The Nobel Prizes Need A Makeover

THE WALL STREET JOURNAL <mark>WEEKEND</mark>

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Extreme

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OFF DUTY

What's News

Business & Finance

Apple staff met with Chinese officials in recent months to discuss concerns over new rules that will restrict the tech giant from offering many foreign apps currently available on its iPhone app store in China. A1

♦ UAW extended its strike to a Ford factory in Chicago and a GM plant in Michigan. citing a lack of progress at the bargaining table. B1

 Underlying inflation cooled notably this summer, with price pressures moderating for a third consecutive month in August. A2

◆ The S&P 500 fell Friday, locking in its worst month so far this year. The benchmark index slipped 0.3%, while the Dow lost 0.5% and the Nasdag added 0.1%. B13

The SEC closed out its fiscal year with a surge of civil-enforcement actions, as Wall Street's top regulator brought in \$218 million in fines on Friday. B12

French prosecutors are investigating a deal between billionaire Bernard Arnault, head of LVMH. and a Russian businessman for possible money laundering. B11

Pilots at United Airlines approved a new contract that includes pay raises of as much as 40% over the course of its four-year term. **B11**

World-Wide

Several Republican rebels joined forces to defeat McCarthy's attempt to keep the government open, leaving no clear path for the House to pass its own short-term spending bill or reach agreement with the Senate. A1

Deluge Turns New York City Streets to Rivers



WATER EVERYWHERE: Motorists navigate FDR Drive in Manhattan near the Williamsburg Bridge on Friday as the city saw its wettest calendar day in recorded history. Heavy rains swamped subways and shut down commuter rail lines. A3

China's Latest Tech Regulations Threaten Apple's App Business

Apple staff met with Chinese officials in recent months to discuss concerns over new rules that will restrict the tech

By Yoko Kubota, Yang Jie and Aaron Tilley

giant from offering many foreign apps currently available on its iPhone app store in China.

Officials told Apple it must strictly implement rules banning unregistered foreign apps, people familiar with the discussions said. Apple employees expressed concern over how the rules would be implemented and affect its users. The exchanges were previously unreported.

China's move to restrict the apps would close a loophole in the Great Firewall that allows Chinese iPhone users to download popular Western socialmedia apps such as Instagram, X (formerly Twitter), Facebook, YouTube and WhatsApp.

While China has for years blocked web access to those sites, iPhone users who download the services' apps can engage on the platforms if they log on through a virtual private network, or VPN, that connects them to an internet server outside the country. Many users, especially younger people, do this even though China bans the use of unauthorized VPNs.

Combined, those five socialmedia apps have been downloaded from Apple's app store more than 170 million times in China over the past decade, according to estimates by Sen-

sor Tower, a market-insights company. Some apps such as X were used to spread information and videos of protests against Covid rules in China that erupted late last year.

Sensor Tower estimates that Instagram has by far been the most downloaded Western social-media app in China on Apple's iOS ecosystem, amassing nearly 54 mil-Please turn to page A7

Kroll executive barred from leaving China..... A7

Shutdown **Is Likely As Rebels Defy GOP** Leadership

Social media and online fundraising empower polarizing House members

By AARON ZITNER AND LINDSAY WISE

WASHINGTON-The small group of House Republicans bucking their party leaders and pushing the government toward a shutdown would have carried a dismissive label in past years. They'd be called gadflies—annoying to col-leagues, and easily swatted away.

Today, the gadflies are dominating the political scene.

They are the members using inflammatory rhetoric and disruptive tactics to draw media attention and campaign donations from the most partisan voters, giving them power to oppose their own party leaders and a majority of their House GOP colleagues. In doing so, they have become heroes to many in the GOP but symbols of what many voters say they lament: The drastic polarization of politics, where the most combative politicians can command status while centrists struggle to be heard.

They are also helping to ensure a shutdown happens at 12:01 a.m. Sunday, as several of the House's most stubborn rebels joined forces to defeat House Speaker Kevin McCarthy's attempt Friday to keep Please turn to page A4

♦ GOP risks blame, but voter ... A4 ire could spread...

 National parks will close if government shuts..... A4

A bail-bond business

owner charged along with Donald Trump in a sweeping Georgia election-interference case pleaded guilty to misdemeanor charges. A6

Federal prosecutors

charged an IRS contractor with stealing the tax returns of Trump and thousands of other wealthy Americans and leaking them to news organizations. A6

The Biden administration

plans to schedule three oil and gas lease sales in the Gulf of Mexico over the next five years, a reversal of the president's campaign promise to stop new offshore drilling under his administration. A3

• A suicide bomber blew himself up in the midst of a religious procession in western Pakistan, killing at least 51 people. A8

Army Gen. Mark Milley warned in his retirement speech that military officers must adhere to the Constitution and not bow to political pressures. A6

A suspect was charged in Las Vegas for the 1996 shooting of Tupac Shakur. A6

> NOONAN Biden's **Trend Line Points** Downward A13

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Markets	



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At Third Point, Dan Loeb's Hot Hand Goes Cold

Hedge fund, after years of strong returns, has had big losses lately and now faces a flood of customer withdrawals

BY GREGORY ZUCKERMAN AND PETER RUDEGEAIR

Dan Loeb, one of the most successful hedge-fund managers of his generation, is having a rough year.

Funds at his firm, Third Point, fell by about 1.6% this year through August after tumbling 21.8% or more in 2022, according to investors. Both figures are worse than those of peers and the broader market.

Loeb, who oversees roughly \$11.7 billion, said he expected higher interest rates to take a bite out of the U.S. economy this

EXCHANGE

NEXT ACT

The end of the writers'

strike marks the

beginning of a new era

in Hollywood. B1

year, so he turned cautious. As a result, he didn't own enough technology shares to fully benefit from the summer's AI-powered rally that drove stocks such as Nvidia skvward.

Compounding the error, Loeb recently boosted stakes in tech and other riskier companies, just in time for those stocks to stumble in recent weeks.

Strategies that once produced big gains for him—shareholder activism, short selling and startup bets—also haven't helped. Please turn to page A9

Peanut Growers Find Japan's Baseball Fans Tough Nut to Crack

U.S. quest to pitch the munchies is tricky: 'They're just not comfortable with littering'

Japan has sent Major League Baseball a raft of topnotch players. Now the U.S. is

> By Kristina Peterson in Washington and Miho Inada in Tokyo

sending Japanese baseball fans a slew of America's favorite munchies.

Trade groups representing U.S. peanuts, potatoes and organic fare such as peanut butter, are targeting Japanese baseball games as a way to boost visibility and sales abroad.

"Baseball and peanuts—you can't go wrong," said Sarah Gorman, international trade manager for the Organic Trade Association.

"Peanuts at a ballpark? Hmmm, I don't get it," said Yumi Mao, a 34-year old aesthetician, who was at a recent baseball game at Jingu stadium in Tokyo and was enjoying battered chicken covered with tartar sauce along with a cocktail. "I think we'd tend to eat more heavy foods here."

In a nutshell, peanuts aren't a tradition at Japan's ballparks,

Dianne Feinstein Dies at 90

The nation's longest-serving female senator, the California Democrat spent a lifetime breaking barriers for women. A5



Stock-Market Rally Sputters in New World Of Soaring Bond Yields

BY KAREN LANGLEY

seemed like nothing could stop the 2023 market rally. Then the third quarter arrived.

Yields on longer-term government bonds soared, blunting the advance of a stock market powered by richly valued technology shares. The S&P 500, which had been up nearly 20% for the year just two months ago, is hanging on to a 12% increase.

Investors are heading into the final months of 2023 worried the Federal Reserve will *Please turn to page A9* keep interest rates higher for

longer than they expected just months ago, potentially eroding the case for risky assets like stocks and heightening the likelihood that a seemingly resilient economy runs into trouble.

The third quarter is ending on a down note: The benchmark stock index had been essentially flat heading into the central bank's meeting last week, but turned lower after officials signaled they might Please turn to page A2

- Bonds are on track for year B10 of dismal returns..... Wall Street expects hot oil
- prices to cool down...... B10



THE NUMBERS | By Josh Zumbrun Why a 'Child-Care Cliff' May Be Averted

Parents of young children could hardly miss headlines about the looming "childcare cliff." According to one prominent estimate, 3.2 million children are poised to lose their child-care spots and 70,000 child-care programs could close as a pandemic-era, child-care funding program ends next week.

On Sept. 30, "child care for millions of children and families nationwide will begin to disappear, with dire consequences for children, families' earnings, and state economies," the report by the Century Foundation, a progressive think tank, warned in June.

But as is often the case with predicted cliffs, the reality is likely to be a lot less dramatic.

his story, and the numbers behind it, are a drama that plays out frequently in Washington. Versions are happening this week as Congress's inability to pass spending bills threatens to close down the government as soon as Oct. 1, potentially shutting numerous programs. Millions of students are on the hook to resume paying their loans in October after a moratorium first declared in March 2020 expired.

The term "cliff" was popularized in 2012 when then-Federal Reserve Chair Ben Bernanke warned that the simultaneous expiration of tax cuts and some spending pro-



The federal government's pandemic-era, child-care funding program is poised to end.

grams at the end of that year represented a "fiscal cliff" that could be followed by an abrupt slowing in the economy. Even then, some said it should be called a "fiscal slope"—with impacts likely to be gradual. In the end, Congress acted at the 11th hour to stop some tax increases and postpone some spending cuts, which eventually took effect more gradually; the cliff was never fully tested.

The term has cropped up repeatedly in the past few years. In addition to childcare support and the student-loan moratorium, there were expanded unemployment benefits that paid an extra \$600 a week, with warnings of catastrophe if they expired. When rentalassistance and eviction-moratorium programs expired, there were predictions of a "tsunami" of evictions.

In each case, catastrophe never materialized. This doesn't mean the money or moratoria made no difference, or their expiration didn't cause hardship. Rather, it shows that people are forward-looking. When they know a cliff is coming, they don't simply charge over the edge, they prepare and adjust.

This is what's happening

that most centers will "try raising rates first, and see how much the market can bear."

he money doesn't literally end this week; recipients for funding had to be picked by Sept. 30, 2022. By December, the assistance had already gone out to 220,000 providers, about 80% of the country's licensed child-care centers. In other words, for most, the checks stopped coming last vear.

Providers didn't necessarily wait for this week's expiration to prepare. Many have already raised prices-childcare rates have been climbing twice as fast as overall inflation, according to Labor Department data, with many centers blaming the end of federal funding.

This will certainly exact a cost. The National Association for the Education of Young Children, a trade group representing child-care providers, said in a written statement that "while the fall off the cliff won't happen all at once, the bottom line is that programs are going to change and close.

Child care already stretches many families' incomes. In fact, few American families find care that meets the Department of Health and Human Services' threshold of "affordable," which it defines as 7% of household income. In an annual survey by Care.com, the largest on-

U.S. income and spending

line child-care marketplace, 89% of parents with children in care reported that it consumed 10% or more of their income. For over two-thirds of families, it consumed more than 20%.

This is widely blamed for interfering with parents' ability to work or have as many children as they would like. Treasury Secretary Janet Yellen, an economist. has described child care as "a textbook example of a broken market."

liffs are often self-defeating prophesies. The more attention they get, the more people can brace themselves, preventing the feared catastrophe. The epitome was Y2K-the inability of many computers to handle the shift from Dec. 31, 1999, to Jan. 1, 2000. So much time and money was spent correcting the flaw that virtually nothing happened when the date arrived.

As the funding ends, it's probably not going to show up as 70,000 daycare closures or 3.2 million kids losing care. Instead, some states step into the gap, perhaps employers pick up parts of the tab, prices ratchet higher, the child-to-caregiver ratios in the facilities get a little higher, and the people watching our kids don't get as big a raise. In other words, not so much a cliff, but a return to the same dreary landscape that nobody much liked in the first place.

August Report Gives Fed Fresh Evidence of Softer Inflation

By Sarah Chaney Cambon AND NICK TIMIRAOS

Underlying inflation cooled notably this summer, with price pressures moderating for a third consecutive month in August. If that continues this fall, it would strengthen the case for the Federal Reserve to stop raising interest rates.

The Fed's preferred inflation gauge, the personal-consumption expenditures price index, rose a seasonally adjusted 0.4% last month, largely reflecting energy costs. Core prices, which exclude food and energy, rose just 0.1% in August, the weakest monthly increase since 2020, the Commerce Delighting why officials aren't ready to declare victory.

Americans increased their spending by 0.4% in August from a month earlier, Friday's report also showed. That is healthy growth but a slowdown from a 0.9% gain in July. Solid job prospects and rising gasoline prices helped fuel spending.

Still, the spending momentum might wane as consumers confront a range of challenges including the depletion of pandemic savings, the resumption of student-loan repayments and high interest rates.

The Fed held its benchmark interest rate steady at a 22year high last week, and most officials penciled in one more rate increase for this year. Fed Chair Jerome Powell said officials want to see "convincing evidence" that they have raised rates enough to sustainably lower inflation to their 2% goal "We're seeing progress, and we welcome that, but we need

to see more progress," he said. We want to see that it's more than just three months.'

Friday's report lowers the prospect that the Fed will raise rates at its next meeting, Oct. 31-Nov. 1, and suggests the central bank could delay any decision on another increase until December.

Fed officials' projections indicate they expect core inflation to cool further next year. But even if that occurs, the Fed risks holding interest rates too high for too long, said Simona Mocuta, chief economist at State Street Global Advisors. She worried that would lower the Fed's chances of achieving a so-called soft landing.

Change in PCE prices, from a year earlier*

with child care. With federal

funding expiring, a number

of states have stepped into

the breach with new or ex-

some of the hole. "That will

mitigate some of our projec-

tions," acknowledged Julie

author of its report.

Kashen, senior fellow at the

Century Foundation and lead

Where such support isn't

available, centers don't typi-

cally shut the week after

plies. Rather, they raise

funding ends, as "cliff" im-

prices first. Kashen said she

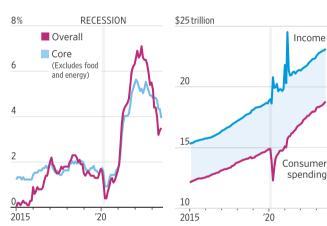
sees the fallout from the end

of funding "happening over a

longer period of time, poten-

tially over a year" and says

panded programs to plug



Seasonally adjusted +Seasonally adjusted at annual rates

easing supply-chain disruptions. They also spent more on experiences, flocking to "Barbie" and "Oppenheimer" this summer and splurging on tickets to Taylor Swift and Beyoncé concerts.

The spending spree bolstered economic growth. Many forecasters think the economy is expanding faster this quarter than earlier this year.

Some of the factors that helped consumer spending in the past two years are fading and signs of stress are emerging. Many Americans are dipping into savings. The personal saving rate, a measure of how much money people have left each month after outlays and taxes, continued to decline and

hit 3.9% in August. "The excess

savings is drying up and the

credit has gotten a lot more

partment said on Friday.

Over the three months through August, core prices rose at a 2.2% annualized rate. If that trend continues in the coming months, inflation would be running very close to the Fed's 2% target. But higher energy prices pushed up overall inflation in August, high-

Chicago Fed President Austan Goolsbee echoed some of that concern on Thursday. In a speech, he warned against allowing interest-rate policy to be guided too heavily by standard economic models that assume higher unemployment will be required to bring inflation down.

Source: Commerce Departmen

"We need to be extra careful about indexing policy to this traditional view," he said. If the economy is behaving differently because of pandemicdriven distortions, following those traditional models would create a "serious risk of a

The technology

traded this week at 24.1 times

its projected earnings over the

next 12 months, down from

28.3 at its July high but above

a 10-year average of 18.5, ac-

cording to FactSet. The S&P

500, meanwhile, traded at 18

rode a rally in oil prices to be-

come some of the few winners

in the third quarter. Brent

crude, the global benchmark,

gained 27% since June to

\$95.31 a barrel. That helped

drive the S&P 500 energy seg-

ment up 11%, with shares of

Exxon Mobil closing at a re-

complicated picture as they

try to anticipate the market's

next moves. Will interest rates

stay elevated? Will the econ-

Investors are confronting a

cord this week.

Energy stocks, by contrast,

times future earnings.

near-term policy error," he said.

Consumer spending, the economy's main engine, has been strong much of this year.

Shoppers snapped up vehicles this year as they flowed back onto dealership lots amid

expensive, so I think that diminishes the resilience angle." said Tim Quinlan, senior economist at Wells Fargo. "Our staying power is going to be tested."

Stocks Yield New Concerns

Continued from Page One hold rates near current levels through 2024.

A prolonged period of elevated rates could upend the investing strategies that prevailed during years of rockbottom rates after the global financial crisis. when investors saw few options for returns outside the stock market.

Now the central bank's rate increases have seeded a world of yield, giving investors opportunities to earn meaningful returns with little potential downside.

"Equities are competing with 5% returns on cash, which is basically no risk," said Saira Malik, chief investment officer at Nuveen. "They used to say 'TINA,' right, 'there is no alternative.' There are alternatives now for equities.

The S&P 500 dropped 3.6% for the quarter. A retreat by technology stocks helped cement the decline, with shares of Apple and Microsoft, the biggest companies in the U.S. market, falling 12% and 7.3%, respectively.

The Dow Jones Industrial Average declined 2.6%, or about 900 points, while the tech-heavy Nasdaq Composite tumbled 4.1%. The S&P 500

and Dow industrials posted their worst showings since the third quarter of 2022, while the Nasdaq Composite had its weakest performance since last year's second quarter.

The trouble for risky assets began last year, when the Fed started ratcheting up rates to fight building price pressures. The S&P 500 fell 19% and the Nasdaq Composite 33% in the worst year for both indexes since 2008.

Many investors feared 2023 would bring more of the same. Economists expected higher rates would tip the U.S. into a recession. Fed officials signaled more increases were on the way.

So money managers were surprised when excitement about artificial intelligence and signs that inflation might subside without a recession propelled the S&P 500 into a new bull market and the Nasdag to its best first half since the 1980s.

Investors saw another reason for optimism: They expected the central bank would soon cut rates. At the end of July, when the S&P 500 closed at its 2023 high, traders thought there was an 87% chance that the Fed would trim its benchmark rate to a lower level by its June 2024 meeting, according to CME Group's FedWatch tool.

That view has changed. Traders late this week assigned a 50% probability to a lower benchmark rate next June, FedWatch data shows. An economy that continues

to expand despite the Fed's rate increases has pushed government bond yields skyward, with the yield on the benchmark 10-year U.S. Treasury note vaulting to its highest levels since 2007.

Higher rates are particularly troublesome for the tech stocks that powered the S&P 500 in the first half. Many such stocks command lofty valuations based on expectations that their business will expand far into the future. Higher rates eat into the worth of that anticipated growth. They also offer investors alternatives that don't stake so much on an uncertain future.

"When interest rates have been going higher, it becomes this worrisome headwind for the technology sector," said Amy Kong, partner and wealth adviser at Corient. "The present value of all that future growth

Share-price and index performance, year to date



becomes smaller and smaller omy remain strong? the higher interest rates get."

sector

David Giroux, chief investment officer and portfolio manager at T. Rowe Price Investment Management, said the firm's Capital Appreciation Fund has its highest allocation to fixed income since he began managing it in 2006, while its allocation to equities is lighter than usual. Giroux said he expects yields to come down, while stocks have grown increasingly expensive.

"The market goes from one extreme to the other. It goes from an extreme like 'We're definitely going to have a recession' to 'We're definitely not going to have a recession,'" Giroux said. "The truth is usually somewhere in the middle. And it kind of pays to take the other side of that argument.'

History suggests the market could have more gains ahead even if the economy hits turbulence. The S&P 500 is up 13% since a July 2022 report showing the U.S. inflation rate hit a four-decade high of 9.1%.

Since 1945, the S&P 500 has risen 21% on average in the two years after the release of data showing a peak in consumer-price inflation, said Brett Nelson, head of tactical asset allocation for the investment-strategy group at Goldman Sachs Group. When episodes with a recession are excluded, the index's average gain was 28%.

"Generally speaking, the market rallies whether there's a recession or not after inflation peaks," Nelson said.

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CORRECTIONS ප්

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Storms Flood Streets, Trains **In New York**

Governor declares state of emergency for city, Long Island and Hudson Valley

NEW YORK—Heavy rains flooded subways in New York City, shut rail lines to its northern suburbs and turned its

By Jennifer Calfas, Erin Ailworth and Ginger Adams Otis

highways into rivers on Friday in the wettest day in the city since the remnants of Hurricane Ida hit the region in 2021.

Gov. Kathy Hochul declared a state of emergency for New York City, Long Island and the Hudson Valley, directing state agencies to assist with resources as a storm inundated the tri-state region.

"We're here to help New Yorkers get through what is a life-threatening rainfall event," Hochul said. "People really need to be taking this extremely seriously.'

New York City Mayor Eric Adams declared a state of emergency. The National Weather Service in New York declared Friday the wettest calendar day in recorded history, which the service has tracked at John F. Kennedy International Airport since 1948.

New Jersey Gov. Phil Murphy declared a state of emergency and closed state offices

for nonessential employees beginning 3 p.m. Friday. Hoboken, N.J., located across the Hudson River from Manhattan, also declared a state of emergency.

Flooding and heavy rainfall hampered travel across the city and region as city officials directed residents to stay home. Many subway and train lines were suspended as crews cleared water from the tracks. Major roadways were closed, and the New York City Emergency Management Department issued a travel advisory through Saturday morning. LaGuardia Airport closed one of its terminals due to flooding, while John F. Kennedy International Airport reported flight disruptions.

Jen Kuipers, who caught a bus in Brooklyn headed to Queens, noticed water levels rising on the street. Then she realized water was seeping into the bus, she said.

"Every time we stopped the water would come, it was like a wave coming through the bottom of the bus," she said. City leaders defended the

decision to keep schools open, saving closures disrupt learning and family schedules.

'We have only a certain number of school days that we can utilize, and we must make sure we meet that," Adams said. "We do not have any issues, dangerous issues, at our schools.

About 150 New York City



Commuters tried to stay dry while waiting to board subway trains at a station in Brooklyn, N.Y., on Friday.

Lincoln Road, 24 hour bo

B16 B43 B48 righton Bch 8

schools had taken on some water, said David Banks, chancellor of the city's Department of Education. Officials evacuated one school in Brooklyn, he said.

Hochul said her priority was to restore service to the transportation system to make sure students could get home safely. The MTA is controlled by the state. By Friday evening, many subway and train services had resumed.

The National Weather Service warned residents in the New York City boroughs of Brooklyn, Queens and Manhattan that life-threatening flash flooding could create hazardous conditions on roads and low-lying areas.

Crews rescued people from six flooded basement apart-

city officials said. There have been no confirmed fatalities, New York City Fire Commissioner Laura Kavanagh said.

The storm dumped 2.5 inches of rain over the Brooklyn Navy Yard between 8 and 9 a.m. Friday, a rate the city's sewer system isn't designed to accommodate, said Rohit Aggarwala, commissioner of the New York City Department of Environmental Protection.

Richard Wilson said he nearly got swept off his bike on a flooded block during his commute from the Brooklyn Navy Yard to Queens.

"There was so much water, there was a current," Wilson said. "I had to hold on to the chain link fence on the sidewalk.'

Wilson eventually dismounted and pushed his bike to higher ground, after picking twigs and other debris out of his chain and wheel cogs. An avid cyclist, Wilson said he has never encountered such dire conditions.

"It's a doozy," he said.

Doug Byrne from Queens dug out his heavy boots and a raincoat to make the 15-block trek to his office.

"It took a little longer than usual because of a lot of zig-ging and zagging," Byrne said. There was really deep water that you had to wade through on a lot of the corners, especially around the subways."

Rainfall totals by midday made Friday the wettest day in New York City since remnants of Hurricane Ida

pounded the Northeast in September 2021, said Dominic Ramunni, a meteorologist with the National Weather Service. The storm produced more than 6 inches of rain by midday Friday in parts of Brooklyn, Ramunni said. Central Park saw more than 5 inches of rain since Thursday night.

"We've received reports of numerous vehicles stranded in Brooklyn, parts of Queens, a few water rescues as well," Ramunni said. "This is dangerous."

Watch a Video



for a video on the heavy rains and flooding in New York City.

In Switch, U.S. Says It Will Allow New Offshore Drilling

By Scott Patterson AND COLLIN EATON

WASHINGTON—The Biden administration plans to schedule three oil and gas lease sales in the Gulf of Mexico over the next five years, a reversal of the president's campaign promise to stop all new offshore drilling under his administration.

The Interior Department, which oversees oil leases, said the sales are necessary because of last year's clean-energy legislation, the Inflation Reduction Act. The agency said low the Biden administration to "support the growing offshore wind industry," Interior Secretary Deb Haaland said.

The announcement sparked opposition from both environmentalists, who pointed to Biden's campaign pledges, and oil and gas drillers angered by the historically lean list of sales.

"By failing to end new offshore drilling, President Biden missed an easy opportunity to do the right thing and deliver on climate for the American people," Beth Lowell, an executive with environmental group Oceana, said. "This decision is beyond disappointing." Mike Sommers, chief executive of the American Petroleum Institute, the oil industry's main lobbying group, said the Biden administration's plan is designed to limit domestic oil and gas production and will

add to rising costs for consum-

"At a time when inflation runs rampant across the country, the Biden administration is choosing failed energy policies that are adding to the pain Americans are feeling at the pump," Sommers said.

The administration has been caught between competing interests and economic forces as it has weighed drilling rights in the past few years. It has been an advocate for clean energy, passing major legislation, such as the Inflation Reduction Act, to boost spending on refederal lands and offshore. Biden started his presidency by introducing a moratorium on new leasing and permitting, following up on campaign promises to focus on the transition to clean energy.

"No more drilling on federal lands, no more drilling, including offshore—no ability for the oil industry to continue to drill—period," Biden said when he ran for office.

Biden is once again facing political pressure from rising oil prices, which reached their highest level in more than a year this week and have be-

Va.) last year grilled Haaland in a congressional hearing about the department's progress on the five-year plan. "Is it your intent to lease?" he said.

"Our intent is to follow the law," Haaland replied. A Wall Street Journal analysis last year found that the Biden administration had leased fewer acres for oil-and-gas drilling offshore and on federal land than any other administration in its early stages dating back to the end of World War II.

The administration last year canceled plans to auction drillAtlantic or Pacific oceans, or in U.S. waters off Alaska.

On Friday, Manchin said the move would limit oil and gas production and offshore wind because the number of leases for either are tied together in the IRA.

"Instead of embracing the all-of-the-above energy bill that was signed into law, this Administration has once again decided to put their radical political agenda over American energy security," Manchin said.

Oil company executives have criticized the administration for sending mixed messages on U.S. oil production. They say the expiration of the latest five-year plan in mid-2022 hamstrung operators trying to make decisions on massive long-term investments in Gulf of Mexico projects that take years to bring into production.

the law mandated that millions of acres of oil and gas leases needed to be offered by the administration in exchange for the expansion of offshore wind projects.

The five-year program will be the fewest oil- and gas-lease sales in U.S. history and will alnewable energy and encourage the adoption of electric vehicles.

But high inflation and gasoline prices sparked by the war in Ukraine and other factors have pressured the White House to roll back earlier promises to curb drilling on

come a frequent talking point for Republican presidential candidates.

Haaland has drawn fire from lawmakers who have claimed the administration isn't doing enough to foster domestic production of fossil fuels. Sen Joe Manchin (D., W.

ing rights in three regions off the U.S. coastline, drawing fire from the fossil-fuel industry and business interests such as the Chamber of Commerce, which said the move would drive inflation higher.

Interior's new plan didn't include any lease sales in the





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GOP Risks Blame, but Voter Ire Could Spread

By Andrew Restuccia And Sabrina Siddiqui

WASHINGTON—Politicians don't agree on much, but they are nearly unified on one thing: The public is likely to blame a government shutdown on Republicans.

"A shutdown would only give strength to the Democrats," House Speaker Kevin McCarthy warned this month. Senate Minority Leader Mitch McConnell has said it would be a "loser for Republicans politically." The White House has dubbed it a "Republican shutdown."

But some pollsters warn that few winners would emerge from a prolonged funding lapse, which might deepen voters' frustrations with dysfunction in Washington.

That has the potential to deal a blow to politicians of all stripes, including Democrats and President Biden, who faces low poll ratings over his stewardship of the economy.

"Everybody will get some blame," said the Republican pollster David Winston. "Given people's attitude about the direction of the country, this is a horrible environment to have a government shutdown in because it just reaffirms the sense that things aren't working."

A recent Economist/YouGov poll found that 29% of adults would blame Republicans in Congress for a shutdown. Fourteen percent would blame Democrats in Congress, 13% would blame Biden, 32% would blame everybody equally, and 12% weren't sure whom they would blame.

For now, pollsters said, GOP lawmakers face the bigger political risk from the possible shutdown.

Winston, who served as an aide to Newt Gingrich when he was House speaker, said the disarray in the House—a group of conservative lawmakers has tanked several measures aimed at funding the government—is likely to hurt the GOP.

"That is going to be a difficult thing for people to understand," he said.

Celinda Lake, a Democratic pollster who worked on Biden's 2020 campaign, said her firm has helped organize recent focus groups on the issue. "In our research, people were flabbergasted that there was going to be a shutdown," she said, adding that voters thought the threat had been addressed during the debt-ceiling negotiations this year.

She argued that the political risk for Biden is small, making the case that voters view the president as an institutionalist. "They don't think he's a 'shut it down' kind of guy," she said. She added, "There's a risk that the whole economy goes down the tubes. Then everybody is in trouble."

Focus groups of independents and Democrats conducted this month for the progressive-aligned Navigator



House Speaker Kevin McCarthy spoke to reporters on Friday about efforts to avert a shutdown. Some pollsters warn that few winners would emerge from a prolonged funding lapse.

research group found that some voters saw both parties as unwilling to compromise in the shutdown fight. But Navigator, in a summary of the focus groups' findings, said Republicans attracted most of the blame.

"Again, I think it's everybody's, all elected officials' responsibility to do what they can to compromise, but I definitely think one party is more difficult than another," one Nebraska man said, according to the summary.

The government is set to partially shut on Oct. 1 if Congress is unable to pass a funding measure. A small group of conservative Republican lawmakers has rejected efforts to reach a compromise as they push for deeper spending cuts, bringing the government close to a lapse in appropriations.

Meanwhile, federal departments and agencies have been updating and reviewing their plans and procedures for a partial closure of government operations. While many federal workers would be furloughed, others deemed essential would continue to work without pay.

The White House has warned of wide-ranging consequences in the event of a shutdown, including disruptions to air travel, a halt on food-safety inspections and delayed disaster-recovery projects—the kind of issues that usually get voters' attention.

* * * * * * *

Previous shutdowns have similarly put the White House at odds with the party controlling the House over key policy priorities.

The government shut down for 21 days in 1995 and 1996 when Republicans, led by Gingrich, clashed with President Bill Clinton over taxes and spending. The political fallout, which saw Republicans bear the brunt of the blame, was acute enough that nearly two decades passed before the next

lapse in government funding. In 2013, Sen. Ted Cruz (R.,

Texas) and a faction of House Republicans tied up government funding in an attempt to block or weaken the Affordable Care Act. Pressured by his right flank, House Speaker John Boehner (R., Ohio) acquiesced to their demands despite opposing a shutdown at the time. The 16-day impasse ended without any significant changes to President Barack Obama's landmark healthcare law, dealing a blow to Republicans in Congress.

"If there is a shutdown, the biggest question is how long it will be," said Eric Cantor, a Virginia Republican who served as the House majority leader during the 2013 shutdown. "Over time, more and more people begin to be impacted by a shutdown, and that's when the pressure builds, and politically, that's when the dam can break."

The longest government shutdown in U.S. history dragged on for 35 days between 2018 and 2019, when President Donald Trump insisted on funding to help pay for a wall along the U.S.-Mexico border. Most Americans blamed Trump, who had declared he was "proud to shut down the government." The weekslong stalemate culminated in flight delays at major East Coast airports and federal employees' missing two paychecks, prompting Trump to relent on his demand.

National Parks Will Close if Government Shuts Down

By Jacob Passy And Andrew Restuccia

National parks will close their gates if lawmakers don't pass legislation to keep the federal government funded by the end of this week.

The Biden administration said on Friday morning that sites run by the National Park Service will close if government funding lapses on Sunday, outlining in a contingency plan how parks would be maintained during that time. The agency would notify the public of expected closures on Sunday and begin closing locations on Monday if a shutdown occurs, according to the plan.

The closures will affect national parks, including sites like Yosemite and Yellowstone, and other monuments and sites like the National Mall and memorials in Washington, D.C. During the shutdown, the NPS expects it would furlough nearly 13,000 employees, which would include thousands of park rangers. Visitors will still be able to access some parks during the shutdown. While some parks have entry points that can be closed to guests, visitors could go to many other federally run destinations that are easier to access. State parks won't be closed because of the shutdown.



Visitors watched brown bears in Alaska's Katmai National Park in August. Programming would be paused during a shutdown.

the recovery that followed. The department's contingency plan for the shutdown will give parks staffing flexibility to maintain their grounds in the event similar activity occurs this time around, the official said.

Parks' programming will be put on pause during the shutdown, which could affect the popular Fat Bear Week event hosted annually by Katmai National Park in Alaska. The senior Interior Department official said park officials wouldn't be able to monitor the bears' progress in bulking up for winter hibernation. The agency's contingency plan states that park websites and social media won't be updated during a shutdown.

During a shutdown, the National Park Service can accept donations from state and local governments and other entities, at the discretion of the agency's director. The department notes that such funding wouldn't be reimbursable. Arizona and Utah have indicated they would provide funding for the national parks located in their states should a shutdown occur. Utah Gov. Spencer Cox said this week that his state expects to be reimbursed by the U.S. Interior Department. Smithsonian Institution museums in Washington will remain open for about a week after the government shuts down, a spokesman said. The agency will rely on prior-year funding to operate the museums during that period.

The nonprofit National Parks Conservation Association, citing government data, projects that the parks could see nearly one million fewer visitors and an economic loss of as much as \$70 million for

to creased in recent years thanks in part to greater demand for outdoor activity during the pandemic. This is also a particularly popular time to visit certain locations: Acadia National Park in Maine is set to have some of its busiest weeks of the year because of its colsorful foliage.

every day the destinations are

Visitation to parks has in-

closed in October.

Rangers and staff at all na-

tional parks and sites will be greatly reduced, and visitor centers will be closed. Maintenance work may not be completed during that time, and parks won't provide regular updates on road or trail conditions.

The availability of emergency services also could vary during that time and isn't guaranteed. Officials are encouraging travelers not to visit these sites during a shutdown for their safety and to protect the landmarks.

"That's not only unfortunate—it's irresponsible of our federal government," said Tori Emerson Barnes, executive vice president of public affairs and policy for the U.S. Travel Association, a lobbying group, ahead of the Interior Department's announcement.

During the most recent government shutdown, the Trump administration kept

trend in both parties, most no-

national parks open with lower staffing levels. As travelers continued to visit, trash and toilet facilities overflowed at some locations. Visitors also caused damage to some locations, including Joshua Tree National Park.

The senior Interior Department official said the agency and its destinations are still feeling the effects from that experience since maintenance funds were depleted during

—Allison Pohle contributed to this article.

Republican Rebels Defy Leadership

Continued from Page One the government open for another 30 days. The measure's failure left no clear path for the House to pass its own short-term spending bill, much less reach agreement with President Biden and the Democratic-controlled Senate.

The defectors on that and other recent votes are using social media and online fundraising to build national profiles and liberate themselves from party leaders. One member of the bloc pushing for a shutdown, Rep. Marjorie Taylor Greene of Georgia, scooped up more campaign cash than nearly every other House member in 2022, partly on comments that rile her party.

Florida Rep. Matt Gaetz, another leading antagonist of

House leaders, is a star in conservative media with 2.5 million followers on the X platform, formerly known as Twitter. If Rep. Matt Rosendale of Montana runs for the Senate, as expected, his calling card will be the pain, rather than the aid, he has given his party in Washington. Every government shutdown-there have been 10 since 1977 lasting more than three days-ends with a political compromise. But these House members, part of a

House members, part of a loose group about 20 pushing McCarthy to demand deep spending cuts and conservative policy riders, raise the prospect of a prolonged suspension of government services. They have blocked budget legislation favored by hundreds of their House GOP colleagues and shown no inclination to make even basic bipartisan compromises.

"I'm doing everything in my power to stop the uniparty....The battle is on," Gaetz said Friday on the X platform. Gaetz and some other rebels say they are simply fighting for fiscal responsibility and the importance of considering annual spending bills one-by-one rather than in massive year-end packages crafted behind closed doors.

But some GOP colleagues question their motives. "I'm always a little skeptical of people who think their vote is motivated by principle but the other side can't possibly be," said Rep. Dusty

Johnson (R., S.D.), who chairs the centrist-leaning Republican Main Street Caucus. "That seems to me to be a level of narcissism that stands in the way of governance."

The problem for GOP leaders: Their control of campaign funds and committee assignments doesn't carry the power it once did to force dissidents to toe the party line, allowing wayward members to essentially commandeer the House. At the same time, a populist tably the GOP under former President Donald Trump, now rewards lawmakers who are most eager to knock down political institutions, even those led by their own party. Trump himself has urged lawmakers to shut the government unless all conservative demands are met. And gerrymandering by

both parties has ensured that only a small

handful of members ever face a competielection, tive prompting lawmakers to cater to the most ideological voters in their party, who tend to vote in primarather ries.

than the political center.

Of the 21 Republicans who opposed McCarthy's last-minute effort to pass a short-term funding bill, only one—Lauren Boebert of Colorado—had a close election last year, winning by less than one-half of 1% of the vote. Only one other defector, Rep. Eli Crane of Arizona, won with less than a 10point margin.

It's a party that many of the old-time conservatives don't recognize. "The basic style of the populists is division, grievance, fighting. They constantly brag that they're going to break things up or come to Washington with a blowtorch," said former Sen. John Danforth, who represented Missouri for three terms, ending in 1995.

"The essence of conservatism is the opposite," he said. "It's holding things together. To insist on 'my way or the highway' and make nonnegotiable demands—to me that's just the opposite of conservatism and the opposite of the genius of the framers of the Constitution."

Bruce Mehlman, a former Republican aide in Congress and official in President George W. Bush's administration, said social media had undermined the old power structure in Congress. "In the old days, you needed the party to raise money, build a profile

and grow power. The system rewarded team play," he said. "Now, you can raise more running against the party and quickly build a national following as a populist disrupter of the establishment."

These factors heighten the problems that McCarthy faces due to his slim, 221-212 margin, which means he can lose no more than four of his GOP colleagues unless he wants to pass bills with Democratic support which would likely prompt conservatives to try to end his speakership. It's the fifth-narrowest margin in history, the Pew Research Center finds.

Some of the House rebels may be charting a path to higher office, and a reputation for combativeness and challenging institutions could be helpful in a base-driven Republican primary. Montana's Rosendale, for example, would be running for the Senate from the political right against a candidate favored by the state's Republican governor and prominent GOP senators.

—Siobhan Hughes contributed to this article.

'The basic style of the populists is division, grievance, fighting.'

Senator Broke Mold for Women in Politics

Democrat pushed an assault-weapons ban, challenged CIA torture program

BY NATALIE ANDREWS AND JEANNE CUMMINGS

Dianne Feinstein spent a lifetime breaking barriers for women.

Tragedy—a mass shooting—thrust her into becoming the first female mayor of San Francisco. Her

OBITUARY	Senate	elec-
DIANNE	tion in	1992
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"Year of the Woman," when the female ranks in the U.S. Senate grew from three to six.

Her arrival in Washington came shortly after the 1991 sexual harassment accusations by professor Anita Hill against then-Supreme Court nominee Clarence Thomas cast a harsh spotlight on the male-dominated Congress. It was also timed with what the press would call the 1993 "pantsuit rebellion," as the female senators defied tradition by wearing pants to work.

Even in death, Feinstein broke the norms set for women. She is the first female senator to die in office, amid health and acuity questions that hadn't prevented men from continuing to hold their offices in the past.

At 90 years old, she died on Thursday night at her home in Washington, D.C., according to her Senate office. "There are few women who can be called senator, chairman, mayor, wife, mom and grandmother," it said.

Feinstein represented California in the Senate for more than three decades, serving extensively in the intelligence and judicial spheres. She spearheaded a ban on assaultstyle weapons, investigated the Central Intelligence Agency's use of torture after



After the 1978 assassination of two city officials, Dianne Feinstein became the first woman to lead San Francisco. In 1994, the senator from California helped enact a federal assault-weapons ban, which expired in 2004.

the 2001 terrorist attacks and played a key role in the confirmation of several Supreme Court Justices.

She was the longest-serving woman senator in U.S. history as well as California's longestserving senator. She said this vear that she wouldn't run for re-election in 2024, and illnesses had sidelined her in recent months.

Her last vote was on Thursday-just hours before her death—on advancing a tempogovernment-spending rary bill. She missed two later Senate votes.

Tributes poured in from the White House and dozens of senators on both sides of the aisle.

"Often the only woman in the room, Dianne was a role model for so many Americans,' President Biden said. "She's a true public ser-



vant, I'll miss her," said Sen. Chuck Grassley (R., Iowa.).

Her death leaves Senate Democrats with an even narrower 50-49 majority. California's Democratic Gov. Gavin Newsom is now charged with naming an interim successor.

Feinstein was the first woman to serve in many of the roles she filled. In 1978, after the assassinations of San Francisco Mayor George Moscone and City Supervisor Harvey Milk, Feinstein became the first woman mayor of the city. She served until 1988 and during her tenure renovated the city's cable-car system.

In a 2008 interview with the San Francisco Chronicle, Feinstein recalled discovering Milk's body after he was shot. "I tried to get a pulse and put my finger through a bullet hole," she said. Her tense yet steady appearance at a news conference announcing the murders is credited with launching her political career. She was elected to the Sen-

ate in a special election in 1992. One of her first notable pieces of legislation was the enactment of the federal assault-weapons ban in 1994, which prohibited the sale, manufacture and import of military-style assault weapons. A series of deadly shootings in California and around the country pushed proponents to pass the law, which expired in 2004.

Feinstein backed the authorization of using military force in 2002 to engage with Iraq against Saddam Hussein's regime. As a member of the Senate Select Committee on Intelligence, Feinstein was part of the 2004 investigation that looked at the government's evaluation of Iraq's weaponry leading up to the invasion. The report found numerous failures in the intelligence-gathering and analysis process.

Feinstein took part in the six-year review of the CIA's detention and interrogation program that investigated the use of waterboarding and sleep deprivation against detainees connected to the U.S. war on terror. In 2009, she became the first woman to chair the Senate Select Committee on Intelligence, a position she held for six years.

In 2014, the Intelligence Committee released the report's executive summary, and Feinstein used a speech on the Senate floor to call the CIA's actions a "stain on our values and on our history," delivering the remarks over the objections of President Barack Obama and officials in the CIA

In early 2023, approaching her 90th birthday, Feinstein said she wouldn't run for another term and was hailed by colleagues as a trailblazer. "She's a legend," said Schumer. Rep. Nancy Pelosi of California, the former House speaker and longtime leader of House Democrats, called Feinstein "a titan in the United States Senate, with a record that stands among the finest in history."

Watch a Video



Scan this code for a video on the life and legacy of Sen. Dianne Feinstein





GIDDYUP: Chad Kremer, bison-herd manager for Custer State Park, left, and South Dakota Gov. Kristi Noem ride during the 58th annual Custer Buffalo Roundup in Custer, S.D.

U.S. NAVY

SEALs Commandos Face Drug Testing

The U.S. Navy will begin random drug testing of its elite SEALs commandos, amid widespread concerns about the use of performance-enhancing drugs in the SEALs' grueling selection and training.

Beginning Nov. 1, the Navy will randomly test members of its special warfare command to deter use of steroids and human growth hormone.

Longtime concerns about the health and integrity of the SEALs selection and training culminated in the death last year of a SEAL candidate and the hospitalization of another following a strenuous training known as "Hell Week".

Kyle Mullen, a 24-year-old seaman., died in a hospital not long after successfully completing the training. An examination of the SEALs' regimen following Mullen's death found that the course "requires exceptional human physical performance, which generates a powerful incentive to use" per formance-enhancing drugs.

That puts drug users at risk and threatens the health of SEAL candidates who don't use performance-enhancing drugs but must compete against others who do. The investigation found Mullen's death wasn't caused by drug use, but revealed "strong indicators of PEDs use" by some of the candidates.

SUPREME COURT

Justices to Take Up Content Moderation :

The Supreme Court on Friday agreed to decide whether state laws regulating content-moderation practices of social-media platforms violate the First Amendment, the latest of several cases the justices have taken to define the Constitution's reach into the digital world.

Texas and Florida both passed laws to combat what they said were content policies that disproportionately muffled conservative voices through practices sometimes called shadow-banning or deplatforming.

Last year, federal appeals courts divided on whether the restrictions are constitutional. The Supreme Court blocked enforcement of the laws while it weighed whether to hear the issues.

The cases were the most prominent of a group of suits the justices added to the docket for their new term. which begins on Monday. The court also took cases involving property rights, arbitration clauses and copyright protection.

The court has yet to act on another high-profile socialmedia case, in which lower courts blocked federal officials from pressuring socialmedia companies to suppress misleading content about Covid and other subjects. –Jess Bravin **Archdiocese Files** For Bankruptcy The Archdiocese of Baltimore, the oldest Catholic diocese in the U.S., filed for

MARYLAND

bankruptcy protection Friday. just days before a new Maryland law was set to take effect allowing people to file civil lawsuits alleging longago child sex abuse.

The archdiocese, covering Baltimore and nine Maryland counties, in its filing estimated liabilities of \$500 million to \$1 billion, exceeding the value of its assets.

The Chapter 11 bankruptcy reorganization would help provide equitable settlements to all who might have been harmed, Archbishop William Lori said in an interview with Catholic Review Media, posted on the archdiocese website. He said it was a priority to ensure the church can continue the ministries of the archdiocese and its parishes, schools and charities. Lori said in the interview

that the church anticipates many lawsuits.

The bankruptcy filing comes nearly six months after the release of a report by Maryland's attorney general that alleged 156 people-including priests and archdiocese personnel-abused more than 600 youths over more than 60 years, causing lasting psychological trauma for survivors.

-Scott Calvert

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in a single composition. Signed "JCLeyendecker" (lower left). Oil on canvas. Canvas: 173/4"h x 173/4"w. Frame: 22"h x 22"w. #31-7832



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-Daniel Nasaw

Co-Defendant Pleads Guilty In Trump Case

By JAN WOLFE

* * * * * * *

A bail-bond business owner charged along with former President Donald Trump in a sweeping Georgia election-interference case pleaded guilty to misdemeanor charges on Friday, becoming the first of Trump's 18 co-defendants to strike a deal with prosecutors.

The deal prosecutors cut with Scott Hall, who had previously pleaded not guilty to racketeering and other criminal charges, could help Fulton County District Attorney Fani Willis bolster her case against the other defendants, who include lawyers Rudy Giuliani and Sidney Powell.

Hall agreed to cooperate with the district attorney's office as part of his plea deal, in which Willis agreed to drop the racketeering charge against him. Hall pleaded guilty to five misdemeanor counts of conspiracy to commit intentional interference

tered the guilty plea during an rupt Organizations Act.

impromptu court hearing on Friday before Fulton County Superior Court Judge Scott McAfee, who is overseeing the sprawling racketeering case. He negotiated a recommended sentence with Willis's office, which will include five years of probation, a \$5,000 fine, 200 hours of community service and writing a letter of apology to the citizens of Georgia. McAfee adopted that recommended sentence, allowing Hall to avoid the threat of prison time.

Hall was caught on tape accessing voting equipment in Coffee County, a rural Georgia county about 200 miles from Atlanta. During grand-jury testimony, Hall acknowledged gaining full access to a voting machine, spending hours setting up computers near election records in an attempt to investigate supposed voter fraud.

Like Trump and the other defendants, Hall had been charged with violating Georgia's racketeering statute, modeled after the federal Racketeer Influenced and Cor-

Army Gen. Mark Milley, left, greeted his successor, Air Force Gen. C.Q. Brown, during a tribute to Milley in Arlington, Va.

As He Exits, Milley Says Officers **Must Adhere to the Constitution**

Top general warns against pressures, in apparent comments about Trump

By Gordon Lubold

WASHINGTON—Army Gen. Mark Milley, the Pentagon's top officer, warned in his retirement speech on Friday that military officers must adhere to the Constitution and not bow to political pressures, in what appeared to be thinlyveiled comments about former President Donald Trump.

"We don't take an oath to a country, we don't take an oath to a tribe, we don't take an oath to a religion, we don't take an oath to a king, or a queen, to a tyrant or dictator or wannabe dictator," Gen. Milley bellowed across a military parade field, without mentioning his former boss by name. "We do not take an oath to an individual, we take an oath to the Constitution, to the idea that is America and we're willing to die to protect it.'

Friday's speech was Milley's last official ceremony as the Joint Chiefs chairman after years of positioning himself as a defender of democracy—and drawing the ire of critics who have accused him of overstepping the authority of the commander in chief and pursuing what they perceive as a progressive agenda.

Trump and others on the political hard right have repeatedly attacked Milley, pushing up against norms for public behavior for politicians and elected officials in the process.

In the past week, Trump, on his Truth Social platform, accused Milley of giving the Chinese military a "heads up" about Trump's thinking about the final days of his presidency and undermining his authority as commander in chief. Trump suggested he should face

death for treason.

Milley has said his calls to his counterpart in Beijing were meant to reassure the Chinese during the political upheaval in Wash-

ington as Trump contested the 2020 election and was sanctioned by both the Pentagon leadership, then-Defense Secretary Mark Esper and other administration officials.

Also earlier this week, Rep. Paul Gosar (R., Ariz.), a longtime critic, wrote in a newsletter: "In a better society, quislings like the strange sodomy-promoting General Milley would be hung."

from military norms to advocate for racial justice, climate change and rights of the LG-BTQ community while bungling the withdrawal of troops from Afghanistan. Milley has vehemently defended himself on those counts.

Trump had picked Milley to be chairman of the Joint Chiefs in a surprise move at the time, admiring his gruff, no-nonsense manner and candor. But Trump later turned on Milley after he decided the general didn't fall into line with him on a

number of key issues.

Milley, who served under Trump both and President Biden. was sometimes referred to as the "crisis Chairman" for the number of chal-

lenges presented to him while in office. He served during the unrest in Washington, D.C., following the murder of George Floyd. Milley appeared with Trump for a photo session near the White House after law enforcement and National Guardsmen forcibly cleared the area of peaceful protesters—and then later apologized for having been there.

as well as the disastrous withdrawal of American troops from Afghanistan following 20 years of war.

Milley, a proud Bostonian and son of a Navy corpsman who fought in World War II, is known for his loquaciousness and penchant for invoking military history to make a point, and served a full, fouryear term ending Friday.

"This is the last time you'll hear from me in uniform, which in itself may be cause for applause," Milley joked.

He is being succeeded by Force Gen. Air C.O. Brown, only the second Black officer to serve in that role. In a nearly two-hour ceremony Friday at Joint Base Myer-Henderson Hall in Arlington that included a 21-gun salute, a review of troops and the typical pomp and circumstance of a senior officer's retirement, Biden and Defense Secretary Lloyd Austin both lauded Milley to an audience on an outdoor parade field.

Biden and Austin both told stories of Milley in combat in Iraq, noting that during combat tours traveling on Route Irish, the name troops gave to one of the most dangerous roads for troops in Baghdad during the war, Milley's convoys were blown up at least five times as he went to visit troops.

marks the first sign of progress in a two-year-long investigation that has proceeded quietly, and it links those two

The charge was filed in a document known as an information, a type of document that prosecutors usually use if a defendant is expected to plead guilty to the charges. Littlejohn and his lawyer, Lisa Manning, declined to comment.

A spokesperson for ProPublica declined to comment Friday. The New York Times didn't comment on Friday. A spokesman for the Treasury Inspector General for Tax Administration, which assisted in the investigation, declined to comment.

The extensive disclosure to ProPublica made public the tax information of many of the most well-known ultrawealthy Americans, including Jeff Bezos and Elon Musk, showing their incomes, payments and tax strategies.

'We do not take an oath to an individual, we take an oath to the Constitution.' with election duties. Hall, who is 59 years old, en-**Contractor With IRS**



BY RICHARD RUBIN AND ARUNA VISWANATHA

WASHINGTON-Federal prosecutors charged an Internal Revenue Service contractor with stealing the tax returns of former President Donald Trump and thousands of other wealthy Americans and leaking them to news organizations, apparently solving a two-year puzzle over a security breach that prompted outrage from lawmakers and administration officials.

Charles Littlejohn, 38 years old, of Washington, D.C., was charged Friday with one count of unauthorized disclosure of tax information, and he faces up to five years in prison, according to a Justice Department news release.

Court records don't name the taxpayers, the news organizations or the company that Littlejohn worked for. The description matches the June 2021 publication by ProPublica of the tax records of wealthy Americans and the publication in September 2020 of information from Trump's 2016 and 2017 tax records by the New York Times. The charge

disclosures for the first time.

Milley's critics have attempted to cast him as the face of the so-called woke military, saying he has deviated

He was also chairman during the Jan. 6, 2021, attack on the Capitol by a mob of Trump supporters, a global pandemic

"That's leadership, that's patriotism, that's strength, that's Mark Milley," Biden said.

Billionaire Ken Griffin sued the IRS over the disclosure of his information; that case is pending

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SUPREME AUCTIONS

Suspect Charged in Tupac Shakur's 1996 Killing

By Suryatapa Bhattacharya

More than a quarter-century after the unsolved killing of American rapper Tupac Shakur fueled countless conspiracy theories, a suspect was charged in Las Vegas for the 1996 drive-by shooting.

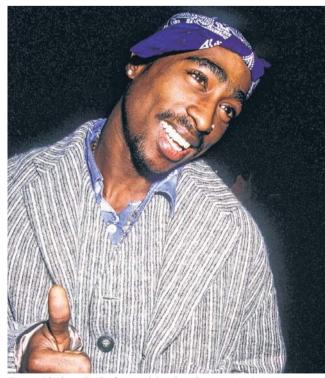
Duane "Keffe D" Davis was indicted Friday in Shakur's death on a charge of murder with the use of a deadly weapon, with additional charges of being associated with a gang, the Las Vegas Metropolitan Police Department said.

Police said Davis was a "shot caller," who orchestrated a plan to carry out the shooting. He is the only surviving suspect in the case. Three other suspects who were in the car have since died, police said.

"It has taken decades to get to where we are today," police said Friday.

Davis, 60, was arrested Friday morning after he was indicted by a closed grand jury. The grand jury received evidence for months, police said. Davis's own words helped reinvigorate the case in 2018. police said, referring to television interviews in which Davis outlined he was in the car with the shooter.

Davis was in a gang that operated out of Compton, Calif. His gang clashed with Shakur and others in Las Vegas shortly before Shakur was



Tupac Shakur died after a drive-by shooting in Las Vegas.

shot. The shooting was retaliation for Shakur beating up a member of Davis's gang, who was also Davis's nephew, police said.

Shakur was 25 years old when he was shot on the Las Vegas Strip. He died days later in a hospital.

The rapper cemented his legacy in the five short years of his music career. His last album, "All Eyez on Me," released months before his death. sold 10 million copies. Shakur received a posthumous star on the Hollywood Walk of Fame in 2013 and was inducted into the Rock & Roll Hall of Fame in 2017. Some of his albums reappeared on bestselling music charts long after his death. His lyrics found a new following during the Black Lives Matter movement.

The Rock & Roll Hall of Fame noted that Shakur's albums—"All Eyez on Me" and

the posthumously released "Greatest Hits"—have surpassed the 10 million mark, making them among the topselling albums of all time. He also acted in movies including "Juice" and "Poetic Justice."

In 2009, Shakur's song "Dear Mama" was added by the Library of Congress to the National Recording Registry. The library called the song "a long, rhyming ode to his mother and all mothers who have struggled to raise their children against the backdrop of hardship, racism and inner city violence."

His unsolved killing fueled public fascination for decades, with rumors of Tupac sightings similar to "Elvis Lives" rumors. In 2012, a hologram of Shakur "performed" alongside Dr. Dre at the Coachella music festival in California.

In Davis's memoir "Compton Street Legend," published in 2019, he said he was in the Cadillac during a drive-by shooting that targeted Shakur.

He said in the book he was the "only living" witness to Shakur's killing. He also said he "knows the much larger story around the reasons why both Tupac and Biggie were killed," referring to Shakur's rival, Christopher Wallace, the rapper known as Notorious B.I.G. and Biggie, who died in a drive-by shooting roughly five months after Shakur was killed.

-Ginger Adams Otis contributed to this article.

WORLD NEWS

Beijing Feels Evergrande's Woes

Prolonged downturn in property market will likely weigh on growth for months

Just as China's economy was showing signs of life, the troubles of the world's mostindebted property developer have come roaring back,

> By **Jason Douglas** in Singapore and **Cao Li** in Hong Kong

showing that a drawn-out downturn in the country's enormous property market is far from over.

On Thursday, China **Evergrande** Group said its chairman, Hui Ka Yan, was under investigation by authorities for potential criminal wrongdoing and that it owes tens of billions of dollars in unpaid bills to lenders, contractors and suppliers. Regulators have also blocked parts of the company's turnaround plan, sending an ominous signal to other developers flirting with insolvency.

An ailing property market looms largest of a host of problems facing China's economy, and Evergrande's latest woes suggest the pain is only worsening. The country is suffering from record youth unemployment, slumping exports and strained government finances. Frosty relations with the U.S.-led West are squeezing access to technologies such as semiconductors.

Foreign businesses are growing increasingly wary of investment in China, in part because of greater scrutiny of their activities.

Evergrande, the company that helped burst China's housing bubble with its debt default, had faded from the headlines in recent months as another massive real-estate developer, Country Garden, showed signs of distress.

Evergrande's lurch back into the headlines strikes a sour note in an economy that. despite its long-term problems, is showing signs of improvement. Business surveys due on Saturday are expected to show that manufacturing activity returned to growth after months of contraction. Bookings for flights and railways point to a bumper week ahead for travel spending as families celebrate one of China's major annual holidays, the Mid-Autumn Festival.

Evergrande's renewed challenges, economists say, emphasize that China's deeply



An Evergrande housing complex in Beijing. Hong Kong-listed shares of the Chinese property giant have been suspended.

troubled property market, which accounts for as much as a quarter of China's economy, will likely weigh on growth for months, if not years, to come.

"There are some tentative signs that we are getting out of that period of stagnation and the economy might be returning to growth," said Julian Evans-Pritchard, head of China economics at Capital Economics, a consulting firm. "It is a reminder for everyone that private developers are still in deep difficulties." The latest data show the depth of the problem. Real-estate investment in the year through August was down 8.8% on the same period last year, after falling by around 10% in 2022. Home sales by value by the 100 biggest developers in August were down 34% compared with a year earlier.

Evergrande, which was China's largest developer by sales, first hit trouble in 2021 when dwindling cash flow led it to default on its U.S. dollar

debt. In recent weeks, a debtrestructuring deal with international creditors fell apart and the developer defaulted on a yuan-denominated bond in mainland China, while in the southern city of Shenzhen, police detained employees of Evergrande's wealth-management unit after it was unable to make payments to buyers of its investment products.

The crumbling property giant's debt crisis has hit numerous other businesses, with suppliers of building materials, construction companies and property-services firms left chasing unpaid bills. The developer disclosed on Thursday that its main real-estate business in China had nearly 2,000 pending litigation cases involving a total sum equivalent to \$61 billion, and other unpaid debts and overdue commercial bills of more than \$66 billion.

Evergrande, which is based in the southern city of Guangzhou, also said on Thursday that Hui, the company's founder and chairman, has been subject to "mandatory measures" by China's authorities. That means the 64-yearold's movements have been restricted and he is being investigated for criminal offenses, a process that could take months to conclude.

Chinese Activist Flees to Canada

By Chun Han Wong

SINGAPORE—A former activist blogger once jailed in China for documenting social unrest says he has fled his home country and relocated to Canada, as more dissidents seek new lives outside the tightening political strictures set by Chinese leader Xi Jinping.

Lu Yuyu, whose four years in custody ended in 2020, landed in Calgary, Alberta, this week after a monthslong journey that took him through Laos and Thailand, he told The Wall Street Journal.

The 46-year-old said he was granted permanent residency in Canada in August, and is looking to settle down in his new home.

Lu was known for posting online tallies of protests and demonstrations in China for years, and the data was closely tracked by activists and academics around the world as a window into social tensions in the world's second-largest economy.

That work came to an abrupt halt in 2016, when police detained him and his then-girlfriend, Li Tingyu, who worked with him in publishing the data.

Rights groups say the detentions were symptomatic of Xi's relentless suppression of dissent since taking power in late 2012.

China's Foreign Ministry didn't respond to queries sent as the country started a roughly weeklong national holiday on Friday.

A spokesman for Canada's immigration department declined to comment on specific cases, citing privacy laws.

Sand

Burgundy

Emerald

HBRARKENDIGF

Royal Blue

Toffee

Navy

LIMITED STOCK

Burnt Orang

Kroll Executive Barred From Leaving China

By Rebecca Feng And Chun Han Wong

A senior executive at U.S. risk-advisory firm Kroll has been barred from leaving mainland China for the past two months, heightening concerns about the risks foreign companies face when doing business in the country.

Chinese authorities have taken an increasingly tough stance on foreign businesses this year. Authorities have raided the offices of due-diligence firm Mintz Group, questioned the staff of U.S. consulting firm Bain & Co., and implemented strict new data rules. These moves have damaged American businesses' confidence in China, which is at its lowest level in decades. Kroll operates a cimiler

Kroll operates a similar business model to some of the foreign firms targeted this year, offering corporate investigations and due-diligence checks, as well as advising on restructurings and insolvencies. Michael Chan, a Hong Kong-based managing director at the company who specializes in corporate restructuring, traveled to the mainland in July and subsequently informed his employer that he can't leave, people familiar with the matter said. Chan declined to comment.

Chan is assisting an investigation into a case that dates back a few years, the people said. A Hong Kong passport holder, Chan can move freely in mainland China and is still working. Neither Chan nor Kroll is the target of the investigation, the people said.

The use of exit bans has become increasingly common, Western officials and humanrights groups said. Beijing uses travel restrictions to facilitate criminal probes, intimidate dissidents, or even create leverage in disputes with foreign companies and governments. Exit bans can last for months or even years as the investigations that prompt the restrictions drag on.

A senior Hong Kong-based

investment banker at Nomura recently told his employer that he can't leave mainland China. He has been cooperating with an investigation related to a company he used to work for, people familiar with the matter said.

China's Ministry of Public Security and the National Immigration Administration didn't immediately respond to queries about Chan's situation sent on Friday, which marked the start of a roughly weeklong national holiday.





Customers tried the newly launched iPhone 15 at Apple's flagship store in Shanghai this month.

Regulations Take Bite From Apple

Continued from Page One lion installs since 2012. That compares with 37 million for Facebook, 34 million for You-Tube, 33 million for X and 13 million for WhatsApp.

By July, Apple will no longer be able to offer such apps in its China app store unless the app operators are registered with the government, under new rules issued by China's Ministry of Industry and Information Technology two months ago.

Some analysts say those operators are unlikely to register with the Chinese government because they could then have to comply with datatransfer and censorship requirements, leaving Apple no choice but to remove them or face legal punishment.

Apple declined to comment. Neither the Ministry of Industry and Information Technology nor the country's internet regulator, the Cyberspace Administration of China, responded to requests for comment.

China is an important market for Apple, with the region accounting for about a fifth of its sales, and serving as its main manufacturing base, producing most of its iPhones

and many other products. The new rules affect both foreign and domestic app distributors and don't specifically target Apple. The Cupertino, Calif.-based company is likely to be among those most affected, given its app store has more than 1,000 unregistered foreign apps. Chinese companies including smartphone makers Huawei Technologies and Xiaomi have updated their app-store rules recently, urging app developers to complete registration procedures.

Apple hasn't said anything publicly on the new rules, which investors say pose a threat to its services business in China. The services segment, which includes appstore transactions, plays an important role in Apple's profitability. Anything disrupting the Chinese app store could eat into profit for its business in the country.

Apple has been making concessions in China for years to comply with the country's increasing censorship and tightening rules on data security.

Some investors said they were concerned about how the new rules would be implemented and the symbolic weight of removing so many hugely popular Western software applications.

"China is my biggest worry for Apple," said David Wagner, portfolio manager at Aptus Capital Advisors, an Apple shareholder. "These are huge risks in China that keep piling on." In Apple's exchanges with officials, the company was told the new rules are needed to crack down on online scams, pornography and the circulation of information that violates China's tough censorship rules, people familiar with the discussions said.

Apple staff expressed concerns about issues the company could face in implementing the rules. For example, Apple and officials touched on the issue of whether users in China who access foreign apps through its overseas app stores would be able to continue to do so, the people said.

Using foreign app stores is another workaround of China's closed internet used by iPhone owners with a VPN and foreign Apple ID.

Twitter, as it was then called, proved a critical platform for getting videos and images of nationwide protests against China's Covid policies out to the rest of the world. People in the country used VPNs to disguise their locations and send material via the platform's messaging system to a handful of widely followed Twitter users, who in turn broadcast it globally.

Apple will likely comply with the rules, said Rich Bishop, chief executive of software publisher AppInChina. "The Apple app store in China will increasingly purely be Chinese apps, with a smaller number of international apps," he said.

—Newley Purnell contributed to this article.

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Corn

Purple

SCAN ME

Brown

WORLD NEWS

Enclave's Collapse Sparks Refugee Exodus

More than half of Nagorno-Karabakh's Armenians have fled breakaway region

By ANN M. SIMMONS

GORIS, Armenia—It took a whole day for Ararat Ghahriyan and his family to make it out through the narrow corridor of land leading to Armenia. Normally, the trip would only take a couple of hours. But since Azerbaijan took control of Nagorno-Karabakh last week after decades of confrontation and war, a deluge of cars. trucks and buses has swamped the one road out, with more than half the enclave's 120,000 population now having left. Many of the rest appear set to follow.

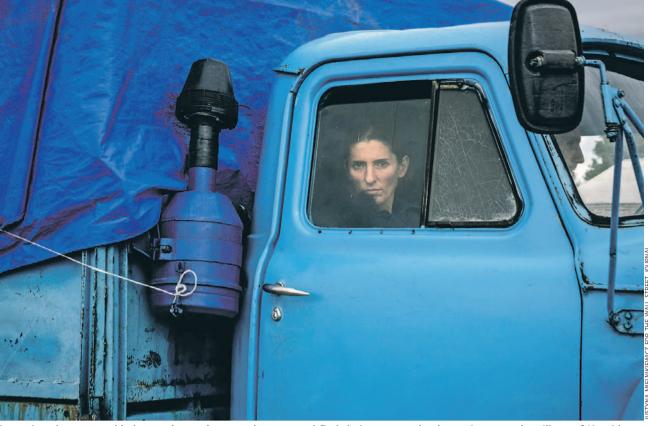
Few, if any, believe they will ever go back.

"I feel it's the end of our nation," Ghahriyan said as his wife and three preteen children squatted outside a supermarket here on the other side of the frontier, surrounded by plastic bags, unsure of where to go.

His wife, Anahit Mayilyan, said they left with little more than the clothes they were wearing, leaving behind their possessions and their ties to a region where three generations before them had been buried. "I'm alive but I feel dead," she said.

For decades, the tiny enclave of Nagorno-Karabakh had been a byword for the intractable conflicts that often bubble up as empires collapse.

It had long been home to ethnic Armenians, who governed themselves in a self-declared republic within the borders of modern-day Azerbaijan and relied on Armenia for support. The old rivalries between



Armenians have scrambled to pack up whatever they can and find their way to a land crossing near the village of Kornidzor.

the two were papered over when both were absorbed into the old Soviet Union. But as the bloc crumbled, Armenia, largely Christian, and Azerbaijan, a Turkic-speaking, Muslim nation, started fighting for control of Nagorno-Karabakh. Some 30,000 people were killed between 1988 and a cease-fire in 1994.

Russia sent a peacekeeping force to the area when fighting broke out again in 2020, vowing to keep open the road bridge to Armenia.

But this year, Moscow, preoccupied with its war in Ukraine and anxious to maintain ties with Azerbaijan and its

main backer, Turkey, stood aside as Azerbaijani forces closed off the lifeline and finally took control of the enclave in a lightning assault last week.

On Thursday, leaders in Nagorno-Karabakh, or Artsakh, as they call it, signed an agreement ending its status as a self-governing region.

Armenians have scrambled to pack up whatever they can and find their way to a land crossing near the village of Kornidzor. More than 70,000 have arrived.

Azerbaijan has said Armenians are welcome to remain. But few of them believe they will be allowed to live in peace after such a protracted and bitter conflict. They fear a campaign of ethnic cleansing is about to begin.

"This is a completely forced deportation of Armenians in Karabakh," said Gassia Apkarian, co-founder of the Center for Truth and Justice, a group of lawyers overseeing the collection of testimonial evidence from survivors of alleged war crimes in Nagorno-Karabakh. "They are escaping to save their lives.'

Cars, with suitcases, carpets and furniture strapped to their roofs, snaked bumper-tobumper through the Lachin corridor, the sole mountain

pass connecting Nagorno-Karabakh's capital, Stepanakert, with Armenia. Thousands of new arrivals jammed Kornidzor and from there headed to Goris, the closest urban center to the border.

Armenian Prime Minister Nikol Pashinyan has promised to care for the displaced from Nagorno-Karabakh, including resettling them, and ensuring their rights are respected. But many said they had little faith the government would make good on its promise.

"We were cheated, we were betrayed. Now we face this reality," said Ramila Mayilyan, Anahit Mayilyan's aunt, showing photos on her mobile phone of her home she said was destroyed during the fighting in 2020.

Three young women passed by and offered to take the family's children to a nearby office where they post worked, so they could rest more comfortably.

"They're just children," said one of them, Sirush Akunts. "Is their only guilt that they were born Armenian?"

In Goris's central square, dozens of people crowded tents serving coffee and pastries and candy-luxuries many said they hadn't tasted during Azerbaijan's long blockade.

At an Armenian Red Cross station, officials loaded small minibuses to transport the displaced to local hotels, hostels, guesthouses and nearby villages

Anush Ohanyan sat on a wall cradling her 13-month-old daughter, Gabriela, as she ate a cookie. She and her cousin Anahit Zakharyan arrived on Tuesday in Goris.

The conditions they left behorrendous. hind were Zakharyan said. There was sporadic electricity. Food was scarce and most families had gone without gas for months. She, like many others, had focused on keeping their homes while caring for her 2-year-old son, David, who was born during the 2020 conflict. She is six months pregnant with her second child.

"Now we are homeless and an Azeri flag is hanging a few meters from our home," Zakharyan said. "They have been our enemies for centuries," she added, referring to the Azerbaijanis' ally, Turkey, whom they view as one and the same.

Pakistan Mosque Bombing Kills 51

BY SAEED SHAH AND WAQAR GILANI

ISLAMABAD, Pakistan—A suicide bomber blew himself up in the midst of a religious procession in western Pakistan on Friday, killing at least 51, as the country's security situation continued to deteriorate.

Some 2,000 people had gathered outside a mosque in the remote town of Mastung, in the western province of Balochistan, when the blast ripped through the crowd. The crowd had assembled to mark the birthday of the Prophet Muhammad. Locals tended to the injured and carried away the dead until ambulances arrived, which then took the more seriously injured to the provincial capital, Quetta. At the scene afterward, shoes and prayer caps remained scattered on the ground where the worshipers had assembled.



Palestinians Pose a Test For an Israel-Saudi Deal

By Dov Lieber

TEL AVIV—Israeli Prime Minister Benjamin Netanvahu's big bet on sealing a landmark rapprochement with Saudi Arabia is running into a familiar problem: The Palestinians want land for giving their blessing to a deal, but Netanyahu's coalition partners are adamantly against the idea.

Talks have been in flux over economic incentives for the Palestinians to get on board with what would be a historic realignment in the Middle East. With the U.S. helping broker the deal, those incentives have broadly included upgrading infrastructure in the West Bank, such as roads and telecommunications, while providing more work permits for Palestinians to work in Israel and freeing up hundreds of millions of dollars in Saudi aid.

But while that is a more modest demand than creating a separate Palestinian state, which had been the default position of both the Palestinians and the Saudis in the past, Netanvahu's partners in his ruling coalitions are pushing back.

Netanyahu came back to power late last year in a coalition with far-right parties that were once on the fringe of Israeli politics, and support the complete takeover of the West Bank by Jewish authorities. They are especially opposed to anything that would resemble the 1993 Oslo Peace Accords, which created the Palestinian Authority and laid out a path toward creating an independent state.

Police said 139 people were injured in addition to the deaths. There was no immediate claim of responsibility.

Pakistan is facing an economic crisis, political instability and an upsurge in terrorist attacks. In July, an attack on a religious political party in the northwest near the border with Afghanistan killed at least 40 people. An election is due in January.

In recent years, the local branch of the Islamic State jihadist group has claimed several large-scale attacks on the

A suicide bomber's attack near a mosque came amid a celebration of Muhammad's birthday.

public. Its version of Islam objects to the adoration of the Prophet Muhammad, which is part of popular religious practice in Pakistan.

The Pakistani Taliban, which used to bomb crowds in the past, has increasingly focused on targeting the police and army. A faction of the group claimed a bombing at a mosque on a police compound in Peshawar in January that killed at least 59 people. The group condemned Friday's bombing, saying that attacking public places was against its policy.

Islamabad says that Islamic State and the Pakistani Taliban are based across the border in Afghanistan. The 2021 Taliban takeover in Afghanistan has provided a refuge for militants there, according to Islamabad. The Taliban administration says that they won't allow their territory to be used to attack other countries.

Balochistan is home to secessionist movements, in addition to the jihadist vio-Baloch separatist lence. groups have claimed some attacks in other parts of the country, such as the bombing of a bus carrying Chinese teachers in Karachi in 2022. Separately, a bombing of a mosque near the western town of Hangu killed four people during Friday prayers, local police said.

Local officials said police tackled the assailants at the gate, where the sound of gunfire and explosions alerted many people to flee before one of the attackers managed to enter the mosque and blew himself up.

The army also said Friday that three soldiers had died the previous day in a clash with militants from the Pakistani Taliban who were trying to cross the border from Afghanistan.

"The main idea is how to ease the lives of the Palestinian people," an Israeli official with knowledge of Netanyahu's thinking said.

Money alone might not satisfy Palestinian leaders who are trying to influence the shape of the deal. The Wall Street Journal has reported that some in the Palestinian leadership want Israel to relinguish control over small parts of the occupied West Bank and tear down some Israeli settlements there.

"Our government won't come within a kilometer of anything that even smells like Oslo." Israeli Finance Minister Bezalel Smotrich said this month.

Palestinian Authority President Mahmoud Abbas is unlikely to welcome any deal that doesn't have a clear political component, said Ghassan Khatib, a former Palestinian official and now a lecturer of international studies at Birzeit University in the West Bank.

"No matter how big the financial component will be, it will not be enough. Without a political component, no Palestinian leadership, including Mahmoud Abbas, can bless a deal," Khatib said.

JAPAN **Official Vows to** Act If Yen Falls

Finance Minister Shunichi Suzuki renewed his pledge to take action against sharp falls in the yen as it weakened to its lowest level in almost a year. "There is no change to our stance that we will take appropriate action against excessive moves without ruling out any options," Suzuki said on Friday. "We have a strong sense of urgency."

Traders have been cautious about the possibility of the ven-buving intervention from the government as the yen depreciated past 149 to the dollar. The government has no specific target for the ven that would trigger currency intervention, Suzuki said. Instead, it is focusing on fluctuations, he added. —Megumi Fujikawa 🗄

EUROPEAN UNION Inflation Is Lower

The eurozone's inflation rate was lower than expected in September, potentially signaling that the European Central Bank may have reached the peak in its current tightening cycle.

The euro area's consumer prices rose 4.3% on year in September, preliminary data from the European Union's statistics agency Eurostat showed on Thursday, lower than the 4.5% economists expected in a Wall Street Journal pool.

The reading in September declined from the 5.2% rate recorded in August, when inflation came in hotter than expected. Core inflation also eased back to 4.5% from 5.3% in August.

—Ed Frankl

MEXICO

Doctor Is Killed in Hospital Shooting

A nighttime shooting attack on a hospital in northern Mexico has left four people dead, including a doctor, authorities said on Friday. The attack happened near midnight Thursday in the Sinaloa state capital of Culiacan.

State police said at least three aunmen tried to storm the hospital, but two were killed in a gunbattle with security personnel. The doctor was apparently caught in the crossfire. A third assailant who was wounded grabbed an officer's gun and shot himself with it, police said.

Local media reported that the aunmen stormed the hospital to finish off a patient who had been wounded in an earlier gunbattle. -Associated Press

WORLD WATCH



NEXT STEPS: Young cadets from Kyiv's Cadets Corps military school danced on Friday after the graduation ceremony at the Monument to Prince Volodymyr in Ukraine's capital.

Than Expected

FROM PAGE ONE

Dan Loeb's Hot Hand Goes Cold

Continued from Page One

The missteps highlight the perils of wagering on a market in which interest rates are surging but the economy continues to grow, a phenomenon that has surprised some pros. For much of the year, highprice tech and other risk stocks kept moving higher, ignoring the rate rise, though they've faltered lately.

Loeb has turned things around after past stumbles, often by shifting gears. Third Point posted a double-digit loss in the first quarter of 2020 when the arrival of the coronavirus pandemic sank stocks, but it ended the year up about 19% thanks in part to bets that consumer and commercial debt would be more resilient than many expected.

In early 2009, on the heels of the 2008 financial crisis, Third Point's assets dropped to \$1.4 billion from \$7 billion. A decade later, they were up to \$15 billion. Loeb has scored some of his best returns during periods of turbulence for debt markets, for example betting on distressed Greek bonds in 2012.

Now, Loeb is betting on an eventual credit crunch as companies are forced to refinance their debt amid high interest rates, something he expects to create investment opportunities for his funds.

Some investors aren't waiting around to see if he can stage another comeback. They've requested withdrawals at the end of September amounting to \$850 million, or more than 7% of the firm's assets, according to people close to the matter. More than \$1 billion of Third Point's total capital is held under terms that prevent it from being easily withdrawn.

The expected withdrawals add to the \$1 billion or so that was redeemed from Third Point funds during the first eight months of the year, according to the people.

Sacramento County Employees' Retirement System, SCERS, which first invested in Third Point in 2012, requested its roughly \$60 million investment back earlier this year. The decision was based on Third Point's performance and a decision to transition away from "growth-oriented" hedge funds, said Steve Davis, chief investment officer at SCERS, in an email. Investors asking

for their money back get it



Dan Loeb, above, said he had expected high interest rates to hurt the economy. Third Point has made money on its investments in Shell, right, and Disney, below.

hedge-fund titan and current-Carolina Panthers owner David Tepper, launched Third Point in 1995. Since then, the 61-year-old billionaire has wagered on and against stocks and debt instruments while agitating for changes at companies including Nestlé, Sony, and Yahoo-sometimes with acid-tipped letters to boards of directors.

More recently, he has used Twitter, the social-media platform now known as X, as a forum to share and debate ideas. Since joining in 2020, he has amassed over 100,000 followers and weighed in on investments and economic policy, offered life advice and extolled the quality of Loro Piana sweaters. Loeb has also spoken publicly about his renewed interest in his Jewish religion and how it has given him an improved perspective on life.

Third Point racked up average annualized returns of 16% after fees over the past 28 years. As recently as 2021, the firm's hedge funds rose as much as 27%.

But Third Point's results this year are a far cry from the S&P 500's total return of 18.7% through August, and also below the 4.7% gain for the average hedge fund, according to HFRI.

Last year's losses at Third Point exceeded the 18.1% decline for the S&P 500, including dividends, and the 4.1% average loss for hedge funds. In the past few years, Loeb has made high-profile pushes for significant changes at companies including Intel, Disney and Shell. The results have been mixed. While Intel quickly hired a tering to investors including new CEO Loeb praised, its





Third Point added to its short positions, only to be caught off-guard when the market started racing upward in 2023.

In 2021, venture-capital investments in cybersecurity firm SentinelOne and fintech lender Upstart Network produced big gains for Third Point after the companies went public. That year, Loeb raised a venture fund and hired former Goldman Sachs analyst Heath Terry to seek out additional investments. Another Third Point executive, Bob Boroujerdi, started focusing on crypto investing.

The firm sold most of its stake in Upstart before it tumbled, but SentinelOne was a losing position last year, as was electric-vehicle maker Rivian Automotive.

Third Point made a sizable investment in FTX that became worthless when the crypto exchange imploded last year. Terry and Boroujerdi left the firm in late 2022.

Loeb attributes the continued strength in the economy to government actions and earlier stimulus that have left consumers and companies flush with cash. That has delaved "the kind of credit cycle we had hoped for from the investment side," he said.

Loeb maintains that debt troubles are on the way. He said so much corporate debt will mature and need to be refinanced over the next few years at higher rates that it will pressure various bonds, loans and other so-called credit investments.

Other investors are also cautious. Bridgewater Associates has told clients that rising bond yields will crimp economic growth and stock and bond prices. Victor Haghani, a former senior executive at Long-Term Capital Management who now runs investment manager Elm Wealth, says U.S. stocks offer the lowest expected return relative to safe investments since early 2007, despite their recent losses.

For Loeb and others, betting on a credit crunch carries risk. Corporate earnings have been robust and unemployment remains low, suggesting that distressed opportunities may not emerge as he expects.

Third Point has been hiring staffers with credit and lending experience so it can deploy capital when the next cycle arrives. It recently tapped a senior investment specialist from New York Life, Chris Taylor, to run its private credit business. Taylor will help raise money for a new private-lending fund, Loeb said, and some of those loans will be added to his main hedge fund.

I don't know if it will hap pen in 2024 or 2025, but we're pretty confident we will see an avalanche" of private and other companies that need to refinance their debt, Loeb said. "We want to be good and ready to deploy capital when the next cycle comes."

over the course of several quarters.

"I'm not thrilled with the results, but each time we've had 20% drawdowns, we've more than made up for them." Loeb said in an interview with The Wall Street Journal.

Loeb, who began his career as a junk-bond salesman ca-

stock has done little since. A campaign to split Shell into two companies was unsuccessful, though the oil giant did simplify its structure and Third Point has made money on its investment. A more than \$1 billion bet on Disney has made the firm roughly

\$200 million so far.

This year, the firm launched a campaign against Bath & Body Works in February, and though it gained a board seat in a settlement, the retailer's stock is still down about 20% for 2023.

Third Point's recent bearish

bets have been ill-timed. The firm shorted companies including Carvana and Evergrande, but Loeb, worried about a rising market, closed many of those positions in 2020 and 2021 before they could pay off. In the second half of 2022,

-Cara Lombardo contributed to this article.

Peanut **Pitch Faces** Challenges

Continued from Page One unlike the U.S., where they are a ritual, along with yelling at the umpires, and millions of Americans grew up singing, "Take me out to the ball game...buy me some peanuts and Cracker Jack."

In Japan, baseball-stadium vendors might offer karaage, a crispy fried chicken, edamame, steamed beans sprinkled with salt, yakisoba fried noodle or bento boxes containing various dishes along with rice.

The American Peanut Council has led the effort to crack the Japan baseball-game market, with a series of peanut-promotional days at a large stadium in Fukuoka in western Japan, and elsewhere. There have been some hurdles, namely that people pop peanuts differently in Japan than at U.S. baseball games.

When Japanese baseball fans initially received samples of peanuts still in the shells, they were reluctant to drop the shells on the ground.

"That's not part of the culture," said Peter Vlazakis, senior director of international programs for the American Peanut Council. "They're just



Yumi Mao, left, takes in a baseball game at Jingu stadium in Tokyo.

not comfortable with littering.'

Japan is a top export market for many U.S. commodities, including peanuts. U.S. producers sent a record high 20,171 metric tons of peanuts and peanut products, worth \$35.6 million, to Japan in 2022, up from \$32.1 million in 2021.

Japan imports more peanuts from China than the U.S., Vlazakis said, but he sees room for growth with Japanese consumers in part by emphasizing peanuts as a source of protein.

And a natural accompaniment to baseball.

Another realization along the way: While U.S. baseball fans may be happy to catch a package of peanuts flung at them from vendors in the aisles, that practice didn't fly in Japan, Vlazakis said. Instead, promoters handed out peanut samples in a less nutty, more orderly way, including at the turnstiles when fans entered the stadium.

"People really liked it." Vlazakis said. "They're just not used to going to the baseball park and buying peanuts."

Given the disdain for littering, the U.S. peanuts group also switched to offering Japanese baseball fans alreadypeanuts-mostly shelled roasted and salted, he said.

Still, Takanori Asako, a 48year-old eldercare business manager, who was at the Tokyo ballpark for a recent night game with his son, said he would be game to see peanuts in shells at ballparks—as they are in the U.S. "Taking time shelling them is part of the fun," he said.

The sentiment in Japan doesn't seem to be breaking in his favor.

PayPay Dome in Fukuoka, about a five-hour bullet train ride from Tokyo, is selling packages of shelled peanuts but some officials remain skeptical of going further.

"I personally think the bar to sell peanuts in the shell is high," said Keisuke Nagase, a sales manager for Fukuoka SoftBank Hawks, the owner of the team and operator of the stadium. He pointed out that eaters would need to use both hands for the shelling task, in a tiny seat space.

Spuds at baseball games may be a "I smoother pitch. think potatoes are more familiar to Japanese people," said Nagase.

This year, Japanese baseball fans had an opportunity to try Farm team "baseball fries," or fries loaded with topor standout

pings such as chili and cheese at the World Baseball Classic games in Japan, said Tiffany Kocir, global food service marketing manager for Potatoes USA, the national marketing group for that industry.

The potato group worked with vendors at the stadium and nearby restaurants to launch menu items with U.S. french fries-served in miniature plastic baseball hats.

The Organic Trade Association, which represents the U.S. organic industry, arranged for jars of organic peanut butter to be given away as part of

the peanut promotional day this year.

Peanut butter isn't commonly consumed in Japan, said Marc Matsumoto, a culinary consultant with GourmetPro, a global network of food and beverage consultants.

Instead, peanut cream, a "fluffy, peanut-flavored frosting" is often used as a spread, he noted.

The exchange of baseball snacks has crossed the Pacific in both directions.

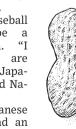
When he played for the

Boston Red Sox, Japanese pitcher Junichi Tazawa introduced players to Hi-Chew, a chewy, fruit candy that is like gum but can be swallowed. Hi-Chew was created because it is considered taboo to spit out gum in Japan, said Terry Kawabe, chief executive of

Morinaga America, part of the Japanese candy manufacturer that makes it.

When Tazawa contacted Morinaga about buying Hi-Chew in bulk, the company instead sent the candy to him and later joined with U.S. baseball teams, beginning in 2014.

This year, Morinaga promoted its chewy, fruit candy Hi-Chew at four U.S. baseball stadiums, including stocking a yellow bucket full of candy in the St. Louis Cardinals' dugout. The bucket can hold 400 candies, Kawabe said, "ensuring a steady supply of Hi-Chew throughout the game."



* * * *

SPORTS



Michael Penix Jr. has inserted himself into the Heisman Trophy race with a huge season for No. 7 Washington.

The Long Rise of a Breakout Star

In his sixth college season, Washington quarterback Michael Penix Jr. is a Heisman candidate.

By LAINE HIGGINS

or the first four years of his college football career, Michael Penix Jr.'s best moment on the field was a dive into the pylon on a 2-point conversion in overtime that sealed Indiana's upset of a top-10 ranked Penn State. It was a great win for the Hoosiers, but eminently forgettable in the grander scheme of college football.

Three years later, Penix is in his second year of starting at Washington—thanks to the sport's recently loosened transfer rules and every week, he's creating unforgettable moments in bulk.

Through four games, he leads the nation in passing yards (1,636) and passing touchdowns (16) and has the No. 7 Huskies averaging over 593 yards of offense a game, also most in the nation. It is a run that has cemented Penix as an early frontrunner for the Heisman Trophy, and placed his team firmly in the conversation about the College Football Playoff.

Penix's ability to break out—in year six of his collegiate career—is a reflection of how today's college football landscape enables players to keep pushing for opportunities, even when things don't work out initially. Penix's progress was initon that was nearly tailor made for a strong-armed passer like him.

Penix was a "near indestructible" four-sport athlete at Tampa Bay Technical High School, said Jayson Roberts, his football coach and biology teacher there. In addition to starting at quarterback, he was a star point guard on the basketball team, a baseball center fielder and a long jumper.

But he didn't generate hype on the recruiting trail until his junior year because Penix spent the first two years of high school quarterbacking a run-heavy offense at Pasco High School. His only scholarship offer at that point was from Florida Atlantic, prompting him to transfer to Tampa Bay Tech during the spring of his sophomore year. He worked his way from third-stringer to starter in the span of about a week.

Despite throwing 61 touchdowns with just six interceptions in two seasons at Tampa Bay Tech, he got a tepid reception from college coaches because of a small quirk: Penix is a lefty.

Southpaws may be coveted in baseball, but in football they are viewed skeptically. The thinking goes that when left-handed quarterbacks throw, the ball spirals the opposite direction from a righthanded passer, and that can make it harder for receivers to catch. "It is baloney," said the quarterback's father, Michael Penix Sr. "As hard as Mike throws the ball, it doesn't matter which direction it's spiraling," Roberts said.

Penix agreed to play for Tennessee coach Butch Jones in the spring of 2017, but saw his scholarship rescinded by his successor when Jones was fired.

With his future uncertain, Penix reconnected with Nick Sheridan, the graduate assistant who had originally recruited him to Tennessee and had since taken a new assistant gig coaching quarterbacks at Indiana. Sheridan convinced head coach Tom Allen that Penix could change the trajectory of the program. So Allen went all in: all 10 coaches on the Hoosiers staff flew down to Tampa to visit the Penix residence. A week after decommitting from Tennessee, the quarterback signed with Indiana.

Penix had flashes of brilliance during his time in Bloomington, but he was held back by repeated injuries. He redshirted in 2018 after tearing his ACL in his third game. In 2019, he helped Indiana begin the season 7-2—its best start since 1993. Then he suffered a season-ending injury to his sternoclavicular joint in November.

He reinjured his ACL in 2020, once again in his sixth game of the season. Finally in 2021, he made it only five games before a different shoulder injury ended his season. God for protection. He was playing scared, too.

"Every time he went back to pass it looked like he was worried about who was falling down around his legs, what was coming at him," Roberts said.

Following the 2021 season, Penix wanted a fresh start—and a more stalwart offensive line. He entered the transfer portal. Meanwhile, Washington had just hired as its head coach Kalen DeBoer, the Indiana offensive coordinator during Penix's best season in 2019. DeBoer fielded an aggressive offense designed to maximize the talented receivers already on Washington's roster.

DeBoer also was trying to convince Sheridan to join him in Washington. Penix caught wind of the idea that the band was getting back together and signed with Washington. Penix was already familiar with DeBoer's system. And because DeBoer was new to Washington, no player had a better handle on the offense than the new guy.

The quarterback's comfort was easy to see. In 2022, he broke a 20-year-old Huskies single-season passing record with 4,641 yards.

More importantly, Penix got through the season in one piece behind a stout offensive line that allowed just seven sacks. For the first time since he was in high school, Penix spent the spring practicing instead of rehabbing his body.

The Lucky Vikings Are Out of Luck

BY ROBERT O'CONNELL

With 10 seconds left in the fourth quarter last Sunday, Minnesota Vikings quarterback Kirk Cousins fired a pass into the end zone. It was tipped and fluttered into the arms of a Chargers linebacker, whose interception sealed Minnesota's third consecutive loss to start the season.

Cousins described the play as a fluke. He had aimed his throw at a "safe spot" away from the defense, where it was likely to end as either a touchdown or a harmless incompletion. "Obviously," he said, "you don't expect the ball to bounce up, twice, in the air and get intercepted."

Any statistician worth their salt, though, could have told Cousins to anticipate his share of lousy breaks. Last season, the 13-4 Vikings claimed the NFC North by riding a historic streak of good fortune. They allowed more points and yardage over the course of the year than they scored and gained, but won a record 11 games by the margin of a single score.

This season, the bill has come due. As the Vikings have turned from contender to cellar-dweller, they've also become a case study in the elements of random chance that can decide a team's fate.

"Fans really enjoy narratives and story lines," said Kevin Cole, a former financial analyst who studies football variance at his Substack site Unexpected Points. But, he said, the notion that an otherwise mediocre team can reliably access reserves of grit and poise in close games is hogwash. "The Vikings show, more than anything, just how much luck is involved in the sport."

According to nearly every measure other than the one fans pay the most attention to—wins and losses—last year's Vikings were average. They scored 24.9 points a game. They managed 5.5 yards per snap; their opponents gained 5.9.

Minnesota went 11-0 in games decided by 8 points or fewer, No other team in NFL history had tallied even eight such wins without a loss.

If Vikings fans would have preferred to believe in their team's ability to rise to a clutch occasion, the 2023 version has disabused them of the notion. They've lost all three contests this year by a one-score margin. They've turned the football over nine times while taking it away from opponents only twice.

According to NFL data scientist Tom Bliss, Minnesota has become the *unluckiest* team in the sport this year, with the plays most affected by chance decreasing its win probability by nearly 40%.

tially stalled by heartbreaking injuries, but his ability to shop for a better situation—and reunite with coaches who believed in him—led him to an opportunity at WashingPenix has since said in an interview with the Pac-12 Network that he used to lie on the floor of his apartment and cry in the mornings before games, praying to

U.S. Is Routed By Europe As Ryder Cup Begins

By ANDREW BEATON

Guidonia Montecelio, Italy **JUST A SHORT DISTANCE FROM** here, in the heart of Rome, ancient gladiators once maimed and mauled opponents to the delight of raucous crowds. The Ryder Cup's Italian debut wasn't so different.

Europe opened up with a historic start that once again left the U.S. reeling on the other side of the Atlantic, where the country hasn't won this event in three decades. Now after failing to win a single match on a disastrous opening day, the Americans face an uphill climb to end that streak.

The Europeans now lead 6.5-1.5 heading into Saturday, matching the biggest opening-day lead ever under the current Ryder Cup format. After a savvy strategic decision, seemingly aimed at probing an American weakness early on, Europe won all four of their opening matches for the first time in their history. They followed that up in the afternoon with a trio of sensational finishes to come back and tie three matches that the U.S. was winning, putting Europe nearly halfway to the 14.5 points it needs to reclaim bragging rights.

The morning beatdown was so severe that none of the early matches even reached the 18th hole. Two of them were finished with three holes left to play. The Americans didn't lead any of those matches at any point.

That sent the tens of thousands

of fans here, mostly favoring the home side, into a quick frenzy. Cries of *"Euuuu-rope"* and "olé olé olé" echoed around the grounds of Marco Simone Golf and Country Club, while the European team had unusually early reason to celebrate on the course.

"It was such a good start," Norway's Viktor Hovland said after the early drubbing, "and we're going to keep it going."

Hovland was right.

The Americans were in position to redeem their poor start when they led three of the four late matches on the back nine. Then Europe's stars hit a series of dazzling shots to tie all of those up, leaving the team with three draws and a win in the afternoon. As the Americans crumbled down the stretch, Spain's Jon Rahm set the galleries on fire with two eagles in the final three holes—first with a chip-in on the 16th and then a long putt on the 18th that tied the match with American stars Scottie Scheffler and Brooks Koepka.

The dominating effort came after European captain Luke Donald made a surprise decision and elected to begin with the foursomes competition, in which two players from each side alternate shots, in the morning session. Since 1977, every Ryder Cup in Europe had opened with four-ball, where each player plays his own ball.

But it doesn't take a lot of guesswork to understand why he may have flipped them: foursome competition has been a particular



Europe's Jon Rahm celebrates holing a chip shot on the opening morning of the Ryder Cup.

bugaboo for the U.S. during its winless streak abroad. During the previous two Ryder Cups in Europe, the U.S. won only two of the 16 foursome matches.

Then Europe won all four on Friday.

While there are always breakdowns of how the host team is allowed to tailor the course to its players strengths, what was so concerning about the start for the U.S. is how a collection of the top golfers around looked so jarringly out of sorts. Scheffler, the world No. 1, was far from his typically sharp self in the morning, and sometimes all he could do was helplessly watch. On the ninth hole, Scheffler drove the ball down the middle of the fairway only for teammate Sam Burns, a controversial pick to make the team, to plunk it into the water.

The afternoon offered more promise for the U.S. While Collin Morikawa and Xander Schauffele got blown out by Northern Ireland's Rory McIlroy and Englishman Matthew Fitzpatrick, the Americans led on the back in the other three matches. But all three were spun back into ties, including two of them on the 18th hole.

Justin Thomas and Jordan Spieth, who both sat out the first round for the U.S., were two up after 13 holes against Hovland and England's Tyrrell Hatton until losing the lead entirely over the ensuing three holes as Spieth became a non-factor leaving Thomas to essentially play one-against-two. And when it looked like Thomas was in strong position to reclaim the lead on the 18th, Hovland nailed a 26foot putt that kept it a tie. That was followed by Rahm's second eagle on the 18th to win the hole and tie that match up.

The day ended with the Americans giving away yet another one. Max Homa and Wyndham Clark were two up after 16 holes.. But a par was good enough for England's Justin Rose to cut that lead in half on the 17th. Then Rose's birdie on the 18th snatched another draw from the jaws of defeat for Europe.

OPINION

THE WEEKEND INTERVIEW with Moshe Koppel | By Elliot Kaufman

The American the Israeli Left Loves to Hate

Jerusalem he problem isn't that Israelis disagree; it's that they agree on so much that isn't so. Overfed on demographic projections, the Israeli right says the last remaining obstacle to its political dominance is the Supreme Court, a self-perpetuating liberal stronghold that rules beyond its remit as an enlightened guardian class. Once it is cut down to size, right-wingers announce, they will overthrow the "old Israel" and replace it with a "new Israel" designed in their own image. The opposition replies, in so many words, that you're right about the court—its extraordinary powers are your only obstacle-and that's why we need it.

The more the right aggrandizes the power of the court, stressing its unusual and antidemocratic features, the more other Israelis see it as democracy's last best hope. The country's broad center wants judicial reform in the abstract but doesn't trust tomorrow's majority to govern. That's how you end up with a popular pro-democracy movement that is against returning power to the people.

The Kohelet Forum takes on judges, bureaucrats and the legacy of socialism to build a more democratic, free and Jewish state.

Moshe Koppel, the man who most trusts his fellow Israelis to govern themselves, is thus considered by the cognoscenti one of the most dangerous men in Israel. One intellectual tells me, "The three American immigrants who have left the biggest mark on Israel are Golda Meir, Meir Kahane and Moshe Koppel." One was the prime minister who nearly led Israel to total defeat in 1973, one a radical-right rabbi assassinated by terrorists in 1990. The third I sat down with in Jerusalem to discuss the future of the Jewish state.

Mr. Koppel founded and leads the Kohelet Policy Forum, a wellconnected conservative-libertarian think tank of a kind Israelis hadn't seen before. Liberals in Israel have begun to speak of Kohelet roughly in the way Americans on the right speak of George Soros, as the private and even foreign actor behind most every dastardly plot.

"We just do research and give advice," Mr. Koppel says. "We don't run the country." True, but where did the push to reform Israel's judiciary come from? Court reform has been Mr. Koppel's issue for 20 years, long before most politicians would give it the time of day. The ideas are Kohelet's. That's not all. The Nation-State Law, which made international headlines in 2018 by sharply defining Israel's Jewish character. flowed from Mr. Koppel's pen. The 2019 reversal of the U.S. legal stance against Israeli settlements can be traced to Kohelet scholarship and influence. Name an effort to unleash the forces of competi-

tion in Israeli commerce, education and culture, and it is likely Kohelet's doing.

"I learned how the system works, how you get stuff done in the Knesset," Mr. Koppel says. "It turns out it's not that hard. The important thing is to control the text and give credit to everybody but yourself. And on that basis, I started dabbling in this stuff."

Dabbling because politics isn't his first career, much less his birthright. A mathematician and professor emeritus of computer science at Bar-Ilan University, Mr. Koppel grew up in an Orthodox Jewish home in New York. He moved to Israel in 1980, at 24. He is now 67, but Israeli politicos love to treat him as an American.

"There's a whole bunch of blue bloods," he says. "Every time I have a meeting with these people, the first thing they tell me is how many generations they've been in Israel, as if to say, 'So who are *you?*' " That most of Kohelet's funding has come from U.S. Jews is treated by critics as illegitimate, even though "the left in this country has an endless array of organizations funded by one European government or another."

Even Mr. Koppel's free-market conservatism is sometimes dismissed as an American import. "To the best of my knowledge," he counters, "socialism wasn't invented in Israel either." Besides, "the idea of conservatism is pretty deeply baked into the Jewish tradition, and Israel is the Jewish state."

The conventional wisdom is that Israel must choose-either become more Jewish and less democratic, or more democratic and less Jewish. Mr. Koppel turns that on its head. To become more Jewish. Israel must first become more democratic, and more free. "The old Zionist notion that the big state will guide its citizens to the ideal balance of Jewishness and democracy has it exactly backwards," he writes in his 2020 book, "Judaism Straight Up." A more limited state will "create the opportunity for us to figure it all out for ourselves."

He sees Judaism "as a kind of language, as something that evolves from the bottom up," he says. When it hardens into diktats from books, rabbis or bureaucrats. the creative genius of the people withers. "Israel needs to provide its citizens freedom not only from foreign enemies and foreign cultures," he writes, "but from their own government and from unelected power-brokers."

That's the Kohelet Forum mission. Founded in 2012. Kohelet fo



is a monopoly. The standards authority. . . ." Mr. Koppel is off to the races, covering building regulation, import restrictions, broadcast licenses, unions and schools. In each area, he can point to accomplishments, allowing some competition or transparency or decentralizing authority. Progress is slow, but major advances are possible. Not long after our interview, Prime Minister Benjamin Netanvahu announced his intention to open the Israeli market to goods approved by the European standards authority.

As for judicial reform: "Let me tell you what happened and why this court is different from every other court," Mr. Koppel begins. "When Labor Zionists realized that they probably were not going to control the country going forward in the way they had before 1977"—the first time they lost an election—"they started shifting power to the courts." Justice Aharon Barak, who joined the Supreme Court in 1978, led a "judicial revolution," in which the court freed itself from the normal restraints that protect the political sphere. Oh, and "the justices have managed to keep reproducing" using their conspicuous power on the committee that selects new justices.

"Judge [Richard] Posner called the Israeli justices 'enlightened despots,' " Mr. Koppel says, quot-ing a 2007 article by the American jurist for the New Republic. Judge Posner concluded, "What Barak created out of whole cloth was a degree of judicial power undreamed of even by our most aggressive Supreme Court justices."

his court may not let itself be reformed. In 1992, Justice Barak said, "The people are sovereign, and the Basic Laws are supreme," and pledged to rule "in complete subservience to the words of the Basic Laws," which the court has treated as a de facto constitution. Now the justices say they can overturn Basic Laws, too. Mr. Koppel is persuasive, and this year his ideas have finally had their moment. But when this Israeli government championed them, they met broad and spirited opposition. A protest movement brought the country to its knees and caused Mr. Netanyahu, badly weakened, to step in and order a retreat.

What went wrong? "If you want to do something major, you need to do it in a very thoughtout and deliberate manner," Mr. Koppel says. "The government did not prepare properly. It was rushed." By the time leaders reached out to compromise, opposition had hardened. "Those who are now in the coalition," he sums up, "are going to need to learn how to govern responsibly-and they haven't."

It didn't help that the attorney general, an independent civil servant granted quasi-judicial power by the court, had ordered Mr. Netanvahu to refrain from any involvement in the judicial-reform effort. This hobbled it, especially since "Bibi is probably the most moderate guy in his coalition."

Mr. Koppel has moderated, too. "All I have done since Jan. 4, when this reform was announced, is speak to opponents of reform," he says. "If you can have this conversation the way it should be had, which is from behind the veil of ignorance," setting all interests and identities aside, "you can reach compromises."

The veil of ignorance, a thought experiment from the work of philosopher John Rawls, might appeal less to a politician than to a mathematician. "Unfortunately," Mr. Koppel laments, "people absolutely refuse to put themselves behind this veil of ignorance." At first, they make arguments about Israel's lack of checks and balances, and Mr. Koppel will surprise them by agreeing—and proposing solutions to strengthen the Knesset's oversight of the government and raise the bar to pass a Basic Law. "The solution to the improperly calibrated relationship between the executive and the legislature is not to have the judges take more authority for themselves," he says. "If you have a problem with the legislature and executive, fix Here they lose interest, he says, because checks and balances are merely their "formal argument." What really motivates them is fear of what the right might do. 'They basically say, look, our tribe prefers that the administrative state and the judicial bureaucracy have more power than the elected government because they advance our interests more than the elected government does." Mr.

Koppel sympathizes, "but you don't get to call that democracy."

Where does judicial reform go from here? "I think the government should reach a compromise, and then say it is moving no further," he says. That is a big comedown, but it's what Israelis tell pollsters they want. Mr. Koppel would change the way Israelis select judges "roughly in the direction of the German system." A selection committee, appointed proportionately by the Knesset, would need a supermajority to install a judge. Compromise would be written into the system, but you might miss that if the opposition keeps yelling "coup."

The protest movement is in one sense "a testament to Israeli democracy," but it has taken some disturbing turns. "I didn't anticipate that they would be willing to use the army as part of the game," he says, with reservist protests, threats of disobedience and the military brass weighing in. Kohelet's largest donor, American investor Arthur Dantchik, was hounded for months by protesters in his Philadelphia suburb until he agreed to stop funding the think tank. A friend of Mr. Dantchik's tells me the billionaire never expected it to get so nasty. Haaretz a left-wing newspaper, writes approvingly that "30 Israelis from Philly" succeeded in "convincing" Mr. Dantchik. In April opponents also barricaded and vandalized Kohelet's offices.

ompromise won't be easy. "Just yesterday," Mr. Koppel says, "I was sitting with somebody on the other side. He complained to me that the guys to his left"—he means politically-"keep asking him, 'Why do you want to work out a compromise? Bibi is on the ropes.' "

Mr. Koppel reflects on the turmoil, "There's a lot of people in this country who are absolutely certain that they should be prime minister." But "Bibi has been around forever, and he has kind of clogged the system. That's why he gets so much hostility. Most of his opponents are his former underlings who wanted to move up.'

This year, the old Israeli elite and the average voter have frustrated Mr. Koppel's ambitions, causing him problems to no end. But unlike so many on both sides, he hasn't lost faith in his countrymen or their shared project.

"My favorite vision of the return of the Jews to Israel is in Zechariah," one of the prophetic books of the Hebrew Bible. "There's nothing grandiose there. He just says. 'In the end of days old Jewish men and women will sit again in the streets of Jerusalem, and little boys and girls will play in the streets.' And after 2,000 years, my parents are those old people, and my kids, my grandchildren, are those kids. Everything else is a bonus. I can't believe my good fortune that it happened to me. So, do I think we'll be OK? We'll be fine. We're just having a little bit of a fit here. We'll get past it."

cuses on national sovereignty, "true representative democracy," and "individual liberty and freemarket economics, which I regard as a single topic," Mr. Koppel says. It adds up to a unified vision for unleashing Israel's greatest advantage: its people. "I'm telling you, if we could ever set the genius in this country free, everything will look like high-tech," he says

"High-tech managed to outpace the regulators. But look at every other industry in Israel. The banks are a cartel. The electric company

Mr. Kaufman is the Journal's letters editor.

Finally, There's a Humane Method of Execution



COUNTRY By Stuart A. Creque

who was found beaten to death with a fireplace implement. (Charles Sennett committed suicide soon after.)

pastor,

Eugene

murder-for-

promised

Charles Sennett, a

Mr. Smith and two

other men \$1,000

each to kill his wife,

On Aug. 25, Alabama Attorney General Steve Marshall filed a request with the state Supreme Court for a date to execute Mr. Smith. If the state does so, it may mark a fundamental shift in the method of capital punishment in the U.S.

In 2007 Mr. Smith amended his 2006 appeal of his capital sentence to object to lethal injection as his method of execution, alleging that it could subject him to substantial pain. As if to prove his point. Mr. Smith's scheduled execution on Nov. 17, 2022, had to be cancelled after technicians failed to place intravenous needles into his veins before his death warrant expired.

Mr. Smith's lawsuit demanded that the state use a different method: nitrogen anoxia, also called nitrogen asphyxiation. The 2018 Alabama law approving this method describes it as "nitrogen hypoxia," but that's not quite right. Hypoxia means reduction of oxygen levels in the blood. Breathing pure nitrogen induces anoxia, a total depletion of blood oxygen.

News articles often describe nitrogen anoxia as unproven as an effective and painless method of execution. In fact, inert-gas anoxia is a well-known cause of death in industrial accidents. According to the Occupational Safety and Health Administration, 16 Americans died from 2017-22 in workplace incidents involving nitrogen asphyxiation. In a 2003 safety bulletin, the European Industrial Gas Association warned: "Inhalation of an oxygen depleted atmosphere can cause a person to immediately lose consciousness with no warning, such as dizziness, and die from asphyxiation. Tragically, there have been many examples of fellow workers going to the aid of victims and becoming victims themselves because they were not aware of the cause of the initial incident.'

Nitrogen anoxia is painless. It requires no drugs, poisons or medical procedures, and its effects are wellunderstood, consistent and reliable. Its first symptom is loss of consciousness.

The electric chair, the gas chamber and lethal injection were all invented with the goal of making executions more humane by instantly inducing unconsciousness. The hope was that the condemned wouldn't feel pain. But none of those methods reliably cause unconsciousness as an initial effect.

Nitrogen anoxia is different. The urge to breathe that develops when a person holds his breath isn't caused by the depletion of oxygen from the body; rather, it's due to the buildup of carbon dioxide in the

Alabama petitions to take Kenneth Eugene Smith's life using painless and quick nitrogen anoxia.

bloodstream, which changes the pH balance of the blood. Skin divers have to be careful not to hyperventilate to "blow off" CO2 and stay under longer: Their blood oxygen may deplete before CO2 buildup prompts them to breathe, causing them to black out before reaching the surface, so that they drown.

When someone breathes pure nitrogen, he exhales carbon dioxide even though he takes in no oxygen. Since CO2 isn't building up in his bloodstream, he never realizes that anything is wrong, nor does he ex-

perience any discomfort. When his blood oxygen falls, he loses consciousness as his body attempts to limit oxygen consumption by reducing brain activity. Soon thereafter, all body tissues shut down and start to die for lack of oxygen.

The use of nitrogen anoxia for executions would avoid another obstacle to lethal injection: drug availability. In 2011 the European Union banned the export of drugs intended for use in executions. In 2016 Pfizer, the last federally approved U.S. manufacturer of drugs for lethal injections, announced it would no longer sell its products for this purpose. South Carolina had been unable to find a willing supplier of pentobarbital for the past 12 years and thus been unable to carry out its death penalty (only this month it purchased a new supply and plans to resume executions).

Pure nitrogen is universally available from many industrial suppliers and can even be produced literally out of the air. Thus nitrogen is immune from restrictions on supply and from political pressures on suppliers.

Nitrogen anoxia is a nearly perfect method of execution. Echoing the Due Process Clause of the Fifth Amendment, it deprives the condemned of life by depriving him of oxygen, the stuff of life. It involves neither physical trauma nor toxic drugs; the executed person's organs will even be suitable for donation.

Alabama was the third state to authorize nitrogen anoxia as an execution method, following Oklahoma and Mississippi. In August 2021, the Alabama Department of Corrections completed the construction of a nitrogen anoxia apparatus, and the department has worked throughout 2023 to develop execution protocols for nitrogen anoxia.

Now Mr. Marshall has stated in his Supreme Court filing that Alabama intends to execute Mr. Smith by nitrogen anoxia. Mr. Smith's lawyers have already filed an appeal based on their argument that using this method is "human experimentation," ignoring the real-world incidents of death by nitrogen anoxia and Mr. Smith's previous request for this method. Inevitably, there will be delays due to this and other litigation, but the method's first use may come as early as 2024.

Society doesn't view it as morally acceptable to inflict the same suffering on a murderer that he inflicted on his victim. Nitrogen anoxia will inflict no physical pain; a murderer such as Mr. Smith will merely forfeit the balance of his natural life span.

Mr. Creque is a technology marketing executive and screenwriter of "The Last Earth Girl."

REVIEW & OUTLOOK

A Case of Tax Fraud—at the IRS

he Internal Revenue Service makes clear that taxpayers who willfully con-

penalties. But what happens when government auditors are caught manipulating documents and hiding those actions in court?

The IRS this month agreed to settle and drop a penalty

in Lakepoint Land II LLC v. Commissioner. A judge in U.S. Tax Court had sanctioned the IRS in the case, ripping the agency's counsel for acting in "bad faith" and having "multiplied the proceedings in this case unreasonably and vexatiously" by failing to tell the court that documents it used to assess a penalty had been backdated.

Several other Tax Court cases suggest wider IRS document fiddling as the agency has gone after "syndicated conservation easements." Congress created conservation easements in the 1980s, letting land owners donate the development rights for acreage to a qualified charity in return for a tax deduction.

Those easements have become big business, as legal tax loopholes often do. Companies buy up land, have it appraised for its foregone developmental value, then sell stakes to investors who receive the tax benefit. This entirely legal commerce is disliked by the green lobby and some lawmakers.

The IRS began its crackdown in 2016, and by 2020 former Commissioner Charles Rettig had declared it a "top priority" to "actively identify, audit and litigate" these transactions that "defraud the government of revenue." The IRS zeroed in on what it claimed were inflated land appraisals, denying deductions and slapping firms with hefty penalties.

One legal rub: The federal tax code requires an IRS supervisor to approve in writing the initial determination of a penalty. That didn't happen in *Lakepoint*. The company presented emails to Judge Christian Weiler showing that the IRS agent on the case failed to get her supervisor's written approval in 2016 for a proposed \$15 million penalty.

When the agent realized this—in February, 2017—her supervisor acknowledged in an

Trump often provokes others into breaking their own insti-

tutional norms.

Agents backdated documents to punish legal deductions.

email that this was a "HUGE oversight" and backdated her signature to seven months earceal or alter tax documents risk severe lier. IRS attorneys nonetheless swore to the

accuracy of this date, and they continued to mislead the court for months even after the falsification was discovered. Judge Weiler ordered the IRS to pay Lakepoint's fees and expenses.

Three more partnerships—Arden Row Assets, Basswood Aggregates, and Delwood Resources—have presented evidence of similar backdating by a different IRS agent and manager. That agent in a March 2022 email tells the manager that "the date you use to sign should either be the date you 'approved' penalties against the taxpayer (7/14/21).

or a little thereafter?" The manager a few days later responded: "All 3 are signed with date of July 14, 2021." Note the wink-nod "approved."

The cases suggest a culture of disregard for tax laws that the IRS requires taxpayers to follow to the tee. Imagine the fines or prison sentences awaiting average Joes who backdate tax documents and lie about it.

IRS abuse is all the more outrageous because the partnerships had the legal right to engage in easements at the time. Congress has since tightened the rules, and perhaps it should eliminate the loophole. But as long as they are legal, the job of the IRS isn't to change the law through enforcement. According to a recent analysis in the publication Tax Notes, of the cases in which the Tax Court has ruled on valuations, judges have upheld some 81% of reported deductions.

In addition to settling with Lakepoint, the IRS says it has "undertaken an ongoing review of syndicated conservation easement cases to ensure that the evidentiary record about supervisory approval is properly presented and that the agency pursues or continues to pursue penalties only where appropriate."

Glad to hear it, but it's a disgrace that the IRS had to be found out in court before it stopped its abuses. This is one of many reasons the recent \$80 billion budget increase for the IRS should be eliminated.

LETTERS TO THE EDITOR

What the Senate Dress-Code Fiasco Revealed

Peggy Noonan's "The Senator's Shorts and America's Decline" (Declarations, Sept. 23) aptly describes the many forms of disrespect conveyed by Sen. John Fetterman's version of business attire on the U.S. Senate floor. But one more victim of the senator's disdain for convention should be mentioned: the working-class Americans whom Mr. Fetterman. "born into affluence," is trying to impress and imitate with his common-folk persona.

* * * *

Ordinary working people don't act this way. They don't show up at their iobs dressed like slobs. My parents' family included a railroad bookkeeper, a shipping clerk, an office worker, a shopkeeper and a restaurant cashier. None of them would have attended a public occasion dressed in what they might have worn to bed

Alan M. Schwartz Teaneck, N.J.

Ms. Noonan is correct about the signs of America's defining deviancy ever more downward. This brings to mind the notion of Prof. Frederick Crews, who once said, "Weariness of rational standards in one generation becomes a pathetic ignorance of them in the next." Sadly, this is that next generation.

LARRY W. WHITE Dallas

Ms. Noonan's appeal to our leaders to dress like adults is as welcome as it is insufficient. Televised congressional hearings have become today's version of yesteryear's "The Jerry Springer Show" or choreographed professional wrestling matches. Congressional hearings that make it to the public's attention these days feature tantrums and expressions of outrage from elected officials. They are blue in the face over their disbelief that someone might not agree with them. Maybe Ms. Noonan is correct that dressing

like adults is a start. The next step might be for them to act like adults. TOM HONIG Watsonville, Calif.

Although I usually agree with Ms. Noonan, I vehemently disagree about dress codes. What a waste of time and resources society expends on clothes. People should be judged on their actions and ideas before their clothes. If you want to dress well, fine. People should be able to express themselves. But if Mr. Fetterman expresses himself by dressing as a slob, he should be allowed to do so.

It is only fair to admit that I dress like a bum every day.

THOMAS WULIGER Kensington, Calif.

Ms. Noonan tactfully avoids stating the obvious reason for Mr. Fetterman's desiring a looser dress code: He remains incapacitated from his stroke, and likely can't dress himself in a shirt and tie without difficulty. For the people of Pennsylvania, whom he represents, that's a far worse problem than his being a slob.

> ANDREA ROUDA Freeport, Maine

Were I to encounter a physician, financial adviser or clergyman clad in rags such as Sen. Fetterman's, I'd run the other way. Having attended Catholic schools and served in the armed forces, I learned that uniforms (and dress codes) are implemented to foster an image of the institution rather than the individual—a lesson Sen. Chuck Schumer seems to have forgotten.

Perhaps the orange jumpsuit ought to be prescribed as the dress code of Congress. Then, should members ever be held to account, they'd already be dressed for time behind bars.

CMDR. FRANK G. COYLE, USN (RET.) Virginia Beach, Va.

Manchin's New Tune on a Climate Boondoggle

Sen. Joe Manchin states, "I'm proud of the Inflation Reduction Act" ("A Law That Isn't Red or Blue—and Sure Isn't Green," op-ed, Sept. 23). Five months ago, however, he sang a different tune, "The Biden administration is breaking its word to the American public by ignoring the text of the Inflation Reduction Act to pursue its radical climate agenda. Let me be clear: if this continues, I'll do everything in my power to stop themincluding voting to repeal the IRA."

In July 2022, Sens. Manchin and Chuck Schumer released a statement claiming the act "will invest approximately \$300 billion in Deficit Reduction and \$369.75 billion in Energy Security and Climate Change programs over the next ten years." Now, forecasts suggest climate subsidies could soar to \$1.2 trillion. The senator can put lipstick on a boondoggle, but it's still a boondoggle.

CHARLES D. EDEN Atlanta

No Government Bailouts for Offshore Wind

America is poised to be a global leader in offshore wind. Our coastal communities, currently powered by the nation's oldest electric infrastructure, need new sources of power, which offshore wind can deliver. There is much to be optimistic about: America's two largest offshore projects are under construction, and many states are expected to award more contracts soon. Unfortunately, a few developers are begging for bailouts instead of fixing their failures ("The Great Northeast Wind Bailout," Review & Outlook, Sept. 22). But the business of offshore wind is bigger than these mismanaged projects. It's also wrong to suggest that offshore wind can't be

cost-effective. The project off Long Island won a technology-neutral competition over fossil and solar. Nor is it a problem of "government policies" promoting U.S. renewables. The world is going green; America should be

Milley takes a shot at

U.S. military chief.

The General and the 'Wannabe Dictator'

over politics.

Gen. Milley is right to highlight that U.S. service members swear an oath to the Constitution, not an individual. That fact should give him an enduring confidence that U.S. institutions are durable enough to weather disruptions like Mr. Trump. They held up under du-

Gen. Milley retired this week after four years as Chairman of the Joint Chiefs of Staff. "We are unique among the world's militaries," the top military officer said at a retirement

ceremony on Friday, noting that service members swear an oath to the Constitution. We don't take an oath to a country. we don τ take an oath to a tribe. We don't take an oath to a religion. We don't take an oath to a king, or a queen, or a tyrant or a dictator. And we don't take an oath to a wannabe dictator." Readers will catch the parting shot at Mr. Trump. The media certainly did. And who could blame Gen. Milley for loathing Mr. Trump? Casually floating the idea of harming a U.S. military officer is conduct unworthy of a wannabe Commander in Chief. Yet it was still dispiriting to hear Gen. Milley's remarks about a former President, in public, while wearing the uniform of the U.S.

onald Trump says many outrageous things, and among his worst was his suggestion recently that Army Gen. Mark Milley might deserve execution for his handling of the tumultuous days in January 2021. Yet on Friday ar-

Trump as he departs as rived a sad reminder that Mr.

Army. Mr. Trump is the front-runner for the Republican presidential nomination. Like it or not, he commands political support in the

country. That doubtless includes a large chunk of the enlisted ranks of the United States military services. The end-of-tour catharsis of a swipe at Mr. Trump isn't worth polarizing the force

ress during his Presidency, and Mr. Trump lost to Joe Biden.

Air Force Gen. C.Q. Brown assumes the top job at one of the more volatile world moments in modern memory. He might calibrate his public remarks to the reality that, in any national security crisis, he will need all Americans to have full trust and confidence in him. Even Donald Trump supporters.

We hope that turning down the temperature of politics in the U.S. armed forces is a priority for the new chairman-perhaps behind only the military threat posed by the Chinese Communist Party.

A Shutdown for Dummies

he old saw is that faculty politics are so bitter because the stakes are so low. The same principle now seems to hold sway

in the U.S. House of Representatives, which is on the verge of shutting down the U.S. government in order to achievenothing at all.

Funding for the government runs out at the end of the fiscal year at midnight Saturday, and a handful of

House backbenchers have refused to vote for bills to keep it open. On Friday they blocked a bill that would have kept it open for a month while also reducing spending, fortifying border security, and creating a bipartisan fiscal commission.

This stopgap bill would have failed in the Senate in any case. And a Senate bill to keep the government open for 47 days with \$12 billion for disaster relief and aid for Ukraine also can't pass the House without Democratic votes. But the GOP malcontents promise to oust Speaker Kevin McCarthy if he passes something with Democrats. Bluto and the Faber College boys in "Animal House" couldn't have come up with a more stupid and futile political gesture as this looming shutdown.

The responsibility lies with the likes of Florida's Matt Gaetz and Arizona's Andy Biggs, who seem to want a shutdown as a show of political manhood. They certainly won't end up cutting any spending, and a shutdown will probably result in more. Republicans control only the House, so a bipartisan agreement is inevitable to fund the government.

A band of House GOP malcontents may close the government to accomplish nothing.

But this isn't really about policy at all. If it were, House Republicans would have passed the 12 annual spending bills that they could

> then negotiate with the Senate. It's their only chance to get something past President Biden's veto pen. Yet until this week the same Republicans calling for "regular order" in appropriations and who slam continuing resolutions were blocking spending

bills out of pique.

The real goal of the malcontents seems to be to topple Mr. McCarthy for personal spite. If Mr. McCarthy is forced to seek Democratic House votes, the Democratic price will be even more spending. Then the Gaetz Republicans will call for a motion to vacate the chair, and Mr. McCarthy could lose his speakership.

But then what? What suicidal imperative would cause anyone else to sign up to be Speaker? At this point it's like volunteering to be the next wife of King Henry VIII. The result is unlikely to be different.

It's a shame that a handful of holdouts are able to hold the entire GOP House hostage. Most House Republicans came to Washington to check Democratic spending and achieve what else may be possible in divided government. They put a ceiling on spending in the debt-ceiling deal this year, but they risk giving that back with the shutdown stunt.

It's all so pointlessly stupid, with failure foreordained. Their constituents wanted conservative policies, but the Gaetz Republicans are playing personal games.

Welcome the Dallas Mayor Before He Moves On—and Up

The center-right voter in me is glad to see that Dallas Mayor Eric Johnson is now a Republican ("America's Cities Need Republicans, and I'm Becoming One," Cross Country, Sept. 23). Having lived in Dallas most of my adult life, I go "back home" every now and then. It's a different place today than it was when I moved. There were many signs that Big D was turning too far left for my liking. Mr. Johnson's decision gives me hope that other big-city mayors will find a similar Damascene path, but my natural cynicism kicks in pretty quickly. Let's face it: If the mayor wants to run for the U.S. Senate or the governor's mansion, he had to turn red.

> JOHN TRICKETT Charleston, Ark.

Between a Rock and the FTC

What a remarkable juxtaposition two of your Sept. 28 editorials present. As urban retail stores face routine smash-and-grab invasions ("The Retail Theft Rampage Gets Worse"), the most convenient online shopping service ever created is assailed by the government ("Khan's Weak Case Against Amazon"). Who's minding the store?

> LANCE MORGAN Washington

Letters intended for publication should be emailed to wsj.ltrs@wsj.com. Please include your city, state and telephone number. All letters are subject to editing, and unpublished letters cannot be acknowledged.

leading innovation and exporting our homegrown technologies.

The problem is the few developers who, failing to grasp the complexities of developing offshore in America, bid too aggressively on their first projects. Now, realizing they are underwater, they want a government bailout. This is a textbook moral hazard.

Having developed America's first offshore wind farm. I believe the best thing for our industry would be for government to say no to bailouts. To be globally competitive, U.S. companies must have the competence that comes from honoring contracts and the credibility that comes from following through on commitments.

CLINT PLUMMER CEO, Rise Light & Power New York

A Fight the Right Can Win

If the state attorneys general are going to start flyspecking the compensation paid by nonprofits ("Political Lawfare May Get 'Hobbesian," Review & Outlook, Sept. 26), that might be a positive for conservatives. Most nonprofits seem to be run by the left, so it has the most to lose. Perhaps that expanded jurisdiction some left-wing AGs are seeking could be used against them.

DAVID PETERSON Orlando, Fla.

Pepper ... And Salt



more study.

around that issue.

Obama twice!

The polls are bearing this out.

This week's Morning Consult poll

found that by a 9-point margin vot-

ers see the Democratic Party as more

"ideologically extreme" than the GOP.

the voters elected a Democrat as

president only three years ago, with

a popular margin of seven million. So

they must kind of like Democratic

policies! And they elected Barack

icies. But Mr. Biden's election was

about one big thing, the urgency of

ridding America of Donald Trump.

Voters largely understood Mr. Biden,

with his long history, to be a man of

the moderate left. As for Mr. Obama,

yes, but his party has gone further

left since he departed the White

House, and it's a particular kind of

leftism, the abstract and academic

kind. It's theory-laden, detached from

life; it is the left of the innermost

sanctums of the faculty lounge and

"The Groups," interest groups that

are big, well-funded and dug in at

major Democratic power centers, and

which focus on identity politics of all

The president is getting no credit

kinds. and climate change.

They do like some Democratic pol-

The opposing argument: Heck no,

OPINION

Biden's Trend Line Points Downward



DECLARATIONS By Peggy Noonan

meant to write on the debate this week but found the event unsatisfying in a way I couldn't characterize. Twenty minutes in I wrote my first note: "Is there such a thing as boring bedlam?" All the candidates seemed to be doing their best in predictable ways, but nothing came together. I thought Nikki Haley strong, as usual now, and Ron DeSantis impressively and almost poignantly dogged. Mike Pence has a sad, kind face, and there's something reassuring and poignant about him, too. Vivek Ramaswamy's self-confidence is grating. He rudely interrupts. He's grown his hair so high that at one point I half-glanced his way and thought it was Lincoln in his stovepipe hat. Is that a branding experiment?

Voters don't miss Trump, but they miss 2019, and they worry about crime, immigration and inflation.

On the president's polling problems, in which major national polls found that he was running even with or losing in a landslide to Donald Trump and that everyone is concerned about his cognitive decline, I think we have the emphasis wrong as we consider the reasons.

Joe Biden is old, but policy is his problem. I believe the majority of Americans don't like current Democratic policies on major issues. They don't like the party's position on crime, which comes down to the idea that crime is bad but we can't just



A protest at Floyd Bennett field in Brooklyn, N.Y.

as a high-spending lunch-pail populist, but is seen as a high spender who services The Groups. That's why he went to the picket line in Detroit. to get some lunch-pail cred.

His policy problem feeds his persona problem. When you don't like policies, you take a tougher look at the man who carries them forward. You're quicker to name his flaws. You don't feel affectionate and forgiving—"My uncle Mike was slowing down, getting spacey, but he had a decency that time couldn't change. The night of the fire, he's the one who saved everything." Instead people say of Joe Biden: He's gaga, he's senile, and the son—jeez, va think the father was in on it? They're less forgiving than they were two years ago, when he was also in decline and the laptop was already famous.

Some other points on the polls. There is no way half the country misses Donald Trump, but far more than half the country misses 2019.

Twenty twenty changed our country. Pandemic, George Floyd, riots. That last, not the demonstrations and marches but the riots, which weren't reported or officially labeled as what they were, hardened things in America. If it's true that racial minorities are detaching from the Democratic Party, the reason can be traced back to then, when the party and big media refused to see the shopkeeper's agony.

Donald Trump finally left the presidency in January 2021, humiliatingly thrown from office. But the repercussions of 2020 continued to develop, or burrowed in, after he departed. Crime is so bad that big chain stores are leaving cities and neighborhoods, everything in the drugstore is locked behind plexiglass. No one stops the criminals. No one wants to be a cop anymore; as a profession it's been demonized. If a bad guy is, against the odds, arrested, he's out the next day. Inflation came; illegal immigration started surging. Among Mr. Biden's first acts on his first day as president was to sign an executive order making it easier for them to come.

Political professionals, being highly sophisticated and having come to regard themselves that way, forget or don't notice that regular people are pretty sophisticated too. They see trend lines. They smoke them out quickly and make connections. They look at crime and see that even if the government changed its ways and started arresting, holding and trying street criminals, it would take years for that to show any real impact on the streets. They know that it will be years before America can get control of its southern border and convince would-be lawbreakers not to come. and show the drug cartels they no longer have the upper hand.

Both are long-term problems that weren't problems in 2019. Now they're crises.

As to inflation, former Rep. Vin Weber said something arresting the other night on one of Mark Halperin's online Wide World of News conversations. It was off the record but Mr. Weber later gave permission to use it. His thought was that the inflation we're now experiencing came suddenly. In past inflationary times it was gradual-think Gerald Ford and Whip Inflation Now, followed by Jimmy Carter's inflation worries. But this time people have clear and recent recollections of lower, stable prices. Thus they don't take comfort that inflation is "easing." They want prices to go back down.

Someone else, it's unclear who, followed up: It takes time for inflation to build and come out of a system. Once you let the genie out it takes time to get it back in.

People will think: To the extent inflation is caused by high government spending, well, that isn't going to end tomorrow. To the extent it's the supply chain, any number of shocks could knock it further off track. To the extent it's human greed, good luck overcoming that.

So crime, illegal immigration, inflation-it's not only that they're here, it's that no one expects them to go away soon.

That's the president's enduring problem: People see trend lines.

What Jordan Peterson Can Teach Church Leaders

By Aaron M. Renn

avin Newsom is a concerned father. "I really worry about these micro-cults that my kids are in," California's governor told Bloomberg's Brad Stone in an interview this month. "My son is asking me about Andrew Tate, Jordan Peterson. And then immediately he's talking about Joe Rogan. I'm like, here it is, the pathway."

Mr. Newsom isn't alone in his concern about the exploding popularity of online influencers among young men-or in failing to see important distinctions. Some, like Mr. Peterson, offer relatively wholesome life advice on podcasts revolving around health, fitness, personal discipline and career development. Others, like Mr. Tate—who has been charged in Romania with rape, human trafficking and being part of an organized crime ring-peddle a misogynistic brand of pickup artistry. (Mr. Tate has denied the criminal charges and described himself as the victim of a "witch hunt.") What they have in common is that they're finding a receptive audience among teenage boys and voung men with a genuine desire for direction that isn't being served by the hollowed-out institutions of traditional society. Mainstream institutions and authorities-churches, schools, academia, the media—could learn a few things from the online gurus about how to speak to young men effectively. Young men today often feel as if their needs are secondary to those of their female peers. Society tends to speak about the well-being of men and boys as a means to an end. There's a lot of hand-wringing about how a decline in the number of marriageable men makes it harder for women to find husbands. Some argue that male struggles cause a litany of social ills like crime and child neglect. Church leaders justify outreach to men as a way to reach women and children. By contrast, online men's influencers seek to help men themselves, to show them how to improve as people and achieve their own goals. To be sure, some of those goals are immoral, such as taking sexual advantage of women. But many are worthy, like health or career success. Online influencers treat men's hopes and dreams as important in their own right.

Many offer teenage boys an aspirational vision of manhood. Some, like Mr. Peterson, say men are important for the sake of others, but present it as part of a heroic vision of masculinity in which men flourish as well. "You have some vital role to play in the unfolding destiny of the world," he writes in "12 Rules for Life," his 2018 bestseller. "You are, therefore, morally obliged to take care of yourself." Traditional authorities, especially in Protestant churches, talk about men being "servant leaders" but reduce that primarily to self-sacrifice and serving others. Pastors preach sermons wondering why men have so much energy left at the end of the day, or saying men shouldn't have time for hobbies. No wonder young men tune them out.

give practical advice and true if sometimes politically incorrect facts, such as those about the opposite sex. Men's relationships with women are primal. Nothing enhances these influencers' credibility like helping young men succeed with women. Teenage boys are hungry for information on what women find attractive. The gurus tell them

Popular online gurus offer young men a vision of masculinity that is both aspirational and realistic.

it's status, confidence, charisma, appearance and style. That's the opposite of what they're used to hearing. which is that women want men who emotionally affirm them and are ready to commit for the long term. Guys who go the sensitive nice-guy route only to be rejected can end up frustrated and bitter.

dan Peterson, on the other hand, says, "Girls are attracted to boys who win status contests with other boys." Which rings truer to you?

Most of these influencers have built online communities that serve as mutual support and encouragement networks for their followers. In an era of growing loneliness and social isolation, teenage boys can bond over furtively watching Andrew Tate videos that their parents and teachers deem dangerous. Because the traditional authorities typically don't have much of an organic following among young men, they don't generate the same kind of community. Where they do have a male audience, such as in churches, attempts at creating community are often hokey and weird. Most young men aren't drawn to groups that ask them to "hold each other accountable" for watching porn. An obvious if overlooked component of these influencers' success is that they're all men. It's common. especially in mainstream media, for women to be the ones sounding off about men's issues and shortcomings. In July, Politico published a

"Masculinity Issue," featuring four articles on the theme-every one of them written by a woman.

The good news is mainstream figures and traditional institutions that want to reach men can easily re-create the online influencers' success. They can have men talking to and about men. They can acknowledge that men are important in themselves, not only as servants to women and children. They can craft an aspirational vision of manhood that includes elements of sacrifice and service. They can build men up with practical insights and advice, even when the truth is unpopular. And they can crystallize community around them. None of these things are objectively hard to do.

Perhaps respectable society won't be able to reach those young men who are only looking to hustle women into sexual relationships. But as the range of online men's influencers shows, plenty of boys and young men are looking for healthy and productive leadership.

Online influencers challenge men to work harder and get better. Former Navy SEAL Jocko Willink encourages his followers to get up at 4:30 a.m. to work out. But they also

"Godliness is sexy to godly people," says Southern Baptist megachurch pastor Matt Chandler. Jor-

Mr. Renn is a senior fellow at American Reformer, a Protestant nonprofit.

Of Many Spin Experiments, Biden's Is the Worst

It was an interesting week in spin, and I don't use the term lightly since spin and reality can become intertwined to create BUSINESS

new realities. WORLD By Holman W.

Trump. He is fa-Jenkins, Jr. mous for being unbounded in his spinning about his wealth. It was Forbes magazine-not a New York Supreme Court judge last week trying to strip Mr. Trump of his property rights-that pointed out to Mr. Trump and its readers that what he

Take

Donald

consistently claimed was a 30,000square-foot triplex apartment in Trump Tower was 11,000 square feet.

Mr. Trump, in the case brought by New York's highly partisan attorney general Letitia James, testified that everybody knew the valuamethod employed tion was worthless (his word). He pointed to the standard disclaimer that such claims shouldn't be relied upon. He might have added: No counterparty with which he dealt-bank, insurance company, independent appraiser-could have been in any doubt that Donald Trump is Donald Trump, notorious purveyor of bombast and, early in his career, of banner-headline bankruptcies.

So informed, his counterparties didn't fail to write contracts that were realistic, even conservative, as testified by Mr. Trump's never defaulting on an obligation or missing a payment. Even the judge admits as much: "Defendants cor-rectly assert that 'the record is devoid of any evidence of default, breach, late payment, or any complaint of harm.' "

Judge Arthur F. Engoron engages in some spin and labored breathing of his own, nevertheless finding in Mr. Trump's hyperbolic real-estate puffery the crime of the century. The judge calls for Mr. Trump to be relieved of personal control of his assets, including his namesake Fifth Avenue tower, for the sin of overpraising them.

Happily, not everyone in the press was buying. As the New York Times's laudable Peter Coy points out, such an outcome would seem to "bump up against the layperson's standard of 'no harm, no foul.' "

Elsewhere in the world of spin, the Hollywood writers' strike ended this week after both sides admitted it was doing neither any good. As a membership organization, one whose leaders must submit to election, the union naturally proclaimed itself a winner. Trump-like, it even produced numbers, claiming the final outcome was worth \$233 million a year versus the studio's initial offer of \$86 million.

Hollywood strikers, an anti-Trump judge, and our incumbent president all take comfort in tall tales.

Uh huh. Actually proved was the uselessness of the strike weapon to grapple with the challenges facing Hollywood workers. The writers will get a bump in their pay rate along with minimum staffing and job-duration guarantees for the biggest shows. These increases won't remotely compensate them for the slowdown in production due to the streaming bust, only exacerbated by their own strike.

Every writer thinks his next show will be a "Seinfeld." The union was strangely determined, in the streaming era, to shift more risk to its members by tying pay to a program's success. But streamers not only closely control the data revealing whether a show is popular. Their algorithms will let them dial that popularity up or down based on whether they feel like making the desired "residual" payments.

As everybody from this column to Barry Diller pointed out, a work stoppage solves nothing. Streaming, digitization, the rule of the algorithm and artificial intelligence will still have to be endured and adapted to. Compounded by the still-unresolved actors' strike, the writers' walkout left all concerned only worse off.

No frantic campaign of spin has been more consequential, however, or less likely to convince, than the White House's spin about why Joe Biden is running for re-election. A deluge of disheartening polls has undercut the claim, once made openly and which the White House still quietly implies at the risk of ridicule: Mr. Biden is the only person who can beat Mr. Trump.

The obvious and irresistible rejoinder: Mr. Trump increasingly appears to be the only Republican Mr. Biden might be able to beat.

Even that's rapidly becoming less of a sure thing. Mr. Biden, among possible Democratic alternatives. seems the candidate most likely to hand the White House back to Mr. Trump. In clinging to his desire to be a two-term president, Mr. Biden threatens to be the agent of a Trump restoration even as he desperately portrays himself as the antidote to Trumpism.

Spinning this reality under the rug will be a tall order for the White House, even with the help of a compliant and blinkered national media. Convincing America that Mr. Biden is doing the country a favor by running will, I predict. become harder and nigh impossible in the 11 months between now and next year's Democratic National Convention.

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Not Disastrous Betting on catastrophe can pay quite well B14



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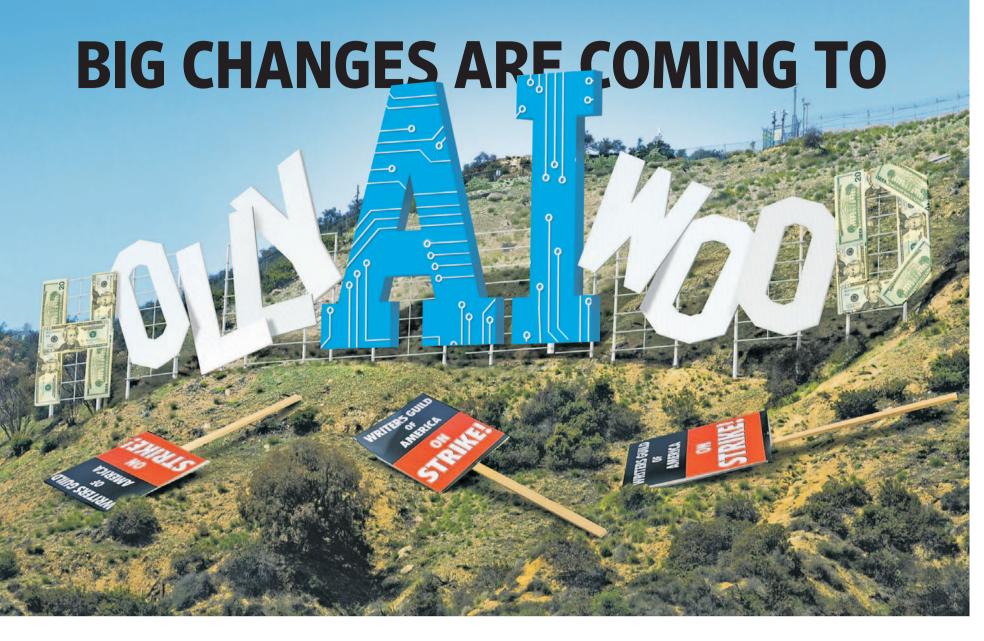
NASDAQ 13219.32 ▲ 0.1%

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10-YR. TREAS. ▲ 6/32, yield 4.572%

OIL \$90.79 **v** \$0.92

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ewer new shows in production. A higher bar to get shows renewed. Rich paydays going only to an elite few.

The pact Hollywood writers struck with studios and streamers didn't just end a five-month labor strike. It represented a formal end to "peak TV," a decade that included an explosion of programming for viewers—and job opportunities for talent in Tinseltown.

Writers won major concessions in the deal, including new bonus payouts and higher royalties. Those hard-won victories are especially important given the hard financial realities of the entertainment business

A combination of debt-laden mergers, mounting losses in streaming, and the fastshrinking cable TV bundle, has led to a push on Wall Street for entertainment companies to rein in spending.

The streamers will have to find a way to pay increased talent costs—from the writers settlement, along with an earlier deal with directors and whatever is finalized with actors-without adding to their overall production costs.

The end of the writers' strike marks a new era. Brace for fewer shows, costlier subscriptions and, maybe, consolidation of streaming services. Robots can help write. but human writers still get paid.

BY AMOL SHARMA AND JOE FLINT

That will likely mean that companies will make fewer new shows and cancel even more that are on the bubble. In effect, while many people in Hollywood will get better pay as a result of the deal, the contraction in spending means there will be less work to go around

"The gusher of spending—I don't see that marketplace coming back," said Kevin Reilly, who held top programming positions at Fox, NBC and the streaming service HBO Max, championing shows like "The Office" and "The Shield" along the way. "Everyone will get a better piece of what they've created. But if anyone is thinking, 'Let the good times roll!'-that won't happen.'

One veteran TV producer predicted the number of scripted shows Hollywood produces could fall by one-third in the next three years. "The contraction in investment in content will by definition restrict the amount of work that's needed," the executive said.

For most of a decade, streaming companies were antiestablishment insurgents. Now, streamers, from Netflix to Max to Disnev+ to Amazon Prime Video. are the new establishment, and the negotiations with writers reflected that.

Mike Royce, a writer-producer whose

credits include "Everybody Loves Raymond and the Netflix reboot of "One Day at a Time," said pushing for better terms was a no-brainer, regardless of whatever program-Please turn to page B4

Big Pension Funds Scale Back Holdings In Private Equity

By HEATHER GILLERS

Jared Gross's large corporate clients have been asking for a different kind of help over the past year. They want to rein in the long-term "alternative" investment portfolios they once clambered to build.

It is a change from the approach that Gross, JPMorgan's head of institutional portfolio strategy, has taken for more than a decade: shifting workers' retirement savings out of traditional stocks and bonds and into private equity and other complex strategies that can lock up money for a decade.

Locking up funds for a long period is unpopular now because for the first time in years, easy-totrade corporate bonds and bank loans offer appealing returns, thanks to rising interest rates. That has upended the retirement calculus for America's corporate giants, after many spent years chasing nontraditional investments whose managers promised they could earn a lot more than stocks and bonds.

Companies now increasingly want quick access to cash so they can buy higher-yielding bonds or sell off retirement obligations to insurance companies. Long lockup periods on private equity and other

private market investments mean they can't easily unwind those complex bets, though.

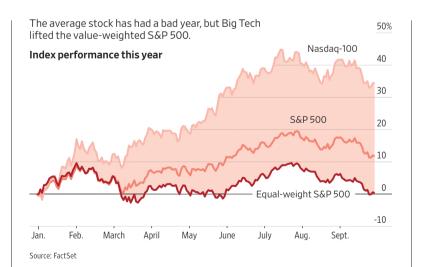
'Corporate pensions have probably gotten to the point where they are not going to be increasing their private market portfolios any further." Gross said.

U.S. corporate titans' holdings in assets other than traditional stocks and bonds have grown to nearly a quarter of their \$1.3 trillion in total pension investments, a record high, according to data compiled by Milliman from annual reports. These so-called alternative assets tend to be investments in hedge funds, private equity or real assets such as real estate-holdings that can be hard to value and difficult to sell.

Some big firms are scaling back. **General Mills** is currently aiming to wind down its investments in private equity and real assets to 17% from 22% of pension assets, the company said in its filings for the fiscal year that ended in May.

Pension beneficiaries of the packaged-foods company include nutritionists, corporate chefs and food safety managers. General Mills is moving more retirement savings into bonds, just as rising rates have bolstered returns on its growing fixed-income portfolio.

Please turn to page B13



STREETWISE | JAMES MACKINTOSH Yields Up, Stocks Down. **But Something's Missing.**



The joy of writing about markets is the struggle to piece together a puzzle with moving parts. Often

they neatly fit together. Right now, not so much.

The latest issue is the relationship-or not-between bonds and stocks. On Monday, the 10-year Treasury yield closed above 4.5% for the first time since 2007, and then rose more. On Tuesday, the equal-weighted version of the S&P 500 fell back enough to leave it down for the year so far.

The obvious explanation is

that stocks fall as bond yields rise-duh! The problem is that the normal, value-weighted version of the S&P 500 is up 12%, thanks to a handful of giant stocks that earlier this year rose a lot.

The gains came from excitement regarding generative AI lifting Big Tech. Those stocks are now such a big part of the index that they can move the market independently of what's going on in the rest of the economy. Because the equal-weight version of the index treats the giants Apple and Microsoft the same way it Please turn to page B5

UAW Expands Strike at GM, Ford

BY NORA ECKERT AND RYAN FELTON

The United Auto Workers union expanded its strike to a Ford Motor factory in Chicago and a General Motors plant in Michigan, citing a lack of progress at the bargaining table.

UAW President Shawn Fain said during a livestream address Friday that Chrysler parent Stellantis would be spared from further walkouts for now, saying the company delivered a proposal that made significant progress on the union's demands, including costof-living adjustments.

The new walkouts would add nearly 7,000 workers to the roughly 18,000 UAW members on strike across the three companies. at three assembly plants and dozens of parts-distribution facilities. The Detroit companies combined have about 146,000 union workers.

The union renewed its expansion of strikes at Ford after sparing the automaker last week because Fain said talks had been advancing at the time.

The latest walkouts offer further insight into the UAW's novel strike strategy. The union has been gradually expanding the Please turn to page B11

EXCHANGE

THE SCORE | THE BUSINESS WEEK IN FIVE STOCKS

Target's Theft Issues, **Amazon's Trust Issues**

AMAZON.COM



illegally wields monopoly power that keeps prices artificially high, locks sellers into its platform and harms its rivals. The agency's chair, Lina Khan, is a longtime critic of Amazon, and the Biden administration has taken an aggressive approach to enforcing antitrust laws. David Zapolsky, Amazon's general counsel, said: "The lawsuit filed by the FTC today is wrong on the facts and the law, and we look forward to making that case in court." Amazon shares lost 4% Tuesday.

'Amazon is now exploiting its monopoly power to enrich itself while raising prices and degrading service for the tens of millions of American families who shop on its platform and the hundreds of thousands of businesses that rely on Amazon to reach them.' —FTC Chair Lina Khan

TARGET

Target is closing a handful of stores in the New York City, Seattle, San Francisco and TGT Portland, Ore. markets, citing 2.5% theft and safety concerns.

Earlier this year, Target forecast that losses from theft as well as lost or damaged goods would cut into profitability by more than \$500 million. Big retailers say shoplifting is on the rise, leading to responses such as locking up merchandise, hiring off-duty police officers and closing some stores. Target's announcement follows a string of violent incidents at retailers. A

CVS store manager in Mesa, Ariz., was shot and killed in September after suspecting a man was stealing from the store. Target shares fell 2.5% Tuesday.

'Theft and organized retail crime are threatening the safety of our team and guests, and contributing to unsustainable business performance.' -Target's statement on the

store closures



President Biden joined auto workers on the picket line Tuesday.

FORD MOTOR

U.S. president to walk a

picket line, joining striking

auto workers in Michigan

Auto Workers are striking

on Tuesday. The United

at dozens of facilities owned by au-

and Stellantis, demanding pay raises

in the mid-30% range. The UAW on

Friday expanded its strike at Ford

and GM, but not at Stellantis. Ford

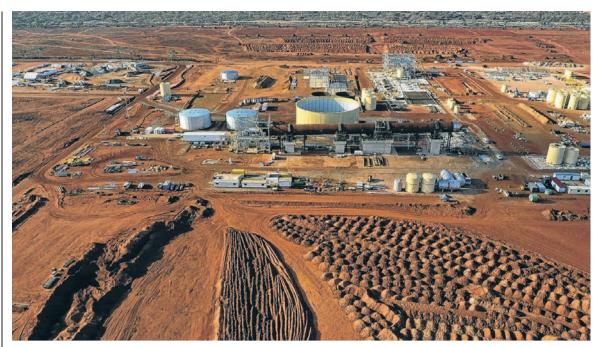
eral Motors shares fell 2.4%

shares lost 1.2% Tuesday, while Gen-

GameStop named activist in-







The cost of a Lynas Rare Earths plant in Australia is up by more than 25% in less than a year.

Surging Mining Costs Threaten Inflation and New Batteries

BHP says it costs more to produce commodities than before the pandemic

BY RHIANNON HOYLE

Adelaide, Australia wo years ago, Liontown Resources talked up its plan for a \$300 million lithium mine to help power the world's energy

transition Today the cost of the Kathleen Valley project in the red dirt of the Australian Outback is estimated at nearly \$600 million.

Liontown, which is a takeover target of Charlotte, N.C.-based chemical company Albemarle, says contractors are charging 30% more than previously estimated. Some engineering groups sat out tenders, reducing competition. A continuing shortage of workers in Australia's mining heartland that dates to the Covid-19 pandemic is driving up wages and forcing companies to hire less-skilled people.

"It is very challenging," said Tony Ottaviano, chief executive of Liontown, which has agreed to supply lithium to buyers including automakers Ford Motor and Tesla.

Inflationary bubbles haven't popped as readily in mining as in some industries. Cost blowouts on new projects have become a theme, and running existing operations has also grown more costly as labor markets remain tight while energy prices resume climbing.

Analysts warn these forces could push commodity prices-including for metals essential to the energy transition—higher for longer, and complicate central banks' efforts to contain inflation in the years to come. If manufacturers can't absorb potential price gains, households could end up paying more for metals-intensive products such as electric cars and air conditioners. "I think you are seeing capital costs to build new projects permanently get adjusted," said Graham Kerr, chief executive of South32, a \$10 billion miner of commodities ranging from coal to silver. In July. Rio Tinto said it now expects to spend \$335 million on a small plant at its Rincon lithium project in Argentina that carried an original budget of \$140 million. Lynas Rare Earths last month said inflationary pressures have helped drive up the cost of an Australian plant by more than 25% in less than a year.

On Monday, Australia's Allkemwhich has agreed to merge with Philadelphia-based Livent—raised development-cost estimates for lithium projects in Argentina and Canada and said they would also likely cost more to run. One project's cost came in 38% higher than a March 2022 estimate.

In some cases, higher costs partly reflect the increasing size of a project. But executives say the biggest engine for budget overruns is inflation.

How miners deal with cost pressures has implications for customers including automakers and construction companies. Commodity prices typically have a theoretical floor that reflects mining costs, as operations risk closure when they

million

The cost of a lithium mine in the Australian Outback, twice its initial budget

become unprofitable.

Since the start of June, prices of coal used in steelmaking are up as much as 45% while iron-ore prices have risen by more than 10%. Oil prices are bearing down on \$100 a

2.5 degrees Celsius above preindustrial levels. Limiting it to 1.5 degrees would cost \$2.7 trillion a year, mostly in metals-intensive clean-energy infrastructure, the U.K.-based firm said.

BHP Group, the world's largest miner by market value, said last month that the cost of producing commodities is now higher than before the pandemic. In the 12 months through June alone, BHP's output costs rose by roughly 9%.

Rivals including Rio Tinto, Glencore and Anglo American have also recently reported increased production costs. Last week, Morgan Stanley analysts raised their real longrun price forecasts for a bunch of mined commodities, including copper and lithium, to reflect continued increases in project costs and rising wages.

When a China-led investment boom lifted mining costs in the 2000s, it didn't have a big impact on inflation. Rising globalization and China's entry into the global trading system helped keep a lid on prices of many goods, including for U.S. imports, said AMP Capital's Oliver.

However, those trends are showing signs of reversing. The U.S. has sought to persuade countries to reduce their dependence on China, and Washington is among governments using subsidies to encourage companies to shift some elements of their production lines back home.

Miners have found technological fixes to cost problems before. And some metals can be swapped out for cheaper alternatives. Also, for some commodities, the prices of key raw materials used during the production process—such as caustic soda in making aluminum-have eased significantly.

GAMESTOP

1.2%



vestor Ryan Cohen as chief executive, ending a monthslong stretch during which the videogame retailer pursued turnaround efforts

without a CEO. Cohen joined the GameStop board in 2021, rose to chairman as part of board restructuring, and brought on former Amazon executive 쑵 Matt Furlong as CEO. Earlier this year, GameStop terminated Furlong. Cohen has sought to revive GameStop's sales by increasing focus on e-commerce and launching an NFT marketplace, but 🗟 those efforts have fallen flat. 🗄 GameStop shares **lost 1.8% Thursday**.

PELOTON INTERACTIVE

Fitness-equipment maker Peloton and yoga-wear giant Lululemon Athletica an-PTON nounced a five-vear partner-5.4% ship on Tuesday, ending turf wars between the two com-

panies. Lululemon said it would discontinue sales of its Studio Mirror home fitness device and steer those customers to Peloton's digital fitness classes instead, while Peloton will start selling co-branded Lululemon attire at its stores and website. The two companies have tried to move into each other's territory in recent years. Peloton shares gained 5.4% Thursday.

—Francesca Fontana

barrel, raising the cost of operating miners' typically large fleets of diesel-powered trucks.

'The cost of mining is only a small part of the overall cost of commodity prices, but it all adds up," said Shane Oliver. Svdnevbased chief economist at AMP Capital. "Particularly when increased military spending and decarbonization are increasing the demand for metals at a time when supply is constrained by years of low investment in new mines."

Record amounts of metals such as copper and lithium will be needed for an energy transition that consulting firm Wood Mackenzie estimated will cost \$1.9 trillion annually to limit global warming to

Still, multiple pressure points remain, miners and analysts say.

The royalties that miners owe to governments where they operate have been increasing in some parts of the world, as communities demand a greater share of natural-resources wealth.

Carbon-pricing policies, such as carbon taxes and emissions-trading systems, have the potential to accelerate cost increases across metals and other mined commodities. many of which require large amounts of energy to produce, according to Wood Mackenzie.

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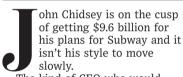
EXCHANGE

The Subway CEO Doesn't Like Slowpokes

As he gets new financial backing, John Chidsey plans overseas expansion, pushes sandwich revamp



By HEATHER HADDON



The kind of CEO who would rather run a private company than a public one, Chidsey struck a deal in August to sell the sandwich chain to private-equity firm Roark Capital. It will end nearly six decades of ownership by Subway's two founding families who built a Connecticut sandwich shop into a global company.

Chidsey, who counts freediving, or diving underwater without an oxygen tank, among his hobbies, said the chance to make big moves was part of what drew him to the sandwich company: Corporate turnarounds require fast moves and sweeping changes. There is a window in which employees, customers and owners are more willing to accept revolution, he said; move too slowly, and a teetering company could go under.

"You have permission to be bold or radical," Chidsey said. The 61-year-old CEO has been moving quickly since he was young. The son of a surgeon who moved his family around for school and the Navy, Chidsey entered North Carolina's Davidson College at 16 years old. He had sped through high school and had planned to work most of his senior year to save money, until his father nixed that plan.

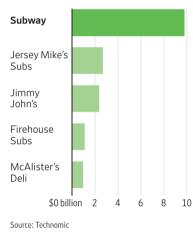
"He said, 'Figure out how to take an extra class and be done after your junior year,'" Chidsey said. He finished college at 20, and already had his next move in mind.

He spent his free time as a teenager reading about the Warburgs, the Rothschilds, J.P. Morgan and other legendary bankers and tycoons. By age 24 he'd earned J.D., M.B.A. and C.P.A. degrees. His first job out of graduate school was in investment banking.

He shifted to an executive role at international divisions of PepsiCo, traveling to shipyards and tomato-processing plants across the world.

He's lived in Germany, Austria and the U.K. Now he resides with his wife in Miami, where Subway opened its second headquarters during his tenure. He has two grown children and a boat he spends time on to relax when he's not eating out at restaurants, which does six times a week, he said.

Part of the appeal of leading private companies like Subway, for Chidsey, is the challenge of a turnaround. He's done it before—at real-estate and travel conglomerate Cendant and at Burger King. For Subway, he came out of retirement in 2019 to lead the effort, and has been hauling the chain's operations into the modern era ever since. U.S. sales at sandwich-chain restaurants, 2022



spree, selling Subway to big franchisees across the globe. He believes Subway can grow to around 60,000 locations through international expansion, a target that would make it the largest U.S. fast-food chain in the world by restaurant count. He is working his Rolodex to build the expantravel-related companies run by private-equity veteran Henry Silverman. As CEO of the firm's vehicle and financial-services divisions, Chidsey moved the autorental business Avis's headquarters and laid off workers, creating what he said was a more entrepreneurial company. He also brought Budget Rent a Car out of bankruptcy.

At 43, Chidsey was asked to take over running Burger King, America's second-largest burger chain at the time, making him the company's ninth CEO in 11 years. Chidsey departed in 2011 after the chain was bought by a different private-equity firm, and he took director gigs on corporate boards.

Executives who worked with him at Burger King said he was good at delegating. "He has a contagious calm," said Russ Klein, Burger King's past President, Global marketing.

Chidsey cut his retirement from the C-suite short when Subway called in 2019. The chain had been on the hunt for a new CEO for years following the death of the company's co-founder, Fred De-Luca, and the brief tenure of De-Luca's sister, Suzanne Greco. Helping to start Subway when he was 17 years old, DeLuca ran the chain like a mom-and-pop business, handing his cellphone number to big franchisees and regularly popping by stores. By the time he got to Subway, there was a store within 5 miles of roughly 92% of Americans, Chidsey said—too many, as sales were dropping. Chidsey recruited a team, cut corporate staff, renegotiated contracts and focused on improving established U.S. locations rather than building new ones. He moved much of the company's executive functions to Miami, closer to suppliers.

Subway in 2021 sought to speed up service by overhauling its menu, and spent \$80 million to add deli meat slicers to 20,000 U.S. restaurants, aiming to highlight freshness.

Chidsey said he has learned from his past mistakes. At Burger King, he laid off nearly all of the Canadian corporate staff and ran marketing and other functions from the U.S., saving several million dollars but leading to lower sales and frustrated franchisees. He reversed himself and brought back the Canadian team, he said.

At Cendant, Chidsey promoted a division head, going with support from the executive's team over

John Chidsey

- Average Subway meals a week: Lunch three days a week
- Out for dinner: Six nights a week
- **Favorite type of restaurant:** One with a good wine list
- Grew up in: Georgia, Hawaii, Alabama, Florida
 First is has Delivering
 - First jobs: Delivering newspapers and cutting lawns
 - Stress reliever: Boating
 - Weekday wakeup time: 6:00 a.m. to 6:30 a.m., no alarm needed

Chidsey's own misgivings. It was a poor fit, he said, and soon he was filling the position again.

"Lesson here is to go with your decision, with input of course," he said. "You own it and are accountable and can't blame others."

Subway's U.S. franchisees haven't always agreed with Chidsey. Bringing back a 2-for-\$10 footlong sub offer that some owners considered too cheap riled up tensions in 2020. Subway dropped that promotion, and several franchisees said the new menu items and deli meat slicers have elevated the chain's sales and standing among consumers.

Chidsey's favorite sandwich is the #12: the Turkey Cali Club, which is described as having ovenroasted turkey, bacon, fresh mozzarella and smashed Hass avocado. He eats lunch at Subway three times a week, often dining in the company's cafe. He's not shy about sampling the food where he works: While at Burger King, he averaged three meals there a week, frequently eating the chain's Chicken Fries and Whoppers.

He is on his own deal-making

sion, while aiming to resuscitate the brand by emphasizing fresher, premium ingredients.

With a private entity, you are "spending virtually all your time internally focused on simply running the company," he said.

Chidsey got his first crack at corporate restructuring at Cendant, a multibillion-dollar conglomerate of real-estate and Subway's sales are improving. The chain, which doesn't release its full financials publicly, said it had 10 quarters of same-store sales growth through June. U.S. customer counts are up in the first half of this year compared with 2022.

"I'm having fun," Chidsey said. "It beats sitting on your boat in Miami most days."

Meal-Kit Maker Blue Apron to Be Sold for \$103 Million

By LAUREN THOMAS

Wonder Group, the food-delivery startup led by former **Walmart** executive Marc Lore, said it has struck a deal to acquire meal-kit company **Blue Apron**.

Blue Apron shareholders are set to receive \$13 in cash per share of Class A common stock through a tender offer, valuing the company at about \$103 million.

That represents a more-than-130% premium to Thursday's closing price of \$5.49 but is a fraction of the price the stock was priced at when Blue Apron went public in June 2017.

Blue Apron shares more than doubled Friday to close at \$12.88 on the news.

New York-based Blue Apron was a pioneer in packaging fresh ingredients for easy-to-make meals sold online and in some retail locations. But after getting off to a buzzy start in 2012, the company struggled to juice sales and retain customers.

Supply-chain challenges and unstable ingredient costs have taken a toll on the business, as has an increasingly saturated meal-kit market, with rivals ranging from grocer Kroger to Amazon.

Blue Apron conducted a strategic review after the onset of the Covid-19 pandemic in 2020, but opted not to pursue a sale at the time.

In late 2022, the company said it would lay off about 10% of its corporate workforce.



Supply-chain challenges and unstable ingredient costs have taken a toll on the business.

Blue Apron in June closed a deal with FreshRealm, which delivers fresh meals to retailers, transferring its fulfillment centers, equipment and some staff in return for a muchneeded cash infusion of up to \$50 million.

FreshRealm, which owns about 16.5% of Blue Apron's outstanding shares of Class A common stock as a result of the deal, has agreed to exercise its warrant as part of the

Wonder transaction and tender its shares.

FreshRealm Chief Executive Michael Lippold said the company remains dedicated to supporting Blue Apron's continuing growth and delivering its meals.

Wonder has experienced its own ups and downs. The startup, founded in 2018, initially set out to build a network of truck-based restaurants preparing hot curbside meals drawn from popular chef-inspired menus.

But after a brief go across the New Jersey and New York suburbs, Lore earlier this year said he was scrapping plans to roll out the service nationwide and moving instead to a less-expensive restaurant-delivery model involving a network of kitchens. Wonder currently runs four bricks-and-mortar locations and will end the year with 10. The closely held company had been valued at roughly \$3.5 billion following a \$350 million funding round in June of 2022, the Journal reported at the time.

Lore said the deal for Blue Apron will bring him one step closer to achieving his goal of creating a "super-app" for meal time. "Making great food more accessi-

"Making great food more accessible was something that really bonded us early on in the discussions," he said. Wonder plans to continue Blue Apron's current operations and keep the brand.

Lore has made a name for himself in the retail industry by selling startups to industry behemoths. He sold Quidsi, an e-commerce site for diapers and other household goods, to Amazon for \$500 million in 2010. Jet.com, another internet venture he founded, was sold to Walmart in 2016 for \$3.3 billion. Lore joined Walmart to oversee the retailer's ecommerce business in the U.S.

Walmart eventually wound down Jet, folding the operation into its broader e-commerce business, and Lore left in early 2021 and took over as chief executive of Wonder later that year.

Lore has been beefing up Wonder's executive ranks, recently bringing on Blackstone alum Kelley Morrell as chief financial officer. He also recently hired former Sweetgreen executive Daniel Shlossman as its first chief growth and marketing officer.

EXCHANGE

Hollywood Prepares for Changes

Continued from page B1 ming cuts might be coming, because the old system wasn't working.

ing. "There is no, 'You'll cut off your nose to spite your face,' " he said. "Our faces had already been eaten. The world we were in, we had lost so much."

Writers were upset that streaming didn't offer the same rewards for success as traditional TV. Under the new deal, they secured bonuses when their streaming shows perform well. They were concerned about a movement toward smaller writing rooms—a cost-cutting measure as streamers continued to bleed money—and won a provision that imposes minimum staffing requirements.

The studios held the line on key issues. Streamers won't publicly release viewing data, despite the writers' demands for transparency, but instead will give data on how shows fared to the Guild confidentially to share with its members in aggregate form.

The studios also have a license to build artificial-intelligence tools and train them on writers' scripts, after rejecting a demand from writers that they pledge not to do so. However, writers get some significant AI protections, too. They won't lose out on writing credits or compensation when AI tools are used to assist in creating scripts.

Hollywood's current problems are structural issues much bigger than the familiar search for hits. The solutions are more likely to come from the boardroom than the writers' room.

The root problem is that there are too many streaming services. That is creating confusion for consumers and hopeless economics for the companies. Consolidation, whether in the form of mergers, joint ventures or bundles, has to come to the streaming world for the industry to be viable.

When do I start to see new episodes of my favorite shows?

Late-night shows including "Late Night With Seth Meyers" and Jimmy Fallon's "The Tonight Show" announced plans to return this coming week, though it will be hard to bring in actors as guests, since their still-unresolved strike limits promotional appearances. Drew Barrymore's daytime talk show plans to resume later in October.

Writing activities on scripted shows can resume—from broadcast shows like ABC's "Abbott Elementary" and NBC's "Law & Or-



* * * *



▲ Writers won significant concessions from producers, including better pay. But there's likely to be less work to go around after the new deal.

Scripted TV seasons from major streamers, change from a year earlier



<u>-100</u> 2020 '21 '22 '23

Notes: Uses three-month averages. Includes Amazon Prime Video, Apple TV+, Disney+, Max, Hulu, Netflix, Paramount+ and Peacock. Data are as of August 2023. For shows produced in the U.S. Source: Ampere Analysis



Production for hit shows like ABC's 'Abbott Elementary,' above, can't resume until a separate strike by the union representing actors is also resolved. It could take until late this year or even 2024 for production to restart.





der" franchise, to streaming and premium-cable fare like "Stranger Things" and "The White Lotus." But production can't start until the Screen Actors Guild reaches a labor deal with the studios. So it could still be many weeks—and for a lot of shows and movies, into 2024—before shooting begins.

The actors union told its members Wednesday that it planned to resume negotiations with studios and streamers Oct. 2 and that several executives from member companies planned to attend. Industry executives are optimistic that the union and studios will forge a deal by the end of October.

Will AI write TV shows in the future?

Not anytime soon. It's more likely that in the coming years AI will become a tool used to brainstorm ideas, sift through script submissions and provide building blocks for show concepts or dialogue as humans do the creative heavy-lifting. The faster applications of AI are in areas like visual effects.

That said, the two sides hashed out issues in the negotiations

A new deal between producers and the Writers Guild of America means writing can resume on premium-cable shows like HBO's 'The White Lotus.'

that will allow some AI-assisted work to begin. The new agreement will make it more important for Hollywood writers to learn how to best use these tools for their jobs.

"The basic storytelling tenets haven't necessarily changed, but the way you get to the end results is changing fast," said Jon Dudkowski, editor and director of "Star Trek: Discovery" and an adjunct professor at University of Southern California.

Ultimately, both the writers and the studios face a common threat in the AI world, said Doug Shapiro, a consultant to media companies. "If AI more broadly reduces the cost of creating content and the supply of good-enough content



As streaming services including Paramount+ pursue profitability, prices are likely to keep rising, a trend the strike settlement won't help curtail.

explodes, then the whole economic foundation of Hollywood is going to shift, if not crumble."

How is the new streaming era shaping up for consumers?

The cost of streaming subscriptions has risen sharply over the past year as entertainment companies' focus on acquiring customers and growth at all costs gave way to a profitability push. That trend is likely to continue, and the costs of the strike settlement will give streamers one more reason to lift prices.

Disney in August raised the price of its flagship streaming service, Disney+, and Hulu by more than 20% each, its second round of significant price hikes in about a year. Paramount's CEO said he plans to again raise the price of Paramount+. Others are likely to follow suit.

Consumers face an increasingly complicated array of subscription tiers and packages, as some streamers experiment with add-on sports plans and ad-supported tiers. Households will also have to pay for services they once enjoyed free of charge as part of family sharing arrangements as more services crack down on password sharing.

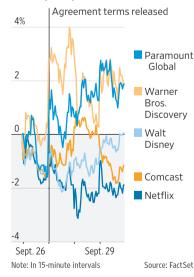
"Sometimes you'll have a wave of great content and other times not so much," said 36-year-old Tarrin Morgan II, who lives in Baltimore. Streaming services, he added, are "putting the price up, but there's not that great content all the time."

Morgan said he supported the striking writers and applauded the changes they won, but breathed a sigh of relief when he saw that the strike ended. He can't wait to



Drew Barrymore's talk show is to resume in October, though without actors as guests for the time being.

Share-price performance



watch new episodes of shows like "Abbott Elementary" and "Rap Sh!t," on Max.

Was the fight worth it for the talent?

There's no question that five months on the picket line paid off. The terms the Guild secured will make a meaningful difference in members' lives-no small achievement after months that left many in dire financial straits. Many writers complained about inadeguate residuals-the royalty payments from studios and producers for re-use of their work that have been a staple of compensation in the TV world since the 1950s. Foreign streaming residuals—a particular sore spot for writers-will increase 76% for the largest services under the deal. In one exam-



'Late Night With Seth Meyers' is among the shows set to resume production this coming week.

ple the Guild provided, the writer or writers on an hourlong show produced by Netflix will receive foreign residual payments amounting to a total of \$32,830 an episode over three years, from \$18,684 under the previous deal.

The most important win was that, as in traditional TV, the talent will get paid more in success. Shows watched by at least 20% of a streamer's domestic subscriber base in the first 90 days of release—or the first 90 days of subsequent years—will get a bonus.

Hits will reach that threshold. The second season of the culinary comedy "The Bear," which streams on Hulu, was watched by about 27% of the service's roughly 44 million subscribers in the five weeks after its late June release, according to a rough analysis of available Nielsen data. Netflix's "Queen Charlotte: A Bridgerton Story," would make the cut as well. Many shows, though, will have a tougher time.

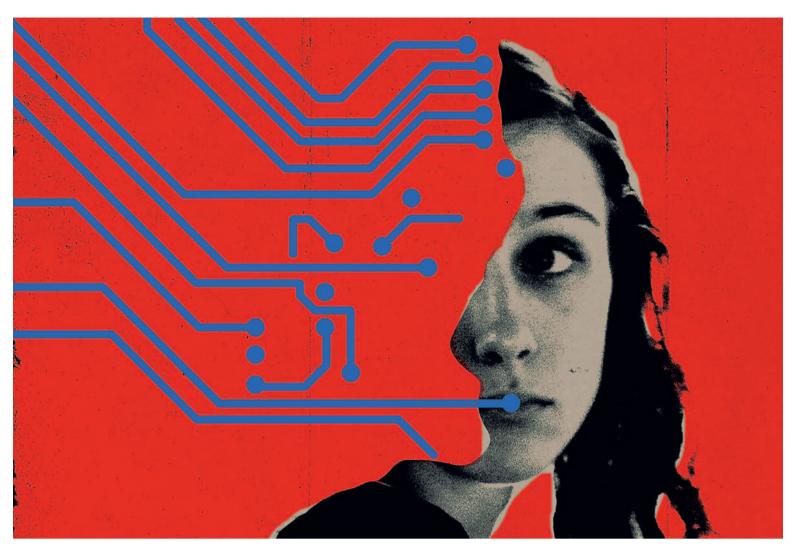
The bonus could be anywhere from about \$9,000 to around \$40,000 for the largest streaming services, depending on the type and length of the programming.

Royce said he hopes the introduction of advertiser-supported versions of Netflix and other streaming services will also help writers. Earlier, shows survived by proving they could attract new subscribers. Now, they can demonstrate their value in another way.

"Logic says if you have shows that are doing well with advertisers you are going to want more episodes of those shows," he said. "You have to keep making things the advertisers like."

-Sarah Krouse and Jessica Toonkel contributed to this article. * * * *

EXCHANGE



KEYWORDS | CHRISTOPHER MIMS

AI Is About to Be Everywhere. Skeptics Risk Being Left Behind.

Most of us will be using artificial intelligence soon enough. Those who don't? They'll be lumped in with the people who clung to the card catalog.



Jacky Liang is living in the future. An artificial-intelligence engineer in Philadelphia, he uses generative AI at work and in his per-

sonal life "as much as possible—to the point that even my girlfriend is like 'Babe, please.'"

The tools he's using—to look things up during his downtime, brainstorm for work, punch up his résumé, or write blog posts—go well beyond the kind of first-generation AI that is already embedded in our daily lives, sorting our social media feeds, catching credit card fraud and recognizing faces in our photos. The tools Liang relies on are all next-generation generative AIs, things like OpenAI's ChatGPT, Google's Bard, Anthropic's Claude, and Inflection's Pi.

Soon, most of us will use tools



Google recently rolled out changes to its Bard generative AI offering.

best effect remains an uncommon skill.

But recently, the giants of the U.S. tech industry made it clear they have plans to bring the capabilities of generative AI deep into tools most of us use every day, where they will be nearly impossible to avoid.

In just the past two weeks, Microsoft announced deep integration of generative AI tools across Windows 11; Google rolled out changes to its Bard generative AI that allow it to use all your documents, emails and calendar items as fodder; Amazon showed off the next generation of generative AI capabilities for its Alexa smart assistant, which should make it chattier and more flexible; and Meta announced it would make a chat-based assistant, as well as a host of other chatbots based on celebrities, available in Instagram, WhatsApp and Facebook. Even Apple—which has yet to announce its own text-based generative AI but is developing onelast week rolled out a new accessibility feature for iPhones that uses a different form of generative AI to clone a user's voice. The sudden accessibility and ubiquity of generative AI tools do not guarantee that they'll be used. And these are very much firstgeneration technologies, full of frustrating limitations. But if the utility that early adopters already get out of them is any indication, adoption by the masses will soon follow.

As more people use AI to help them generate written and visual communications more quickly, the volume of that content is likely to increase. This could mean AI will also be needed to respond to this uptick in information—in the form of better filters for it, but also in the use of AI to help generate responses to it.

Those who don't opt to use AI to help them summarize others' reports (likely generated with the help of AI), respond to emails (ditto) or adapt to new business processes (also created with the help of AI) risk drowning in a fire hose of communications and increased complexity.

Another way generative AI could make itself impossible to avoid: by becoming the default interface for information retrieved from the internet, and within companies. Already, one of the things language-based generative AI systems are pretty good at is search and summarization.

One potential stumbling block to the use of AI in this way: It often makes stuff up, a tendency that is inherent to the way it works, and may be unavoidable. This reduces its value somewhat, as it means that we can't just hand tasks over to AI, and all of its work must be checked. But AI is still pretty good at taking care of a lot of rote tasks—like writing often-used, boilerplate code or text—and can save its users time by turning them into editors, documents, but it also editorialized—correctly—that the ideas contained in them were at an early stage. (Note to future historians: The kind of low-key humiliation represented by a robot dispassionately observing that a human's ideas are half-baked began approximately...now.)

Becca Chambers is a senior vice president at Ottawa-based software company Alludo (formerly known as Corel). When she's planning a vacation, she uses OpenAI's ChatGPT and Google's Bard. Recently, she says, she used the two engines to plan an 8-day Hawaiian vacation, including helping her pick a hotel and coming up with

'AI feels like such an important tool that if you're not using it, you're missing out.'

itineraries for every day of the trip.

The whole process took two days, and played out as a dialogue between her and the chatbots. She'd give the bots parameters how many people were coming, their dietary restrictions, the fact that they'd be renting a car—and then she asked them to refine their suggestions, such as ranking hotels by price, and adding or subtracting items from their suggested itineraries.

Recently, Liang had to prepare for job interviews. He used Claude and ChatGPT to help, by having the bots pretend to be interviewers interested in hiring him for a product management role. He also uses them both at the beginning of the process of writing a blog post—to help brainstorm—and at the end—to turn his jumble of notes into a finished blog post, which he can then edit before posting.

Liang even uses one chatbot— Pi—as a kind of counselor, to help him process challenges in his life. "Sometimes you're not looking for someone to give you solutions, you're just looking for someone to listen to you and ask you targeted questions," he adds.

As more people come to rely on chat-based information retrieval, disinvestment in the old way of doing things could mean those who stick with plain-old search find themselves the contemporary equivalent of people who still used card catalogs and printed indexes when digital search was first ascendant.

The creeping ubiquity of generative AI both as a way to do things and an influencer of everything we're exposed to doesn't mean that any one of these tools or companies will succeed. The pace and simultaneity of all of these announcements from so many tech companies suggests that what's going on now is a manic land grab for our attention. money, and time. Not all of these tools will endure, especially given the mounting costs of running them. But the overall trajectory of generative AI seems clear—at least to those who are currently its most devoted users. And the history of productivity-enhancing automation suggests they may be right. "AI feels like such an important tool, that if you're not using it, you're missing out," says Chambers. "I think that's what AI isless effort. better results.'

like these, even if indirectly, unless we want to risk falling behind. We 🗄 will face a growing number of communications generated with AI assistance, plans made with their input, and even products they helped inspire. Productivity-en-ੋ hancing technology tends to img prove our output or make it more plentiful, forcing people to change how they work but not reducing the hours they spend at it. This means the gap between those using AI for productivity, and everyone else, threatens to widen into a chasm as we contend with more and more stuff produced by the

combination of human minds and new kinds of machine assistance.

A recent global survey of 10,000 people by tech and consulting firm Capgemini found that people who have used generative AI tools for basic tasks like searching for and summarizing information were on the whole highly satisfied with them. For now, the generative AI tools that can boost people's productivity require an early adopter's mindset, since the purveyors of these tools are still unknown to many, and using them to rather than content creators.

This talent for making information more accessible—and transforming it into other kinds of information more easily—is apparent in Google's new Bard rollout, called Extensions.

Enabling Bard to search and summarize across everything in your Google account yields, in my own experience, some astonishing results. For example, I asked it to summarize recent documents I'd created that contained ideas for a specific creative project. It not only delivered a succinct summary of the contents of these disparate

The Pieces To Solve the Market Puzzle

Continued from page B1 does tiddlers like the flooring manufacturer Mohawk Industries, it shows that the average stock has gone nowhere as rates rose. Puzzle solved.

The explanation is alluring, but leaves some parts out. Since the end of July. investors in the 10year Treasury note lost 4.6% as yields rose, and the S&P 500 is down 6.6%. The problem is that the equal-weight index fell harder, dropping 8.5%, even more than the Big Tech-dominated Nasdaq-100. It should be the other way round. AI isn't a great explanation for tech outperformance this time, because AI excitement has waned since July. This is clear from the plunge in smaller stocks that benefited from the theme, such as the robotic-warehouse company Symbotic (off 47% in August and September) and the software supplier C3.ai (down 39%).

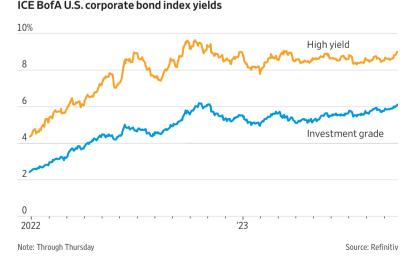
So what gives? Some of it is just that the markets puzzle has

lots of company-specific moving parts in the short run. Apple suffered from concern about its access to the Chinese market, while Amazon has just been slapped with an antitrust lawsuit. Several of the Big Tech stocks are now big enough to be akin to asset classes, so something stock-specific can overwhelm the macroeconomic factors that drive bond yields.

Some of it is that the explanation needs nuance. Sure, higher yields should hit growth and Big Tech more than the rest of the market. Making secure income from bonds more appealing naturally makes promised profits far in the future less appealing—and tech stocks are highly valued precisely because investors see a bright future for them.

But higher yields are the result of two things that can be good for at least some stocks. A stronger economy pushed the Fed to predict that rates will be higher for longer. Meanwhile, more government borrowing, in part to spend on industrial subsidies, pushes up the supply of bonds, and so their yields.

Investors like the strong economy and the government spending; they just don't like the higher rates and the extra borrowing. The confused causes might explain why there is no relationship be-



tween how expensive a stock was on a forward price/earnings multiple at the end of July and how it has moved since.

This is the latest example of a bigger problem for those of us trying to figure out markets.

For most of the past two decades, higher bond yields meant higher stock prices—the opposite of "duh." I think that's because investors focused on the profitboosting growth that caused the higher rates, and inflation was low enough to ignore. At the moment, investors are focused on inflation instead, so higher growth is bad.

The bond markets that really matter for stocks aren't Treasurys, but corporate debt. Companies that borrowed at floating rates have been hit hard, and borrowing costs are much higher than at the start of last year. But corporate bond yields provide another piece of the puzzle: While borrowing costs for the best companies have risen this year, junkbond yields are only back up to where they stood at the start of January, and both are lower than last October. This is because investor concerns about creditworthiness have waned somewhat.

Finally, the economy hasn't behaved the way economists expected. Higher rates haven't proven much of a drag on growth-yet. As recession predictions were pushed back, earnings expectations rose, further confusing the recent selloff. (Wall Street forecasts for next year's earnings have risen continuously since July, even as shares dropped.) A fall in shares driven by falling valuations, rather than falling earnings, ought to hit stocks with the highest valuations the hardest, but didn't. Huh.

I still fall back to a super-simple explanation for all this. Bond yields are up a lot this year, and the average S&P 500 stock has gone nowhere as a result, while smaller stocks are down. Some of the moving parts don't fit perfectly, but accept the outline and investors should remain worried about rising yields.

I expect higher rates to slow the economy, making 10-year Treasurys attractive at 4.5%, despite my worries about long-run inflation pressures. But this partial solution to the puzzle doesn't make stocks overall look like a great buy, even if their pullback makes them a bit cheaper than they were.

MARKETS DIGEST

13219.32

18.05

or 0.14%

All-time high:

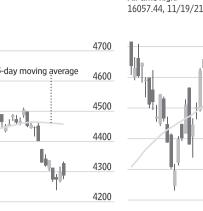






Sept.

Aug.



4100

Last Year ago



Nasdaq Composite Index

Trailing P/E ratio *† 29.55

P/E estimate **

Dividend yield **

Last

26.15

0.89

22.94

20.82

0.99

13300 13100 12900

_____ Aug. Sept

Trading Diary

Weekly P/E data based on as-reported earnings from Birinyi Associates Inc. ⁺Based on Nasdaq-100 Index

Major U.S. Stock-Market Indexes

•			Latest					52-Week —		— %	chg —	Volume, A	dvancers, l	Decliners
	High	Low	Close	Net chg	% ch	g	High	Low	% chg		3-yr. ann.		NYSE	NYSE Amer.
Dow Jones												Total volume*1	1,066,047,165	13,976,522
Industrial Average	33893.68	33407.45	33507.50	-158.84	-0.47		35630.68	28725.51	16.6	1.1	6.9	Adv. volume*	454,830,007	3,212,917
Transportation Avg	15121.43	14929.67	14968.77	-17.13	-0.11		16695.32	12058.26	24.1	11.8	9.8	Decl. volume*	598,644,010	10,001,971
Utility Average	827.90	810.99	816.55	1.02	- I	0.13	1002.11	815.53	-8.1	-15.6	0.3	Issues traded	2,974	325
Total Stock Market	43243.56	42666.26	4 27 88 .69	-110.72	-0.26		45969.67	36056.21	18.5	11.1	7.9	Advances	1,293	137
Barron's 400	975.14	961.78	963.10	-6.23	-0.64		1036.97	836.84	15.1	4.6	10.7	Declines	1,580	166
Nasdag Stock Marke	ət											Unchanged	101	22
Nasdag Composite	13382.98	13177.09	13219.32	18.05		0.14	14358.02	10213.29	25.0	26.3	6.0	New highs New lows	22 85	1 17
Nasdag-100	14901.85	14664.78		12.47	ï	0.08		10679.34	34.1	34.5	9.1		0.96	1.33
												Block trades*	4,566	130
S&P 500 Index	4333.15	4274.86	4288.05	-11.65	-0.27		4588.96	3577.03	19.6	11.7	8.7		Nasdag	NYSE Arca
			4288.05	-11.65	-0.27		4588.96 2728.44	2203.53		3.0	8.7 10.6	Total volume*		
MidCap 400	2534.29	2499.13			-0.50				13.6			Adv. volume*3	, ,	
SmallCap 600	1167.95	1149.30	1151.26	-7.86	-0.00		1315.82	1064.95	8.1	-0.5	10.5	Decl. volume*2		
Other Indexes												Issues traded	4,446	1,759
Russell 2000	1809.69	1781.05	1785.10	-9.21	-0.51		2003.18	1664.72	7.2	1.4	5.9	Advances	2,164	592
NYSE Composite	15572.17	15364.99	15398.21	-79.86	-0.52		16427.29	13472.18	14.3	1.4	6.9	Declines	2,056	1,134
Value Line	545.04	537.91	538.95	-1.34	-0.25		606.49	491.56	9.6	0.5	5.7	Unchanged	226	33
NYSE Arca Biotech	5062.85	5008.48	5014.81	-10.88	-0.22		5644.50	4509.45	11.2	-5.0	-2.1	New highs	37	5
NYSE Arca Pharma	891.50	880.55	882.45	-4.38	-0.49		925.61	741.56	19.0	1.7	10.4	New lows	146	31
KBW Bank	79.39	78.05	78.29	0.11	1	0.14	115.10	71.96	-18.3	-22.4	2.8	Closing Arms [†]	0.69	0.90
PHLX [§] Gold/Silver	109.93	106.50	107.48	-0.38	-0.35		144.37	96.42	6.5	-11.1	-9.1	Block trades*	40,409	1,905
PHLX [§] Oil Service	97.15	94.26	94.51	-2.81	-2.89		98.76	59.93	57.7	12.7	49.9	* Primary market NY		, ,
PHLX [§] Semiconductor	3481.79	3421.54	3434.29	13.30		0.39	3861.63	2162.32	48.9	35.6	15.3	(TRIN) A comparison issues with the volu		5
Cboe Volatility	17.74	15.83	17.52	0.18		1.04	33.63	12.82	-44.6	-19.2	-12.6	Arms of less than 1		5 5
§ _{Nasdaq} PHLX							5	Sources: Facts	Set; Dow J	lones Mar	ket Data	indicates selling	pressure.	

International Stock Indexes

				— Latest —	YTE
Region/Country	y Index	Close	Net chg	% chg	% cho
World	MSCI ACWI	656.82	0.10	0.01	8.5
	MSCI ACWI ex-USA	289.49	1.29	0.45	2.9
	MSCI World	2853.24	-2.64	-0.09	9.6
	MSCI Emerging Markets	952.78	8.70	0.92	-0.4
Americas	MSCI AC Americas	1626.64	-3.79	-0.23	11.6
Canada	S&P/TSX Comp	19541.27	-49.47	-0.25	0.8
Latin Amer.	MSCI EM Latin America	2301.44	25.97	1.14	8.1
Brazil	BOVESPA	116565.17	834.41	0.72	6.2
Chile	S&P IPSA	3289.25	4.90	0.15	3.7
Mexico	S&P/BMV IPC	50874.98	-679.97	-1.32	5.(
EMEA	STOXX Europe 600	450.22	1.72	0.38	6.0
Eurozone	Euro STOXX	440.92	2.18	0.50	7.5
Belgium	Bel-20	3553.01	33.23	0.94	-4.0
Denmark	OMX Copenhagen 20	2124.50	-8.96	-0.42	15.
France	CAC 40	7135.06	18.82	0.26	10.
Germany	DAX	15386.58	63.08	0.41	10.
Israel	Tel Aviv	1844.61		Closed	2.
Italy	FTSE MIB	28243.26	80.23	0.28	19.
Netherlands	AEX	728.79	2.80	0.39	5.8
Norway	Oslo Bors All-Share	1497.15	1.11	0.07	9.9
South Africa	FTSE/JSE All-Share	72382.89	-123.10	-0.17	-0.9
Spain	IBEX 35	9428.00	1.20	0.01	14.
Sweden	OMX Stockholm	795.37	7.68	0.97	1.
Switzerland	Swiss Market	10963.50	45.71	0.42	2.
Turkey	BIST 100	8334.94	116.20	1.41	51.
U.K.	FTSE 100	7608.08	6.23	0.08	2.
U.K.	FTSE 250	18279.42	180.74	1.00	-3.(
Asia-Pacific	MSCI AC Asia Pacific	157.33	0.67	0.43	1.0
Australia	S&P/ASX 200	7048.60	23.84	0.34	0.1
China	Shanghai Composite	3110.48		Closed	0.
Hong Kong	Hang Seng	17809.66	436.63	2.5	l -10.0
India	S&P BSE Sensex	65828.41	320.09	0.49	8.
Japan	NIKKEI 225	31857.62	-14.90	-0.05	22.
Singapore	Straits Times	3217.41	10.42	0.33	-1.
South Korea	KOSPI	2465.07		Closed	10.
Taiwan	TAIEX	16353.74		Closed	15.
Thailand	SET	1471.43	-10.71	-0.72	-11.3

Percentage Gainers...

-							
Company	Symbol	— La Close	itest Sess Net chg	ion — % chg	High	- 52-Wee Low	ek
Blue Apron CI A	APRN	12.88	7.39	134.52	70.68	4.70	-81.4
BTC Digital	BTCT	3.58	1.55	76.35	9.93	1.75	-50.3
CF Acqn VIII CI A	CFFE	25.98	7.98	44.33	32.90	9.85	153.5
OceanPal	OP	2.93	0.79	36.92	102.00	1.26	-95.2
Structure Therap ADR	GPCR	50.42	12.95	34.56	65.51	20.80	
Mercato Ptrs Acqn Cl A	MPRA	11.73	2.63	28.90	12.12	8.63	16.7
MicroAlgo	MLGO	2.86	0.58	25.44	71.50	1.12	-72.4
Anzu Special Acqn I Cl A	ANZU	7.02	1.38	24.38	11.72	5.21	-28.6
Iridex	IRIX	2.54	0.47	22.71	2.74	1.31	5.4
Lixte Biotechnology	LIXT	2.45	0.45	22.50	27.00	1.58	-56.3
Sonder Holdings	SOND	8.21	1.49	22.17	48.20	5.40	-75.3
EzFill Holdings	EZFL	2.69	0.41	18.00	6.00	1.46	-45.4
Doma Holdings	DOMA	5.08	0.72	16.51	23.60	3.86	-53.8
Aenza ADR	AENZ	2.50	0.35	16.28	5.90	1.52	15.7
Groupon	GRPN	15.32	1.97	14.71	15.78	2.89	92.5
Percentage Los	iers						
•			test Sess			-52-Wee	
Company	Symbol	Close	Net chg	% chg	High	Low	% chg
Glimpse Group	VRAR	1.84	-1.41	-43.38	6.90	1.75	-65.2
Capricor Therapeutics	CAPR	3.42	-2.40	-41.19	8.22	3.30	-43.0
Presto Automation	PRST	1.43	-0.97	-40.29	5.74	1.23	-30.2
Adlai Nortye ADR	ANL	15.00	-8.00	-34.78	23.00	15.00	
Athena Consumer Acqn A	ACAQ	7.46	-2.10	-21.97	12.80	7.25	-25.8
Lifezone Metals	LZM	12.27	-3.22	-20.79	19.92	8.32	21.0
Bionomics ADR	BNOX	2.70	-0.67	-19.88	10.90	0.93	-56.9
Spectral AI	MDAI	2.57	-0.56	-18.00	19.50	2.53	-73.9
Rani Therapeutics	RANI	2.18	-0.48	-17.92	10.80	2.07	-77.3
Avinger	AVGR	5.39	-1.17	-17.84	24.30	4.14	-68.8
Corcept Therapeutics	CORT	27.25	-5.75	-17.41	34.28	17.86	6.3
Kaixin Auto Holdings	KXIN	1.67	-0.35	-17.33	12.60	1.60	-85.5
Carmell Therapeutics	СТСХ	3.60	-0.65	-15.23	13.31	2.60	-63.0
Foghorn Therapeutics	FHTX	5.00	-0.83	-14.24	9.97	4.51	-41.7
Opera ADR	OPRA	11.27	-1.77	-13.57	28.58	3.92	159.7

Track the Markets: Winners and Losers Year ago

* * * *

Index

A look at how selected global stock indexes, bond ETFs, currencies and commodities performed around the world for the week.

	ommodity, Exchange- raded in U.S.* traded fund
vs. U.S. dollar ti Nymex natural gas	
Comex copper	
Nymex ULSD	1.69
S&P 500 Energy	
Nymex crude Russell 2000	
BOVESPA Index	
WSJ Dollar Index	
S&P SmallCap 600	0.42
S&P MidCap 400	
Norwegian krone	
S&P 500 Materials Nasdaq-100	
iSh 1-3 Treasury	-
Nasdaq Composite	
Chinese yuan	0.04
	S&P 500 Communication Svcs
	Indian rupee S&P 500 Information Tech
-0.09	
	Dow Jones Transportation Average
	Australian dollar
	S&P 500 Consumer Discr
	S&P BSE Sensex
	S&P/ASX 200 U.K. pound
	iShiBoxx\$HYCp
-0.48	
-0.55	Canadian dollar
-0.67	STOXX Europe 600
-0.69	VangdTotIntIBd
-0.69	Euro area euro CAC-40
-0.70	Shanghai Composite
-0.71	Japanese yen
-0.74	S&P 500
-0.78	IBEX 35
-0.86	iSh TIPS Bond
-0.87	Indonesian rupiah Euro STOXX
-0.92	iSh 7-10 Treasury
-0.94	South African rand
-0.94	Swiss franc
-0.98	VangdTotalBd
-0.99 -1.10	FTSE 100 DAX
-1.11	S&P 500 Health Care
-1.16	FTSE MIB
-1.19	Mexican peso
-1.21	S&P/TSX Comp
-1.28	South Korean won Bloomberg Commodity Index
-1.34	Dow Jones Industrial Average
-1.37	iShNatlMuniBd
-1.37	Hang Seng
-1.54	iShJPMUSEmgBd
-1.55 -1.58	S&P/BMV IPC S&P 500 Financials
-1.59	S&P 500 Real Estate
-1.63	Lean hogs
-1.64	Soybeans
-1.68	NIKKEI 225
-1.72 -1.73	KOSPI Composite Russian ruble
-1.75	iShiBoxx\$InvGrdCp
-2.09	S&P 500 Consumer Staples
-3.00	iSh 20+ Treasury
.10	Comex gold
	Nymex RBOB gasoline Comex silver
	Wheat
	S&P 500 Utilities
onth contracts	

*Continuous front-month contracts

-4.76 -5.89 -6.56 -6.99

Sources: FactSet (indexes, bond ETFs, commodities), Tullett Prebon (currencies).

Most Active Stocks

Company	Symbol	Volume (000)	% chg from - 65-day avg	Latest S Close	Session % chg	52-W High	eek Low
EBET	EBET	374,095	206.2	0.03	-39.00	2.66	0.03
Novo Integrated Sciences	NVOS	222,276	380.8	0.30	48.36	1.17	0.07
RVL Pharmaceuticals	RVLP	179,181	4541.9	0.09	10.88	2.42	0.08
ProSh UltraPro Shrt QQQ	SQQQ	162,231	32.4	20.44	-0.20	69.55	16.38
Femasys	FEMY	159,034	2091.7	2.98	96.05	3.62	0.25

Common stocks priced at \$2 a share or more with an average volume over 65 trading days of at least 5,000 shares thas traded fewer than 65 days

14%

-7

-14

2022

2023

Forex Race

Yen, euro vs. dollar; dollar vs.

major U.S. trading partners

Euro

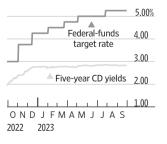
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WSJ Dollar Inde

Consumer Rates and Returns to Investor

U.S. consumer rates

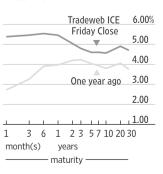
A consumer rate against its benchmark over the past year



Selected rates	
5-year CDs	
Bankrate.com avg†:	2.83%
Barclays Bank	4.50%
Wilmington, DE	888-720-8756
Quorum Federal Credit Union	4.50%
Purchase, NY	800-874-5544
First Internet Bank of Indiana	4.59%
Indianapolis, IN	888-873-3424
First National Bank of America	4.65%
East Lansing, MI	800-968-3626
Popular Direct	4.65%
Miami Lakes, FL	800-274-5696

Interest rate		late (%) -) Week ago		/eek Rang 2 4 6	e (%) — 8 High	3-yr chg (pct pts)			
Federal-funds rate target	5.25-5.50	5.25-5.50	3.00		5.50	5.25			
Prime rate*	8.50	8.50	6.25		• 8.50	5.25			
SOFR	5.31	5.30	2.96		5.32	5.23			
Money market, annual yield	0.48	0.59	0.20 💌		0.60	0.26			
Five-year CD, annual yield	2.83	2.83	1.94	•	2.86	2.20			
30-year mortgage, fixed [†]	7.90	7.91	6.36		• 7.98	4.89			
15-year mortgage, fixed [†]	7.05	6.94	5.54		• 7.05	4.48			
Jumbo mortgages, \$726,200-plus	7.95	8.00	6.35		• 8.06	4.92			
Five-year adj mortgage (ARM) [†]	6.64	6.55	5.21		6.67	3.78			
New-car loan, 48-month	7.47	7.47	5.67		• 7.64	3.33			
Bankrate.com rates based on survey of over 4,800 online banks. #Base rate posted by 70% of the nation's largest banks.† Excludes closing costs. Sources: FactSet: Dow Jones Market Data: Bankrate.com									

Treasury yield curve
Yield to maturity of current bills,
notes and bonds



Sources: Tradeweb ICE U.S. Treasury Close; Tullett Prebon; Dow Jones Market Data

Corporate Borrowing Rates and Yields

Bond total return index	Close		l (%) — Week ago	— 52-W High	/eek — Low	Total Return (%) 52-wk 3-yr
U.S. Treasury, Bloomberg	2055.060	4.850	4.780	4.920	3.610	-1.122 -5.905
U.S. Treasury Long, Bloomber	rg 2876.220	4.850	4.660	4.870	3.610	-10.033 -15.963
Aggregate, Bloomberg	1923.860	5.370	5.260	5.430	4.180	0.329 -5.255
Fixed-Rate MBS, Bloomber	rg 1888.170	5.520	5.350	5.600	4.140	-0.772 -5.091
High Yield 100, ICE BofA	3294.706	8.449	8.346	8.753	7.022	10.600 1.699
Muni Master, ICE BofA	548.669	4.111	3.858	4.128	2.757	2.422 -2.241
EMBI Global, J.P. Morgan	n.a.	n.a.	8.158	n.a.	n.a.	n.a. n.a.
5	Sources: J.P. N	/lorgan; Bl	loomberg F	Fixed Inco	me Indic	es; ICE Data Services

THE WALL STREET JOURNAL

Methodology

Performance reflects price change (except DAX, Bovespa, and Tel Aviv 35, which reflect total returns). Commodities are represented by the continuous front-month futures contract. Bond exchange-traded fund performance may diverge from that of their underlying index. Bond categories are represented by the following ETFs: U.S. Bonds Total Market: Vanguard Total Bond Market; 1-3 Yr U.S. Treasury: IShares 1-3 Year Treasury; U.S. 7-10 Yr Treasury: IShares 7-10 Year Treasury; 20+ Yr U.S. Treasurys: IShares 20+ Year Treasury; Treasury Inflation-Protected Securities (TIPS): IShares TIPS; Investment Grade Corporate Bonds: IShares iBoxx \$ Investment Grade Corporate; High Yield Corporate Bonds: IShares IBoxx & High Yield Corporate; Municipal Bonds: iShares National Muni; International Bonds: Vanguard Total International; Emerging Market Bonds: iShares J.P. Morgan USD Emerging Markets.



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Currencies

U.S.-dollar foreign-exchange rates in late New York trading

	gir enter	angen	US\$ vs.		aanig		US\$ vs.
Country/currency	in US\$	Fri per US\$	YTD chg (%)	Country/currency	in US\$	Fri per US\$	YTD chg (%)
Americas	mosφ	per 054	(/0)	Vietnam dong	.00004114	24305	
Argentina peso	00202	350.0565	98.1	Europe			
Brazil real		5.0326		Czech Rep. koruna	.04331	23.092	2.3
Canada dollar	.1967	1.3579	-4.0	Denmark krone	.04551	7.0528	1.5
Chile peso	.001122		5.1	Euro area euro	1.0573	.9459	1.5
	.001122				.002713	.9459	
Colombia peso				Hungary forint			
Ecuador US dollar	1	-	unch	iceland krona	.007255	137.83	-2.6
Mexico peso		17.4206		Norway krone	=	10.7263	9.4
Uruguay peso	.02597	38.5079	-3.7	Poland zloty		4.3743	
Asia-Pacific				Russia ruble		98.000	32.9
Australia dollar	.6433	1.5545	5.9	Sweden krona		10.9222	4.6
China yuan	.1371	7.2952	5.8	Switzerland franc	1.0922	.9156	
Hong Kong dollar	.1277	7.8313	0.3	Turkey lira		27.4086	
India rupee	.01202	83.178	0.5	Ukraine hryvnia		36.9500	0.3
Indonesia rupiah	.0000645	15493	-0.5	UK pound	1.2199	.8197	-0.8
Japan yen	.006695	149.37		Middle East/Afri	ca		
Kazakhstan tenge	.002092		3.3	Bahrain dinar	2.6539	.3768	-0.1
Macau pataca	.1239	8.0704	0.3	Egypt pound		30.9109	
Malaysia ringgit	.2130	4.6953	6.6	Israel shekel		3.8086	8.0
New Zealand dollar	.5993	1.6686	6.0	Kuwait dinar	3.2348	.3091	1.0
Pakistan rupee		287.750		Oman sul rial	2.5974	.3850	
Philippines peso	.00940	56.632	1.7	Qatar rial	.2747	3.641	
Singapore dollar	.7320	1.3661	1.9	Saudi Arabia riyal		3.7506	
South Korea won	.0007391		7.2	South Africa rand		18.9302	
		324.60		South Africa Fand	.0520	10.9202	11.2
Sri Lanka rupee Taiwan dollar	.0030807				Close Net C	ha % Cha '	YTD%Chn
	.03101	32.246	5.2	WSJ Dollar Index 1		03 0.03	3.73
Thailand baht	.02735	36.560	5.6	wash ndex 1	00.15 0.0	15 0.05	2.75
Sources: Tullett Prebo	on, Dow Jon	es Market	Data				

Commodities

		Friday			52-Week			
	Close	Net chg	% Chg	High	Low	% Chg	% chg	
DJ Commodity	1002.86	-9.96	-0.98	1071.61	930.59	-0.13	-4.37	
Refinitiv/CC CRB Index	284.53	-2.52	-0.88	290.29	253.85	6.05	2.44	
Crude oil, \$ per barrel	90.79	-0.92	-1.00	93.68	66.74	14.22	13.12	
Natural gas, \$/MMBtu	2.929	-0.016	-0.54	7.308	1.991	-56.71	-34.55	
Gold, \$ per troy oz.	1848.10	-12.30	-0.66	2048.00	1627.30	11.17	1.56	

Sources: FactSet; Dow Jones Market Data; Bankrate.com

* * * *

0pen

3.343

3.597

3.248

3.019

2.991

Corn (CBT)-5,000 bu.; cents per bu.

Oats (CBT)-5,000 bu.; cents per bu.

487.50

446.50

March'24 1331.50 1336.75

392.40

391.80

58.61

56.91

16.09

16.38

March'24 607.00 613.25

503.00

Dec

Jan'24

March

April

May

Dec March'24

Dec March'24 466.75

Nov

Oct

Dec

Oct

Nov

Dec

Dec March'24

Oct

Oct

Jan'24

Contract

Low

3.255

3.512

3.178

2.959

2.983

475 50

490.50

425.50

447.00

1272.50

1307.00

374.30

380.80

57.29

55.66

15.83

16.15

▼ 540.00 ▼ 571.75

▼ 662.00 ▼ 671.00

Agriculture Futures

High hilo

3.382

3.632

3.278

3.033

3.051

490.00

504.75

456.50

466.75

392.40

392.00

58.77

57.30

16.09

16.38

Cattle-Feeder (CME)-50,000 lbs.; cents per lb. 254.725 254.725 257.475 257.475

Cattle-Live (CME)-40,000 lbs.; cents per lb

186.350 186.350

Soybean Oil (CBT)-60,000 lbs.; cents per lb.

Rough Rice (CBT)-2,000 cwt.; \$ per cwt.

Wheat (CBT)-5,000 bu.; cents per bu.

Wheat (KC)-5,000 bu.; cents per bu. 685.00 691.75 693.00 699.25

579.50 585.50

Soybeans (CBT)-5,000 bu.; cents per bu. 1300.50 1305.50

Sovbean Meal (CBT)-100 tons: \$ per ton.

Settle

3.312

3.565

3.220

2.995 3.016

Chg

-.028

-.028 131,328

-.029 122,618

-.018

-.015

476.75 -11.75 735.785

491.75 -11.50 252,971

1275.00 -25.50 323,141

1310.25 -21.25 132,816

381.20 -10.30 213.244

-.22

-.21

541.50 -37.25 253,294

573.50 -33.00 81,840

663.75 -21.25 123.930

672.25 -20.75 50,337

432.50 -12.00

450.50 -10.75

375.90 -16.50

57.44 -1.09

55.83

15.91

16.23

252.025 **252.475** -2.250

254.525 **254.900** -2.775 19,433

184.075 **184.200** -2.300 37,705

MARKET DATA

Oper

interest

91,275

90,080

47,428

3,105

4,812

2,163

8,865

1,218

7,616

-1.08 175,902

793

Futures Contracts

	Me	etal & P	etr	oleum	Futur	es						
	inte		ntrac		in arean		Open					
	Open		ni lo	Low	Settle	Chq	interest					
Copper	-Hiah (c	MX) -25,00	0 lbs	: \$ per lb.								
Oct	3.7380	3.7665		3.7175	3.7260	0.0315	2,050					
Dec	3,7125	3,7860		3.7115	3,7375	0.0295	147,233					
Gold (C	MX)-100 tr	roy oz.; \$ pe	r tro	y oz.								
Oct	1864.30	1872.30		1846.00	1848.10	-12.30	5,325					
Nov	1873.00	1887.30	-	1853.40	1856.90	-12.60	920					
Dec	1882.30	1896.70	\blacksquare	1862.30	1866.10	-12.50	370,465					
Feb'24	1902.30	1915.90	-	1881.50	1885.40	-12.60	26,090					
April	1918.10	1934.10	\blacksquare	1900.40	1904.00	-12.60	11,559					
June	1937.20	1952.40	▼	1920.00	1923.20	-12.60	7,193					
Palladium (NYM) - 50 troy oz.; \$ per troy oz.												
Oct					1255.20	-22.70	3					
Dec	1281.50	1299.00		1248.00	1256.00	-22.50	16,799					
Platinum (NYM)-50 troy oz.; \$ per troy oz.												
Oct	904.40	920.90		902.80	906.80	1.50	609					
Jan'24	916.10	935.50		912.10	915.90	0.80	73,015					
Silver (0 troy oz.; 9	\$ per									
Oct	22.775	23.575	\blacksquare	22.285	22.236	-0.279	306					
Dec	22.840	23.805		22.325	22.450	-0.291	112,893					
		Sweet (NYN									
Nov	91.76	93.10		90.35	90.79	-0.92	332,250					
Dec	89.70	90.96		88.45	88.80	-0.79	263,820					
Jan'24	87.89	89.09		86.74	86.98	-0.77	156,583					
March	84.84	85.82		83.72	83.88	-0.67	90,015					
June	81.91	82.83		80.97	81.12	-0.58	162,657					
Dec	78.48	79.31		77.72	77.86	-0.45	140,161					
		D (NYM)-4	12,00									
Oct	3.3451	3.4066		3.3268	3.3622	.0442	1,727					
Nov	3.2868	3.3564		3.2694	3.3006	.0302	91,424					
		BOB (NYN	1) -42			0/54	4 70 /					
Oct	2.5155	2.5221		2.4326	2.4399	0654	4,706					
Nov	2.4745	2.4858		2.3925	2.3995	0667	126,573					
		M) -10,000	MN			01.1	200.274					
Nov	2.949	2.997		2.855	2.929	016	288,276					

Exchange-Traded	
Portfolios	

Largest 100 exchange-traded funds, latest session

Friday, September 29, 2023

XLP 68.81

DFAC 26.20

XLC 65.57 **XLY** 160.98

 XLE
 90.39

 XLF
 33.17

 XLV
 128.74

 XLU
 128.74

 XLU
 128.74

 XLI
 101.38

 QQQM
 47.93

 RSP
 141.69

 DGRO
 49.53

 IEFA
 64.35

 IEFA
 64.35

 ILM
 94.93

 IJH
 249.35

 JJH
 249.35

 JJR
 94.33

 IJR
 94.33

 IJR
 94.33

 IJR
 94.33

 IJR
 94.34

 IOSW
 72.38

 QUAL
 131.79

 IAU
 34.72

 AGE
 94.04

 IQD
 102.54

 IGSB
 48.80

 ACWI
 92.37

 IWB
 254.91

 IWW
 265.92

 IWM
 151.82

 IGSB
 49.83

 MUB
 10.76.41

 IFF
 103.72

69.25 234.91 265.99 151.82 176.74 68.42 153.84 107.64 91.59 110.47 103.72 88.69 22.04 53.56 50.18 49.43 35.62 91.82 334.95 171.45 31.01 41.26

50.26 59.28 427.48 33.96 49.85

70.76 50.60 72.72

456.64

SPDW SPYV SPLG SPYG SPY

SCHF SCHB

SCHD SCHX

SCHG MDY

-0.53 0.12 0.07 -0.27 -0.42 -0.33 0.02 -0.25 -0.22 -0.32 -0.64 -0.10 -0.55 -0.22 -0.17 -0.17 -0.28 -0.29 -0.29 -0.29 -0.29 -0.69 -0.69 -0.69 -0.69 -0.69 -0.69 -0.69 -0.69 -0.69 -0.69 -0.29 -0.21 -0.21 -0.21 -0.21 -0.22 -0.

34.6 34.5 0.3 -0.9 4.4 1.9 3.6 11.8 3.1 -0.3 11.1 -2.7 -3.0 0.4 15.6

1.2 0.1 -3.2 -4.3

8.8 5.0 0.1 6.6 -2.8

-0.04 -2.8 ... 0.0 0.01 -0.2 -0.27 2.7 -0.32 11.6 -0.09 24.2 -0.47 0.1 -0.47 1.4 -0.29 17.0 -0.20 6.0 0.10 -10.7 0.02 -4.4 ... 0.5

-0.20 0.01

6.0 -10.7 -4.4 0.5 -2.6 -10.9

ETF

CommSvsSPDR

CnsmrDiscSelSector CnsStapleSelSector

DimenUSCoreEa2

EnSelSectorSPDR FinSelSectorSPDR HealthCareSelSect IndSelSectorSPDR

HealthCareSelSect IndSelSectorSPDR InvscNasd100 InvscQQQI InvscSAP500EW IShCoreDivGrowth IShCoreMSCIEAFE IShCoreMSCIEAFE IShCoreMSCIEAFE IShCoreS&P500 IShCoreS&P500 IShCoreS&P500 IShCoreS&P7otUS IShCoreTotaIUSDBd IShCareJSAggBd IShEdgeMSCIMinUSA IShEdgeMSCIMINUSA IShEdgeMSCIMISAUaI IShBoxxSHYCpBd IShBoxSGCBAE IShMSCIEAFE IShMSCIEAFE IShMSCIEAFE IShMSCIEAFE IShMSCIEAFEValue ISNAtIMuniBd

iShNatlMuniBd

iShRuss1000

iShRuss1000Grv

iSh1-5YIGCorpBd iSh1-3YTreaBd iShRussMC

ISINGUSSIOUO ISINGUSSIOUOGrw ISINGUSSIOOOGrw ISINGUSSIOOOGrw ISINSEPSOOGrw ISINSEPSOOGrw ISINSEPSOOGrw ISINSEPSOOGRW ISINSTreaBd ISINISTreaBd ISINISTreasuryBd JPMEquityPrem JPM UIISINIcm PacerUSCashCowsJ ProShUltPrQQ SPDRBbg1-3MTB SPDR JJIA Tr SPDR Gold SPDRPKDexUS

SPDRS&P500Value SPDRPtfS&P500

SPDRS&P500Grow SPDR S&P 500 SchwabIntEquity SchwabUS BrdMkt

SchwabUS Div SchwabUS LC

SchwabUSLC Grw

SPDR S&PMdCpTr

A Week in the Life of the DJIA

A look at how the Dow Jones Industrial Average component stocks did in the past week and how much each moved the index. The DJIA lost 456.34 points, or 1.34%, on the week. A \$1 change in the price of any DJIA stock = 6.59-point change in the average. To date, a \$1,000 investment on Dec. 31 in each current DJIA stock component would have returned \$30,835, or a gain of 2.78%, on the \$30,000

Closing Chg YTD Symbol Price (%) (%) investment, including reinvested dividends. -0.56 0.53 -0.29 -0.46 -2.02 -0.93 -0.76 36.6 24.6 -7.7 7.9 3.3 -3.0 -5.2 3.2

r-end ZZ,	1,000 Invested(yea		Course of	• 6	Point chg		Pct
¢(22	\$1,000	Close \$22.24	Symbol WBA	Walgreens	in average 7.38	1.12	5.30
\$623 825		₽ZZ.Z4 95.62	NKE	Nike	7.50 31.44	4.77	5.25
		95.62 35.55	INTC	Intel	9.03	4.77	5.25 4.01
1,372 1,064		55.55 51.56	DOW	Dow	9.05	1.37	2.61
,		168.62	CVX	Chevron	0.05 15.42	2.34	1.41
966							
1,051		268.76	AMGN	Amgen	6.99	1.06	0.40
1,155		53.76	CSCO	Cisco	1.25	0.19	0.35
1,157		273.00	CAT	Caterpillar	-0.40	-0.06	-0.02
933		81.05	DIS	Walt Disney	-1.32	-0.20	-0.25
962		504.19	UNH	UnitedHealth Group	-12.59	-1.91	-0.38
1,326		315.75	MSFT	Microsoft	-8.30	-1.26	-0.40
1,106		145.02	JPM	JPMorgan Chase	-4.68	-0.71	-0.49
977		302.16	HD	Home Depot	-23.53	-3.57	-1.17
964		323.57	GS	Goldman Sachs	-28.47	-4.32	-1.32
1,141		159.93	WMT	Walmart	-15.95	-2.42	-1.49
1,529		202.78	CRM	Salesforce	-24.06	-3.65	-1.77
1,323		171.21	AAPL	Apple	-23.59	-3.58	-2.05
1,114		230.01	V	Visa	-33.42	-5.07	-2.16
1,021		149.19	AXP	American Express	-25.64	-3.89	-2.54
865		32.41	VZ	Verizon	-5.73	-0.87	-2.61
876		184.74	HON	Honeywell	-33.22	-5.04	-2.66
886		163.31	TRV	Travelers	-29.86	-4.53	-2.70
900		55.98	КО	Coca-Cola	-10.68	-1.62	-2.81
901		155.75	JNJ	Johnson & Johnson	-31.31	-4.75	-2.96
1,006		191.68	BA	Boeing	-39.74	-6.03	-3.05
947		102.95	MRK	Merck	-22.34	-3.39	-3.19
1,016		263.44	MCD	McDonald's	-57.87	-8.78	-3.23
815		93.62	MMM	3M	-22.54	-3.42	-3.52
981		145.86	PG	Procter & Gamble	-37.70	-5.72	-3.77
1,034		140.30	IBM	IBM	-43.56	-6.61	-4.50

Source: Dow Jones Market Data; FactSet

Borrowing Benchmarks | wsJ.com/bonds

September 29, 2023 **Money Rates** 29.9

		Contra	ct			Oper
	Open	High hilo	Low	Settle	Chg	interes
Dec	190.150	190.175	187.850	187.925	-2.500	144,275
Hogs-Lo	ean (CME	E) -40,000 lbs.; (ents per ll	b.		
Oct	82.600	82.600	80.200	80.200	-3.750	23,010
Dec	73.550	73.675	71.775	71.775	-3.750	92,359
Lumber	(CME)-22	7,500 bd. ft., \$ p	er 1,000 b	d. ft.		
Nov	509.00	509.00	500.50	501.50	-5.50	5,833
Jan'24	521.50	521.50 🔻	515.00	518.00	-1.50	1,558
Milk (CN	NE)-200,0	00 lbs., cents p	er Ib.			
Sept	18.39	18.41	18.38	18.38		4,139
Nov	16.90	17.21	16.87	17.17	.27	5,134
Cocoa (I	CE-US) -10	0 metric tons; \$	per ton.			
Dec	3,457	3,484	3,402	3,418	-41	132,828
March'24	3,462	3,491	3,415	3,428	-36	79,601
Coffee	ICE-US)-3	37,500 lbs.; cent	ts per lb.			
Dec	147.00	147.50	144.95		-1.05	102,983
March'24	148.35		146.05	147.20	-1.15	49,978
Sugar-\	Norld (IC	CE-US)-112,000) lbs.; cent	s per lb.		
Oct	26.77	26.80	26.20	26.27	46	59,110
March'24	27.00	27.10	26.36	26.48	48	452,407
Sugar-[Domesti	C (ICE-US)-112	2,000 lbs.;	cents per Ib		
Nov	43.50	43.50 🔺	43.50	43.50		828
March'24	44.09	44.09	44.09	44.09		2,689
Cotton	(ICE-US)-	50,000 lbs.; cen	ts per lb.			
Oct	90.75	90.75 🔺	85.21	86.86	-1.87	2
Dec	88.64	89.29	87.02	87.15	-1.56	128,958
Orange	Juice (IC	:E-US)-15,000	lbs.; cents	per lb.		
Nov	344.65	351.95	341.05	349.75	3.95	7,641
Jan'24	330.05	335.65	327.20	335.10	3.40	1,437

Interest Rate Futures											
Ultra Tr	easury	Bonds (CB	T) - \$100,000); pts 32nds	of 1009	%					
Dec	118-220	119-270	118-030	118-220	12.0	1,538,643					
March'24		120-220	119-020			6					
Treasu	ry Bonds	S (CBT)-\$10	0,000; pts 32	nds of 100%	6						
Dec	113-250	114-240	113-120	113-250	9.0	1,406,109					
March'24		114-260		113-270	9.0	404					
Treasu	ry Notes	5 (CBT)-\$100),000; pts 32r	nds of 100%							
Dec	107-310	108-145	107-260	108-020	6.5	4,792,336					
March'24	108-065	108-265	108-060	108-150	5.5	291					
5 Yr. Tre	easury N	Notes (CBT) -\$100,000; j	pts 32nds o	f100%						
Sept	105-027	105-122	104-217	105-050	5.2	351					
Dec	105-082	105-180	105-067	105-115	5.0	5,568,503					
2 Yr. Tre	easury l	Notes (CBT)-\$200,000;	pts 32nds o	f100%						
Sept				101-155	1.2	78					
Dec	101-104		101-099	101-113		3,913,975					
30 Day	Federal	Funds (CB	T)-\$5,000,00	00;100 - da	ily avg.						
Sept	94.6700	94.6725	94.6700	94.6700		167,016					
Nov	94.6250	94.6350	94.6250		.0100	475,479					
Three-M	Nonth S	OFR (CME)	-\$1,000,000	;100 - daily	avg.						
July	94.6825	94.6850		94.6850	-	15,173					
-						,					

		Curre	ncy Futi	ures		
Japane	se Yen (CME)-¥12,50	00,000; \$ per	r 100¥		
Oct	.6712	.6749	.6704	.6710	0008	2,00
Dec	.6783	.6818	.6770	.6778	0009	281,69
Canadia	an Dolla	r (CME)-CA	D100,000;\$	per CAD		
Oct	.7415	.7455	.7363	.7378	0031	41
Dec	.7421	.7462	.7369	.7384	0031	173,46
British	Pound (CME)-£62,50	00:\$per£			
Oct	1.2204	1.2272	1.2182	1.2207	.0011	1.13
Dec	1.2210	1.2277	1.2185	1.2210	.0011	240,03
Swiss F	ranc (cr	IE) -CHF 125	,000; \$ per C	HF		
Dec	1.1023		1.1004	1.1016	.0010	54,87
March'24	1.1160	1.1208	1.1124	1.1133	.0011	57
Austra	lian Doll		UD 100,000;	\$ per AUD		
Oct	.6365	.6504	.6428	.6442	.0016	34
Dec	.6444	.6519	.6441		.0015	205,73
			500,000;\$p		.0012	202772
Oct	.05739	.05745	.05676	.05732	.00074	1,26
Dec	.05623	.05689	.05619	.05672	.00074	-,
		000;\$per€	.07017	.07072	.00074	210,02
Oct	1.0574		1.0568	1.0584	.0023	9,37
Dec	1.0600	1.0653	1.0596	1.0613	.0023	680.08
					.0025	
			ex Futur	es	10025	
		rial Avera	ge (CBT) -\$5	es ix index		
Dec	33939	ial Avera 34127	ge (CBT) -\$5 33623	es x index 33725	-167	
Dec March'24	33939 34305	ial Avera 34127 34461	ge (CBT) -\$5 33623 33969	es ix index		
Dec March'24 Mini S&	33939 34305 2 P 500 (fial Avera 34127 34461 CME) -\$50 x i	ge (CBT) -\$5 33623 33969 index	es x index 33725 34061	-167 -173	24
Dec March'24 Mini S& Dec	33939 34305 34305 4342.00	rial Averag 34127 34461 CME)-\$50 x i 4371.25	ge (CBT) -\$5 33623 33969 index 4311.00	es x index 33725 34061 4325.50	-167 -173 -12.00	24
Dec March'24 Mini S& Dec March'24	33939 34305 CP 500 (0 4342.00 4394.00	Tial Averag 34127 34461 CME) -\$50 x 1 4371.25 4419.00	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50	es 33725 34061 4325.50 4373.75	-167 -173	24
Dec March'24 Mini S& Dec March'24 Mini S&	33939 34305 3 P 500 (0 4342.00 4394.00 3 P Midca	ial Averag 34127 34461 CME)-\$50 x i 4371.25 4419.00 ap 400 (CM	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir	es x index 33725 34061 4325.50 4373.75 index	-167 -173 -12.00 -12.25	2/ 2,091,48 10,73
Dec March'24 Mini S& Dec March'24 Mini S& Dec	33939 34305 CP 500 (0 4342.00 4394.00	ial Averag 34127 34461 CME)-\$50 x i 4371.25 4419.00 ap 400 (CM	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50	es 5 x index 33725 34061 4325.50 4373.75 ndex 2520.40	-167 -173 -12.00 -12.25 -11.00	24 2,091,48 10,73 38,35
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24	33939 34305 3 P 500 (1 4342.00 4394.00 3P Midca 2536.50	ial Averag 34127 34461 CME) -\$50 x i 4371.25 4419.00 ap 400 (CM 2553.50	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir 2517.20	es x index 33725 34061 4325.50 4373.75 index	-167 -173 -12.00 -12.25	24 2,091,48 10,73 38,35
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na	33939 34305 iP 500 (4 4342.00 4394.00 iP Midca 2536.50 asdaq 10	ial Averag 34127 34461 CME)-\$50 x1 4371.25 4419.00 ap 400 (CM 2553.50 O (CME)-\$2	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir 2517.20 20 x index	es 33725 34061 4325.50 4373.75 adex 2520.40 2537.10	-167 -173 -12.00 -12.25 -11.00 -8.90	24 2,091,48 10,73 38,35 n.
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na Dec	33939 34305 iP 500 ((4342.00 4394.00 iP Midca 2536.50 isdaq 10 14876.50	ial Averag 34127 34461 CME)-\$50 x1 4371.25 4419.00 ap 400 (CM 2553.50 O (CME)-\$2 15060.75	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir 2517.20 20 x index 14811.00	es 33725 34061 4325.50 4373.75 ndex 2520.40 2537.10 14866.50	-167 -173 -12.00 -12.25 -11.00 -8.90 6.75	24 2,091,48 10,73 38,35 n. 241,42
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na Dec March'24	33939 34305 500 (d 4342.00 4394.00 50 Midca 2536.50 15078.50	ial Averag 34127 34461 CME)-\$50 × i 4371.25 4419.00 ap 400 (CM 2553.50 00 (CME)-\$22 15060.75 15251.75	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir 2517.20 20 x index 14811.00 15003.25	es 33725 34061 4325.50 4373.75 adex 2520.40 2537.10	-167 -173 -12.00 -12.25 -11.00 -8.90	24 2,091,48 10,73 38,35 n. 241,42
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na Dec March'24	33939 34305 500 (d 4342.00 4394.00 50 Midca 2536.50 15078.50	ial Averag 34127 34461 CME)-\$50 xi 4371.25 4419.00 ap 400 (CM 2553.50 O (CME)-\$2 15060.75 15251.75 OO (CME)-	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir 2517.20 20 x index 14811.00 15003.25	es 33725 34061 4325.50 4373.75 ndex 2520.40 2537.10 14866.50	-167 -173 -12.00 -12.25 -11.00 -8.90 6.75	24 2,091,48 10,73 38,35 n. 241,42 1,55
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na Dec March'24 Mini Ru Dec	33939 34305 5P 500 (d 4342.00 4394.00 5P Midca 2536.50 14876.50 15078.50 15078.50 15078.50	ial Averag 34127 34461 CME)-\$50 xi 4371.25 4419.00 ap 400 (CM 2553.50 O (CME)-\$2 15060.75 15251.75 OO (CME)-	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir 2517.20 20 x index 14811.00 15003.25 \$50 x index	es 33725 34061 4325.50 4373.75 dex 2520.40 2537.10 14866.50 15057.00	-167 -173 -12.00 -12.25 -11.00 -8.90 6.75 5.75	38,35 n.
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na Dec March'24 Mini Ru Dec March'24 June	33939 34305 iP 500 (i 4342.00 4394.00 iP Midca 2536.50 issel 20 15078.50 issel 20 1811.90 1831.00	ial Avera; 34127 34461 CME)-\$50 xi 4471.25 4419.00 p 400 (ch 2553.50 O (cME)-\$2 15060.75 15251.75 OO (CME)- 1824.80 1844.10	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir 2517.20 20 x index 14811.00 15003.25 \$50 x index 1793.40 1814.00	es x index 33725 34061 4325.50 4373.75 idex 2520.40 2537.10 14866.50 15057.00 1798.60	-167 -173 -12.00 -12.25 -11.00 -8.90 6.75 5.75 -10.50	24 2,091,48 10,73 38,35 n. 241,42 1,55 468,89
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na Dec March'24 Mini Ru Dec March'24 June	33939 34305 iP 500 (i 4342.00 4394.00 iP Midca 2536.50 issel 20 15078.50 issel 20 1811.90 1831.00	ial Averag 34127 34461 CME)-\$50 x1 4371.25 4419.00 ap 400 (CM 2553.50 00 (CME)-\$2 15060.75 15251.75 00 (CME)- 1824.80	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x ir 2517.20 20 x index 14811.00 15003.25 \$50 x index 1793.40 1814.00	es 33725 34061 4325.50 4373.75 dex 2520.40 2537.10 14866.50 15057.00 1798.60 1818.60 1837.50	-167 -173 -12.00 -12.25 -11.00 -8.90 6.75 5.75 -10.50 -10.30	24 2,091,48 10,73 38,35 n. 241,42 1,55 468,89
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na Dec March'24 June Mini Ru Dec March'24	33939 34305 ;P 500 (t 4342.00 ;P Midca 2536.50 issell 20 1811.90 1831.00 issell 10 2394.30	ial Avera; 34127 34401 CME)-\$50 ×1 4471.25 4419.00 ap 400 (cME)-\$2 553.50 00 (CME)-\$2 15251.75 00 (CME)-\$2 1824.80 1824.80 1824.80 00 (CME)-\$2 2396.40	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x in 2517.20 20 x index 14811.00 15003.25 550 x index 1793.40 1814.00	es 33725 34061 4325.50 4373.75 ddex 2520.40 2537.10 14866.50 15057.00 1798.60 1818.60 1837.50 2371.50	-167 -173 -12.00 -12.25 -11.00 -8.90 6.75 5.75 -10.50 -10.30	24 2,091,48 10,73 38,35 n. 241,42 1,55 468,89 82
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Ru Dec March'24 June Mini Ru Dec U.S. Do	33939 34305 27 500 (t 4342.00 4394.00 2536.50 asdaq 10 14876.50 15078.50 ussell 20 1831.00 ussell 10 2394.30 llar Inde	ial Averag 34127 34401 CME)-\$50 xi 4471.25 4479.00 (CME)-\$2 15060.75 15251.75 00 (CME)-\$2 1824.80 1844.80 1844.10 00 (CME)-\$2 2396.40 x (ICE-US)-	ge (CBT)-\$5 33623 33969 index 4311.00 4359.50 NE)- \$100 x ir 2517.20 20 x index 14811.00 15003.25 \$50 x index 1793.40 1814.00 \$50 x index 2364.90 \$1,000 x index	es xindex 33725 34061 4325.50 4373.75 adex 2520.40 2537.10 14866.50 15057.00 1798.60 1837.50 2371.50 ex	-167 -173 -12.00 -12.25 -11.00 -8.90 6.75 5.75 -10.50 -10.30 -9.00 -6.90	24 2,091,48 10,73 38,35 n. 241,42 1,55 468,89 82 6,19
Dec March'24 Mini S& Dec March'24 Mini S& Dec March'24 Mini Na Dec March'24 June Mini Ru Dec March'24	33939 34305 ;P 500 (t 4342.00 ;P Midca 2536.50 issell 20 1811.90 1831.00 issell 10 2394.30	ial Avera; 34127 34401 CME)-\$50 ×1 4471.25 4419.00 ap 400 (cME)-\$2 553.50 00 (CME)-\$2 15251.75 00 (CME)-\$2 1824.80 1824.80 1824.80 00 (CME)-\$2 2396.40	ge (CBT) -\$5 33623 33969 index 4311.00 4359.50 ME) -\$100 x in 2517.20 20 x index 14811.00 15003.25 550 x index 1793.40 1814.00	es 33725 34061 4325.50 4373.75 ddex 2520.40 2537.10 14866.50 15057.00 1798.60 1818.60 1837.50 2371.50	-167 -173 -12.00 -12.25 -11.00 -8.90 6.75 5.75 -10.50 -10.30 -9.00	24 2,091,48 10,73 38,35 n. 241,42 1,55 468,89 82

Bonds | wsj.com/market-data/bonds/benchmarks

Global Government Bonds: Mapping Yields

Yields and spreads over or under U.S. Treasurys on benchmark two-year and 10-year government bonds in selected other countries; arrows indicate whether the yield rose(▲) or fell (▼) in the latest session

	Country/				- Yield (%)			Spread Under/Over U.S. Treasurys, in basis poin		
Coupon (%)	Maturity, in years	Latest()-2	2 0	2 4 6	8 10 Previous	Month ago	Year ago	Latest	Prev	Year ago
5.000	U.S. 2	5.046 🔻		•	5.071	4.888	4.168			
3.875	10	4.572 🔻		•	4.596	4.121	3.747			
0.250	Australia 2	4.096 🔻		٠	4.118	3.890	3.370	-95.0	-94.5	-84.7
3.000	10	4.498 🔺		•	4.466	4.108	3.939	-7.8	-11.2	15.2
0.000	France 2	3.497 🔻		•	3.551	3.291	1.813	-154.9	-151.2	-240.4
3.000	10	3.400 🔻		•	3.535	3.034	2.817	-117.6	-104.3	-97.1
3.100	Germany 2	3.211 🔻		•	3.296	3.024	1.784	-183	-176.6	-243.3
2.600	10	2.845 🔻		•	2.931	2.512	2.178	-173.1	-164.7	-160.9
3.600	Italy 2	4.036 🔻		٠	4.144	3.700	3.029	-101.0	-91.9	-118.8
4.350	10	4.778 🔻		•	4.922	4.157	4.669	20.2	34.4	88.1
0.005	Japan 2	0.051 🔺	•		0.032	0.018	-0.041	-499.5	-503.0	-425.9
0.400	10	0.771 🔺	•		0.761	0.647	0.259	-380.5	-381.7	-352.8
0.000	Spain 2	3.599 🔻		•	3.723	3.402	2.182	-144.7	-134.0	-203.5
3.550	10	3.917 🔻		•	4.078	3.541	3.392	-66.0	-50.0	-39.6
0.625	U.K. 2	4.656 🔻		•	4.687	4.963	4.349	-39.0	-37.6	13.2
4.250	10	4.446 🔻		•	4.493	4.426	4.142	-13.0	-8.5	35.4
								C THURL T		<i>a</i> 1

Source: Tullett Prebon, Tradeweb ICE U.S. Treasury Close

Corporate Debt

Prices of firms' bonds reflect factors including investors' economic, sectoral and company-specific expectations

Investment-grade spreads that tightened the most...

5 1		-		Spread*, in basis points				
Issuer	Symbol	Coupon (%)	Yield (%)	Maturity	Current	One-day change	Last week	
Nationwide Building Society	NWIDE	4.000	6.52	Sept. 14, '26	171	-14	n.a.	
Societe Generale	SOCGEN	4.250	6.76	Aug. 19, '26	198	-13	n.a.	
Metropolitan Life Global Funding I		5.400	5.54	Sept. 12, '28	95	-11	101	
Banco Santander	SANTAN	2.749	7.23	Dec. 3, '30	270	-9	n.a.	
First Citizens BancShares	FCNCA	6.125	6.30	March 9, '28	169	-7	178	
American Honda Finance	HNDA	1.300	5.46	Sept. 9, '26	66	-5	63	
JPMorgan Chase	JPM	5.400	5.91	Jan. 6, ′42	105	-5	100	
UBS	UBS	5.650	5.95	Sept. 11, '28	135	-5	129	

Contract

Low

Settle

Chg

94.5450 **94.5500** .0050 1,399,963

High hilo

0pen

Dec

94.5450 94.5650

Open

interest

SPDR S&PMdCpTr	MDY	456.64	-0.40
SPDR S&P Div	SDY	115.01	-0.30
TechSelectSector	XLK	163.93	0.34
UtilitiesSelSector	XLU	58.93	0.17 ·
VangdInfoTech	VGT	414.90	0.39
VangdSC Val	VBR	159.49	-0.36
VangdExtMkt	VXF	143.33	-0.21
VangdDivApp	VIG	155.38	-0.46
VangdFTSEAWxUS	VEU	51.87	-0.29
VangdFTSEDevMk	VEA	43.72	-0.32
VangdFTSE EM	vwo	39.21	0.10
VangdFTSE Europe	VGK	57.93	0.14
VangdGrowth	VUG	272.31	0.10
VangdHlthCr	VHT	235.10	-0.67
VangdHiDiv	VYM	103.32	-0.54
VangdIntermBd	BIV	72.31	0.04
VangdIntrCorpBd	VCIT	75.98	-0.05
VangdIntermTrea	VGIT	57.15	0.07
VangdLC	vv	195.69	-0.30
VangdMC	vo	208.24	-0.30
VangdMC Val	VOE	130.96	-0.30
VangdMBS	VMBS	43.78	-0.18
VangdRealEst	VNQ	75.66	0.29
VangdS&P500ETF	voo	392.70	-0.24
VangdST Bond	BSV	75.17	0.08
VangdSTCpBd	VCSH	75.15	-0.03
VangdShortTrea	VGSH	57.60	0.02
VangdSC	VB	189.07	-0.26
VangdTaxExemptBd	VTEB	48.10	0.15
VangdTotalBd	BND	69.78	-0.04
VangdTotIntlBd	BNDX	47.83	0.15
VangdTotIntlStk	VXUS	53.52	-0.21
VangdTotalStk	VTI	212.41	-0.29
VangdTotWrldStk	VT	93.18	-0.28
VangdValue	VTV	137.93	-0.65
WisdTrFRTrea	USFR	50.32	0.06

0.4 7.9 2.3 3.5 4.2 0.6		al mark	ets. R	ates	below	rrow or lend n are a guide to actions.	-			
4.5 27.8		Inflat	ion				Latest	Week ago	—52-V High	VEEK— Low
-5.2 -4.5 -2.7 -2.0		Aug. index level	Ju		n (%) Aug. '22	Switzerland Britain Australia	2.25 5.25	2.25 5.25	2.25 5.25	1.00
-2.3 12.3 2.2	U.S. consum All items Core	er price 307.02 310.10	26	0.44 0.23	3.7 4.3		4.10 ondary	4.10 / mar	4.10 ket	2.35
-3.2 -3.8 -8.3	Inte	rnatior	nal ra	ites		Fannie Mae 30-year mortga	ige yields			
11.8 -0.1 -0.1		V Latest	Veek ago	— 52- High	-Week — Low	30 days 60 days	6.927 6.945		7.044 7.073	
-0.4 3.0	Prime rates					Notes on data: U.S. prime rate	is the bas	e rate or	corpora	ate
-2.8 -2.9 0.8 3.5	U.S. Canada Japan	8.50 7.20 1.475	8.50 7.20 1.475	8.50 7.20 1.475) 5.45	loans posted by a U.S. banks, and is prime rates are practices vary wi	at least 70 effective n't directly)% of the July 27, y compa	2023. O rable; ler	est ther nding
11.1 8.1 -1.7 0.1	Policy Rates Euro zone	4.50	4.50	4.50) 1.25	Money Rates tab Friday. Sources: Bureau	ole appear	's Monda	ay throu	gh

...And spreads that widened the most

Wells Fargo	WFC	3.000	5.98	Oct. 23, '26	118	34	107
Progressive	PGR	6.250	5.70	Dec. 1, '32	118	16	110
John Deere Capital		5.150	5.27	Sept. 8, '26	47	15	46
Swedbank	SWEDA	6.136	6.35	Sept. 12, '26	154	10	143
Sumitomo Mitsui Trust Bank	SUMITR	5.550	5.76	Sept. 14, '28	115	8	108
Morgan Stanley	MS	5.000	6.05	Nov. 24, '25	94	6	83
Verizon Communications	vz	4.862	6.31	Aug. 21, '46	140	6	130
ANZ New Zealand	ANZNZ	1.250	5.76	June 22, '26	96	5	84

High-yield issues with the biggest price increases...

Issuer	Symbol	Coupon (%)	Yield (%)	Maturity	Bond Pric Current	e as % of face v One-day change	alue —— Last week
Transocean	RIG	7.500	10.08	April 15, '31	86.625	1.13	87.750
Bath & Body Works	BBWI	6.750	8.29	July 1, '36	88.000	1.00	89.375
CSC Holdings	CSCHLD	5.250	13.16	June 1, '24	95.125	0.96	95.000
FirstEnergy	FE	7.375	5.91	Nov. 15, '31	109.323	0.80	109.550
Howmet Aerospace	HWM	6.750	6.39	Jan. 15, ′28	101.313	0.69	101.250
Sealed Air	SEE	6.875	7.29	July 15, '33	97.125	0.66	n.a.
Telecom Italia Capital	ТІТІМ	6.375	8.32	Nov. 15, '33	86.875	0.54	89.350
	at under de sue						

...And with the biggest price decreases

Pactiv	ΡΤΥ	7.950	8.10	Dec. 15, '25	99.688	-0.61	100.846
Ford Motor Credit		4.389	7.12	Jan. 8, '26	94.375	-0.38	94.977
Navient	NAVI	6.750	8.13	June 15, '26	96.701	-0.35	97.251
Hughes Satellite Systems		6.625	12.90	Aug. 1, '26	85.500	-0.14	87.250
Royal Caribbean	RCL	7.500	7.51	Oct. 15, '27	99.980	-0.07	n.a.
Telecom Italia Capital	ΤΙΤΙΜ	7.200	8.64	July 18, '36	89.000	-0.02	92.138

*Estimated spread over 2-year, 3-year, 5-year, 10-year or 30-year hot-run Treasury; 100 basis points=one percentage pt.; change in spread shown is for Z-spread. Note: Data are for the most active issue of bonds with maturities of two years or mo

Source: MarketAxess

Dividend Changes

Company	Symbol	Yld %	Amount New/Old	Frq	Payable / Record	Company	Symbol	Yld %	Amount New/Old		Payable / Record
Increased						Vacasa	VCSA		1:20		/Oct03
CenterPoint Energy	CNP	2.8	.20/.19	Q	Dec14/Nov16	Foreign					
City Holding Co.	CHCO	3.2		Q	Oct31/Oct13	Accenture CI A	ACN	1.7	1.29	Q	Nov15/Oct12
Howmet Aerospace	HWM	0.3	.05/.04	Q	Nov27/Nov10	Banco Bilbao Vizcaya ADF	R BBVA	5.1	.16851	SA	Oct26/Oct10
Initial						Global Indemnity	GBLI	2.9	.25	Q	Oct16/Oct09
PennyMac Nts 2028	PMTU	8.7	.5844		Jan02/Dec15	Sandstorm Gold	SAND	1.3	.0148	Q	Oct27/Oct17
Stocks							S	ources:	FactSet; D	or wo	nes Market Data
Curis	CRIS		1:20		/Sep29	KEY: A: annual; M: mont	hly; Q: qua	arterly;	r: revised	;SA:s	emiannual;
TOP Ships	TOPS		1:12		/Sep29	S2:1: stock split and ratio	o; SO: spin	i-off.			

New Highs and Lows		52-Wk % n Hi/Lo Chg Stock S		52-Wk % Hi/Lo Chg Stock Sym	52-Wk % Hi/Lo Chg Stock	52-Wk % Sym Hi/Lo Chg
The following explanations apply to the New York Stock Exchange, NYSE Arca, NYSE American and Nasdaq Stock Market stocks that hit a new 52-week intraday high or low in the latest session. % CHG -Daily percentage change from the previous trading session.	AdventTech DN 0.39 -0.1 Burkel+erbert BHRI Agenus AGEN 1.09 0.9 ByrnaTech BYR AgreeRealty ADC 55.01 0.1 CISO Global GISO AlgonquinPower AQN 5.86 -2.1 Castellunt CTM AlgonquinPower AQN 2.86 -2.14 -6.16 Celularity CELU	RN 2.19 -0.4 Fresh2 O 0.14 1.2 FulgentGenetics M 0.22 -9.3 GladstonePfdB U 0.22 -1.4 GlenBurnieBncp	FRZA 0.80 KymeraTherap KYMR FRES 1.00 1.3 LXP Ind Pfd C LXPpd FLGT 26.38 -0.3 LoopMedia LPTV LANDO 1.7.90 -1.6 LucidDiag LUCD GLBZ 6.37 -4.9 LumiraDx LMDX	43.57 0.6 PerimeterSolns PRM 0.47 -3.5 Personalis PSNI 1.10 -14.0 Phunware PHUI 0.23 -4.1 PlatinumGrpMtls PLG	4.53 -2.6 Stepan 1.17 1.7 StryveFoods 0.17 1.5 SunComms 1.10 -0.9 SunshineBio	MDAI 2.53 -18.0 SCL 73.12 0.5 SNAX 3.09 -2.6 SUI 117.20 SBFM 0.30
Friday, September 29, 2023 52-Wk % 52-Wk % 52-Wk % Stock Sym Hi/Lo Chg Stock Sym Hi/Lo Chg	Alight ALIT 7.06 -0.7 CenturyTherap IPSC AliogeneTherap ALIO 3.08 -7.0 CetusCapitalAcqnWt CETU AlistatePrdi ALLpi 18.31 -1.4 Charles&Colvard CTHK AmbacFin AMBC 11.99 -0.8 ChesapeakeUti CPCK	UW 0.03 -14.8 GlbINetLeasePfdE 0.57 -16.7 GlobalWaterRscs 97.45 -3.1 GoldenSunEduc	GWRS 9.75 -2.6 MedicennaTherap MDNA GSUN 0.74 7.6 Medifast MED	7.17 -1.4 PortageBiotech PRTG W 0.02 66.7 PortlandGenElec POR A 0.25 5.7 PrecisionBio DTIL 74.69 -2.1 PreneticsWt PRTG	1.64 -7.5 SyndaxPharm 40.27 -0.4 Synlogic 0.34 -4.2 SyraHealth W 0.04 -2.7 TOP Ships	SNDX 12.85 -7.1 SYBX 2.55 -11.1 SYRA 2.96 -27.3 TOPS 6.49 1.6 TCON 0.17
Highs EG Acqn A EGG F 11.67 -0.9 PyrophyteAcqn PHYT 11.08 Abercomble&Fitch ANF 56.79 0.6 50 initet FN 17007 0.6 RawecRestaurant RAVE 1.19 1.00 Algonquin/PwrNt AQNA 25.75 0.2 GlobusMartime GlobusMartime GlobusMartime GlobusMartime GlobusMartime BLS 1.01 8.794525424 A100 8.8 Perovarbiloscience ReNits 4.50 9.8 AlbhaMtel AIR TIS 6.00 6.00 FRPN TS.01 8.794525424 7.500 A10 8.38 9.9 7.700 0.4 Alcolngred AILO 4.58 GlodmanSachSPIA GSR TS.74 Seaportoliblacqnil Scilu 3.62 9.5 5.770 0.4 3.62 5.771 5.60 2.2 StructureTherap SeprotisFarmers SFN 4.72 5.651 3.46 7.6 3.20 7.77 5.00 2.2 StructureTherap S	Amerydarcyanguard AVD 10.20 0.6 ChoiceOneFinil ODES Amerydarcyndrsk AWK 12.27 0.2 ClorivatePfdA CUT Anarevdartwydrek AWK 6.52 -2.5 COMSovereign COM AngloGoldAsh AU 15.73 -3.2 Valaris VLR AnnovisBio ANVS 9.26 1.3 CrownCrafts CRW Anpreciate SFR Old -9.3 Curis CRIS ArmadaHoffler AHH 10.17 -0.1 Cutera CUTs ArmadaHoffler AHH 10.17 -0.1 Cutera CUTs ArmadaHoffler AHH 10.17 -0.1 Cutera CUTs ArmadaHoffler AHT 9.85 -2.5 DenaiTherap DIL AshfordHospPfdI AHTpf 9.85 -2.5 DenaiTherap DIL AshfordHospPfdI AHTpf 9.20 -3.5 DenaiTherap DIL AshfordHospPfdI AHTpf	TpA 29:20 -0.3 HawthornBcsh 45:20 -0.3 HawthornBcsh 45:21 1.18 -1.8 Hershey 45:5 6.78 -5.6 HubcyberSecurityWt 45:5 6.78 HubcyberSecurityWt 45:5 6.70 -7.1 +80Gold 46:5 4.8 Introbustor -7.1 46:5 4.8 Introbustor -7.1 46:5 4.8 Introbustor -7.1 46:45 0.8 Introbustor -7.1 46:45 0.8 Introbustor -7.1 47:4 1.44 -7.1 IntegratedMediai 47:4 1.44 -7.1 IntegratedMediai 47:4 1.47 1.11 1.11 1.11 47:4 1.48 1.11 1.11 1.11 48:4 5.41 1.02 1.11 1.11 49:4 5.41 1.12 1.11 1.11 49:4 5.41 1.11 <td>HWBK 15.91 0.9 MetaGor Based MetaGor Based HIPD 7.81 -0.4 MetaGor Based METAGOR Based HIPD 7.81 -0.4 MetaGor Based METAGOR Based METAGOR Based HIPD 7.81 -0.4 MetaGor Based METAGOR Based METAGOR Based HIPD 0.21 -0.4 MetaGor Based METAGOR Based METAGOR Based HUBC 0.02 -45.5 MonoramOrtho METAGOR Based METAGOR Based INV 0.68 -7.6 -1.4 Newaramedical MMETAGOR Based INV 0.65 1.4 NeuroSense METAGOR Based NEXTOR Based INV 0.76 1.5 NewpBachEnerth MEEDAGOR METAGOR METAGOR NEWER INTE 0.18 -1.2 NeuroSense METAGOR METAGOR NEWER INTE 0.23 NeuroSense METAGOR METAGOR NEWER NWEE INTE 0.23 NeuroSense NEWER NWEE NUFA 2.3 <t< td=""><td>103.25 0.8 Protractn-Heath PRTC 65.37 0.5 PureTech-Heath PRTC 1 3.70 0.7 QuantPharm QKR 1 2.60 -5.5 REGENXBIO RGN 1 6.68 -1.5 REGENXBIO RGN 1 6.68 -1.5 REGENXBIO RGN 1 1.68 -0.6 RAIMAX NNA 1.168 -0.6 RainTherap RAN 1.128 -4.3 Reading A RDI 1.128 -3.6 RenaissancePfdG RNR 0.40 7.75 -2.6 RechardsonElec RSJ 2.90.2 -2.8 RichardsonElec RAI 1.37 -3 SignaSports/WE SJA 3.76 -2.0 SafeGreenevel SLD SA -3.78 -2.8 SchultzeSpecifivet SAM 3.778 -2.8 SchultzeSpecifivet SAM -3.78 -2.8 SchultzeSpecifivet SAM <tr< td=""><td>12.1 10.6 TXO Partners 22.2 2.2 Tantech 22.3 2.2 Tantech 22.1 1.2 TempestTheray 12.1.7 1.2 TempestTheray (4.10 3.1 Tharimmune (5.14.4-6) 9.1 ThesauseGiobal (5.16.4-6) 9.4 TivicHealth 2.0 TreasureGiobal 2.06 Initid 0.50 1.2.8 uniQure 0.6 0.1 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METAGOR Based NEXTOR Based INV 0.76 1.5 NewpBachEnerth MEEDAGOR METAGOR METAGOR NEWER INTE 0.18 -1.2 NeuroSense METAGOR METAGOR NEWER INTE 0.23 NeuroSense METAGOR METAGOR NEWER NWEE INTE 0.23 NeuroSense NEWER NWEE NUFA 2.3 <t< td=""><td>103.25 0.8 Protractn-Heath PRTC 65.37 0.5 PureTech-Heath PRTC 1 3.70 0.7 QuantPharm QKR 1 2.60 -5.5 REGENXBIO RGN 1 6.68 -1.5 REGENXBIO RGN 1 6.68 -1.5 REGENXBIO RGN 1 1.68 -0.6 RAIMAX NNA 1.168 -0.6 RainTherap RAN 1.128 -4.3 Reading A RDI 1.128 -3.6 RenaissancePfdG RNR 0.40 7.75 -2.6 RechardsonElec RSJ 2.90.2 -2.8 RichardsonElec RAI 1.37 -3 SignaSports/WE SJA 3.76 -2.0 SafeGreenevel SLD SA -3.78 -2.8 SchultzeSpecifivet SAM 3.778 -2.8 SchultzeSpecifivet SAM -3.78 -2.8 SchultzeSpecifivet SAM <tr< td=""><td>12.1 10.6 TXO Partners 22.2 2.2 Tantech 22.3 2.2 Tantech 22.1 1.2 TempestTheray 12.1.7 1.2 TempestTheray (4.10 3.1 Tharimmune (5.14.4-6) 9.1 ThesauseGiobal (5.16.4-6) 9.4 TivicHealth 2.0 TreasureGiobal 2.06 Initid 0.50 1.2.8 uniQure 0.6 0.1 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-3.78 -2.8 SchultzeSpecifivet SAM 3.778 -2.8 SchultzeSpecifivet SAM -3.78 -2.8 SchultzeSpecifivet SAM <tr< td=""><td>12.1 10.6 TXO Partners 22.2 2.2 Tantech 22.3 2.2 Tantech 22.1 1.2 TempestTheray 12.1.7 1.2 TempestTheray (4.10 3.1 Tharimmune (5.14.4-6) 9.1 ThesauseGiobal (5.16.4-6) 9.4 TivicHealth 2.0 TreasureGiobal 2.06 Initid 0.50 1.2.8 uniQure 0.6 0.1 UniversalHealt 10.8 0.5 UZ8 0.21 2.2.0 UniversalHealt 10.8 0.1 UniversalHealt 10.8 0.1 VerbTech 11 1.0.1 VerbTech 13 -5.4 VirtageWineEsta 10.0 2.8 Veru 13 -5.4 VirtageWineEsta 10.2 2.6 VirtiscoPfdA 10.7 2.6 VisionMarineTe 6.7.</td><td>TX0 20.03 1.4 TANH 1.30 -4.9 TANH 1.30 -4.9 TAN 1.30 -4.9 THAR 0.30 -9.0 THAR 0.317 3.1 TBPH 8.25 3.0 THEX 2.60 0.4 TVC 1.72 -3.4 TINX 0.49 -22.0 QURE 0.21 8.1 QURE 0.60 -12.2 UIT 42.58 -1.2 QURE 0.60 -22.8 1 UTZ 1.329 -1.0 VTX 1.02 -3.4 UTZ 1.329 -0.7 VERB VERD 0.67 -0.0 VRM VERU 0.56 -9.0 VRMI VRDN 1.46.4 1.2 NCVpA VOS 0.18 5.4 KLGw 1.375 8.3</td></tr<>	12.1 10.6 TXO Partners 22.2 2.2 Tantech 22.3 2.2 Tantech 22.1 1.2 TempestTheray 12.1.7 1.2 TempestTheray (4.10 3.1 Tharimmune (5.14.4-6) 9.1 ThesauseGiobal (5.16.4-6) 9.4 TivicHealth 2.0 TreasureGiobal 2.06 Initid 0.50 1.2.8 uniQure 0.6 0.1 UniversalHealt 10.8 0.5 UZ8 0.21 2.2.0 UniversalHealt 10.8 0.1 UniversalHealt 10.8 0.1 VerbTech 11 1.0.1 VerbTech 13 -5.4 VirtageWineEsta 10.0 2.8 Veru 13 -5.4 VirtageWineEsta 10.2 2.6 VirtiscoPfdA 10.7 2.6 VisionMarineTe 6.7.	TX0 20.03 1.4 TANH 1.30 -4.9 TANH 1.30 -4.9 TAN 1.30 -4.9 THAR 0.30 -9.0 THAR 0.317 3.1 TBPH 8.25 3.0 THEX 2.60 0.4 TVC 1.72 -3.4 TINX 0.49 -22.0 QURE 0.21 8.1 QURE 0.60 -12.2 UIT 42.58 -1.2 QURE 0.60 -22.8 1 UTZ 1.329 -1.0 VTX 1.02 -3.4 UTZ 1.329 -0.7 VERB VERD 0.67 -0.0 VRM VERU 0.56 -9.0 VRMI VRDN 1.46.4 1.2 NCVpA VOS 0.18 5.4 KLGw 1.375 8.3
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BIGGEST 1,000 STOCKS

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52-Week Hi Lo Stock YTD % Chg YTD 52-Week %Chg Hi Lo Stock Yld Net Sym % PE Last Chg YTD % Chg 52-Week Hi Lo Stock Yld Sym % PE Last Yld Net Sym % PE Last Chg How to Read the Stock Tables Chg 3.5 17 2.0 18 80 26.35 FoxB 111.27 Franco-Nevada 20.24 FranklinRscs 27.29 FreeportMcM 12.79 FreeseniusMed 4.58 FullTruck 28 Futu FOX 1.8 13 28.88 FNV 1.0 39 133.49 BEN 4.9 15 24.58 FCX 1.6 26 37.29 FMS 1.9 20 21.54 YMM ... 33 7.04 FUTU ... 16 57.81 The following explanations apply to NYSE, NYSE Arca, NYSE American and Nasdaq Stock Market listed securities .36 Mattel .01 McCormickVtg .60 McCormick .58 McDonald's .75 McKesson 67.44 Sempra 56.08 <u>ServiceIntl</u> 337 ServiceNow 49.50 Shell 195.24 SherwinWilliar
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 4.0 42. 34.42 161.25 0.02 23.49 -4.00 22.64 94.97 MAT MKC.V 35 30 22.03 78.88 -0.0 -11.96 -17.36 84.12 74.66 0.26 1.51 -2.19 Prices are composite quotations that include primary market trades as well as trades reported by Nasdaq BX (formerly Boston), Chicago Stock Exchange, Cboe, NYSE National and Nasdaq ISE. The list comprises the 1,000 largest companies based on market capitalization. <u>Underlined quotations</u> are those stocks with large changes in volume compared with the issue's average trading volume. **Boldfaced quotations** 2.0 34.37 46.73 27.71 -8.75 94.39 70. -0.03 299.35 230. 15.92 446.95 331 MKC 2.1 29 MCD 2.3 24 MCK 0.6 16 0.12 -0.04 -0.12 43.96 01... 13.05 65.96 7.47 283.80 1 -1.87 31.82 -1.44 -1.16 -2.1 MCKesson
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-0.60 38.48 28.25 Brookfield BN 0.9348 31.27 -0.81	-41.74 283.62 138.14 EsteeLauder EL 1.8 52 144.55 2.60	26.85 22.24 LibertySirius C LSXMK 13 25.46 0.48	10.48 156.65 120.58 RepublicSvcs RSG 1.5 29 142.51 -1.94	84.16 90.71 28.11 Wayfair W dd 60.57 0.87
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1-13.07 36.16 23.72 BrookfieldRenew BEPC 5.6 13 23.94 -0.76	12.20 395 256.71 Everest -19.43 65.39 50.21 Evergy EVRG 4.8 15 50.70 0.28	26.95 22.01 LibertySirius A LSXMA 13 25.45 0.49	3.02 78.30 51.26 RestaurantBrands QSR 3.3 20 66.62 -0.11 -21.05 150.17 105.83 Revvity RVTY 0.3 17 110.70 0.45	-14.85 56.46 31.03 WebsterFin -1.04 48.84 35.25 WellsFargo WFC 3.4 10 40.86 -0.05
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-8.85 84.84 52.22 Bruker BRKR 0.3 29 62.30 -0.13	36.22 22.80 14.87 Exelixis EXEL 43 21.85 -0.54	14.15 393.67 266.22 Linde LECO 1.4 22 181.79 -2.42	-10.62 80.52 52.25 RioTinto 31.74 37.39 11.68 Rivian RIO 6.3 12 63.64 -0.15 RIVN dd 24.28 1.20	59.43 415.73 206.19 WestPharmSvcs WST 0.2 55 375.21 -3.87
91.88 156.85 53.79 BuildersFirst BLDR 10 124.49 -1.73	-12.58 44.37 35.19 Exelon EXC 3.8 18 37.79 -0.09	44.25 329 180 LithiaMotors LAD 0.7 7 295.33 -3.60	-0.74 89.78 64.65 RobertHalf RHI 2.6 15 73.28 0.08	44.63 46.89 29.73 WesternDigital WDC 0.0 dd 45.63 -0.17
8.50 116.59 82.05 Bunge BG 2.4 8 108.25 -2.36	17.66 124.95 82.39 Expedia EXPE 0.0 18 103.07 0.49	19.07 101.74 64.25 LiveNationEnt LYV 78 83.04 -0.65	20.52 13.23 7.57 Robinhood HOOD dd 9.81 0.13	1.42 29.18 23.79 WesternMidstrm WES 8.3 10 27.23 -0.04 21.58 138.39 84.54 Westlake WLK 1.6 12 124.67 -0.33
-33.27 239.94 106.47 BurlingtonStrs BURL 33 135.30 1.04	10.31 128.04 86.12 ExpeditorsIntl EXPD 1.2 17 114.63 0.23	-3.18 2.63 1.70 LlovdsBanking LYG 5.8 2.13 -0.01	1.76 47.67 24.88 Roblox RBLX dd 28.96 1.13	21.58 138.39 84.54 Westlake WLK 1.6 12 124.67 -0.33
4.44 359.33 245.32 CACIIntl CACI 19 313.93 -2.00	-17.39 180.76 119.90 ExtraSpaceSt EXR 2.0 20 121.58 0.76	-15.94 508.10 381.55 LockheedMartin LMT 2.9 15 408.96 -2.00	16.86 11.95 5.97 RocketCos. RKT 0.0 dd 8.18 -0.05	1.82 39.30 26.84 WestRock WRK 3.1 dd 35.80 -0.39
-4.03 89.58 66.31 CBRE Group CBRE 28 73.86 0.56	6.60 120.70 87.31 ExxonMobil 12.28 167.89 127.05 F5 XOM 3.1 9 117.58 -1.89 FFIV 29 161.14 -0.13	8.54 65.39 49.76 Loews L 0.4 12 63.31 -0.58	10.99 348.52 214.89 Rockwell ROK 1.7 23 285.87 -0.54 -18.04 50.16 36.23 RogersCommB RCI 3.8 17 38.39 -0.32	-1.10 36 27.65 Weyerhaeuser WY 2.5 32 30.66 0.15 3.76 52.76 29.76 WheatonPrecMet WPM 1.5 30 40.55 0.08
1 53.45 13.41 8.20 CCC Intelligent CCCS dd 13.35 0.94 12.98 215.69 147.91 CDW CDW 1.2 26 201.76 -1.12	12.28 167.89 127.05 F5 -46.34 134.38 65.30 FMC FFIV 29 161.14 -0.13 FMC 3.5 14 66.97 1.06	10.75 73.70 41.81 LogitechIntl LOGI 1.7 34 68.94 0.68	-18.04 50.16 50.23 KOGERSCOMMB KLI 5.8 17 58.59 -0.52	-5.49 160.74 124.10 Whirlpool WHR 5.2 dd 133.70 0.55
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-5.93 108.05 84.76 CH Robinson CHRW 2.8 20 86.13 -1.01	15.47 59.43 43.73 Fastenal FAST 2.6 28 54.64 -1.01	14.06 102.05 74.33 LyondellBasell LYB 5.3 15 94.70 0.16	12.08 508.90 356.21 RoperTech ROP 0.6 41 484.28 -3.21	-14.56 258.93 195.29 WillisTowers WTW 1.6 21 208.96 -2.92
19.07 209.31 166.54 CME Group CME 2.2 24 200.22 -1.44	-10.30 115.08 85.27 FederalRealty FRT 4.8 19 90.63 -0.55		-2.69 122.70 81.21 RossStores ROST 1.2 24 112.95 1.14	-7.93 53.46 37.81 WillScotMobile WSC 26 41.59 -0.50
-16.14 65.72 52.41 CMS Energy CMS 3.7 21 53.11 0.41	52.96 270.95 147.98 FedEx 29.53 170.26 99.16 Ferguson FDX 1.9 17 264.92 -1.52 FERG 1.8 18 164.47 -3.53	MN	-7.00 104.72 83.63 RoyalBkCanada RY 4.6 11 87.44 -0.58 86.41 112.95 36.92 RoyalCaribbean RCL 0.0 dd 92.14 -1.99 -5.67 147.82 86.75 RoyalGold RGLD 1.4 30 106.33 -0.43	3.86 5.31 4.32 Wipro WIT 0.2 19 4.84 -0.01
-6.93 45.42 36.17 CNA Fin -24.66 17.98 11.15 CNH Indl CNA 4.3 11 39.35 -0.36 CNH 3.3 7 12.10 -0.17	29.53 170.26 99.16 Ferguson 37.96 329.88 176.82 Ferrari FERG 1.8 18 164.47 -3.53 RACE 0.7 48 295.54 1.10		86.41 112.95 36.92 RoyalCaribbean RCL 0.0 dd 92.14 -1.99	-3.80 26.93 19.95 WoodsideEnergy WDS 14.0 7 23.29 -0.15 28.62 133.15 80 Woodward WWD 0.7 37 124.26 -1.26
-24.66 17.98 11.15 CNH Indl 41.79 60 31.73 CRH CNH 3.3 7 12.10 -0.17 CRH 0.5 14 54.73 -1.45	37.96 329.88 176.82 Ferrari RACE 0.7 48 295.54 1.10 9.78 45.51 31.84 FidNatlFinl FNF 4.4 22 41.30 -0.03	-12.83 192.56 109.36 M&T Bank 9.63 51.35 29.20 MGM Resorts MGM 0.0 36 36.76 0.12	-31.33 44.47 25.92 RoyaldyPharma RPRX 2.9 48 27.14 0.36	-0.40 33.09 22.18 WooriFinl WF 8.1 3 27.42 -0.11
41.79 60 31.73 CRH CRH 0.5 14 54.73 -1.45 -0.74 34.38 25.80 CSX CSX CSX CSX 1.4 16 30.75 0.18 -25.08 104.83 64.62 CVS Health CVS 3.5 31 69.82 -0.21	-18.54 85.18 48.57 FidNatlinfo FIS 3.8 dd 55.27 -0.55	141.38 29.92 4.45 MinisoGroup MNSO 1.5 32 25.90 -0.09	16.60 50.64 32.13 RyanSpecialty RYAN 79 48.40 -0.59	28.40 252.72 128.72 Workday WDAY dd 214.85 3.63
-25.08 104.83 64.62 CVS Health CVS 3.5 31 69.82 -0.21	-22.80 38.05 22.11 FifthThirdBncn FITB 5.5 7 25.33 0.30	8.31 35.85 29.55 MPLX MPLX 8.7 9 35.57 0.05	30.03 112.75 55.90 Ryanair RYAAY 12 97.21 -1.10	28.40 252.72 128.72 Workday WDAY dd 214.85 3.63 12.05 117.86 53.81 WynnResorts WYNN 1.1 dd 92.41 1.04
45.85 248.16 138.76 CadenceDesign CDNS	81.98 1512.07 505.84 FirstCitizBcshA FCNCA 0.2 2 1380.10 9.50	10.30 572.50 385 MSCI -4.57 68.92 45.58 MagnaIntl MSCI 1.1 45 513.08 -8.42 MGA 3.4 17 53.61 -0.04	25.32 145.10 80.50 SAP SAP 1.2 75 129.32 1.37	50.26 27.71 10.30 XD XD XD 10.2 10.23.05 0.07
20.73 25.04 15.24 CAE CAE 0.0 35 23.35 0.04	81,98 1512.07 505.84 FirstCitizBcshA FCNCA 0.2 2 1380.10 9.50 -1.39 55.51 42.91 FirstIndRity FR 2.7 20 47.59 -0.01 7.88 232 115.66 FirstSolar FSLR111 161.59 0.09	-4.57 68.92 45.58 MagnaIntl MGA 3.4 17 53.61 -0.04	9.10 428.65 279.32 S&P Global SPGI 1.0 51 365.41 -3.12	124.27 76.77 26.16 XPO XPO105 74.66 -0.06
11.42 60.27 31.31 CaesarsEnt CZR 14 46.35 -0.43	7.88 232 115.66 FirstSolar FSLR 111 161.59 0.09	62.82 208.31 107.18 ManhattanAssoc MANH 85 197.66 0.49	-28.59 312.34 192.88 SBA Comm SBAC 1.7 43 200.17 1.71	-18.39 72.99 55.11 XcelEnergy XEL 3.6 18 57.22 0.35
-15.46 127.60 94.10 CamdenProperty CPT 4.2 49 94.58 -0.04	1-18.50 43.31 34.01 FirstEnergy 18.76 163.95 114.80 FirstService FE 4.8 43 34.18 -0.39 FSV 0.6 48 145.54 -0.73	2.47 20.40 14.92 ManulifeFini 42.95 28.26 Maplebear MFC 4.8 9 18.28 -0.19 CART 29.69 -0.14	3.31 64.69 46.30 SEI Investments SEIC 1.4 20 60.23 -0.02	84.71 23.62 6.18 XPeng XPEV dd 18.36 1.14
74.86 42.16 21.02 Cameco CCJ 0.2245 39.64 -1.51 -27.61 57.77 40.76 CampbellSoup CPB 3.6 14 41.08 -0.18	18.76 163.95 114.80 FirstService FSV 0.6 48 145.54 -0.73 11.76 130.74 91.55 Fiserv FI 28 112.96 -0.59	-1.18 33.42 20.57 MarathonOil MRO 1.5 8 26.75 -0.66	4.23 21.73 18.26 SK Telecom 0.92 64.52 45.25 SS&C Tech SSNC 1.8 22 52.54 -0.24	-17.67 118.58 84.16 Xylem XYL 1.5 48 91.03 -0.02 33.30 16.19 6.08 YPF YPF 0.0 3 12.25 -0.37
-4.55 48.84 38.24 CIBC CM 6.5 11 38.61 -0.47	-0.03 220 10 130 15 EivoRolow EIVE 22 160 00 2 56	30.03 159.50 98.03 MarathonPetrol MPC 2.0 5 151.34 -3.09	90.12 443.85 180.17 Saia SAIA 32 398.65 -3.58	-2.45 143.25 103.97 YumlBrands YUM 1.9 25 124.94 0.86
-4.55 48.84 38.24 CIBC CM 6.5 11 38.61 -0.47 -8.87 129.89 103.79 CanNtlRiwy CN 2.2 19 108.33 -1.32	-9.03 220.19 130.15 FiveBelow FIVE 33 160.90 3.56 39.01 278.35 161.69 FleetCorTech FLT 21 255.34 -3.19	11.76 1560 1084.08 Markel MKL 11 1472.49 -34.68	90.12 443.85 180.17 Saia 52.94 238.22 126.34 Salesforce SAIA 32 398.65 -3.58 CRM127 202.78 -0.42	1.96 64.70 38.59 YumChina YUMC 0.9 32 55.72 0.30
16.46 67.23 45.82 CanadianNatRscs CNO 4.2.13 64.67 -1.46	25.72 28.90 16.11 Flex FLEX 16 26.98 0.39	-23.40 399.78 200.01 Market Axess MKTX 1.3 32 213.64 4.21	102.82 32.41 8.42 Samsara IOT dd 25.21 0.21	-10.05 30.05 16.27 ZTO Express ZTO 0.0 17 24.17 0.17
-0.24 85.40 65.17 CdnPacKC CP 0.8 22 74.41 -0.23	29.97 116.03 63.51 Floor&Decor FND 34 90.50 1.01	32.02 210.98 137.25 Marriott MAR 1.1 22 196.56 -2.99	10.76 57.82 38.01 Sanofi SNY 2.6 15 53.64 0.63	-7.75 351.74 222.58 ZebraTech ZBRA 19 236.53 -0.34
4.40 123.09 83.93 CapitalOne COF 2.5 7 97.05 0.04	39.72 119.62 60.89 FomentoEconMex FMX 1.3 11 109.15 1.25	15.00 199.20 148.13 Marsh&McLen MMC 1.5 29 190.30 -3.10	-6.45 159.89 100.15 SareptaTherap SRPT dd 121.22 -2.37	43.31 57.19 26.14 Zillow C Z dd 46.16 -0.41 43.51 55.68 26.21 Zillow A ZG dd 44.79 -0.35
12.94 95.45 66.05 CardinalHealth CAH 2.3 88 86.82 -0.98	6.79 15.42 10.90 FordMotor F 4.8 12 12.42 -0.14	21.45 463.41 298.32 MartinMarietta MLM 0.7 27 410.48 -4.04	-12.99 18.70 11.56 Sasol SSL 5.3 17 13.67 0.12	43.51 55.68 26.21 Zillow A ZG dd 44.79 -0.35
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1.07 38.32 24.59 Carlyle CG 4.6 27 30.16 -0.07 16.16 87.50 52.10 CarMax KMX 25 70.73 1.72	-5.12 46.28 34.76 Fortis 15.42 79.90 57.43 Fortive FTS 4.6 17 37.99 -0.30 FTV 0.4 33 74.16 -0.21	14.53 63.85 42.33 Masco 13.86 418.60 276.87 Mastercard MAS 2.1 15 53.45 -0.87 MA 0.6 37 395.91 -3.53	-34.06 86.63 45 Schwabc SCHW 1.8 16 54.90 0.35 -15.53 88.84 34.87 Sea SE116 43.95 0.83	3.25 89.67 60.45 ZoomVideo ZM155 69.94 1.61
70.22 19.55 6.11 Carnival CCL 0.0 dd 13.72 -0.72	8.84 77.14 49.51 FortuneBrands FBIN 1.5 16 62.16 -0.61	3.91 73.78 42.04 MatadorRscs MTDR 1.0 8 59.48 -1.22	25.36 74.51 47.47 Seagate STX 4.2 dd 65.95 0.26	-45.53 48.76 15.53 ZoomInfoTech ZI 53 16.40 0.06
70.38 17.67 5.43 Carnival CUK 0.0 dd 12.25 -0.66	2.73 37.26 28.02 FoxA FOXA 1.7 14 31.20 0.06		65.08 217.08 116.08 Seagen SGEN dd 212.15 -0.09	39.04 185.99 84.93 Zscaler ZS dd 155.59 4.67

Prod NAV Cog Nater Fund NAV Cog Nater NAV NAV NAV	Mutual Funds Data provided by LIPPER	Net YT					Net YTD Net YTD
Top 250 mutual-functions listings for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-quality for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-quality for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-quality for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-q-ublished share classes by relaxes. TultRindle 9.8 - 4 Buildings for Mask-q-ublished share classes by relaxes. Multiclasses for Mask-q-ublished share classes		Fund NAV Chg %Re					
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Artisa Fued Artis Fued							Intival 37.99 -0.04 6.5 Instidy 257.01 .0.06 12.0
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capiBa 61.51 - 0.18 - 0.3 51.52 + 0.13 - 0.3 51.22 + 0.13 - 0.3 51.22 + 0.13 - 0.5 MulTAdmi 10.18 + 0.03 - 1.3 TotRe2000 36.96 - 0.05 7.4 TotRe101 - 9.12 9.12 + 0.13 - 0.5 MulTAdmi 10.18 + 0.03 - 1.3 TotRe2000 36.96 - 0.05 7.4 TotRe101 - 9.12 9.12 + 0.13 - 0.15 MulTAdmi 10.18 + 0.03 - 1.3 TotRe2000 36.96 - 0.05 7.4 TotRe101 - 9.12 9.12 + 0.13 - 0.15 MultAdmi 10.18 + 0.03 - 1.3 TotRe2000 36.96 - 0.05 7.4 TotRe101 - 9.12 9.12 + 0.13 - 1.05 MultAdmi 10.18 + 0.03 - 1.3 TotRe2000 36.96 - 0.05 7.4 TotRe101 - 9.12 9.12 + 0.13 - 1.05 MultAdmi 10.18 + 0.03 - 1.3 TotRe2000 36.96 - 0.05 7.4 TotRe101 - 9.12 9.12 + 0.13 - 1.05 MultAdmi 10.18 + 0.03 - 1.3 TotRe2000 36.96 - 0.05 7.4 TotRe101 - 9.12 9.12 + 0.13 - 1.05 MultAdmi 10.18 + 0.03 - 1.2 7.4 TotRe101 - 9.12 9.12 + 0.13 - 1.05 MultAdmi 10.18 + 0.03 - 1.2 7.4 TotRe101 - 9.12 9.12 + 0.13 - 1.05 MultAdmi 10.18 + 0.03 - 1.2 7.4 TotRe101 - 9.12 9.12 + 0.13 - 1.05 MultAdmi 10.18 + 0.03 - 1.2 7.4		FF2030 15.39 -0.01 5.3					T 10 0005 00 (0 0 00 ((
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Value No. of Market \$billions Deals Share%

103 9.0

102

73 6.6

> 62 4.8

40 3.6

7.6

5.1

2.8

7 3.7

1 3.6

223.4

115.6 603 4.8

84.4 800 3.5

79.3 574 3.3

1,295

1,041

998

938

919

614

612

559

511

486

11.7

9.9 90 7.7

9.9

7.2 80 5.6

6.4 68 5.0

6.2

6.0 50 4.7

5.2 56 4.0

143.2 454

139.2 595

73.1 290

68.8 308

63.3 214

Value No. of Market

\$millions Deals Share% 9

Deals credited in First 9-months

U.S. Initial Public Offerings

Deals priced in First 9-months

Bookrunner

JPMorgan

Wells Fargo

BNP Paribas Bank of China

TD Securities

Bookrunne

JPMorgan

BofA Securities

Goldman Sachs

BNP Paribas

Deutsche Bank

U.S. High-Yield Bonds

Deals priced in First 9-months

Jefferies

Bookrunner JPMorgan

Citi

Goldman Sachs

BofA Securities

Morgan Stanley

Deutsche Bank

RBC Capital Markets

BMO Capital Markets

Wells Fargo

Barclays

RBC Capital Markets

Citi

UBS

HSBC

Mizuho

MUFG Sumitomo Mitsui Fin.

Citi

BofA Securities

THIRD QUARTER MARKETS DIGEST

Top 10 Rankings

Global Mergers & Acquisitions Deals announced in First 9-months				Global Equity Capital Markets Deals priced in First 9-months			
Adviser	Value \$billions		Market Share%	Bookrunner	Value \$billions		Marke Share
Goldman Sachs	583.8	236	27.5	Goldman Sachs	33.2	215	7.8
JPMorgan	475.0	256	22.4	BofA Securities	28.4	204	6.7
Morgan Stanley	398.7	204	18.8	JPMorgan	27.6	224	6.5
BofA Securities	302.6	178	14.2	Morgan Stanley	25.8	181	6.1
Citi	266.1	130	12.5	CITIC Securities	18.1	104	4.3
Centerview Partners	177.6	53	8.4	Citi	18.1	157	4.3
UBS	167.1	179	7.9	UBS	11.6	110	2.7
Barclays	153.8	88	7.2	Huatai Securities	11.4	68	2.7
RBC Capital Markets	128.4	107	6.1	China International Capital	11.3	63	2.7
Lazard	127.9	146	6.0	Barclays	11.3	113	2.7
Global Debt Capital Markets				Global Syndica	ted Lo	ans	

Global Debt Capital Markets Deals priced in First 9-months

Bookrunner	Value \$billions		Market Share%
JPMorgan	298.1	1,431	5.8
BofA Securities	295.1	1,190	5.7
Citi	261.7	1,207	5.1
Barclays	214.0	985	4.2
Morgan Stanley	204.4	1,116	4.0
BNP Paribas	191.6	813	3.7
Goldman Sachs	175.8	776	3.4
Deutsche Bank	161.3	706	3.1
HSBC	143.1	654	2.8
Wells Fargo	136.1	914	2.6

U.S. Mergers & Acquisitions Deals announced in First 9-months

Dealbailtean		111011	chis
Adviser	Value \$billions		Market Share%
Goldman Sachs JPMorgan Morgan Stanley BofA Securities Centerview Partners Citi Guggenheim Partners Wells Fargo	454.7 356.3 261.6 238.3 159.6 155.4 117.7 116.1	159 148 103 98 40 69 55 40	39.5 31.0 22.7 20.7 13.9 13.5 10.2 10.1
RBC Capital Markets	115.5	70	10.0
Evercore	99.6	86	8.7

U.S. Investment-Grade Bonds Deals priced in First 9-months

•			
Bookrunner	Value \$billions		Market Share%
BofA Securities	123.3	455	11.6
JPMorgan	100.2	515	9.4
Citi	90.8	372	8.5
Morgan Stanley	78.9	265	7.4
Wells Fargo	69.3	305	6.5
Goldman Sachs	63.4	255	5.9
Barclays	54.6	198	5.1
Mizuho	45.5	207	4.3
HSBC	40.1	96	3.8
BNP Paribas	34.0	143	3.2

U.S. Core Leveraged Finance¹

0.5.	COIC	LCA	CIG	ageu		mance	
Fees	paid i	n Firs	t 9-	mont	h	S	

9-months	Fees paid for M& loans in First 9-m	A, ECM, DCM and onths
Revenue 2023 2022		Revenue 2023 2022
\$millions Mkt Shr%Mkt Shr%	Bank	\$millions Mkt Shr %Mkt Shr %

Global Investment Banking¹

Bank	\$millions	Mkt Shr 9	Mkt Shr %	Bank	\$millions	//kt Shr %	Nkt Shr %
JPMorgan	513.8	13.8	11.5	JPMorgan	4,253.1	8.6	7.9
BofA Securities	287.2	7.7	7.7	Goldman Sachs	3,542.2	7.1	7.3
Goldman Sachs	281.9	7.6	7.2	BofA Securities	3,064.0	6.2	5.9
Barclays	198.3	5.3	7.9	Morgan Stanley	2,519.3	5.1	5.2
Wells Fargo	181.4	4.9	3.0	Citi	2,014.0	4.1	4.1
Citi	170.6	4.6	4.4	Barclays	1,552.6	3.1	3.2
Morgan Stanley	166.0	4.5	5.1	UBS	1,314.3	2.7	4.1
Deutsche Bank	146.4	3.9	4.1	Wells Fargo	1,044.8	2.1	1.8
RBC Capital Markets	142.3	3.8	3.8	RBC Capital Market	s 1,003.7	2.0	1.9
UBS	141.3	3.8	7.5	Jefferies	937.3	1.9	2.3
¹ Dealogic Revenue analytics are employed where fees aren't disclosed. Source: Dealogic						ealogic	

 $^1\!\text{Dealogic}$ Revenue analytics are employed where fees aren't disclosed.

Who's No. 1?

Top banks in Dealogic rankings across M&A, equity capital markets (ECM), debt capital markets (DCM) and loans, in first nine months of 2023

> First 9 mo. Chg in share from first 9 mo. of 2022 market

How the 30 Dow Jones Industrials Performed the third a

۰.	apital	Mar	kots	Percentage chan	ige in th	ne third	l-quar	ter and year-to-da	te		
st 9-months		KELS	Company	3rd-qtr close	Percent 3rd-qtr	t Chg YTD		3rd-qtr close	Percen 3rd-gtr	it Chg YTD	
4	Value \$billions		Market Share%	Amgen	268.76	21.1	2.3	Johnson & Johnson	155.75		-11.8
	33.2	215	7.8	Caterpillar	273.00	11.0	14.0	Travelers Companies			-12.9
	28.4	204	6.7	Chevron	168.62	7.2	-6.1	3M	93.62	-6.5	-21.9
	27.6	224		Intel	35.55	6.3	34.5	Coca-Cola	55.98	-7.0	-12.0
	25.8	181	6.1	UnitedHealth Group	504.19	4.9	-4.9	Microsoft	315.75	-7.3	31.7
	18.1	104	4.3	International Business Machines	140.30	4.9	-0.4	Walt Disney	81.05	-9.2	-6.7
	18.1	157	4.3	Cisco Systems	53.76	3.9	12.8	Boeing	191.68	-9.2	0.6
	11.6	110	2.7	Walmart	159.93	1.7	12.8	Merck	102.95	-10.8	-7.2
	11.4	68	2.7	Goldman Sachs	323.57	0.3	-5.8	Honeywell International	184.74	-11.0	-13.8
	11.3	63	2.7	JPMorgan Chase	145.02	-0.3	8.1	McDonald's	263.44	-11.7	-0.03
	11.3	113	2.7	Home Depot	302.16	-2.7	-4.3	Apple	171.21	-11.7	31.8
			2.7	Visa	230.01	-3.1	10.7	Verizon	32.41	-12.9	-17.7
	ed Lo			Dow	51.56	-3.2	2.3	NIKE	95.62	-13.4	-18.3
Fil	rst 9-m	onth	S	Procter & Company	145.86	-3.9	-3.8	American Express	149.19	-14.4	1.0
4	Value billions		Market Share%	Salesforce	202.78	-4.0	52.9	Walgreens	22.24	-21.9	-40.5

Source: Dow Jones Market Data

Biggest Percentage Gainers...

Company	Symbol	Close	3rd Qı Net chg	uarter % chg	Low	52-Wee Close(●)	k High	% chg
Tango Therapeutics	TNGX	11.26	7.94	239.2	2.47	•	11.61	211.0
Cardlytics	CDLX	16.50	10.18	161.1	2.57	•	19.57	75.5
Groupon	GRPN	15.32	9.41	159.2	2.89	•	15.78	92.5
US Cellular	USM	42.97	25.34	143.7	13.79	•	46.86	65.1
Telephone & Data Sys	TDS	18.31	10.08	122.5	6.44	•	21.75	31.7
Blue Apron Cl A	APRN	12.88	7.04	120.5	4.70		70.68	-81.4
Thorne Healthtech	THRN	10.19	5.49	116.8	3.41	•	10.20	115.4
NeuroPace	NPCE	9.73	5.24	116.7	1.22	•	9.73	159.5
Immunovant	IMVT	38.39	19.42	102.4	5.09	•	44.19	588.0
Ultralife	ULBI	9.76	4.92	101.7	3.67	•	10.75	102.9
Matrix Service	MTRX	11.80	5.91	100.3	3.66	•	12.19	185.0
Axcella Health	AXLA	10.44	4.98	91.3	2.59	•	48.50	-75.6
Orion Group Holdings	ORN	5.36	2.55	90.7	2.10	•	5.49	103.0
Virco Manufacturing	VIRC	7.94	3.77	90.4	3.54	•	8.24	86.4
AN2 Therapeutics	ANTX	16.08	7.58	8 9.2	4.87	•	21.04	-7.5

Biggest Percentage Losers

		31	rd Quarter		52-W	eek ——	
Company	Symbol	Close Net	chg % chg	Low	Close()	High	% chg
Better Home & Finance	BETR	0.48 -9	.97 -95.4	0.44	•	62.91	-95.2
ESGL Holdings	ESGL	0.50 –10	.29 -95.4	0.48	•	24.72	-95.0
Galera Therapeutics	GRTX	0.18 –2	.94 -94.4	0.17	•	3.59	-89.9
Fangdd Network Group ADR	DUO	0.77 –12	.43 -94.2	0.76	•	32.70	-94.4
Ault Alliance	AULT	0.33 –4	.42 -93.1	0.29	•	42.96	-99.1
Marti Technologies	MRT	0.77 –9	.82 -92.7	0.60	•	17.72	-92.3
SIGNA Sports United	SSU	0.28 –2	.55 -90.3	0.24	•	6.40	-95.2
1847 Holdings	EFSH	0.97 –8	.41 -89.7	0.74	•	92.50	-97.6
noco-noco	NCNC	1.18 –9	.37 -88.8	0.83	•	11.42	-88.2
Altisource Asset Mgmt	AAMC	6.90 –49	.29 -87.7	6.27	•	103.50	-56.2
Momentus	MNTS	2.00 –13	.75 -87.3	1.28	•	79.50	-97.1
SEALSQ	LAES	2.01 –12	.91 -86.5	1.90	•	28.50	
Electriq Power Holdings	ELIQ	1.76 -8	.82 -83.4	1.41	•	11.85	-82.2
Complete Solaria	CSLR	2.06 -8	.54 -80.6	1.97	•	16.00	-79.2
AMC Entertainment	AMC	7.99 –30	.83 -79.4	7.05	•	80.74	-87.0

Most Active Stocks

Most heavily traded issues in Third quarter of 2023; composite volume, in millions

Company	Symbol	Volume	Close	3rd Q Net chg	uarter % chg	High	52-Wee Low	k — % chg
ProSh UltraPro Shrt QQQ	SQQQ	7,760	20.44	1.53	8.1	69.55	16.38	-66.7
Tesla	TSLA	7,337	250.22	-11.55	-4.4	299.29	101.81	-5.7
ProShares UltraPro QQQ	TQQQ	5,878	35.62	-5.38	-13.1	47.14	16.10	84.4
SPDR S&P 500 ETF Trust	SPY	4,719	427.48	-15.80	-3.6	459.44	348.11	19.7
Direxion Dly Semi 3 Bear	SOXS	4,021	11.20	1.33	13.5	89.59	8.17	-84.2
NIO ADR	NIO	3,894	9.04	-0.65	-6.7	16.88	7.00	-42.7
Palantir Technologies	PLTR	3,870	16.00	0.67	4.4	20.24	5.92	96.8
Advanced Micro Devices	AMD	3,760	102.82	-11.09	-9.7	132.83	54.57	62.3
Apple	AAPL	3,658	171.21	-22.76	-11.7	198.23	124.17	23.9
Direxion Dly SCOND 3 BL	SOXL	3,488	18.87	-5.96	-24.0	28.75	6.21	113.0
Amazon.com	AMZN	3,393	127.12	-3.24	-2.5	145.86	81.43	12.5
Invesco QQQ Trust I	QQQ	3,138	358.27	-11.15	-3.0	387.98	254.26	34.1
Ford Motor	F	3,134	12.42	-2.71	-17.9	15.42	10.90	10.9
NVIDIA	NVDA	3,092	434.99	11.97	2.8	502.66	108.13	258.3
Rivian Automotive	RIVN	3,020	24.28	7.62	45.7	37.39	11.68	-26.2
AT&T	Т	2,801	15.02	-0.93	-5.8	21.53	13.43	-2.1
Dank of America	DAC	2 554	27 20	1 21	_1 4	20 40	26 22	0.2

Third-quarter stock-market performance, based on the S&P Global BMI (Broad Market Index) in U.S.-dollar and local-currency terms ranked by U.S.-dollar performance

Country	U.S. dollar	Local currency	Country	U.S. dollar	Local currency
Turkey	37.5%	44.6%	Estonia	-3.1%	-0.1%
Egypt	18.2	18.2	Italy	-3.2	-0.2
Sri Lanka	14.4	20.5	China	-3.4	-3.4
Kazakhstan	14.2	21.0	U.S.	-3.6	-3.6
Romania	11.7	15.5	Kuwait	-3.7	-3.2
Mauritius	8.2	5.7	Thailand	-3.9	-1.4
Pakistan	6.5	7.4	Peru	-4.1	-3.9
Norway	6.5	5.9	South Africa	-4.3	-4.6
UAE	6.2	6.2	Spain	-4.4	-1.4
India	4.7	5.9	Austria	-4.5	-1.6
Bulgaria	4.5	7.7	Philippines	-4.8	-2.4
Malaysia	4.3	4.9	Australia	-4.8	-1.8
Slovakia	4.3	7.4	Canada	-4.8	-2.7
Argentina	3.1	40.5	Ireland	-5.0	-2.1
Cyprus	2.7	5.8	Switzerland	-5.4	-3.3
Vietnam	1.9	5.0	Mexico	-5.4	-4.2
Israel	1.0	2.8	South Korea	-5.6	-3.4
Qatar	0.8	0.8	Finland	-5.7	-2.8
Czech Republic	0.8	6.5	Brazil	-6.0	-2.7
Denmark	0.7	3.9	Iceland	-6.5	-5.8
Bahrain	0.6	0.6	Taiwan	-6.7	-3.3
Colombia	0.2	-2.8	Greece	-6.7	-3.9
Oman	0.03	0.03	Portugal	-7.0	-4.1
Luxembourg	-0.1	2.9	France	-7.0	-4.2
Jordan	-1.1	-1.1	Slovenia	-7.1	-4.3
Nigeria	-1.3	3.0	Sweden	-7.2	-6.7
Hungary	-1.5	5.7	Germany	-7.6	-4.8
Japan	-1.7	1.4	New Zealand	-8.9	-7.1
Morocco	-1.8	1.9	Tunisia	-9.5	-7.1
Belgium	-2.0	1.0	Chile	-10.5	-0.3
Lithuania	-2.2	0.8	Poland	-11.0	-4.5
Bangladesh	-2.4	-0.5	Hong Kong	-11.8	-11.8
Indonesia	-2.4	0.6	Netherlands	-14.4	-11.8
Singapore	-2.8	-2.1	Kenya	-17.1	-12.7
U.K.	-3.1	1.0	Ukraine	-18.6	-18.2

Source: S&P Dow Jones Indices

Top 20 Global M&A Deals in First Nine Months of 2023

Ranked by deal value excluding net debt of the target company.

		Date	Value
Acquirer	Target	Announced	\$billions
Pfizer	Seagen	13-Mar	45.7
Existing Management	Kenvue (80.1%)	24-Jul	36.2
Cisco Systems	Splunk	21-Sep	28.1
Glencore	Teck Resources	3-Apr	25.9
Black Spade Acquisition	VinFast Auto	12-May	23.1
Newmont	Newcrest Mining	5-Feb	19.6
Existing Shareholders	Jio Financial Services	21-Aug	19.2
Japan Industrial Partners, TBJH	Toshiba	23-Mar	15.3
ONEOK	Magellan Midstream Partners	14-May	14.0
Carrier Global	Viessmann Climate Solutions	25-Apr	13.2
GTCR Golder Rauner	Worldpay (55%)	6-Jul	12.7
Silver Lake Group, Canada Pension Plan Investment Board	Qualtrics International (96.34%)	6-Mar	11.9
Smurfit Kappa Group	WestRock	12-Sep	11.3
Extra Space Storage	Life Storage Inc (100%, Bid No 2)	3-Apr	11.2
Merck	Prometheus Biosciences	16-Apr	10.9
Nasdaq	Adenza Group	12-Jun	10.7
JPMorgan Chase	First Republic Bank (Substantial majority of assets, 100%)	1-May	10.6
CVS Health	Oak Street Health	6-Feb	9.8
Roark Capital Group	Subway IP	24-Aug	9.6
Endeavor Group Holdings	World Wrestling Entertainment	3-Apr	8.5

Top 20 Global IPOs Priced in First Nine Months of 2023

Issuer	Exchange	Currency	Offer Price	Pricing Date	Value \$ millions
Arm Holdings	NASDAQ	USD	51.00	13-Sep	5,228
Kenvue	NYSE	USD	22.00	3-May	4,372
ADNOC Gas	Abu Dhabi	AED	2.37	3-Mar	2,476
Hidroelectrica SA	Bucharest	RON	104.00	5-Jul	2,049
Nexchip Semiconductor	STAR Market	CNY	19.86	19-Apr	1,880
SMEC	STAR Market	CNY	5.69	25-Apr	1,809
Ades Holding	Saudi	SAR	13.50	20-Sep	1,219
Shaanxi Energy Investment	Shenzhen	CNY	9.60	28-Mar	1,047
Baimtec Material	STAR Market	CNY	78.99	7-Jul	983
CSI Solar	STAR Market	CNY	11.10	30-May	975
SCHOTT Pharma	Frankfurt	EUR	27.00	27-Sep	857
Huaqin Technology	Shanghai	CNY	80.80	27-Jul	818
ADNOC Logistics & Services	Abu Dhabi	AED	2.01	25-May	769
Nextracker	NASDAQ	USD	24.00	8-Feb	734
PT Amman Mineral Internasional	Indonesia	IDR	1695.00	19-Jun	715
ZJLD Group	Hong Kong	HKD	10.82	21-Apr	677
Rakuten Bank	TSE - Prime	JPY	1400.00	13-Apr	674
Hunan Yuneng New Energy Battery Material	Shenzhen	CNY	23.77	20-Jan	663
Lottomatica Group	Borsa Italiana	EUR	9.00	28-Apr	661
Instacart	NASDAQ	USD	30.00	18-Sep	660

Product and Deal Type	No.1 - Ranked Bank	share(%)	mo. of 2022 (pct. points)
Investment Banking	Hold Hanked Bank	Share (70)	(peu pointo)
	IDM -	0 (0.7
Global IB Revenue ¹	JPMorgan	8.6	0.7
Global M&A Revenue ¹	Goldman Sachs	10.4	-0.2
Global ECM Revenue ¹	JPMorgan	7.2	1.4
Global DCM Revenue ¹	JPMorgan	6.7	-0.6
Global Loans Revenue ¹	JPMorgan	12.1	1.4
Global M&A	Goldman Sachs	27.5	-6.0
U.S. M&A	Goldman Sachs	39.5	-2.2
Global M&A Boutique	Centerview Partners	8.4	3.2
Equity Capital Markets			
Global ECM	Goldman Sachs	7.8	1.1
Global IPOs	CITIC Securities	6.9	-2.4
Global All Follow-Ons	Goldman Sachs	9.9	2.3
Global Convertible Bonds	BofA Securities	11.1	5.5
U.S. ECM	Goldman Sachs	14.1	-0.1
U.S. IPOs	Citi	9.5	2.0
U.S. Block Trades	Goldman Sachs	31.4	6.2
U.S. Non-Block Follow-Ons	Goldman Sachs	12.8	6.2
U.S. Convertible Bonds	BofA Securities	14.0	0.4
Fixed Income			
Global DCM	JPMorgan	5.8	-0.9
Global Investment-Grade Bonds	BofA Securities	5.8	-0.4
Global High-Yield Bonds	JPMorgan	8.8	-0.4
U.S. DCM	BofA Securities	10.1	-0.04
U.S. Investment-Grade Bonds	BofA Securities	11.6	-1.2
U.S. High-Yield Bonds	JPMorgan	9.0	-1.3
U.S. FIG Bonds	BofA Securities	13.1	-0.6
Global Loans	BofA Securities	10.1	-1.3
Global Investment-Grade Loans	JPMorgan	10.4	0.4
Global Leveraged Loans	BofA Securities	9.7	-1.6
U.S. Loans	BofA Securities	15.3	-1.5
U.S. Investment-Grade Loans	JPMorgan	16.4	0.2
U.S. Leveraged Loans	BofA Securities	15.0	-2.6
U.S. Total Leveraged Finance	BofA Securities	13.8	-2.8
U.S. Core Leveraged Finance	JPMorgan	9.3	1.3
U.S. Core Leveraged Finance Revenue ¹	JPMorgan	13.8	2.2
¹ Dealogic Revenue analytics are employed where	5		Source: Dealogic

Market Boxscores

How the major indexes performed

	Third-quarter pe	9/29/23	% cng from 9/30/22	
Dow Jones Industrial Average	-2.6%		33507.50	16.6
DJ U.S. Total Stock Market	-3.7		42788.69	18.5
DJ World (excl. U.S.)	-4.1		254.71	16.9
NYSE American Composite		9.8 %	4592.31	12.8
NYSE Composite	-3.0		15398.21	14.3
S&P 500	-3.6		4288.05	19.6
Nasdaq Composite	-4.1		13219.32	25.0
Russell 2000	-5.5		1785.10	7.2
Value Line (Geometric)	-5.9		538.95	9.6

Lucid Group	LCID	2,408	5.59	-1.30	-18.9	17.81	4.97	-60.0
Finl Select Sector SPDR	XLF	2,456	33.17	-0.54	-1.6	37.11	29.59	9.3
Kenvue	KVUE	2,517	20.08	-6.34	-24.0	27.80	19.95	
Bank of America	BAC	2,550	27.58	-1.51	-4.0	38.60	20.32	-9.5

Gainers and losers include common issues of $2\,$ or more listed on NYSE, Nasdaq, NYSE American or NYSE Arca at the beginning of the quarter.

IPO Scorecard

Best-performing U.S.-listed IPOs in 2023 ranked by % change in price from offer to last trade in the quarter

Issuer	Exchange	\$ Offer price	% Chg from offer		IPO Value \$ millions
Genelux	NASDAQ	6.00	308.2	Jan. 25	16
Structure Therapeutics	NASDAQ	15.00	236.1	Feb. 2	185
Shengfeng Development	NASDAQ	4.00	197.5	Mar. 31	10
Jin Medical International	NASDAQ	8.00	192.5	Mar. 27	8
Golden Heaven Group Holdings	NASDAQ	4.00	97.0	Apr. 12	7
Skyward Specialty Insurance Group		15.00	82.4 78.8	Jan. 12 Mar. 14	154
ICZOOM Group	NASDAQ	4.00			6
Nextracker	NASDAQ NYSE	24.00	67.3 39.2	Feb. 8 June 14	734 365
Cava Group Ispire Technology	NASDAQ	22.00 7.00	39.Z 30.7		22
	NASDAQ	7.00	50.7	Apr. 3	
Apogee Therapeutics	NASDAQ	17.00	25.3	July 13	345
Atlas Energy Solutions	NYSE	18.00	23.5	Mar. 8	324
RayzeBio	NASDAQ	18.00	23.3	Sept.14	358
Klaviyo	NYSE	30.00	14.6	Sept. 19	576
Kodiak Gas Services	NYSE	16.00	11.8	June 28	294
TMT Acquisition	NASDAQ	10.00	7.4	Mar. 27	60
Mars Acquisition	NASDAQ	10.00	7.0	Feb.13	69
Oak Woods Acquisition	NASDAQ	10.00	7.0	Mar.23	58
Atmus Filtration Technologies	NYSE	19.50	6.9	May 25	317
Bellevue Life Sciences Acquisition	NASDAQ	10.00	6.8	Feb. 9	69
Worst-performing U.Slisted I from offer to last trade in the g			,		- price
		\$ Offer	% Chg	Pricing	IPO Value
Issuer	Exchange	\$ Offer price	from offer	Pricing Date	IPO Value \$ millions
lssuer LQR House	Exchange NASDAQ	price 5.00	from offer -91.9	Date Aug. 9	\$ millions 6
Issuer LQR House NFT Gaming	Exchange NASDAQ NASDAQ	price 5.00 4.15	from offer -91.9 -91.7	Date Aug. 9 Feb. 14	\$ millions 6 7
Issuer LQR House NFT Gaming Asset Entities	Exchange NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00	from offer -91.9 -91.7 -90.4	Date Aug. 9 Feb. 14 Feb. 2	\$ millions 6 7 8
Issuer LQR House NFT Gaming Asset Entities Earlyworks	Exchange NASDAQ NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00 5.00	from offer -91.9 -91.7 -90.4 -87.5	Date Aug. 9 Feb. 14 Feb. 2 July 24	\$ millions 6 7 8 6
Issuer LQR House NFT Gaming Asset Entities	Exchange NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00	from offer -91.9 -91.7 -90.4	Date Aug. 9 Feb. 14 Feb. 2	\$ millions 6 7 8
Issuer LQR House NFT Gaming Asset Entities Earlyworks	Exchange NASDAQ NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00 5.00	from offer -91.9 -91.7 -90.4 -87.5	Date Aug. 9 Feb. 14 Feb. 2 July 24	\$ millions 6 7 8 6
Issuer LQR House NFT Gaming Asset Entities Earlyworks Cadrenal Therapeutics	Exchange NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00 5.00 5.00	from offer -91.9 -91.7 -90.4 -87.5 -86.4	Date Aug. 9 Feb. 14 Feb. 2 July 24 Jan. 19	\$ millions 6 7 8 6 7
Issuer LQR House NFT Gaming Asset Entities Earlyworks Cadrenal Therapeutics 60 Degrees Pharmaceuticals	Exchange NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00 5.00 5.00 5.30	from offer -91.9 -91.7 -90.4 -87.5 -86.4 -86.0	Date Aug. 9 Feb. 14 Feb. 2 July 24 Jan. 19 July 12	\$ millions 6 7 8 6 7 7 8
Issuer LQR House NFT Gaming Asset Entities Earlyworks Cadrenal Therapeutics 60 Degrees Pharmaceuticals Lucy Scientific Discovery	Exchange NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00 5.00 5.00 5.00 5.30 4.00	from offer -91.9 -91.7 -90.4 -87.5 -86.4 -86.0 -85.0 -83.4 -83.3	Date Aug. 9 Feb. 14 Feb. 2 July 24 Jan. 19 July 12 Feb. 8	\$ millions 6 7 8 6 7 7 8 8 8 8 18 10
Issuer LQR House NFT Gaming Asset Entities Earlyworks Cadrenal Therapeutics 60 Degrees Pharmaceuticals Lucy Scientific Discovery Multi Ways Holdings	Exchange NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NYSE	price 5.00 4.15 5.00 5.00 5.00 5.30 4.00 2.50	from offer -91.9 -91.7 -90.4 -87.5 -86.4 -86.0 -85.0 -83.4	Date Aug. 9 Feb. 14 Feb. 2 July 24 Jan. 19 July 12 Feb. 8 Apr. 3	\$ millions 6 7 8 6 7 7 8 8 8 8
Issuer LQR House NFT Gaming Asset Entities Earlyworks Cadrenal Therapeutics 60 Degrees Pharmaceuticals Lucy Scientific Discovery Multi Ways Holdings Warrantee	Exchange NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NYSE NASDAQ	price 5.00 4.15 5.00 5.00 5.00 5.30 4.00 2.50 4.00	from offer -91.9 -91.7 -90.4 -87.5 -86.4 -86.0 -85.0 -83.4 -83.3	Date Aug. 9 Feb. 14 Feb. 2 July 24 Jan. 19 July 12 Feb. 8 Apr. 3 July 25	\$ millions 6 7 8 6 7 7 8 8 8 8 18 10
Issuer LQR House NFT Gaming Asset Entities Earlyworks Cadrenal Therapeutics 60 Degrees Pharmaceuticals Lucy Scientific Discovery Multi Ways Holdings Warrantee Wang & Lee Group	Exchange NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NYSE NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00 5.00 5.00 5.30 4.00 2.50 4.00 5.00	from offer -91.9 -91.7 -90.4 -87.5 -86.4 -86.0 -85.0 -83.4 -83.3 -83.3	Date Aug. 9 Feb. 14 Feb. 2 July 24 Jan. 19 July 12 Feb. 8 Apr. 3 July 25 Apr. 20	\$ millions 6 7 8 6 7 8 8 8 8 8 8 8 18 10 0 8
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Issuer LQR House NFT Gaming Asset Entities Earlyworks Cadrenal Therapeutics 60 Degrees Pharmaceuticals Lucy Scientific Discovery Multi Ways Holdings Warrantee Wang & Lee Group Forme MGO Global QuantaSing Group	Exchange NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00 5.00 5.00 5.30 4.00 2.50 4.00 5.00 5.00 8.00 5.00 12.50	from offer -91.9 -91.7 -90.4 -87.5 -86.4 -86.0 -85.0 -83.4 -83.3 -83.0 -83.0 -83.0 -81.2 -81.2	Date Aug. 9 Feb. 14 Feb. 2 July 24 Jan. 19 July 12 Feb. 8 Apr. 3 July 25 Apr. 20 Apr. 27 Jan. 13 Jan. 24	\$ millions 6 7 8 6 7 7 8 8 8 8 8 8 8 18 10 8 10 8 9 42
Issuer LQR House NFT Gaming Asset Entities Earlyworks Cadrenal Therapeutics 60 Degrees Pharmaceuticals Lucy Scientific Discovery Multi Ways Holdings Warrantee Wang & Lee Group Forme MGO Global QuantaSing Group Trio Petroleum	Exchange NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ NASDAQ	price 5.00 4.15 5.00 5.00 5.00 5.30 4.00 2.50 4.00 5.00 5.00 8.00 5.00 12.50 3.00	from offer -91.9 -91.7 -90.4 -87.5 -86.4 -85.0 -83.4 -83.3 -83.0 -83.0 -83.0 -81.2 -81.2 -81.2 -81.0	Date Aug. 9 Feb. 14 Feb. 2 July 24 Jan. 19 July 12 Feb. 8 Apr. 3 July 25 Apr. 20 Apr. 27 Jan. 13 Jan. 24 Apr. 17	\$ millions 6 7 8 6 7 8 8 8 8 8 8 8 18 10 8 10 8 9 12 9 42 6
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Top 20 Global Bonds Priced in First Nine Months of 2023

Ranked by face value, in U.S. dollars

Issuer	Deal Type	Issuer Nation	Currency	Pricing Date	Value \$ millions
Pfizer Investment Enterprises	Corp IG	United States	USD	16-May	31,000
Amgen	Corp IG	United States	USD	15-Feb	24,000
Spain	Sovereign	Spain	EUR	25-Jan	14,144
Spain	Sovereign	Spain	EUR	7-Jun	13,910
Intel	Corp IG	United States	USD	7-Feb	11,000
Italy	Sovereign	Italy	EUR	4-Apr	10,857
Agricultural Bank of China	Corp IG	China	CNY	21-Mar	10,175
Saudi Arabia	Sovereign	Saudi Arabia	USD	10-Jan	10,000
European Union S	Supranational	Luxembourg	EUR	9-May	9,924
Commonwealth of Australia	Sovereign	Australia	AUD	19-Apr	9,418
Bank of America	Corp IG	United States	USD	19-Apr	8,500
Meta Platforms	Corp IG	United States	USD	1-May	8,500
Wells Fargo	Corp IG	United States	USD	18-Jul	8,500
Bank of America	Corp IG	United States	USD	12-Sep	8,500
Agricultural Bank of China	Corp IG	China	CNY	12-Sep	8,229
Bank of China	Corp IG	China	CNY	19-Sep	8,225
Industrial Commercial Bank of China - ICBC	Corp IG	China	CNY	10-Apr	7,996
Kenvue	Corp IG	United States	USD	8-Mar	7,750
European Union S	Supranational	Luxembourg	EUR	25-Apr	7,739
Kingdom of Belgium	Sovereign	Belgium	EUR	10-Jan	7,493
				Source	e: Dealogic

Industry Groups

Best and worst-performing U.S. industry groups in the past quarter based on the DJ U.S. Total Stock Market Index family

Best Performers

Best Performers		Worst Performers		
Industry group	% chg from prev qtr	Industry group	% chg from prev qtr	
Coal	28.7	Airlines	-25.3	
Oil Equipment & Services	19.7	Consumer Electronics	-21.8	
Exploration & Production	14.8	General Mining	-21.2	
Oil & Gas	11.5	Alternative Electricity	-20.9	
Integrated Oil & Gas	8.8	Platinum & Precious Metals	-20.7	
Travel & Tourism	8.0	Recreational Services	-18.9	
Paper	7.5	Electronic Office Equipment	-16.9	
Marine Transportation	7.4	Personal Products	-16.7	
Transportation Services	6.7	Renewable Energy Equipment	-16.4	
Reinsurance	6.5	Diversified REITs	-14.3	

Sources: Dow Jones Market Data; S&P Dow Jones Indices

Source: S&P Dow Jones Indices

QUARTERLY MARKET REVIEW

Bonds Are on Track for Year Of Dismal Returns—Again

By Sam Goldfarb

The year of the bond is shaping up to be a dud.

After bonds posted a historically bad 2022, many on Wall Street argued that this year would mark a decisive rebound. Instead, the widely tracked Bloomberg U.S. Aggregate bond index has lost 1.1% through Thursday, including price changes and interest payments—putting it on track for its third straight year of negative returns.

Losses happen in investing. But bonds are often touted as a safe option for investors, particularly those nearing retirement. Before 2022, the Bloomberg index had never delivered negative returns for even two consecutive years.

Overall, "it's gone from OK to terrible" for bonds this year, said Sonu Varghese, global macro strategist at Carson Group, a financial advisory firm.

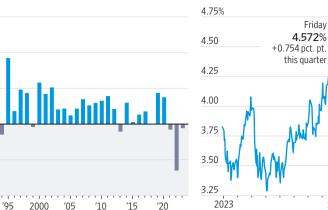
Investors can typically hope for returns that match the yields on the bonds they buy, Varghese said. At the start of the year, hopes were high because last year's rout—sparked by the Federal Reserve's aggressive interest-rate increases to fight inflation—had caused yields on investment-grade bonds to climb above 4%.

To get their expected return, investors just needed bond prices to stabilize. There was a reason to expect more: Analysts widely anticipated an economic slowdown that would drive rates down and bond prices up.

Earlier in the year, those forecasts seemed prescient. In March, bonds rallied when the collapse of Silicon Valley Bank sparked fears of a looming re-

Bloomberg U.S. Aggregate bond index total return*





Sources: FactSet (bond index); Tradeweb ICE Closes (yield)

cession.

1976 '80 '85

*2023 data is through Sept. 28

30%

20

10

-10

-20

Since then, however, investor sentiment has shifted drastically. Recession worries have abated. Investors' expectations for future interest rates have moved higher, not so much because they think the Fed will keep raising rates but because, with the economy surprisingly resilient, they see less reason for the central bank to cut them in the coming years.

'90

Since June 30, the yield on the 10-year U.S. Treasury note has climbed to 4.572%, as of Friday, from 3.818%. The Bloomberg U.S. Aggregate index—made up largely of Treasurys, government-backed mortgage securities and corporate bonds—is on course to lose about 3% this quarter.

Expectations for higher interest rates drive down bond prices because investors worry that bonds issued in the future will pay larger coupons than current ones. That in turn pushes up yields, a measure of expected annualized returns that assumes bonds will be paid at their face value at maturity.

Putting money in an actively managed bond fund generally hasn't been the secret to earning a positive return this year. Of 85 actively managed core U.S. bond mutual funds that use the Bloomberg U.S. Aggregate index as their benchmark and have up-todate data, only six have generated a positive return, according to Morningstar Direct.

Over the past 21 months, the 10-year Treasury yield has repeatedly crossed key thresholds—starting with 2% in early 2022—each time leading to debate over whether it can reach the next milestone. Now that it has climbed above 4.5%, the next landmark is 5%, which some investors say is easily obtainable.

The Fed's benchmark federal-funds rate is currently set in a range between 5.25% and 5.5%. A plurality of central bank officials have forecast that the fed-funds rate as it stands will settle over the longer run at 2.5%. That is widely interpreted as a so-called neutral rate—conducive to optimal economic growth, with inflation stable at around 2%.

Sept

Fed Chair Jerome Powell has made it clear that those forecasts are highly uncertain. If investors believe that the fed-funds rate will only fall to 3.5%, a 10-year yield at 5% could make sense based on the historical premium that they have demanded to hold longerterm Treasurys, said Mike Sanders, head of fixed income at Madison Investments.

Still, many on Wall Street question the notion that the fed-funds rate will settle above 2.5%. They also point out that higher yields should still eventually be good for investors, provided they can wait out the current volatility and hold bonds to their maturity.

"I think there are two very clear macro camps out there," said Priya Misra, a fixed-income portfolio manager at J.P. Morgan Asset Management. One camp believes it will just take time for higher interest rates to slow the economy, while the other thinks that "something fundamentally has changed post the pandemic," she said.



Track the Markets: Winners and Losers

* * * *

A look at how selected global stock indexes, bond ETFs, currencies and commodities performed around the world for the guarter



Barring a supply crisis, few analysts think oil prices above \$100 a barrel can be sustained in the near term.

Wall Street Expects Oil Rally to Cool

By Bob Henderson

Oil prices surged in the third quarter, but Wall Street doesn't expect the rally to last.

U.S. crude-oil futures closed at about \$91 a barrel Friday, up nearly 30% from \$71 at the start of July when cuts made by the Organization of the Petroleum Exporting Countries and its allies lowered global supplies below demand. The rally has put \$100-a-barrel on the table and raised the specter of renewed inflation pressures and central bank actions to combat them.

Prices popped 3.6% on Wednesday after federal record-keepers said U.S. commercial crude inventories had fallen to their lowest level since last December. The news inspired speculators—whose net bullish bets were already at their highest level since March 2022—to buy even more.

But barring a supply crisis, few analysts think oil prices above \$100 a barrel can be sustained in the near term. Most market observers think prices are likely to hover near \$90 for the rest of the year. Longstanding oil bull Goldman Sachs is forecasting an average fourthquarter price of \$88 a barrel for

U.S. crude-oil futures price

\$95 90 \$90.79 +29% this quarter 85 80 75 70 65 Jan. 2023 Sept. Source: FactSet

U.S. crude.

Higher prices are denting demand. Americans are driving and flying less, says J.P. Morgan, because of elevated gasoline and jet fuel prices. Gasoline consumption dropped in July month-on-month more than it usually does, the bank said, and airlines recently reported sales at the lower end of expectations. Chinese demand growth, driven largely by millions of travelers taking to the skies as Beijing relaxed travel restrictions, is also waning. Jet-fuel consumption has nearly recov-

ered to its prepandemic level. And China has started tapping into its own crude inventories, ramping up refinery runs and exporting more fuel.

China is able to do this, and profit in the process, said Citi's global head of commodities strategy Ed Morse, because of the enormous crude oil stockpile the country amassed over the past three years by buying cheap crude, most recently from Russia and Iran.

High oil prices might stimulate supply growth. If prices exceed \$100 for long, said UBS, U.S. producers are likely to increase output and bring them back down. Even at current price levels, exports from Iran, Iraq, Libya, Nigeria and Venezuela are already soaring, Citi noted, despite the sanctions and production problems plaguing those countries.

The potential for speculators to power the market higher is limited, say some analysts. Money manager positions are already the most bullish they have been in more than three years, according to Standard Chartered. Consumers, producers and merchants anticipated the tight market and bought ahead of the run-up, said Daniel Ghali, a commodities strategist

at TD Securities.

"They were well-positioned for it," said Ghali. "Ultimately, I think that caps the rally."

To be sure, oil prices could still be jolted upward by an unexpected supply shock, and today's high level of speculative positioning, tight oil fundamentals and economic uncertainty are, say analysts, a recipe for volatility in the months ahead.

But if prices do climb much higher, many believe Saudi Arabia will try to bring them back down by tapping into the copious spare crude capacity its cuts have left it with. Riyadh is reaping favorable revenues with prices where they are now, said Rebecca Babin, senior energy trader at CIBC private wealth, and worries about the damage that higher prices could do.

"I think they've learned the hard way that letting prices rip higher and the long-term demand destruction that follows isn't worth it," Babin said.

JOURNAL REPORT

The Investing Monthly report, including quarterly data for mutual funds and ETFs, will appear on Monday, Oct. 9.

*Continuous front-month contracts Sources: FactSet (indexes, bond ETFs, commodities), Tullett Prebon (currencies).

BUSINESS NEWS

LVMH CEO Faces France Scrutiny

Prosecutors say preliminary probe relates to possible money laundering

BY NICK KOSTOV

PARIS—French prosecutors are investigating a deal between French billionaire Bernard Arnault and a Russian businessman for possible money laundering.

The Paris prosecutor's office said Friday that its investigation follows an alert from France's anti-money-laundering unit Tracfin, and that a preliminary probe has been under way since 2022.

It declined to comment further.

Arnault is chief executive and the controlling shareholder of luxury empire **LVMH** Moët Hennessy Louis Vuitton. An LVMH spokesman didn't respond to requests for comment.

The prosecutors' statement follows a report in Le Monde, which said France's antimoney-laundering body had detected what it considered to be suspicious money transfers between Arnault and a Russian businessman, Nikolaï Sarkisov.

The dealings related to the Frenchman's acquisition of real estate in Courchevel, located in the French Alps, in 2018. That deal left Sarkisov with an alleged profit of around 2 million euros, without any obvious justification, the French daily said, citing a Tracfin document.

Sarkisov, who made his fortune in insurance, couldn't be reached for comment.

Watch a Video

Scan this code for a video on 96 S 7 how Bernard Arnault built his empire



Probe of Bernard Arnault follows an alert from France's anti-money-laundering unit Tracfin.

United's Pilots to Get Raise of as Much as 40%

BY ALISON SIDER

Pilots at United Airlines approved a new contract that includes pay raises of as much as 40% over the course of its four-year term.

The Air Line Pilots Association union said the deal adds \$10.2 billion in wage increases, benefits and other improvements, and was approved by 82% of pilots voting.

Pilot unions have been able to secure big gains as they negotiated new contracts as airlines confronted a rapid rebound in travel demand and a shortfall of aviators. Airlines have been racing to hire and train more pilots to replace those who retired early during the Covid-19 pandemic and prepare for a wave of coming retirements.

Workers are seeking to flex power in other industries, propelled by companies' need for workers and refreshed union leadership. On Friday, the United Auto Workers union expanded a two-week strike to two additional plants, after earlier this past week Hollywood writers reached a tentative deal with studios and streamers after a nearly five-month strike.

American Airlines and Delta Air Lines pilots have also struck deals for lucrative new contracts this year. including big wage increases and improvements pilots had sought for retirement contributions, scheduling, and other measures. United's new contract is also set to trigger pro-

UAW

Strikes

footprints.

bers.

ground in talks.

Expands

Continued from page B1

walkouts but so far without

causing deep disruption



United and its pilots union also hope that changes to work rules will encourage more pilots to seek out captain positions.

European Airlines Express Interest In TAP

By MAURO ORRU

British Airways parent International Consolidated Airlines Group, Deutsche Lufthansa and Air France-KLM have expressed interest in TAP Air Portugal, after the Portuguese government said it plans to sell a majority stake in its flag carrier.

The government said on Thursday that the Council of Ministers had approved a decree to sell at least 51% of the company, reserving up to 5% for its employees.

Finance Minister Fernando Medina said he was seeking large-scale investors, either alone or in consortia, that would leverage their control of the airline to grow its national hub in Lisbon and bolster capacity at other national airports, including Porto.

"We do not seek to attract pure investments of a financial nature that are looking to get into TAP to then sell it or sell parts of it and we wish to reiterate TAP's strategic contribution to the country," Medina said.

The decision to privatize the airline paves the way for more consolidation in Europe's aviation industry, after Germany's Lufthansa bought a 41% stake in ITA Airways, the Italian carrier formerly known as Alitalia, and International Consolidated Airlines Group agreed to buy out Spanish carrier Air Europa.

An IAG spokesman said the group is interested in TAP as a deal represents an opportunity to develop the Lisbon hub and bolster its network. Aside from British Airways, IAG houses Spain's Iberia and Ireland's Aer Lingus, among other airlines.

The successful bidder will gain access to TAP's sprawling network and connections to South America, including Brazil. and other Portuguesespeaking countries in Africa such as Mozambique as well as Sao Tome and Principe.

"In principle, the Lufthansa Group always wants to take an active role in the consolidation of the market," a spokesman said. "That is why the planned sale of a stake in Portugal's TAP is interesting for us. Lufthansa Group and TAP would complement each other very well, especially with TAP's route network to and from South America." A spokesman for Air France-KLM said the group had a "strong interest in the privatization of TAP" and that it was awaiting details of the process.

visions in the new contracts that require airlines to match or exceed one another's pay. The agreements leave

United are still negotiating Southwest Airlines as the last with flight attendants.

it was pausing construction at a battery plant in Michigan, citing concerns about its ability to remain competitive. Fain criticized the move as a threat to cut jobs.

Farley expressed frustration Friday about the UAW's latest action, saying he believed the two sides could have reached a compromise on pay and benefits. Instead, he said talks

across the companies' factory hit a sticking when point The union also has applied they turned to future jobs at

pressure unevenly, rewarding companies that give up more the company's planned bat-The latest expansion drew tery plants.

sharp rebukes from the chief executives of GM and Ford Friday, with both accusing the union of prioritizing publicity over reaching a deal for memtery

The latest work stoppages hit plants that make popular seven-passenger SUV models. Ford's Chicago factory builds the Explorer and Lincoln Aviator. GM's factory in Lansing, Mich., makes the Chevrolet Traverse and Buick Enclave.

The union stopped short of targeting factories that produce the companies' big pickup trucks and largest SUVs. Those vehicles, including Ford's F-series trucks and GM's Chevy Suburban SUVs, are the companies' biggest moneymakers.

"We will win. Our strategy is working," Fain told tens of thousands of viewers in his livestream address Friday morning.

Tensions between Ford and the union flared this past week after the company said

Ford Chief Executive Jim

hit plants that make popular "So far, the seven-

UAW is holding the deal hostage over batplants," Farley said in a

news conference Friday afternoon. He added that the car company wanted to determine first what its labor costs would look like in the next

UAW strike locations

 Plants targeted Sept. 14
 Parts distribution centers targeted Sept. 22 Plants targeted Sept. 29

Minn. Ore. Mass Wis ŃY. Pa. Nev. Ohio Colo. .W.Var Calif. Mo. Va Tenn Miss Texas Source: United Auto Workers

union agreement before moving ahead with the Michigan battery plant.

of the biggest four airlines

without a new pilot contract.

Several airlines including

Farley also took a swipe at Fain, saying he is more interested in media attention than getting a deal done. "Shawn has been on the TV more than Jake from State Farm," Farley said

The UAW president fired back in a statement, saying the CEO is lying about the

state of negotiations and had

failed to show

hensive day and still

haven't heard back," Fain said. He added, alluding to the State Farm jingle: "Like a good neighbor, we're available 24/7."

GM's Chief Executive Mary

Barra released a pointed statement, accusing the union of dragging out the strikes for "their own personal and political agendas."

United and its pilots union

also hope that changes to

work rules will encourage

more pilots to seek out cap-

tain positions. The union has

"It's clear that there is no real intent to get to an agreement," Barra said.

GM said it hasn't received a full counteroffer from the union since the company submitted its last proposal on Sept. 21.

Fain said Stellantis's proposal came closer to the union's demands on cost-ofliving adjustments, the right to strike over plant closures and job outsourcing. The new union president said he is excited about the momentum at Stellantis, whose earlier proposals he had strongly rebuked.

Stellantis, which absorbed Fiat Chrysler in 2021, sells Jeep, Ram, Chrysler and Dodge brands in the U.S. The company is also a major player in Europe and other overseas markets, where it sells Peugeot, Citroën, Opel and other names.

The company is more global than GM and Ford, deriving roughly half of its operating profit from outside North America. It also has the fewest hourly UAW workers of the three companies.

The UAW has sought to bring national attention to its walkouts while preserving its \$825 million fund used to compensate striking workers and withholding the most serious harm to the companies³ bottom lines, said Marc Robinson, a consultant who spent more than 30 years at GM, including on labor strategy.

said many experienced co-pilots had been avoiding the captain's seat, despite the higher pay, to avoid giving up control over their schedules.

Bankrupt EV Startup Lordstown Motors to Sell Assets to Ex-CEO

By SEAN MCLAIN

Lordstown Motors, the electric-truck bankrupt startup that once sought to revive an old General Motors factory in Ohio, has found a potential buyer for its remaining assets: a capital firm majority-owned by former Chief Executive Steve Burns.

The firm, LAS Capital, has agreed to purchase the company's assets for \$10 million, according to a regulatory filing late Friday. The deal is due to be completed by the end of October, subject to court approval.

The purchase would give Burns, who founded Lordstown Motors, the assets of a startup he left in 2021, after an investigation by the board of directors found inaccuracies around disclosures of preorders for its Endurance pickup truck.

Burns couldn't be reached for comment.

Lordstown Motors, which filed for bankruptcy in June, emerged investor amid frenzy for EV startups in 2019 when it purchased a closed GM plant in Lordstown, Ohio, for \$20 million.

Burns and LAS Capital have offered to purchase assets that include batterymotor-manufacturing and equipment, intellectual property and any completed Endurance vehicles. The Lordstown Motors factory itself, which the startup sold to contract manufacturer Foxconn Technology in 2021, isn't part of the deal.

The company went public in late 2020 through a merger with a special-purpose acquisition vehicle, also known as a SPAC. Burns said at the time that Lordstown Motors had raised approximately \$675 million.

But Lordstown Motors ran into cash problems and said it needed more cash to start production.

In late 2021, Lordstown Motors signed a deal with Foxconn in which the Taiwan-based manufacturing giant would purchase shares in the startup over a period of months.

The deal, heralded as a way to reinvigorate the cashstrapped startup, collapsed earlier this year when Foxconn declined to make a planned \$47 million share purchase.

As a result, Lordstown Motors wound down its operations and filed for bankruptcy protection.

The latest action up at bargaining this week. "If he were there, he'd know we gave Ford a comprepassenger SUVs. proposal on Mon-

BANKING & FINANCE



Albemarle will pay more than \$218 million to settle the probe. A facility in Nevada.

Lithium Supplier Albemarle **Settles Bribery Investigation**

BY WILL FEUER

Albemarle has agreed to pay more than \$218 million to settle an investigation into bribes paid by third-party sales representatives.

The Charlotte, N.C.-based supplier of lithium and other materials said it voluntarily disclosed the payments to the Justice Department and Securities and Exchange Commission in 2018. The SEC said the payments violated the Foreign **Corrupt Practices Act.**

From 2009 to 2017, Albe-

marle's third-party sales agents and employees of its subsidiaries conspired to pay bribes to government officials to obtain and retain chemical catalyst business with stateowned oil refineries in Vietnam, Indonesia and India, the Justice Department said. Albemarle netted about \$98.5 million in profit as a result of the

scheme. Albemarle previously said it expected to pay a \$218.5 million fine to resolve the investigation.

"The actions taken by a

limited number of former employees and third-party sales representatives happened years ago," Albemarle said. "Those responsible for these past actions were held to account and separated years ago.

The company said it has since transformed its riskmanagement process, and noted that it cooperated with the Justice Department. The violations occurred in its refining-solutions business. which is now part of its Ketjen catalyst segment.

SEC Takes In Millions In Fines at Year-End

* * * * * *

Regulator brought in \$218 million Friday; most will go to Treasury Department

By DAVE MICHAELS

WASHINGTON — Wall Street's top regulator on Friday brought in \$218 million in fines, roughly equal to 10% of its latest annual budget. It is still shutting down next week if lawmakers can't agree on a plan to fund the federal government.

The Securities and Exchange Commission closed out its fiscal year with a surge of civil-enforcement actions, a regular occurrence for a regulator that measures its impact by the fines it levies. But most of the SEC's fines are sent to America's checking account, the general fund of the U.S. Treasury Department.

The SEC can't hold on to penalties to fund its operations. The SEC's fines have risen steeply under SEC Chair Gary Gensler, whose top staff insists higher fines are needed to discourage a pattern of regulatory lawbreaking. Last year, Gensler's enforcement division

made a record haul-\$6.4 billion.

A group of 10 brokerage firms and money managers accused of breaking recordkeeping rules were among the firms that faced end-of-year fines on Friday. The firms agreed to pay a total of \$79 million to the SEC.

The recordkeeping cases targeted traders' use of WhatsApp and other tools that their compliance departments didn't monitor. The SEC often finds evidence for enforcement actions in traders' emails and Bloomberg chats. But regulators found they couldn't get some of that information if traders used encrypted messaging apps.

The practice sparked a crackdown that began in 2021 and has carried through this week, with Interactive Brokers, Perella Weinberg Partners, Baird and William Blair being the latest to settle cases over texting on prohibited apps.

Last year, the brokerage units of JPMorgan Chase, Goldman Sachs and Citigroup each paid \$200 million to the SEC and Commodity Futures Trading Commission to settle recordkeeping investigations. In August, Wells Fargo became the latest member of the \$200 million club, settling SEC and CFTC investigations over its employees' messaging practices.

Christy Goldsmith Romero, a CFTC commissioner, said Friday that higher fines are necessary to fix the "tone at the top" of Wall Street. Interactive Brokers repeatedly settled CFTC enforcement actions over the past four years, she said.

Some of the SEC's fines are used to repay investors who were victims of fraud. The money can also be used to pay whistleblowers.

But allowing the SEC to fund itself with fine money would create "a financial incentive to impose penalties on people without regard to a balanced and objective enforcement policy," said Andrew Vollmer, a former SEC deputy general counsel.

A long-term shutdown is the one thing that could derail the SEC's ability to break its fine record, again. Under its shutdown plan, SEC enforcers would have to stop investigations that aren't considered emergency actions. Thev couldn't negotiate with brokers, money managers or public companies over the money needed to settle probes.

Newell Agrees to Settlement

BY WILL FEUER

The Securities and Exchange Commission charged Newell Brands as well as its former chief executive officer with misleading investors over financial-accounting practices. The maker of Sharpie

markers and Rubbermaid containers agreed to pay \$12.5 million in civil penalties to settle the charges. Michael Polk, CEO of Newell from 2011 to 2019, agreed to pay \$110,000. Neither admitted or denied the alleged violations.

The Wall Street Journal reported in 2020 that the SEC was investigating sales and accounting practices at the consumer-products maker.

In 2016 and 2017, Newell and Polk boosted the company's publicly disclosed core sales growth in ways that were out of step with Newell's actual but undisclosed sales trends, the SEC said. The agency said Newell announced 'strong" or "solid" results in quarters it internally described as disappointing due to shortfalls in sales.



The company pulled sales forward, according to the SEC.

Newell pulled sales forward into earlier quarters without adequate disclosure and engaged in accounting practices inconsistent with generally accepted accounting principles, according to the SEC.

"Today's order finds that Newell's former CEO issued an instruction to 'scrub' the company's accruals after he learned that the company was projecting a 'massive' and 'disappointing' miss for the quarter," said Mark Cave, associate director of the SEC's division of enforcement.

Newell said in a securities filing Friday that the settlement doesn't name any current executive officers. It said the SEC noted the company's cooperation in the investigation and subsequent improvements made to its financial controls. Polk didn't respond to a request to comment.



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Cybersecurity Spending Grows

By JAMES RUNDLE

Cybersecurity budgets have largely been protected from the worst consequences of economic uncertainty, but have hardly been untouched by wider trims to company spending.

Stubborn inflation and the specter of a recession have spooked companies across sectors, with some pulling back on hiring, cutting head count and in some cases, shutting down entirely.

Security, however, is one area where companies appear not to have significantly lowered spending, amid a threat environment that has seen significant attacks against organizations of all sizes in recent years.

"It's telling that, in a year that was pretty economically challenging, security didn't plummet in terms of spending," said Nick Kakolowski, director of research at IANS Research, a cybersecurity advisory group.

Cyber budgets grew this year for the most part, but modestly, IANS found in a study with recruiting company Artico Search. After double-digit increases in 2020 and 2021, the average growth in cybersecurity budgets for 2023 was 6%, according to the survey of 550 security executives. As a portion of overall technology budgets, cyber accounted for 11.6%, the study found. Around 37% of respondents to the survey said their cyber budgets were flat or reduced, the survey found.

Security requests continue to receive priority, said Mary

Elizabeth Faulkner, chief information security officer at Thrivent, a financial services provider. Faulkner just received approval to hire four people for her cyber team, she said. "I received a lot of support from the business leaders for that," she said.

Cybersecurity's importance to an organization isn't simply in preventing cyberattacks or safeguarding data, Kakolowski said, but has increasingly become a compliance concern.

Recent rules from the U.S. Securities and Exchange Commission, for instance, will require publicly traded companies to disclose details of cyber incidents and their cyber-risk management

Budgets

increased more

modestly this

year, a study

shows.

programs. Companies in certain critical-infrastructure sectors, such as oil and gas pipelines and hospitals, must comply with cyber regulations from industry bodies and fed-

eral agencies. State regulators have been rolling out new rules.

Escalating cyberattacks and added compliance burdens mean "you can only go so far in terms of cutting spending, even in a difficult economic situation," Kakolowski said.

In a report published Thursday, Moody's Investors Service found that cybersecurity spending by debt issuers rose 70% from 2019 to 2023. Publicly traded companies were the highest spenders in the survey of over 1,700 public and private-sector organizations, with budgets up 100% during that period.

Digital projects kick-started by the coronavirus pandemic, and their accompanying cybersecurity needs, have survived general spending cuts, said Steve Martano, a partner at Artico. Senior executives and the board of directors support this work, he said. which makes funding easier to secure than discretionary budgets for new tools.

Still, a notable share of security chiefs reported that they must nip and tuck their spending, he said. Some security chiefs are being asked to lay off the lowest performers

in a group, or those with duplicative roles.

General spending on cybersecurity is increasing dramatically, and will reach \$215 billion next year, according to projections from consulting

firm Gartner. That would be up 14.3% from \$188 billion this vear, Gartner said.

While some areas, such as cloud security, data privacy and security, and application security, have seen the largest share of spending growth, Gartner said, all security areas will receive continuing investment next year. "Security is something that is recognized and seen as important, even by nontechnical or nonsecurity teams," said Nat Smith, vice president analyst at Gartner.

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MARKETS

Stocks Wrap Up Another Weak September

S&P 500 has worst month so far this year, but remains up 12% for the year

By KAREN LANGLEY

The S&P 500 fell Friday, locking in its worst month so far this year as investors face the possibility that higher interest rates will stick around for a while.

A recent surge in longerterm government bond yields ______ has given in-

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op-



returns without as much risk as in the stock market. That helped push stocks lower for the week, month and quarter ending Friday.

The S&P 500 fell 4.9% in September, its worst month since December 2022. In daily trading Friday, the benchmark index slipped 0.3%, while the

Dow industrials lost 0.5%, or about 159 points. The Nasdaq Composite added 0.1%.

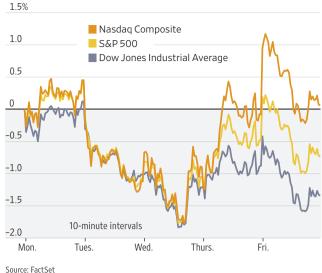
"September is typically a bad month, and it proved true again this year," said Michael Farr, chief executive and founder of investment-management firm Farr, Miller & Washington.

The S&P 500 is now up 12% for the year, down from a gain of nearly 20% at its 2023 closing high at the end of July.

Bond yields have climbed lately as investors bet the Federal Reserve will leave interest rates high in the face of a surprisingly robust U.S. economy. Traders now assign a 50% probability that the Fed will cut its benchmark rate below the current level by its meeting next June, according to CME Group's FedWatch tool. That is down from 77% a

month ago. The yield on the benchmark 10-year U.S. Treasury note settled Friday at 4.572%, up from 4.090% at the end of August.

Index performance this past week



That was its largest onemonth yield gain since September 2022, according to Dow Jones Market Data.

Technology stocks have been hit hard by the climb in rates. Apple shares fell 8.9% in September, while Nvidia shares tumbled 12%. Those stocks remain up 32% and 198%, respectively, in 2023.

Energy stocks were the only one of the S&P 500's 11 sectors to end September higher, rising 2.5% for the month. They were propelled by gains in oil prices, with global benchmark Brent crude climbing 9.7% for the month to \$95.31 per barrel.

Exxon Mobil shares gained 5.7% in September, while Chevron shares added 4.7%.

Stocks initially rallied Friday morning after encouraging data on inflation, raising hopes that the Federal Reserve would stop raising interest rates.

The central bank's preferred inflation measure, the personal-consumption expenditures price index, rose a seasonally adjusted 0.4% in August from the previous month. Core prices, which leave out food and energy, rose 0.1%, the weakest monthly increase since 2020.

"Everybody's watching inflation," said Lamar Villere, a portfolio manager at moneymanagement firm Villere & Co. "It's continuing to look like it's slowing down, so that's giving people hope that maybe the Fed will actually cut rates."

Among individual stocks, Nike shares rose 6.7% Friday after the sneaker giant beat Wall Street's expectations for earnings.

Analysts expect profits for companies in the S&P 500 to come in about flat for the third quarter and to rise 1.1% for 2023. Looking ahead to next year, they expect earnings to rise 12%. With the Fed's interest-rate increases continuing to ripple through the economy, that earnings forecast strikes some investors as optimistic.

"You don't see earnings increase when the economy slows," Farr said. "There still seem to be some unrealistic expectations."

Major overseas stock benchmarks also declined for the month. The Stoxx Europe 600 fell 1.7% in September, while Japan's Nikkei 225 dropped 2.3% and Hong Kong's Hang Seng retreated 3.1%.

Antitrust Agencies' Efforts to Slow Mergers Face Criticism

By Chris Cumming

The private-equity industry is pushing back against plans by antitrust enforcers to scrutinize more proposed mergers, saying these efforts violate the law and will hurt the economy.

The American Investment Council, the chief lobbying group for the nearly \$12 trillion private-markets investment sector, is challenging efforts by Biden administration regulators to collect more information about—and in some cases potentially block—buyout firms' acquisitions of companies.

The Federal Trade Commission and the Justice Department this summer proposed changes to merger rules that would let the regulators scrutinize more private-equity roll-ups, a widely used strategy that involves buying many small companies to create a single large one. FTC Chair Lina Khan and Justice Department officials say these deals often slip through the current deal-review framework, potentially harming market competition.

On Wednesday, the Washington-based AIC attacked these enforcement efforts, calling them "fundamentally irrational." It asked the FTC to withdraw plans to revise the Hart-Scott-Rodino merger-review process, saying the proposed changes would have a



Under FTC Chair Lina Khan, private equity has become an antimonopoly priority.

crushing effect on the U.S. economy and would exceed the agency's legal authority.

The proposals "will deter productive activity, dampen the incentives for businesses and investors, and divert billions of dollars of otherwise productive capital into compliance costs," wrote AIC General Counsel Rebekah Goshorn Jurata. "It will therefore hinder innovation and slow the growth of the American economy, to the detriment of the very consumers whom the antitrust laws are intended to benefit.' Biden administration regu-

lators have sought to establish more government oversight of the private-equity industry, which has expanded massively over the past decade yet remains less strictly regulated than many other types of Wall Street money managers.

The enforcement efforts have led to some clashes with industry groups. Earlier this month a coalition of lobbyists, including the AIC, sued the Securities and Exchange Commission to block new rules that require firms to give investors more detail about fund costs. Under Khan and Jonathan

Kanter, the head of the Justice Department's antitrust division, private equity has become an antimonopoly priority for perhaps the first time in the industry's history. Khan has raised particular concerns about roll-ups in the healthcare sector, saying last year that some may have "degraded patient care."

Khan said this month that the FTC will "scrutinize and challenge serial acquisitions, roll-ups and other stealth consolidation schemes that unlawfully undermine fair competition and harm the American public." Last week, her agency sued private-equity firm Welsh, Carson, Anderson & Stowe and a Texas anesthesiology company it backs, alleging they attempted to monopolize the Texas market and raise prices. The firm denied the claim, saying the company's price increases were in line with medical-care inflation, and called the FTC's lawsuit unprecedented.

Antitrust authorities this year proposed changes to the merger-review process to allow scrutiny of more privateequity roll-ups, according to attorneys.

Khan said in July that the proposed rules are intended to modernize regulations and reflect new economic realities, such as the growing prevalence of roll-ups, and are consistent with the agency's congressional mandate to prevent illegal anticompetitive behavior.

In June, the antitrust agencies sought changes to the Hart-Scott-Rodino process that would increase the level of detail buyout firms would be required to provide on potential mergers and open to scrutiny deals too small to meet the current threshold for review. Lowering the bar for reviews is aimed at preventing private-equity firms from circumventing the process through roll-ups that only involve acquisitions of smaller companies.

The FTC and Justice Department continued these efforts with new merger guidelines proposed in July, for the first time making explicit reference to private-equity rollups. The June and July proposals can take effect once the agencies publish final versions of the rules.

Private-equity lobbyists are also opposed to the new merger guidelines. The AIC wrote to regulators Sept. 18 to say that the proposed changes "seek to eradicate the role of markets in regulating competition and tilt the balance too far towards the government managing the economy."

Some groups that seek greater checks on Wall Street have applauded the FTC and Justice Department's proposed merger rules. Americans for Financial Reform, a coalition of groups that advocates for tougher financial regulation, said that privateequity roll-ups of small companies have serious anticompetitive effects and need to be reined in.

"The private-equity industry has become the primary driver of consolidation and merger activity in the United States and the predatory practices and economic extraction of private-equity firms from their portfolio acquisitions present unique risks to a competitive economy," the group said in a Sept. 18 letter to the FTC and Justice Department.

Pensions Cut Private Equity

Continued from page B1

"We've been able to make some nice moves on de-risking," said Jeff Siemon, treasurer and vice president of investor relations.

Some firms have leaned heavily on alternative investments. **American Airlines** and drugmaker Eli Lilly each have more than \$3 billion in private equity and other private market investments that could take as long as a decade to mature, according to 2022 corporate filings. For both companies, that is around 30% of total pension holdings. Private-equity funds use borrowed money to buy, overhaul and eventually sell companies.

Delta Air Lines had 79% of its pension assets in investments that weren't traditional stocks or bonds in fiscal 2022, the highest percentage of any large U.S. corporate pension according to Milliman.

The company's \$12 billion portfolio of hedge funds, private equity and other nontraditional investments hadn't changed much in size from the previous year. But a 2022 market selloff resulted in the alternative category gaining share for many large pensions.

Some companies have also promised to allocate additional money to private equity and other alternative asset managers in the coming years. Those commitments amount



American Airlines has more than \$3 billion in private equity and other private market investments.

to \$2 billion at Delta and \$1.5 billion at American, according to 2022 filings.

Delta declined to comment. Lilly and other company officials and plan advisers said alternative assets can help give pension funds access to a wider variety of assets and produce higher returns over the long run. Lilly's pension plan remains open to new employees, so its timetable for investing might be longer than others.

U.S. corporations' shift into exotic assets over the past 20

years was part of a decadeslong effort to manage the cost of providing for retired workers. Companies shifted new workers into 401(k)-style plans and began setting more money aside to cover promises to older workers. Then, along with university endowments, state and local government pensions, and even some wealthy individuals, they sought out alternatives.

Gross and other consultants said that alternatives have helped boost funding levels over the past decade, and that a fully funded plan might do well to take on the risk that comes with seeking higher returns in case they have to cover bond losses or cut checks to pensioners who live longer than expected. They said clients continue to pursue alternative assets that lock up money for just a few years or that offer more frequent opportunities to withdraw cash. Those include private credit and hedge funds.

Companies' 2022 financial reports showed their pension funds in the best shape they have been in 15 years, according to Milliman. That is in large part because rising interest rates reduce the value of their long-term liabilities meaning their promises have suddenly gotten much easier to keep.

That has left them eager to reduce risk and maintain flexibility. Gross said some clients are diverting occasional cash payouts from private-equity investments into stocks or bonds rather than reinvesting them in illiquid assets.

Pension and human-re-

sources consulting company Buck has some clients whose relatively small alternative asset portfolios threatened to disrupt their plans to offload retirement obligations to an insurer, said David Eisenberg, a principal in the New Yorkbased firm's investments practice.

That move, known as a pension risk transfer, reached record highs in 2022 and in the first half of 2023, according to Aon, which advises on the deals. Shrinking funding gaps made the deals cheaper for many companies because they often have to pay up front to cover the gap between assets and liabilities.

The companies that Buck works with ultimately found ways to close risk transfer deals, Eisenberg said. One ended up purchasing the illiquid assets from its pension plan and is now borrowing against those assets until it can convert them to cash, he said.

The past couple of years have been rocky for private equity. Benchmark private-equity returns turned negative for the year ending March 31, for the first time since the 2008-09 financial crisis, according to a Burgiss Group index that excludes venture capital.

Today, a closed corporate pension plan can likely get the returns the company wants from publicly traded investment-grade and high-yield bonds and bank loans without the uncertainty and complexity of alternative assets, said James Reichert, senior director of portfolio strategy at investment consultant NEPC.

"You don't necessarily need it," he said.

—Theo Francis contributed to this article.

HEARD ON STREET

FINANCIAL ANALYSIS & COMMENTARY

How much would you need to be paid to cover the risk of the next massive hurricane or earthquake? Investors in the insurance market have a new answer: Way more than they were before.

That is the message coming from a key part of that market, catastrophe bonds. "Cat bonds" emerged roughly a quarter century ago as insurance companies scrambled for ways to manage their most extreme risks after Hurricane Andrew's shocking losses put several out of business

They found a taker of the risk of major earthquakes or hurricanes on Wall Street: In exchange for a high annual yield, hedge funds, pensions and wealthy individuals were willing to put up cash that they might lose in the event of a specified weather event or insurance loss.

Some bonds have had losses over the years. In an example described by a Federal Reserve Bank of Chicago research paper, a private home-and-auto insurer sold a \$100 million bond back in 2010 that was designed to compensate the insurer for industry-wide losses from thunderstorms and tornadoes across the U.S. beyond \$825 million. When it was determined that industry losses were \$954.6 million in 2011. investors had to give up the cash. The decision was litigated for several years.

Overall, though, this arrangement has worked out for investors over time. Even in 2017, when a trio of major hurricanes hit the U.S., the Swiss Re Global Cat Bond Total Return Index still was positive that year. But then last year, cat bonds produced a negative 2.16% return. It was the first annual loss in the index's history.

What happened? It wasn't just about interest rates, since the cash put up by investors earns a floating market yield that rises with rates. And it wasn't even just about loss events, as potential payouts triggered by Hurricane Ian are turning out to be smaller than initially feared.

Instead, cat bonds' prices were caught up in the insurance industry's broader turmoil. Several recent years of \$100 billion-plus industry losses have spurred a radical rethinking of the price of risk. Hurricane Ian last year, with insurance losses expected at around \$50 bil-

Betting on Disaster Pays Off

'Cat bonds' notch record-breaking returns, even as the cost of calamity rises



The aftermath of Hurricane Ian last year. For insurers, the storm was the second-costliest ever to hit the U.S.

lion-second only to 2005's Katrina, adjusted for inflation, according to the Insurance Information Institute—might have been the final wake-up call.

Now, cat bond investors are demanding much higher payouts relative to the risks they are taking on. That pushed down the value of older bonds, which contributed to last year's price decline. But the upshot is that investors are now getting paid more than they have in 20 years to take on extreme catastrophe risk.

A key way to measure the price of this risk is the multiple of the vield investors earn to the loss rate projected by catastrophe models. In 2023, the average coupon paid on cat bonds has been over five times the average expected loss, according to Artemis, a catastrophe-bond

and insurance-linked-security news and data provider.

That is a big step up. Back in 2017, cat bonds' coupons on average were less than two times the expected loss rate. The ratio in 2023 is so far the highest it has been since 2002, when the market was far smaller and newer, and issuers were trying to entice investors to the esoteric products.

Usually in markets, investors' higher demands for return result in fewer willing sellers. But insurance is a different beast: Cat bond sales in 2023 are on pace to surpass the prior record of \$12.5 billion, according to AM Best, a credit agency specializing in insurance.

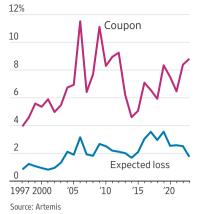
Companies can delay going public until the price is right, but insurers and some companies can't go without coverage for major catastrophes. Traditional reinsurers are also right now charging a lot more to cover more common losses and providing less overall coverage, sometimes leaving cat bonds as the only alternative.

Buyers are reaping the benefits. The total return on the Swiss Re index in the first half of 2023 was a record-breaking 10.3%. Investors are "doing better than they ever were," says Emmanuel Modu, managing director and head of insurance-linked securities at AM Best.

Of course, one should always be skeptical of the proverbial free lunch: Is it really more return for less risk? One major question is whether the market is actually right in what it expects for losses.

Cat bonds on average in 2023 have carried an expected 1.7% loss rate, according to Artemis. That is

Average coupon yield and expected loss rates on catastrophe bonds



more remote than what investors were covering a few years ago, when bonds in 2019 had an expected loss rate of 3.5%

Still, what were thought to be incredibly rare occurrences or skyhigh loss levels might be less so now, particularly if climate change is altering the underlying frequency or severity of some catastrophes. Already, industry losses can reach high levels even without major earthquakes or hurricanes, due both to general inflation in claims and how costly other disasters have become. Major thunderstorms in the U.S., known as severe convective storms, have generated more than \$50 billion in insured losses for the first time ever in 2023, according to Gallagher Re.

So the current extremely high ratio of yields to losses might be illusory. However, the relatively short lifespan of cat bonds, typically a couple of years, also means that pricing and terms on new bonds have time to catch up to longerterm shifts as they become more pronounced.

Another risk is that cat bonds' recent performance will bring in a flood of not-so-sophisticated money, depressing pricing. Yet due to those rising-loss pressures, the demand for coverage might just keep up with the supply of capital. Urs Ramseier, chief investment officer of Twelve Capital, which specializes in insurance investments, expects the cat-bond market to double from its roughly \$40 billion size today over the next five years. –Telis Demos 🗟



inflation dynamics in other ways. First, this is because fuel costs affect businesses—and businesses try to pass those costs along to consumers. When fuel prices surged last year, this effect was especially pronounced, Goldman Sachs economists estimate.

This is likely because, coming

Nike Clears a Low Bar With Investors

Underlying inflation is improving. But what about those gasoline prices?

U.S. Inflation Steps Back on the Gas

Rising fuel costs are difficult to ignore

It will be hard for the

Fed to cut rates if gas

to scare consumers.

prices are high enough

Inflation is cooling, as long as you don't pay much attention to fuel prices.

The Commerce Department on Friday reported that its gauge of consumer prices-the Federal Reserve's favored inflation measure—rose 0.4% in August from July. With that, prices moved to 3.5% higher than a year earlier, which compared with year-overyear gains of 3.4% in July and

3.2% in June. But econo-

mists and the Fed like to look at so-called core prices, which strip out food and energy items to get a better sense of

inflation's underlying trend. Here, the news was better, with prices rising just 0.1% from a month earlier. This put them up 3.9% from a year earlier—still hot, but the smallest increase since May 2021.

Moreover, during the past three months, core prices have risen at just a 2.2% annual rate—only a tad above the Fed's 2% inflation target. Fed projections released last week show that policy makers, on balance, forecast that core prices in the fourth quarter will be up 3.7% from a year ago. Going by the recent trend, that figure looks as if it is too high.

But what about those gasoline prices? According to the Energy Information Administration, a gallon of regular averaged \$3.84 in August, still down from a year earlier, but up plenty since last December's \$3.21. Gasoline prices

haven't moved all that much from August. But with crude oil pushing toward \$100 a barrel, that might not last. The reason

prices for energy items get taken out of the core, beyond their volatility, is they are set globally.

Case in point: More than anything going on with the U.S. economy, the recent surge in oil prices has to do with Saudi Arabia's and Russia's statements that they would extend voluntary oil-production cuts through the end of the year.

That said, fuel prices can affect

alongside supply-chain disrup tions and heavy demand, businesses were able to raise prices. Now, with supply-chain issues largely resolved and the demand for goods cooling, the ability to pass through prices has probably slipped.

Second, rising fuel costs can shape consumers' inflation expectations—especially because of the price of gasoline featured on gigantic signs at intersections. This can lead people to push for wage increases that amplify cost pressures on businesses.

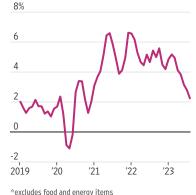
But so far, at least the recent rise in gasoline prices doesn't appear to be doing much on that count. Also, the University of Michigan reported on Friday that in its latest monthly survey, consumers reported they expected prices to rise 3.2% over the next year—the least since March 2021.

This is all good news as far as the Fed is concerned: The chances that it won't be raising rates again this year are looking even stronger. But steep fuel costs, so long as they persist, still will make it harder for it to take the next step and ease.

Cutting rates when the gasoline prices on those big signs are flashing scary numbers is hard to do.

—Justin Lahart

Core* personal-consumptionexpenditures price index, three-month annualized change



Source: Commerce Department

Manageable expectations and an attractive valuation set the stage for a stock bounce

Before Nike's latest earnings call, its shares had shed about 23% year to date, or about \$44 billion in market capitalization. It would have taken a pretty bad set of numbers for its stock not to rebound.

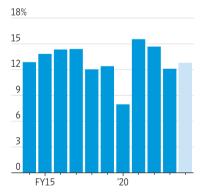
Luckily for Nike bulls, the sneaker giant's performance was solid. Revenue was up 2% in its quarter ended Aug. 31 compared with a year earlier—slightly lower than what Wall Street was expecting. But better-than-expected expense management helped Nike's bottom line, with net income declining just 1%. Wall Street analysts had been expecting a 20% drop.

Nike's shares jumped around 8% in after-hours trading following its earnings call Thursday. Even with that rebound, Nike shares look cheap at around 2.7 times forward sales-about a third below their five-year average. The discount looks unfairly steep for a company that has beaten analysts' top-line expectations in seven of the past eight quarters.

The company managed to assuage some of investors' biggest concerns in the most recent period. Performance in the North American wholesale channel was slightly better than expected, with revenue down 8% year over year. There were worries about that channel after Foot Locker reported weak results in its last quarter. And while there was concern about an inventory glut across the market, Nike reported 10% slimmer stock levels compared with a year earlier. While operating margins declined to 12.5%, marking the seventh straight quarter of year-overyear contraction, that was better than analysts' expectations of 11.3%

Nike's performance in China, Hong Kong, Macau and Taiwan was a weaker spot, though. Sales were up 12% on a constant-currency basis, weaker than the 14% growth analysts expected. In all, last quarter's positive trends weren't

Nike annual operating margins



Note: Fiscal 2024 ends May 2024. Figure for 2024 is an estimate based on analysts polled by Visible Alpha Source: Visible Alpha

enough to move the needle on the company's outlook of full-year revenue growth in the mid-single-digit percentage range.

Like many of its apparel peers, the company faces some big unknowns in consumer spending trends. In the U.S., student-loan repayments are top of mind, and there are lingering questions about China's economic recovery.

While Nike's executives spent much of the earnings call talking about their product strategy, they also spent a fair bit of time highlighting initiatives to reduce costs. The company said it made investments in digital fulfillment that will be a drag on the bottom line in the near term but will save money long term.

Nike said it is trying to contain the pace of overhead increases this fiscal year after two consecutive years of double-digit-percentage growth. Margin performance in its current fiscal year will be key, as Nike's operating margins expanded abruptly in fiscal 2021 and stayed elevated in 2022, before shrinking.

They say defense wins championships, and Nike's deflated investors were in the right mood to hear about it on Thursday.



CULTURE | SCIENCE | POLITICS | HUMOR

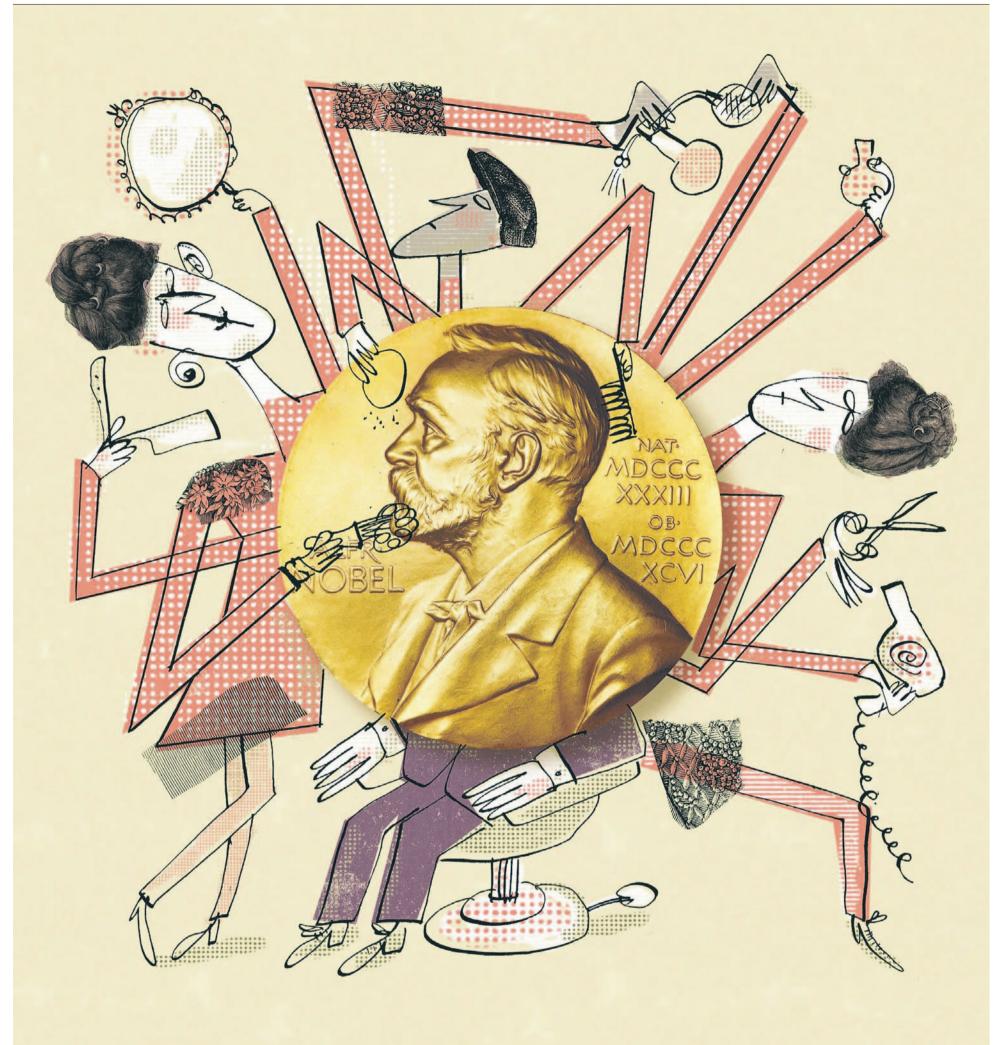
Conspiracy Theory Russell Brand and his defenders claim he's a victim of politics **C3**



Tinderbox When Chicago was the most fire-prone city in the world **Books C7**



Saturday/Sunday, Sept. 30 - Oct. 1, 2023 | C1



THIS MONDAY, at precisely 11:30 a.m. Stockholm time, the winners of the 2023 Nobel Prizes will start rolling out in marathon fashion, as befits the world's most coveted award. The Pulitzer Prizes are distributed over lunch; the Academy Awards require a long evening. The Nobel announcements will cover eight full days, not counting the banquets and formal presentations.

The prize for physiology or medicine will be announced on Monday, physics on Tuesday, chemistry on Wednesday, literature on Thursday, peace on Friday and economics on the following Monday. Most laureates will learn of their good fortune in a quick phone call just minutes before the world is informed. A few, given human error and different time zones, may find out only after the formal announcement. In one notorious incident in 1987, a call meant for UCLA chemist Donald J. Cram was directed to a sleepy Los Angeles rug shampooer named Donald O. Cram, who could barely understand the heavily accented caller. "Now, I do a good job on carpets," he remarked, "but this seemed a little excessive."

The Nobels have long been this way—steeped in tradition, resistant to major change. Historically, most complaints have centered on the carefully shielded selection process—the nominations are kept secret for 50 years—as

THE NOBEL PRIZES NEED A **MAKEOVER**

The world's most prestigious prize no longer reflects how science is done or what fields matter, and it has been notably biased against women. It's time for reform.

By David Oshinsky

well as on the honorees themselves. The prizes for peace and literature have borne the brunt of criticism because their laureates are far better known to the public. What can one say of a peace prize that consistently rejected Mahatma Gandhi while honoring the likes of Henry Kissinger and Yasser Arafat? Or that selected Barack Obama in the early months of his presidency? "Why not give him the literature prize?" one observer quipped. "At least he's actually written a couple of books."

Why not, indeed? The famously Eurocentric literature prize has gone to just two Americans in the past 30 years—one of them being Bob Dylan, whose award raised suspicions that the Nobel Committee, fearing a loss of relevance, was actively courting publicity, as it most likely had done with Obama. If true, it proved a losing gamble. Dylan skipped the ceremony, citing a previous commitment.

The latest wave of criticism, however, has focused on the awards for physics, chemistry and, especially, physiology or medicine. A 2017 article by Ed Yong in the Atlantic was titled "The Absurdity of the Nobel Prizes in Science." The criticism has less to do with the judgments of the selection committees than with the clash between the changing needs of these disciplines and the archaic rules imposed by founder Alfred Nobel more than a century ago. To informed observers, it has been clear for some time that the Nobels are in desperate need of a makeover.

Nobel, the Swedish-born inventor of dynamite, left most of his substantial fortune to the establishment of the five annual prizes that bear his name. (Economics was added in 1969.) His motive remains a mystery. Some historians cite Nobel's genuine love for the arts and sciences. Others point to his brother Ludvig's obituary, published *Please turn to the next page*

David Oshinsky directs the Division of Medical Humanities at NYU Langone Health. His books include "Bellevue: Three Centuries of Medicine and Mayhem at America's Most Storied Hospital" and "Polio: An American Story," which won the 2006 Pulitzer Prize for history.

Inside

WEEKEND CONFIDENTIAL

Werner Herzog has made over 70 movies across his extraordinary life, but he says that his writing is the more enduring art. **C14**



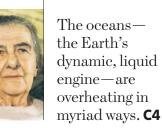


Golf clubs are beginning to challenge players who manipulate their handicaps. **C6**

ISRAEL

Fifty years after the Yom Kippur War, internal divisions pose a new threat to the Jewish state. **C5**

CLIMATE





Bringing The Nobel Prizes Into The 21st Century

Continued from the prior page several years before Alfred's death in 1895, which mixed up the two men and described the mistakenly deceased Alfred as "a merchant of death." He became "so obsessed with [his] posthumous reputation," said one biographer, "that he rewrote his last will" to ensure a safe send-off.

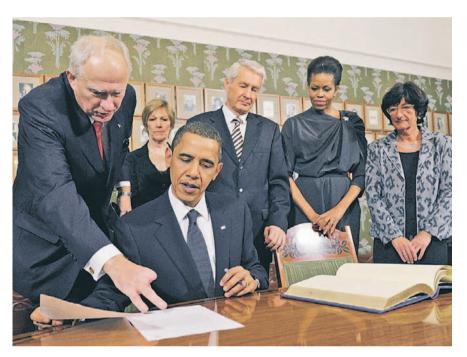
The document laid out Nobel's plan in meticulous detail. The prize money, "divided into five equal parts," would go to "those who during the preceding year shall have conferred the greatest benefit on mankind." The prizes would be open to all comers though the words "whether he be Scandinavian or not" certainly implied male dominance—and there could be but one winner in each category.

A few grudging improvements have been made since the first prizes were announced in 1901. Three nominees may now share the award in each category, and their prize-winning contributions can occur at any point in their lives, not simply "during the preceding year." But the governing committee has also tightened the screws by ruling that the prize cannot be awarded posthumously—or revoked.

Each change, however small, has been magnified by the Nobel mystique. Take revocation, for example. It's no secret that prizes in science have been awarded to Nazis, racists and misogynists, all of whom made vital discoveries benefiting humankind. There have been no serious public campaigns to revoke these prizes. and rightly so. The discoveries speak for themselves. But what should be done when the reverse situation arises—when the work itself is later found to be flawed or even dangerous?

It's not an abstract question. In 1949, the prize in physiology or medicine was awarded to a Portuguese neurologist named Antonio Egas Moniz for introducing the lobotomy, a procedure designed to treat various mental disorders by severing the connection between the frontal cortex and the rest of the brain. News of his Nobel almost single-handedly turned this ghastly, irreversible procedure into a routine medical treatment, which 20,000 Americans-most in state asylums-received over the next four years. To this day, there are periodic calls for the revocation of Moniz's prize, which the Nobel Committee routinely ignores. The science juries have always favored the individual over the group. It goes back to Nobel's preference for one winner per category, which made good sense when most scientists toiled alone and the best of them-a Louis Pasteur or a Joseph Lister—might single-handedly pull off a miracle. Times have changed, yet the rules, amended slightly to include three yearly recipients, still project a "winnertake-all" attitude in an increasingly collaborative scientific world. Complicating this problem is the committee's preference for "original discoveries" over "practical applications." In doing so, it has denied the prize in physiology or medicine to some of the most fabled researchers of the past century, including Jonas Salk, developer of the polio vaccine. With his file now open for inspection, we can see that Salk was nominated and rejected for the prize on several occasions, the main obstacle being one juror's repeated charge that his work relied too heavily on the building blocks of others-in short, it provided "nothing new." Many scientists today consider this to be a serious misreading of Salk's research. His discovery not only saved countless children from paralysis and death, they note; it also proved that a killed-virus vaccine can provide a level of immunity equal to that of a natural infectionsomething previously thought unlikely, if not impossible. Asked years later about the snub, Salk, beloved by the public, joked that it hardly mattered because "most people think





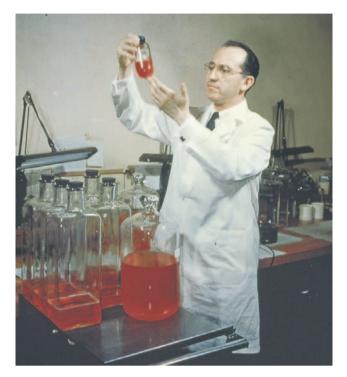
I did win the Nobel Prize."

If one were to make a composite of the typical Nobel Prize winner in science, it would be a middleaged American man, nurtured in elite surroundings, whose eureka moment occurred about 15 years or so before winning the prize. The U.S. has dominated these competitions, winning close to half the science Nobels since 1901, and the reasons are clear. The federal government pours billions of dollars into basic scientific research, supplemented by NGOs and academic institutions. Nine of the world's top 10 universities boasting the most Nobel laureates in science are in the U.S.: Harvard, MIT, Caltech, UC Berkeley, Stanford, Chicago, Columbia, Princeton and Rockefeller. The only outlier is the University of Cambridge. There have been some notable exceptions. Between 1930 and 1943, the City Colleges of New York graduated 10 future Nobel Prize winners-nine in the sciences. It's a stunning achievement, surpassing the combined undergraduate total of Harvard, Yale and Princeton in this period. These fiercely competitive children of immigrants faced religious prejudices that limited their access to the nation's top private institutions. All 10 were Jewish—an ironic twist given the vitriolic antisemitism found in Alfred Nobel's private correspondence. America's dominance can be partly attributed, in fact, to its role as a haven for scientists seeking freedom and opportunity. What began as a trickle in the 1930s with the arrival of refugees from Nazism became a steady stream by the 1960s, as the U.S. liberalized its more restrictive immigration laws. Since then, the number of Nobels in science won by Americans born elsewhere has skyrocketed. Immigrants have accounted for close to 40% of the prizes awarded to Americans in the 21st century. "The U.S. has built a phenomenal culture of welcoming," says Stefano Bertuzzi, an Italian émigré who heads the American Society for Microbiology.





* * * *



Clockwise from top left: Jennifer Doudna, recipient of the 2020 Nobel Prize in chemistry, displays her medal; Marie Curie, winner of Nobels in physics and chemistry, in her laboratory; Jonas Salk, whose work developing a polio vaccine was overlooked by the Nobel committee; President Barack Obama, whose Nobel Peace Prize in 2009 was criticized as premature, at a Nobel ceremony; Bob Dylan, who received the Nobel Prize in literature in 2016 but declined to attend the ceremony.

or in physics until 1963. The prize in physiology or medicine would not be awarded to a female researcher until 1947.

It wasn't for lack of deserving candidates. The record includes such luminaries as Lise Meitner, who discovered the phenomenon of nuclear fission with her colleague, Otto Hahn. Described by Albert Einstein as the "Marie Curie of Germany," Meitner would be nominated 48 times for a Nobel Prize, without success. Hahn alone with the winners, who represent the cream of their professions, but rather with the process that rewards them—the obsolete rules, the lack of interest in collaboration, the limited categories, the yawning gender gap, the focus on academic pedigree. Few critics want to do away with the prizes, which provide an opportunity to celebrate scientific achievements on the grandest scale. The goal is to modernize the Nobels by getting them to better represent how cutting-edge research is now conducted.

That would require, in the first place, increasing the number of winners in each category. The "lone wolf" of scientific discovery is a disappearing species; collaboration is

The U.S. and much of Europe, including Scandinavia, now hold a virThe committee's preference for 'original discoveries' over 'practical applications' has denied the Nobel Prize to fabled researchers like Jonas Salk.

tual monopoly in these fields. There are a few exceptions—Australia, Israel and Japan have won multiple awards in the new century—but the world's two most populous countries, India and China, have been shut out almost entirely. India simply lacks the infrastructure to be competitive at this point, and China is plagued by a state-run scientific system short on creativity and mired in corruption.

The most serious inequity plaguing the science awards is the dearth of women laureates. It began with great promise when Marie Curie shared the physics prize with her husband, Pierre, in 1903, and won the chemistry prize outright eight years later, making her the only person to receive a Nobel Prize in two different scientific fields. But then the bottom dropped out. No woman would win another Nobel in chemistry until 1935 received the chemistry prize in 1944.

Women have won just 61 of the 989 awards in all Nobel categories since the inception of the prizes, faring somewhat better in peace and literature than in the sciences, where the percentage of laureates hovers at around 3%. Even in

modern times, the disdain for women scientists is on public display. At a conference in 2015, Tim Hunt, winner of the 2001 Nobel in physiology and medicine, declared: "Three things can happen when [women] are in the lab. You fall in love with them, they fall in love with you, and when you criticize them, they cry."

But the landscape in science is improving, with the number of female science laureates since 2000 equaling the total of the previous century. Last year, Carolyn Bertozzi won the prize for her work on bioorthogonal chemistry, which enables scientists to more easily build complex molecules and map how cells function. The 2020 prize in chemistry went to Emmanuelle Charpentier and Jennifer A. Doudna in recognition of their breakthrough work in gene editing, and the 2020 prize in physics was shared by Andrea Mia Ghez for the discovery of a "supermassive compact object" at the center of our galaxy.

And women are rapidly entering fields once dominated by men. According to the National Science Foundation, the percentage of academic doctoral positions held by American women in engineering and the sciences has increased from 26.4% in 1991 to 38.5% in 2019. This may not translate into immediate gains, since the average age of a Nobel Prize winner in the sciences is close to 60. But change is on the way.

The problems with the Nobel Prizes in science today rest not

now the norm. Some have suggested that the science juries follow the lead of the peace prize jury, which has selected entire organizations in the past, such as Amnesty International, Doctors Without Borders and the 2022 winner, the Center for Civil Liberties in Ukraine. Why not give the prize to a laboratory in which a groundbreaking discovery occurs, or at least to its major contributors, rather than to a single star?

Increasing the range of prize categories would also help. The Nobels simply have not kept up with a rapidly changing world. "The environmental sciences—oceans and ecology—aren't covered," writes the distinguished astronomer Martin Rees. "Nor are computing, robotics, and artificial intelligence." Given the prestige of the Nobel Prizes, he adds, "these exclusions distort the public perception of what sciences are important."

Nobel officials must also find a mechanism for reexamining the past. They could start by forming a committee to scour the files for cases where a truly deserving candidate was denied the prize for reasons of obvious prejudice—a move that might require amending the rule regarding posthumous awards. Lise Meitner, for example. Or Jonas Salk. Or Rosalind Franklin, the crystallographer whose invaluable contributions to discovering the molecular structure of DNA were exploited, but barely recognized, by James Watson, Francis Crick and Maurice Wilkins, the three men who went on to win the Nobel Prize and worldwide acclaim.

Alfred Nobel might have rejected some of these changes, but the prizes he endowed have already evolved beyond his original instructions and 19th-century social views. What remains, and should guide the prizes into the future, is the noble goal of his bequest: to honestly recognize those among us whose work has "conferred the greatest benefit" on humankind.

Russell Brand Wants to Be the Victim of a Conspiracy

The actor and his defenders, like Tucker Carlson and Alex Jones, are trying to deflect accusations of sexual assault by claiming that he's being persecuted for his political views.



Comedian and actor Russell Brand has said that accusations of sexual assault against him are politically motivated.

BY COLIN DICKEY

hen high-profile individuals have been accused of sexual assault in recent years, their friends usually come forward to make public statements regarding their "good character," whether it's Ashton Kutcher calling his "That '70s Show" co-star and convicted rapist Danny Masterson "an extraordinarily honest and intentional human being," or Lindsay Lohan's 2017 statement that Harvey Weinstein "never harmed me or did anything to me." (Both Kutcher and Lohan later walked back these statements.) The script is standard: Avoid talking about the specifics of the allegations and attest to the accused's character, implying either that the victims are lying or the actual crime wasn't that bad. But something is clearly different with those now rushing to defend British actor, comedian and wellness guru Russell Brand. On Sept. 16, a joint investigation by the Times of London, the Sunday Times and the television network Channel 4 Dispatch reported four different women's stories of rape and sexual assault by Brand over the course of seven years. All four women chose to remain anonymous out of fear of reprisal; they do not know each other, and each came forward independently after being approached by reporters. One of the women described in the piece was 16 years old at the time the alleged assault took place, when Brand himself was 31. (Like The Wall Street Journal, the Times of London and Sunday Times are owned by News Corp.) In the wake of the report, London's Metropolitan Police announced that they had opened an investigation into the allegations, but as vet no criminal charges have been filed. Brand, who's long peddled conspiracy theories, denied the allegations in a statement, saying that all his relationships were consensual, and claimed that he's the victim of a coordinated attack. Through videos posted to Rumble (a YouTube rival favored by the far right), he claimed that there was "a serious and concerted agenda to control these kinds of spaces and these kinds of voices, and I mean my voice along with your voice." Crucial to Brand's argument is his attempt to tie the assault allegations into a larger framework of conspiracy theories. "These organizations collaborate in constructing narratives," he says in one video, "whether that's around the war or the pandemic, and of course there are other examples." By invoking his

ongoing squabble with "mainstream" media and yoking it to other conspiracy theories he's already alleged—including fear-mongering about the Covid-19 vaccines and half-baked suspicions about the Russian invasion of Ukraine—Brand sidesteps altogether the truth or falsity of these allegations.

What's different now is that many of those defending Brand are people who do not know him or his character; rather, they're embracing and amplifying Brand's conspiracy theories as their own. Former Fox News host and conspiracy theorist Tucker Carlson commented: "Criticize the drug companies, question the war in Ukraine, and you can be pretty sure this is going to happen," to which Elon Musk responded, "Sure seems that way!" Alex Jones (who claims to be a friend of Brand) released a video echoing this line, claiming that no one had accused Brand of assault in the last 15 years (this is false; there had been allegations in 2012, 2013, 2014 and 2020) but "now because he comes out against Big Pharma, he comes out against the globalists, he comes out against the New World Order, suddenly the allegations are happening to him." By making common cause with Brand, these others are doing something larger than just defending him. Conspiracy theories, after all, are more than just lies or misinformation. The job of a conspiracy theory is to remake the world, to undercut how we perceive evidence. Conspiracists gaslight on a global scale; their mantra is "Trust me, not your own lying eyes." They encourage believers to discount facts in favor of their preconceived biases and gut instincts. In one video, Brand thanks his audience not just for their support but for "questioning the information you've been presented with." And the rush by conspiracy mongers like Carlson, Musk and Jones to defend Brand may have less to do with the specifics of the allegations than with trying to reshape how the public responds to sexual assault altogether. Using conspiracy theories to push back against social change has a long history. They arise throughout American history, almost like clockwork, whenever a group or segment of the population is pushing for rights or a new level of visibility. During the first half of the 19th century, a common talking

point among slave-owners was that those they enslaved did not necessarily want their own freedom but were being agitated by Northern abolitionists. In 1857, Virginian and early proponent of secession Edward Ruffin fretted over the "ability of the abolitionists to operate on our slaves, to infuse discontent, and to seduce them to abscond, or to rebel." An 1856 article in The Mississippian similarly worried about how "the vile emissaries of abolition, working like



turn to a rise in women's mental health on the job. These gains are still relatively modest, and many of them are tenuous.

But a backlash to the movement has begun, and the embrace of conspiracy theories surrounding Brand must be seen as part of it. Their net effect has little to do with Brand per se; rather, he's being seized upon as a cause célèbre to undermine an entire movement. After all, while Brand has not been charged with any criminal acts (let alone convicted), the allegations put forth in The Times suggest the kind of specific information that can often be dispositive. One of the alleged victims in the report claims that not only did Brand rape her in his Los Angeles home, but that she was treated at a rape crisis center the same day and texted him to

Conspiracy mongers want to make the Brand case about anything other than sexual assault.

say she had been scared by him and felt taken advantage of. In a text exchange reviewed by The Times, she wrote to him, "When a girl say[s] NO it means no," to which he apparently replied that he was "very sorry."

This kind of verifiable and contemporaneous evidence, if found to be true, takes the case beyond the more ambiguous "he said/she said" situations that victims can sometimes find themselves in. The documentation of such crimes helps to create a climate in which other victims are emboldened to come forward and politicians might be more likely to pass laws to combat sexual assault.

Conspiracy mongers like Carlson and Jones, however, want to make

moles under the ground, have been secretly breathing the poison of insubordination into" the



minds of enslaved people.

Over a hundred years later, white Southerners would use antisemitic conspiracy theories to attempt to diminish the civil rights movement. Navy Admiral John Crommelin, who ran for public office in Alabama throughout the 1950s and '60s, saw a "communist-Jewish conspiracy" behind the civil rights movement. Such conspiracy theories have been used again and again in an attempt to undermine social change, alleging that any group demanding rights or visibility does so under duplicitous circumstances and lacks validity. More recently, conspiracy theories surrounding "groomers" and child molestation have whipped up a frenzy around innocuous events like drag queen story hours, which are now being attacked legislatively and literally—the end result of attempting to tarnish the entire LGBTQ community as composed of sexual predators.

The quick move invoking conspiracy theories in the context of sexual assault allegations is a new front in this war. Since 2017 and the rise of the #MeToo movement, we've seen significant—if still limited—progress in men's attitudes toward sexual assault allegations. Studies have found that the #MeToo movement led to an increase in the reporting of sexual assault cases, as women felt emboldened to finally speak out. By 2020, the National Women's Law Center reported, 19 states had enacted new laws to protect victims of sexual harassment and assault. Researchers also found that workplace harassment diminished, which led in

Above: Protesters outside the trial of Harvey Weinstein in New York, January 2020. Left: internet broadcaster Alex Jones in September 2022.

the Brand case about anything other than sexual assault. By folding it into a larger conspiracy about the mainstream media. Covid conspiracies and other grievances, their goal is to shift the conversation, so that sexual assault and the abuse of power by powerful men is discounted as a distraction. The aim of these conspiracy theories is to undermine the very ground by which the public might judge allegations of assault, turning the clock back to a pre-#MeToo moment when predators acted with seeming impunity. What might appear as a preponderance of evidence to some-multiple victims, independent report-

ing by multiple news organizations, verifiable text exchanges that might seem to suggest an admission of guilt—is turned on its head: This is now, they argue, not proof of assault but proof of a coordinated effort.

The outcome of the Metropolitan Police's investigation remains to be seen, and Brand, should he be formally accused, certainly deserves the legal presumption of innocence during any possible trial. But we should not be surprised that after a moment of real and long overdue change, reactionary forces would do anything they can to blunt efforts at lasting reform.

Colin Dickey is the author of "Under the Eye of Power: How Fear of Secret Societies Shapes American Democracy."

The Shifting Flows of Our Overheating Oceans

The Earth's waters are the dynamic, liquid engine of life across the planet, and rising temperatures are disrupting its workings in a multitude of ways.



By Helen Czerski

half century ago, the Apollo missions brought back two photos that redefined our concept of home, one dubbed "Earthrise" and the other "The Blue Marble." Those vivid images of the Earth showed humanity a beautiful, mostly blue ball of richness and wonder, spinning through the vast emptiness of the universe.

It was a magnificent revelation, but it also led to a kind a collective blindness—a habit of not really looking at the blue itself. When people



pattern is far richer than a simple ring. As the narrow, fast stream barrels eastward it begins to wobble. The wobbles get bigger until they form loops, and sometimes a loop becomes so extreme that it detaches into a separate spinning circle. There are two ways that this can happen. The loop can push into the cold water to the north, enclosing warm water from the south to form a trapped island of warmth, spinning clockwise. Or the loop can push southward, creating a counterclockwise spinning cold island drifting through warmer water.

These whirls, known as meso-

Extra energy

from heat can

change how the

ocean engine

operates,

shifting the

speed and

shape of

currents.

trients they carry.

The point is that instead of thinking of the ocean as a big empty pond, we should see it as the complex swirling engine that it is, a place rich in character and variety with distinct patterns that are dictated by the physics of how the engine moves. With this perspective, the prospect of ocean warming takes on a different flavor.

The main reason that the ocean is warming is that the carbon we emit traps energy, which is mostly stored as heat, and more than 90% of that extra heat ends up in the ocean because water is really effec-

talk about the ocean, it is primarily about the things in it—fish, whales, pollution, flocks of lost rubber duckies and so on. Even our global maps tend to sideline the oceans so that we can better see the land (though the geophysicist Atheistan Spilhaus came up with a projection that flips the view to display a single, connected global ocean).

Today we tend to see the ocean as a remote void, an absence rather than a presence. We fail to see its dynamic variety, which is especially important to understand as climate change advances. Over the summer, some waters off the coast of Florida soared to 100 degrees, far higher than normal, and it isn't just a localized phenomenon. Average global ocean surface temperatures have been climbing steadily since the 1970s, and "marine heat waves" are now regularly hitting the headlines.

As ocean temperatures rise, we are being forced to see the blue for what it really is: a giant liquid engine that dictates how the whole planet operates. It's the physics of the ocean that enables the marine life to weave through it, as part of something much grander.

The ocean is too big for all the water in it to be mixed into one uniform pool. Rather, it has an intricate internal anatomy. The uneven distribution of heat and salt creates water masses of different densities, so the ocean is layered like a posh cocktail: the densest liquid at the bottom and the most buoyant parked at the surface. These layers mean that the surface water is mostly disconnected from the depths.

But the most fundamental characteristic of an engine is the conversion of energy to movement. The energy that drives the ocean's engine comes from sunlight, which heats up the water and also ultimately powers the weather, making winds that push around the surface of the ocean. And all of this is happening on a spinning planet, where the movement of wa-



ter is interrupted and directed by giant continents.

As this engine turns, the rich internal anatomy of the ocean flows, swirls and mixes. Though our eyes can only see water and more water, modern imaging technology shows us nuanced patterns of heat, salt, nutrients and trace elements that can shift with the seasons and on multiyear cycles. Most marine life is either a passenger carried by these patterns or a voyager navigating through them. All of that life depends on what the engine offers it.

Imagine yourself as one of the great predators of the seas—perhaps a bluefin tuna, swordfish or shark. You are a fast and powerful swimmer, with the endurance to travel hundreds or thousands of miles to find prey and the resilience to withstand a range of temperatures. The global ocean lies before you. Where do you go to find what you need to thrive?

The Gulf Stream is the fast warm current that flows up the eastern side of North America and then turns to cross the Atlantic. It's one part of a giant carousel that spins around the whole northern ocean, sluggish and wide as it slides down the side of Western Europe and slinks westward just above the equator, and then narrowing and accelerating as it turns north up the American coast.

But since this engine is liquid, the

scale eddies, can be up to 100 miles across and a mile deep and can last for many months, carrying the water within them for hundreds or even thousands of

miles. They're particularly dramatic around the Gulf Stream, but there are similar structures throughout the global ocean.

Every distinctive environment in the ocean will host a different ecosystem that depends on where the water originated, what nutrients are in it, what the tempera-

ture is and how much sunlight is available. The cold, counterclockwise islands are especially full of life, and predators like bigeye and yellowfin tuna will travel long distances to take advantage of that. The warm, clockwise islands generally have less life near the surface, but bluefin tuna are common visitors, and blue and white sharks hunt in them for fish, taking advantage of the warmth to venture deeper into the ocean's interior. Swordfish have lower energy needs and will happily feed on squid rather than fish, so they tend to be found outside the eddies, where there's less food but also less competition.

There are plenty of other examples. In the southern ocean, along the long boundary called a front where cold and warm water meet, the mixture of nutrients and life from both sides produces the ocean equivalent of a densely populated city. King penguins travel hundreds of miles to hunt for fish there, and the abundance of krill feeds Antarctic fur seals and whales. In the Indian Ocean, silvertip sharks congregate just above submerged mountains called seamounts; the cold currents flowing over the obstacle are forced up toward the surface along with the nutive at storing energy. It takes a huge amount of energy to heat water up by even one degree, so if the ocean warms by even a little bit,

that represents a gigantic amount of extra energy.

That energy can power more extreme weather, but it can also have serious effects inside the ocean. As the surface water warms, it becomes more buoyant. This makes it harder for nutrients to mix upward into the sunlight from the layers below, limiting the flow of

raw material that life needs to thrive. The extra energy can also change how the ocean engine operates, shifting the speed and shape of currents, and thus the nature of features like the mesoscale eddies.

Marine heat waves and hot spots can have severe local effects, as ocean life struggles to survive the increasing temperatures or moves to find cooler water, disrupting the ecosystems in those places. But the bigger picture is that any change to the ocean engine will matter, because the way this engine hums dictates conditions for the rest of life on Earth. Living on a blue planet isn't about the color, lovely though it is. The ocean is the dominant feature of Earth, and we live in its shadow. This is about our identity as citizens of an ocean world, which is broadcast to the universe, written in blue light.

Helen Czerski, a physicist and oceanographer, writes the "Everyday Physics" column for The Wall Street Journal. This essay is adapted from her new book, "The Blue Machine: How the Ocean Works," which will be published by W.W. Norton on Oct. 3.

FROM TOP: GETTY IMAGES

* * * *

REVIEW

Israeli tanks in the Golan Heights during the Yom Kippur War, Oct. 17, 1973.



Remembering the Yom Kippur War in a Divided Israel

Fifty years ago this month, the Jewish state survived a surprise attack by its Arab neighbors. Some veterans of the conflict see the country's current political divisions as no less dangerous.

BY MICHAEL OREN

ecently, while walking in a Tel Aviv park, I was approached by a welldressed, elderly man who recognized me—I once served as Israel's ambassador to the U.S.-and asked for a moment of my time. "Fifty years ago, I was a tank commander in Sinai," he began, "firing at enemy tanks only 10 yards away." Carrying his wounded to an aid station, he saw row after row of Israeli dead. "I see those bodies before me every day of my life."

He paused to compose himself and continued. "Returning to my tank, a religious soldier suggested that we say a prayer of thanks and, though I'm not observant, I agreed." But while praying, they were hit by Egyptian artillery. Miraculously he survived but everyone else, including that religious battles in history but the colossal airlifting of military supplies by the U.S.S.R. and the U.S. to the Arab states and Israel, respectively; an Arab oil boycott that nearly paralyzed the West; and a superpower showdown that almost ended in nuclear war. Finally, through deft diplomacy, U.S. Secretary of State Henry Kissinger laid the foundations for peace between Egypt and Israel.

The war ended with the Israel Defense Forces surrounding the Egyptian army and arriving within striking range of Damascus. Israel would never again face a serious conventional military threat.

As an ambassador visiting the U.S. military academies, I learned that, rather than the Six-Day War, cadets studied how Israel changed its tactics in the middle of the Yom Kippur War and rallied from early setbacks. They studied General Ariel Sharon's audacious crossing of the Suez Canal to cut their leaders, Israelis suddenly distrusted them. Veterans of the war founded Peace Now to pressure the government to make territorial concessions to the Palestinians. Fearful that it would, religious Zionists established the Bloc of the Faithful to irreversibly settle Judea and Samaria (the West Bank). The left-leaning Labor Party that had led Israel since its independence lost to the right-wing Likud, destined to dominate Israeli politics for 40 of the next 50 years.

Israelis felt betrayed by politicians who not only failed to prevent the war but later pinned the blame on the army

blame on the army. That perfidy was never entirely forgotten and, in the eyes of many Israelis, is now being replicated by the Netanyahu government.

"The Worst Crisis Since the Yom its initial Kippur War"—so trauma. read many of the posters and Tshirts at the demonstrations that have convulsed Israel since January. The protesters, numbering several hundred thousand, have multiple grievances: the government's appointment of racists and convicted criminals to senior ministerial positions: its earmarking of billions of shekels for unauthorized settlements and for ultra-Orthodox Jews, most of whom neither work nor serve in the military; its threats to women and LGTBQ rights; and its domination by a

are fighting for the character or the country," one of their banners proclaimed. Several septuagenarians even tried to tow a tank from a Golan Heights memorial to display at demonstrations. In contrast to the war, they stress, the present threat is internal, and therefore even more existential. Like the elegant man who interrupted my walk, they are haunted by the past and fearful for the future. They are asking themselves what their sacrifices were for.

Each anniversary of the Yom Kippur War pitches Israel into paroxysms of mourning, and this year will be no ex-

Israel's ultimate triumph in the Yom Kippur War brought no relief from

with the sorrow, this Oct. 6 is also marked by fresh perspectives on the war. Newly released documents show that Israel tried repeatedly

ception. But, along

HISTORICALLY SPEAKING AMANDA FOREMAN

Broken Hearts And How to Heal Them



A MERE GENERATION ago, "heartbreak" was an overused literary metaphor but not an actual medical event. The first

manual medical event. The first person to recognize it as a genuine condition was a Japanese cardiologist named Hikaru Sato. In 1990, Sato identified the curious case of a female patient who displayed the symptoms of a heart attack while testing negative for it. He named it "Takotsubo Syndrome" after noticing that the left ventricle of her heart changed shape during the episode to resemble a takotsubo, a traditional octopus-trap.

A Japanese study in 2001 not only confirmed Sato's identification of a sudden cardio event that mimics a heart attack but also highlighted the common factor of emotional distress in such patients. It had taken the medical profession 4,000 years to acknowledge what poets had been saying all along: Broken Heart Syndrome is real.

The heart has always been regarded as more than just a pump. The Sumerians of ancient Mesopotamia, now part of modern Iraq, understood that it performed a physical function. But they also believed it was the source of all emotion, including love, happiness and despair. One of the first known references to "heartbreak" appears in a 17th-century B.C. clay tablet containing a copy of "Atrahasis," a Babylonian epic poem that parallels the Old Testament story of Noah's Ark. The words "heart" and "break" are used to describe Atrahasis's pain at being unable to save people from their imminent doom.

The heart also played a dual mindbody role in ancient Chinese medicine. There was a great emphasis on



soldier, was killed. "I see that picture before me every day, too."

Tears welled in his eyes. "And now I wonder if our sacrifices were worth it." Referring to the turmoil triggered by Prime Minister Benjamin Netanyahu and his radical right-wing coalition, he asked, "Did all those young boys die just so our government could succeed where the Arabs failed and destroy the State of Israel?"

There was nothing unusual about the man's memories. Tens of thousands of Israelis share them. They remember that Yom Kippur—50 years ago next week-when the blare of the shofar segued into the wail of air raid sirens and the tense farewells of reservists rushing from their synagogues to war. At precisely 2 p.m. on Oct. 6, the armies of Egypt and Syria launched a massive surprise attack that broke through Israeli defenses in the Sinai Peninsula and atop the Golan Heights, inflicting hundreds of casualties. Both areas had been conquered by Israel six years before, during the Six-Day War. a victory so swift and total that the Arabs would never again dare to strike-or so Israeli leaders hubristically thought.

In fact, with almost unlimited Soviet backing, Egyptian President Anwar Sadat and Hafez al-Asad, father of Syria's current dictator, resolved to break the status quo and, if possible, deliver a blow from which Israel would never recover. Assured by her generals that the Arabs were only bluffing and pressured by the Nixon administration not to launch a preemptive strike, Prime Minister Golda Meir waited until the last minute before mobilizing. It was too late.

The result was a conflict that, in terms of its scale and complexity, was almost unmatched in the post-World War II era. It involved not only some of the largest tank off the Egyptians from behind.

In the national experience of Americans, the surprise attacks on Fort Sumter and Pearl Harbor did not diminish the final victories in the Civil War and World War II. By contrast, Israel's ultimate triumph in the Yom Kippur War brought no relief from its initial trauma. The images of paratroopers dancing in liberated Jerusalem in 1967, after the Six-Day War. would forever be tainted by those of Israeli prisoners of war, shell-shocked and ragged, in 1973. There was the sight of Defense Minister Moshe Dayan, the great hero of 1967, having a nervous breakdown on national television



Golda Meir, Israel's prime minister in the Yom Kippur War.

in 1973, and of Golda Meir publicly declaring, "We have never faced such a deadly danger."

And there were the repeated scenes of mothers collapsing over freshly filled graves. In three weeks, 2,656 Israeli soldiers were killed—proportional to the country's population, three times the number of American deaths in the entire Vietnam War.

The Yom Kippur War shattered Israeli identity. Once confident in thrice-indicted prime minister. Above all, the demonstrators oppose the government's plans to strip the Supreme Court of the powers which, they believe, serve as the last-ditch defense against laws that will transform Israel from a high-tech bastion of liberalism into an undemocratic, puritanical backwater.

Among the most activist protesters are veterans of the Yom Kippur War. "The soldiers of 1973 before 1973 to invite Sadat to peace talks, and riveting films such as "Golda" and "The " are challenging the

Stronghold" are challenging the narrative of feckless leadership.

The positive outcomes of the war may also be recalled. The arms airlift inaugurated the U.S.-Israel strategic alliance, and the Egyptian-Israeli peace treaty presaged the recent Abraham Accords and possibly peace with Saudi Arabia. Israel recovered from the Yom Kippur War, it may be remembered, and rose to become one of the world's strongest and most prosperous states.

Such achievements will be overshadowed, though, if the negative outcomes of the war resentment, distrust and demoralization—persist. The vast majority of Israelis, among them many veterans of 1973, are not protesting. Some accuse the protesters of trying to topple a democratically elected government and of upholding the interests of an affluent elite. The prospect of internecine violence looms.

"The wars of the Jews are always the ugliest," commando leader Yoni Netanyahu, the late brother of the present prime minister, wrote to his parents in November 1973. "The Arabs won't need to fight. The Jews, as usual, will destroy themselves." The challenge for Israel today, as 50 years ago, is to avoid that fate and emerge from our crisis even stronger.

Michael Oren served as Israel's ambassador to the U.S. from 2009 to 2013. His books include "Six Days of War: June 1967 and the Making of the Modern Middle East" and "Power, Faith and Fantasy: America and the Middle East, 1776 to the Present."

Heart surgeon Daniel Hale Williams

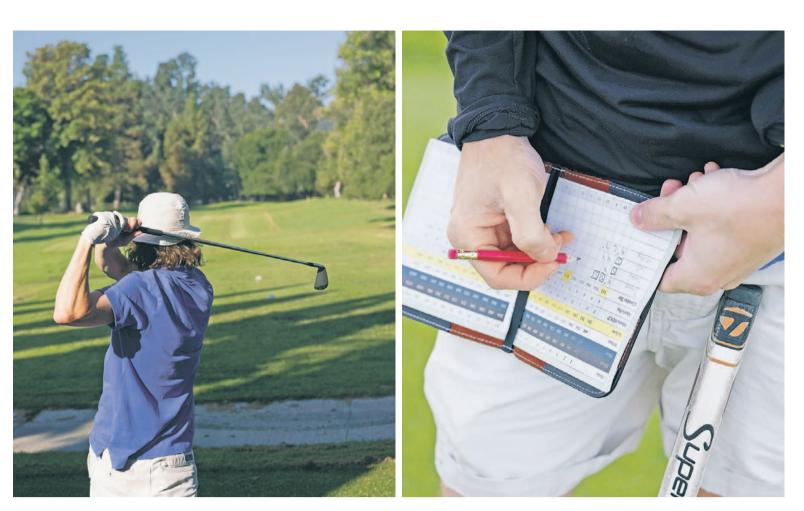
the importance of emotional regulation, since an enraged or greedy heart was believed to affect other organs. Confucius used the heart as an analogy for the perfect relationship between the king and his people: Harmony in the latter and obedience from the former were both essential.

In the West, the early Catholic Church adopted a more top-down approach to the heart and its emotional problems. Submitting to Christ was the only treatment for what St. Augustine described as the discomfort of the unquiet heart. Even then, the avoidance of heart "pain" was not always possible. For the 16th-century Spanish saint Teresa of Avila, the agonizing sensation of being pierced in the heart was the necessary proof that she had received God's love.

By Shakespeare's era, the idea of dying for love had become a cliché, but the deadly effects of heartbreak were widely accepted. Grief and anguish kill several of Shakespeare's characters, including Lady Montague in "Romeo and Juliet," King Lear, and Desdemona's father in "Othello." Shame drives Enobarbus to will his heart to stop in "Antony and Cleopatra": "Throw my heart against the flint and hardness of my fault."

London parish clerks continued to list grief as a cause of death until the 19th century, by which time advances in medical science had produced more mechanical explanations. In 1893, Daniel Hale Williams—founder of Provident Hospital in Chicago, the first Black-owned hospital in the U.S.—performed one of the earliest successful heart surgeries. He quite literally fixed the broken heart of a stabbing victim by sewing the pericardium or heart sac back together.

Today there are protocols for treating the coronary problem diagnosed by Dr. Sato. We can indeed cure Broken Heart Syndrome, but there's still no cure for a broken heart.



How to Catch Golfers Who **Pad Their Handicaps**

An Ohio-based data analyst developed an algorithm for identifying players who exploit a system meant to even the odds.

BY DANIEL MCGINN

he head pro at a country club in the southeastern U.S. faced a problem. In 2021, a golfer was piling up wins in the club's tournaments-mostly due to his suspiciously high handicap. In golf, a player's handicap represents the number of strokes they are expected to score above or below a course's par score during an aboveaverage round.

The member, whose handicap index ranged between 10 and 14, played multiple rounds each winter in Florida, where no one from his home club could observe him. "It's amazing how he always shot 96," the pro said. "He always sucked over the winter." Then he'd return to his club in the spring and enter "net" tournaments (which allot players strokes based on their handicaps). Suddenly he'd start shooting in the high 70s a statistically improbable turnabout. Within a few months, this player won three events and placed in three others. "People were grumbling very loudly," said the pro, who requested anonymity to avoid antagonizing the club member. At the beginning of the 2022 golf season, the club signed on with Cap Patrol. an Ohio-based startup that analyzes golfer scores to ensure handicaps are accurate. Cap Patrol's analysis showed that the problematic golfer should receive four fewer

strokes than his handicap index suggested. The club's handicap committee began reducing the strokes he received in competitions. The suspect golfer hasn't won an event since.

The handicap system is one of golf's best inventions—a method for facilitating equitable competition between golfers of different skill. Handicapping originated in Scotland centuries ago to enable betting. The current World Handicap System was put in place in 2020 to standardize the methodology across 124 countries.

The current system requires golfers to record a score after each round. An algorithm averages a player's best eight rounds of the most recent 20, adjusting for course difficulty and other factors to create a handicap index that's updated daily. The resulting number predicts what a golfer will shoot during a good round. (Statistically, golfers should "play to their handicap" in only about 20% of rounds.) Golfers use their handicaps to equalize competition. If I'm a 20 handicap and play against my neighbor who's a 7, the system determines how many strokes he must give me to compete head-to-head on a specific course. The trouble results from the fact that golf scores are self-reported, making handicaps subject to manipulation. Complaints about "sandbaggers"-players suspected of keeping their handicaps artificially high-are nearly as old as the sport.

George Thurner became tired of the complaints. Thurner, 60, is a near-par golfer who's played competitively since high school and won 10 club championships. A selftrained data analyst, he'd previously created a system to analyze the stats of high school athletes. Thurner had served as president of Hyde Park Golf & Country Club in Cincinnati, where he'd experienced bickering about sandbagging. In 2018, when the club asked him to chair its handicap committee, he agreed under one condition: He wanted to create a system to objectively identify members whose handicaps needed adjustment.

Thurner spent 15 months building a model. The resulting algorithm includes 43 variables. It looks at how a player's handicap has moved over time, trying to identify suspicious patterns. It compares a club's tee sheets (showing who played when) to reported scores, identifying players who aren't filing their numbers. It compares home and away rounds, searching for players who post high scores out of town—like the gentleman with all those 96s in Florida. It looks at how frequently a person is winning tournaments. The system recommends which players' handicaps need tweaks, and then the club's handicap committee can decide on adjustments. "I did this for the love of the game, expect-



The offenders often work in accounting or financepeople who understand subtle ways to manipulate data.

Sandbaggers don't "forget" to report scores. Conventional wisdom is that players manipulate handicaps by neglecting to report their best rounds, skewing the data. In fact, Thurner has found that suspected sandbaggers (about 2.5% of golfers in his sample) submit 97% of their scores, compared with 51% for all players. "The big misconception is that [they] don't turn in scores. It's actually the complete opposite," Thurner says. The more common method of sandbagging is that a player's scoring deteriorates on the final few holes of a round. Presumably the match is settled by that point, so the player just misses a few final putts to pad the day's number. Most players who cheat do it in the wrong direction. Although Cap Patrol is meant to identify golfers with artificially high handicaps, it also identifies those with the opposite problem: artificially low "vanity handicaps" created by reporting lower scores. These players want bragging rights. "They'd rather claim to be a 7 handicap and lose money to friends every weekend than admit to being the 11 they really are," Thurner says. Sixteen percent of the golfers in Thurner's database carry vanity handicaps, more than six times the proportion of sandbaggers.

Keep an eye on that accountant. Thurner says the average player that Cap Patrol identifies for a downward adjustment is a male golfer in his 50s or 60s with a handicap index of 9 who plays nearly 60 rounds a year. When Thurner talks with clubs, he often hears the offender works in accounting or finance-professions filled with people who understand subtle ways to manipulate data.

Many clubs are reluctant to confront this problem. "These handicap conversations can be really tricky," says Nick Papadakes, golf pro at Onwentsia Club in Lake Forest, Illinois. "No one likes to be accused of [sandbagging].... If you want to be head pro at your club for more than a few years, the last thing you want to do is tick off or embarrass a member." When clubs decline Thurner's sales pitch, it's often because their culture is too conflict-averse to confront suspected cheaters.

For clubs that do sign on, Thurner claims there are significant benefits: Players report scores more frequently, more people sign up for tournaments, and different players win.

For its part, the United States Golf Association says the problem of sandbagging isn't widespread. In the U.S. approximately 3 million golfers carry a handicap, and the USGA estimates just 1% are fudging their numbers. "Most people are trying to do the right thing," said Steve Edmondson, the USGA's managing director of handicapping. "The exist-

ing to use it for my club only," Thurner says. But other clubs began calling, so in January 2020, Thurner introduced Cap Patrol at a golf trade show. So far 1,100 private courses have signed on. Clubs pay \$6 per member, per year, with the annual cost capped at \$3,600.

Beyond servicing the clubs who are clients, Thurner's data on 600,000 golfers give him unique insights into how golfers play in relation to their handicaps.

ing system has a sufficient number of safeguards." Still, in 2024 the c USGA will begin recommending to 3 local handicapping committees which players should be adjusted and by how many strokes.

For inveterate sandbaggers, that leaves a few more months to $\log \frac{1}{2}$ some 96s in Florida.

Daniel McGinn is an executive editor at Harvard Business Review with a 20.8 handicap.



MOVING TARGETS JOE QUEENAN

Keeping up with a playoff run makes for some dark times in the City of Light.

An American Phillies Fan in Paris

WHEN I GOT TO PARIS two weeks ago, I was seriously jetlagged. So I started staying up late watching Phillies games on Major League Baseball's streaming service. It was fun. It filled me with *joie de vivre*. So much so that even after the jet lag began to dissipate I

continued my nocturnal revels. I admit that I feel guilty about this because at the end of the day, to truly immerse myself in the Parisian experience, I should be up in my hotel room devouring classic

French literature like "Les Misérables" or "Nausea." But the lure of my favorite sport is just too great. Especially in late September, with the playoffs looming. So after my wife

has gone to bed, I slip down to the basement lounge in my well-appointed hotel near the Bastille and watch baseball games on my laptop.

Other guests in the hotel, some of them French, have spotted me late at night watching the Phillies duke it out with the Cards, and have cast disapproving glances in my direction. How gauche! their looks seem to say. How typical!

I don't care. My attitude is: I already went to the Musee D'Orsay, the Place de la Concorde and Delacroix's studio during the day, so am I not entitled to some light entertainment at night? Come on, guys: Je fais de mon mieux (I'm doing my level best.)

The problem is the six-hour difference between Paris and New York. Because a night game back home starts at 1 a.m., I sometimes get to bed really, really late. As a result, I have found myself nodding off when the pedantic tour guide at Victor Hugo's house starts explaining why the great French writer got exiled from France for 19 years. I am similarly dozy at the Debussy piano recital down the street from the Sorbonne. And climbing up the many, many flights of steps to Sacre Coeur in Montmartre the way Keanu Reeves does in "John Wick 4" is just not happening.

Baseball clearly interferes with savoring the incomparable splendors of Paris. You need to be in fighting trim if

you're going to spend the morning visiting Voltaire's tomb in the Pantheon and then rush across town to eyeball Moliere's grave in the Pere Lachaise cemetery. Not to mention Jim Morrison's tombeau. Yesterday I

realized that I was not alone in my obsession. People standing

in front of the Mona Lisa at the Louvre were furious at the jerk with the smartphone pressed to his ear listening to a rebroadcast of the previous evening's Padres-Dodgers game. And one night I got back to the hotel lounge to find four depressed-looking guys watching the oncemighty Yankees get smacked around by the lowly Pirates.

One night while I was watching the Phils edge the Mets on my graveyard shift, the desk clerk at the hotel came downstairs to see why I was swearing so loudly. I dutifully explained that the Mets and the Phillies hate each other as much as Paris Saint-Germain fans hate supporters of Olympique de Marseille. This segued into a long, desperate attempt on my part to explain *l'infield fly rule*. In French. We then moved on to *le suicide squeeze*. Here my mastery of French met its Waterloo.

Eventually I decided to give up my night-owl baseballviewing habits. Watching Atlanta fans do "the chop" while the Phils are getting clobbered 9-3 by the Braves puts me in a terrible mood to visit the Conciergerie, the otherwise charming building where Marie Antoinette patiently waited to get her head chopped off in 1793. I am in a similarly dyspeptic frame of mind while strolling through the Tuileries to get to Honore de Balzac's house after watching Atlanta tee off on my team the night before. Even from 3500 miles away, these guys are ruining my life. As the old saying goes, plus ca change, plus c'est la meme Braves.





A to Zs How we know what we know about sleep **C9**

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I'm Every Woman The allure of the girl-group sound **C12**



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RAPID RUIN Buildings after the Chicago fire in 1871.

How the Town Got Hot

Chicago grew quickly in the 19th century, drawing on the region's cheap wood to house hundreds of thousands. The thriving city was a tinderbox waiting for a spark.

> The Burning of the World By Scott W. Berg Pantheon, 464 pages, \$32

BY RICHARD SNOW

N THE EVENING of Saturday, Oct. 7, 1871, the big bell in the Cook County courthouse began to toll, telling everyone within earshot that a fire had broken out.

This was welcome news. Many Chicagoans liked a spectacle, and what's a better spectacle than a good fire? Some even knew the location from the code the bell clanged out: two rings, then four, then eight directed firemen to firebox 248, across from the South Side, in a district the insurance brokers had given the snappy name "Red Flash."

Soon nobody needed directions: The brightening sky showed where to go. Hundreds of eager spectators—the papers without the inexhaustible white-pine forests that surrounded it. The whole place was made of wood so cheap that Chicagoans could buy a house for as little as \$400—no other American city had so many homeowners.

Among them were Kate and Patrick Leary, who lived with their five children on DeKoven Street in the working-class West Side. Patrick was a laborer; Kate kept cows, bolstering the family income by selling milk. DeKoven Street, Mr. Berg tells us, "represented everything Chicago's Yankee establishment said an immigrant neighborhood should be . . . full of wage earners working long hours to lift themselves up." (Today the area, just across the river from the South Loop neighborhood, is surrounded by department stores and chain restaurants.)

On Oct. 8 Kate was asleep by nine o'clock—milking time comes early—when Patrick, alerted by a neighbor, called her: "Kate, the barn's afire!" The fire had

Chicagoans set about rebuilding with their usual energy, but that was nowhere evident in the city fathers' shockingly sketchy inquiry into the fire's causes. Their hasty verdict was that the blaze had killed 300 people. The Chicago that loved to celebrate itself by throwing about big numbers—so many million board-feet of lumber cut, so many million hogs disassembled-now indulged in a sort of reverse braggadocio. The fire had been hot enough to turn bone to powder-Mr. Berg points out that the official figure is "just an actuarial baseline," and that there were many more victims than the city acknowledged. There was no way to understate the extent of the damage, though: a swath of utter destruction 4 miles long and nearly a mile wide.

Amazingly, Kate and Patrick Leary's house was undamaged; disaster tourists came to see it, standing alone amid a level desolation of ash. And one thing

Closer And Closer, Yet Apart

This Exquisite Loneliness By Richard Deming Viking, 336 pages, \$29

Alone: Reflections on Solitary Living By Daniel Schreiber Reaktion, 152 pages, \$22.50

BY ANDREW STARK

ARLIER THIS year the U.S. surgeon general, Vivek Murthy, issued a report on "loneliness and isolation" in America. Loneliness,

Dr. Murthy explained, is a mental phenomenon. It emerges when we feel psychologically distanced or alienated from others. Isolation, by contrast, is a physical experience, arising when we are prevented, as during the pandemic, from being in the actual presence of family and friends. Either form of solitude, physical or mental, can increase the risk of everything from cardiovascular disease to diabetes to depression. And, Dr. Murthy says, we are facing an epidemic.

The poet Richard Deming would like to register a dissenting note. In "This Exquisite Loneliness," Mr. Deming discusses six 20th-century writers and artists who showed that the two solitudes, physical isolation and mental loneliness, can in fact bring us hardwon emotional benefits. Mr. Deming's first subject, whose observations give a foundation to what follows, is the Viennese-born psychoanalyst Melanie Klein. We human beings, Klein believed, all share an elemental aloneness. It's rooted in the moment when, in infancy, we first experience ourselves as distinct individuals, physically and mentally separate from our mothers. As painful

as it can be, this primal realization is also what propels usover our life span-to reach out for the intimacy that is such an integral human value.

Zora Neale

The paradox of loneliness is that it is among the most universal of human complaints.

Hurston is

another of Mr. Deming's subjects. A celebrated writer central to the Harlem Renaissance, Hurston created fictional

already been spotted—though a mistaken called them "firebugs"—started toward



DEAD ZONE A map of Chicago, marking the area consumed in the Great Fire of 1871. the blaze, and they weren't disappointed. The fire's 5-acre feeding ground contained such combustible delights as two sawmills, a box factory, a lumberyard and a scattering of coal sheds.

The firemen got there quickly, and six tall-boilered steam pumpers produced a satisfying inundation that went on for hours, into the next day. In the end, the men prevailed, but steaming heaps of rubble marked their victory. Onlookers went home, tired but entertained. Not so the stars of the drama. The firemen had waged a grueling battle that told both on them and their equipment. Some of the engines were damaged, and the men who

had worked them were exhausted. Then, just hours later, on the evening of Oct. 8, the courthouse bell summoned them again, this time to face the greatest calamity that had ever befallen an American city. "Very sensible men," the landscape architect Frederick Law Olmsted later reported, "have declared that they were fully impressed at such a time with the conviction that it was the burning of the world." A fine book by Scott W. Berg, whose previous works include an account of the creation of Washington, D.C., makes Olmsted's impression seem perfectly reasonable.

In "The Burning of the World," Mr. Berg writes that Chicago, in 1871, was "the most fire-prone city in the world." Energy and money had built it from a town of 24,000 in 1850 to a metropolis of 300,000, which couldn't have happened

first alarm put it a full mile south of where it was. By the time an engine got close to the Learys' barn, said Billy Musham, in charge of the pumper "Little Giant," the fire was "under such fierce headway that the region was illuminated almost as brightly as if by daylight."

This was all long ago, and a fire's track tends to be amorphous. So it is particularly impressive how closely Mr. Berg is able to plot this one's early

progress, which he does with the clarityand tension—of a well-wrought military narrative. The firemen worked calmly and intelligently, but the strenuous night at Red Flash had left them bone-weary, and some of their engines crippled. And they were far too few. Chicago always had little fires burning here and there, but nothing terrible had ever happened, so the aldermen had seen fit to finance only 17 fire engines, six hose carts and 219 men: one company for every 4,500 buildings. The fire won.

Devouring the wooden city, the flames twisted and thrashed high overhead, spewing sparks. "Somewhere in that red hail," Mr. Berg writes, "a solitary fragment of burning wood among thousands of others...arced over the river and disappeared into a jumble of buildings on the South Side." Firebugs turned from spectators into refugees and, along with the rest of the populace, fled, taking what belongings they could carry. As the journalist Joseph Edgar Chamberlin wrote: "The great, dazzling, mounting light, the crush and roar of the conflagration, and the desperate flight of the crowd, combined to make a scene of which no intelligent idea can be conveyed in words."

It went on until soon after midnight on Monday, when a gentle rain finally began to fall, putting an end to a drought that had lasted since Independence Day. Some 17,500 buildings were gone, more than \$220 million worth of property.

that the hearing did accomplish was to vilify Mrs. Learv. Once her name was out, she received a thick coating of folklore as the villain who had started it all, either by herself or when a cow she was milking kicked over a lamp. The canard about "Mrs. O'Leary and her cow" (the "O" attached itself later) still rattles around in the American consciousness.

As vivid as Mr. Berg's depiction of the fire is, his description of its aftermath is fascinating as well. The Great Chicago Fire left in its wake a restless, shifting social equation; an early tremor of this was evident in the fierce debate not about how to rebuild, but what to do it with. The city fathers—old-money settlers-wanted the new buildings to be fireproof, solid brick and masonry. This sounds reasonable enough, but many thousands who made up the city's workforce feared being pushed off their own property by materials they could not afford. They demanded wood. The friction thus engendered led to other harsh differences of opinion. Class divisions-or a fraught awareness of them-opened in the city. They were there to stay.

So, of course, was Chicago, which always prided itself on looking forward. Just two decades after its fiery nearextinction, the city was able to play host to more than 27 million visitors in the grand sugar-white vistas of the World's Columbian Exposition.

A more intimate gauge of the town's resilience can be found in the career of Kate Leary's son. James Patrick O'Leary, says Mr. Berg, "went on to live a life . . . as stereotypically and perhaps prototypically Chicagoan as could be." He owned a saloon by the time he was 24 and went on to own several drugstores, an amusement park and a swarm of other enterprises, all of which he ran with a high-hearted gusto that gained him the nickname "Big Jim." His many obituaries barely mentioned the fire.

Mr. Snow is the author of the forthcoming book "Sailing the Graveyard Sea: The Deathly Voyage of the Somers, the U.S. Navy's Only Mutiny, and the Trial that Gripped the Nation."

characters beset by the isolation and loneliness that she herself endured, as we know from her autobiographical writings. Her readers, Mr. Deming argues, seeing their own experiences of mental estrangement and physical separation mirrored in her books, felt greater reassurance and less shame about the course their own lives had taken. We all part physically from loved ones; we all bump up against the limits of what we can understand about others and of what they can understand about us. This awareness—that we are not alone in experiencing aloneness-Mr. Deming finds consoling, even as he acknowledges that it can be a "cold" kind of comfort.

Mr. Deming sees a similar theme in others. The social philosopher Walter Benjamin, moving through Europe to elude the Nazis, wrote poignantly of how ordinary objects—a book, a telephone, a thimble—can connect us to times and places that we might never see again. The American photographer Walker Evans, finding "his own feelings of loneliness and isolation reflected back to him in the faces" of New York subway Please turn to page C8



TABLE FOR ONE 'Plum Brandy' (ca. 1877) by Édouard Manet.

* * * *

BOOKS

'To find a man's true character, play golf with him.' -P.G. WODEHOUSE



FIVE BEST ON GOLF'S GREATEST MOMENTS

Michael Bamberger

The author, most recently, of 'The Ball in the Air: A Golfing Adventure'

On Learning Golf By Percy Boomer (1942)

The market for golf-instruction books will likely die a slow death. Who needs a clumsy book when there is so much golfswing information right on your phone? But this slender, elegant instruction book by Percy Boomer, the winner of the 1923 Belgian Open, will always have a place on better golfbook bookshelves, and not because the author happens to have a wonderful golfing surname. "On Learning Golf" turns the feel of a golf swing into words that can settle deep within you, giving you something useful to bring to the course. It includes this most sturdy sentence: "Every good golf shot is the outcome of a satisfactory psychological-physical relationship." Talk about being ahead of your time. I hope the simple illustration in Chapter 13—it shows the "mind impression" of the golf swing, in all its glorious roundness—will do for you what it did for me. The golf swing, like life itself, is round.

Blasted Heaths and Blessed Greens By James W. Finegan (1996)

Jim Finegan, an idiosyncratic and beloved Philadelphia ad man and golf figure, was one of the game's true pilgrims and almost surely the first American writer to discover the sublime joys of the course at Machrihanish, in the lower left-hand corner of Scotland, and the one in Brora, in its upper right. Finegan wrote a series of highly literate golf travel books, and this one is about Scotland. It was Finegan's considered opinion that if a golfer could make only one overseas trip, the motherland was the place to go. He writes about his visits to the shrines-St. Andrews and Turnberry and Muirfield-as intensely personal experiences. But he also gives us the courses at Machrie and Alyth and Letham Grange. Who else knew of these golfing fields? Finegan did, bless his soul.

Golf Dreams By John Updike (1996)

This is no ordinary collection. For one thing, some of the pieces first ran in the New Yorker, the New Republic, the United States Golf Association's 1984 U.S. Women's Open program and the Sunday Book Review of the New York Times. For another, the writer, John Updike, could not write a dull sentence if he tried. Here he has assembled short stories that could have golf courses as datelines, and essays that read like short stories. In these pages, you will find the most elegiac back-to-back sentences about the game likely ever written: "He began to get



Glasgow and back. This was happiness, on this wasteland between the tracks and the beach, and freedom, of a wild and windy sort."

Golf in the Kingdom By Michael Murphy (1972)

This one is a twofer and a cult classic that has grabbed hold of many of us. The first half is a novella about a philosophy student named Michael Murphy who falls under the spell of a Scottish golf teacher, Shivas Irons, and is never the same. The second half is a treatise about the mind-golf relationship. Mr. Murphy captures every emotion and thought golf engenders. supernatural are rubbed thinnest." He was reviewing "Golf in the Kingdom," and warming us up for Mr. Murphy.

The Bogey Man By George Plimpton (1968)

"The Bogey Man" is one of the most charming golf books ever published. George Plimpton famously embarked on a series of sporting adventures and wrote about them. He was tall and lanky, with a patrician accent, so when he played a few downs for the Detroit Lions or stepped into the ring with Archie Moore he didn't exactly blend in. He didn't in this adventure, either, Beach (now named for AT&T), the old Bob Hope tournament in Palm Springs (now named for American Express) and the old Lucky International in San Francisco (named for a beer that still exists, although the tournament does not). Plimpton captures a lost world where the pros and the ams were almost on equal footing, both trapped by the game's mysteries. He encounters names still in circulation today: Claude Harmon, Dave Marr, Jack Nicklaus, Arnold Palmer. Plus various others, golfing characters lost to time: Plimpton's selflacerating pro partner, Bob Bruno, and the writer's wheezing caddie, Abe. Plimpton takes a woolen headcover off his brassie, we fall right in, and the years evaporate. Professional golf is in a ridiculous state right now, but the game itself does not change. This is here to remind us of that.

pars, as the whitecaps flashed on one side of the links and on the other the wine-red electric commuter trains swiftly glided up to Updike once wrote that, among all games, golf is "the most mystical, the least earthbound, the one wherein the walls between us and the when playing, as a suspect 18-handicapper, in three California pro-am events. The lineup: the old Bing Crosby invitational at Pebble

Loneliness And Its Lessons

Continued from page C7

riders, as Mr. Deming writes, captured them in hundreds of candid black-andwhite shots. Unaware that he was taking their picture, Evans's subjects are often caught looking away from the camera. Viewing them, we see the raw, unfiltered feelings of withdrawal and disconnection written in their faces.

The expressionist Egon Schiele, meanwhile, depicted subjects who frequently look directly at us. In fact, they do so in such a "confrontational" and "aggressive" fashion that it's the viewer who wants to turn away, becoming the one who experiences the withdrawal and disconnection. Mr. Deming's last subject, Rod Serling, developed the 1960s television series "The Twilight Zone." Focusing each week on a different aspect of human strangeness, the show transformed Serling's "own feelings of isolation and alienation," Mr. Deming says, into a collective national experience.

Mr. Deming's portraits are rich and sensitive. He himself, he tells us, has wrestled with profound doubts about his self-worth and place in the world. They drove him, when he was younger, into a self-protective shell—as well as into years of blackout drinking. His ability to limn loneliness and isolation, and trace the ways in which his six subjects explored them, is one that Mr. Deming comes by honestly.

In "Alone," the German writer Daniel Schreiber (whose text has been translated by Ben Fergusson) takes a position similar to Mr. Deming's, although his accent is on how isolation and loneliness connect us to ourselves—that is, how they allow us to discover, or acknowledge, aspects of ourselves that may otherwise be lost in the blur of social activity and the demands of others. An unattached gay man in his 40s, Mr. Schreiber has spent much time alone, he reports, whether on secluded farms or remote islands. Some of that time he has devoted to excavating the depths of his unconscious for clues to why he has not found a permanent partner.

Unable to learn the answer, he has more recently resolved to live simply on the surface of his thoughts and feelings, engaging with day-to-day life as it comes without asking too many questions. On top of that-in what seems like a nice parallel-he has decided to no longer obsess about "the surface" of his body or its potential attractiveness and instead to turn his attention to its depths: to the way the body holds trauma deep inside itself. Conflicts, thwarted desires, confusions, resentments, doubts, frustrations: They all, as he sees it, register in the very muscles we tense and flex, in the breaths we take, the postures we assume, the sensations we experience at rest and in motion. (One is not surprised to learn that he has taken up yoga.)

Despite the opportunities that isolation and loneliness have given him for strengthening (as we might say) his relationship with himself, Mr. Schreiber realizes that they can sometimes be bad for us. Fortunately, though, just as the dual alonenesses often abide together, he finds that they often disappear together. Shuttered in his apartment during the pandemic, Mr. Schreiber notices that conversing with friends over Zoom makes him feel not only less mentally lonely but thanks to their virtual presence—not even all that physically isolated. Getting out into nature even when he is not in anyone's company, Mr. Schreiber discovers that just by reducing his physical isolation he can also diminish his feelings of mental loneliness.

each other. "I am just like everybody else," the writer Jessica Keener said at the height of Covid, and "strange as this is to say, I am comforted by this. I am isolating, but . . . I am not alone." Because we were each physically isolating, we faced the same daily mental preoccupations and challenges: having



SINGULAR 'Head of a Woman' (1908) by Egon Schiele.

Mr. Deming's and Mr. Schreiber's arguments and personal reflections beautifully capture our emotional lives; they manage to be both honest and inspiring. And yet they miss something important, an idea that, in different ways, has materialized lately in popular culture: As either of the two solitudes—physical isolation or mental loneliness—emerges to the point where it becomes an insurmountable problem, we can often compensate for the trouble it is causing by diminishing the other.

We saw this during the pandemic. As we grew ever more physically isolated, many of us at the same time felt a deepening mental connection with to earn a living, care for children, and feed ourselves all while avoiding physical contact. That this experience was widely shared—with "everyone," not just with the close friends whom Mr. Schreiber reached over Zoom proved to be anything but cold comfort: It enveloped Ms. Keener in a warm blanket of fellow-feeling.

Likewise, we can grow closer physically even as we move further apart mentally. Late in life, as Alzheimer's descended on the writer and philosopher Iris Murdoch, she and her husband John Bayley reached a point where they could no longer understand the nature of each other's loneliness. They made up for this—as we often can with those closest to us, if not with humankind universally—by ensuring that they were rarely physically apart. Lying "beside Iris in bed tapping on my typewriter," Bayley recalls, he and Murdoch became "fused together" in "mutual comfort." They grew "closer and closer apart." A similar idea appears in Michael Ignatieff's recent book "On Consolation." When we are with someone who is grieving or dying—who is plunged into a men-

The screenwriter and television producer Rod Serling translated his feelings of isolation into science-fiction fables.

tal state we can't really share—our mere physical presence, simply sitting with her, can provide solace, both to us and to the person in distress, who may otherwise be hopelessly remote.

Focusing on lives in which physical isolation and mental loneliness have accompanied each other, Mr. Deming and Mr. Schreiber are certainly in good company. Petula Clark, recommending that we head downtown, had in mind times of joint physical and mental disconnection; or, as she put it, times "when you're alone" and "life is making you lonely." But mental and physical aloneness need not be linked. Even as the mental distances between us grow more profound, our physical connections can deepen. And as the physical separation between us grows more prolonged, our mental bonds can intensify.

Mr. Stark is the author of "The Consolations of Mortality."

'A professor is one who talks in someone else's sleep.' –w.H. AUDEN

Hitting the Snooze Button

Mapping the Darkness By Kenneth Miller Hachette, 432 pages, \$32.50

BY BRANDY SCHILLACE

DEEP WELL opens into the earth, a twisting, ancient path of water through interminable darkness. Today, we

know it as Mammoth Cave, 400 miles of limestone chambers, stunning rock formations and great cathedral galleries located a hundred miles from Louisville in the Kentucky wilderness. Early humans first discovered this cave system some 5,000 years ago and left behind pictographs made by firelight. Modern visitors now tour them with guides and electric lamps, traveling down carved stairs assisted by safety rails. But that doesn't mean the cave's ancient mysteries have all been solved. Even today, this subterranean world extends beyond the reach of our penetration, withholding secrets that await our discovery.

It's the perfect metaphor for our unconsciousness and an ideal place to contemplate questions of human sleep: Why do we do it? What winds our internal clock and sets it ticking? What forces disrupt it and deprive us of oblivion? Nathaniel Kleitman, a physiologist, sought to answer these questions and to shed light on the "mysteries of the human brain and body." On June 4, 1938, Kleitman said goodbye to the Kentucky daylight and ventured into one of the darkest places on earth, to conduct what would be one of the most important studies of slumber ever performed.

Kleitman's experiment, writes the journalist Kenneth Miller in "Mapping the Darkness: The Visionary Scientists Who Unlocked the Mysteries of Sleep," was to be a 33-day sojourn into sensory deprivation: no cycle of day and night, no noisy interruptions of modern life. Kleitman and his assistant slept on raised bunks, the feet of which were submerged in water so that rats and other vermin couldn't climb into bed with them. A generator kept their scientific instruments humming; their only source of light came from gasoline lamps. Food was ferried in (and human waste ferried out) by the staff of a nearby hotel at random intervals so that the researchers couldn't guess the time of day. Kleitman was on a mission to solve sleep.

Beginning during World War I, an outbreak of "sleeping sickness" killed 40% of those it struck. (We know it today as encephalitis lethargica.) Some patients suffered from insomnia; others from what became known as narcolepsy. And yet, in the early 20th century, there was no "science" of sleep.



VIGIL Nathaniel Kleitman (in bed) and his assistant, Bruce Richardson, in Kentucky's Mammoth Cave in 1938.

fame), for instance, didn't believe the brain had a sleep center; he considered sleep to be a means of protecting the brain from stress or even boredom.

Kleitman's study had a singular goal: to establish the normal sleeping rhythm (what we now call the circadian rhythm) for each person, then try to manipulate it. Sleeping and waking, Kleitman had discovered, conformed to body temperature—it dropped as one's natural bedtime approached, and rose at the end of one's sleep cycle. Kleitman wanted to see if the human body could break free of its 24-hour sleep cycle.

The answer: not by much. Despite the lack of daylight, clocks or external influences in Mammoth Cave, Kleitman's sleep-wake cycles stayed remarkably constant. That led him to the conclusion that our bodies have an internal clock after all—which in turn pointed, at last, to the existence of a sleep center in the brain. It also overturned the age-old assumption that sleep was an unimportant interruption of the waking self: "Sleep," he wrote, "is in reality a complement to the wakother as the trough of a wave is related to the crest."

Kleitman would forever change our understanding of the unconscious brain—not only because of his findings, but because he turned the small, obscure study of the sleeping brain into news. His bizarre experiment proved too good not to share. Leaked stories and rumors generated a bizarre interest in his slumber study. He emerged from the cave to flashbulbs and reporters and was rocketed to public acclaim as a "scientific caveman" chasing sleep's enigma.

The Mammoth Cave sleep expedition didn't impress everyone, however. As one newspaper put it, "to the man in the street" the science didn't matter. If only "the neighbors upstairs would shut off the radio and the baby would stop crying and flaming youth next door would stop practicing on the saxophone and the old pay check was as big as all the bills that have to be paid," it read, then "we could all go to sleep."

Meanwhile, no one seemed to be getting enough sleep and the "cures" were anything but. By 1930, Mr. Miller of barbiturates" were consumed annually in attempts to win some shut-eye. But the sleep they induced wasn't the sleep the body needed. (The pills were also highly addictive, and as the dosage needed to be increased over time, they led to numerous overdoses.)

Kleitman had written the definitive study of sleep, but sleep science needed scientists. As the top (only) researcher in the nascent field, Kleitman would oversee the rise of nearly every sleep researcher of note who followed. Mr. Miller leads us through the careers and research of some of Kleitman's notable protégés, including Eugene Aserinsky, who in 1952 discovered REM sleep. At first believing them to be a fluke, Aserinsky proved that rapid eye movements during sleep represent dream states, that all sleepers had periods of REM, and that if deprived of it for any period of time a sleeper would make up for it with longer periods later on.

Aserinsky departed the field after he had a falling out with Kleitman, we are told, but Aserinsky's young assistant, William Dement, stepped into his work on sleep deprivation, using electroencephalograms to watch the brain's responses during REM. He would go on to become one of the most recognized names in the field and help to identify and treat both sleep apnea and narcolepsy.

In the 1970s, Dement's student Mary Carskadon established the multiple sleep latency test to measure sleepiness. Ms. Carskadon would be the first to bring attention to the fact that it wasn't only adults who weren't getting enough sleep: Teenagers and children were run-

On June 4, 1938, Kleitman ventured into one of Earth's darkest places to conduct a study on how we sleep.

ning sleep deficits, too. Mood swings, exhaustion and the inability to stay awake in class weren't signs of sloth. School schedules simply made demands on budding brains that a weekend of sleeping in couldn't make up for.

In 2020, Ms. Carskadon was awarded a \$10 million grant from the National Institutes of Health to develop the first research center specifically focused on the connections between circadian rhythms and the mental health of children and adolescents. As Mr. Miller points out, the work goes on. Kleitman may have been the first to travel the mind's dark continent, but he provided others with a map and a light to steer by.

Americans remain chronically underrested. As Mr. Miller makes clear, we're in the midst of an ever-escalating "assault on sleep." We can blame the blue light from our smartphones; we can accuse our attachment to scrolling and endless news cycles. We might even speculate that working from home post-Covid has become a type of endless shift work, constantly throwing our circadian clocks out of rhythm.

The truth is, despite all the scientific breakthroughs, we remain committed to the erroneous 19thcentury concept of sleep as an unnecessary self-indulgence and rest being the domain of the weak. "Mapping the Darkness" offers, therefore, two narratives at once: a sweeping journey of discovery about dreams, sleep and the terra incognita of unconsciousness; and a wake-up call about the dangers of chronic exhaustion. It's time, Mr. Miller tells us, to take our sleep back.

Ms. Schillace, the editor in chief of the journal Medical Humanities, is the host of the online "Peculiar Book Club" and the author of "Mr. Humble

Defenders Of the Old Ways

Blood in the Machine

By Brian Merchant Little, Brown, 496 pages, \$30

By KATRINA GULLIVER

N BRITAIN in the early 19th century, the industrial revolution was under way, but there was also an economic crunch. Workers faced inflation and reduced wages. And for those in the textile industry, there was another challenge: automation. In "Blood in the Machine," Brian Merchant describes the moment as "the first time that technology was used to replace human jobs en masse."

One group decided to fight back. The men who would become known as the Luddites—after their mythical leader, Ned Ludd-were makers of stockings. They worked on hand looms, and were being pushed aside by factories introducing wide-frame looms powered by water or steam. In response, the Luddites began a campaign of breaking looms in factories. Luddite activity spread across the north of England and raged for several years. In time, the Luddites would become legendary, not so much as brave champions of the working man but as symbols of resistance to technology.

Mr. Merchant, a technology columnist for the Los Angeles Times and the author of "The One Device: The Secret History of the iPhone," notes that the Luddites weren't simply resisting the arrival of the power looms that were putting skilled textile workers out of business. They were challenging the industrial system itself, as the centers of Britain's textile manufacturing shifted from homes and small workshops to large factories in which employees would be subjected to control and surveillance and be paid less.

England's industrial revolution was driven by natural resources. Britain had rich seams of coal that could be used to power engines. It also had, thanks to population growth, a renewable supply of children. These were loaded onto wagons at orphanages and dropped off at factories, where they were overworked and underfed; many were maimed or killed in accidents. The Luddites represented

The machine-driven factories preferred small, nimble—and young—workers to skilled adult craftsmen.

the old way: adult craftsmen who had served apprenticeships and who possessed skills. The machine-driven factory preferred small, nimble—and disposable—workers.

Initially the Luddites limited themselves to property damage, but more violence soon followed. A decentralized group, they attracted troublemakers, spies and agents provocateurs. The government responded by making machine-breaking a capital offence. Factory owners hired soldiers as guards. There were armed clashes. Luddites were killed; bosses were murdered in reprisal. Eventually, those convicted for their involvement in the uprisings were hanged or sent to penal colonies.

Mr. Merchant's narrative makes it easy to regard the factory owners as mustache-twirling villains who were enriching themselves off the labor of 7-year-olds. At best, the owners seem to have been oblivious to the conditions of their workers. As Mr. Merchant writes:

After the politician and mill owner Robert Peel paid a visit to his operation...he was shocked to discover how bad the conditions were *at his own factory*. The children

who worked there were maimed, their skin sallow, and they were clearly malnourished. They had no time for education or exercise. Peel was appalled.

Still, the author tells us, though he supported legislation limiting the hours children worked and improving their living conditions, Peel didn't try to outlaw child labor. "He needed them to run the machines, after all."

Mr. Merchant introduces us to members of the Luddite movement as well as other activists seeking to improve workers' rights, and laborers toiling in the factories. Alongside these are intellectuals such as William Godwin, whose political tracts influenced radical politics, and the poet Byron, who spoke in support of the Luddites in the House of Lords.

As much as the Luddites might have been cheered on

by these champagne socialists, it wasn't enough to win their case. Improvements for workers would come in fits and starts over the ensuing decades, through legislation and changing culture. But the battle against the factory and the efficiencies of mass production was lost, for the Luddites were pushing back against a world with no labor unions and no welfare state. The idea that workers should have a voice in policy was completely new. That their quixotic crusade should have failed seems inevitable.

Mr. Merchant is keen to see in the Luddites echoes of today's demands for workers' rights, from those losing out to AI to Amazon's warehouse employees. "If the Luddites have



BREAKER Ned Ludd and followers, portrayed in an English cartoon, ca. 1812.

taught us anything, it's that robots aren't taking our jobs. Our *bosses* are. Robots are not sentient—they do not have the capacity to be *coming for* or *stealing* or *killing* or *threatening* to take away our jobs. Management does." This is true, but it overlooks the fact that if your boss is undercut by competitors who are automating, he won't be able to pay you anyway. The Luddites' descendants—the garment workers of the late 20th century—lost their jobs not to machines but to globalization. Less-expensive products produced by automation (or off-shoring) find a market. As we've seen in the era of the big-box store, nobody wants to pay for quality when they can get cheap. Consumers vote with their wallets.

In the case of the Luddites,

what the wide-frame looms produced was of a lower standard than the artisans' work. According to Mr. Merchant, "someone previously unfamiliar with the trade could use a wide frame to churn out stockings roughly six times as fast as a framework knitter, though the product was of obviously inferior quality." The artisans were competing with a shoddy product. But they were also in the twilight of their industry. Men's fashions were about to change, with breeches giving way to long trousers. There would not be such demand for stocking-makers again.

Few of us think to regret the candlemakers sidelined by the arrival of electricity, or the milliners who lost their jobs when men stopped wearing hats, or the Bell operators displaced by automated phone systems. But it's different when it's your own job. White-collar types who

shrugged when factory workers were thrown out of employment by automation or off-shoring suddenly see things differently when they are racing like John Henry against ChatGPT. We are all Luddites sometimes.

Ms. Gulliver is writing a history of crime and police.

'Be steady and well-ordered in your life so you can be fierce and original in your work.' -GUSTAVE FLAUBERT

Not a Simple Heart

The Letters of Gustave Flaubert

Edited by Francis Steegmuller NYRB, 720 pages, \$24.95

By Max Norman

HERE ARE in me, literarily speaking, two distinct persons," Gustave Flaubert wrote to his

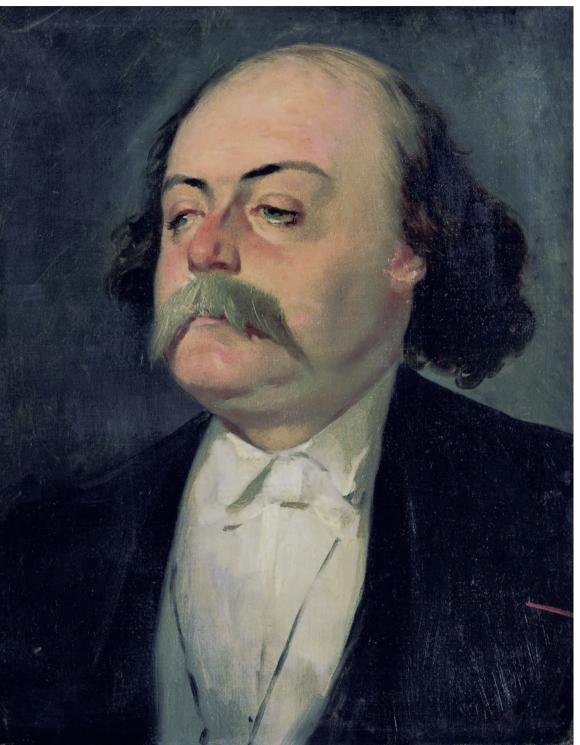
lover, the poet Louise Colet. One was "infatuated with bombast, lyricism, eagle flights, sonorities of phrase and lofty ideas." The other aimed to burrow "into the truth as deeply as he can," treating "a humble fact as respectfully as a big one."

There was Flaubert the romantic and Flaubert the realist. We know the latter as the author of "Madame Bovary," that unflinching work of social scrutiny. But the former is on full display in the writer's salacious. sarcastic, funny and at times brilliant correspondence, originally selected and translated by Francis Steegmuller in the early 1980s. We now have "The Letters of Gustave Flaubert" in a new edition. Steegmuller was an eminent scholar of French literature, and in his hands the letters emerge not only as an excellent primary-source biography of one of the great artists of the 19th century but as a great 19th-century work in themselves.

That's not to say that Flaubert's life was particularly interesting. Already disgusted with the world at 24, he wrote to Alfred Le Poittevin, one of his closest friends, that "happiness is in the *idea*, nowhere else." He urges Le Poittevin to "break with the outside world, live like a bear—a polar bear let everything else go to hell-everything, yourself included, except your intelligence." A bit later he'd write to another great friend, Maxime Du Camp, that life is "like a nauseating smell of cooking escaping through a ventilator: you don't have to eat it to know it would make you vomit."

Flaubert examined the reality of his fellow bourgeois with all the disgust and precision of a restaurant health inspector. The word that comes back over and over in the correspondence is *anatomy*, which was more than just a metaphor for Flaubert: As a child, he watched his physician-father studying corpses in the dissection room of the Rouen hospital, which gave on to the Flauberts' backyard.

Even though young Gustave wasn't tapped for medicine, and eventually washed out of law studies in Paris (like Frédéric Moreau, the protagonist of "Sentimental Education," Flaubert's third novel), he knew from age 17 that, as a writer, he would aim to "simply tell the truth: but that truth will be



SENTIMENTAL EDUCATION Portrait of Gustave Flaubert (ca. 1867) by Pierre-François-Eugène Giraud.

were also satisfactions. "It is splendid to be a great writer," Flaubert later admitted, "to put men into the frying pan of your words and make them pop like chestnuts."

The novelist felt compelled to keep a wary distance from the world he set out to study and from the fiction he labored to write. He even tried to keep a certain distance from himself. "An author in his book must be like God in the universe," he wrote to Colet, "present everywhere and visible nowhere." The romantic audacity of this famous realist credo is in the way Flaubert likens himself to God.

It's not easy to be God, however.

fectionism and rigor, Flaubert was amply human. He was strenuously sexual (physical arousal was "the only thing that counts"). He was also sickly: At 23, he suffered an epileptic fit, which he thought had ended his amorous days.

But a chance encounter with Colet, in 1846, reawakened him, both physically and, as their letters attest, intellectually. It was to her that he wrote throughout the painstaking composition of "Madame Bovary" as he attempted to fashion a new aesthetic form in his *gueuloir*, or "yellingroom"—his name for the study in which he often shouted with frustration at his sentences. Yet he kept his love, like life itself, at arm's length. "You want to know whether I love you, so that everything can be cleared up once and for all," Flaubert writes to Colet. "If you look upon love as the main dish of existence, the answer is No. As a seasoning, Yes." You don't need to be a therapist to know that's the wrong answer.

Despite the ideal of personal invisibility, there's so much richness in these letters—from Flaubert's experiences in Egyptian brothels to the humiliations of the Franco-Prussian War, when Germans occupied Croisset (the family farm near Flaubert, astonishingly, had drilled the local guardsmen.

In the last chapters of his life, when, as Steegmuller writes, Flaubert slipped "quite willfully, at fifty, into premature old age," the novelist George Sand replaced Colet as Flaubert's main interlocutor. She coaxed him through the uncomprehending reception of some of his later writing, her encouragement mixed in with good-hearted political disagreement with Flaubert's reactionary pessimism. Meanwhile, Flaubert gave his own encouragement to younger writers: not least to Émile Zola, who brought Flaubert's realism down from the sitting rooms of the bourgeois into the shady world of Paris's underclasses, and to Guy de Maupassant, whose story "Boule de Suif" he greeted as a "masterpiece."

He kept a wary distance from the world and even from himself. He kept love at arm's length, too, as Louise Colet discovered.

Friendly letters to and from Victor Hugo pop up here and there in Steegmuller's selection ("Your book is dense as a forest," Hugo wrote of Flaubert's "The Temptation of Saint Anthony," his final and longest-gestating novel), as do commiserating notes on life and craft from Ivan Turgenev, who pushed Flaubert to read Tolstoy's "War and Peace" and whose short stories made Flaubert "want to be jolted in a *telega* among snow-covered fields, listening to the howling of the wolves."

Finally there is Flaubert's fall into poverty, thanks to the feckless husband of Caroline, his niece, who is forced, by her husband's shoddy financial management, to encourage her uncle to economize. "Do you think I can 'keep an eye on what my cook spends'!" he writes her, exasperated. "Suicide is sweet compared with such a prospect."

The letters enfold a whole human comedy, centered on the two things that seem to have mattered most to Flaubert: work, which possessed him, and friendship, which, as a lifelong bachelor married to his writing, he seems particularly to have cherished. Everything that Flaubert didn't want in his books has ended up here. "Sometimes I even think it wrong of me to want to write a rational book, instead of letting myself indulge in all the lyricism, all the bombast, all the fantastic philosophical extravagance that might enter my head," he confessed to Du Camp. This is that book.

horrible, cruel, naked." The results could verge on the sadistic, but there

For one, it requires suppressing the human in you, and despite his per-

Rouen that Flaubert shared with his mother). Ahead of the occupation,

Mr. Norman is the Economist's culture correspondent.

A Vision of Numbers and Nightmares



FICTION SAM SACKS

A novel based on the life of a 20thcentury polymath presents a warning for the age of Al. of history is making a resurgence, though in place of the usual statesmen and generals a new crop of destiny-makers has arisen: scientists and tech pioneers. Following close after Christopher Nolan's marathon biopic on J. Robert Oppenheimer and Walter Isaacson's hagiography of Elon Musk appears Benjamín Labatut's darkly absorbing novel, "The MANIAC" (Penguin Press, 368 pages, \$28), which proposes a lesser known candidate for the pantheon of world-changing demigods: John von Neumann (1903-1957), the Hungarian-born polymath who established the mathematical framework for quantum mechanics, founded the field of game theory, was integral in the Manhattan Project and, most ominously to Mr. Labatut, made the first serious advances into the creation of

THE GREAT MAN interpretation

artificial intelligence. Mr. Labatut. a Chilean who has also lived in Europe, will be known to American readers for his unlikely breakthrough "When We Cease to Understand the World" (2021), a collection of essays and fictions about 20thcentury scientific trailblazers such as Fritz Haber and Werner Heisenberg. Though grounded in fact, these pieces read like works of Gothic horror, depicting geniuses driven to insanity by the ramifications of their discoveries. "The MANIAC" continues the nightmarish portrayal of modernity, opening with a prelude about the 1933 suicide of an Austrian physicist, Paul Ehrenfest, whose despair was spurred by the quantum revolution, in which a coherent model of the physical world was replaced by impossibly complex mathematics, a regime change that simultaneously unveiled the secret processes of the universe and rendered its meanings altogether opaque.

John von Neumann shared little of Ehrenfest's melancholy, largely because he was perhaps the only person on Earth to whom the math came easily. The novel retells his biography, from his bourgeois youth in Hungary to his celebrated research at Princeton, through the imagined accounts of family members and colleagues, including the physicists Eugene Wigner and Richard Feynman. All witnesses speak to von Neumann's intimidating "machinelike intelligence" as well as the "childlike moral blindness" that made him an invaluable asset to the American military. Von Neumann was convinced that all of existence, from human behavior to the weather, could be "mathematized." forced to submit to formulas, and he attacked his calculations with the enthusiasm that normal people devote to the weekend crossword. "MANIAC" is not a description of the hyperrational von Neumann but the jokey acronym he gave to the computer he engineered in 1952 ("Mathematical Analyzer, Numerical Integrator and Computer"), a plaything he used to help develop the hydrogen bomb and, in Mr. Labatut's attempt, "to create a new type of life," namely artificial intelligence.

Mr. Labatut stresses an inherent continuity between thermonuclear weapons and AI, both staggering innovations that pose existential threats to humanity. Von Neumann, in this telling, is another Dr. Frankenstein, but it is only after his death that his digi-

THIS WEEK

The MANIAC

By Benjamín Labatut

The Pole

By J.M. Coetzee

tal progeny slouch toward Silicon Valley to be born. The novel ends with a coda set in 2016 that dramatizes the victory over the grandmaster of Go, the world's most complicated board game, by AlphaGo, a computer program trained through machine learning—a Pyrrhic triumph of "pure calculation" over human artistry and intuition.

It all makes for a brooding, heady narrative that is addictively interesting and, at times, somewhat troublingly unreliable. Mr. Labatut has rightly recognized an enormous public hunger to make sense of our epoch's astounding technological advances, and he's a skilled, concise generalizer of esoteric concepts. (His previous book was translated from Spanish but, impressively, he has written this in English with no loss to clarity.) But while the streamlined story arc he fashions—this is essentially an age-old cautionary tale of scientific progress run amok-makes "The MANIAC" highly readable, it brooks very little uncertainty or nuance. A bit of a Dr. Frankenstein himself. Mr. Labatut arrogates the power to imagine the innermost thoughts of real people, and he has shaped those thoughts to conform to a portentous vision of spiritual terror. The science and biography lend a veneer of factual validity to what is really a work of fantasy. Certainly read this gripping, provocative novel-but read it with utmost skepticism.

Before he wrote any fiction, J.M. Coetzee was a mathematician and computer programmer with IBM. But one day, he writes in his autobiographical novel "Youth," he was gripped by a kind of antirationalist revelation: "Death to reason, death to talk!" Thus he threw himself headlong into the imaginative arts. Yet even here, in his many searching, cerebral novels, he has returned to the interrelationship between reality and illusion, fact and belief.

The tension between these oppositions is indicated at the start of Mr. Coetzee's svelte novel **"The Pole" (Liveright, 176 pages, \$26),** which begins with an author fretting about how he is going to portray his

two main characters. The characters, who from then on are depicted realistically, are Beatriz, a married, middle-aged society matron in Barcelona, and a 72year-old pianist named Witold Walczykiewicz, known for the sake of convenience as the Pole. The two meet when Witold is invited to play at a concert series organized by Beatriz. She thinks little of the encounter with this stiff, rather creaky old man until months later he reappears, professing his undying love to her, as Dante did for his own Beatrice. Bemused rather than aroused by his courtly declarations—"I want to live side by side with you like two clasped hands"—she is nevertheless persuaded to invite him to her summer house in Mallorca.

A kind of anti-rom-com results, as Beatriz and Witold fail repeatedly to match their desires for the other. Dryly funny ironies abound: Despite his romantic abandon, Witold plays piano in an austere, mathematical style, and Beatriz wonders whether more sensuous playing would pick the lock to her heart. Like all of Mr. Coetzee's best books, "The Pole" is a textual echo chamber-gesturing to Dante, "Don Quixote," George Sand and even Mr. Coetzee's own novel "Disgrace"—that never feels smothered by its allusions. Quick, deft, stimulating, stripped-down but unexpectedly moving, it's a return to form by a writer who can make music from the fewest possible notes.

'Though the outside of life changes much, the inside changes little, and the lesson-book we cannot graduate from is human experience.' -EDITH HAMILTON

The Queen of Olympus

American Classicist By Victoria Houseman Princeton, 528 pages, \$39.95

By Meghan Cox Gurdon

DITH HAMILTON was 7 when her father, a Fort Wayne, Ind., wholesale grocer, introduced her to the study of Latin. Edith's parents were disenchanted with their mid-19th-century public schools, considering the curricula unbalanced and the hours too long, and so they arranged for their brainy girls-Edith, Alice, Margaret and Norah-to be educated at home. After beginning Latin, Edith embarked on Greek, a language that would stir her heart, widen her world and give her life lasting consequence. As Victoria Houseman tells us in "American Classicist," the first full-length biography of Hamilton, Edith confided to a cousin when she was studying at Bryn Mawr: "If ever I shall do anything hereafter I sometimes fancy I shall do it in Greek." It was a remark, in its prescience, fit for the Oracle at Delphi.

Had Edith Hamilton (1867-1963) done little more than a bit of dilatory writing, her long life would have supplied plenty of material for a biographer. As a little girl, she sat on Susan B. Anthony's lap; later she marched for women's suffrage. Before the turn of the 20th century she had earned both a bachelor's and a master's degree and spent a year in Germany auditing classes at the all-male universities in Leipzig and Munich. She palled around with Gertrude Stein in Paris, ran a girls' prep school in Baltimore for more than two decades, collaborated with Ezra Pound, published her first book at age 62, and was still writing at 95 when a heart attack finally doused her pen. She never married but for four decades shared her life with a woman 28 years her junior, the dashing and opinionated Doris Fielding Reid, a trailblazer in her own right who became Wall Street's first female stockbroker on the eve of the Great Crash.

But Edith Hamilton was not a dilettante. At an age when many an eye sidles toward retirement, she fixed hers on the glories of ancient Greece and would become perhaps the single most important interpreter of the classical world for 20th-century Americans. Her love of Greek and admiration for Periclean Athens, along with her lucid prose, make her first book, "The Greek Way," as crisp and insightful today as it was when it was published in 1930. Ms. Houseman sees autobiography throughout its pages, especially in the second chapter, which, she writes, established what Hamilton thought was "the essential achievement of the ancient Greeks, their ability to balance the mind and spirit, which she had, in turn, adopted as her philosophy of life."

That book's success led Hamilton to write "The Roman Way" (1932), though she was far less enamored of the bloody-minded Romans than of their playful, artistic, philosophical predecessors. Her crystalline style and her mastery of classical works made her a perfect fit when the publisher Little, Brown sought a writer to revamp "The Age of Fable," Thomas Bulfinch's stately—some would say tur-



THE GREEK WAY Edith Hamilton receiving her honorary citizenship of Athens in 1957.

In its pages, Hamilton not only retold the tales of gods and heroes and the storied families of antiquity but did so in such a way as to emulate the writers who were her sources. Her reworkings of Hesiod, the Greek poet who provides us with the earliest renderings of mythic tales, accord with her view that his style was "childish, sometimes crude, always full of piety," while her translations of

Hamilton had a crystalline style and a mastery of classical works. 'Mythology' was the path by which many Americans entered the dazzling ancient world.

Ovid convey his polish, artificiality and skepticism. The collection, recently reissued by Black Dog & Leventhal in a gorgeous 75thanniversary edition, remains the go-to volume for readers seeking prose renditions of the epics of Virgil and Homer and the tales of the 12 Olympians and their cohort. portion of the book; she gives the impression of not wanting to contribute anything to the despot's cause. Hamilton concedes that "many of the stories are splendid," but she regrets that in the Northland there arose no Homer to cut away the "childish and wearisome" elements of the poems or to weld them into a single narrative "of beauty and power."

Ms. Houseman notes that Hamilton shows her abhorrence of Nazism early in "Mythology," in her exaltation of the Titan Prometheus, that "great rebel against injustice and the authority of power." Prometheus earns the enmity of Zeus first by saving mankind with the gift of fire, then by refusing to reveal to the god a secret. For these transgressions, Zeus consigns Prometheus to torture. "He refused to submit to cruelty and tyranny," Hamilton writes of her hero. "His body was bound but his spirit was free."

As a student, Hamilton had absorbed Matthew Arnold's argument that the two roots of Western civilization are Hellenism and Hebraism. Thus in addition to her work in the classics, which included translations of Aeschylus, Euripides, Sophocles and Plato, she would explore Judeo-Christianity in books such as "The Prophets of Israel" (1936), later retitled "Spokesmen for God," and "Witness to the Truth: Christ and His Interpreters" (1948). professor of history and philosophy at the University of Wisconsin-River Falls, gives an expansive account of Hamilton's life and intellectual formation and shows how she sought in her work to shape public response to the traumatic political crises of the times. She also respects Hamilton's privacy. In her tactful treatment of Hamilton's intimate relationships, she refers only elliptically to the word lesbian and does not evoke, as a more puckish writer might, the poet Sappho. In our sex-crazed age, it's refreshing for a biographer to keep her subject's bedroom door firmly closed. In any case, whom Hamilton loved is far less important to posterity than what she wrote.

The high point of Hamilton's life, she herself felt, came a few days short of her 90th birthday, when she was visiting Greece to see her translation of "Prometheus Bound" performed at the foot of the Acropolis and be declared, officially, an honorary Athenian citizen. The sight of Edith, standing slim and erect and proud, had the audience roaring. She declared that Athens, "truly the mother of beauty and of thought," was also the mother of freedom: "Freedom was a Greek discovery."

gid—1855 collection of myths and legends. Hamilton's "Mythology" (1942) became a classroom staple and the path by which tens of thousands of Americans entered the dazzling classical world. Following Bulfinch, Hamilton included a short section on the Norse pantheon that, at the time of her writing, was being repurposed by Adolf Hitler to confect foundational Aryan myths. There's a grudging quality to this

"American Classicist" is marked by both abundance and restraint. Ms. Houseman, a

Mrs. Gurdon, a Journal contributor, is the author of "The Enchanted Hour: The Miraculous Power of Reading Aloud in the Age of Distraction."

A Journey to Hell With a Bushy-Tailed Guide



SCIENCE FICTION & FANTASY Liz Braswell

On a trip along a mystic highway, Quintus the fox ran into disaster. Can a new mission set things right? **IN A WORLD** just a few degrees off from our own, a thriving version of the Roman Empire reaches across the entire globe. But unlike the familiar realm of the Caesars, this imperium doesn't govern only humans: Talking beasts also live as citizens in the empire. Christopher Rowe is the author of a range of books, from the postapocalyptic "These Prisoning Hills" to the critically acclaimed short-story collection, "Telling the Map." In "The Navigating Fox" (Tordotcom, 160 pages, \$18.99), Mr. Rowe leaps genres again

with a modern Aesop's fable

Ouintus Shu'al is the only

knowledgeable fox in a world of

speaking raccoons, horses and

of the modern cow). Only he

the Silver Roads, magic high-

ways that lace the world with

convenient shortcuts-a valuable

Despite his sought-after and

asset in an international empire

without planes or steamboats.

unusual abilities, Quintus is

rious destruction. Salvation

comes in the form of Octavia

about to be expelled from the

Sodality of Explorers because of

an expedition he led to a myste-

Delphina, the sister of one of the

dead adventurers who wants to

know what really happened, and

High Priest Scipio Aemilanus,

who hires Quintus to find the

gates of Hell. Along with them

even aurochs (the wild ancestor

among a very few can navigate

come a pair of mapmaking raccoons who steal the spotlight and a bison ambassador named Walks Along Woman.

Quintus navigates for the party in return for Scipio's promise to reveal the secret of the fox's own enigmatic origins. He leads the expedition through many "countries" and into encounters with their various inhabitants (some of these don't go well). When secrets from the fox's past catch up to him, the whole group is put in danger.

The reimagined ancient world that Mr. Rowe conjures is detailed and fascinating. But the complexity sometimes gets in the way of the plot (the geography can also be confusing; in our world, at least, there are bison in Poland as well as the Americas). But this is a gentle story about one fox's place in the world, a work that might bring to mind Neil Gaiman's "The Dream Hunters." A short, dreamy novel for a cold fall day.

Halloween can never come too early for me. **"Out There** Screaming: An Anthology of New Black Horror" (Random House, 388 pages, \$30) satisfies the seasonal need for scary, starting off strong with an introduction by its editor, the filmmaker Jordan Peele. The rest of the table of contents is a veritable who's who of black writers in genre fiction: N.K. Jemisin, Rebecca Roanhorse, Nnedi Okorafor, Tochi Onyebuchi and 15 others.

Some of the stories deal specifically with historic (or present-day) horrific black experiences, like Tananarive Due's "The Rider," which follows two sisters trying to take a bus to join the Freedom Riders in 1960s Montgomery, Ala. Violence of the supernatural as well as the human sort manifests in the ugliest way, and though the

THIS WEEK

The Navigating Fox

By Christopher Rowe

Out There Screaming

Edited by Jordan Peele

An Inheritance of Magic

By Benedict Jacka

women triumph, neither remains untouched by what happens.

Several stories lean into science fiction, like "Flicker" by L.D. Lewis, which is about the end of everything and would have sat very nicely as a post-"Matrix" bonus. "Invasion of the Baby Snatchers," by Lesley Nneka Arimah, genuinely scared me, a very rare treat for this jaded reader.

Many of the stories are traditionally creepy yarns, with nary a bad one in the bunch. A nice tweak on haunts comes from Nicole D. Sconiers in "A Bird Sings by the Etching Tree," a tale about two young women, revenants whom the reader alternately pities and condemns. In "Eye and Tooth," by Ms. Roanhorse, underpaid monster hunters-who are monsters themselves—are challenged by a monstrous human. "The Most Strongest Obeah Woman of the World," by Nalo Hopkinson, is a wonderful cautionary tale about a strongminded girl who learns the consequences of rash decisions thanks to a demon in her village's well.

Young men living alone with their cats seem to be trending literarily (see "Starter Villain" by John Scalzi). Benedict Jacka, the prolific author of the Alex Verus series, joins in with an appealing vision of contemporary fantasy in **"An Inheritance of Magic" (Ace, 384 pages, \$17).**

Stephen Oakwood is a young Londoner in a dead-end job; his mother left when he was a baby, and his father has mysteriously vanished. He has little going for him besides a few close friends, his pet cat, Hobbes, and a secret: Behind his closed bedroom door. Stephen practices magic, or "drucraft." It is vaguely known in the wider world but dismissed by many as a weird hobby, while others hoard its secrets: In fact, the most powerful families, corporations and governments control it.

Stephen comes to understand the full truth about the commodification of drucraft when his distant cousin Lucella visits him as part of her plan to become heir of the Ashford family, a wealthy clan who wield both magic and wealth. The internecine battle she drags Stephen into imperils the life of the one thing in the world he has to care for: his beloved cat.

He realizes the only way to save Hobbes is via the sort of magic normally out of reach for an unfunded outsider like himself. But with the help of a mysterious priest and his own newly discovered talent for detecting the wells of energy called "essentia" (note: not a brand of bottled water), Stephen slowly builds the magical arsenal he needs to beat the system.

One complaint: The secondary characters in this novel are a bit thinly sketched—and it's very strange that, in this day and age, our personable young hero hasn't a single female friend. Otherwise, Stephen's tale makes for one of the most satisfying contemporary fantasies I have read in a long time; cozy and human, with some good fight scenes to boot. The succinctly explained treatment of magic even makes sense.

"An Inheritance of Magic" is an enchanting journey into a world where sorcery may be for sale, but agency is beyond price.

'Each time I saw him / I couldn't wait to see him again. / I wanted to let him know / That he was more than a friend.' -THE CRYSTALS

Dedicated to the One You Love

But Will You Love Me Tomorrow? By Laura Flam and Emily Sieu Liebowitz Hachette, 448 pages, \$31

BY DAVID KIRBY

HE SHIRELLES. The Marvelettes. The Shangri-Las. Half a century and more has passed since they flooded the airwaves in the 1950s and '60s, but the voices of the

"girl groups" are still with us. As Jackie Hicks of the Andantes says, "there's not a day go by that I don't hear my voice on the radio." And now comes Laura Flam and Emily Sieu Liebowitz's "But Will You Love Me Tomorrow?" Their oral history compiles an utterly charming assembly of memories given tongue by the singers, songwriters, producers and engineers who brought us the girl-group sound that still feels as fresh as the moment these records were cut.

The first thing you think of when you see the photos on the cover of this book is how young the girls were. Emma Pought of the Bobbettes recalls of her group-mates, "when Jannie and Reather went on tour, they were twelve years old. And I was fourteen, and I turned fifteen while I was on tour." Which means that readers expecting the usual chronicle of sex, drugs and rock 'n' roll should cut their expectations by two thirds: Though some of the older singers drank, drugs are virtually absent here, and even in its mildest forms, sex was purely the imaginary kind. As La La Brooks of the Crystals says, she was 15 when she sang "Then He Kissed Me," but "I had never been kissed."

Some of the girl groups' best-loved songs are thinly veiled paeans to losing one's virginity: "Tonight's the Night" by the Shirelles, for example. That same group also recorded the anthem of innocence that gives this book its title-another tune that begins with anticipating the night to come and turns to worry about the morning after. As the refrain pleads for the answer to the question "will you still love me tomorrow," that "still" perfectly captures the singer's uncertainty about her lover's sincerity.

The infamously exploitative touring scene was made manageably safe for these young performers thanks to people like Zelma "Zell" Sanders, a producer and erstwhile chaperone for groups including the Hearts and the Jaynetts. Trudy McCartney of the Clickettes recalls that Sanders was "big and tall and masculine." Barbara English, another Clickette, remembers Sanders cramming the singers and all their equipment in one car. She drove her charges to gigs, installing them in cheap hotels and cooking chicken wings for them on a hot plate. At times, the singers say, Sanders also pretended the Clickettes were the better-known Shirelles. Ms. English also asserts that credit for her songwriting contributions was stolen, and bitterly notes "I haven't received a royalty to this day.

Some of the most enduring tunes came from the hit factories of the era: Brill Building writing duos like Ellie Greewich and Jeff Barry (who co-wrote "Be My Baby" and "Da Doo Ron Ron" with Phil Spector) or Carole King and Gerry Goffin (who wrote "Will You Still Love Me Tomorrow?"). The songwriting-producing team of Jerry Leiber and Mike Stoller boasted hits like "Leader of the Pack" and "Chapel of Love" on their Red Bird record label. While many of the relationships between writers and singers were beneficial to both parties, the business didn't always treat the talent well. Louise Murray, who



WHOA-OH-OH-OH The Ronettes in London, 1964.

sang with both the Hearts and the Jaynetts, says that "most of the promoters around then were thieves in those days, and they still are."

The last half of that assertion is debatable, but if this book is any evidence, the first half is beyond dispute. Ahmet Ertegun and Jerry Wexler of Atlantic Records made sure that the Bobbettes' songs were copyrighted in the girls' names and even created a publishing company

The girls in the groups really were girls. La La Brooks of the Crystals was 15 when she sang 'Then He Kissed Me,' and she herself had never been kissed.

for them, but many producers and record company execs took credit where credit wasn't due. The title of Chapter 46, "Royalties: The Same Old Song and Dance," says it all.

Of course, thieves only come around if there's money to be made, especially if it's producers managed to avoid doing business with the mob, though Jerry Leiber leaves this indelible memory: "They'd come up, and they were always polite and always well dressed. But you could look in their eyes, and you could tell that you could disappear in thirty seconds."

And then it was over. Some better-known groups (Martha and the Vandellas, the Dixie Cups, Diana Ross and the Supremes) continued to appear, but many readers will know about the Cookies, the Exciters and the Velvelettes only from this book. The reasons for their disappearance are legion. The rise of guitar rock pushed the pioneering female musicians off the radio. Touring was horrible, especially in the segregated South. And listeners' preferences always change: "It was a new day," says Vicki Wickham, who worked with the Bluebelles as they became Labelle in the late '60s, "and, of course, then it became a new audience," then simply "people weren't interested anymore."

Why were (and are) the girl groups so popular, though? Easy: Their songs promised many things but mainly love. Referring to the Dixie Cups' "Chapel of Love," the writer Melanie Mintz is quoted here asking a good question: Would someone who had ever been married, even for a year, believe the song's promise of a perfect union? "No. But you'd think it if you were sixteen or seventeen and you just met a boy and you're hanging out in school." Bob Dylan dismissed songs like "Chapel of Love" when he said they amount to little more

than "I'm hot for you and you're hot for meooka dooka dicka dee." But as Rosa Hawkins (herself an original Dixie Cup) and Steve Bergsman point out in "Chapel of Love: The Story of New Orleans Girl Group the Dixie Cups" (2021) that song shot to No. 1 on the Billboard Hot 100 in 1964 thanks, at least in part, to the strategic use of the pronoun "we": When the group sings "we're going to the chapel" and "we're going to get married," the song becomes, not one girl's boast that her boyfriend proposed to her, but the anthem of a nation of hopeful young women. In those days, young women bought 45-rpm records by the millions.

Some of the memories recorded here could use a little context, but if this oral history isn't perfect, so what? Perfection is for squares! What matters is the songs themselves, which can still conjure visions of love and longing. Try it: Pull up "I Love How You Love Me" (the Paris Sisters) or "He's So Fine" (the Chiffons) on your favorite device, close your eyes, and don't be surprised to find yourself at the drivein, waiting on a couple of root-beer floats as you look at someone who's looking back at you. You may not quite feel like Juliet, and he may

being generated by kids too young to know they're being had. Mobsters materialized as the dough started rolling in; looking back to Prohibition, Dee Dee Kenniebrew of the Crystals says, "once they can't sell illegal alcohol, guess where they went? Into the music business. Same guys." Some more established

not be Romeo—but their love didn't work out anyway, and yours will. The song says so.

Mr. Kirby teaches at Florida State University. His books include "Little Richard: The Birth of Rock 'n' Roll" and "Crossroad: Artist, Audience, and the Making of American Music."

Bestselling Books | Week Ended Sept. 23

With data from Circana BookScan

Hardcover Nonfiction

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
The Dem. Party Hates America Mark R. Levin/Threshold	1	New
Elon Musk Walter Isaacson/Simon & Schuster	2	1
Skinnytaste Simple Gina Homolka/Clarkson Potter	3	New
Build the Life You Want Arthur C. Brooks/Portfolio	4	2
Astor Anderson Cooper/Harper	5	New

Nonfiction EBooks

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEE
The Dem. Party Hates America Mark R. Levin/Simon & Schuster	1	Nev
Elon Musk Walter Isaacson/Simon & Schuster	2	1
Counting the Cost Jill Duggar/Simon & Schuster	3	2
Becoming Coachable Scott Osman/Scott Osman	4	Nev
Running with Grace Lori Van Dusen/Lori Van Dusen	5	Nev
Astor Anderson Cooper/Harper	6	Nev
Breath James Nestor/Riverhead	7	-
From Grassroots to Greatness Lloyed Lobo/Lloyed Lobo	8	Nev
Killers of the Flower Moon David Grann/Doubleday	9	7
Social Justice Fallacies Thomas Sowell/Hachette	10	Nev

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEI
Atomic Habits James Clear/Avery	6	5
All Hope Is Found Sarah Jakes Roberts/Thomas	7 Nelson	Nev
Social Justice Fallacies Thomas Sowell/Basic	8	Nev
Counting the Cost Jill Duggar/Gallery	9	3
The Garden Within	10	Nev

Anita Phillips/Thomas Nelson

Nonfiction Combined

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
The Dem. Party Hates America Mark R. Levin/Threshold	1	New
Elon Musk Walter Isaacson/Simon & Schuste	2 er	1
Skinnytaste Simple Gina Homolka/Clarkson Potter	3	New
Build the Life You Want Arthur C. Brooks/Portfolio	4	2
Counting the Cost Jill Duggar/Gallery	5	3
Astor Anderson Cooper/Harper	6	New
Social Justice Fallacies Thomas Sowell/Basic	7	New
Atomic Habits James Clear/Avery	8	5
Killers of the Flower Moon David Grann/Doubleday	9	6
Shadow Work Journal Keila Shaheen/Nowdrops	10	-

Hardcover Fiction

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Fourth Wing Rebecca Yarros/Entangled: Red To	1 wer	2
Holly Stephen King/Scribner	2	1
The Last Devil to Die Richard Osman/Pamela Dorman	3	New
Lessons in Chemistry Bonnie Garmus/Doubleday	4	7
Tom Lake Ann Patchett/Harper	5	6

Fiction EBooks

TITLE Author / Publisher	THIS WEEK	LAST WEEK
The Lost Bookshop Evie Woods/HarperCollins	1	2
The Last Devil to Die Richard Osman/Penguin	2	New
Fourth Wing Rebecca Yarros/Entangled: Red T	3 ower	6
Blessing of the Lost Girls J. A. Jance/William Morrow	4	New
Magical Midlife Battle K.F. Breene/K.F. Breene	5	New
Code Red Vince Flynn/Atria	6	1
Holly Stephen King/Scribner	7	5
Tom Lake Ann Patchett/Harper	8	-
Starter Villain John Scalzi/Macmillan	9	New
E. Oliphant Is Completely Fine Gail Honeyman/Pamela Dorman	10	-

TITLE AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Just Because Matthew McConaughey/Viking	6	3
Code Red Vince Flynn/Atria	7	4
Demon Copperhead Barbara Kingsolver/Harper	8	9
Michael Vey 9: The Traitor Richard Paul Evans/Simon Pulse	9	New
Dog Man: Twenty Thousand Dav Pilkey/Graphix	10	-

Fiction Combined

TITLE UTHOR / PUBLISHER	THIS WEEK	LAST WEEK
The Lost Bookshop Evie Woods/HarperCollins	1	6
Fhe Last Devil to Die Richard Osman/Pamela Dorman	2	New
Fourth Wing Rebecca Yarros/Entangled: Red To	3 ower	3
Holly Stephen King/Scribner	4	2
Fom Lake Ann Patchett/Harper	5	9
A Court of Thorns and Roses Sarah J. Maas/Bloomsbury	6	10
Things We Left Behind Lucy Score/Bloom	7	5
Lessons in Chemistry Bonnie Garmus/Doubleday	8	-
Code Red Vince Flynn/Atria	9	1
23 ½ Lies James Patterson/Grand Central	10	4

Methodology

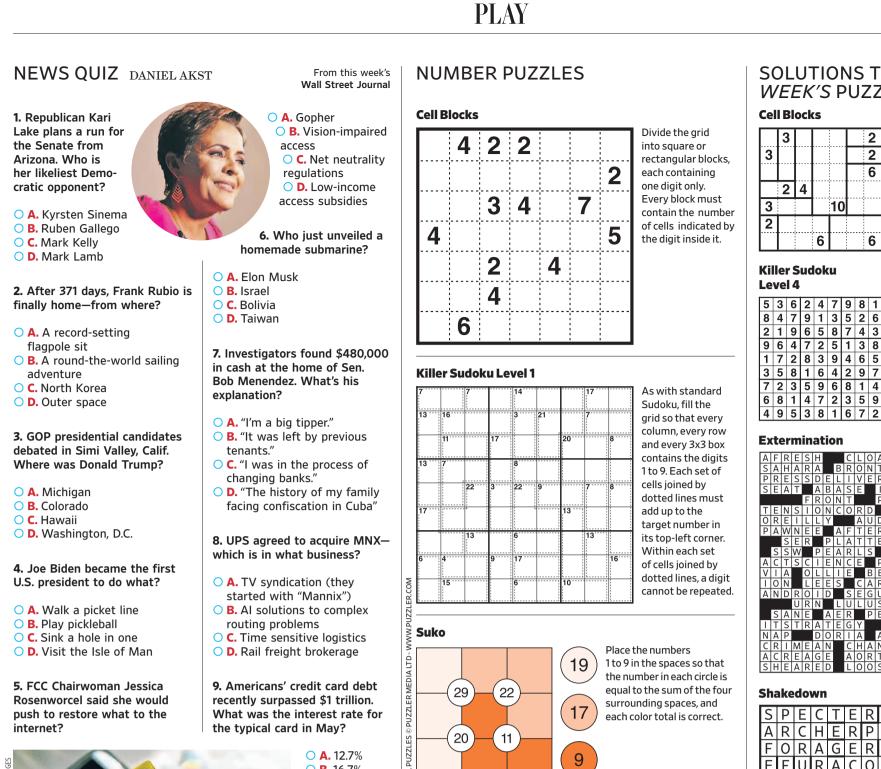
Circana BookScan gathers point-of-sale book data from more than 16,000 locations across the U.S., representing about 85% of the nation's book sales.

Print-book data providers Circana. include all major booksellers, web retailers and food stores Ebook data providers include all major ebook retailers. Free ebooks and those selling for less than 99 cents are excluded. The fiction and nonfiction combined lists include aggregated sales for all book formats (except audio books, bundles, boxed sets and foreign language editions) and feature a combination of adult, young adult and juvenile titles. The hardcover fiction and nonfiction lists also encompass a mix of adult, young adult and juvenile titles while the business list features only adult hardcover titles. Refer questions to Teresa.Vozzo@wsj.com

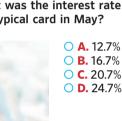
Hardcover Business

TITLE NUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Atomic Habits James Clear/Avery	1	1
Emotional Intelligence 2.0 Travis Bradberry & Jean Greaves/	2 TalentSm	8 nart
Nine-Figure Mindset Brandon Dawson/Maxwell Leade	3 rship	New
StrengthsFinder 2.0 Tom Rath/Gallup	4	2
Web3 Alex Tapscott/Harper	5	New
Extreme Ownership Jocko Willink & Leif Babin /St. Ma	6 rtin's	5
The New Automation Mindset Vijay Tella/Wiley	7	3
Jnreasonable Hospitality Will Guidara/Optimism	8	4
The Daily Stoic Ryan Holiday & Stephen Hanselm	9 an/Portfo	- olio
Dare to Lead Brené Brown/Random House	10	6

* * * *



ALL



Answers are listed below the crossword solutions at right.

The shakedown: PROCRUSTEAN, RACONTEURS, COURTESAN, ETRUSCAN, CENTAUR, CURATE, TRUCE, ECRU, CUE.

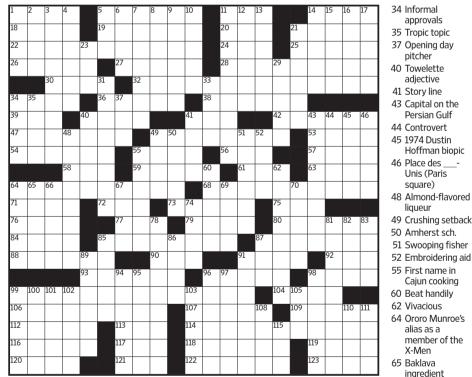
ACROSS 1. S + PE(C)TER 5. C(LI)ENT 10. ARCHER (2 defs.) 11. PO + INTER 12. FOR + AGER **13.** RUG RAT (hid. rev.) **15.** CAN(T)S **18.** IS + L + E **20.** CARTOUCHE (anag.) **23.** ONCE (even letters) **24.** S(PEN)T **26.** T + ERROR **28.** TRI(LATER)AL **32.** AU(TO) + MAT

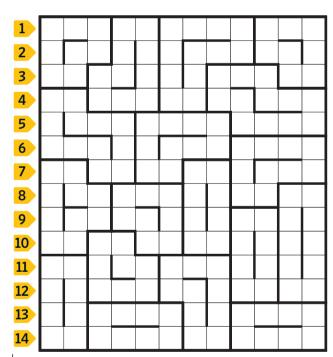
33. TEST RUN (hid.) 34. EST + HER 35. SEANCES (anag.) DOWN 1. SAFER (anag.) 2. PROFUSION (anag.) 3. CHARRED ("chard" hom.) 4. ERE + CT 5. CO(GNAT)E 6. LIST (2 defs.) 7. INLET (anag.) 8. N + EAR 9. TRUSSED ("trust" hom.) 14. AC + UTE 16. NOON + E 17. CHOCOLATE (anag.) 19. LOUd + SIESTA 21. ACE + TATE

22. FORLO + RN ("floor" anag.) 25. P(L)ATH 27. RITES ("rights" hom.) 29. R + YES 30. A(C)RE 31. IMAC (hid.)

Answers to News Quiz: 1.B, 2.D, 3.A, 4.A, 5.C, 6.D, 7.D, 8.C, 9.C

THE JOURNAL WEEKEND PUZZLES edited by MIKE SHENK





7 ► California city whose

Ohio's "Glass City"

8 > Worms used in ancient

Many a B-movie of the

Archie Comics character

9 > Based on higher moral

Doesn't wear out

who casts spells

treatment)

measures

and Peary

might induce (8)

dam

Loops

13 • What a FICO score

Wartime prison camp

14 Namesake of Lake Mead's

Region explored by Cook

What watching a watch

11 > Too good to be true, say

Devious rule-breaker

supplements (anemia

Hunt for gold or black gold

in Spanish

medicine

standards

1950s

10 > Crop up

12 >

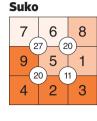
name means "ash tree

SOLUTIONS TO LAST WEEK'S PUZZLES



For previous weeks' puzzles, and to discuss strategies with other solvers, go to WSJ.com/ puzzles.







S	Ρ	Ε	С	Т	Ε	R	С	L	Ι	Ε	Ν	Т
А	R	С	Н	Ε	R	Ρ	0	Ι	Ν	Т	Ε	R
F	0	R	А	G	Е	R	G	S	L	R	А	U
Ε	F	U	R	А	С	0	Ν	Т	Е	U	R	S
R	U	G	R	А	Т	С	А	Ν	Т	S	С	S
Ι	S	L	Ε	С	А	R	Т	0	U	С	Н	Е
Α	Τ	0	D	U	С	U	Ε	0	F	А	0	D
С	0	U	R	Т	Е	S	А	Ν	0	Ν	C	Ε
Ε	Ν	S	Ρ	Ε	Ν	Т	Т	Е	R	R	0	R
Т	R	Ι	L	А	Т	Е	R	А	L	Ι	L	Ι
Α	Υ	Ε	А	С	А	А	U	Т	0	Μ	А	Т
Τ	Ε	S	Т	R	U	Ν	С	U	R	A	Т	Е
E	S	Т	Η	Ε	R	S	Ε	А	N	C	Ε	S

Exclamation Points | by Gary Larson & Doug Peterson 42 Going to work

47 Literally

'empty

orchestra'

Acr	
1	Clue, e.g.
5	Look around
11	Spout for stout
14	Its ancestor was
	the serpent
18	Khutbah
	deliverer
19	Climate phenomenon
	whose last
	occurrence ended
	March 2023
20	White House
	nickname
21	Material for a
	mummy's wrappings
22	Influenced upon
22	hearing negative
	public opinion?
24	End for host or
	priest
	Chose
26	Turning jumps
27	Abuela's
20	daughter
28	Doesn't fall behind
30	Diner on "Alice"
	Like a love
22	scene with all
	the dialogue
	removed?
	"Excuse me"
36	Angelic
20	accessories Take turns
38	
59	Apostrophized preposition
40	Chutney spice
40	church spice

41 Criticize harshlv

pickled 54 Inhibit Wing 56 Bear. in Baia 57 The triceps is 58 Tempe sch. 59 Fortification ditches 61 "The Purloined 64 Verv auick of relief? 68 Cries for Barney the Dinosaur? 71 Ripped 75 Eon division 76 Taking care of business part 79 Sole 80 Cruise guarters

49 Expressions of disbelief durina 90 Address for GIs a bear market? 91 Course warning 53 Root that's 92 Explosive letters 93 Some wedding 55 Muppet who had 96 "Ditto!" an appearance 98 Casino dealer's on "The West card box 99 Reacting violently opinion? anchored to it 104 Carry on 106 1913 Willa Cather novel 107 Factions 109 Many a reggae Letter" author musician 63 Force of attack 112 Merle Haggard's `Things expressions 113 Understood 114 Woeful attention from lamentations from a fallen Humpty Dumpty? 72 Title of respect 116 Parade spoilers 73 Heart guickener 117 Wanted poster abbreviation 118 Log-shaped pastry 119 2022 Jordan 77 Jack-in-the-box 120 Unit of force 121 A pop 122 "Good grief!" 84 Musical based on 123 Plan detail "La Bohème

85 Expressions of Down frustration from 1 It flows into the a fly fisherman? Colorado nea 87 Peak in Exod. Yuma 88 "Holy moly!" 2 Visa alternative 3 Celebrated 4 Logo, e.g. 5 Simple sandwich 6 Emanuel guests give them who's Biden's ambassador to Japan 7 43,560 square feet to negative public 8 Pitch preceder 9 Responds derisively 10 Relaxed 11 Olympics sport since 2000 12 Not here 13 Currency replaced by el euro Funny Anymore' 14 Hedren of "The Birds' 15 Remove one's name from, as a Facebook photo 16 Fine-grained wood 17 Where potatoes originated 21 Team record figure 23 Famous fashion initials Peele sci-fi film 29 Secret Service acronym 31 Corporate restructurings

33 Not written

51 Swooping fisher 52 Embroidering aid 55 First name in Cajun cooking 60 Beat handily 62 Vivacious 64 Ororo Munroe's alias as a member of the ingredient 66 Rocket gasket 67 Big Island town 69 Addresses with slashes 70 Wipe away 74 Miguel's greatgrandmother. in a 2017 Pixar film 78 Empire's ultimate weapon 81 Being repaired 82 Start for meter or technology 83 Spot 85 Galaxy, e.g. 86 Basilica feature 87 Sentimental tattoo 89 Is tightfisted 91 1988 Tracy Chapman song 94 May-December space 95 Butterfly, e.g. 96 What a reporter protects 97 "Fancy schmancy!" 98 Gives rise to 99 Squirrel away 100 "Here's hoping..." 101 Promotional product 102 1,000 kilograms 103 Secretly included, in a wav 105 Former California fort 108 Milk choice 110 Sort 111 "Just 115 Previously, poetically

Loop-the-Loop | by Patrick Berry

Answers fit into this grid in two ways, Rows and Loops. Each Row contains two consecutive answers clued in order of appearance. The answer to each Loop clue will occupy one of the grid's heavily outlined loops, starting in any square and reading clockwise or counterclockwise, as shown in the **CIRCULAR** example



Loop clues are ordered by length (shown in parentheses after each clue) but otherwise randomly, so use the Row answers to determine where each Loop belongs.

Guy Fawkes Night sights

- uncomplimentary slang (2 wds.)

- What first-class seating

- Perch in a pub (8)
- Senate (deliberative body in the "Star Wars' prequels) (8)
- Temporarily satisfy (4,4)
- Best Picture winner set in Seoul (8)
- "Vamoose, the cops are here!" in 1920s gangster lingo (6,2)
- Well-behaved feline's reward (3.5)
- Shockingly unpleasant (8)
- Vessels featured in Mark Twain's "Life on the Mississippi" (10)
- Groups that sit in pits (10)
- Places for exhibitions (3,7)
- Swung back and forth (10)
- Chaotic battle with no fixed sides (4-3-3)
- Assemblage sent to a diplomatic conference (10)
- Term coined by Hasbro to sell G.I. Joe merchandise (6.6)
- Ropes tied to docks (7,5)
- Poem excerpted by Mary Shelley on the title page of "Frankenstein" (8,4)
- Get the solutions to this week's Journal Weekend Puzzles in next Saturday's Wall Street Journal. Solve crosswords and acrostics online, get pointers on solving cryptic puzzles and discuss all of the puzzles online at WSJ.com/Puzzles.

Rows

- 2 Dojo floor covering
- 1 Carne asada holder
- - Wee child, in

 - 3 ► Put differently
 - Move with effortless ease

4 ► Glass used to make faux jewelry

- Wolves and jackals, e.g.
- 5 Fantasy baseball option
 - Taken into custody (8) has more of
- 6 ► Dependable

Type used for titles



REVIEW

erner Herzog is renowned for his strange and novel filmmaking-and for the lengths to which he'll go to get a shot. In "Fitzcar-

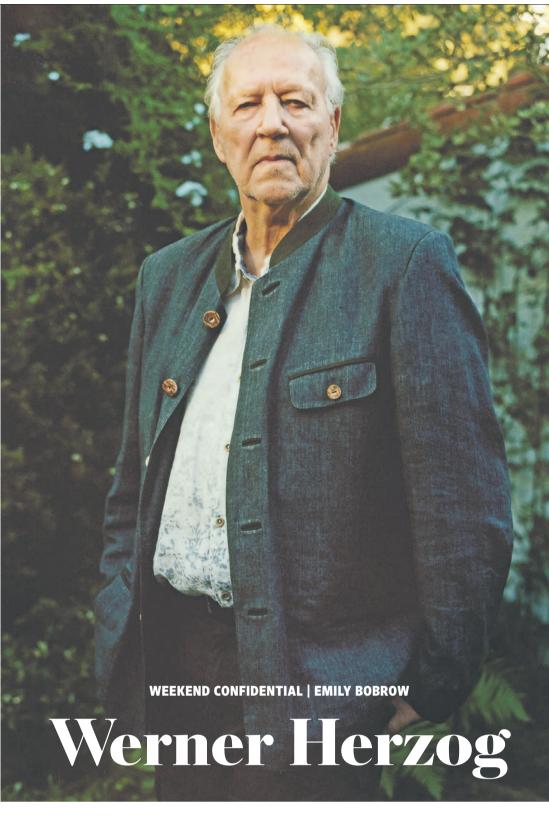
raldo," his 1982 film about an operaloving madman who hauls a steamship over a mountain in pursuit of rubber in the Amazonian jungle, Herzog had his crew haul an actual 320-ton boat on pulleys over a muddy mountain in the Amazon, even though a Brazilian engineer quit after warning that it was too dangerous. "I swear to God it's not a special effect," says Herzog, who disdains them. "Audiences can tell right away."

Roger Ebert once anointed Herzog, now 81, "the most original and challenging of directors." But Herzog insists his films "are a distraction" from what he thinks will ultimately be his more enduring legacy: his writing. "There's no one who writes like me, no one," he says over video during a recent trip to Austria, not far from the small German village where he grew up. "Look at my prose, look at my literature. I believe it will outlive my films."

This is a bold statement from a man responsible for over 70 films and a handful of esoteric books, including his first novel, "The Twilight World," published in English last year. His new memoir, "Every Man for Himself and God Against All," out next month, promises to bring his writings to a wider audience. Herzog's idiosyncratic movies and methods have earned him a loyal following, and the book addresses various rumors about his life and career. Did he really jump into a bed of cactuses after shooting his 1970 film "Even Dwarfs Started Small"? Yes, and he writes that this quirky stunt, meant to boost the cast's morale, left him with "long nasty spines" in the sinews of his knees for months.

Herzog has lived a life well-suited for a memoir, with exploits that include stints as a rodeo clown in Mexico (though he had no riding experience), acting opposite Tom Cruise as a villain in "Jack Reacher" and being held in a prison in Cameroon in the 1960s for reasons he claims still not to understand. He chronicles these experiences poetically yet somewhat anthropologically, seemingly uninterested in the roots of his own instincts. "I have a deep aversion to too much introspection, to navel-gazing," he writes. He asserts that a house is "uninhabitable when every last corner is harshly lit" and dismisses psychoanalysis as "one of the many reasons why the 20th century, in its entirety, was a mistake."

Herzog was born in 1942 in Munich, but his mother fled with her two sons for rural Bavaria, he writes, upon discovering her baby



The 81-year-old director has created 'a cinema of my own' across the extraordinary life he describes in his new memoir.

electricity, Herzog remembers spending much of his youth hungry and cold, but it was "the most incredible, wonderful childhood," he insists. Unhindered by rules or fathers-Herzog's never lived with the family-he and his friends filled their days with "anarchic" adventures and learned about life for themselves. He says friends who grew up in postwar German cities felt the same way: "They were the kings of bombed-out blocks."

Herzog saw his first films at 11 when a man with a mobile projector came to his one-room schoolhouse, but the experience left him unand Dr. Fu Manchu.

Yet he sensed at 14 that he was destined "to be a poet and to make films," so he watched closely whatever he could to learn how to build suspense and tell a story. Rejected by the local film school, he saw his ignorance of convention as an asset: "I would have to come up with a cinema of my own," he writes.

To pay for his first teenage productions, Herzog worked the night shift as a spot welder and stole his first camera from the film-school storeroom. Despite earning a big prize for a full-length screenplay at 22, he knew that financial backing found the school "intellectually impoverished" and dropped out, but he lingered in Pittsburgh to work for a local documentarian and then fled to Mexico to avoid deportation.

From Mexico, he next headed to Guatemala to join a Mayan political movement but succumbed to hepatitis after trying unsuccessfully to swim across a river to evade border authorities. After regaining his health, he returned to Germany and worked on his first feature, "Signs of Life," about a German soldier who goes mad on the Greek island of Kos. It won a jury prize at the Berlin International Film Festival in 1968.

("Grizzly Man," 2005) and features about Dracula ("Nosferatu the Vampyre," 1979) and American prisoners of war ("Rescue Dawn," 2006), among many other subjects, Herzog's oeuvre is hard to classify. If there is a unifying theme, it is that his films blur the line between fact and fiction in pursuit of what he calls the "ecstatic truth." He stages scenes in his documentaries if the result feels right and bristles at the thought of being a mere fly on the wall: "I'd rather be a hornet," he writes. His output can seem fren-

Did he really jump into a bed of cactuses after shooting his 1970 film 'Even **Dwarfs Started** Small'? Yes.

zied, with sometimes two releases in a year, but he is still brimming with stories he hopes to tell. "There's such a vehemence to these projects that I sometimes can't find a producer fast enough," he says. "If I have to, I'll finance my films myself."

Herzog lives with his wife Lena, a photographer, in Los Angeles, but at a remove from Hollywood—both conceptually and literally. When he is not traveling for his films, he teaches a kind of guerrilla filmmaking at his roving Rogue Film School, launched in 2009. He says that it is easier than ever to work on the cheap—"you can make a 90-minute cinema-quality documentary for \$20,000"—and argues against taking office jobs. "Work in a slaughterhouse, work as a guard in a lunatic asylum, work where real life is happening, at its densest," he says. "The only thing I teach is how to open a safety lock with a set of surgical tools, or how to forge documents like shooting permits, without which many of my films would not have happened."

Herzog's "orientation to something sublime" nudged him toward Catholicism for a spell as a teen, and he still brings Luther's 1545 translation of the Bible to his shoots. The "consolation" he gets from the Book of Job proved especially valuable when he worked with the notoriously explosive Klaus Kinski, the star of some of Herzog's most memorable films, including "Aguirre, the Wrath of God" (1972). "Every gray hair on my head I call 'Kinski,' but so what? What counts are the films, and he's incomparable," he says.

Herzog may make allowances for ₹ the tantrums of talented actors, but \exists he says his ambition for himself is always to be "a good soldier." He approaches his work with a sense of duty and says that time has hard- ${\mbox{\sc z}}$

Werner covered in broken glass and rubble in his cradle amid the Allied bombing. Growing up in a home without running water or reliable

moved. He went to the cinema more regularly while living in Munich as a teenager but remained underwhelmed by the escapades of Zorro

for a feature film was still out of reach, so he went to the U.S. to attend Pittsburgh's Duquesne University on a film studies scholarship. He

With documentaries on subjects from ski jumping ("The Great Ecstasy of Woodcarver Steiner," 1974) to doomed environmental activists

ened his courage. "My fascinations සි have become wider and wilder." he \exists says. "I'm not afraid of anything ₹ anymore."

MASTERPIECE | 'SUPPER TIME' (1933), BY IRVING BERLIN

A Searing Song of Grief

By JOHN EDWARD HASSE

NINETY YEARS AGO, something remarkable happened on Broadway: An anti-lynching song, "Supper Time," had its premiere in a major production that ran 400 times. The performance marked a brilliant collaboration between songwriter Irving Berlin and singer Ethel Waters.

In the spring of 1933, Berlin, one of America's most successful songsmiths, had heard Waters, a highly versatile entertainer, at Harlem's Cotton Club, where, singing with Duke Ellington and His Orchestra. she created a sensation introducing the torch song "Stormy Weather." Berlin asked if she would perform in his forthcoming Broadway revue.

He had read about the lynching of a man accused of rape in Florida and, appalled by the savagery of the mob, created a song in response. That year would see at least 24 such crimes. "People told me I was crazy to write a dirge like that," Berlin said, according to a 2019 biography. But he was determined to include a serious note in an otherwise comic production.

Berlin retreated to Bermuda with librettist Moss Hart to write the show, "As Thousands Cheer," which became one of the songwriter's finest theatrical achievements. A satirical revue of events

and personalities covered by newspapers, it used different article formats-hard news, society gossip. weather forecast—to set up each song.

On Sept. 9, 1933, the production began its Philadelphia tryout. Three of its white stars refused to take a curtain call with Waters. When Berlin told them there would be no final bows the next night, they quickly relented and henceforth joined her. On Sept. 30, the show moved to Broadway's Music Box Theatre, which Berlin, an astute businessman and showman, owned.

In Act I, Waters introduced the memorable "Heat Wave," with its saucy line, "She started a heat wave / By making her seat wave." In Act II, the audience must have gasped or winced at the headline banner, "Unknown Negro Lynched by Frenzied Mob." In a shack, Waters—plainly dressed, her head in a kerchief-riveted the audience. With an interior monologue, her character responds to the devastating news that her husband has been lynched:

Supper time-

I should set the table, 'Cause it's supper time: Somehow I'm not able, 'Cause that man o' mine Ain't comin' home no more. Berlin's lyric never mentions the crime. The understatement adds to

its impact and contrasts with the explicit, disturbing song "Strange Fruit," which Billie Holiday famously recorded in 1939 and many people assume was the

earliest song to protest lynching.

Waters was a superb actress, but her rendition went beyond acting to reliving personal pain. In Atlanta, she'd nearly been lynched after a dispute with a theater owner. Waters made "Supper Time" haunting and searing. "In singing it," she wrote in her memoir. "I was telling my comfortable, wellfed. well-dressed listeners about my people." Using her consummate phrasing, flawless diction, and expressive, rhythmically flexible voice, Waters could transform her material into dramatic art through the force of her outsize personality, lived experience, and theatrical gifts. She recorded the song in 1947 and, in 1969, performed it on a TV special hosted by Diana Ross. Years later, her renditions still pack a gut-punch.

Perhaps not only imagination but the shared pain of prejudice, discrimination and marginalization by mainstream society enabled Berlin-a Jewish immigrant born in the Russian Empire and raised in New York-to leap across color and gender lines when writing



Ethel Waters, left, performed the antilvnchina dirae bv Irving Berlin, below, on Broadway 90 years ago.



words for a black female character in the American South.

In both music and lyrics, "Supper Time" breaks new ground. It has no introductory verse section but just plows into the main theme. It's a bluesy melody that carefully places "blue notes" on certain syllables to add emphasis. The harmonies move unexpectedly. The climax comes with the line. "How can I be thankful when they start to thank the Lord? . . . Lord!" Referring to the second "Lord!," which is sung slightly higher than the first, composer Alec Wilder wrote, "Nowhere else in American song have I heard a single note

and a single word combined so shatteringly.'

Unsurprisingly, "Supper Time" has been the province mostly of female singers—for example, Carmen McRae, Nancy Wilson and Audra

> McDonald. Lena Seikaly interprets the song with controlled yet palpable emotion and poignancy, holding the last note a full 10 sorrowful seconds. But instrumentalists have been drawn to it, too, among them Dick Hyman, Renee Rosnes, and Ruby Braff and Ellis Larkins.

"Supper Time" merges specificity with universality. The singer Susannah McCorkle wrote: "As a white woman . . . I feel it and sing it as the song of any woman whose hus-

band has died, or been killed, or abandoned his family. It is the strongest and saddest song I sing, and to perform it is always a powerful and transforming experience for me.'

"Supper Time" stands as a profoundly moving and unforgettable musical narrative, where racial cruelty and personal pain converge.

Mr. Hasse is curator emeritus of American music at the Smithsonian's National Museum of American History. His books include "Beyond Category: The Life and Genius of Duke Ellington" (Da Capo) and "Discover Jazz" (Pearson).



Trust Exercise Dan Neil fretfully tests Mercedes-Benz's new self-driving car **D15**

FASHION | FOOD | DESIGN | TRAVEL | GEAR

Leaf-Packed Trips

OFF DUTY

THE WALL STREET JOURNAL.

The hotel can send my clothes back home *later*. Or burn them! Who cares?!

> Like fall foliage? 'Extreme leaf peepers' love it with shades of obsession. Here, their expert tips.

'Ban Bland Chicken!

Ban Bland Chicken!'

We heard your

protests D14

Saturday/Sunday, Sept. 30 - Oct. 1, 2023 | D1



BY JEN ROSE SMITH

NLY WHEN Anthony Quintano felt his car start to slip off the road did he wonder: Had he finally gone too far in his annual hunt for fall foliage? Quintano, a 45-year-old adventure photographer, was driving the notoriously hairy route to Colorado's Crystal Mill, a historic wooden structure whose backdrop of golden aspens draws foliage seekers like catnip, when his back wheel briefly slipped off the edge. After catching the bug as a high-school student in Rockland County, N.Y., Quintano has frequently zigzagged across the U.S. in search of autumnal beauty. Today, he looks back at the Crystal Mill affair with zero regrets. "It was peak fall color," he said of the photos he took once his car regained solid ground. "Well worth it."

If Quintano, now based in Mount Laurel, N.J.,

can seem obsessive in his laser-focus on fall leaves, he has plenty of company. We'd met through New England Foliage Reports, one of many Facebook groups devoted to tracking and celebrating fall color as it spreads through American forests.

Come autumn, ordinary Americans hop in the car to gaze at vermillion maples as readily as they pursue a love/hate relationship with pumpkin spice. But foliage hunters like Quintano start planning leaf-themed fall trips while the rest of us are still getting sunstroke at the beach. Fortunately, they generously dole out advice: Dilettantes eager to see forests turn fiery orange without spending weeks analyzing weather patterns will find valuable resources in those Facebook groupspart of what you might call the internet of foliage.

"It just makes my heart sing," said Carol Smith, 62, a retired nutritionist

from Abington, Mass., describing her love of autumn color. Smith has co-moderated the Vermont Fall Foliage Fanatics Facebook group for a decade, presiding over a global membership. For 25 years, she's spent each fall in Barton, Vt., rising before dawn to watch the sunrise amid vivid leaves. This year, Smith traveled to Alaska to see Denali National Park figuratively ablaze. "The fall colors of the tundra were so beautiful," she said. "It was a totally different experience."

Following her retirement from the U.S. Navy, Laura Casey, 48, moved to Maine in part to realize a longtime dream of living amid autumn's crisp



brilliance. Seeking peak color, Casey has hiked 4.000-foot summits and kayaked in cold so keen she saw ice form on her boat. "To just be able to take it all in and have it all to yourself—it's like the world is Please turn to page D4

D3

Inside



HERMÈS AND HER Our Q&A gets at all sides of Nadège Vanhee, the brand's creative director D2



A TOMATO MARGARITA? You bet. Turn the last of summer's produce into vitamin-filled tipples D13



HANG OUT, STYLISHLY, WITH THE FAMILY Chic ways to display photos of your kin D6



STYLE & FASHION

Nadège Vanhée

Ahead of her Paris runway show, Hermès's women's creative director on her favorite things.

UNK" IS HOW NADÈGE Vanhée describes her childhood self. No, not the kind with a mohawk and safety-pin-pierced clothes, she said, but the "type of kid who went for it." While growing up in northern France, she and her equally punkish best friend "were determined and wouldn't let anything get in our way."

Today Vanhée, 45, is the women's creative director of superluxury French fashion house Hermès. And while heading up a brand best known for five-figure handbags and handmade silk scarves might not seem inherently "punk," her path to success—which involved studying at the prestigious Antwerp Academy of Fine Arts; working for brands such as Maison Martin Margiela, Phoebe Philo's Celine and the Row; and, believe it or not, bands with names like the Detroit Cobras has been somewhat unorthodox.

Her influences include "Picnic at Hanging Rock," a 1975 Australian horror film that sees well-to-do schoolgirls vanish into the wilderness. The cult flick helped inspire Vanhée's spring 2024 collection, which will debut in Paris on Sept. 30. Both the film and her new designs, she says, explore the various sides of femininity, the strength of women's sensuality and anger, and female friendships. Here, Vanhée talks negronis, surprising swimwear and what women want.

My first job in fashion was: making shirts for Detroit bands that would come to Belgium. This was in 2002 or 2003. I would show up and sell bespoke rock 'n' roll shirts. There were bands like the Detroit Cobras. And I loved the Dogbones.

I'll never part with: my collection of red silk dresses. I have a very strong attraction to them. I started collecting them when I was 24, when I was traveling to the States, to places like Detroit for research. My favorite is an elasticated '80s dress with long sleeves.

I'll also always keep: my Issey Miyake dresses. At different moments in my life, I put on weight, I lost weight, but the Issey Miyake dresses always fit. I even swam with one this summer. I went to the beach and forgot my swimsuit. So I thought, "Keep cool and go with it." I together. And I'll group by colors. When I wake up, I'm a bit hazy. When I open the wardrobe and see order, it brings me back to reality.

A favorite city right now is: Oslo. There is no night [at certain times of year] and that dilatation of time is quite cool. I love the Munch museum. The kids in Oslo are cool. There's really great vintage, and there's really great art.



Right now I'm watching: "The Bear." I love the realness. I love also that Carmen takes risks. I love that all the characters are going through something. And they overcome.

which Vanhée cooks at home; an Oura ring, which has helped the designer change her behavior-slightly.

I prefer hotels that have: history and good service, like the Locarno in Rome. It's charming because it's super genuine. And there's something very warm about it. Being there makes you feel good.

The best advice I've ever gotten: came from a meditation coach. She told me to put myself first when planning my day—that the first thing I do should be what I want to do. Now, I feel that I get carried away by things less. I feel more balanced.

My coziest weekend clothes are: vintage denim and a white T-shirt. I've got a pair of jeans that's sort of a seafarer shape with a high waist. The denim is super soft and has adapted to my shape. She's so cute. It's quite funny.

I have pissed off: every beautician. I am very lazy with my beauty routine. I've discovered the sauna, so I have cleaner skin now. I can't tell you exactly where my sauna is, but it's in a club in Paris.

I also appreciate: good creams. I like Augustinus Bader because it has very efficient ingredients.

Lately I've been using: dry, natural soap. A friend sent me a nice Aesop bar that I like.

A few weeks ago: I started wearing an Oura ring. When I wake up and see the amount of light sleep and deep sleep, it's quite fascinating. It's helped me change my behavior, slightly.

Right now, women want: a recon-

that can withstand the test of time and taste.

I would love to own a painting by: the artist Lynette Yiadom-Boakye. Sometimes, paintings inspire the colors in my collections.

My favorite drink is: a negroni. Finding a good place with a bartender who can make a proper negroni is heaven. In Paris, I like the Bristol Bar or the Hemingway Bar at the Ritz.

I can cook: adult food—not just pasta. I do a good veau en cocotte. It takes about 45 minutes and you can add carrots and celery and onions.

My dream dinner party would include: definitely Prince. He was such a beautiful man. So inspiring, creative. It would have been nice to have met Dennis Hopper when he



was the chicest woman on the beach. And it dried in no time.

I organize my closet by: typologies. I'll break it down into skirts, dresses, shirts. Then I'll have silk shirts together and cotton shirts



ART TO HEART Lynette Yiadom-Boakye's '6pm Madeira,' (2011). Oil on canvas. At home, my daughter and I: play défilé [fashion show]. She's four and puts on her dress and shoes and walks up and down the corridor. nection with their body. A lot of people are centered on themselves and on their well-being. I want to wear clothes that make me feel confident, assertive, sensual. I think Covid also made more women want high-quality clothes was young, Greta Gerwig and [the Belgian-born French director and screenwriter] Agnès Varda. They could write a new movie and Prince could do the soundtrack. —Edited from an interview by Katharine K. Zarrella

FAST FIVE

Through the Good-Looking Glass

From gleaming purses to lustrous dresses, designers are seeing themselves in mirrored embellishments and silvery hues



IMMACULATE REFLECTIONS Radiant wares to consider this season. Clockwise from left: Silk Skirt, *\$2,398, ToryBurch.com*; Cotton-Silk Jacket, *\$1,380, AlixofBohemia.com*; Mirror-Effect Dress, *\$3,890, Fashion.PacoRabanne.com*; Faux-Patent-Leather Bag, *\$710, us.CoperniParis.com*; Metal and Rhinestone Top, *\$90, Zara.com*



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STYLE & FASHION

BY FARAN KRENTCIL

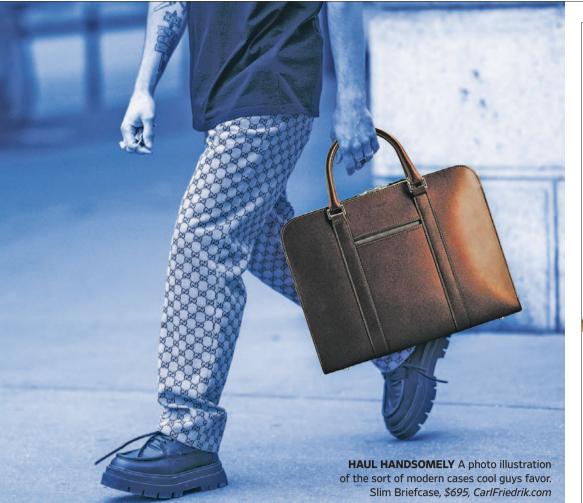
HEN Brian Chung, 35, returned to the office this summer, he decided it was "finally time to upgrade" his plain black backpack. "My dad always car-

black backpack. "My dad always carried a briefcase to the office. When I think of being an adult going to work, I think of him," said Chung, the CEO of a media startup in Los Angeles. His father, an accountant, lugged a hard, bulky carrier secured with a combination lock so complex it could thwart an escape-room champ. "I wanted to find my own version of that briefcase," Chung said. "But, you know...*cooler*."

He settled on a suave, tan, leather model by London brand Carl Friedrik (right), whose designs are toted by executives on "Succession." "I love it—it's soft but still smart," he said. "The younger guys [at work] ask, 'Where'd you get that? That's cool.' That's how I know I'm onto something."

Other stylish guys have gotten the brief that briefcases are back—and surprisingly cool. In the past 12 months, sales for hardback attachés have more than doubled year-over-year for Globe-Trotter, the British label favored by Daniel Craig's James Bond (far right). Fellow U.K. brand Bennett Winch has seen sales of its softback designs double in the past nine months compared with the same period last year. Fashionphile, a luxury resale site popular with millennials, reports a 300% increase in "briefcase" searches in September 2023 vs. September 2022, with Louis Vuitton's designs in especially hot demand.

"I think with people going into the office less these days, they're keen to make an impact when they do venture in," said Bennett Winch co-founder Robin Winch. Briefcases, characterized by a rectangular shape and top handle, deliver on that front. Today's models—a return to smaller, sleeker and often softer designs—convey easy professional polish. And they represent a mature style upgrade from ubiquitous, back-to-school-



A Brief Resurgence

Stylish men are ditching backpacks and taking polished briefcases—stuffers that could never be accused of stuffiness—to the office instead

like backpacks (see "The Backpack Brigade" below).

Winch said his designs, rendered in canvas and leather and in rich shades of chocolate and navy, "look the part but don't scream 'finance guy." The same could be said of many of today's most popular briefcases. Globe-Trotter's hardback designs, thinner and lighter than their ancestors, come in fresh shades like olive. Even more common are soft models, which feature smooth or grainy leather, or canvas. Some canvas takes, such as Bleu de Chauffe's (see right), even verge on rugged. Mercifully, most options are blessed with shoulder straps you can use or remove.

The term "briefcase" comes from the carriers Victorian barristers used to haul dense legal torts, said Sarah Collins, a fashion professor at Savannah College of Art and Design. In time, the bag migrated from courtroom to boardroom, where "it became a symbol of ambition and success," she said. In pop culture, corporate cads from Don Draper of "Mad Men" to Harvey Specter of "Suits," the hit 2010s series, have brandished briefcases like battle maces.

Not everyone today views the bags as corporate. "Music people have more use for briefcases than almost anyone," said Josh Madden, 46, a Nashville creative director. He totes sketches, scores and vinyl albums in a hardback model by the band Palaye Royale. And rapper Travis Scott launched a case along-



side his recent "Utopia" album. When social entrepreneur John Kluge Jr., 40, met with Jordanian beekeepers this summer, he brought his canvas-and-leather Filson briefcase. "When I carry a briefcase, I feel like I'm on a mission," he said. "It's like it packs a sense of purpose along with papers and a laptop," added Kluge, who remembers his father, the media mogul and philanthropist John W. Kluge, carrying a Holland & Holland briefcase to work. (Kluge Jr. still has that case, but it now hosts cocktails as a repurposed tabletop at Kluge's Virginia meadery.)

Kluge typically combines his Filson number with a blazer and Raleigh Workshop jeans. Chung, the media CEO, also plays the high-low game, pairing his case with knitwear, black jeans and black Birkenstock clogs. "It's my version of showing up as the boss at work."

The Backpack Brigade | Guys who are committed to backpacks—and haven't yet found salvation in briefcases—often conform to one of four sartorial stereotypes



The corporate cad with a sad bag Though he has invested in a sharp tailored suit and diligently polishes his laceups, he lets himself down with a flimsy, black sad-sack tacked onto his back. That ny-



The 'We get it, you cycled to work!' guy His trip to the office is a 3-mile cinch, but based on his garb, you could've sworn he'd just summited the Pyrenees. Pants tucked into socks, and admittedlyquite-cool sunglasses, keep him



The guy with an artisanal leather pack Smart and shapely, leather (and leathertrim) backpacks had a moment about a decade ago, around the time of the lumberjack hipster. Some can still be spotted in the wild. They're oft



The 'Is he a professional mountaineer or just a Brooklyn hipster?' guy Takes gorpcore to an extreme with his cool, campingready attire: Salomon hiking boots, a Snow Peak shell, and Arc'teryx Veilance's minimalist, waterproof Nomin

lon lump of misery has quite possibly been clinging to his shoulders since college.

whippet-streamlined. A roll-top backpack rivals Mary Poppins's carpetbag in capaciousness.

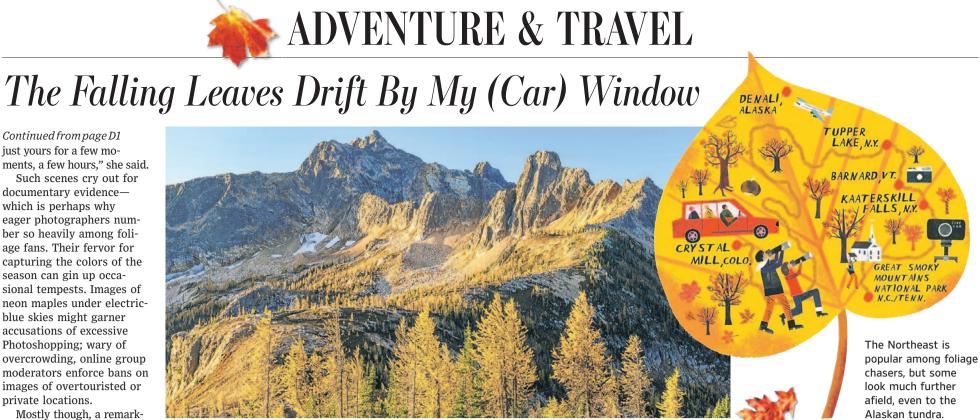


accompanied by neatly cuffed selvedge-denim jeans—and a firm belief that this style still rules.



pack. Knows all about a "fire fit." Less clear: If he knows how to actually light a fire. *—Jamie Waters*





Mostly though, a remarkably wholesome tone imbues

the internet of foliage. Participants trade friendly advice, compliment each other's most stunning images and sign off with "God bless." Fall's fleeting nature also lends a sense of urgency to the discourse. By mid September in one foliage group, members were posting about Foliage Anxiety Disorder (FAD), the gnawing fear of missing that one perfect day in the woods. A joke? Only sort of.

In the chase for dazzling forest scenes, achieving success year after year requires martial rigor. Leaf cams trained on forest canopies provide real-time data on the trees' first tentative hues, from Great Smoky Mountains National Park to Brownville, Maine. (This week national parks were preparing for a possible government shutdown that would close parks and could affect online services

such as webcams.) A loose network of foliage analysts scrutinize weather reports to spot the tempo of cold nights and sunny days that urge colors along.

"I go back and take a hard look at the climate and weather events for the past year. I look at the predicted outlooks for the upcoming fall, and really give a best guess of what's going to impact the colors," said Jim Salge, 42, a high-school physics teacher from Nottingham, N.H., who sidelines as Yankee magazine's fall foliage forecaster.

This year's combo of late frost and summer rains in the Northeast might translate to a slightly delayed

rollout of nuanced hues that linger, Salge predicted. "We don't think you're going to see the bright punch of color, but you're going to see a long, pastel season," he said.

Scrupulous amateurs make significant contributions, too. New Hampshire restaurant Polly's Pancake Parlor has tracked fall color since 1975, crafting a record so comprehensive even science-minded analysts like Salge value it as a resource. And in the 1980s, state tourism organization I Love NY

Coast puts on its own show come fall, including in Washington's North Cascades, where subalpine larches turn bright yellow; Polly's Pancake Parlor, in New Hampshire, has become an unlikely source of autumnal archives, keeping fall color records since 1975; Speedwell Dam in Morristown, N.J. attracts Garden State foliage chasers.



* * * *



tains' precise tones, she eschews pedestrian words like "red" and "orange" for more descriptive language: rhubarb, raspberry, saffron and mac-and-cheese.

Out-of-town leaf-seekers depend on such information, said Francis X. Driscoll, 74, of Windham, N.Y., a photographer who is also I Love NY's Catskills color spotter. "I can't do it from an armchair, and vou can't go by what happened last year," he said. "You have to get out there and see it up

be barred from the roads to Vermont's Sleepy Hollow Farm—a cluster of weathered barns in the town of Pomfret—by locals fed up with tourist-traffic logjams.

Blame it on Instagram? Perhaps, but Americans have long been avid for fall's slow, showy reveal. As Emily Dickinson wrote in her 1896 poem "Autumn": "The maple wears a gayer scarf / The field a scarlet gown."

Henry David Thoreau penned similar

CHASE FOLIAGE LIKE A PRO Fine-tune your next leaf-peeping

adventure with these expert tips 1 Follow latitude and altitude. Northerly woods and high summits see leaves change first, followed by southern forests and lowlands. Jim Salge, Yankee magazine's foliage forecaster, encourages travelers to improvise. "If you're too early at any given location, you can go north and uphill, and if you're too late you go south and toward the coast," he said.

2 Sleep in. Sunrise can leach color from trees, so you needn't set out before dawn, said Francis X. Driscoll, a Catskillsbased photographer. be richer," he said. At other times, look for indirect light to flatter foliage; leaves hum on cloudy days.

3 Think beyond

'peak.' Affixed to a tree in northern Vermont is a sign that reads "Peak Foliage Monday 2 p.m." The hoary joke is on tourists who tend to anxiously query when trees will hit maximum brightness. Carol Smith, moderator of a foliage-focused Facebook group, encourages a mindful approach to noticing nuances. "When you

have some of the

colors popping

began creating foliage maps by soliciting updates from volunteer leaf peepers in locations across the state.

"Every week we send pictures and do a report," noted Regina Rockburn of Tupper Lake, N.Y., who monitors Adirondacks-region foliage for I Love NY. To capture the mounclose and personal."

Spreading the word has drawbacks. Visitors often mob Kaaterskill Falls, one of Driscoll's favorite places to shoot, at the first whisper of fall. The trail to Crystal Mill has been closed, following damage to the 1893 structure. This year, nonresidents will

hymns to fall. "How beautiful, when a whole tree is like one great fruit full of ripe juices, every leaf from lowest limb to topmost spire, all aglow, especially if you look toward the sun!" he rhapsodized in an 1862 issue of the Atlantic. On the internet of foliage, he would have killed.

through, but you still He aims for "golden have some of the hour," 30 minutes after the sun arrives. You want that soft light in the morning-the colors will

greens-that's really pretty," she said. For more, go to WSJ.com/travel

MARTIN



ADVENTURE & TRAVEL

Resort-Free Retreat

On West Africa's Bissagos Islands, wild nature—and not a chain hotel in sight

By Ryan Lenora Brown

S A STRANGER carrying a plate of grilled fish approached me on the beach, slight annoyance pricked in my gut. My day on Bubaque, an island in the Bissagos archipelago of Guinea-Bissau in West Africa, had started with a bike ride through a forest of cashew trees, where I snacked on the custardy fruit plucked from the branches. Now I was sipping a beer as turquoise water sloshed over my feet. I didn't feel like haggling over a fish.

But as he handed me the plate, I realized I'd misread the situation. This wasn't a sale—it was a gift. The man explained that he'd caught more than he and his friends needed. "Enjoy," he said, while spooning a spicy relish onto the fish. Then he sauntered back to his impromptu barbecue.

You won't find Guinea-Bissau a country of 2 million flanked by Senegal and Guinea—on most must-visit lists. My boyfriend and I had chosen to visit the Bissagos (or Bijagós), 30 miles off the mainland, as part of a month-long trip through West Africa. Sparse Google results told of a proud culture (the islands held out against Portuguese colonialism longer than the mainland), vast nature reserves and beaches that resort chains have yet to gobble up.

* * * *

But during our visit, the residents' uncommodified kindness impressed us the most. The Bissagos seemed removed from the transactional realm of modern tourism. We encountered constant gestures of hospitality, apparently extended with no ulterior motive.

In a place where nature so abounds, we didn't expect our interactions with people to be the highlight. African manatees, nesting turtles and rare, saltwateradapted hippos call the 88-island archipelago home. In part because they are considered sacred, knotty mangrove forests and towering kapok trees—whose trunks look like halfway-open accordions thrive here.

After we'd landed in the capital, Bissau, a speed boat ferried us to Bubaque, where we spent most of the trip. We walked through villages where men played checkers and women pounded green mangoes into pulpy salads. We watched "pygmy cows," barely three-feet tall, **ARRIVE BY SEA** Most visitors reach the Bissagos by boat from Bissau, the country's capital.

wander otherwise empty beaches.

We did go farther afield some days. The Bissagos remain one of the world's few matriarchal societies, and we ventured to the island of Canhabaque to spend an hour with a present-day matriarch. Afterward, our guide told us proudly that he'd proposed to his wife—not the other, more customary, way around.

Traveling to the Bissagos isn't akin to washing ashore onto some "untouched" paradise. For centuries, traders and colonists have come and gone. But the touch of tourism does feel feather-light. You'll look in vain for an ATM; souvenir shops don't exist. The few hotels nuzzle up to public beaches, where locals and

This isn't paradise, but the touch of tourism feels feather-light.

tourists swim side by side.

This made it extra shocking when a cruise ship docked one morning. Soon, a dozen tourists were handing out cookies to local children, then filming them on smartphones, while demanding they share. It was a jarring reminder of how tourism can warp the shape of who we are to each other. But by afternoon, the ship was gone—and island life carried on, as it long has, unruffled.

THE LOWDOWN / ESCAPE PLANS FOR THE BISSAGOS ISLANDS

Getting There The tourist season runs October to May, and most hotels close during the rainy season (June to September). To get to Bissau, fly from Senegal, Portugal or Morocco. Get a visa ahead of time at the Guinea-Bissau embassy in Lisbon or Dakar.

Your hotel can likely arrange the speedboat trip to Bubaque (1.5-3 hours, depending on weather). The company Consulmar also runs a regular ferry service and private charters.

Staying There Hotels are clustered on Bubaque, and range from the simple and clean Saldomar (\$35 a night) to the upscale Cajou Lodge (\$150). On neighboring Rubane, Ponta Anchaca features beachfront cabanas on a mostly uninhabited island (\$150).

Eating There Every hotel has a restaurant, but Saldomar's proprietor cooks up especially inventive meals and crisp pizzas. Local food stalls are scattered around Bubaque's port.



Cajou Lodge is one of the islands' only upscale accommodation options.





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ELEGANCE IS A JOURNEY





DESIGN & DECORATING

Kindred Snaps

Want to show off your family photos in a way that feels chic, not cringe? Here, five tips from the pros

By NINA MOLINA

T'S A SCENE so familiar as to be cliché: Staggered along a staircase wall or atop a dusty mantle, promnight snapshots and Sears portraits perch haphazardly. Why do family photos always seem to get short shrift? Displaying these mementos stylishly can feel like a daunting challenge-but "a welldesigned family gallery is one of the best storytelling opportunities you have," said Paulina Perrault, a Sausalito, Calif., designer. Thankfully, sprucing up your snapshot act needn't take long. Here, interior stylists share five strategies for creating displays that dodge both chaos and cheesiness.

Keep It Simple

When family photo groupings go wrong, it's often because they look disorderly. To combat that, designer Danielle Colding of New York City relies on cohesive frames that all employ oversize white mats to give snapshots presence. Keep frames "sleek and clean," she



Local designer Kara Miller used pics to invite visitors into a family's world in a Jupiter, Fla., entryway.

said. Montecito, Calif., designer Jessica Jubelirer offers similar advice: "The simpler the better, [because that] unifies the visual." Designer Shea McGee of Salt Lake City, another fan of generous mats, turns mess into order by hanging photos in neat grids (see right). She suggests laying elements out on the floor before picking up a hammer and nails.

Think Beyond the Snapshot To chic-ify a family gallery, many pros prefer an eclectic approach

Select images that trigger a...memory or spur conversation.

over a monotonously sentimental one. (Really: you don't need to hang every school picture.) "Sometimes a small piece of artwork mixed in can act as a foil," said Amanda Reynal, a designer in Des Moines, Iowa. To find affordable pieces, Birmingham, Ala., designer Danielle Bloodworth Balanis suggests scouring thrift stores for period portraits, sketches and silhouettes. Another approach: Lindsey Jamison of Rumor Designs in Steamboat Springs, Colo., said, "Gallery walls can be a great place to display [souvenirs] from travels and children's artwork or showcase your own creativity."

Stay in Sight

Don't banish photos to bedrooms just because they're personal, says Jubelirer. When displayed in hallways or other high-traffic areas, family galleries can "invite people to pause and reflect" in unexpected ways. (Brace yourself



for spirited opinions!) "No need to hide your happiest memories," said Helen Bergin, a Palm Beach, Fla., designer. Some of her favorite living-room perches are built-in bookshelves, consoles and étagères.

Play with POV

For a happy medium between casual and considered, Reynal likes to mix

professional and informal photos in a single display. "Select pieces that trigger a...memory or can also be a topic of conversation," suggested Jamison. And when planning portrait sessions, Los Angeles-based designer Cleo Murnane recommends seeking out photographers with an anti-cliche approach. Think: no shots of every family member in matching white cowl-neck sweaters.

Go Noir

To avoid a clashing Technicolor vibe and create aesthetic harmony when plotting out a display, New York City designer Tara McCauley suggests printing photos in black and white or sepia. Bonus: The monochrome look will lend your mementos a timeless quality—whether they were lensed in 1932 or 2023.





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The Appeal

The human brain loves a good pattern. Evolutionarily speaking, we're hard-wired to recognize repetitive shapes. They organize the world around us. At home, the right motif in the right places similarly brings order and structure to an interior scheme, said Barrie Benson. In the library of one Charlotte, N.C., home, the local designer used a tartan print in small doses as roman shades and the upholstery of a settee. "There was a lot going on-textures and patterns, books, oriental rugs. The plaid worked because it added straight lines and a kind of framework," she said.

A bolder repetition of pattern across multiple surfaces can engender a sense of snugness. Elizabeth Hay, a designer who splits her time between Singapore and the U.K., clad the walls and a big sofa in a TV room in the same motif. "It creates an enveloping, cozy feel," she said.

The Tips

Such pattern echoes work best when deployed in understated ways—on just seat covers and window shades, say or taken intentionally over-thetop, explained Benson. "One more place would have been too much—unless I did the entire room in plaid," she said of her limited use of tartan in the library. "You do it completely, or you pick two places." Treatments that occupy the middle ground tend to look cloyingly matchy-matchy.

But beware: Heavy-handed repetition can skew old-fashioned if the pattern is too fussy **A TAD PLAID** In a Charlotte, N.C., library, interior designer Barrie Benson put tartan in a window and on a settee.

or traditional, says Hay. "You used to see rooms with chintz on everything—the walls, the curtains, the bed, the bed skirt—with lots of ruffles and gathers," she said. "That can feel a bit claustrophobic."

"What works very well is what we call in French 'décalé," said Paris designer Laura Gonzalez by way of pattern guidance. The translation: offbeat, like the unusual boho geometric she chose for the wall and sofa shown in the photo below.



Pattern play as featured in 'Laura Gonzalez: Interiors' (*Rizzoli, October 2023*).

The Caveats

Patterns are often available as both wallpaper and fabric, but the two renderings are likely printed at different mills, warned Benson. "Make sure you're getting samples, because often the colors are a little off. They should be very, very close."

Just as the brain is built for pattern recognition, it instantly detects disruptions. Take care with seaming and matching. The smallest offset can spoil allover patterning. "When you match the lines perfectly, it can look like a sofa is growing from the wall," Gonzalez said. "There is an infinity illusion," which can make even a tiny room seem much bigger.

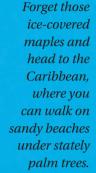
While liberal use of bold patterns calls for courage, Hay cautions against the wishy-washy accent wall. "Your room will feel much busier with just one patterned wall, because it's not balanced," she said. If you paper the whole room and carry the pattern to the headboard or the curtains, "it'll actually be softer on the eye."

—Kate Morgan

* * * *

Special Advertising Feature

Caribbean Cruising





Fou can tour the buildings and enjoy the views in Old San Juan, Puerto Rico, on shore excursions from Regent Seven Seas cruises, or on your own before your cruise begins.

Caribbean Adventures for Everyone

by Julie Bennett



ot looking forward to winter? Why not spice it up with a parrotfish or stingray encounter, a lesson in cooking Caribbean cuisine or an underwater walk? Regent Seven Seas Cruises[®] has 71 cruises to and around the Caribbean from November to the end of March that provide adventure, beautiful views and excellent shopping opportunities. Regent's small ships — the largest of which hold 746 guests — visit dozens of ports, many with harbors too small for traditional cruise ships. Every voyage features the onboard perks you expect from ultra-luxury cruising: spacious suites and balconies, gourmet meals, poolside snack and beverage service, fitness centers and spas, plus shore excursions for everyone, all included in your cruise fare.

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Day 2

The first morning of your cruise, you'll wake up in Gustavia, the capital of Saint Barthélemy — more commonly known as St. Bart's — the only port in the region named after a King of Sweden, and a popular stop on many Regent Caribbean cruises. There, you can disembark into the chic city on your own, browse its sophisticated shops and eat at a fine restaurant. Or you can meet green sea turtles and angelfish via a boat ride to their coral reef homes, where you'll have the opportunity to snorkel among them.

If you prefer to sightsee above the surface, you can opt for sailing on a catamaran along St. Barts' leeward coast with a stop in the Colombier Bay, where you can swim in clear waters, or stay aboard and gaze at a famous oceanfront villa built in the 1960s. If you just want to relax, you can spend the day at a hilltop colonial resort, where you can enjoy a massage and a leisurely lunch of

tropical dishes.

Day 3

St. John's, the capital of the island nation of Antigua and Barbuda, is a popular cruise ship stop because it provides the quintessential Caribbean experiences — sparkling waters, white-sand beaches,

Continued on Page D8

Regent Seven Seas Grandeur is one of three ultra-luxury cruise ships carrying guests away from blizzards this winter and into the placid waters of the Caribbean.

The Wall Street Journal news organization was not involved in the creation of this content.

GRAI

VDEUR





You don't have to leave your cruise ship to enjoy island food — Regent serves local cuisine onboard, like this seafood appetizer available in the Pacific Rim restaurant.

Continued from Page D7

sweeping ocean views, charming villages and historic buildings. You can see them all on a "Best of Antigua" motor tour or, for the more daring, on a trip in an off-road vehicle that travels through a rainforest and watershed.

The younger members of your party may want to spend their day swimming with and feeding stingrays under the supervision of a stingray wrangler. History buffs can take a drive that includes a tour of Nelson's Dockyard Village, a fully restored 18thcentury naval base, or a walking tour of St. John's. Those who just want to relax can spend their time at a resort and spa, lounging at its pools or on its private beaches.

There's another scenic catamaran ride option in St. John's, but this one includes champagne and lobster. After sailing past idyllic bays and a crumbling British fort, and spending time on a

Day 6

Cruising the Atlantic — a perfect day to have

lunch at the Splendor's pool deck or pamper yourself with a spa treatment.

Day 7

Nassau, the capital of the Bahamas, contains modern hotels and casinos, including an entertainment complex and water park, plus historic Colonial-era neighborhoods you can explore on your own. Or you can take a catamaran from the dock to Blue Lagoon Island, where you and your family can enjoy close encounters with sea lions and bottlenose dolphins. For an extra fee, you can be picked up at the dock by a private yacht, sail to nearby Rose Island and snorkel with reef fish and swim with friendly pigs — that's right, the local pigs have discovered the joys of tourPHOTOS COURTESY OF REGENT SEVEN SEAS CRUISES

Sunsets are more glorious enjoyed from your balcony on a cruise ship sailing to tropical islands (above). Turtles may be slow on land, but their antics are a thrill to watch underwater, whether you are snorkeling, scuba diving or riding in a mini-submarine (below).



from San Juan, Puerto Rico, to Bridgetown, Barbados, in February 2024 — stop in Oranjestad, the Dutch city that serves as the capital of Aruba. The island country is famous for coral reefs that host a dazzling variety of tropical fish, and Regent's excursion directors have designed ways for almost every cruiser to see them.

UNDER THE SEA

Trips to reefs and World War II shipwrecks are available for experienced snorkelers and scuba divers, but so are ingenious ways for the less-skilled to observe the region's underwater attractions. One option is an air-conditioned submarine that carries passengers to depths of 120 feet, close enough to watch blue parrotfish, sergeant major damselfish and sea turtles in their natural habitats. Even easier

picture-perfect beach, the trip back features a Caribbean-style party with champagne, grilled lobster and calypso music.

Day 4

Your next port is on St. Thomas in Charlotte Amalie, the capital of the U.S. Virgin Islands, which is a famous destination for snorkeling and scuba diving. Although the Splendor offers a variety of watery excursions, many tourists head to Charlotte Amalie to shop for everything from designer clothing to locally made jewelry and candies.

Day 5

From Puerto Plata, Dominican Republic, you can walk through a rainforest to visit a series of waterfalls along the Damajagua River. There, you can splash in pools beneath the falls and relax on surrounding boulders. Afterwards, you'll dine at a remote beach house and enjoy a few hours at its private beach with the option to kayak, snorkel or go paddleboarding.



ism and will happily paddle alongside you (even if just for the snacks provided by your yacht's crew).

CHOOSE YOUR ADVENTURE

All Regent's Caribbean shore excursions are listed on its website and the cost of most are included in Regent's all-inclusive fares. Guests in suites below Concierge level can reserve their shore excursions 300 days in advance, while guests in Conciergelevel suites and above may reserve 365 days out.

Foodies would hate to miss the "Caribbean Cooking Experience" if their Regent cruise takes them to Basseterre, the capital of the island country of St. Kitts and Nevis. There, they can watch a local chef prepare several regional dishes in the kitchen of Fairview Great House, the 300-year-old former residence of a French military commander. Guests will learn about St. Kitts' history and sample island specialties, such as jerk pork loin, Creole fish in a tomato broth and green banana escovitch.

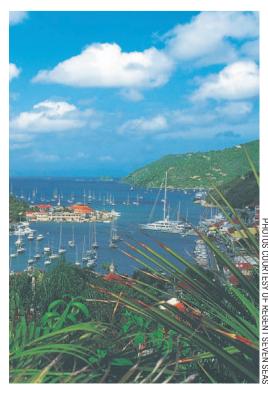
All Regent Seven Seas shore excursions are rated for easy, moderate or strenuous activity levels. Several cruises — including a 10-night sailing on Splendor is a ride in a "semi-submarine" where passengers cruise just five feet beneath the surface.

If you want a closer look at marine life, you can take a ferry ride to De Palm Island, where you will actually walk on the seafloor just offshore wearing "a specially designed helmet that keeps your face and head dry, so you can see clearly as you walk along at depths up to 25 feet below the surface," according to Regent's website. Or you can try snuba, a cross between snorkeling and scuba that lets you breathe through a diver's mouthpiece, called a regulator, connected to an air supply on the surface.

You can't carry that warm, flower-scented Caribbean air home with you, but you can continue the spirit of your cruise by preparing island-style cuisine. Seven Seas Grandeur[™], Seven Seas Splendor[®] and Seven Seas Explorer[®] ships feature Culinary Arts Kitchens, where guests can learn to re-create the rumbased beverages, jerk dishes and seafood-centric meals they enjoy at beachside restaurants and aboard ship. A perfectly crafted Mai Tai may not end winter's chill, but it will certainly help you cope with it.



Tropical isles offer white sand beaches, but sometimes the best way to cool off in the Caribbean is under an inland waterfall (left). Coral reefs circle the islands, and Regent has dozens of all-inclusive excursions that provide snorkel equipment and boat rides, so you can see them up close (center). Beautiful harbors attract private yachts from all over the world — and Regent Seven Seas cruise ships because they are small enough to dock there (right).



* * * *

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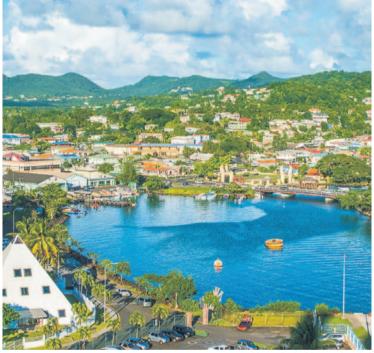
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This beautiful table is set and waiting for you and your friends or multigenerational family to dine at while cruising on an Oceania Cruises ship.

COURTESY OF OCEANIA CRUISES

Deep Dive Into the CARIBBEAN



by Julie Bennett

ravelers often book Caribbean cruises for a sunny escape without the need for long flights. Tourists are returning this year on Oceania Cruises to take a deep dive into the region's culture and history, test their skills at new sports, savor great food and, of course, enjoy the sunshine.

Two of Oceania Cruises' small, luxurious ships carry only 670 guests, and the other three, including the Vista, which launched in spring 2023, carry about 1,200. This season, from October to March, Oceania Cruises will follow a variety of itineraries along spectacular shorelines and into dozens of Caribbean ports. Once there, guests can choose from an array of nearly 800 shore excursions, decentury British military engineering." Participants will be transported there in a vehicle that can accommodate a limited number of wheelchairs and/ or mobility scooters.

HISTORY LESSONS

Oceania Cruises' "Reefs & Rhythms" on the Sirena, which leaves Miami on March 7, 2024, and and a in Banama City 10 days later provides two

COURTESY OF OCEANIA CRUISES

Castries, the capital of St. Lucia, offers travelers white-sand beaches, charming markets and chic shops.



COURTESY OF OCEANIA CRUISES

Many Oceania Cruises guests choose to stay aboard ship while in port and enjoy the sunshine, tropical cocktails and gourmet food available on the pool deck.



Angelfish, damselfish and dozens of other tropical creatures are just beneath the surface and ready to be viewed by guests on excursions. signed for every interest and activity level.

On-shore adventures are so important to Oceania Cruises' guests that its website is arranged to let trip planners select ports and excursions *first*, then find a cruise that will take them there. For instance, on a trip to Kingstown, capital of St. Vincent and the Grenadines, you can sign up for a snorkeling tour that ends with a visit to Wallilabou Bay, where sets from a major movie franchise and

its sequels are on display. If your interests are more nature-focused, an excursion called "Whales, Dolphins and Volcanoes" will sail you by catamaran along St. Vincent's northern coast to view damage from the 2021 eruption of La Soufriere and, perhaps, spot humpback and short-finned pilot whales or spinner and bottlenose dolphins. The day also includes an opportunity to swim from one of the island's famous black-sand beaches.

SHIPS TO SHORES

Most visitors to St. John's, the capital and

key port of Antigua and Barbuda, opt for Oceania Cruises', shore excursions that involve swimming or snorkeling from its famous beaches or taking a helicopter ride over a still-active volcano on the neighboring island of Montserrat. But a lessadventurous trip, called "A Taste of Antigua," will introduce you to its people and cuisine. You will visit the restaurants where locals go to relax and learn about (and sample) local rums and dine on Antiguan delicacies like conch fritters, jerk chicken, crab cakes and freshly caught fried fish.

Basseterre, the capital of St. Kitts and Nevis, offers a full roster of biking, hiking and underwater adventures, but Oceania Cruises also features an accessible tour of Romney Manor, a former sugar plantation once owned by an ancestor of Thomas Jefferson, and Brimstone Hill Fortress, a UNESCO World Heritage site, which, according to the Oceania Cruises, website, "is a tribute to 18th ends in Panama City 10 days later, provides two cruising highlights — a chance to explore Mayan ruins and a daytime trip through the Panama Canal. Excursions to several different Mayan sites are available in Costa Maya, Mexico; Harvest Caye, Belize; and Santo Tomas, Guatemala.

Visitors to Harvest Caye who would rather try something more modern — or tasty — can take a "Ke'kchi Chocolate & Culture" tour, where they'll



Elegance on the sea, Concierge-level guests enjoy the finest Oceania Cruises has to offer, as well as a spectacular view.

visit a cacao farm to see how organic cacao is ground and turned into chocolate using traditional Mayan techniques. The more adventurous can tear across the typically smooth waters of Placencia Lagoon on a two-person wave runner or learn to maneuver a stand-up pedalboard across a lagoon where manatees live beneath the placid waters.

Oceania Cruises may offer the broadest selection of shore excursions in the Caribbean — and 60 cruises to get you there — but sometimes travelers just want to explore

a city or an island on their own. Sandy Cares, a frequent guest lecturer on Oceania Cruises, offers a trio of off-the-beaten-path gems in San Juan, Puerto Rico.

If you walk to the 1756 Church of St. Francis of Assisi, she says, a short staircase in front of the main door will take you to the Catacombs of San Juan, "where departed Franciscan monks rest."

Cares also recommends visiting an old kitchen from the 17th century preserved in a university building and the "ominous-looking old prison cells from the Spanish Colonial era" on the grounds of the city's Tourist Bureau.

She urges all visitors to the Caribbean to "keep an eye out for even more wonderful surprises along the way."

Julie Bennett is a freelance writer specializing in franchising, small business and lifestyle issues.



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DESIGN & DECORATING

* * * *



Can a rug make my small room look bigger? Yes. Get the largest rug possible so

it defines the room as one big, inviting space. Optimally, the visible perimeter of floor is no wider than 8 or 9 inches. Size tip: Designers consider a 9-foot-by-12-foot rug-which will fill a small living room and can visually anchor a queen-size bed in most bedrooms-the most versatile size to repurpose if you someday move to a new home. In a living room make sure the carpet is at least big enough that the front two legs of the sofa and armchairs in the main seating area can sit on it. And always match its shape to the shape of the room. "Don't put a square rug in a rectangular room, because it will make everything look off-balance," said rug consultant Elisabeth Poole Parker, a former vice president at Christie's New York and international head of the auction house's carpet department.



CARPET STRATEGY A large rug emphasizes the grandeur of a dining room by Tori Rubinson, a designer in Fort Worth, Texas.



Anv advice on runners? Patterns hide stains in high-traffic areas like entryways, staircases and the kitchen (where they add color to an aisle between prep island and sink). Give a runner breathing room without making it look like a skinny Band-Aid. Ideal margins in a hallway are 4 to 5 inches, says antique-rug seller Georgia Hoyler, of Passerine in Washington, D.C. "Tape it out before you buy to be sure it will feel proportional." On stairs. 3 to 4 inches suffices. as in the space above designed by Liz Caan, of Newton, Mass.



Few things are as key to your room's design. Michelle Slatalla queried experts to suss out the lay of the land when it comes to carpet size, shape, fiber, style and placement.

Did Aladdin have a flying carpet? No. Disney invented it. In the Arabian Nights stories, Aladdin had a magic lamp. (The magic carpet belonged to Prince Hussain, a character in a different tale.) "But in the film, Disney juiced up the romantic angle of the story with an escape on a magic carpet," said Jack Zipes, a professor emeritus at the University of Minnesota.



WOOL

Considered the gold standard

for rugs, this natural fiber

Can cheap rugs look expensive? How?

Here are three ways. A. Buy an inexpensive. neutral room-size rug made of a natural fiber

such as sisal (which costs as little as \$1.50 a square foot), then center a pricier, but smaller, rug on top of it. "The space will be defined by the larger sisal rug, so the rug on top doesn't need to be big enough to sit under the furniture to look amazing," said Nadia Watts, an interior designer in Denver who frequently employs this strategy if clients bring along a favorite rug when they move to a new home.

B. Another technique: Find a vintage carpet with a beautiful patina going cheap due to rips or stains and cut it down to create a runner or a foot-ofthe-bed rug. A rug installer can bind the rug's perimeter with a selvage stitch to prevent threads from unraveling. C. If your layout includes a long, narrow room, commonly found in brownstones and other row houses, search for a vintage or antique rug in what is known as a gallery size. Frequently woven during decades and centuries past, their quirky dimensions (5 feet by 10 feet or 8 feet by 17 feet, for example) make these rugs harder to sell and therefore inexpensive to buy relative to their size, says Jason Nazmiyal, an antique-rug dealer in Manhattan.

Etsy sells a 🕖 bazillion rugs and a lot of them look great on my screen. How do I avoid getting ripped off when buying a carpet I haven't seen IRL from someone I don't know? Start by sleuthing before you shop. Research rug types and styles to zero in on what you like, and then do enough window shopping online to train your eye to recognize the difference between

a good and a bad example when you see it. Now you're ready for Etsy, where you will continue to behave like Sherlock Holmes.

Research the seller. Comb through customer reviews for red flags.

Pose questions. For instance, if a rug is described as "vintage," (which Etsy defines as at least 20 years old) ask the seller to pinpoint the decade or year the rug was made.

Ask for more pictures.

You want photos taken in natural light, to give you a real sense of color; close-up photos of any damage, uneven wear or alterations; and even photos of the backside. "Ask a seller to flip it over and take a photo, knots and whether the fringe is an actual part of the rug-which would confirm it's hand knotted—or something applied afterward," said Bailey Ward, an interior designer in Atlanta.

COTTON

A fluffy fiber, cotton has an airy look but requires frequent cleaning because it

SISAL Woven from agave-plant fibers, sisal is a neutral tan

A delicate luxury fiber with a beautiful sheen, silk belongs in a low-traffic

SILK

so you can see the

Materials matter. May I have a cheat sheet, please?



quiet backdrop for colorful, patterned furnishings. "It has a casual look that is a very nice contrast in a formal living room," said interior designer Ward.

color that works well as a

bedroom. "Like a silk blouse,

a silk rug should be dry cleaned" to avoid damaged fibers, says Scott Johnston, owner of Carpet Care of the Carolinas in Raleigh, N.C.

easy to clean, stain-resistant and a good choice for outdoor rugs. However, tufted polypropylene rugs "just don't bounce back after cleaning," said Johnston.

POLYPROPYLENE

Made from recycled plastics,

this durable material comes

in any color or pattern and is



quickly exhibits any and all signs of dirt and wear. For that reason, the most

practical cotton rugs are those small enough to fit into a laundry machine.



A felt rug pad at Washington, D.C., shop Passerine.

Rug pads are like the orthotics of rugs. What's the best kind? "Without a thick protective pad, you'll grind grit into the rug and wear down its foundation," warned carpet-care expert Johnston. The best are at least 1/4-inch thick with a layer of felt atop a nonskid rubber backing, he says. Feel free to use one of those cheap, 1/8-inch thick, waffle-weave rubber things they sell at hardware stores if you have a tight fit beneath a door.





Is wall-to-wall carpet ever not cheesy? Yes, it can be

quite chic in a bedroom, where it can turn a room $\overline{\underline{\dot{z}}}$ into a sanctuary. "We use it because it feels cozy, and it brings a softness to a space," said interior designer Watts. Perhaps for that reason, "for the most part, today wall-to-wall carpet has been primarily relegated to bedrooms," said Jamie Welborn, a senior vice president at flooring manufacturer Mohawk Industries. Make that a lot of bedrooms: Wall-towall carpeting still covers 35% of the square footage in American homes, Welborn says.

Nearly every town has a rug **IU** store that's been going out of business for 10 years. Why? Because they have no intention of actually going out of business. They're trying to lure customers who assume they are desperate merchants offering rockbottom prices. "Rugs are a product category that people buy rarely, so these stores are not trying to build a loyal customer base," said Katrijn Gielens, professor of marketing at the University of North Carolina. In reality? Prices may be marked up.



EATING & DRINKING

Boozy Bounty

Tap the last of the summer harvest in these fresh, fragrant cocktails packed with produce and brimming with flavor

By IAN KNAUER

Y WIFE and her farm crew grow and manage about 13 acres of organic vegetables. It's dirty, sweaty, backbreaking and, far too often, heartbreaking work. At the end of the day, or week, or summer, the farm crew only wants a couple things; a cold shower and a stiff drink.

They'll settle for an icy beer in a can, but occasionally I'll whisk a case of produce from the farm into the kitchen and mix cocktails featuring the fruits and vegetables of their labors. For the farmers, these drinks are doubly satisfying: hard work realized and rewarded in the same sip.

As you wander your late-summer garden or early-fall farmers market, think about what's for drinks.

When making these cocktails, I rely on a few key techniques to distill the essence of the crops:

1. Cocktail Syrups That **Really Are Simple** Infusing produce into a syrup is a move that most DIY bar-

tenders likely know well. The simplest syrup of this kind—a one-to-one sugar-to-water ratio known, appropriately, as simple syrup—can be the base of something far more complex. Just add some lemon verbena, and you al-



* * * *

Find the recipe for this Frozen Cantaloupe Mojito at WSJ.com/Food

ready have a head-turning cocktail ingredient. Most any herb works great. So do fruits. Apple-cinnamon-chamomile syrup will give any drink the taste of fall, just as a strawberry-rhubarb syrup unfailingly brings on springtime. One of my favorite latesummer fruits, the Concord grape, keeps a low profileoutclassed by its European wine-grape cousins and not nearly as sweet as seedless table grapes. But the Concord, sour of skin with a subtly sweet and highly fragrant flesh, brings a unique complexity to drinks. A Concord simple syrup-always in latesummer rotation on my bar cart—provides the base for the tall, cool Concord Collins recipe at right.

2. Freeze the Flavor of Summer

Let's give thanks for the freezer. Everyone who works on the farm also has the opportunity to plant their own row to tend and harvest throughout the season. These staff rows usually grow all sorts of weird and wonderful heirloom varieties of beans





LONG COOL DRINK The complex flavor of Concord grapes distinguishes this cocktail from other Collinses.

and corn, tomatoes and okra. One thing everyone is sure to grow: melons. I opt for a row of French cantaloupes, my favorite summer fruit. That means there is a three-week window when all the melons on the farm are ripe at the same time. We eat and share them, of course, but gallons of sun-ripened melon flesh gets frozen in cubes to blitz into frozen cocktails.

The frozen melon cocktail is a drink and technique I learned from the boozehappy food editors in the test kitchen at Gourmet magazine. where I worked in the first decade of the 2000s. You could always find a stash of frozen watermelon or honevdew cubes in one of the freezers. Anytime a staffer was celebrating a birthday, the food editors would blend frozen melon cubes with sugar, lime juice and liquor to make a boozy, frosted concoction. Currently my freezer is full of French cantaloupe cubes, but any summer melon will work in this drink, which works wonders to ease the heat and stress of late summer and early fall.

moonshine and elderberry syrup, or cucumber water with gin and lemon.

While you wander your late-summer garden or early-

fall farmers market, think not just about what's for dinner, but what's for drinks. As you unpack your farm-share box, keep one eye on the liquor

cabinet. This weekend I'll be blending Frozen Cantaloupe Mojitos, the coolest way I know to toast the end of another hot farm season.



SOUPED UP This bright beverage is gazpacho, on a bender.

smooth

Gazpacho Margarita This love child of a Bloody Mary and a Margarita ends up a lighter, more refreshing version of the first and a savory version of the latter-i.e., the best of both. Total Time 40 minutes Makes 8 drinks For the gazpacho water: 1 quart cherry tomatoes 1 medium cucumber, chopped 1 small red bell pepper, seeded and chopped

1 shallot, peeled

and halved	Pour mixture
1 tablespoon	through a fine-
sugar	mesh sieve set
2 teaspoons	over a bowl. Drain,
Sherry vinegar	stirring once or
1⁄2 teaspoon salt	twice, until water
For each cocktail:	measures 2 cups,
Tajín seasoning,	about 30 minutes.
to garnish	Discard solids.
2 tablespoons	2. Make a cock-
fresh lime juice,	tail: Sprinkle
plus spent lime	some Tajín on a
halves	small plate. Run
Ice	cut side of a
3 tablespoons	spent lime around
tequila	the rim of a glass,
	then roll rim in
1. Make the gaz-	Tajín. Fill glass
pacho water: In a	with ice. Add ¼
blender, purée to-	cup gazpacho wa-
matoes, cucum-	ter along
bers, peppers,	🥒 with lime
shallots,	juice and
sugar,	tequila.
vinegar	Stir to
and salt	combine.
until	Serve im-

mediately.

3. Take the Waters

One of my all-time favorite techniques: making flavorful waters from produce. Take a couple pounds of tomatoes. Chop them, then purée them in the blender with some salt and vinegar and a pinch of sugar. Pour everything into a cheesecloth-lined sieve set over a bowl and let the water drip into the bowl for 30 minutes. Throw out the pulp. The resulting tomato water looks just like water, but its flavor screams tomato. It's a bit of a mind-melter. My brain can never quite put together how the water I just drank tastes so much like a tomato.

While tomato is the most common flavor of water I make, the technique works with just about any vegetable. This summer I blended a tomato-cucumber-bell pepper-shallot water that mimicked the classic flavors of Spanish gazpacho. Using that gazpacho water as a savory base, I rounded the drink out with the usual suspects you'd find in a margarita, tequila and lime juice. Find the recipe at left.

The possibilities for this technique are endless. Think corn water with



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EATING & DRINKING



ON WINE / LETTIE TEAGUE



RECENTLY I ASKED the manager of a large wine store on the Upper East Side of Manhattan, "Do you have any New Zealand wines that aren't Sauvignon Blanc?" The answer was no.

I wasn't surprised. After all, this variety accounts for the vast majority (about 89%) of New Zealand's wine exports, and almost five times more Sauvignon Blanc than Pinot Noir, the country's second-mostpopular grape, is currently planted there. While New Zealand producers turn out plenty of wines made from other grapes—Chardonnay, Pinot Gris, Cabernet Sauvignon and Riesling, to name a few—not many show up in American wine stores.

I couldn't help but wonder: What would I find if I went looking for New Zealand wines other than Sauvignon Blanc? In stores that stocked New Zealand Non-Sauvignon Blancs-NZNSB, as I decided to call them—I found two or three at most. Only two stores, both in New Jersey. stocked more: my local Total Wine & More, in West Orange, and Gary's Wine & Marketplace, in Wayne.

Thanks to Gary's corporate wine buyer Gillian Sciaretta, the store features 12 NZNSB wines (along with 43 New Zealand Sauvignon Blancs). When Sciaretta assumed buying duties late last year, she tasted an arrav of New Zealand wines and was impressed with their uniform high quality. Indeed, she thought quite a few "over delivered" for the price and was particularly impressed by New Zealand Pinot Noirs.

I found even more NZNSBs at Total Wine & More, though I needed the assistance of a sales associate to ferret them out. There was no New Zealand section as such; instead, New Zealand Pinot Gris and Chardonnays were shelved with Chardonnavs and Pinot Gris from other countries, and New Zealand sparkling rosés were shelved with sparkling wines from around the world.

* * * *

"Non-Sauvignon Blanc makes up a tiny fraction (a few measly percentage points) of the NZ wine business at Total," said Rodolphe Boulanger, Total Wine & More's Maryland-based vice president of wine merchandising, in an email. He oversees New World wines, including those from New Zealand, for more than 255 Total Wine & More stores. The largest number of NZNSB wines in Total stores are Pinot Noirs (a distant second to Sauvignon Blancs in sales), followed by rosés and Pinot Gris, a virtual tie for third place, with rosé "a smidge ahead," Boulanger said. This accords with the latest export stats from the New Zealand Winegrowers, which lists Sauvignon Blanc as far and away the largest export followed by Pinot Noir, Pinot Gris and rosé.

Boulanger posited that New Zealand winemakers are in some ways victims of their own success: They have done such a good job producing and promoting Sauvignon Blanc that oenophiles have a difficult time considering their other wines.

And yet, as Boulanger noted and my tasting later bore out, Kiwi producers make good to very good Pinot Noirs, good Chardonnays and decent Pinot Gris, not to mention some toothsome sparkling wines and Cabernet blends. I even found an impressive 2019 Riesling, though I wondered if the four-year-old wine was a late release by the winery or had simply languished on the shelf.

That wine, the 2019 Rippon "Rippon" Mature Vine Riesling Lake Wanaka Central Otago (\$32), was the sole New Zealand Riesling I found. (Only 1,530 acres of Riesling were planted in New Zealand as of 2022.) It was also the only wine in my tasting closed with a cork, not a screw cap. Marked by a racy acidity with notes of lime zest, this very dry wine was lean but definitely not past its prime.

I found three Pinot Gris bottlings, but two were unbalanced and overly sweet. The 2022 Fern Ridge Hawke's Bay Pinot Gris (\$17), however, was crisp and dry with a pleasant tropical note. The only two Chardonnays I could unearth were from the same producer: Kumeu River Wines. The 2022 Kumeu River Estate Kumeu Chardonnay (\$32) was a more complex and powerful wine, sourced from six different vineyard sites, barrel fermented and aged almost a year in barrel. The 2022 Kumeu Village Chardonnay (\$20), meanwhile, was lighter and brighter, fermented

mostly in stainless steel. While both are well made, I gave the Village bottling the edge, particularly in terms of price/quality ratio.

The lone Cabernet blend I found, the 2018 Te Mata Awatea Cabernets/ Merlot Hawke's Bay (\$40), was a polished Bordeaux-style blend, soft and approachable but impressively structured. I shared it with a Bordeaux-loving friend who was astonished to learn it was produced in New Zealand. Te Mata, established in 1896, is arguably New Zealand's oldest and most famous producer of Cabernet blends. Awatea is the bestselling premium Cabernet blend in its native New Zealand, according to Te Mata CEO and owner Nick Buck. Only 2,400 bottles of its 60,000-bottle production make it to the U.S.

The four Pinot Noirs I purchased were all reasonably priced and well-made, though the 2020 Innocent Bystander Pinot Noir Central Otago (\$20), marked by crisp red

Kiwi producers make good to very good **Pinot Noirs.**

fruit and a lithe profile, impressed me the most in terms of quality and price. Lithe and rather restrained, it's one of two Pinots produced under the Innocent Bystander label; the other is Australian.

The McBride Sisters Collection Hawke's Bay Sparkling Brut Rosé NV (\$20) was an anomaly in several respects: Although it's produced in Hawke's Bay, New Zealand, the entire production is shipped to the U.S. A juicy, fruity, frothy pink blend of mostly Pinot Noir and a bit of Chardonnay, it was a lot of fun. Sisters Robin McBride and Andréa McBride John grew up in California and New Zealand, respectively, and met later in life. Now they make wines in both countries, under labels including McBride Sisters Collection, SHE Can Wines and Black Girl Magic.

It wasn't easy to track down the 15 bottles I managed to buy, and the effort required did raise the question: Is it worth trying to find wines imported in such small quantities? Given that oenophiles happily search for rare wines all the time (Burgundy lovers, I'm looking at vou). I'd answer ves, especially since the wines I recommend below have such a good price/quality ratio. Perhaps an increased demand for these NZNSBs will mean that more show up on retail store shelves.

Email Lettie at wine@wsj.com.

OENOFILE / NON-SAUVIGNON-BLANC BEAUTIES FROM NEW ZEALAND

2022 Kumeu Village Chardonnay \$20

2018 Te Mata Awatea 2020 Innocent By-Cabernets/Merlot

stander Pinot Noir Cen-

2022 Fern Ridge Hawke's Bay Pinot **McBride Sisters Collec**tion Hawke's Bay Spar



Sourced from vinevards in both the Kumeu and Hawke's Bay regions of New Zealand's North Island, this crisp and vibrant Chardonnay is fermented in old French oak and (mostly) stainless steel.

Hawke's Bay \$40 This savorv Merlot-Cab Franc-Cabernet Sauvignon blend has notes of red and dark fruit and spice. Produced from estate fruit, it's styled to be approachable in its youth, said Te Mata CEO Nick Buck.

tral Otago \$20 Not to be mistaken with the Innocent Bystander Pinot produced in Australia, this one from New Zealand's Central Otago region is a lithe, juicy red with a brisk acidity and earthy notes, well balanced and food-friendly.

Gris \$17 Juicy tropical fruit—these are the three words that come to mind right away to describe this white wine produced in the Hawke's Bay region of New Zealand. It is also pleasant, uncomplicated, crisp and dry.

kling Brut Rosé NV \$20

The McBride Sisters make wines in both New Zealand and California. This pink sparkler is a juicy, frothy, fun blend grown in New Zealand's Hawke's Bay. The entire production is exported to the U.S.

SLOW FOOD FAST / SATISFYING AND SEASONAL FOOD IN ABOUT 30 MINUTES



The Chef Douglas Katz

His Restaurants

Zhug, Amba and Provenance, all in Cleveland

What he's known

for Bringing a farm-to-table, made-from-scratch ethos to the Cleveland dining scene for over 20 years. Creating welcoming restaurants that are go-to specialoccasion spots. Cooking a range of cuisines that rely on a well-stocked spice drawer.

Harissa Chicken Thighs With Zucchini and Almond Couscous

"WHEN YOU COOK with spices, your whole kitchen fills up," said Doug Katz. For his third Slow Food Fast contribution, the Cleveland-based chef shares a satisfying braisedchicken supper he seasons with harissa, a North African blend of chile peppers and other aromatics. Harissa comes as a dry spice or as a paste—either of which works here. Less flexible: how you cook it. "You

Time 35 minutes Serves 4

8 skin-on chicken thighs (about 2 pounds) Kosher salt and freshly ground black pepper

- 9 tablespoons olive oil 1 ½ cups finely diced yellow onion
- 1 tablespoon minced garlic
- 3 tablespoons minced jalapeño
- 2 small red bell peppers, finely diced
- 3 tablespoons harissa
- 1 tablespoon sherry vinegar
- **1** ½ cups couscous
- 2 bay leaves
- 1 ¹/₂ tablespoons honey 1 medium zucchini, finely diced
- 2-3 tablespoons golden raisins
- 3 tablespoons slivered

can't just toss it in—you have to coax out its flavor, blooming the spice in fat before adding the main ingredients," Katz explained.

Served over a mound of couscous dotted with zucchini, almonds and jewel-like raisins, the saucy braise shines. As the chef points out: "It's the kind of dish that makes people think you're an expert, but it really doesn't take much." —*Kitty Greenwald*

almonds

¼ cup parsley or mint leaves, roughly torn

1. Season chicken with salt and pepper. Add 3 tablespoons oil to a Dutch oven over medium-high heat. Working in batches, sear chicken skin-side down until golden, about 5 minutes. Turn and sear opposite side, 3 minutes more. Repeat with remaining chicken and 3 tablespoons oil. Set thighs aside and pour off all but 3 tablespoons fat from pot. 2. Stir in onions, garlic, jalapeño, bell pepper and harissa. Season with salt and pepper. Sauté over medium until veggies soften, about 5 minutes. Add 1 cup water; bring to a simmer. After 2-3 minutes, add reserved thighs, skin side simmer until meat cooks through, 10-15 minutes. Add vinegar. Cook until flavors mellow, 2-3 minutes. 3. Meanwhile, prepare couscous: In a small pot, toast grains over medium until nutty but still pale, 1 minute. Transfer to a medium bowl. Set clean pot over medium heat and add 1 ½ cups water, 3 tablespoons olive oil, bay leaves, a pinch of salt, honey and zucchini. Simmer 1-2 minutes, then pour mixture over couscous. Add raisins; stir to combine. Cover and let steam until tender, 10 minutes. Uncover, fluff and stir in almonds. 4. To serve, scoop couscous onto plates. Top with

up. Cover, reduce heat and

chicken, vegetables and pan sauce. Garnish with herbs.



WALL STREET JOURNAL, FOOD STYLING BY PEARL JONES, PROP STYLING BY SOPHIE STRANGIO,

HOEWELER

MICHAEL



THE RIGHT FLUFF Toasted couscous cooks quickly and absorbs the sweetness of slow-simmered peppers and saucy chicken.

GEAR & GADGETS

RUMBLE SEAT / DAN NEIL



Mercedes-Benz Tests The Autonomous Driving Waters



HANDS OFF Mercedes-Benz's autonomous Drive Pilot technology effectively handles the duties of stop-and-roll freeway traffic.

LAST WEEK, Mercedes-Benz invited journalists to Los Angeles to test the company's Drive Pilot advanced driver-assist system (ADAS), the first Level 3 system technology to be state-certified in the United States. L.A. traffic didn't disappoint.

As defined by the Society of Automotive Engineers, Level 3 means "conditional automated" operation, such that the driver is legally allowed to take his or her eyes off the road and hands off the wheel. Level 2 ADAS—incorporating now-commonplace functions such as active lane keeping, dynamic cruise control, collision avoidance and emergency braking—require drivers to remain eyes-up and hands-on, even if it's only a finger on the wheel.

Available next year for an upfront subscription fee of \$2,500, Drive Pilot will have a few requirements of its own. Speed has to be 40 mph or lower, in dry and daylight conditions, with well-marked pavement and a vehicle ahead to follow. For however long these conditions are satisfied, the operator is free to watch video, play games, message, browse or otherwise relax. tion. Drivers then have to re-initiate the ADAS systems. If everything is jake, indicators will signal that Drive Pilot is again available.

* * * *

Stipulated, I'm a big dumb monkey, but I had issues. The redundant button-pushing required as the car passed in and out of what the software folks called the Operational Design Domain was highly non-optimal. I'm told the extra clicks to activate and confirm Drive Pilot were necessary to satisfy SAE and European regulations.

Drivers can look down but they can't close their eyes without drawing the biometric scrutiny of the system, which will warn, alert (audible, visual, haptic) and then gradually count down from 10, giving drivers plenty of time to take control. Wake up, sleepy head! The vast majority assume control within about 4 seconds, Mercedes engineers said.

I struggled to keep my paws off the pedals and wheel—touching either will kick the system out of Level 3. It will also disengage if it loses sight of a lead vehicle. A few times when I was obliged to assume command, I stepped too hard on the accelerator, causing the car to lunge. Oops. Learning curve ahead. These fretful moments—known to human-factors engineers as the handoff—are the most problematic for autonomous driving, when responsibility in an emergent situation would seem to be tossed between driver and car like a hot potato. Mercedes-Benz is explicit on this point: If, during those 10 seconds, the system fails to operate as designed, that's on them. Otherwise, the driver is responsible.

With Drive Pilot, the operator is free to watch video, play games, browse or otherwise relax without a hand on the wheel or eyes on the road.

As it often is, Tesla is the elephant in the room. The Silicon Valley car company run by Elon Musk has poured billions into autonomous technology, which began apchine vision and optical cameras to generate the car's virtualized view of the world.

Pilot, the Tesla system is still Level

2, so drivers can't just set and for-

tries to minimize these legally in-

demnifying check-ins whereas Mer-

It might be tempting to think of

the companies at two points along

own path; a notable example is the

company's decision to rely on ma-

the same technical trajectory. But

Tesla is very much following its

get. The difference is that Tesla

cedes-Benz depends on them.

Representing prevailing wisdom, the Mercedes-Benz EQS I the matching unit on the right is decorative, I was told, there to maintain "symmetry." Uh-huh. Clearly, a second LIDAR unit will live there in future models.

Drive Pilot is also capable of automatic route-following, from highway entrance to exit, navigating a pointillistic 3D map of multi-wavelength imagery that tells the car its whereabouts to the centimeter. However, this map is currently limited to California—Southern California, at that—and Nevada, the two states where Drive Pilot is approved for public roads.

At the end of the SAE rainbow is Level 5, unrestricted full driving automation. Robotaxis. This is Tesla's play. The latest version of the company's Full Self Driving technology, Version 12 (FSD V12), represents a heroic break from the regime of classical computing. The brain in the Mercedes, for example, is conventionally heuristic, sifting through its sensor-fused environment with vast, patternmatching algorithms and responding as programmed, if/then. Is the object ahead a tree, a traffic cone. a cvclist?

But there will always be edge cases, instances of stochastic weirdness when patterns don't match and rules are more observed in the breach. In February, for example, Tesla was obliged to recall almost a quarter-million cars betatesting FSD after NHTSA identified "certain driving maneuvers [that] could potentially infringe upon local traffic laws or customs, which could increase the risk of a collision if the driver does not intervene." Tesla issued the responsive software update in March.

Inevitably, fully autonomous cars of the future will be called upon to respond, to intuit, to improvise, to behave like human beings—who are, by the way, strangely awesome at driving.

To cross this uncanny valley of autonomy, Tesla has moved to a deeper kind of processing based on generative artificial intelligence. FSD V12 (using the fourthgeneration hardware, HW4) effectively abandons the bulk code front-loaded into previous versions, even a map, relying instead on a series of neural nets daisychained together, tasked to learn and mimic human driving behavior by watching video clips. FSD V12 was never told to stop at stop signs; it just knows how humans respond to them, and does that.

Initially trained on video clips and telemetry curated from millions of Teslas already on the road, FSD V12 will continue to observe and learn. More data is always better. To that end Tesla has built Dojo, a supercomputing neural-network trainer. Dojo is designed to turn millions of terabytes of video data, gathered from hundreds of millions of driven miles, into something like instinct, reflex, wisdom and experience, to be imparted to succeeding generations of self-driving cars. Good luck with that. Seriously.

When speed exceeds 40 mph the car will drop out of Level 3 opera-

pearing in Tesla cars back in 2014 under the billing of Autopilot. Tesla's Enhanced Autopilot, including automatic route-following navigation, auto park and auto summon functions, is currently a \$6,000 option. While more capable than Drive drove in Santa Monica was fitted with a mix of sensors operating at multiple wavelengths, including binocular cameras in the windshield and long-range, laser-based LIDAR sensors mounted in the grille. The one on the left is active;

Cutting Remarks

Four knife filers, ranked by how hard they are to use

EVER SEEN a chef reduce an onion to a pile of translucent rubble while maintaining direct eye contact with someone else? This unnerving feat relies on both muscle memory and the chef's ability to keep her knives sharp. But even if you don't work the line, take care to avoid dull knives for safety's sake. A worsefor-wear edge can slip over your food and cut you, warns Jacqueline Blanchard, who owns the Japanese restaurant Sukeban and Coutelier, a knife shop, both in New Orleans. Once home cooks go down the rabbit hole of Matters Related to Sharpening, they yearn for consensus on frequency. Chefs can tell it's time to refine their knife's edge by feel but a visual aid often helps. "For me it's chives," said Blanchard. "When you stop sailing through and get those accordion ribbons that aren't fully severed, then it's time to sharpen."

1 | THE OUTSOURCER

While the knife sharpening vans that once patrolled many neighborhoods have all but vanished, you can still easily find other people to undertake the task. Go to a hardware store (shown), or use a prepaid mailer from **Knife Aid**. Send the company's knife smiths up to 14 blades at once. Knife Aid says it'll return them after about a week. *\$59 for four knives, KnifeAid.com*



2 | THE SWIPE AND REPEATER Manual sharpeners promise to strop a

knife after about 25 back-and-forth strokes. The **Chef's Choice AngleSelect Diamond Hone Knife Sharpener** has slots to refine most types of knife. About the size of a condiment bottle, it also stashes easily. A downside: Blanchard says manual sharpeners wear down knives faster than other methods. \$38. ChefsChoice.com

3 | THE GRINDER

If you can make room for a nearly 12pound machine, the **Tormek T-1 Kitchen Knife Sharpener** involves a nice amount of hands-on work. Its guide provides a surface to rest your knife against as you slide it across the main rotating wheel. An extra honing wheel finishes the job. *\$357, Tormek.com*

4 | THE TRADITIONALIST

Ready to ditch the training wheels? In high-end kitchens chefs prefer the tricky but classic whetstone to sharpen knives. It takes up little space, lasts for years and can produce a super sharp edge without removing too much steel. The **Korin Togiharu Two-Sided Sharpening Stone** features a coarse surface for sharpening on one side, and a finer one for honing on the other. To use it, soak the stone in water, then drag your knife over the coarse side from one end to the other. *\$65, Korin.com* —*Sal Vaglica*



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