it updates the products Whole Foods stocks.

Investors have been pushing the company to operate more like a big-box grocer.

Whole Foods has long divided its 462 stores into 11 regions, each with distinct product offerings like local maple syrup and gourmet pickles. A quarter of Whole Foods shoppers that visited the chain in the past month did so for items they couldn't find elsewhere, according to a survey by Kantar Retail. For those who also shopped at Wal-Mart Stores Inc., only 3% said exclusive brands were a top draw.

The shift comes as Whole Foods looks for a way out its longest stretch of same-store sales declines since going public in 1992. Whole Foods is under pressure from Jana Partners LLC, which last week said that along with allies it had amassed an 8.8% stake in Whole Foods. The firm is pushing for faster operational changes.

Major grocery stores like Kroger Co. and Albertsons Cos. have seen annual sales increases of more than 10% in recent years for natural and organic foods, eating into Whole Foods' core business. Stealing that business from Whole Foods and other specialty stores has been a rare bright spot for big grocery chains battling more competition and falling food prices, which has sparked a price war that has eaten into profits.

FINANCE & MARKETS

PwC Hit By Suit Over Its Hiring Practices

BY JACOB GERSHMAN

PricewaterhouseCoopers bills itself as the "place to work for millennials," who have taken jobs and internships with the accounting giant in droves. The firm annually recruits thousands of newly minted college graduates.

The firm's aggressive pursuit of youth is now the focus of a class-action suit, part of an emerging wave of litigation that is testing the boundaries of age-discrimination liability and casting a legal cloud over college recruitment programs.

Employment lawsuits alleging age bias aren't new and are usually brought by fired employees. Cases like the one against PwC allege discrimination against job applicants, whose civil rights involve a surprisingly unsettled area of law.

The named plaintiffs in the PwC case are two men—one 53 years old and the other 47—whose applications for entry-level associate positions at the firm were rejected.

The litigants have years of accounting and bookkeeping experience, but both failed to make the cut. They allege they were turned down because they lacked the youthful profile possessed by so many PwC recruits.

To "attract and maintain millennials," PwC intentionally screens out individuals ages 40 and older...and denies them employment opportunities," according to their lawsuit in San Francisco federal court.

Such favoritism toward millennials, the suit alleges, violates the federal Age Discrimination in Employment Act.

The litigants have years of experience, but both failed to make the cut at PwC.

The plaintiffs say the ADEA was meant to cover hiring practices that may not intentionally discriminate against older workers but have a disproportionately adverse effect on them.

Lawyers for PwC say the plaintiffs' reading of the law conflicts with Congress's intent.

Courts have upheld "disparate impact" claims against hiring practices in other contexts, such as lawsuits accusing firms of gender and race bias. Those other categories are covered by a different civil-rights statute.

But the idea that company recruitment efforts aimed at students and recent graduates can be unlawful is a controversial premise that no federal appeals court has ever endorsed.

Advocates for older Americans say age discrimination in hiring is driven by a common misconception that younger workers are more productive, creative, trainable and cheaper. Their legal arguments have gotten support from the U.S. Equal Employment Opportunity Commission and a sympathetic hearing from some judges, including from the district-court bench presiding over the PwC case.

"The history of the ADEA's enactment reveals that Congress was concerned not just with age discrimination within the workplace, but also with the barriers to older workers finding employment in the first place," wrote Judge Jon Tigar of San Francisco in February when he declined to dismiss the case.

The ADEA prohibits an employer from depriving an individual of employment opportunities "or otherwise adversely affect[ing] his status as an employee" because of the person's age. It is the meaning of "status as an employee" that is hotly contested. Lawyers for PwC say the words clearly restrict the protections to the currently employed, not job seekers.

Manufacturers Weigh Cyber Policies

BY RICHARD TEITELBAUM

Abbott Laboratories was pilloried last week by regulators for, in part, botching its response to a report that certain company defibrillators and pacemakers could be manipulated by hackers. Shares of the health-care company, which acquired the devices in its purchase of St. Jude Medical Inc., fell 1.9%.

The criticism, which came in a warning letter from the Food and Drug Administration, casts another spotlight on the fusillade of cyber dangers facing manufacturers.

For years cyber insurance was overwhelmingly purchased by consumer-facing business—retailers, financial-service providers and hospitals. Mostly this was to protect against customer data theft. The St. Jude situation helps explain why manufacturers are now rushing to make sure they are covered.

Manufacturers paid \$36.9 million in premiums for cyber-specific policies in 2016, according to **Advisen** Ltd., an insurance consulting firm, based on its sample of over 9,000 mostly U.S. companies. That is up 89% from the year before.

Manufacturers accounted for 12.6% of premiums tracked in 2016 compared with 9% the year before.

"There's certainly an increased exposure in the industry overall, especially with more reliance on cloud providers, greater sophistication of hackers globally and increased



A Kimberly-Clark factory in Brazil. The firm began buying cyber insurance in 2009, as traditional policies may not cover cyberattacks.

consumer interactions through social media," said Daniel Steiner, enterprise risk manager at **Kimberly-Clark** Corp., the maker of Kleenex tissues and Huggies diapers. The company began buying cyber insurance in 2009.

Factories are increasingly computerized, automated and digitally integrated with other parts of a company and keeping those networks secure is critical. "It's hard to think of an area of our business that is not touched by this, as business is only becoming more connected," said Eric Dobkin, director of insurance and risk management at drugmaker

Merck & Co. in an email.

"Nobody should be able to look at themselves in the mirror and say 'I'm not exposed to this,'" said Robert Wice, leader for technology, media and business services of Beazley PLC in the U.S.

As for St. Jude, a company spokeswoman declined to say whether it carried cyber insurance to cover the cardiac devices. A 2016 filing said it didn't carry product liability insurance. An Abbott spokesman declined to comment on whether the company has cyber insurance. Abbott's shares were up 1% in intraday trading Monday.

In the event of a cyberattack that shuts down a factory, manufacturers may not be covered by existing policies. Many property and casualty policies require physical damage before they pay, said Ben Beeson, cyber-risk practice leader at brokerage Lockton Cos.

A wake-up call for manufacturers came in December 2014 when the German Federal Office for Information Security reported that a cyberattack caused "massive damage" at a steel plant it didn't name. The report highlighted how cyberattacks can be more destructive than events like floods

that are covered by typical P&C policies.

"When you look at severity, you have to consider they are cyber-based," said Brent Pickens, director of global risk management at Bemis Co., a maker of plastic packaging that was an early buyer of cyber insurance.

Selecting a cyberpolicy forces manufacturers to set priorities on what to protect, he said, particularly at larger companies that can have policies tailored for different plants and situations. "You get the best return out of [insuring] what is most important for you," Mr. Pickens added.

KPMG's Star Auditor Marcello Takes Hard Fall

BY MICHAEL RAPORT
AND DAVE MICHAELS

Scott Marcello was supposed to be the man to redeem KPMG LLP's audit business. Instead, he and other top partners became the center of a scandal that tarnished the firm's reputation.

The accounting world was stunned last week when Mr. Marcello, KPMG's top audit official, was fired over a leak of confidential information.

The firm said Mr. Marcello, who turns 54 this month, and four other partners were let go over the mishandling of a tip that gave the firm improper advance word about which of its audits its regulator planned to scrutinize in its annual inspections.

Mr. Marcello, a three-decade veteran at the firm, was a highly regarded and technically accomplished auditor, specializing in the intricate financial statements of banks and insurers. He climbed the ladder at KPMG to become the Big Four accounting firm's vice chairman

of audit, managing a workforce of thousands of auditors. After his 2015 promotion from national leader of the firm's financial-services practice, he faced the challenge of satisfying KPMG's regulator, the Public Company Accounting Oversight Board, which in recent years had scored KPMG's auditing performance below that of other big firms.

People who know Mr. Marcello said they were surprised such an experienced, knowledgeable auditor is accused of having gotten into such a fix.

"It's a huge and disappointing thing to happen to such a fine individual," said Dennis Beresford, former chairman of the Financial Accounting Standards Board, the U.S. accounting rule-writing panel, who knows Mr. Marcello from common ties to a professional organization. He called Mr. Marcello "personable and extremely competent."

Mr. Marcello declined to comment to a Wall Street Journal reporter at his Connecticut home. KPMG and the

accounting board declined to comment.

Details of the leak to KPMG are still unclear, as are the precise roles that Mr. Marcello and his deputy David Middendorf, who also was fired, are alleged to have played in the process. But they were aware that others at KPMG had received leaked information and "failed to report the situation in a timely manner," KPMG said in a statement April 11.

Lynne Doughtie, the firm's chairman and chief executive, said KPMG has "zero tolerance for such unethical behavior," and KPMG has said it told the accounting board about the matter as soon as top management learned of it.

The leak reflects the tension between the Big Four accounting firms and the rigorous demands of the accounting board, which was created in the wake of the Enron Corp. scandal.

Some auditors have long felt stressed by the board's inspections, fearing their careers could be set back if the regula-



KPMG fired Scott Marcello

deficient audits found by the PCAOB had risen to 54% for 2014 from 22% for 2010.

Several months before Mr. Marcello's appointment, the accounting board unsealed previously confidential criticisms that the firm had failed to sufficiently evaluate information that could have contradicted its audit conclusions—a public rebuke of the firm, similar to what the regulator had done with other Big Four firms.

Mr. Marcello cast the image of an auditor well prepared for the job: He had deep knowledge of accounting practices through his auditing of complex financial companies as well as a two-year fellowship at the FASB, which also gave him experience as a rule maker and in dealing with the Securities and Exchange Commission.

He was "straight out of central casting," said a person who had worked with him. He was an everyman, "the exact opposite of flashy," the person said.

FINANCE WATCH

INSURANCE

Indonesia Changes Stand on Ownership

Indonesia will reinstate an 80% foreign-ownership limit on insurance companies, a move that will likely require some foreign investors to cut their stakes in local firms.

Finance Minister Sri Mulyani Indrawati said in parliament that for insurance companies with foreign ownership of more than 80%, it "means that the new capital injection must come from domestic [investors]."

Currently, 19 of Indonesia's insurance firms are under foreign ownership of at least 80%, the minister said. Among them is PT Asuransi Allianz Life Indonesia, which is 99.76% owned by Allianz Asia Pacific & Africa GmbH. The same company also owns a 97.75% share in PT Asuransi Allianz Utama Indonesia.

Adrian Dosiwoda, a spokesman for Allianz in Indonesia, said the firm "is committed to complying with the local regulation."

—I Made Sentana

SAUDI ARABIA

Oil Minister Expects Help With Market

Members of the Organization of the Petroleum Exporting Countries and producers outside the group will do what is necessary to balance the oil market, Saudi Arabia energy minister Khalid al-Falih said Monday.

"The compliance level is very good. Some countries complied more than others," Mr. Falih told reporters on the sidelines of an energy event in Riyadh.

Saudi Arabia doesn't only care about the current state of the oil market but also its prospects in the future, he added.

—Summer Said



Indonesia's Sri Mulyani Indrawati says insurers with 80% foreign ownership must turn to domestic investors for additional capital.

By PHRED DVORAK

Ant Financial Services Group raised its bid for U.S. money-transfer company **MoneyGram International** Inc. to around \$1.2 billion, topping a rival offer and making China's biggest online-payments firm once more the leading contender in an increasingly politicized takeover battle.

Ant Financial, which is controlled by Chinese e-commerce giant **Alibaba Group Holding** Ltd., has been looking to expand overseas and initially signed a deal to buy MoneyGram in January for \$880 million.

But it was sideswiped in March by an unsolicited competing offer of around \$955 million from payments processor **Euronet Worldwide** Inc.

Euronet, based in Leawood, Kan., also launched a lobbying campaign, telling U.S. lawmakers and the U.S. Treasury—which leads the multiagency body that reviews foreign investments for national-secu-

rity issues—that an Ant takeover could pose privacy and information-control risks.

Ant has denied those claims and is fighting back with its own lobbying and public-relations campaign. On Sunday—following MoneyGram's receipt of a binding offer from Euronet—Ant increased its cash bid to \$18 a share from \$13.25. Ant will also assume or refinance MoneyGram's debt.

MoneyGram's board unanimously voted to approve the increased offer.

"It's a superior financial bid—at \$18 it's extremely compelling," said MoneyGram Chief Executive Alex Holmes, describing Euronet's lobbying efforts as "noise."

He said that the board had notified Euronet of its decision but declined to comment on any response.

Euronet didn't respond to a request for comment.

MoneyGram shares were up 7.8% at \$17.80 in midafternoon Nasdaq trading on Monday.

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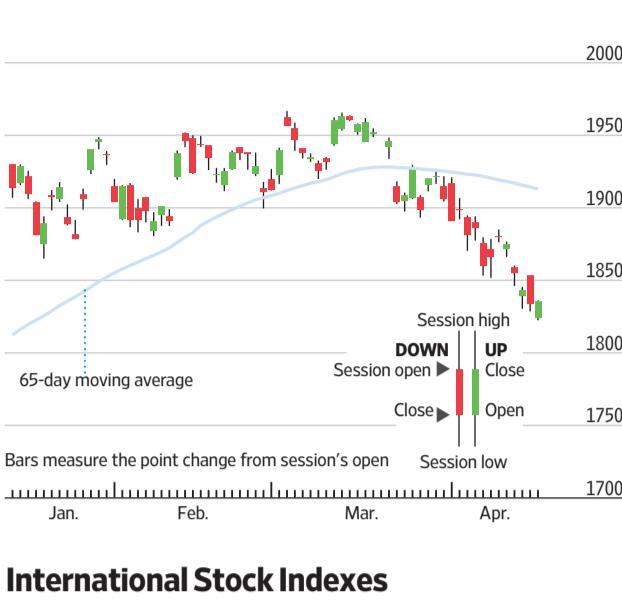
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MARKETS DIGEST

Nikkei 225 Index

18355.26 ▲ 19.63, or 0.11%

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



Bars measure the point change from session's open
65-day moving average

STOXX 600 Index

380.58 Market Closed

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



Data as of 4 p.m. New York time

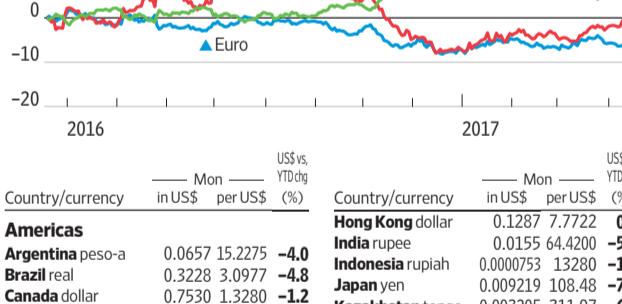
International Stock Indexes

Region/Country	Index	Close	NetChg	% chg	52-Week Range	Low	Close	High	YTD % chg
World	The Global Dow	2663.10	14.06	0.53	2193.75	2193.75	2720.47	2720.47	5.3
	MSCI EAFE	1782.21	4.58	0.26	1471.88	1471.88	1956.39	1956.39	3.8
	MSCI EM USD	963.33	2.90	0.30	691.21	691.21	1044.05	1044.05	21.3
Americas	DJ Americas	567.21	5.01	0.89	480.90	480.90	577.65	577.65	5.0
Brazil	Sao Paulo Bovespa	64394.78	1568.50	2.50	48066.67	48066.67	69487.58	69487.58	6.9
Canada	S&P/TSX Comp	15683.00	147.52	0.95	13535.54	13535.54	15943.09	15943.09	2.6
Mexico	IPC All-Share	48993.25	37.43	0.08	43902.25	43902.25	49753.57	49753.57	7.3
Chile	Santiago IPSA	3751.83	1.52	0.04	2998.64	2998.64	3786.05	3786.05	16.4
U.S.	DJIA	20636.92	183.67	0.90	17063.08	17063.08	21169.11	21169.11	4.4
	Nasdaq Composite	5856.79	51.64	0.89	4574.25	4574.25	5936.39	5936.39	8.8
	S&P 500	2349.01	20.06	0.86	1991.68	1991.68	2400.98	2400.98	4.9
	CBOE Volatility	14.67	-1.29	-8.08	9.97	9.97	26.72	26.72	4.5
EMEA	Stoxx Europe 600	380.58	...	Closed	308.75	308.75	381.90	381.90	5.3
	Stoxx Europe 50	3146.65	...	Closed	2626.52	2626.52	3182.84	3182.84	4.5
Austria	ATX	2861.19	...	Closed	1981.93	1981.93	2913.76	2913.76	9.3
Belgium	Bel-20	3790.76	...	Closed	3127.94	3127.94	3827.15	3827.15	5.1
France	CAC 40	5071.10	...	Closed	3955.98	3955.98	5142.81	5142.81	4.3
Germany	DAX	12109.00	...	Closed	9214.10	9214.10	12375.58	12375.58	5.5
Greece	ATG	683.57	...	Closed	517.10	517.10	686.23	686.23	6.2
Hungary	BUX	32622.40	...	Closed	25126.36	25126.36	34334.92	34334.92	1.9
Israel	Tel Aviv	1378.66	...	Closed	1372.23	1372.23	1504.42	1504.42	-6.3
Italy	FTSE MIB	19773.68	...	Closed	15017.42	15017.42	20540.39	20540.39	2.8
Netherlands	AEX	515.77	...	Closed	409.23	409.23	521.48	521.48	6.7
Poland	WIG	58695.36	...	Closed	42812.99	42812.99	60631.65	60631.65	13.4
Russia	RTS Index	1094.27	21.12	1.97	864.46	864.46	1196.99	1196.99	-5.0
Spain	IBEX 35	10326.10	...	Closed	7579.80	7579.80	10534.50	10534.50	10.4
Sweden	SX All Share	563.03	...	Closed	443.66	443.66	565.81	565.81	5.3
Switzerland	Swiss Market	8629.02	...	Closed	7475.54	7475.54	8710.26	8710.26	5.0
South Africa	Johannesburg All Share	53510.22	...	Closed	48935.90	48935.90	54704.22	54704.22	5.6
Turkey	BIST 100	90653.80	590.11	0.66	70426.16	70426.16	91832.03	91832.03	16.0
U.K.	FTSE 100	7327.59	...	Closed	5788.74	5788.74	7447.00	7447.00	2.6
Asia-Pacific	DJ Asia-Pacific TSM	1543.20	3.86	0.25	1308.52	1308.52	1570.38	1570.38	8.5
Australia	S&P/ASX 200	5889.90	...	Closed	5103.30	5103.30	5934.00	5934.00	4.0
China	Shanghai Composite	3222.17	-23.90	-0.74	2806.91	2806.91	3288.97	3288.97	3.8
Hong Kong	Hang Seng	24261.66	...	Closed	19694.33	19694.33	24593.12	24593.12	10.3
India	S&P BSE Sensex	29413.66	-47.79	-0.16	25101.73	25101.73	29974.24	29974.24	10.5
Japan	Nikkei Stock Avg	18355.26	19.63	0.11	14952.02	14952.02	19633.75	19633.75	-4.0
Singapore	Straits Times	3138.30	-30.94	-0.98	2729.85	2729.85	3187.51	3187.51	8.9
South Korea	Kospi	2145.76	10.88	0.51	1925.24	1925.24	2178.38	2178.38	5.9
Taiwan	Weighted	9716.40	-16.53	-0.17	8053.69	8053.69	9972.49	9972.49	5.0

Source: SIX Financial Information/WSJ Market Data Group

Currencies

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



Source: Tullett Prebon, WSJ Market Data Group

London close on April 17

Country/currency	Mon	US\$ vs. per US\$ (%)
Country/currency	Mon	US\$ vs. per US\$ (%)
Europe		
Bulgaria leva	0.5437	1.8392 -1.0
Croatia kuna	0.1430	6.992 -2.5
Euro zone euro	1.0657	0.9384 -1.3
Czech Rep. koruna-b	0.0400	25.000 -2.7
Denmark krone	0.1432	6.9812 -1.2
Hungary forint	0.003400	294.16 -0.04
Iceland krona	0.009012	110.96 -1.8
Norway krone	0.1172	8.3552 -1.3
Poland zloty	0.2507	3.9888 -4.7
Russia ruble-d	0.01788	55.931 -8.7
Sweden krona	0.1113	8.9843 -1.3
Switzerland franc	0.9976	1.0024 -1.6
Ukraine hryvnia	0.0372	26.9040 -0.7
U.K. pound	1.2587	0.7945 -1.9
Middle East/Africa		
Bahrain dinar	2.6525	0.3770 -0.05
Egypt pound-a	0.0553	18.0935 -0.2
Israel shekel	0.2735	3.6563 -5.0
Kuwait dinar	3.2799	0.3049 -0.2
Oman rial	2.5970	0.3851 0.02
Qatar rial	0.2747	3.641 0.02
Saudi Arabia riyal	0.2666	3.7505 -0.01
South Africa rand	0.0752	13.3042 -2.8
Asia		
Hong Kong dollar	0.1287	7.7222 0.2
India rupee	0.0155	64.4200 -5.2
Indonesia rupiah	0.0000753	13280 -1.8
Japan yen	0.009219	108.48 -7.3
Kazakhstan tenge	0.003205	311.97 -9.7
Macau pataca	0.1247	8.0181 1.3
Malaysia ringgit-c	0.2270	4.4045 -0.5
New Zealand dollar	0.7025	1.4235 -1.4
Pakistan rupee	0.0095	104.855 0.5
Philippines peso	0.0203	49.267 -0.7
Singapore dollar	0.7165	1.3956 -

FINANCE & MARKETS

Wall Street Critic Hits Commodities

A contrarian researcher argues the asset class isn't appropriate for retail investors

By IRA IOSEBASHVILI
AND TIMOTHY PUOKO

Campbell Harvey looks at Wall Street and sees a lot of ideas that are easy to sell but hard to trust.

The Duke University finance professor is making a career out of challenging research backing the products firms pitch to investors. Much of it, he says, just isn't sound.

His studies have shown that more than half of all research pumped out by both academics and analysts is, in his words, "likely false." Mine enough data, and you can find a result that backs up your idea, Mr. Harvey says.

While his contrarian ideas have put him at odds with many on Wall Street, Mr. Harvey's work has shown up in research and strategies employed by Goldman Sachs Group, GMO LLC's Jeremy Grantham and the Federal Reserve Bank of New York, among others.

His next project is aimed at one of his favorite targets: commodities. When a famous academic paper helped bring the asset class into the mainstream in the early 2000s, Mr. Harvey warned that commodities were too opaque and volatile to hold for the long term, and were unlikely to provide the stocklike returns that some consultants suggested. Prices for oil, metals and other raw materials crashed twice in the following decade, vindicating his position.

With the asset class coming back into vogue, Mr. Harvey, 58 years old, is preparing a paper challenging popular strategies in commodities investing.

"People still believe they should be buying commodity futures," Mr. Harvey said. "I feel the obligation to correct that misperception."

He may have some persuading to do. With signs of global economic growth pick-



we just shook our heads," Mr. Harvey said, referring to himself and co-author Claude Erb, at the time a portfolio manager at Trust Company of the West. "The narrative was problematic."

Mr. Harvey stress-tested some of the other paper's main claims. For example, he said that replicating a diverse commodities portfolio as Messrs. Gorton and Rouwenhorst recommended would prove challenging in the real world since many commodities, such as tin or butter, are thinly traded.

"This is much more complicated than buying a stock or bond," Mr. Harvey said. "The sector is fraught with risk for retail investors, and it is discouraging that so many institutions get it wrong as well."

Another assumption that didn't stand up was the concept of "roll yield," or the bonus investors pocket when selling expiring commodity contracts and buying newer ones, which were often cheaper.

There was no guarantee that prices for future-dated contracts wouldn't eventually rise, Mr. Harvey argued. In fact, many commodities are now more expensive further out in time, hurting investors who hold futures for long periods.

Some prominent investors have come around to Mr. Harvey's views, and even expanded on his research.

A Goldman Sachs Group Inc. study last year found that a portfolio of stocks, bonds and commodities showed a worse return in the period from 1987 to 2015 than a portfolio of just equities and debt.

Calpers still holds commodities in its portfolio. The Illinois Teachers' Retirement System jettisoned its commodities strategy in 2012.

"When we read that paper,

Duke University finance professor Campbell Harvey says many finance studies are 'likely false.'

ing up, commodities have bounced back after bottoming in early 2016. The S&P GSCI Index, which tracks commodity futures, rose 28% last year. That was the index's biggest gain since 2009, though its rally has stalled a bit this year with stagnant oil prices.

The recent rally has reignited investor interest in materials and resources. Commodity assets under management are up 41% from a year ago, rising to \$408 billion as of the end of February, according to Citigroup Inc.

"Commodities, over long cycles, have provided diversification that reduces volatility," said Omar Aguilar, chief investment officer at Charles Schwab Investment Management.

Mr. Harvey's interest in commodities was piqued by a 2004 paper from Yale Univer-

sity professors Gary Gorton and K. Geert Rouwenhorst.

Their research analyzed a commodity-futures portfolio from 1959 to 2004. They argued that a broad index of commodity futures offered annual returns on par with the S&P 500, but with the added benefit that their prices didn't move together with stocks and bonds.

Messrs. Gorton and Rouwenhorst worked with American International Group Inc., they noted in the paper. The insurer had developed the Dow Jones AIG Commodity Index about six years before and then used the research by Messrs. Gorton and Rouwenhorst to sell investment products tied to that index, according to people familiar with the process. An AIG spokeswoman declined to comment for this article.

Messrs. Gorton and Rouwenhorst declined to comment. In their 2015 follow-up paper, they said their earlier findings on commodities "largely hold up."

Typically, an index owner will receive a small fee every time a fund buys or sells options contracts tied to that index.

Many consultants seized on their research to market commodities products to large investors. Giant pension funds like the California Public Employees' Retirement System and the Illinois Teachers' Retirement System began allocating money to commodities for the first time.

Calpers still holds commodities in its portfolio. The Illinois Teachers' Retirement System jettisoned its commodities strategy in 2012.

"When we read that paper,

Earnings Hopes Lift U.S. Stocks

By GUNJAN BANERJI
AND KOSAKU NARIOKA

U.S. stocks rose, bouncing back after last week's declines.

Some analysts and investors said optimism about corporate earnings and easing geopolitical concerns helped Monday's rebound.

The Dow Jones Industrial Average rose

MONDAY'S MARKETS 183.67 points, or 0.9%, to 20636.92. The S&P 500 and the Nasdaq Composite each climbed 0.9%.

Most European exchanges were closed for Easter Monday.

Part of the move is "a little bit of relief," said Thomas Lee, a managing partner at Fundstrat Global Advisors, referring in part to North Korea's failed ballistic-missile test.

Financial companies led gains in the S&P 500, rising 1.5% by late afternoon. M&T Bank added 3.6% after the bank's earnings exceeded analysts' estimates and higher interest rates helped boost lending margins.

Consumer discretionary stocks also gained, rising 0.9% in the S&P 500. Nike was up 1.7% by late afternoon.

Energy stocks in the S&P 500 rose less than 0.1%, as the price of U.S. crude oil fell 1% to \$52.65 a barrel.

The yield on the benchmark 10-year U.S. Treasury note touched a five-month low before recovering to 2.248% Monday, up from 2.237% Thursday. Yields and prices move in opposite directions.

The WSJ Dollar Index, which measures the U.S. currency against a basket of 16 others, fell 0.1%.

Investors are closely watching earnings, and the mood is optimistic. As of March 31, U.S. companies were expected to report their best quarterly earnings since 2011, according to FactSet.

WSJ TALK / EXPERIENCE / OFFER / GETAWAY

Reflections on the Past for Investors Today



Join WSJ's James Mackintosh and the editors of the CFA Institute's recently published book, "Financial Market History: Reflections on the Past for Investors Today," for an insightful discussion on the historical risks and returns on various assets, the development of stock markets, bubbles and crises, and the role of innovation in financial markets.



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MARKETS

THE DAILY SHOT | By Lev Borodovsky

The Reflation Trade Fizzles

Markets have arrived at a crossroads. A euphoric response to the U.S. election has dissipated, raising questions about what dynamic will next drive valuations and trading.

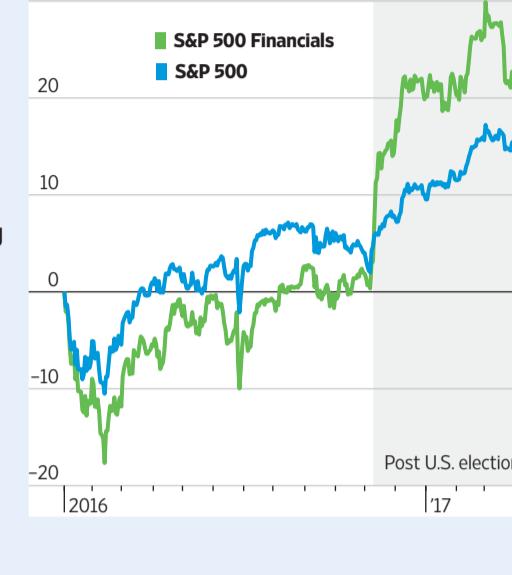
WSJ subscribers can get **The Daily Shot**—a chart-by-chart briefing on markets and economics—sent to their email each morning. Subscribe at wsj.com/newsletters

Anticipating surging economic growth, inflation and bond yields as a result of presumed Trump administration policy shifts, investors initially sent stocks and commodities higher and sold bonds. But lately the winds have shifted, with rallying bond prices pushing yields down and many industrial commodities and stocks—notably bank stocks—retreating alongside inflation expectations. Some indicators have returned to pre-election levels.

The reversals are especially sharp in the narrower 'Trump trade,' in which investors bought supposedly favored assets such as Russian stocks and smaller U.S. firms and sold putative administration targets such as the Mexican peso and consumer-staple stocks. Some say the larger bullish narrative remains intact, but spring shows the markets are in a 'show-me' mood.

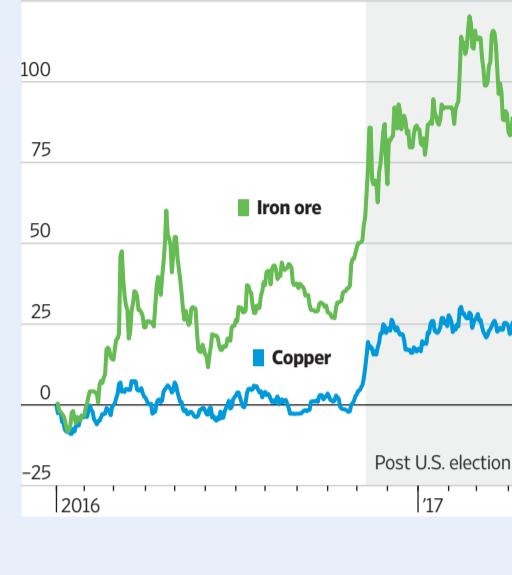
Financial sector and the broader market

Change from 2015



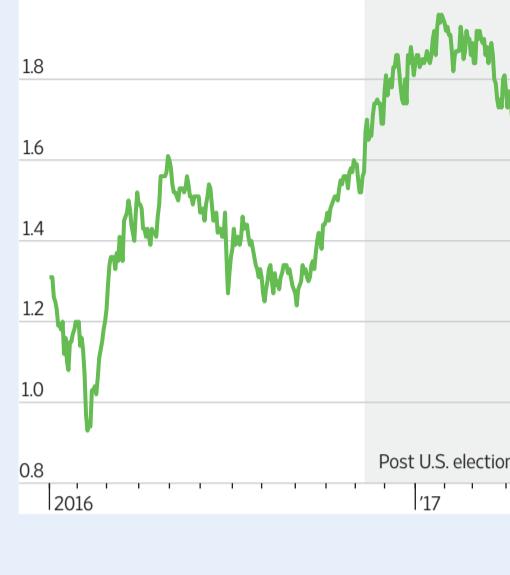
Commodities

Change from 2015



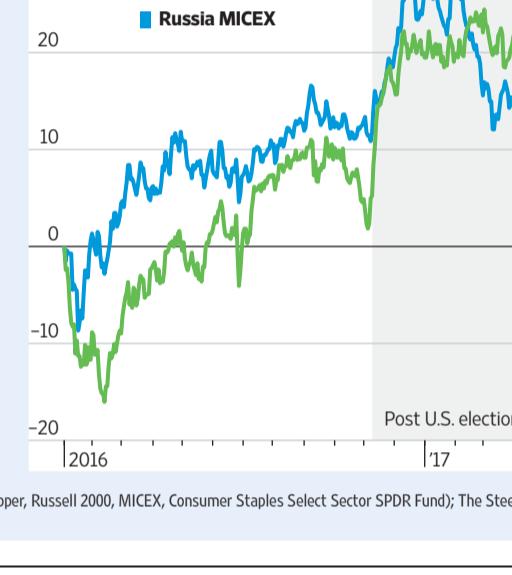
U.S. five-year breakeven inflation rate

Change from 2015



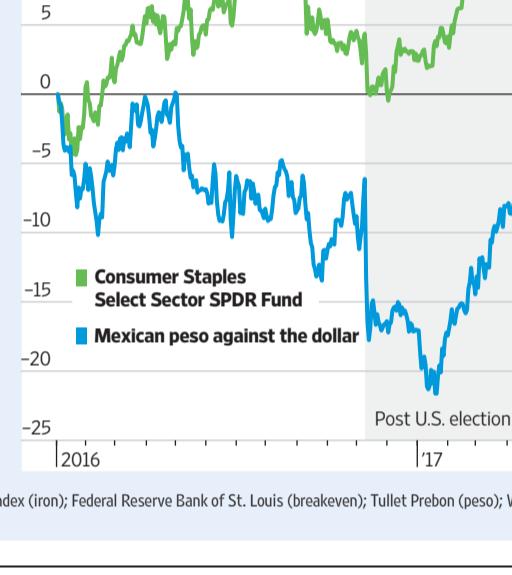
Russian stocks and small U.S. firms

Change from 2015



Mexican peso and consumer staples

Change from 2015



WSJ Dollar Index

Change from 2015

Sources: FactSet (S&P 500, S&P 500 Financials, copper, Russell 2000, MICEX, Consumer Staples Select Sector SPDR Fund); The Steel Index (iron); Federal Reserve Bank of St. Louis (breakeven); Tullet Prebon (peso); WSJ Market Data Group (dollar index)

THE WALL STREET JOURNAL.

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China Is Bailed Out by Consumers

Everyone knows the China stimulus story: When the economy hiccups, state firms ramp up borrowing, which they plow into buildings and bridges to boost growth.

That used to be the story; it isn't anymore. Since 2015, China's debt-funded stimulus model has undergone a radical change. A ramp-up in household borrowing has helped slow the dangerous rise in China's corporate debt burden. But as U.S. banks discovered to their sorrow in 2008, rising consumer debt paired with slowing income growth is a dangerous combination.

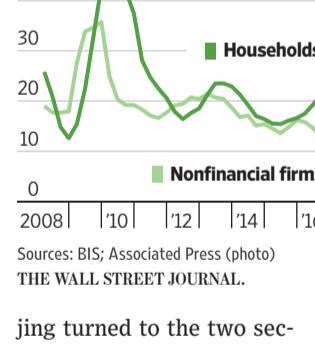
As China's latest downturn in 2015 deepened, companies already groaning under a debt burden equal to 150% of gross domestic product were in no position to play their traditional role as stimulus engines.

The central bank's repeated efforts to lower corporate borrowing costs fueled a historic stock market bubble but did little to boost real loan demand.

To solve the problem, Bei-

Role Reversal

Chinese debt outstanding, change from a year earlier



People buy roses in Beijing.

firms, meanwhile, have slowed their own borrowing: Nonfinancial corporate debt as a share of GDP fell by 0.6 percentage point in the third quarter of 2016, according to the Bank for International Settlements, the first dip since 2011.

The flip side of this marginal improvement in corporate health has been a dramatic rise in the consumer debt burden. Chinese families are still far less indebted than their U.S. counterparts in relative terms: U.S. consumer debt was nearly 80% of GDP in late 2016, about twice the comparable figure for China. But that is rising rapidly.

Trading healthy household balance sheets for marginally healthier corporate ones helped boost growth over the past two years. But if the next time the economy slows—and the time after that—Beijing decides to goose consumer lending again, eventually higher debt and slowing income growth are likely to collide in a painful manner.

—Nathaniel Taplin

OVERHEARD

FCC Shift Might Not Change a Lot

Shares of broadband providers have run up since the election on the hope that the Trump administration will bring a lighter touch to telecom policy. But even with looser net-neutrality rules on the horizon, little may actually change.

Federal Communications Commission Chairman Ajit Pai is planning to roll back a key aspect of the Obama administration's 2015 rules governing how broadband providers treat internet traffic. The new rules are expected to end the policy of classifying broadband as a utility subject to price regulation and return providers to a more limited regulatory framework. That would remove a big long-term risk for cable and telecom companies. But it may not make much of a difference in the short term, raising the question of whether recent stock-price gains are fully justified.

Critics of current rules argue the threat of price regulation chilled investment. But cable capital expenditures at Comcast, the largest wired broadband provider, have continued to climb since the new rules and are expected to rise again this year, according to UBS.

Broadband stocks were doing well even before President Donald Trump. Shares of Comcast, Charter Communications and AT&T beat the S&P 500 in the period between the FCC's February 2015 vote to reclassify broadband and Election Day.

Companies are also savvy enough not to raise prices right after the rules change. And there is the risk that a future Democratic administration will change the rules again. Investors shouldn't celebrate too loudly about looser net-neutrality rules.

—Miriam Gottfried

Don't Write Off Comcast's Wireless Ambitions Just Yet

Deal making in the wireless business is getting a green light, and investors are watching to see whether Comcast Corp. will join the race.

The cable giant said Thursday it paid \$1.7 billion for wireless spectrum licenses in the U.S. government's auction of broadcast airwaves, making it the third largest bidder after T-Mobile US Inc. and Dish Network Corp. The announcement came just a week after Comcast unveiled the details of its Xfinity Mobile wireless service, which it plans to market only to its existing customers.

Comcast's spectrum purchase is smaller than the \$4 billion or so that many ana-

Wireless Calling

Amount spent on spectrum in the FCC's auction, in billions



Source: Federal Communications Commission

THE WALL STREET JOURNAL.

lys had been forecasting.

But it doesn't quell speculation that Comcast may want a bigger piece of the wireless business.

The auction rules prevent companies in the industry

from talking to each other until 10 days after the announcement of the auction results. That has meant deal talks have been on hold for more than a year.

Comcast has positioned Xfinity Mobile, which will run on Verizon Communications Inc.'s cellular network, as a way to help it retain existing customers. Comcast has said it doesn't need to own its own network to be successful in wireless. But the broader strategy at Comcast and rivals such as AT&T has been moving toward the convergence of TV distribution, TV content, fixed broadband service and wireless service. And history suggests Comcast can't reap the

biggest benefits of the wireless business without owner's economics.

If Comcast is truly serious about getting into wireless, it likely will need to purchase an existing player such as T-Mobile, Sprint or even Verizon. T-Mobile spent \$8 billion on spectrum in the auction. If Comcast were planning to bid for it, it may have decided it wasn't worth paying for additional spectrum in the auction.

Comcast may also not be in a hurry to act. Sprint is likely to try again soon to merge with T-Mobile in the hopes that a deal will have better chances under a Republican administration.

Dish Network may also be

interested in a combination with T-Mobile. If a deal between T-Mobile and Sprint is rejected, Comcast could pick up one of the pieces without as much competition. If it is approved, Comcast could bid for the combined company.

And even if Comcast fails to buy a wireless carrier, it could make money on its spectrum. The last time the company bought spectrum as part of a group of cable peers in 2006, it made a sizable gain upon selling it to Verizon in 2011.

Comcast's wireless plans may still be very much alive. Investors shouldn't underestimate its chances of success.

—Miriam Gottfried