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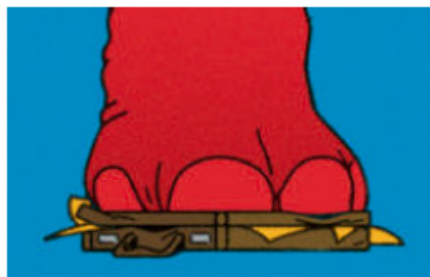
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Liz Cheney lost her battle to stay in Congress as Wyoming's representative in the House, when Republicans in the state voted heavily against her in a party primary. Ms Cheney is one of the few outspoken Republican critics of Donald Trump, warning of the damage to democracy from his lies about a "stolen" election. Mr Trump made it his mission to kick Ms Cheney out after she supported his impeachment in 2021. The winner of the primary, Harriet Hageman, is a former Never Trumper who now thinks he is the best president of her lifetime.

In Alaska's primary election, **Sarah Palin** was one of the candidates to make it through to November's mid-terms, where they will vie for the state's single congressional seat in the House. Ms Palin, John McCain's running-mate in the election of 2008, is backed by Mr Trump.

Republicans continued to push for the publication of the affidavit that sets out the case behind the FBI's search of **Donald Trump's** home in Florida. The government argues that releasing the affidavit would compromise its investigation, as it could stop witnesses from co-operating. FBI agents removed various sets of documents from Mar-a-Lago, including papers marked "classified" and "top secret".

Ukrainian saboteurs attacked another Russian ammunition depot in Crimea, the latest in a series of assaults far behind Russia's front lines. Both sides blamed each other for heavy shelling near the Zaporizhia nuclear plant in southern Ukraine. The United Nations

has called for a demilitarised zone in the area to avert a nuclear disaster.

Finland decided to reduce the number of visas it issues to Russians to a tenth of the current total in order to **stop Russians** using Helsinki airport as a gateway to European holiday spots. Ukraine wants the EU to ban Russian tourists altogether, as an extra means to press the Russian government to reverse the invasion of Ukraine.

China conducted fresh military drills around **Taiwan** as the island's president met members of an American congressional delegation. The drills were not as big as those held by China earlier this month after Nancy Pelosi, the speaker of America's House of Representatives, visited Taiwan, which China claims. Meanwhile, China said its forces would take part in joint military exercises to be hosted by **Russia** at the end of August. Other countries, including Belarus and India, will also take part.

The front line of free speech

Sir Salman Rushdie was reported to be "feisty" and "defiant" following surgery for injuries he sustained after being stabbed multiple times at an event in Chautauqua, a town in western New York. In 1989 Ayatollah Khomeini, Iran's leader at the time, called on Muslims to kill Sir Salman for writing "The Satanic Verses", a book the Shia cleric considered blasphemous. Iranian media described the assault on Sir Salman as "divine retribution". America said such gloating was "despicable". Sales of "The Satanic Verses" soared.

Iran sounded hopeful that a deal to curtail its nuclear programme, which was first agreed in 2015 but later renounced by America, could be revived using new proposals put forward by the European Union. But Western diplomats expressed concern

that Iran is dragging out the talks to avoid further repercussions.

For the first time since the Communist revolution in 1959, the **Cuban government** said it would allow foreign investors to participate fully in wholesale retailing, and would "selectively" encourage foreigners to invest in ordinary retailing, as long as they comply with socialist aims. Cubans endure long queues for basic goods when they use the state-owned shops. The government hopes foreign investment will ease shortages.

Thousands of federal troops were sent to border cities in northern **Mexico**, after a drug cartel threatened to attack residents if they did not stay home amid a feud sparked by the attempted arrest of one of its leaders. Tijuana practically shut down for two days.



William Ruto, the deputy president who ran as the anti-establishment candidate and champion of the poor, was declared the winner of **Kenya's** presidential election by a narrow margin, defeating Raila Odinga, who disputes the result. Four of the seven election commissioners also disavowed the result, but gave scant justification for doing so. Uhuru Kenyatta, the outgoing president, is the third head of state in a row to honour term limits.

Scott Morrison, **Australia's** prime minister until he lost an election in May, came under pressure to resign from parliament, following revelations that he had secretly appointed himself co-minister of finance, health, home affairs, resources

and treasury during the first year of the pandemic. Mr Morrison says he never used most of the powers he gained by the manoeuvre, but the current prime minister, Anthony Albanese, labelled it "tin-pot activity".

A court in **Myanmar** added another six years to the various prison sentences imposed on Aung San Suu Kyi, the country's leader until a military coup last year. That brings her total sentence to 17 years, which she is serving in solitary confinement.

North Korea conducted its first missile tests since early June. The tests came as **South Korea** prepared for its first big military exercises with America since 2017. America suspended such drills to show goodwill in talks with the North which ended in 2019.

Yoon Suk-yeol, South Korea's president, granted a **pardon** to Lee Jae-yong, Samsung's de facto boss, for corruption, clearing the way for him to rejoin its board. Mr Lee was jailed for 18 months before being released on parole for his part in a bribery scandal that led to the downfall of Park Geun-hye as president in 2017. His pardon is a big blow for anti-graft campaigners.

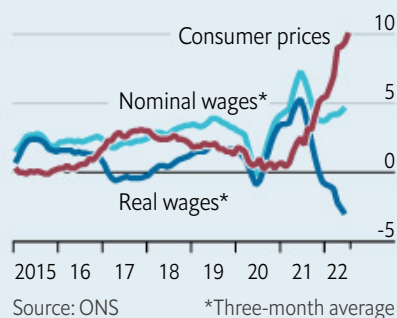
Two policemen who were guarding **polio** vaccinators in north-west Pakistan were shot dead. Islamic militants routinely kill polio workers, whom they suspect of providing cover for some sort of anti-Muslim plot.

"Sake Viva!"

In a novel approach to increase its tax take, the **Japanese government** backed a campaign to encourage Japan's younger generations to drink more. People aged 20 to 39, a sober bunch by comparison with their forebears, have also been invited to come up with ideas for how to boost the drinks industry. The health ministry said it had not co-operated in the campaign.

Wages and inflation

Britain, % change on a year earlier



Britain's annual **inflation** rate, as measured by the consumer-price index, jumped to 10.1% in July, the first time the country has hit double-digit inflation since 1982. Higher energy costs were the main factor behind rising prices, but transport and food also added to the squeeze on household bills. Calls to freeze the price cap on domestic energy are growing louder. An average household is expected to see its annual bill double to over £4,300 (\$5,200) by January. On account of the cost-of-living crunch, real **wages** fell by 3% between April and June, the most since records began in 2001.

Britain's economy was moribund in the second quarter, shrinking by 0.1% over the previous three months. Workers were given an extra day off in June to celebrate the queen's jubilee, though the number-crunchers said that had little impact on growth. **Japan's GDP** expanded by 0.5% in the quarter, having registered zero growth at the start of year. The country's economy is now back to its pre-pandemic size.

Markets breathed a sigh of relief when **Walmart** published a solid set of quarterly earnings. In July the retailer issued its second profit warning of the year, but revenue was up sharply in the latest quarter, reflecting the stiffer price of the average shopping basket. Walmart said customer behaviour had changed, with lower-income shoppers buying more canned meat and less deli produce, and that it was seeing more higher-income consumers in its shops. **Home Depot** reported a similar story, as it chalked up its highest-ever sales in a quarter.

Prices of **natural gas** surged again in Europe, amid more jitters about the reliability of Russian supplies, problems with gas-carrying barges navigating the Rhine and traders trying to shore up gas stocks ahead of the winter. Dutch front-month futures rose to €226 (\$230) a megawatt-hour, close to the price in early March and ten times above the seasonal average. Natural-gas prices also rose sharply in America. Underground stockpiles have fallen there as power generators tap the gas to produce more electricity during the hot summer.

Uniper, Germany's biggest distributor of gas, reported a €12.3bn (\$12.5bn) loss for the first half of the year. The company is getting only 40% of the Russian gas it has contracted for, and must turn to spot markets, where prices are higher, to cover the shortfall.

A kingdom's ransom

Saudi Aramco reported another record quarterly profit. Saudi Arabia's state oil company saw net income rise by 90%, year on year, to \$48.4bn. That's almost as much as the combined headline profits of BP, Chevron, ExxonMobil and Shell in the second quarter. Joe

Biden and other world leaders have pleaded with the Saudis to raise oil production by a significant amount to reduce prices, which the Saudis have little intention of doing while they reap such huge rewards.

The **People's Bank of China** reduced its medium-term lending rate slightly to 2.75%. The cut was unexpected and followed the release of disappointing retail sales and manufacturing data. Meanwhile, stocks in **Chinese property** companies surged amid reports that the government was planning to support the country's stricken developers with a plan that would enable them to refinance their debt by ordering state organisations to underwrite their new bonds.

Tencent reported its first year-on-year quarterly decline in revenue. The Chinese tech giant has been ensnared in the government's clampdown on big tech and has yet to receive a licence this year for any of its new video games, a big part of its business. The company is said to be hoping to sell all or part of its \$24bn stake in Meituan, a food-delivery group.

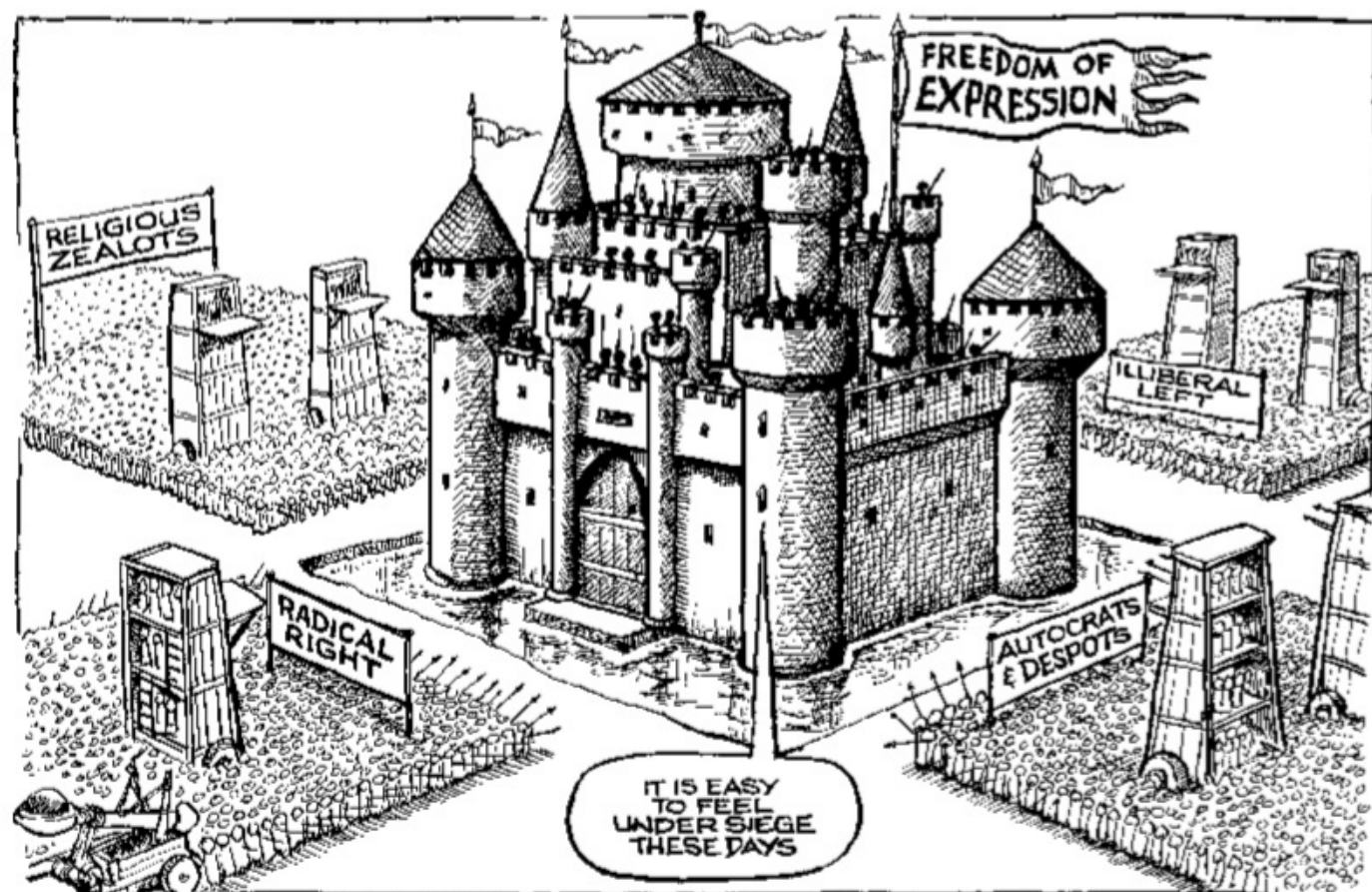
Apple has reportedly told employees at its headquarters that they must **return to the**

office at least three days a week from September 5th. The company has tried before to get staff back, only to have its plans upended by new covid outbreaks. Apple's approach is stricter than that of its Silicon Valley peers. One senior executive has already left for Alphabet, apparently because of Apple's lack of flexibility in its policy.

Breaking the sound barrier

Flight times from New York to London could be cut to three and a half hours and from Los Angeles to Sydney to under seven hours when **Boom Supersonic's** jets are rolled out for passengers in 2029. American Airlines this week placed an order for 20 of the aircraft, which can reach speeds of Mach 1.7 (Concorde's cruising speed was just over Mach 2). United Airlines ordered 15 last year. It's a big bet that the planes will take off. Boom is still in discussion with Rolls-Royce about the engines.

The time saved flying in a supersonic jet will probably be spent waiting for your luggage at an airport. **Heathrow** has extended its cap of 100,000 passengers a day until October 29th because of a shortage of baggage handlers.



Leashed

Donald Trump's grip on the Republican Party is tightening

THEY ARE the questions hanging over America and, thus, the West. Will the man who tried to overturn the results of the presidential election in 2020, threatened to disband the world's most powerful military alliance and played footsie with Vladimir Putin, decide that he wants to run again? If so, can he be stopped? It may seem premature to ask. But the first primary of 2024 is closer in time than the last general election, 94 weeks ago. And, despite his poor record in office and his unconscionable behaviour after America's voters kicked him out, Donald Trump's grip on the Republican Party has strengthened.

The thumping defeat of Liz Cheney in her Wyoming primary this week matters, because it robs Congress of a brave, principled conservative, and because it fits a pattern. Not all the candidates endorsed by Mr Trump have won their primaries. But most of them have done so (see Briefing). Perhaps a greater sign of his influence is that many of the losing candidates sought his endorsement, too. These contests have not been over different flavours of conservatism, but over which contender is the most MAGA. Of the ten House Republicans who voted to impeach the president for what he did on January 6th 2021, eight are either retiring or have been retired by primary voters. At the same time, the party's nominees for key positions in some states' administration of elections are people who support Mr Trump's dangerous claim that the vote in 2020 was stolen.

Early polling on whom Republican voters want as their champion in 2024 suggests that about 50% of them say Mr Trump. In a system where a candidate can knock out most rivals with a solid 30% of support in the early states, it is a formidable starting position. A few months ago Republican voters, tiring of Mr Trump, looked as if they might switch to Florida's go-

vernor, Ron DeSantis, or anyone else offering MAGA without the drama. Today Mr DeSantis would be more likely to conclude that his best shot at the White House is as Mr Trump's running-mate.

A lot could change between now and the first Republican primary, but unless Mr Trump either decides he does not want to run, or something prevents him from doing so, it looks as if he would win the Republican nomination. That leads to the second question: could he be stopped?

One obstacle is the law. The most recent of the many investigations Mr Trump faces was revealed when the FBI came knocking at Mar-a-Lago earlier this month. A lot remains unknown. The unsealed warrant says that the Department of Justice sought classified documents that Mr Trump took from the White House. Once his investigation is complete, the attorney-general, Merrick Garland, may decide that the documents are safe and his work is done. Whether a prosecution follows may depend on how sensitive the documents were (see United States section).

Many Republicans, including Mr DeSantis, have rallied behind Mr Trump. The most vocal are calling for the impeachment of Mr Garland and demanding the defunding of the FBI—a double standard considering that they wanted Hillary Clinton to be locked up for her use of a private email server. However, Democrats should remember that the precedent cuts both ways: in

2016 the Justice Department declined to prosecute Mrs Clinton.

Three other investigations—into whether Mr Trump lied on his tax returns, whether he broke the law on January 6th, and whether he took part in a criminal conspiracy to overturn the election in Fulton County, Georgia, in November 2020—are equally uncertain. Like anyone else, Mr Trump deserves the presumption of innocence. And his opponents should be wary of repeating old mistakes: at each turn they have hoped that something, anything (the Mueller investigation, the first impeachment trial, the second impeachment trial) would take him out of the picture. And yet here he is.

In fact, these legal troubles increase the incentive for Mr Trump to run. Out of politics, he is just a private citizen facing some prosecutions. For as long as he is a potential president, he is the head of a movement that won 74m votes last time round. At that point Mr Garland and others running the investigations would face an unenviable choice: either put a presidential candidate on trial or choose not to uphold the rule of law. Being on trial and even being convicted could fuel Mr Trump's return. A revenge tour, in which he campaigned on retribution for his persecution by the legal system, would play to Mr Trump's worst instincts and further exhaust America's institutions.

In another era, the influence of corporate America might have helped sideline Mr Trump. Yet the political clout of big companies is waning, as the Republican Party becomes a movement of working-class whites and an increasing number of conservative Hispanics. That movement protests against not just foreign entanglements, illegal immigration and cuts to Medicare and Social Security, but also trade and left-wing identity politics advanced by the global, managerial

elite. Many Republicans think the party has for too long put the interests of the S&P 500 ahead of American workers (see Business section). Little wonder that big companies now regard the prospect of a Republican triumph in November with trepidation. What remains of the Republican establishment acts like a government in exile, muttering about Mr Trump's takeover, but lacking the means to reverse it.

More crosses than ticks

If neither his party nor the law will stop Mr Trump, what can? Poetic justice recommends a do-or-die run for the Oval Office by Ms Cheney, in a bid to siphon off Republican voters who cannot bear to put a cross next to the name of a Democrat. If enough of them switched in red states in a close race, it could deny Mr Trump victory in the electoral college.

Better would be to depend on the good sense of the American people. It is easy to forget that Mr Trump loses elections. In the four years of his presidency he lost his party both houses of Congress as well as the White House. Many voters understand that he is dangerous and undemocratic and most do not want him back in office. The reason Mr Trump campaigns so hard against the trustworthiness of the ballot box is that he knows the ballot box can defeat him. ■



The Tory leadership

Britain's next prime minister

It will be a technocrat who knows what to do, or a politician who knows how to do it

IN THESE TUMULTUOUS times, running the Conservative Party is as hard as running the country. On September 5th Britain will get its fourth prime minister in six years. Rishi Sunak or Liz Truss will be handed the keys to 10 Downing Street by the grace of roughly 160,000 Tory party members as everyone else looks on. Whoever wins—and just now it seems likely to be Ms Truss—will inherit a country that is in a mess and a party that forced out its three previous leaders while they were still in office. It is not a record that breeds confidence.

This is a cause for worry. After 12 years of Conservative-led government, Britain is suffering from a bout of inflation and a chronic period of slow growth. At the same time, politics has become unstable as old alignments have broken down. One or more of these phenomena is roiling most of the rich world. It is hard to think of a country that has such a severe case of all three.

Neither Mr Sunak nor Ms Truss is especially inspiring. On the campaign one child in Peterborough said they would have preferred the next prime minister to be Larry the Cat, No 10's chief mouser. The good news is that both would be better than the man who resigned in July. Characteristically, Boris Johnson has so far lacked the follow-through even to turn up to his own farewell tour. By contrast, both contenders can master a brief and see it through without losing interest. They appear to want to be in office to get things done more than because they crave attention. And, though it sounds quaint, they stretch the truth like politicians rather than rip it in two like a con man.

The bad news is that the next prime minister is walking into a tempest. Inflation is expected to pass 13%, worse than any other country in the G7. Real wages next year are forecast to fall more rapidly than they have in decades. The typical annual household energy bill may reach £4,300 (\$5,200) in January, triple what it was in 2021. Strikes are spreading, across the railways, into the courts, the ports, logistics and local councils. They could reach the NHS in England, where waiting lists already contain one in eight of the population. This cost-of-living crisis could trip up Mr Sunak or Ms Truss before their feet are under the cabinet table. Labour this week put down a marker, promising to cap average annual energy prices for households at an annualised £1,971 for an extra six months (see Bagehot).

Both candidates have been left looking flat-footed (see Britain section). Perhaps because most Tory party members are not much affected and because Mr Sunak and Ms Truss want to emphasise their long-term goal of a smaller state, they are loth to say how much money they would hand out. Mr Sunak is more plausible, having offered a mix of tax cuts, rebates and targeted benefits. Ms Truss's claim that her payroll-tax cut would help makes no sense for the poorest, who do not contribute. But she is cutting green levies and has kept open the option to give away money if she wins office.

The hope is that events will not stop the next prime minister getting to Britain's second, deeper problem—its long-term economic weakness. To their credit, both candidates have made this the heart of their campaign. Both embrace supply-side reform.

Ms Truss has put forward a warmed-up Reaganite agenda of deficit-funded tax-cuts and deregulation. She is right that Britain, an early privatiser, needs to overhaul its regulated industries. Today's rules lock up capital that pension funds and insurers could use to back innovative British firms. In that spirit, there's no harm in looking at the mandate of the Bank of England, though talk of targeting the money supply is, frankly, odd.

Mr Sunak's plans are more coherent. Rather than cutting overall corporate taxes, which does little to boost investment or growth, he would target relief on capital spending and R&D. He is more likely to preserve fiscal space for an emergency, such as another pandemic, and for the demands of climate change and an ageing population. He is less likely to ruin relations with the European Union which, by a fact of geography, is and will remain Britain's biggest trading partner. But he, too, has his foibles, pledging to restrict planning even though Britain's most successful cities cannot expand, holding back the economy.

That contradiction reflects Mr Sunak's clumsy efforts to cope with the changing allegiances upending British politics. Just as the Labour Party struggles to please both its traditional and metropolitan voters, so Conservative Party members and MPs are a rabble of social conservatives, big-government populists, red-trousered country folk and bomb-throwers. Mr Johnson always told everyone what they wanted to hear, and even he could not unite them for long.

Mr Sunak's tin ear has been exposed by the campaign. Having won the vote among MPs by 39% to 32%, he defined himself to party members as a sound-money Thatcherite. But then he started offering up gimmicks. When news broke in April that his wealthy wife had saved millions thanks to her special tax status, it undermined the authority of a minister then responsible for HM Revenue & Customs. Believing that it was nobody's business, he turned out not to have a ready-made defence.

By contrast, Ms Truss has repeatedly been underestimated. Despite a reputation for oddity, she has rubbed along in the cabinets of three very different prime ministers. She sat out the exit of Mr Johnson which, given that unruly Tory members already want him to stay, now looks tactically astute (if morally dubious). During the campaign she has been hungrier and more convincing. The question is whether she would have the ruthlessness to distance herself from the baleful influence of her toxic early supporters, such as Nadine Dorries and David Frost.

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The choices they make

Britons will not choose the next prime minister: he or she will be imposed by the Conservative Party's factious members. They are facing a choice between an urbane technocrat, with a sounder grasp of what needs doing, and a tested politician, with a canner instinct for how to do it. As prime minister, Mr Sunak would be unlikely to act foolishly, but the job is inherently political. Ms Truss would be a riskier bet, but may also be more likely to succeed. Whatever their reasons, it looks as if the Tories have opted to be risk-takers. They may be proved right. ■



The war in Ukraine

Stay cool on Kherson

Ukraine's army should not rush to recapture the whole province

IN THE YEARS to come, NATO armed forces will queue at the door of Ukraine's general staff to learn from the commanders who halted the Russian army's march on Kyiv and Odessa and inflicted more than 60,000 casualties in six months of war. Yet a huge test still lies ahead: Ukraine wants its territory back.

There is growing chatter that the Ukrainian army is preparing a counter-offensive in and around the city of Kherson in the south (see Europe section). It has damaged or severed most of the bridges that connect the city to other Russian-held territory, isolating Russian forces on the western side of the Dnieper river. It is pounding Russian ammunition dumps and command posts with rockets. Ukrainian generals are buoyant; one says the city could be liberated by the end of the year.

Such triumphal talk masks a more complex reality. Russia has been pouring troops into Kherson and digging in. Urban warfare is slow and costly for the troops waging it and the civilians in the way (see International section). Russia has captured Mariupol, Severodonetsk and other Ukrainian cities because it had little compunction about destroying them in the process.

Ukraine would rather Kherson remained intact. An effective Ukrainian counter-offensive is more likely to resemble a protracted campaign of siege and attrition than blitzkrieg on the steppe.

In weighing an attack, Volodymyr Zelensky, Ukraine's president, must strike a balance. His Western allies, especially in Europe, are having to cope with spiralling gas prices and looming shortages. He wants to show them clear progress. Some of his own compatriots are also getting restless. And he is keen to disrupt the sham referendum Russia is planning to justify the annexation of Kherson. "We will liberate everything," he promised this month. But the truth is that Ukraine needs more time to train soldiers, acquire weapons and soften up Russian defences.



Right now, the war looks like a stalemate. Russian advances in the eastern Donbas region have slowed to a crawl. Ukraine's probing north of Kherson in recent weeks has also been fruitless. Both sides are still rebuilding their armed forces, battered from six months of war. Russia will use the coming months to stiffen its defences, resupply its badly mauled battalions and replenish them with well-paid volunteers.

On current trends, however, it is Ukraine that will be in a stronger position to break the stalemate early next year. It has manpower shortages of its own, but Ukrainian recruits are undergoing basic infantry training in Britain. The 10,000 troops produced by that effort will help Ukraine establish the new brigades it needs for an offensive, although it will need the scheme to continue and grow after that.

More arms are also arriving every week. On August 8th America announced its biggest shipment yet, including new ammunition for the HIMARS rocket launchers that have tormented Russian forces.

Ukraine's partners must be patient; wars of attrition do not turn on a sixpence. Western governments may be nervous about maintaining public support for Ukraine as heating bills soar in the winter months. Vladimir Putin, Russia's president, is no doubt assuming that fatigue will set in. But capturing Kherson is not the only way to stave it off.

Spectacular strikes like the ones Ukraine has been conducting in Crimea this month, well beyond the range of its known weapons, show clearly that it is still outfoxing its adversary and maintaining the initiative. The latest attack, on August 16th, destroyed an ammunition depot and an electricity substation 200km behind the front lines. The methodical destruction of Russian military power will eventually pave the way for the territorial gains Ukraine craves. ■

Stockmarkets

Beware bear traps

American markets are staging a recovery. Can it last?

HOW SWEET it is to forget. Just months ago financial markets were being pummeled by war, inflation and the prospect of rapidly rising interest rates. January to June this year were the worst first half for American shares in more than five decades. The S&P 500, America's leading index of stocks, slumped by 21%; the tech-heavy NASDAQ shed 32%. Yet since the middle of June the market has staged a remarkable comeback. The NASDAQ has climbed by more than 20% from its low, officially entering a bull market; the S&P 500, up by 17%, is verging on bull territory of its own. Apple is now just 7% shy of being valued at \$3trn, as it was, briefly, on January 3rd. Can the turnaround continue?

The good news is that the rally is underpinned by, well, good news. As companies' earnings releases over recent weeks have

shown, American consumers still went shopping in the second quarter. On August 16th Walmart reported that households' spending grew strongly, helping its revenue climb by 8.4% on the year. Gauges of consumer sentiment are picking up. America added a whopping 530,000 jobs in July and, more hearteningly still, consumer prices did not rise compared with a month earlier. The market rout of the first half of 2022 has also yet to expose lurking dangers in the financial system. Aside from blow-ups in dodgier corners of the crypto-sphere, American finance has so far proved resilient.

The bullish interpretation is to assume that a soft landing is under way. In this world inflation will drift down without derailing economic growth, and the Federal Reserve may not even ►►

▶ need to raise interest rates quite so quickly. Consumers' expectations of inflation, even for the year ahead, have fallen sharply. Market pricing suggests that the Fed will probably increase rates at a gentler pace than had been expected earlier in the summer, before it begins cutting them as soon as May. Investment bankers on Wall Street expect companies to escape relatively unscathed, without a meaningful slowdown in earnings this year.

Yet it is too soon to breathe a sigh of relief. For a start, inflation is far from being vanquished. The monthly rate did not rise in July mainly because of a fall in energy costs, including for petrol. That in turn offset stickier inflation in other components, like rents. Core inflation, excluding food and energy, was an annualised 3.7% in July—far above the Fed's target range. Moreover, the impressive jobs numbers were accompanied by rapid wage growth, indicating that underlying price pressures may not abate so easily. Having been late to react to the inflation surge, the Fed is unlikely to turn on a dime.

Companies' earnings, meanwhile, have not all been rosy. Although investors embraced news of strong earnings from lots of firms, they have also overlooked mediocrity. Alphabet, for in-

stance, reported revenues and earnings that were a little lower than analysts' expectations. Its share price nonetheless jumped by nearly 8% on the news. And threats to earnings loom ahead. The Fed's interest-rate rises are yet to have their full effect. Even as American shoppers have so far been unfazed, the rest of the world has faltered. China's recovery from its covid-19 lockdowns has been lacklustre; growth in both retail sales and industrial production fell short of economists' forecasts in July. Europe remains in the throes of an energy crisis.

Sauter pour mieux reculer

History offers a final note of caution. As battle-weary short investors on Wall Street are quick to point out, most past market downturns included plenty of breathtaking "bear market" rallies before stock prices resumed their downwards march. In the dot-com bust, the NASDAQ shed a third of its value between March and April 2000 before surging by more than 20%, entering a fresh bull market. The index did not reach its bottom for another two years. This time could, of course, be different. But for that to happen, the good news must keep rolling in. ■

Free speech and "The Satanic Verses"

Never-ending story

The old battles still rage, as the attack on Salman Rushdie shows

THE LONGER Salman Rushdie remained alive, he wrote in "Joseph Anton", "the longer he went without being killed, the easier it was for people to believe that nobody was trying to kill him." The book is a memoir of the years the author spent in hiding after Ayatollah Ruhollah Khomeini, then Iran's supreme leader, issued a *fatwa* urging Muslims to murder him and his publishers because of the alleged blasphemy of his novel, "The Satanic Verses". That was in 1989; on August 12th Sir Salman (as he became in 2007) was stabbed as he was about to give a lecture in upstate New York (see Culture section).

The past is never past—and history's great, tectonic clashes are rarely over. That may be the main lesson from this dreadful episode. In the days before the *fatwa* and the years after it, the furore around Sir Salman's book took the lives of demonstrators in India and Pakistan and of its Japanese translator. It set off one of the modern era's great debates over free speech and the place and claims of religion in democracies. In the decades since, though, the threat to Sir Salman's life seemed to fade. In recent years other worries, from the pandemic to Vladimir Putin's bloody revanchism, have come to seem more urgent than that of Islamist violence, whether state-sponsored or otherwise.

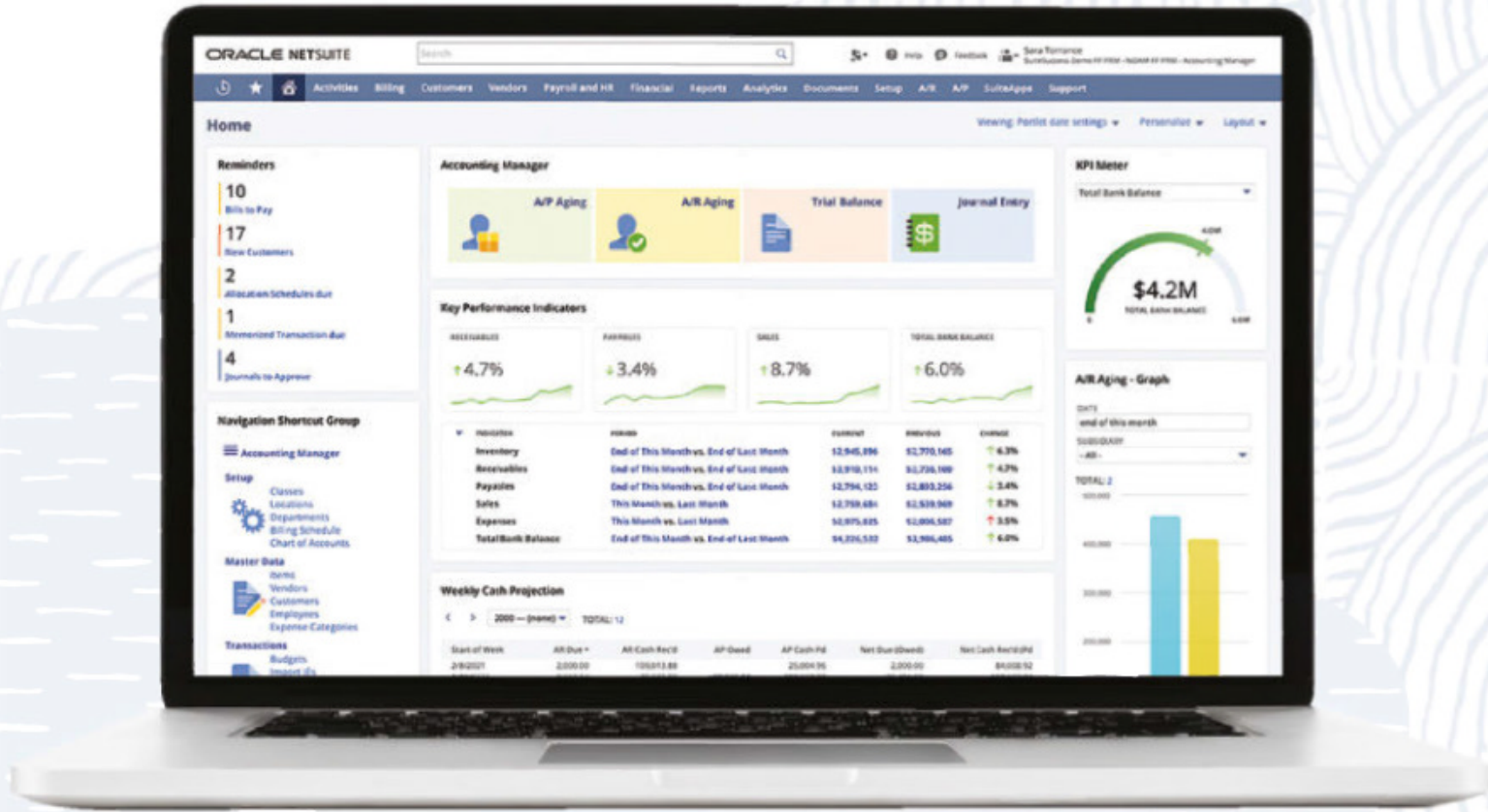
But in the world of fundamentalism, nothing ever dies. Its acolytes operate in deep time, nurturing ancient grievances and waiting years to avenge them. The man in custody in America for the attack on Sir Salman was born almost a decade after "The Satanic Verses" was published. Modern technology is an ally of this long perspective. For all its ephemerality, the internet is a reservoir of deathless resentment and grudges, in which loners and fanatics find solace or a mirror for their yearnings. Calumnies and conspiracies of all kinds now live on for ever.



Meanwhile, the struggle for free speech, of which Sir Salman became an accidental champion—deciding it was a cause worth dying for, if he had to—is as fierce and pressing as ever, if also more complex, waged on new fronts and against suave foes as well as the murderous sort. Now, as in the aftermath of the *fatwa*, the battle lines are wavier than they ought to be. Then, some politicians and thinkers were forced to choose between principles: a non-judgmental multiculturalism and what ought to have been an inviolable commitment to free expression, even or especially when it causes offence. Some got the hierarchy wrong, tolerating intolerance and criticising an author they should have shielded. "Good men would give in to fear and call it respect," Sir Salman wrote. Some still do.

But if the timidity of that period is familiar, so is the courage. While some public figures equivocated after the *fatwa*, many others stood up for both Sir Salman and free speech. Other writers read from his novel in public; bookshops faced down bomb threats to stock it. People bought his work in solidarity. They have done so again this week. "The Satanic Verses" is still being read—albeit not by many of those who purport to be offended by it. Though grievously wounded, Sir Salman himself is mercifully said to be on the road to recovery.

In "Joseph Anton" he describes how a frog-shaped phone he once saw on the desk of a Hindu nationalist politician in India found its way, indirectly, into "The Moor's Last Sigh", one of the books he wrote while he was under police protection. "Nothing", he observed, "is ever lost." He was right about that, too. Controversies may fade but great literature lasts. And though the hatred and irrationality that made him their target endure, so does the determination to resist them—which Sir Salman himself heroically embodies. ■



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A push in the right direction

As the original public policy “nudge” unit, the Behavioural Insights Team shares your interest in research in the field (“Nudge factor”, July 30th). The dangers of publication bias are not new, which is why we have allowed independent researchers to examine our results and publish their findings. A study reviewing 347 BIT and American government “basic nudge” interventions was recently published by Stefano DellaVigna and Elizabeth Linos in *Econometrica*. It found the effects of the interventions were “sizeable and highly statistically significant”.

The average effect size was 8%. In contrast, comparable academic studies claimed larger effect sizes, but this was entirely driven by publication bias and smaller samples. So there is a problem with academic incentives, but let’s not jump from that to throwing out a general-purpose tool that can boost and improve outcomes and public-service productivity.

You missed the bigger point. Researchers should focus their attention on why and how behavioural science interventions vary by context and population. That will help us drive up that 8%, and spare people from nudges that don’t work or aren’t relevant.

DAVID HALPERN
Chief executive
Behavioural Insights Team
London

Germany’s energy use

Charlemagne rightly emphasised the unintended consequences of reducing Germany’s domestic energy supply by banning fracking and phasing out nuclear power (July 23rd). However, the idea that the country’s prosperity rests on “cheap imported energy” is the real fairy tale. German gas consumption has stagnated over the past 20 years. Today Germany uses and imports less energy, and less gas, per unit of GDP than most of its European peers.

The proposition that Vladi-

mir Putin “seduced” German business and politicians with low prices is equally untenable. Why would Russia sell gas to Germany at a lower price than to others and thus forgo revenues? Gas is a fungible commodity with a highly integrated market in Europe and consequently very similar wholesale prices across countries. Data from the European Commission show that German industry has actually paid slightly more for gas than its competitors in other European Union countries.

Germany’s elite was blind to the danger of depending on one supplier, but cheap imported energy played no role in German prosperity.

DANIEL GROS
Distinguished fellow
Centre for European
Policy Studies
Brussels

It’s not all about the money

The real conclusion from our research and that described in “What graduates want” (July 23rd) is that different people want different things. In a large-scale survey of what motivates business students and professionals, we consistently found that most thought “positioning” was the biggest motivation for career opportunities, followed by “lifestyle” (free time and flexibility). That was the case before the pandemic. But the data now show a neat flip. It is as if those future opportunities lost their sheen as the very concept of “future” grew hazier and more uncertain. By contrast, the lifestyle afforded by remote work, once the realm of science fiction, was shown to be not only possible but desirable or even necessary. Hence “lifestyle” overtook “positioning” for the first time.

Until recently companies focused on the motivating power of compensation, which is appealing (although with a diminishing return) and easy to measure. By over-focusing on compensation, employers do a disservice both to the people they are trying to motivate and to their shareholders.

Why not give a little more autonomy as a reward to the employee who finds it gratifying, a little more recognition for someone who craves that? You will be fine-tuning your rewards to fit the individual employee, and doing it free.

JAMES WALDROOP
President
CareerLeader
Brookline, Massachusetts

Russian colonialism

Sergei Lavrov, Russia’s foreign minister, churned out the anti-colonial rhetoric during his tour of Africa (The world this week, July 30th). But the fact is, Russia, in its various guises, has an older colonial history than most Western powers. Russian colonialism began in earnest by the mid-1500s, with Muscovy’s conquest of the Khanates. The list of peoples and places conquered and incorporated into Russia is long. Kalmyks, Chechens, Crimean Tatars, Georgians. Dagestan, Khiva, Kokand. It takes committed expansion over centuries to get as big as the Russian Empire. It takes violence, too. Armed conquest, intimidation, forced settlements, deportation, ethnic cleansing, slaughter. Maybe a million Circassians were expelled, resettled or killed during and after their conquest in the 19th century.

The Russian government talks as if Crimea is primordially Russian, but this is a lie. It was simply stolen from the Tatars. This is Russia’s record, and it is damnable. What makes Mr Lavrov’s anti-colonial posturing the more shameless is that this past is also Russia’s present.

ETHAN MENCHINGER
Lecturer in Islamic history
University of Manchester

Our summer issue

Why did you publish a summer double issue (July 30th)? I can understand the Christmas bumper edition to manage the festive holidays, but not a summer one. I thought everything shutting down for trade

holidays was a fading part of history. One reason I subscribe to *The Economist* is that it has a paper version, since I do not enjoy reading articles on a screen. And you made it seem like a great event by padding out the edition with pieces from 1843 magazine, which I would never pay for. What I do pay for is 51 weekly issues of *The Economist* a year.

TREVOR HOGG
Dollar, Clackmannanshire

The lengthy and edifying article in 1843 on Muhammad bin Salman (“MBS: despot in the desert”, July 30th), together with the news of his chummy meetings with Vladimir Putin, places the predicament of Western democracies in troubling context. Authoritarianism is on the march, armed with powerful new technologies. When one thinks of the longer perspective it is easy to think that we are witnessing the twilight of Enlightenment rationalism and humanist hope, championed by *The Economist* since 1843. Have we now arrived where we feared we might? The cruel fates of Jamal Khashoggi, Alexander Litvinenko and others suggest that we are in an age in which previous assumptions of state restraint are losing their force.

GAVIN MARSHALL
Vancouver

Drinking whiskey and rye

Reading your article about the cryptic significance of the lyrics to Don McLean’s “American Pie”, reminded me of a comment he made at the time of its release in 1971. When asked what the song meant he replied, “It means I never have to work again” (“Though released a long, long time ago, “American Pie” endures”, digital editions, July 19th).

TIM JORDAN
Charlotte, North Carolina

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That hideous strength

DALLAS, PHOENIX AND JACKSON, WYOMING

After the mid-term elections this November, the Republican Party will be Trumpier than ever

LIKE HIS presidency, the after-presidency of Donald Trump is riddled with extreme contradictions. Here is a man deeply mired in investigations into a range of possible crimes—a mire it is hard to imagine any previous politician escaping. And yet he is so powerful within his party that his disapproval can sink the career of almost any elected representative who speaks out against him, no matter how unassailable their pedigree or impeccable their credentials. Two events, only eight days apart, prove the paradox.

On August 8th FBI agents turned up at Mar-a-Lago, Mr Trump's club and private mansion in Florida, with a warrant to search the premises for top-secret documents and presidential records kept in violation of federal laws, including the Espionage Act. They left with 11 boxes of material. Mr Trump is no stranger to litigation, and indeed to criminal investigation; but this was something new even for him (see United States section).

On August 16th Liz Cheney, who won reelection to Wyoming's single seat in the House of Representatives with 69% of the

vote in 2020, was trounced in the primary election which would have allowed her to contest the seat again this autumn. Ms Cheney, once seen as a rising star, is the daughter of local Republican royalty—former Vice-President Dick Cheney, who represented the same seat in Congress for ten years. But she is also one of just ten Republican legislators who voted to impeach Mr Trump over his conduct before and during the attack on the Capitol by his supporters on January 6th 2021. She has since helped lead the congressional committee investigating Mr Trump's role on that dire day. In the face of Mr Trump's resultant fury her illustrious parentage and unassailably conservative beliefs were as naught.

Not all those who have irked Mr Trump have been purged from the party's ranks. Georgia's governor, Brian Kemp, and its secretary of state (chief elections officer), Brad Raffensperger, both helped thwart Mr Trump's attempts at post-election cheating. Despite efforts to unseat them, Georgia's primary voters made them the party's nominees in May. But the price of self-preservation was silence. "I've never said a

bad word about [Mr Trump's] administration and I don't plan on doing that," Mr Kemp said. Republican senators and representatives do not always do exactly as Mr Trump would wish. In private many will admit their exhaustion with him—sometimes their loathing, too. But in public they hold their tongues. The party's base is still devoted to Mr Trump (65% net approval in polls) and to his Big Lie about the 2020 election (70% tell pollsters they believe it was stolen from him), and he can focus their ire on anyone whose head rises above the parapet. His power in the party is not absolute. But it is unquestionable.

Most candidates seeking to run as a Republican this year have seen a kiss from the king as essential to victory—and fear his possibly fatal displeasure. In races for open seats, Mr Trump's endorsement picks have won four in five times (see chart 1 on next page). As a result, the party which lost the White House and the Senate two years ago is going into the forthcoming elections looking more, not less, like the man who led it to that defeat.

Despite that, the Republicans' chances of taking the House seem good, and they could take the Senate too. And while the precise quantity and distribution of Republicans to be returned remains unknown, their quality is already apparent: they will act as fierce Trump loyalists. There will be no let-up in their vociferous denunciation of any and all attempts by "the regime" to impose the rule of law on their liege. Any investigative committees ►►

▶ they come to control will abruptly lose interest in Mar-a-Lago's safes and turn their attention to President Joe Biden's administration and family. And the chances of another, better-orchestrated attempt to steal an election will grow.

The undisputed centre of this empire of paranoia is Arizona. Last year, Republicans in the state legislature took the unprecedented step of subpoenaing all the ballots cast in Maricopa County (which includes Phoenix and 61% of the state's voters) and launching a partisan audit. Their chosen company, Cyber Ninjas, had ties with the "stop the steal" movement and no prior election experience. After all the effort, and the frenzied following of the former president's dearest supporters, the ninjas came up empty. That did nothing to chasten the conspiracists. After the findings were released, Mr Trump simply released a statement lying about the discovery of "significant and undeniable evidence of FRAUD!" and resumed his campaigning.

Republican primary voters went on to choose ardent supporters of the Big Lie for all three statewide positions that will certify the next presidential election—governor, attorney-general and secretary of state. The Republican parties in various other potential swing states, including Michigan and Nevada, have chosen to field Big Lie endorsers as their candidates for some or all of the same offices (see chart 2).

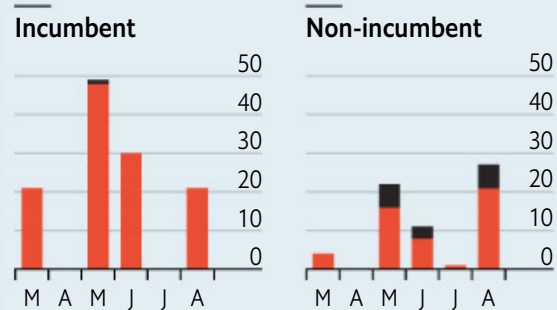
None of these crusaders embodies pugilism-as-bombast as well as Kari Lake, the nominee for governor in Arizona. Her policy platform for democracy is to obsess over the last, "stolen" presidential election and fantasise about future steals being planned; her border policy is to declare illegal immigration an invasion and blow up drug tunnels; her water policy is, in part, to "fill Lake Mead with liberal tears" (after desalination). She is already being mooted as a running-mate for Mr Trump in 2024.

On the eve of the primary election on August 1st, in a muggy warehouse bar in Phoenix, Ms Lake whipped up the crowd against "those bastards back there"—the media, of which, as a television presenter, she was a member for two decades. At the same rally, Abe Hamadeh, the party's nominee for attorney-general, declared that "we all know that our elections have been hijacked; our justice system has been corrupted." And yet the most hardcore of the lot is Mark Finchem, a leading "stop the steal" proponent who has previously admitted to being a member of the Oath Keepers militia. He attended the January 6th riot (but maintains he did not enter the Capitol) and has said that Mr Trump would not have lost the state in Arizona had he been in charge of its elections. He is now the party's nominee for secretary of state. If democracy dies in America, it will start in the desert.

The king's court

United States, Trump-endorsed candidates*

2022 Republican primary results: Wins Losses



*For governor, attorney-general, secretary of state and other state-level offices
Source: The Economist

The election of the Trump-appointed slate means that the "rule of law is teetering" in Arizona, according to Bill Gates (not that one), a Republican member of the Maricopa County Board of Supervisors. In other times a man like Mr Gates, a Harvard-educated lawyer and businessman who supports tighter voter-identification laws and low rates of taxation, might have aspired to statewide office, too. But with openness to electoral nullification a new litmus test for such candidates he counts himself out. He says his party has a tumour which is metastasising, and that its nature has changed fundamentally. "We've become a European far-right party."

America's national front

The recent Conservative Political Action Conference (CPAC), in Dallas, Texas, confirmed as much. Once derided as an out-there fringe, CPAC is now a gathering of the party's best beloved. But its content is hardly any less extreme. An opening speaker was Viktor Orban, the prime min-

ister of Hungary and champion of "illiberal democracy", who was enthusiastically received for assailing progressives, globalists, illegal migrants and George Soros. Admirers mobbed anti-globalist and conspiracist stars like Steve Bannon, a former senior adviser to Mr Trump freshly convicted of contempt of Congress, and Nigel Farage, the prime instigator of Brexit.

The movement's unifying goal is to save America by completely destroying the enemy. "We will bring Big Tech down to their knees!" screamed Lauren Boebert, a Republican congresswoman. "We drove a stake through the heart of the McCain machine," said Ms Lake of the devotees of Arizona's most recent Republican to run for the presidency, with a vampire-killing gesture to accentuate her point. "What President Trump did bring out was he unveiled the left, and especially their affiliation with the media, for what they really stand for...socialism," says Scott Perry, a Republican congressman from Pennsylvania who is under federal scrutiny trying to overturn the election. Even if Mr Trump had not been there, the profound mark on his party would have been unmistakable.

But he was there. And in fine form. "The election was rigged and stolen and now our country is being systematically destroyed," he said to rapturous applause. "I ran twice, I won twice...and now we may have to do it again," he teased. Vintage Trumpian complaints made their appearances: the American carnage ("the streets of our Democrat-run cities are drenched with the blood of innocent victims"); the border ("it's an invasion"); and the "fake news media". But the biggest ovations came over "critical race theory and left-wing gender ideology" and the former president's calls to "keep men out of women's sports" and abolish the Department of Education. A straw poll at the convention gave him a 99% approval rating; 69% said they would support his almost-promised candidacy in 2024.

Second in that poll, with 24%, came Ron DeSantis, the governor of Florida. Mr Trump, when crowing over his own numbers, pointedly pretended not to know this—thus confirming that he, like the rest of the party, sees Mr DeSantis as his most viable rival. A humourless culture warrior, Mr DeSantis has branded himself a fighter against woke corporations, media and schools. His appeal is his ability to triangulate between the party's America First diehards and exhausted moderates, presenting himself as a successor to, rather than a repudiation of, what has come before.

Once a Trump mini-me—in 2018 an infamous campaign ad had him schooling his infant children in Trumpism—he now keeps his distance. But he is happy to go round the country stumping with Trump darlings like Ms Lake or J.D. Vance, the Senate nominee in Ohio. The governor has ▶▶

Buckle up

United States, 2022 battleground-state primaries*

Results for Republican candidates rejecting outcome of 2020 presidential election

Won Lost Not yet decided None running

State	Governor	Attorney-general	Secretary of state
Arizona	Won	Won	Won
Florida	Not yet decided	Not yet decided	Appointed by governor ‡
Georgia	Lost	Lost	Lost
Michigan	Won	Not yet decided	Not yet decided
Minnesota	Won	Won	Won
Nevada	Won	Won	Won
New Hampshire	Not yet decided	Not yet decided	Not yet decided
Ohio	Lost	None running	Won
Pennsylvania	Won	Appointed by governor †	Appointed by governor ‡
Texas	Won	Won	Appointed by governor ‡
Wisconsin	Won	Won	Won

*At August 17th †Next election 2024 ‡Appointed by governor
Source: The Economist

► usurped Mr Trump's position as guest-in-chief on Fox News, a partisan television channel. He has raised more than \$100m. Much of it has come from former Trump donors who think the risk of another loss against Mr Biden is too high.

Mr DeSantis's appeal is that he is "Trump without the baggage", says Sarah Longwell, a Republican strategist who runs many Republican focus groups. The fallout from the search of Mar-a-Lago has been a jarring reminder of the tumult and chaos the man cannot help but bring with him. "People are happy—overwhelmingly—with the direction of the party. And that means America First," says Ms Longwell. "Even if Trump the man loses some altitude...the party has now changed for ever."

The problem with "Trump without the baggage" as a strategy, though, is that the baggage gets a say. In the unlikely event that Mr Trump decides, very much against the run of play, not to stand in 2024 Mr DeSantis will be very well placed. If he does run again, Mr DeSantis, who is only 43, could simply decide to sit this one out. If the younger man decides to make a fight of it, it will be a battle for which he is not well-equipped. He is not a gifted orator and a head-to-head confrontation would be bruising. Florida's shores already host the shipwrecks of two other Republicans from the state—Jeb Bush, a former governor, and Marco Rubio, a senator—who did not survive Mr Trump's derision and humiliating insults when they challenged him in 2016.

Baggage is as baggage does

There are three things which could, in principle, make Mr Trump less formidable: the depredations of age, legal sanctions and political misjudgments. On the first, at 76 a sudden, severe deterioration in health is obviously possible. That said, the former president appears hale and hearty.

His legal jeopardy seems more acute. The FBI's dropping by Mar-a-Lago is only one of his problems. His business dealings are under investigation in New York. The House Committee on Ways and Means is making progress in its efforts to look at his tax records. State prosecutors in Georgia have empanelled a grand jury that is investigating his exhortation that Mr Raffensperger "find 11,780 votes" somewhere in the state in order to overturn his election loss. It has already issued subpoenas to compel testimony from allies such as Rudy Giuliani, Mr Trump's lawyer, and Lindsey Graham, a senator from South Carolina. Investigators at the Department of Justice are closely following the work of the January 6th committee and have been seizing mobile phones and documents from those most closely involved in the efforts to keep Mr Trump in power.

But the possibility of prosecution seems to fire Mr Trump and his supporters



up, rather than turn them off. They treat it as offering a form of vindication—evidence of how much "the regime" wants him off the scene. The political risks for the law-enforcement agencies involved are huge. Not charging Mr Trump gives him an air of impunity; charging him unsuccessfully would make him look invincible. "The downside of going after him," according to Paul Rosenzweig, a senior official under George W. Bush who worked on the Whitewater investigation in the 1990s, is that "even the federal government might miss with a nullified jury"—that is, one in which some jurors would acquit come what may.

The possibility of indictments may hasten Mr Trump's announcement of his candidacy, the better to play the victim. Casting the prosecution of a presidential candidate as a deep-state conspiracy is peculiarly compelling.

Senior Republicans are privately terrified Mr Trump might make that move before the November elections. Though they feel confident of taking the House, they are already worried that his interventions may cost their party the Senate. In at least five of the states which will decide who controls the chamber, Mr Trump endorsed political neophytes; duly selected as candidates, they seem to be underperforming. Blake Masters, a 36-year-old former venture capitalist who is the party's nominee in Arizona, is trailing Mark Kelly, the Democratic incumbent, by ten percentage points. Mehmet Oz, a carpet-bagging celebrity doctor running in Pennsylvania, faces a similar shortfall. An ad complaining about the cost of crudités has not helped.

Having given the Democrats control of the Senate in 2020—by flubbing two runoff elections in Georgia after he incessantly complained about electoral fraud—Mr Trump may, through his endorsements,

have helped them keep it in 2022. And if, come election day, he has announced his candidacy he may damage the party's prospects further. Democrats would much prefer to run against Mr Trump than on the basis of their economic record. Ronna McDaniel, the chair of the Republican National Committee, has tried to steer Mr Trump away from such a course by publicly reminding him that the party would no longer pay his considerable legal bills if he were to formally declare his candidacy.

That said, a failure in the mid-terms which seriously jeopardised Mr Trump's standing would have to be both cataclysmic and very clearly his fault. That is why some of his enemies are looking at a fourth thing which might weaken him: a direct challenge. This would not be an attempt to beat Mr Trump to the nomination as a means to achieve office, as a run by Mr DeSantis would be. It would treat keeping him out of office as an end in itself.

Here eyes naturally fall on Ms Cheney. Her relish for such a role was clearly set out in her concession speech on the night of August 16th: "I have said since January 6 that I will do whatever it takes to ensure Donald Trump is never again anywhere near the Oval Office. And I mean it," she said, framed for the television cameras by a vintage Chevrolet pickup and neatly stacked hay bales impaled with American flags. Her willingness to sacrifice elected office shows her resolve.

The last hurrah?

There is no chance of Ms Cheney splitting the party; the schism which anti-Trump establishment types promised first in 2016 and then in 2020 looks even less likely today. Her approval rating among Republicans is a remarkable minus 52 points. But there are other conservatives who, like her, are unwilling to vote for either Mr Trump or a Democrat. By appealing to them she could well deny the party in which she has spent her life a few swing states. This appears to be something she is considering: "I love what our party has stood for. But I love my country more."

It might seem that the Democrats should not need such help against opponents so divorced from reality. But if some Republicans worry that Mr Biden could beat Mr Trump again, plenty of Democrats worry that he couldn't. Nor do other plausible nominees look strong. And if the election is close, Mr Trump may benefit from followers who will soon be in a position to influence its certification. A constitutional crisis looms.

"It's funny," says Mr Gates of the Maricopa Board of Supervisors. "The Democrats say, 'We need a strong Republican Party for this democracy.' And my feeling is we actually need a strong Democratic Party to help our Republican Party get better." ■



After the Mar-a-Lago drama

The paranoid style of Merrick Garland

NEW YORK

The investigation of Donald Trump recalls another sensitive inquiry

AMERICA'S ATTORNEY-GENERAL has reason to be haunted by the country's latent capacity for political violence. Merrick Garland was a senior official in the Justice Department on April 19th 1995, when a bomb exploded beneath a federal building in Oklahoma City, killing 168 people, including 19 children. Mr Garland, who had young children himself, implored his boss to send him to Oklahoma. Eleven years later, sitting for an oral history about the bombing and the investigation into it that he led, he choked up when he recalled the "gaping hole" he saw when he reached the scene of what remains the deadliest act of domestic terrorism in America. "And the worst part was being told...[that's] where the kids had been," he said.

Now Mr Garland's decision to obtain a warrant to search Donald Trump's Florida home, Mar-a-Lago, is roiling some of the same currents of anti-government paranoia and hate that led to the bombing in 1995. Threats against the FBI and other law-enforcement officials have surged. Three days after the search, which took place on

August 8th, an armed man in body armour tried to break into the FBI's office in Cincinnati. He died in a shoot-out with police.

On August 15th another man was charged in federal court in Pennsylvania with "influencing, impeding or retaliating" against a law-enforcement officer. Authorities said the man had posted threatening messages on Gab, a far-right social-networking site, including one reading, "I sincerely believe that if you work for the FBI, then you deserve to DIE." The federal complaint said he also wrote that he knew he would die at the hands of law enforce-

ment but "my only goal is to kill more of them before I drop". In Florida, the federal magistrate who signed the warrant, along with his children and synagogue, came under a hail of anti-Semitic threats. His synagogue cancelled a planned outdoor service.

Mr Trump himself said that "the temperature has to be brought down in the country". But in practically the same breath he tried to turn it up, in an interview with Fox News on August 15th. "There has never been a time like this where law enforcement has been used to break into the house of a former president of the United States," he said, "and there is tremendous anger in the country—at a level that has never been seen before, other than during very perilous times." Mr Trump suggested the FBI might have planted evidence at his home.

Documents unsealed by the federal magistrate hint at the legal jeopardy Mr Trump may be in. An inventory kept by investigators showed that they took 20 boxes of items from Mar-a-Lago, including documents of varying levels of classification. Four sets of documents were labelled as top secret, and one carried an even higher classification applied to information considered critical to national security.

Mr Trump and his allies claim that none of the information is now classified, because Mr Trump issued a standing order that documents he took home were automatically declassified. It is an imaginative defence, and also possibly an irrelevant one. The warrant, at least in part, sidesteps ▶▶

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▶ the question of classification.

It shows that investigators are looking into possible crimes including removal or destruction of documents, obstruction of justice or violations of the Espionage Act. Documents covered by the Espionage Act must relate to matters of national defence, but they do not have to be classified. The concern about possible obstruction could relate not to the documents themselves but to false information provided about what was being held at Mar-a-Lago.

In one of the curious inversions that are becoming more common as America's politics grows ever more polarised, the search of the former president's premises has put the Democrats in the position of defending law-enforcement officers and set Republicans against them. A number of Republican politicians have called for "defunding" or even abolishing the FBI, playing off calls by Democrats two years ago to "defund the police"—for which Republicans are still criticising them. (On August 17th Mike Pence, the former vice-president, cautioned that "calls to defund the FBI are just as wrong as calls to defund the police.")

Democrats and Republicans have also swapped poles on the matter of handling classified information itself. Six years ago, Democrats were defending Hillary Clinton after the FBI found she had handled some classified information improperly as secretary of state while using a private email account for communicating with her staff. Mr Trump called her "guilty as hell" and led crowds in chants of "Lock her up!"

Strictly by the book

Some responses to the current drama have been more measured and substantive. In one bipartisan step, the chairman and the ranking member of the Senate Intelligence Committee—Mark Warner of Virginia, a Democrat, and Marco Rubio of Florida, a Republican—sent a letter on August 14th to Mr Garland and Avril Haines, the director of national intelligence. They asked for members of the committee to get a look, on a classified basis, at the seized documents, and for an evaluation of the possible risks to national security of their mishandling.

It is not yet known whether Mr Garland or Ms Haines has responded. Mr Garland has resisted sharing further information publicly, including the affidavit supporting the search, saying that to do so would compromise the investigation. But his handling of the Oklahoma City bombing investigation might provide some hopeful clues about his approach.

Recognising that a secretive and sloppy investigation would feed the very paranoia about government overreach that he was trying to stem, Mr Garland emphasised transparency, speed and co-ordination. When the suspect, Timothy McVeigh, was caught, Mr Garland rejected efforts to keep

the press away from his arraignment, insisting on an open hearing. He insisted that his investigators should scrupulously follow proper procedure to acquire each piece of evidence, to ensure that its use could not be successfully challenged in court, and even the lead defence lawyer said he succeeded. After listening to 22 days of testimony in 1997, a jury deliberated for 23 hours over four days before convicting McVeigh on all counts. He was executed by lethal injection in 2001. ■

New York's 12th district

Primary pugilism

NEW YORK

Redistricting turns once-friendly neighbours into political foes

AL SMITH, A New York governor, unsuccessfully ran for president in 1928 with the campaign song "The Sidewalks of New York", a popular tune but one with a peculiarly local theme. Its chorus includes the lyrics: "East Side, West Side, All around the town". The candidates running in New York's 12th congressional district might consider adopting the old campaign song. Because of redistricting, for the first time in decades the seat unites Manhattan's East and West Side. As a result, two high-ranking Democratic incumbents are now fighting each other for political survival, in a primary election to be held on August 23rd. Carolyn Maloney, who has represented much of the East Side since she was elected in 1992, is pitted against Jerry Nadler, who has represented much of the West Side for three decades in the 10th congressional district. Both are entrenched in their neighbourhoods.



Redistricting's rivals

The contest is fierce. Once congenial allies who worked together on bills such as the one granting compensation to New Yorkers who fell ill after the attacks of September 11th 2001, they are no longer pulling punches. Mr Nadler happily reminds voters that Ms Maloney voted for the Iraq war and opposed President Barack Obama's Iran deal. She, meanwhile, says he is lying when he takes credit for securing funding she says she was responsible for.

No matter who wins, New Yorkers will lose at least one powerful representative with decades of institutional knowledge. It is hardly the first time that two incumbents of the same party have run against each other. But at this level of seniority, according to Dave Wasserman of the *Cook Political Report*, a non-partisan newsletter, "it is unprecedented".

Ms Maloney is one of the most powerful women in Congress. She is the first woman to chair the House Committee on Oversight and Reform, the main investigative one. Her hearings on gun control, with testimony from mass-shooting victims (including an 11-year-old survivor of the massacre in Uvalde, Texas), played a critical role in persuading the Senate to pass the most sweeping gun reform in decades. She recently held hearings on the loss of abortion rights. In a campaign advertisement, Ms Maloney says: "You cannot send a man to do a woman's job."

Mr Nadler chairs the influential House Judiciary Committee. He was closely involved in the first impeachment of Donald Trump. He is ahead in the most recent poll and has received the endorsements of the *New York Times* and of Chuck Schumer, the Democratic leader in the Senate.

During a debate Mr Nadler said, "With seniority comes clout and the ability to get things done," a dig at another candidate, Suraj Patel, a former Obama campaigner with Kennedy-esque hair. Unlike many other upstarts, he is not from the left of the party. The 38-year-old is a centrist, as are his two septuagenarian opponents.

What he offers is his youth. At campaign events, he calls for generational change. His debate zingers brought more money into his coffers and more interest in his campaign, he says. Mr Patel has faced Ms Maloney before, nearly beating her in the primary in 2020. But most of the areas he won are no longer in the district. Ms Maloney says this is not a time for rookies: "The stakes are the highest they've ever been in my life, really."

New York's Democrats helped to create the primary animosity. To add more Democratic congressional members to the state's roster, they drew maps and used a redistricting process that New York's top court ruled violated the state constitution. A court-appointed official redrew the district maps. The 12th, which once ran along Man-▶

▶ hattan's East Side as well as across the East River in Queens and Brooklyn, now extends from the East River to the Hudson, the width of Manhattan. The new borders meant that Mr Nadler lives in the 12th district and not in the 10th, which is now made up of parts of Brooklyn and Lower Manhattan. Instead of running in the 10th, which many pundits think he would have won, he decided to compete in the 12th, infuriating Ms Maloney. She told *The Economist* that Mr Nadler even advised her to move districts.

Mr Nadler's choice left open the 10th. More than a dozen hopefuls threw their hats in the ring, including (briefly) Bill de Blasio, a former mayor. The front-runner is Dan Goldman, an heir to the Levi Strauss fortune who served as a lawyer in the first impeachment of Donald Trump. He faces, among others, Mondaire Jones, an incumbent who currently represents a suburban

district. Mr Jones moved to Brooklyn to avoid running against Sean Patrick Maloney (no relation to Carolyn), another incumbent, in the redrawn 17th district.

Redistricting caused chaos. In a report on reforming New York's elections the Manhattan Institute, a think-tank, suggests that all registered voters, regardless of their party, should vote for candidates in a primary. The top four would then advance to the general election in November.

New York might also consider moving its primary back to September. Unusually, this summer it has two dates for primaries. The first, in June, was for statewide offices and the Assembly. Turnout in the August batch is sure to be low, with many of the 12th district's constituents on holiday or at their summer houses in the Berkshires or the Hamptons. As Bruce Gyory, a Democratic strategist, notes: "There is no turnout template for an August primary". ■

Alaska's choice

Gone fishing

A new ranked-choice voting system hampers Sarah Palin's hopes

THERE ARE few parts of America where the migration of salmon is a political issue. Alaska is one of them. On August 16th voters in America's largest, wildest state went to the polls to elect their sole member of the House of Representatives, a seat vacant since the death of Don Young in March. Mary Peltola, the Democratic candidate, a fisheries manager, describes herself as the only politician "willing to fight back against the foreign and out-of-state trawlers that are decimating our king salmon".

Ms Peltola's chances, in what has been a reliable state for Republicans, have been improved by Alaska's ranked-choice voting system, introduced by a referendum two years ago. Her Republican opponents are Sarah Palin, a former governor and vice-presidential candidate, and Nick Begich, a relative moderate from an Alaskan political dynasty. Mr Begich has called Ms Palin "self-aggrandising" and "uninformed", accusing her of abandoning Alaska to "get rich and famous". Ms Palin, who is backed by Donald Trump and the state party, has called him "Republican in name only".

Such vitriol between the Republicans may weaken the party. Whoever comes third will have their second preferences redistributed to the remaining two. Ms Peltola will be hoping that she can sneak through if Mr Begich's supporters give her their second preference over Ms Palin, says Amy Lovcraft of the University of Alaska. Predicting the outcome is



The man behind the woman

hard. Such a system exists for congressional elections in only one other state, Maine, which first used it in 2020.

The new system, and the time it takes to collect absentee ballots, mean that the results may not be known for weeks. Whoever wins will not have long to settle in Washington. On the back of the ranked-choice ballot paper, voters also had one vote in a primary to pick who will make the final four when the seat is fought for again in November. The Begich-Palín-Peltola trio all made it through. So too, in the Senate primary, did Lisa Murkowski—one of seven Republican senators who voted to convict Mr Trump last year, and thus a prime Trump target.

Flood risks

Buy-out on the bayou

LAKE CHARLES, LOUISIANA, AND MANVILLE, NEW JERSEY

Some flood-prone places are being abandoned

THE VERY year Bernadette Davis bought and remodelled her home in Lake Charles, in 2016, it was flooded. A nearby canal—what locals call a coulee—overflowed when a storm dumped up to 31 inches (79cm) of rain on parts of Louisiana. It flooded again the next year, from Hurricane Harvey, and in 2020 from Hurricane Delta. Then again last year, amid a torrential downpour in May. Once, when her elderly father refused to evacuate, rescuers arrived by boat.

After four floods in six years, Ms Davis had had enough. In June she sold her home to the state in a voluntary buy-out scheme. Nearby properties have been acquired too. The surrounding streets, in a poor part of a pulverised city, look semi-deserted.

Using federal aid, states and counties are acquiring flood-prone homes from willing sellers (see map on next page) and converting the lots to open space. The properties must pass a cost-benefit test: projected future damages must exceed the buy-out price. More than 50,000 have been bought at their pre-flood value over the past three decades.

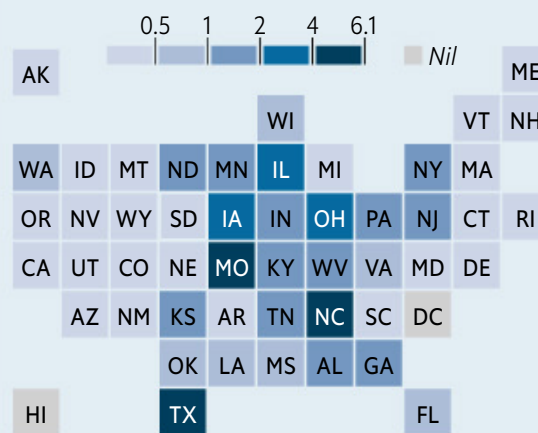
Buy-outs remove people from harm's way and let riparian areas soak up overflow during flooding. Building so close to rivers and bayous was always unwise. James Wade, who oversees buy-outs in the Houston area, says he is "correcting the problem" of development in the areas that should never have been developed.

Plenty of vulnerable places will not be abandoned amid flood risk, which is intensifying because of climate change. Areas with costly property and dense population are more likely to be fortified with seawalls and levees. After Harvey, Harris County, which includes Houston, required new structures to be built two feet above the expected level of inundation in a 500-year flood (in other words, one with a 0.2% chance of happening in any year), the strictest standard in the country. An estimated 84% of damaged homes would have been spared had they met that requirement. Such strategies make places safer, but not immune.

Retreat is the surest way to avoid damage. In rare instances whole communities pack up together. Thirty-seven households on the Isle de Jean Charles, in Louisiana, are moving 40 miles (64km) north with the help of a \$48m federal grant awarded in 2016. Alaskan Natives in the village of New-▶▶

The great escape

Number of properties acquired with FEMA funds
1989-2021, '000



Source: Federal Emergency Management Agency (FEMA)

► tok, facing coastal erosion, are moving to a more stable site several miles away.

More typical is Manville, a working-class town in New Jersey named after a roof-insulation manufacturer whose factory there closed long ago. Overflow from the Raritan and Millstone rivers submerged buildings during Hurricane Floyd in 1999, Irene in 2011 and Ida last year. The Army Corps of Engineers refused Manville's pleas to build a levee system.

The state resorted to buy-outs, targeting a neighbourhood known as the Lost Valley. Train tracks isolate it from the rest of town, but for a tunnel and a bridge. In floods those become impassable; emergency services cannot get in or out. Now the Lost Valley is a fragmented, hollowed-out community. Some homes have been razed or will be. Other owners are not leaving. They complain of rats from the abandoned properties. Sherri Brokopp Binder, an independent researcher, says that the remainers watch the "slow-motion decay" of their neighbourhood. Richard Onderko, the mayor, worries about Manville's financial future. After about 170 buy-outs, the town has lost more than \$1m in property taxes a year.

Buy-outs tend to take several years, and that deters some people. Unwilling to wait, they rebuild or sell to others. "Flood amnesia" sets in, says Mr Wade. To speed up the process, a bill in Congress would authorise the federal flood-insurance programme to buy insured homes that are repeatedly flooded in lieu of paying claims. A study of Staten Island's buy-outs after Hurricane Sandy found that one in five occupants moved to areas of equal or greater flood risk, and almost all to neighbourhoods of higher poverty. Homes in vulnerable areas tend to be more affordable.

In her mother's kitchen, a few streets from her former house, Ms Davis mulls her next move. She wants to be on higher ground. But she will probably not go far, to stay near family in Lake Charles. "It's home. Where am I going to go?" ■

Animal welfare

If pigs could fly

NEW YORK

Lobbying and litigation frustrate moves to give farm animals more space

MEAT PRODUCTION in America can be a controversial topic. The country has one of the highest meat-consumption rates per person in the world. For many the availability of cheap ribs, steaks and bacon is almost a basic right. But unease over the cramped conditions of many farm animals has grown. A legal row in Massachusetts shows the deep difficulty of reform.

In 2016 voters in the Bay State backed a ballot initiative to overhaul farm-animal welfare. The "Massachusetts Minimum Size Requirements for Farm Animal Containment", also known as Question 3, banned the "cruel" confinement of chickens, pigs and calves, defined as housing that "prevents the animal from lying down, standing up, fully extending the animal's limbs or turning around freely". The measure passed with 78% support, and on August 15th the new pork rules were due to come into force. But a last-minute delay stopped them, perhaps indefinitely.

A tangled web of lobbying, litigation and amendments around Question 3 has been spinning for nearly six years. Last December Governor Charlie Baker signed a bill which expanded the regulations for chickens to cover all egg products but also reduced the space requirement, from 1.5 square feet (0.14 square metres) per hen to just 1 square foot, provided the animals had access to "vertical" space. Some animal-rights groups praised its broadened scope, but Bradley Miller of the Humane Farming



Hard to hog some space

Association noted that the new space requirement enabled egg producers to "crowd 50% more hens into egg factories than current law".

The outlook looks bleaker for the state's pigs. The new rules were set to ban the sale of pork products within Massachusetts from animals "confined in a cruel manner". This would in effect ban the use of "gestation crates", where pigs are unable to turn round (the European Union banned these in 2013). In December, in the same bill that amended the rules for chicken, these pork regulations were delayed until August, ostensibly to stave off potential supply shortages.

But the Supreme Court has meanwhile taken up a challenge to a similar law in California, "Proposition 12", from the National Pork Producers Council (NPPC). The space restrictions in both California and Massachusetts apply not just to in-state pork production but to the sale of pork from other states. The NPPC argues that this violates the Dormant Commerce Clause by excessively restricting interstate commerce, and that voters in California are unfairly imposing pork conditions on other states, hindering billions of dollars of trade. On August 11th a district judge in Massachusetts agreed with a coalition of restaurant associations and the NPPC to delay implementation of Question 3's pig-housing rules until 30 days after the Supreme Court decides on the Proposition 12 case.

Mr Miller calls these delays "deeply troubling". But Terry Wolters, president of the NPPC, welcomed the "push to preserve the rights of America's pig farmers to raise hogs in the way that is best for their animals and maintains a reliable supply of pork for consumers".

In regulating not just local farm conditions but including sales from other states, have Proposition 12 and Question 3 crossed a constitutional line? The out-of-state impact would certainly be large. Iowa, America's leading pork producer, holds more than 200 times as many pigs as Massachusetts and California combined. The Supreme Court will start grappling with the thorny question in October.

The law may be murky, but one thing is clear: many voters are uncomfortable with the idea of pigs unable to move around or chickens pressed together in small cages. In probably the first poll of its kind, in 2019 a majority of respondents nationwide supported greater oversight of industrial animal farms, and 43% favoured a ban on new "concentrated animal feeding operations", where the animals have no space to turn. Despite that, only eight states, containing just less than 3% of the national pig population, have banned the use of gestation crates. Solving this discrepancy democratically and constitutionally is proving a frustratingly difficult task. ■



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The Supreme Court

History test

NEW YORK

“Originalism” is pushing the law to the right. Could it be a tool for progressives?

IN 1987, THE last time the Senate voted to reject a president’s pick for the Supreme Court, a constitutional theory seemingly went down with the nominee. Robert Bork, Ronald Reagan’s ill-fated choice, told senators that judges should be guided not by their own lights but by the intentions of those who drafted the constitution. To read values into it that the framers “did not put there”, he said (referring to liberal rulings of the 1960s and 1970s, among others), is to “deprive the people of their liberty”. *Roe v Wade*, and rulings such as that protecting a right to contraception, were wrong or even “pernicious”: they had nothing to do with the true meaning of the constitution.

Thirty-five years on, that theory is enjoying a renaissance. Justices claiming the mantle of “originalism” have handed down decisions expanding gun rights, transforming the law on religious liberty and withdrawing the right to abortion established in *Roe*. The core idea is powerful: judges should adhere to the constitution’s fixed meaning, not steer the law towards their preferred outcomes. But the theory serves more as cover than constraint. And it has been a moving target. Originalism has become, as Richard Primus of the University of Michigan Law School says, a “surname of a family of approaches to constitutional law” that might not recognise one another around the dinner table.

In 1996 Antonin Scalia, an arch-conservative justice who died in 2016, proposed the first revision. He looked to “the original meaning of the text”, not Bork’s mind-reading criterion of “what the original draftsmen intended”. (Bork later noted he was persuaded by this move.) But when pressed to explain whether the text’s semantic meaning or its expected consequences should prevail, Scalia was cloudy.

The constitution may be “dead, dead, dead”, as Scalia insisted, but its ghosts speak in various tongues. “New originalists” writing in the past two decades, unhappy with Scalia’s waffling, have sought to shore up an objective account of constitutional meaning. According to Randy Barnett of Georgetown University, judges should focus on what the constitution says, as opposed to what its drafters “expected or hoped” would flow from it. Some provisions, like the requirement that senators must be aged 30 or over, speak for themselves. Others, like the guarantees of “equal protection” or “due process”, may

need “teleological or purposive considerations to determine their appropriate meaning” for a particular problem.

As the theory has become less dogmatic and more open to liberal results—some “new originalists” even argue that same-sex marriage and abortion-rights decisions cohere with the original meaning of the 14th Amendment—originalism has started to resemble the theory it arose to combat. In 1985 Justice William Brennan’s “living constitutionalist” approach noted that justices can read the constitution only as “20th-century Americans” asking: “What do the words of the text mean in our time?” For Eric Segall, of Georgia State University, newer forms of scholarly originalism are “indistinguishable” from the chief rival of their forebears.

Theory and practice

At the Supreme Court, however, there has been no hint that the meaning of the constitution is up for debate. In the hands of the six conservative justices, originalism is consistently yielding conservative results. Reflecting on the *Dobbs* decision that ditched abortion rights, Reva Siegel, of Yale Law School, said in July that the majority’s originalism no longer seeks the separation of law and politics. It “has an aim” and serves as “an instrument of Republican will”. Justice Samuel Alito, in his majority opinion, had no qualms about focusing his analysis on a period when American wom-

en were second-class citizens, decades away from winning the right to vote.

In contrast to how it is often praised, Mr Primus observes, originalism does “not hold the law steady”. It permits—even demands—sweeping changes. The principle of *stare decisis* (standing by previous rulings) is a weak constraint. But the conservative revolution may be digging its own grave by offering progressives a model for undoing precedent. “As the Supreme Court consolidates more and more conservative doctrine”, Mr Primus predicts, originalism will become “more and more popular among liberals” envisaging a future court that takes an axe to decisions like *Dobbs*.

Elizabeth Wydra, president of the Constitutional Accountability Centre, a law firm and advocacy organisation, is not waiting for liberals to take hold of the court. She finds powerful originalist sources for progressive causes—especially in the Reconstruction Amendments. These provisions, which ended slavery and guaranteed equal rights for formerly enslaved people, “reflect broad conceptions of equality, inclusion and liberty”. For true originalists, Ms Wydra says, “the 14th Amendment should matter just as much to you as the Second Amendment.”

This odd-bedfellows arrangement worries Mr Segall. “It’s very dangerous for progressives to adopt originalism,” he says; it risks giving credence to a theory that legitimises “racists and sexists”. Mr Segall also points out the difficulty of looking backwards in the service of progressive goals. But Ms Wydra presents the approach as both “right” and the only tactical choice. It is better to wage the battle over the meaning of the constitution on the same battlefield as conservatives, she says. The “second founding of the country” heralded “dramatic progressive changes” after the civil war. “We don’t cede that ground.” ■

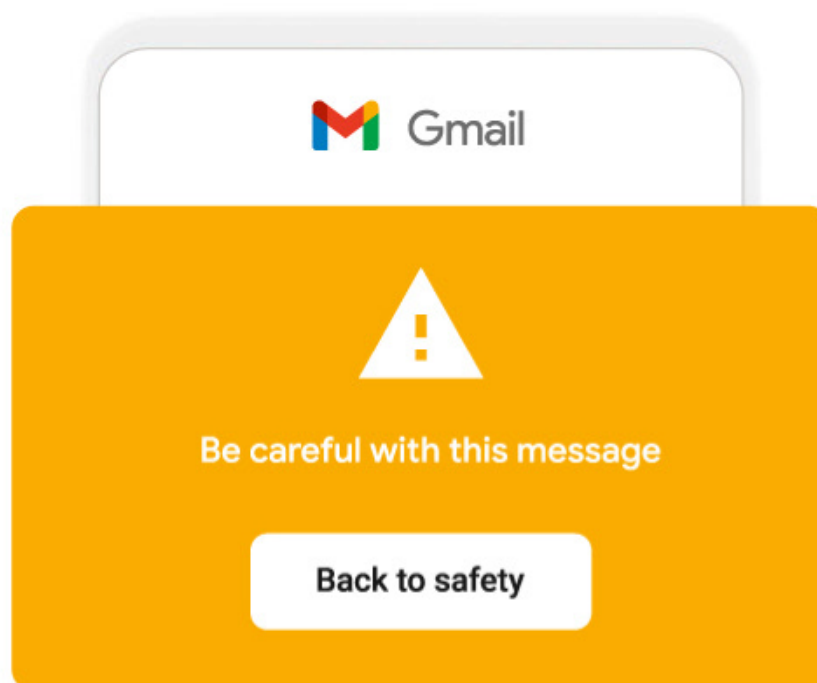


The origins of originalism



9 out of 10 cyberattacks
begin with a phishing link

Gmail phishing protections
were built to **block** more than
100 million attempts a day



Hackers use phishing emails to try and trick people into revealing personal information. Gmail features the most advanced phishing security available, because the best way to combat large-scale phishing operations are even larger-scale defenses.

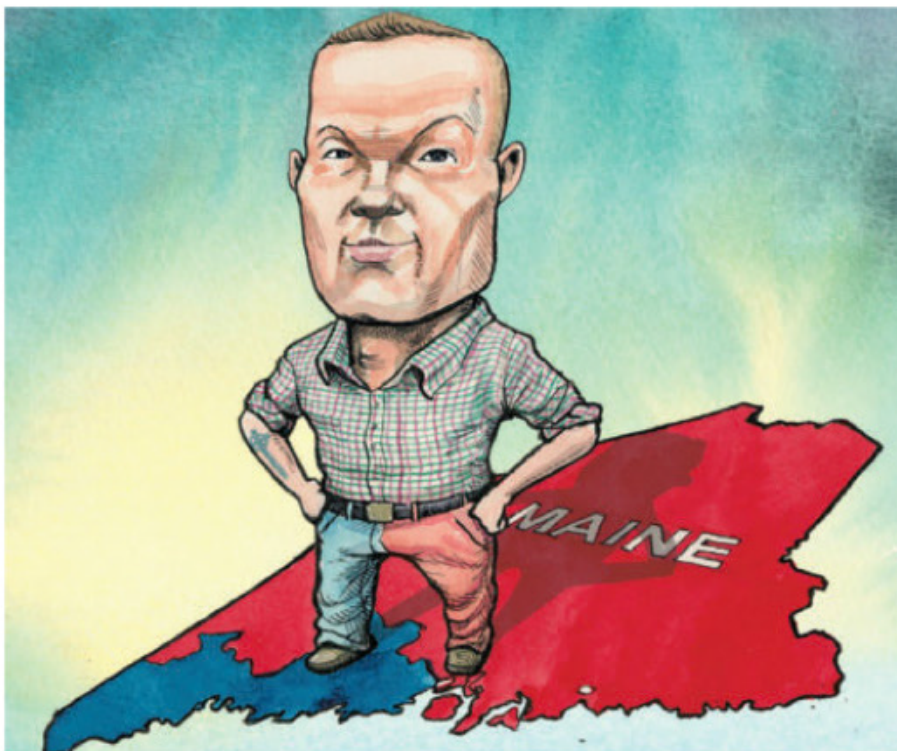
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Lexington | A Golden opportunity

Democrats are wrong to give up on rural America. The right candidates can win there



MAINE'S 1.3M CITIZENS are divided into just two congressional districts. The first is small, since half of Mainers live along the coast around Portland, a fizzy entrepot of lobster-and-scallop mousse and vegan doughnuts. But the second district, which stretches north to Canada, is vast, as big as Ireland. Its forests of pine and birch are so thinly settled that it counts as the second-most-rural district in America. Its people are whiter, older and poorer than Americans in general. The district tells the story of how Democrats lost their appeal to rural and working-class Americans, and with it at times majorities in Congress to match the party's consistent majorities in the national vote.

It also suggests how the Democrats might recover. Because whereas Donald Trump twice won the district easily in presidential elections, it has been represented in Congress for two terms by a Democrat, Jared Golden. Only seven Democrats represent districts won by Mr Trump, and none is more Trump-loving than Mr Golden's, according to the *Cook Political Report*, a non-partisan newsletter. Yet even some local Republican leaders expect Mr Golden to be re-elected in November.

"You've heard this—you know, 'What's the matter with Kansas?'" Mr Golden asked recently over a beer in Skowhegan, in central Maine. He was referring to an influential book from 2004 arguing that conservatives use cultural issues to fool rural Americans into voting against their own best interests. "Yeah, I hate that book," he continued. "I think it's so condescending." He is sick of being asked about the theory outside his district. His response: "No, people are not voting against their own self-interest. They know what's important to them." The Democratic Party, he says, "has developed too much of an attitude that anyone that disagrees with us is just not smart."

Mr Golden grew up in central Maine, joined the Marines after the terrorist attacks of September 11th 2001, and served in both Afghanistan and Iraq. Now, at 40, he is a trim man with a buzz cut and tattoos—the Celtic cross, a Devil Dog to honour the Marines. Mr Golden speaks and smiles sparingly. He is pro-labour, pro-choice, pro-police and pro-gun. He objects to the use of the word "assault" to describe a semi-automatic rifle, and he would also stick out like one at a Manhattan donor's salon, unlike some re-

cent, unsuccessful Democratic candidates in Maine.

"If you were designing a Democratic prototype from the ground up to hold or win this kind of district," says Mark Brewer, a political scientist at the University of Maine, "it'd look a lot like Jared Golden when you were done."

Yet Mr Golden has been such a thorn in the side of the White House that one top aide to President Joe Biden suggested running another Democrat against him, according to "This Will Not Pass", by Alexander Burns and Jonathan Martin. He says he is a Democrat because he believes government has a critical role to play in helping people. But he thinks his party has taken a grandiose view of that role, alienating rural voters by trying to dictate national standards that ignore local realities—such as unrealistic credentials for day-care teachers—and wasting money on people who do not need it. He supports anti-poverty initiatives like the child tax credit, but was outraged that Democrats continued permitting it to couples earning as much as \$400,000 a year. (Mr Golden endorsed Lexington's brother, Michael Bennet, a senator and proponent of the tax credit, when Mr Bennet ran for president in 2020.)

Democrats and Republicans split rural voters as recently as 2009, according to the Pew Research Centre, a non-partisan think-tank. But by 2017 Republicans had a 16-point lead—and a 24-point one among rural white people. As Democrats lost ground, they took to lamenting Republican advantages in the electoral college and the Senate, where representation follows geography, not population. What Democrats have not done is compete harder. They instead condemn rural voters as mourning their white privilege in a diversifying country. Hillary Clinton consigned half of Donald Trump's supporters to a "basket of deplorables", and Barack Obama called small-town Americans bitter people who "cling to guns and religion or antipathy toward people who aren't like them".

Such generalisations may please some voters. But, conveniently for a party dominated by urbane elites, they ignore the role of class. (It was no coincidence that Mrs Clinton was speaking at a fund-raiser in New York and Mr Obama at one in San Francisco.) They overlook Mr Trump's gains in 2020 with urban working-class voters of whatever race—and that Mr Obama himself carried Maine's second district twice. Mr Golden worries that Democrats think they can write off rural voters and rely on demographic change to supply majorities by turning more of America into Portland. "I don't know if that's even true," he says. "Secondly, even if it is, don't you just want to do right by everybody?"

A river runs through it


Mr Golden's district has reeled for decades as textile and paper mills shut down, but he believes it is finding its feet again. The beer he was drinking was a brown ale from the Bigelow Brewing Company, started in a barn in Skowhegan a few years ago by a local teacher and millworker. They now sell in 700 stores and are turning the idled mill in town into a brewpub, hotel and apartments.

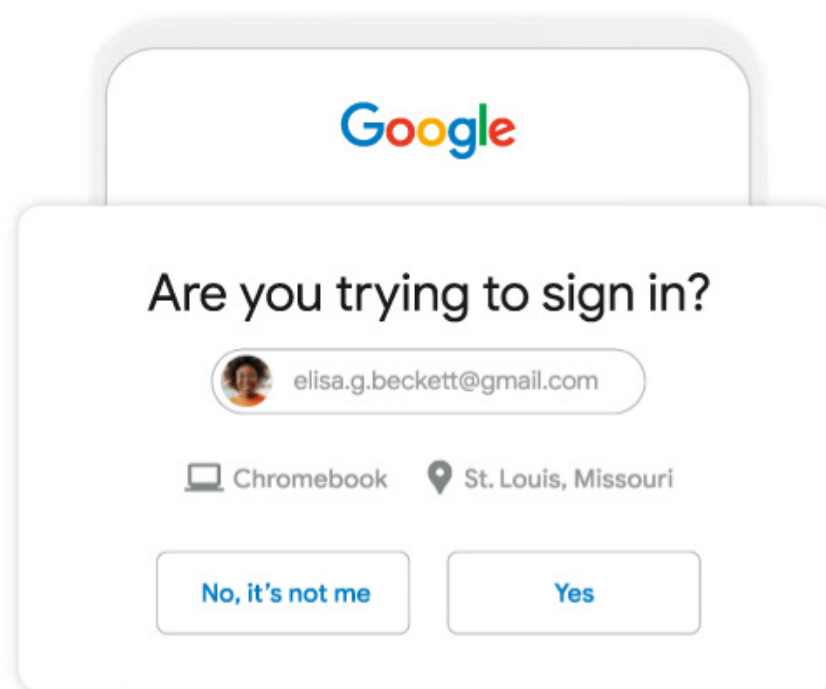
The brewers want to help clean up the Kennebec river, which powered the mill, and enhance its rapids for water sports to give the young less cause to flee to Portland. That morning, two dozen leaders of the project—a car dealer, an insurer and a pizza-maker among them—had gathered to update Mr Golden. Their excitement about the future of their pretty, faded town was infectious.

"I think my job is to try and connect them with as much help along the way or clear as many roadblocks as possible," Mr Golden says. "I think they want to believe in a government that will help them do those things. But they're very sceptical of it." ■



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Saskatchewan

Pots of pink gold

SASKATOON

A remote Canadian province luxuriates in the global supply crunch

GERRID GUST'S great-grandfather was from near Dubno, a town that is now in western Ukraine. He settled between the two biggest towns in the Canadian province of Saskatchewan, Saskatoon and Regina, on a plot of 160 acres which he bought for C\$10. The farm is now a patchwork of properties 100 times the size which Mr Gust runs with his father and brother. Each year they harvest wheat, lentils and rapeseed.

Every planting season 23-metre-wide "drillers" shoot seed and fertiliser directly into the soil for 16 hours a day. Then it is all down to the heavens. Nearly all of Saskatchewan's crops depend on rain rather than irrigation. Last year "was desperately dry", says Mr Gust. "We can't afford another bad year." Nor, it seems, can the world. The 15m tonnes of wheat and 20m tonnes of other crops that the province produces in a typical year will be vital to markets roiled by the war between Russia and Ukraine. So, too, will almost everything else Saskatchewan produces.

When Ukrainian immigrants first streamed into Canada at the end of the 19th

century, the government of the day had a role in mind for them: to settle the vast prairies between the forests of Ontario and the Rocky Mountains. The minister of immigration knew what he wanted: "a stalwart peasant in a sheepskin coat, born on the soil, whose forefathers have been farmers for ten generations, with a stout wife and a half-dozen children." Those with uncalloused hands could look elsewhere.

It was a good match. The landscape reminded many of Bukovina and Galicia in western Ukraine. Its aspen forests needed clearing but the soil was lush and the land dirt cheap. By the first world war tens of thousands had come, settling around onion-domed churches, often living next to the same neighbours they had back home. That migration established what would be-

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— **Bello is away**

come the world's second-largest Ukrainian diaspora, behind Russia's.

In Saskatchewan, where a tenth of the population has Ukrainian roots, events in eastern Europe are again shifting local fortunes. Russia's invasion of Ukraine has not quite prompted a stampede towards the prairie—the refugees arriving in Canada mostly prefer the comfort and energy of cities in the east. But it has caused the price of many of the commodities which drive Saskatchewan's see-sawing economy to rocket like never before.

Just about everything the province produces in abundance has seen its price shoot up as a result of the war. This includes the wheat and oats first grown by early settlers, Ukrainian or otherwise, as well as newer crops like rapeseed, pulses (lentils, chickpeas and the like) and mustard (see chart on next page). It is a bonanza that will reach far and wide. Saskatchewan is set to grow by 6% this year, more than any other Canadian province.

Most important of all is what lies beneath the earth: oil, gas, uranium and above all potash, a jagged, crystalline mix of soluble salts of potassium that is a crucial ingredient in fertilisers. It is sometimes called "pink gold" for the hue it takes before it is refined into a white powder. Saskatchewan produces a third of the world's output, and exports almost all of it.

Russia and Belarus, the world's two other potash powers, together produce about what Saskatchewan does on its own. But the world has lost access to much of ▶▶

▶ their output, owing to sanctions and shipping blockades. Ken Seitz, the boss of Nutrien, a Canadian potash miner, recently told Reuters that the stranded supplies could amount to 8m tonnes this year, a fifth of global potash exports.

That means the biggest importers, such as Brazil, India and Indonesia, as well as Europe, will find it harder to procure the fertiliser they need to plant crops and keep citizens fed. Saskatchewan is one of the few places in the world that can boost production at short notice, says Bronwyn Eyre, until recently the province's minister of energy and resources. Ambassadors and other officials have been calling with urgent demands. For them, "it's a national security concern."

Saskatchewan is often said to be Canada's heartland, full of cheerful, guileless folk who are just a generation or two off the farm if not still on it. The ups and downs of farm life helped forge a culture of mutual support. The province was the first place in North America to provide universal health care, in 1962. But recent prosperity, and perhaps the influence of Alberta, an oil-soaked neighbouring province with a secessionist bent, have changed things a bit. Today's Saskatchewanites seem to want smaller government and lower taxes. Ms Eyre's conservative Saskatchewan Party caters to that.

The potash industry is at the centre of this new mood. The tallest steel-and-glass office building in Saskatoon, the largest city, is the Nutrien tower. Mosaic's building in the provincial capital, Regina, is almost as prominent. The firms' names adorn stadiums and events. To anyone who takes the Yellowhead Highway across the province, half a dozen mines and their huge pink-white tailing piles can be seen across the pancake-flat landscape.

Firms are scrambling to take advantage of what one boss describes as "outrageous" prices, which have tripled in a year. But new mines take time. Potash deposits are a kilometre or so beneath the earth, under a thick layer of pressurised water. To sink a

shaft down the water must be frozen from above, a procedure that can take two years or more. BHP, the world's biggest mining firm, is rushing to finish its first potash mine, in Saskatchewan, a year before it was due to open in 2027.

Efforts are under way to ramp up production at existing mines, too. Nutrien plans to extract an extra 1m tonnes of potash in 2022, equal to 7% of its output. Mosaic has reactivated a mine it had mothballed in 2019. But transport problems hamper such plans. What Canada needs, says Ms Eyre, is more pipelines to move oil and gas about, which would free rail capacity to move more potash and crops to ports to be shipped abroad. The left-leaning prime minister, Justin Trudeau, disagrees.

Like most of Canada, the province also suffers from a shortage of workers. No other province has seen such slow population growth. Over the past century the ranks of Saskatchewanites have increased by half to 1.2m while the country's population has quadrupled. The provincial government has been keen to take as many Ukrainian refugees as it can get. But despite ample jobs, cheap housing and a diaspora, Ukrainians have not come flocking. ■



Closing the gap

But Mr Maduro's elation is based on more than just a leftward tilt in Colombia. He seems to think the election of left-wingers such as Gabriel Boric in Chile and Pedro Castillo in Peru will undermine the campaign to isolate his regime. The United States, meanwhile, appears too worried about an oil shortfall to keep piling pressure on the regime. All this will help make the Venezuelan president less of a pariah in the region. Even right-wing governments quietly accept that Mr Maduro (pictured) is here to stay.

It is ironic that the wily Mr Maduro may benefit from the ascension of left-wing leaders, whose rise he has actually impeded. After boosting socialist movements across Latin America in its heyday, Venezuela has become a political headache for leftists trying to get elected. On the campaign trail conservatives portray Venezuela's agony as what awaits voters if they plump for the left. Candidates often end up caught between centrist allies, whose support they need to govern effectively, and the radical bits of their base who still idolise Mr Maduro's regime.

That may be why Mr Petro, who concedes the point that the regime is "dictatorial", made no mention of Venezuela in his inauguration speech and is likely to proceed with great caution. Colombian-Venezuelan relations have been in tatters since 2019 when Mr Duque and much of the West recognised Juan Guaidó, the head of Venezuela's national assembly, as the rightful leader of the country and demanded that Mr Maduro step down. Mr Duque, a technocrat friendly to the United States, became a prominent supporter of Mr Guaidó's prolonged but fruitless bid for power.

There is nevertheless plenty of room for co-operation. An obvious step would be the reopening of the 2,200km (1,400-mile) border between the two countries. Since ▶▶

Venezuela

Isolation interrupted

CARACAS

A regional left turn and high oil prices boost Nicolás Maduro

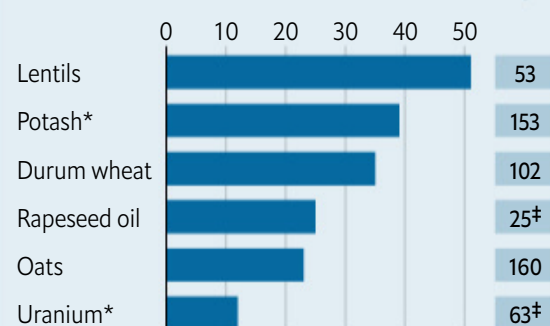
AS REGIONAL LEADERS descended on Bogotá for the elaborate inauguration on August 7th of Colombia's first left-wing president, one man was notable by his absence. The outgoing conservative president, Iván Duque, used his last dregs of power to make sure of that. He barred Nicolás Maduro, the dictator next door in Venezuela, from stepping on Colombian soil until the very moment Gustavo Petro was sworn in. So Mr Maduro stayed home and played television presenter, standing by a large screen in his palace and commenting on events in Bogotá as they unfolded.

Missing the ceremony has not dampened Mr Maduro's enthusiasm for the political change sweeping Colombia, America's staunchest ally in the region. Like many tyrants, Mr Maduro hails democracy when it works to his liking. "New times are coming," he tweeted shortly after the victory of Mr Petro, a guerrilla-turned-senator, in June. The leftist Mr Petro has promised a thaw in his country's frosty relations with Venezuela. To start, he says he will restore diplomatic relations, severed since 2019.

The little province that could

Saskatchewan, Canada, share of world exports 2021 or latest available, %

Price†, Jan 2021-Jun 2022, % increase



*By volume †\$ terms ‡Global benchmark price
Sources: Bloomberg; IMF; national statistics

▶ 2015 most vehicles have been unable to cross; almost all transit and trade takes place on foot. That has been calamitous for livelihoods across what was once among South America's busiest frontiers. Trade worth \$7bn in 2008 shrank to just \$142m in the first four months of this year. Fernando Grajales, who manufactures jeans in the Venezuelan border town of Ureña, says production is just 10% of what it was back in 2015, and that 80% of clothing firms in the town have closed. "We want Colombian consumers here," he said.

Less enthusiastic about the détente are many of the 1.7m Venezuelans who have moved as refugees to Colombia in recent years. A fifth of the population, some 6m people, has fled Venezuela since its economic crisis deepened in 2014. Some fear that Mr Petro's interventionist instincts will set their new home on a familiar path towards ruin. "We know how this film ends," sighs Jorge Moreno, a young engineer who moved from Venezuela to Bogotá four years ago. Others fretting include members of Venezuela's opposition, who have made Bogotá their headquarters since 2019. Some may opt to leave the country.

Grander geopolitical events further perturb Mr Maduro's enemies: the war in Ukraine and the United States' subsequent hunt for alternatives to Russian oil. President Joe Biden has had to reassess ties with Venezuela, which sits on the world's largest proven oil reserves, but whose state oil firm, PDVSA, strains under sanctions. Mr Biden has dispatched negotiators to Venezuela twice this year. Officials insist the talks are an effort to jump-start negotiations with the opposition and free American prisoners, two of whom returned home after the first visit in March.

And yet the United States seems poised to let Venezuelan oil flow. In June two European oil firms won its permission to buy oil from PDVSA—the first such approvals in two years. Chevron, a Western energy firm still in Venezuela, is said to be working on a deal to ship oil from its joint venture with PDVSA straight to the United States, after PDVSA drops its stake to just below 50%. For the Biden administration, such obscure schemes can "reduce the political cost" of dealing with a despot in order to lower oil prices, says Francisco Rodríguez, a Venezuelan economist and anti-sanctions campaigner.

Mr Biden is not likely to formally accept Mr Maduro as Venezuela's rightful leader, let alone give him a fist-bump as he did Saudi Arabia's crown prince, Muhammad bin Salman. But the quest for cheap oil is not the only reason for the United States to ease up on the Venezuelan government. It will also not want to strain relations with the growing ranks of left-wing governments in the region by demanding that they ostracise Mr Maduro. ■

Monarchism in Brazil

State organ

The republic's royal past is gone but not forgotten

WHEN CELEBRATING milestone anniversaries, Brazil has an odd habit. In 1921, ahead of its centenary, it brought home the corpse of its last emperor, Pedro II. At 150 years it summoned the body of his father, Pedro I: for five months the military regime of the day lugged his coffin around the country in a cortege. Given that independent Brazil had just two monarchs, you might assume that no remains remain to be flown in for the country's bicentenary on September 7th. Not so. On August 22nd Brazil will receive from Portugal, with full military honours, a glass jar filled with formaldehyde. Floating inside is a gory grey tentacular blob: Pedro I's heart.

With two months left in a bitter presidential election campaign haunted by fears of unrest, the royal organ may escape widespread notice. For decades the monarchy, ousted by the army in 1889, has been simply an old relic. But although Jair Bolsonaro, the right-wing president, is above all else smitten with the armed forces, he has grown close to those who would like to reinstate royal rule. Footsoldiers for this obscure movement have found new vigour in the slipstream of the president's modern populism, entering the parliament and cabinet. Upon its arrival, the heart may further inflame monarchist passions.

Obtaining it took months of talks. It will spend just 20 days in Brazil before returning to Portugal, which was reluctant to part with it. But the sharing is apt, for Pedro I



National heart-throb no more

(pictured) was a royal with two homes. In 1807 his father transferred the royal court from Lisbon to Rio de Janeiro as Napoleon's army advanced. In 1822, after one Portuguese attempt too many to subdue the restless colony, it was he, at 23 years of age, who unsheathed his sword and uttered: "Independence or death!" After delivering Brazil its independence, he returned to Portugal and left his heart to the city of Porto in his will.

For Luiz Philippe, a royal descendant who is a congressman and an ally of Mr Bolsonaro, the heart's display will shine a light on what he sees as an impressive record. The monarchy, the only one to reign in independent Latin America for any length of time, kept Brazil intact while Spanish colonies in the hemisphere splintered upon independence.

Moreover, campaigners contend, republican life since 1889 has been replete with coups, corruption and chaos. Suely Silveira says she became a monarchist when she "woke up and started to study history". Republican Brazil has stalled, she says, while many parliamentary monarchies abroad have grown enviably rich. Of the nine presidents since the end of military rule, one died before taking office, two were impeached and five have faced investigation for graft. Monarchists wonder if the country might be sturdier with the calming influence of a king.

But those who believe the resurrection of the past is the answer to what ails Brazil are "reclaiming a past that never existed", says Jurandir Malerba of the Federal University of Rio Grande do Sul. A return to the ways of the 19th century sounds less enthralling to the millions of Brazilians who are indigenous or poor. In a referendum in 1993 voters were asked whether Brazil should be a republic or a monarchy. The republic won the day by 87% to 13%. Current polls show a similar landslide.

Militarists and monarchists, once opponents, get along better these days. In 2018 Mr Bolsonaro considered picking Mr Philippe as his vice-president. Upon the death on July 15th of Luiz of Orléans-Braganza, the head of the defunct royal house, the president declared a day of official mourning.

The current would-be emperor is 81 and childless. But many monarchists think the third in line, Rafael Bragança, a 36-year-old consultant living in west London, is royal material. In Britain, Mr Bragança explains between sips of a double macchiato, he can admire a good constitutional monarchy in action, one that brings continuity and unity to a stormy political environment. Would he like to do the same at home? "I don't want to impose anything," he says, without skipping a beat. "There would need to be a plebiscite. But if it is needed, I'm there." ■



The Rohingya crisis

Slow death

SINGAPORE

Five years on from the genocide in Myanmar, its Muslim minority still suffers—on both sides of the border with Bangladesh

ON A VACANT patch of land in Sittwe, the capital of Rakhine state along the western flank of Myanmar, grass grows long under the hot sun. A house once stood on this plot, though all trace of it is long gone. Mohammed, a 36-year-old Rohingya man, grew up in that house and lived there until 2012, when he and his family were forced to flee by a band of ethnic Rakhines wielding sticks and torches. That summer mobs of Rakhine villagers and Burmese soldiers razed Rohingya villages and killed hundreds of people belonging to the long-persecuted Muslim minority group. Some 140,000 Rohingyas were displaced in the melee and herded into camps, where they have remained ever since.

The pogrom of 2012 laid the groundwork for a bigger bout of bloodshed five years later. In 2017 Burmese security forces launched a campaign of mass killing, rape and arson in northern Rakhine, in what the UN has branded as genocide. Nearly 750,000 Rohingyas fled to Bangladesh, where they live in the world's biggest refugee camp (see map on next page).

In the decade since the rampage of 2012 and the five years since the genocide of 2017, the Rohingyas have been subject to conditions designed to drain the life from the ethnic group, according to the UN. Crossing over into Bangladesh afforded some respite, at first. Yet the Bangladeshi government has long since begun to view the refugees as a burden. Violence in the camps is rampant, with much of it committed by the Bangladeshi security forces. No matter which side of the border Rohingyas find themselves today, their experience is the same: hunger and misery surrounded by barbed wire.

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The Burmese army, which has run Myanmar for most of the past 50 years, began persecuting Rohingyas decades ago. It first attempted to drive them off their land in 1978, using the now familiar tools of murder, arson and rape. Its high command considers them Bangladeshi interlopers, with no claim to Burmese citizenship—as do many other Burmese. It enshrined that view in law 40 years ago, turning the Rohingyas into the world's largest community of stateless people.

It was not until 2012, however, that the government began to herd Rohingyas into camps. This segregation, in addition to the imposition of a matrix of repressive laws, which include restrictions on marriage and having children, amount to a system of apartheid, according to Human Rights Watch (HRW), an advocacy group. After the genocide of 2017, this vice tightened.

Today about a fifth of the Rohingyas who remain in Myanmar live in what Fortify Rights, a pressure group, calls "modern concentration camps". One unfortunate resident, Hla Maung, lives cheek by jowl with 11 relatives in one of the cramped shelters into which families are crowded. These structures were originally designed to last two years. Many have been badly damaged by monsoons and flooding over the past decade. In April some 28,000 Rohingyas were living in shelters deemed by the UN to be structurally unsound. Because international aid agencies must apply to travel to the camps two weeks in advance, ▶▶

▶ they cannot always repair shelters right away. “Living conditions are, by design, squalid,” observed HRW in a recent report.

Harsh restrictions on movement make life harder still. More than three-quarters of displaced Rohingyas cannot leave their camps at all, according to a survey conducted in 2015 by the Centre for Diversity and National Harmony, a Burmese NGO. The rest may travel, but only to a Rohingya ghetto in Sittwe or to Sittwe General Hospital, the sole facility in the state that provides specialised treatment. Medical referrals are granted only for emergencies and even then getting the necessary travel authorisation can take days. Access to health care in the camps is limited. In the more remote ones, doctors visit for just a couple of hours once or twice a week. Rates of disease and child mortality are higher in the camps than elsewhere in the state, according to the International Rescue Committee, an aid organisation.

Those who can leave the camps must get a “village departure certificate” which costs up to 5,000 kyat (\$3.45). Sometimes security forces demand travellers present an identity card proving their citizenship, which most Rohingyas lack. All Rohingyas must pass through numerous checkpoints manned by soldiers who demand bribes, and to leave they must often also pay for a “security escort”, which costs up to 20,000 kyat. These restrictions prevent Rohingyas from working, making it difficult for them to supplement the cash or food aid they receive from NGOs, which residents say is insufficient for their daily needs.

For the roughly 300,000-350,000 Rohingyas who have not been herded into camps, conditions are still dire. They, too, are rarely granted permission to get treatment at Sittwe General Hospital. And though they continue to live in their own homes, a mesh of restrictions hems them in as well. They are not allowed to leave their districts without authorisation. Security checkpoints strewn throughout their villages are manned by soldiers who enforce curfews (from 6pm to 6am) and rules

limiting gatherings in public areas to no more than five people. Violations of these rules lead to beatings or detention.

These conditions appear calculated to bring about the “slow death” of the Rohingyas, says the UN. Their numbers in Myanmar have dropped precipitously. Before 2017 the country was home to as many as 1.3m Rohingyas. (No reliable numbers exist as they were not included in the last census in 2014, the first in 30 years.) Now the population is closer to 600,000. Most fled to Bangladesh. But many are likely to have died because of the grim living conditions.

There are dismaying parallels between the experiences of Rohingyas in Rakhine state and those in the refugee camps of Bangladesh. At first refugees could work in surrounding towns, recalls Hakim Ullah, who has lived in the refugee settlement in Cox’s Bazar district since 2017. Now they need permission to leave the camps. Shops and schools in the camps were demolished earlier this year by the Bangladeshi authorities, who have banned paid work and private education. “The refugee camps have become detention camps”, says Rahamat Ullah, a Rohingya civil-rights activist who lives in Cox’s Bazar.

Nor have refugees traded freedom for

safety. Militant groups and criminal gangs operating in the camps regularly commit murders, kidnappings and robberies. Bangladesh’s security forces do much of the terrorising themselves, according to reports from human-rights groups. The Armed Police Battalion, the specialist unit responsible for security in the camps, acts “with impunity”, says Ashraf Zaman of the Asian Human Rights Commission, a pressure group based in Thailand. The battalion has reportedly beaten children and raped women. The Bangladeshi forces are so brutal, that they remind Mr Hakim Ullah of the Burmese army. (Bangladeshi authorities did not respond to multiple requests for comment from *The Economist*.)

As long as the Burmese army is in power, little about the Rohingyas’ condition is likely to change. “Life in the camps is worse than prison,” says Mohammed, who now lives in a camp outside Sittwe. At least prisoners know the length of their sentence. Rohingyas do not know if they will ever be released. Even if they are, many would have no home to return to. The authorities long ago bulldozed the ruins of houses like Mohammed’s, and sold the land to developers—making it easier to remove every last trace of the group. ■

Australian politics

Cabinet me-shuffle

SYDNEY

The former prime minister took on five other portfolios without informing his citizens—or even some incumbent ministers

AUSTRALIA’S FIRST Pentecostal prime minister, Scott Morrison, is fond of ministries. Delivering a sermon at a church in Perth after losing a federal election in May, he advised worshippers to trust in God, not governments. Australians have recently learnt that he has a penchant for ministries of the political kind as well.

The former Liberal, meaning conservative, prime minister (pictured on next page), now an opposition MP, secretly swore himself into five different ministerial portfolios between March 2020 and May 2021. He held so many that he struggled to recall them all. He did not tell voters that he was extending his powers. Even his colleagues were kept in the dark.

To Australians, this is as odd as it is alarming. “I cannot conceive of the mindset that has created this,” said the new Labor prime minister, Anthony Albanese, speaking for many of the country’s 25m people. Mr Morrison’s actions, he argued, were an “unprecedented trashing of the Westminster system”, which does not bestow presidential powers on its leaders.

Mr Morrison first started accruing portfolios in the early days of the pandemic, according to journalists at the *Australian*, a conservative newspaper. To keep covid-19 at bay, his government wanted to invoke emergency powers under the country’s Biosecurity Act, but doing so gave vast, unchecked powers to the health minister (then Greg Hunt). Mr Morrison and his attorney-general, Christian Porter, reasoned that creating a second minister of health would be a safeguard. It might prove useful if someone fell ill, they thought. Mr Hunt welcomed the idea, and the prime minister was secretly sworn in with a signature from the governor-general.

Soon after, Mr Morrison made himself co-minister of finance, giving him power over emergency spending. He continued to pile up portfolios as fears about the pandemic faded, installing himself as joint home affairs minister and treasurer in May 2021. None of the incumbents in these jobs was told that they were job-sharing.

He also took on powers unrelated to covid, making himself minister of resources. ▶▶





Minister of everything

► In that portfolio, unlike the others, he wielded his new authority. As the federal election loomed, he overruled the resources minister, Keith Pitt, to cancel an unpopular permit for gas exploration off the coast of New South Wales. (Climate change was a big issue for voters, and the project was controversial in wealthy conservative seats.) The company, Asset Energy, is challenging the decision in court.

Even his detractors are shocked that he would so “undermine the integrity of government”, as Karen Andrews, his home affairs minister, put it. As calls for his resignation grew louder, Mr Morrison proffered a defence on August 17th. His actions were a rational precaution in extraordinary times, he claimed. Australians expected him to take on all the responsibility he could to keep them safe. Yet those duties had to be kept secret, he reasoned, lest they be “misconstrued and misunderstood”, thus rocking faith in government.

No other Australian prime minister has amassed such powers, whether in wartime or pandemic, let alone in secret. Mr Morrison says he only wanted a say over portfolios which gave “unilateral decision-making powers of ministers”, implying that he sought a tighter grip on areas of government that he could not otherwise control. The centralising of power may sit poorly with voters. Yet it does not appear that he acted illegally; there is nothing in the constitution to bar two ministers from being appointed to the same portfolio. Even so, Mr Albanese is seeking legal advice on his predecessor’s actions. Reforms, he says, may be needed to prevent future prime ministerial power grabs. ■

Correction: An article about Aboriginal rights in Australia in last week’s issue incorrectly stated that Aboriginals die on average 20 years earlier than other Australians. In fact, the figure is 8.6 years for men and 7.8 years for women. Sorry.

Colonialism and law

The riches of the earth

ZAMBOANGA

A judgment in Europe awards billions to a forgotten Filipino monarchy

THERE EXIST few easier ways to become filthy rich than by ruling a patch of Borneo, Asia’s largest island. It is there that the Sultan of Brunei sleeps every night in the world’s biggest residential palace. Ponder, then, the opportunity missed by the Sultanate of Sulu, an archipelago in the southern Philippines (see map), which for centuries stretched far enough west to be Brunei’s neighbour. Today its former slice of Borneo is the Malaysian state of Sabah, and much of the money from the oil pumped there ends up in Kuala Lumpur, Malaysia’s capital. Descendants of Jamalul Kiram II, the last sultan of Sulu, who died in 1936, have had to settle for more modest lives.

Until now. In February, a Spanish arbitrator in Paris ordered the government of Malaysia to pay \$15bn to eight descendants of Kiram II. It is the second-largest arbitration award ever. Malaysia has appealed against the decision, but its effects are already being felt. Last month a court in Luxembourg seized assets owned by Petronas, Malaysia’s state oil firm (Petronas claims nothing of value was nabbed). The news has provoked outrage in Malaysia, where an election is expected to be called soon.

The case revolves around a deal struck in 1878, whereby Sulu let the British North Borneo Company, a colonial enterprise, use its slice of Borneo for a yearly fee. Under the English version of the treaty the Sultanate would “cede” the land. The original promises merely to lease it. Upon achieving independence from Britain in 1963, Malaysia inherited Sabah and all attached obligations, and for 50 years it sent 5,300 ringgit (\$1,200) to the sultan’s legal heirs. That makes Sabah distinct from other 19th-century land grabs, says Elisabeth Mason, a lawyer for the claimants. “It’s a rare, perhaps unique, example of a colonial contract that endures uninterrupted into modern times,” she says.

In 2013 Malaysia cut off the payments to the heirs after a relative, declaring himself to be the true sultan of Sulu, staged a tragicomic invasion of Sabah in which 60 people died. Claiming breach of contract, the heirs warned of impending legal action. Malaysia ignored them for two years and later boycotted hearings in Europe, allowing the claimants’ lawyers to advance arguments unchallenged. Yet Malaysia is a signatory to an international convention on arbitration, and will probably have little choice but to abide by the ruling. The judg-

ment awarded the heirs 15% of fossil-fuel and palm-oil revenues since 2013 and of estimated future earnings.

Many in Malaysia are furious that a lawyer—not even a judge—in Europe can dispose of billions from their treasury. More damaging still is the wound to national dignity. Few Malaysians realised that sovereignty over their second-biggest state has all the while come with an asterisk. Politicians of all stripes are desperate to redirect blame for a case bungled by four successive prime ministers. Sabahans wonder why a squabble in the name of their state, Malaysia’s poorest, should end with money going to anyone else but them.

The potential appearance of \$15bn is causing commotion elsewhere as well. The eight claimants have all been instructed to move house and speak to no one. The 20 or so other pretenders to the throne are either buttering up the legal heirs or pretending to be the true victors of the case in local media. Lawyers for the claimants say a man even showed up in their office in London, brandishing business cards which declared him to be the prime minister of Sulu. No such position exists.

Not that anyone would know. Most foreigners are too frightened to go to Sulu. Its jungles have become a base for Abu Sayyaf, a band of bloodthirsty jihadists and pirates who claim common cause with al-Qaeda. A string of kidnappings helped give the islands a reputation as one of the most dangerous backwaters in Asia. Violence has receded in recent years, says Al Jacinto, a journalist based in the nearby city of Zamboanga. But Sulu still lacks amenities such as clean water, electricity and internet.

The heirs’ legal bill has reached \$22m so far. That was covered upfront by Therium, a litigation fund based in London, which in exchange will take a cut of whatever Malaysia eventually pays. The two sides may end up settling for less than \$15bn. Subtract legal fees and chunky commissions, and that could still leave the heirs a large enough sum to make even the Sultan of Brunei sit up and take notice. ■



East Asian security

Return to form

SEOUL

America and South Korea restart their big military drills after five years

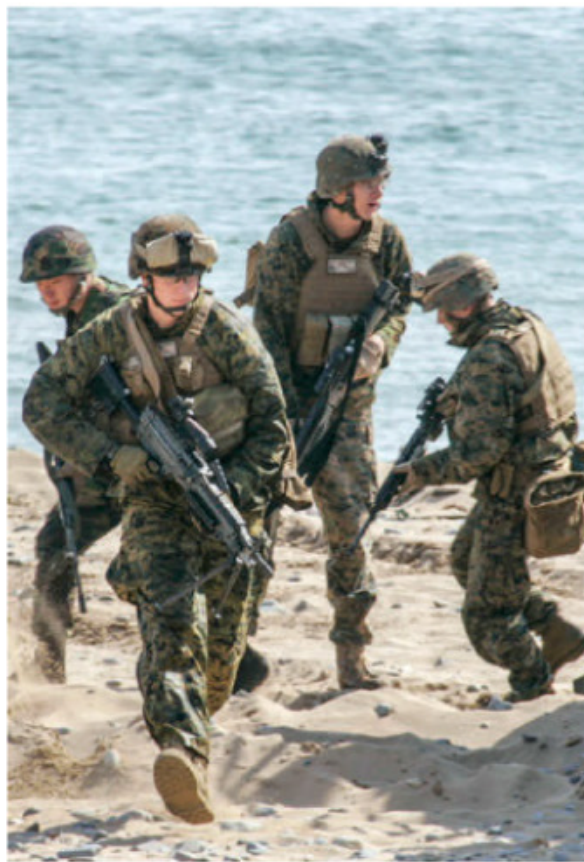
AFTER DONALD TRUMP met Kim Jong Un in Singapore in 2018, he appeared sympathetic to the North Korean position. Having secured from his counterpart a commitment to the “complete denuclearisation of the Korean peninsula”, and feeling well on the way to a “comprehensive and complete deal”, Mr Trump called for an end to joint military drills between America and South Korea, which started in the 1950s. Not only were they expensive, he claimed, but they were “very provocative”, echoing North Korea’s propagandists.

Reality set in when talks fell apart at their second meeting, in Hanoi the following year. Yet covid-19 and the lingering hope of rapprochement meant that joint exercises have been cancelled or scaled down ever since. Yoon Suk-yeol, who took over as South Korea’s president in May, has been keen to bring them back. On August 22nd the two armed forces will start their first full-scale drills since 2017.

Led by South Korean generals, tens of thousands of both countries’ troops will be put through their paces until the end of the month, rehearsing scenarios such as responding to the bombing of a nuclear power plant. Such exercises test officers’ decision-making skills and soldiers’ effectiveness in the field in case of an attack from the North. The aim is to drill forces until they know their missions instinctively, says Chun In-bum, a retired South Korean lieutenant-general who has been involved in over 50 joint exercises.

The exercises are also sorely needed, says Clint Work of the Stimson Centre, a think-tank in Washington. Conscripts come and go and officers change roles often, so regular training is necessary to ensure everyone knows their duties. Usually this turnover is staggered, ensuring some continuity. But the long gap since the previous exercises has sapped readiness. And North Korea has been developing new conventional weapons over that period. New threats require new training.

Beyond preparedness, the exercises serve several other purposes. The first is reassurance. North Korea conducted a flurry of missile tests earlier this year and is thought to be on the verge of another nuclear-weapons test. Joint drills show the South Korean public that their government is taking the threat seriously and that America remains engaged. That helps to assuage South Korean fears of abandon-



Warming up

ment, which feed calls for an indigenous nuclear-weapons programme, something America does not want. Moreover, drills test how ready the South Korean armed forces are to take the lead in military affairs on the peninsula, something the Americans have desired since the 1970s.

Exercises also act as a deterrent, warning North Korea against probing for weaknesses in the South’s armour. But deterrence always comes with risk: it is hard to convey military strength to a thin-skinned regime without antagonising it. On August 17th, as American and South Korean forces were conducting preliminary drills, North Korea test-fired two cruise missiles. General Chun points out that the allies maintained preparedness with small-scale exercises over the past few years without drawing attention to them.

There is also the risk of annoying China. The presence of America in what China sees as its backyard is already a sore point. Mr Yoon managed to sidestep Chinese ire by avoiding Nancy Pelosi, the speaker of America’s lower house, when she stopped in South Korea after visiting Taiwan in early August. But an old quarrel over an American missile-defence system deployed in South Korea has recently reignited. And South Korea not only participated in missile-defence drills with America and Japan this month, but also publicised that fact.

As far as America and South Korea are concerned, neither North Korea nor China has any right to grumble. The exercises are defensive and merely a return to the status quo. That does not mean that North Korea will not decry them as a dangerous provocation. Fiery words from north of the 38th parallel are as much part of the status quo as live-fire drills. ■

Japanese inflation

Tasty stick growth

TOKYO

Prices are rising, but not wages

UMAIBO HAS delighted Japanese people for decades. The cylindrical puffed-corn treat, whose name means “delicious stick”, comes in 15 flavours, from salami to spicy cod roe. The price makes all the more appealing: the same ten yen (\$0.08) since it hit the market in 1979. So when Yaokin Corporation, the firm which makes Umaibo, put up prices by two yen in January, it made national news. “We’re witnessing a turning point in history,” tweeted Osawa Atsushi, a musician whose rock band crooned about Umaibo’s “miracle price” in a hit song in 2010.

“It’s not just Umaibo, all of the prices have been going up!” cries Ohtani Fumihiro, the owner of a snack shop in Tokyo that sells the sticks alongside other cheap treats. Core consumer prices in Japan, which exclude fresh food, rose 2.2% year-on-year in June. Figures for July, to be released on August 19th, are expected to maintain the trend. The Bank of Japan (BOJ) now reckons prices will rise by 2.3% in the current fiscal year. That would be the first time prices outstrip the bank’s 2% target since it was introduced in 2013, excluding the impact of sales-tax hikes. The covid-19 pandemic and commodity shocks from the war in Ukraine seem to have done what years of loose monetary policy could not.

Inflation has been far more restrained in Japan than elsewhere in the rich world. (It has passed 9% in America and 10% in Britain.) As in other countries, it is being spurred by the rising cost of imports more than by runaway demand. “We have the bad kind of inflation,” says one Japanese CEO. “It’s not the product of a healthy economy.” Stripping out both fresh food and energy, prices rose just 1% in June compared with a year earlier. While other rich-world central banks have put up rates to tame inflation, the BOJ has kept them negative, wary of raising them before it is sure that demand is strong enough to push up prices.

Several factors have kept prices in Japan relatively grounded. First, the economy has not recovered as rapidly from the pandemic as in other countries. Consumers have remained cautious for far longer than elsewhere. Whereas America’s GDP regained its pre-pandemic size by the second quarter of 2021, Japan’s did so only in the second quarter of this year. Decades of low inflation or outright deflation have also left firms more reluctant to pass rising costs along to consumers. ▶▶

Crucially, wages have not grown alongside prices. During this year's *shunto*, the season of annual salary negotiations, big firms gave full-time employees rises of just 2.3%, barely more than last year's 1.8%, and well below the government's 3% target. In contrast to America and Britain, wage growth has not accelerated significantly, despite an unemployment rate of 2.6% in June. That is a big reason why the BOJ expects inflation to fall below 2% in 2023 and 2024, as commodity prices dip.

Nonetheless, many policymakers and economists reckon Japan still has a chance

to break free from decades of low or no inflation. Japanese are beginning to expect prices to go up. The BOJ's *Tankan* survey, which covers business conditions, shows inflation expectations above 2% not only in the short term, but also in three years' time. Growing input costs are starting to be reflected in retail prices across a wider range of goods. Data for June showed rising prices for over 70% of items in the consumer-price basket, the highest share on record. Optimists hope that if inflationary pressures persist until next spring's *shunto*, wages might also start growing.

Yet plenty of potential stumbling blocks remain. If America falls into recession, the yen would probably appreciate, creating fresh deflationary pressures. The government is already being pushed to alleviate the impact of rising prices. On August 15th, Kishida Fumio, Japan's prime minister, ordered officials to draw up new plans for fuel and food subsidies. And even when pandemic-induced caution fades, consumers who are unaccustomed to substantial inflation and are receiving minimal pay raises may hold back on spending, thus dampening demand. ■

Banyan Storm in a port

The rising prominence of the Indian Ocean worries the countries in it

ON AUGUST 15TH Ranil Wickremesinghe, Sri Lanka's president, travelled to the Katunayake air base near Colombo, the capital, to take delivery of a Dornier 228 maritime surveillance aircraft, a gift from India. The very next day, *Yuan Wang 5*, a Chinese surveillance ship, docked in the port of Hambantota, in the south, despite objections from India and America. Meanwhile, *PNS Taimur*, a Chinese-built Pakistani frigate, called at the port of Colombo on August 12th.

For Sri Lanka, it has been a tricky few days. Responding to allegations in the Indian press, its navy denied that it was conducting "war games" with the Pakistani boat. But the Chinese ship captured the imaginations of both Sri Lankans and Indians. Originally due to dock on August 11th, its arrival was "deferred" at the request of Sri Lanka under pressure from India, which fears the vessel can track its missile launches.

All of which would be delicate enough under normal circumstances. But Sri Lanka, which defaulted on its debt in May, is dependent on the goodwill of its creditors and its neighbours. China alone accounts for 10% of the country's \$32bn in foreign borrowing, and is usually reluctant to offer write-downs. India has been a stalwart ally over the past several months, providing some \$4bn in loans and aid to keep Sri Lanka afloat. Maintaining good relations with both countries is essential if Sri Lanka's debt is to be made sustainable. Hence the slightly awkward compromises regarding all the visiting vessels.

"We've so far kept out the power rivalry from the Indian Ocean," Mr Wickremesinghe said in an interview with *The Economist* the day before he went to accept India's gift. But it is becoming more difficult to maintain a balance, he

says, in light of the war in Ukraine and China's no-limits alliance with Russia. "I think we have to face up to that situation and work with everyone...Sri Lanka, of course, has a special relationship with India where we have to look after each other's interests. But most countries in the Indian Ocean want to stay out of the power rivalry. So we have to be clear about that and say what our policies are."

That is easier in theory than in practice, as the *Yuan Wang 5* saga shows. China was reportedly furious at the request to defer its arrival. It insists it is merely a "scientific research vessel" rather than the nefarious spy ship India claims it is. These are "very normal exchanges between two countries that enjoy a long friendship", the Chinese ambassador told reporters.

Such wrangling between Asia's giants is likely to become more common in the coming years. Ties have been strained ever since a Himalayan border clash between their forces in 2020, which killed 20 Indian soldiers and five Chinese ones. Tens of thousands of troops are massed on either side of their border. The relationship "is

not normal [and] it cannot be normal as the border situation is not normal", Subrahmanyam Jaishankar, India's external affairs minister, said recently. This month Indian officials refused to say what Chinese ones wanted to hear about Taiwan, stating only that "relevant policies are well known and consistent".

The tension has implications not just for South Asia but the Indian Ocean, too. Many island nations "recognise China's newfound interest in their regions as an opportunity," writes Darshana Baruah of the Carnegie Endowment, a think-tank in Washington. They also see, she adds, that Chinese attention has spurred a renewed focus from such countries as India and America. The Indian Ocean may become a stage for "strategic competition between major rival powers", Ahmed Khaleel, the Maldives' foreign minister, said last year at a forum organised by the think-tank. "But our hope is that the Indian Ocean will not witness a security dilemma in which activities by larger outside powers to enhance their own security interests create insecurity for others in the region," he said.

Mr Wickremesinghe, too, is concerned that the Indian Ocean will become the next venue for great-power tussles. "Nancy Pelosi on her own has created a crisis," he says, referring to a visit to Taiwan this month by the speaker of America's House of Representatives, which enraged China. "We don't want any of that happening here. We see India as the net security provider in the area. And then all other countries can also be present as long as it doesn't lead to rising tensions or increase the rivalry between states." That position is understandable. Yet the flip-flopping over *Yuan Wang 5*, which irritated both China and India, is a sign of how hard it will be to maintain.





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The economy

No way out

HONG KONG

China's economy is beset by problems. The zero-covid policy is just one

WHEN SHANGHAI lifted its two-month lockdown in June, it hoped to see citizens flocking back to the shops in relief. Instead it has witnessed people fleeing a store in alarm. On August 13th health authorities discovered that a close contact of a child infected with covid-19 had visited an IKEA outlet in the city. Under Shanghai's strict virus-control regulations, the store had to be immediately locked down, so that everyone inside could be whisked off to quarantine. But panicked shoppers rushed for the exits, pushing past guards.

Similar perils face anyone in China bold enough to take a holiday. As many as 150,000 tourists have been stranded on the resort island of Hainan, where a covid outbreak has infected over 13,000 people this month. Those hoping to leave have faced onerous testing requirements (pictured) and widespread flight cancellations. Videos circulating online show families sleeping on the floor of an airport.

China's zero-covid policy has left its economy equally trapped. The impact is both direct and indirect, hampering both supply and sentiment.

The most profound effects are not always the most obvious. Hainan, for example, accounts for only 5% of China's tourism revenues, according to Tao Chuan and Shao Xiang of Soochow Securities, a broker. Tourism as a whole accounts for only 4% of China's GDP. Lockdowns elsewhere in the country have been relatively short in recent weeks. Despite great alarm about disrupted global supply chains, China's exports have continued to grow strongly. On a visit to a port in the export hub of Shenzhen, Li Keqiang, the prime minister, likened the country's reforms and the port's achievements to an irreversible river.

Given the drought now afflicting six of China's provinces, it was perhaps an unfortunate metaphor. But Mr Li's pep talk was at least tacit acknowledgment of the damage China's covid-crushing measures have done to morale. For every trapped shopper or tourist, there are thousands of others who will not shop, travel or spend to avoid a similar fate. Consumer confidence in the second quarter was the lowest on record. As a result, China's consumption has lagged behind industry and exports (see

chart on next page). Retail sales in July were only 2.7% higher than a year ago. When adjusted for inflation, they shrank.

Sales of furniture have been particularly weak—and not just because people dare not enter IKEA. Buying furniture is closely tied to home purchases, which have plunged. Sales of residential property fell by over 28% in July, compared with a year earlier. Weak sales have in turn put downward pressure on prices.

To cap it all, people who buy a flat in advance can no longer be sure it will actually be built. Many distressed developers lack the cash required to complete construction and can no longer find anyone to lend it to them. That has contributed to long delays in finishing pre-sold properties, prompting a growing number of buyers to threaten to stop repaying their mortgages.

The accumulation of bad economic data has finally prompted the central bank to act. It reduced two interest rates by 0.1 percentage points on August 15th, bucking the global trend towards tighter monetary policy. But these cuts may not be effective, because demand for loans is so weak. Since April China's money supply (broadly measured) has been growing faster than its broad stock of credit. This has not happened since 2015, according to Jiang Peishan and Sun Liping of Haitong Securities, another broker. It suggests an eagerness to hoard money rather than borrow it. "Funds are idling," they argue. That raises fears of a liquidity trap, whereby monetary policy becomes ineffective in reviving growth. ▶▶

► If monetary policy is losing its bite, the onus falls more firmly on fiscal policy to rescue China's economy. Investment in infrastructure is already growing quickly. But the central government has yet to step in decisively to revive the property market. It has told China Bond Issuance, a state-owned credit insurer, to underwrite bond sales by a handful of private property developers, including a unit of Longfor Group. There is also talk of a 300bn-yuan (\$44bn) rescue fund. But so far the central government has been largely content to let cash-strapped local governments cobble together rescue plans on their own.

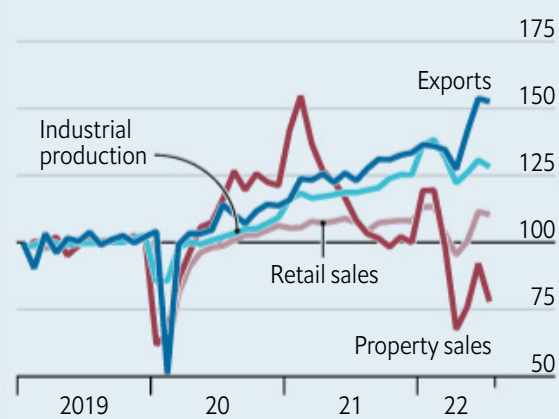
What explains its diffidence? The cost of finishing stalled projects is large but calculable. Andrew Batson of Gavekal Dragonomics, a research firm, has put it in the range of 2trn-4.8trn yuan, or 1.8-4.2% of last year's GDP. A full restoration of confidence might, however, require something closer to a "blanket guarantee" that all pre-sold properties would be built, says Houze Song of Macropolo, a think-tank. That would be an "open-ended commitment", which could come at an "exorbitant cost".

Such a guarantee could also skew incentives. Mr Song compares it with deposit insurance. One difference is that deposit insurance discourages bank runs, thereby reducing the risk it insures. A backstop for pre-sales, by contrast, might have the opposite effect. It could make it more likely that property developers will run into trouble, especially if it allowed reckless operators to pre-sell flats more easily.

The commitment to zero-covid and to ending China's housing excesses comes from the top. Both goals have been repeatedly emphasised by Xi Jinping, China's leader, whose personal philosophy, Xi Jinping Thought, looms over everything. But as he prepares to secure a third term at a Communist Party congress later this year, those iron commitments have left the economy in a jam. The economic setting for the congress is not what Xi Jinping thought it would be. Nor is it anything Xi Jinping Thought appears able to solve. ■

New development pattern

China, 2019 average=100*



Sources: Gavekal Dragonomics; Haver Analytics; *The Economist*

*Nominal terms

Pollution

Airing grievances

HULUDAO

The creative ways Chinese activists protest against pollution

PUBLIC PAYPHONES don't usually ring. So when one started buzzing in Beijing recently, people picked it up. On the other end of the line were residents of Huludao, some 400km away. All had the same story. The city's factories were polluting the air. Some nights it smelled of chocolate; other nights, of chemicals. Most people kept their windows shut, yet they still struggled to breathe. The government refused to act, said residents. So some started calling the payphone.

The effort is one of several creative ways in which activists and artists are raising awareness of China's pollution problems. An artist known as Nut Brother has played a role in many of the projects, including the hotline between Huludao and Beijing. Last year he filled a dirty canal with toy fish and peppers in the city of Zibo, turning the waterway into a "hot pot" (pictured). Lately he has led concerts by musicians dressed in hazmat suits and gas masks. They sing about air, soil and water pollution.

In 2015 Nut Brother walked around Beijing with a large vacuum cleaner and acted as if he was cleaning the city's smog-filled air. This coincided with much media coverage of the problem. It helped that Beijing is China's capital and thus home to its chief decision-makers, who also had to breathe the air. The local authorities were already in the process of compelling heavy industries and coal-fired power stations to reduce emissions. Over the past decade, pollution levels in the city have dropped.

Activists face a harder task in cities like Huludao, in China's north-eastern rustbelt. Its population is shrinking and greying. Poorer cities cannot afford to pick and choose projects, so dirtier industries are moving north from the more developed south, says Wu Fengshi of the University of New South Wales in Australia. Officials in Huludao have struggled to keep the economy on track, let alone deal with pollution. A study in 2020 found worrying levels of heavy metals in residents' hair. One of its districts is known for its high cancer rates.

China's regulators have asked the public to be on the lookout for polluting businesses. President Xi Jinping often talks about the value of blue skies and clean rivers. But the government does not like it when its failures are exposed. Environmental protests, once somewhat common in China, are now rare. Since



Soup to Nut

2012 the authorities have cracked down on environmental NGOs and activists. They did not appreciate the Huludao-to-Beijing hotline.

When your correspondent visited the payphone in Beijing last month, a car with a Huludao police sticker was parked nearby. Anyone who picked up the phone was filmed by unidentified men, then moved along by police from Beijing, who noted down their names. The official reason given by the police, one they often use, was that those answering calls risked spreading covid-19. The phone continued ringing. Eventually, the handset was taken off the hook.

A few days later a woman from Huludao, who had been bold enough to give interviews to reporters about the pollution, retracted her comments. In a video posted on social media, she apologised for lying and "stirring up" the issue. "Actually Huludao is great," she said.

Still, the hotline had an effect. Stories describing the "most magical payphone in Beijing" were shared widely on social media. The press reported on Huludao's strange smells. As pressure mounted, the local government said it was investigating several companies and suspending production in some factories. In recent days the city's air has improved.

But residents doubt that the factories will remain closed for long. After past pauses, they started producing more at night, when pollution is less visible, say residents. "The earth is no good here, the air is no good here," says one. "The government won't bother to fix it."

Mao-loving websites

Seeing red

In the grey zone between propaganda and dissent

RED SONG SOCIETY is redder than red. For more than a decade the privately run website and its social-media accounts have been pumping out articles that praise Mao Zedong and Marxism more enthusiastically than most Communist Party officials do. It sees no fault with the late dictator; it attacks capitalism—and its growth in China—with a vengeance. “Sing red songs; promote righteous ways” is its motto, handwritten at the top of the home page.

The website is one of several in China that are run by neo-Maoists. Their essays portray life in Mao’s day as fairer—a time when the state provided urban workers with free housing, education and health care. They are usually careful not to criticise today’s party, but sometimes their misgivings are palpable. Recent legal complaints against Red Song Society, made by a party-controlled media company, have been stirring them.

Neo-Maoist websites, as well as others run by nationalists of a less ideological hue, often serve a useful purpose for the party. They can amplify its message, especially its criticisms of the West. The neo-Maoist ones also show that the party’s founding beliefs still enjoy support (although Red Song Society’s account on Weibo, a Twitter-like service, has fewer followers than that of the us embassy’s visa section). Among officials, the flare-up of neo-Maoist discontent will not be welcome.

The furore erupted in July when Red Song Society published what it described as a lawyer’s letter from a subsidiary of Hubei Daily Media Group, the biggest media

company in Hubei province. The firm is based in Wuhan, the provincial capital, nearly 900km north of Shenzhen, where the website is registered. The letter accused Red Song Society of republishing news reports from the group’s outlets without permission. It asked for their deletion and compensatory payment that the website says could force it to close. On August 12th another letter, this time from the group’s lawyers, accused Red Song Society of libellous attacks against Hubei Daily Media. The website published this too, with an indignant response.

Comments and articles in neo-Maoist forums have echoed the website’s view that the party’s media should be grateful that others recycle their news—surely, they argue, that is the point of propaganda. But independent websites and social-media accounts, even those that champion party rule, operate in tricky territory. They cannot republish news unless produced by media on a government “white list” (Hubei Daily Media’s outlets are on it). Even those media can be prickly. Shortly before its latest difficulties, Red Song Society said it had persuaded another large provincial newspaper to drop a similar copyright case.

The neo-Maoists know well that the government watches them warily. In 2012 several of their favourite forums were temporarily closed, apparently because of their support for Bo Xilai, a red-song-loving rival to China’s then leader-in-waiting, Xi Jinping. Mr Bo was arrested that year and jailed for abuse of power. Neo-Maoist websites now avoid mentioning him.

But Red Song Society has invited followers to join groups on WeChat, a messaging service, to discuss its dispute with Hubei Daily Media. Some comment on other matters, too, such as whether the party responded forcefully enough to the recent visit to Taiwan by Nancy Pelosi, the speaker of America’s House of Representatives. Others, nervously, advise participants to steer clear of sensitive topics. ■

Semiconductors

Big Fund, big problems

BEIJING

China’s chips push is mired in corruption allegations

CHINA’S HABIT of pouring cash into strategic industries creates opportunities for corruption. Just look at the microchip business. The “Big Fund” was created in 2014 to spur self-reliance in chipmaking. Backed by state investors, it has raised 343bn yuan (\$50bn). But several of the fund’s executives are suspected of corruption, including its head, Ding Wenwu.

The investigation may be motivated by more than just concern over graft. Chips are used in everything from mobile phones to missiles, which is why China’s leaders don’t want to rely on other countries to make them. But the progress of China’s chip industry has not met expectations. Self-reliance may be decades away, if it is achievable at all.

China still imports a large share of its chips. It also depends on other countries for the equipment needed to make them. America refuses to sell Chinese chipmakers tools or to provide its companies with advanced semiconductors. On August 9th President Joe Biden signed a law that offers \$52bn in subsidies and incentives to America’s chip industry. It was designed, in part, to counter China’s efforts.

China’s chip industry ran into trouble from the start. One of its first “home-grown” chips, unveiled in 2003, was exposed as American. The promise of state aid has caused the industry to expand, perhaps too quickly. Some 22,000 new chip companies registered in China in 2020. That year a firm in Hubei province folded after accepting millions of yuan in local subsidies. Last year cash-strapped Tsinghua Unigroup, a big state-backed manufacturer, was forced to restructure. Its former head is thought to be under investigation.

China’s expectations were unrealistic. It started making chips long after America, South Korea and Taiwan, which lead the world. Still, China now produces a hefty share of the world’s less advanced chips. And its largest chipmaker, Semiconductor Manufacturing International Corp, is said to have produced a chip that is considered advanced, if not cutting-edge.

Some argue that the Big Fund’s main goal, of attracting private investment, has been accomplished. Attracting talent is now the biggest hurdle, says Wang Xiaolong of icwise, a consultancy. Leaders in Beijing may not be so forgiving. The state’s money is not producing the expected results. Someone must be blamed. ■





Kenya's new president

Enter the strongman

NAIROBI

William Ruto, the likely new president, stirs hope and alarm in equal measure

IT HAD ALL gone so well. For days, ballots cast in Kenya's presidential election had been meticulously and transparently counted. But just as Kenyans were hoping to consign their murky electoral history to the past, all hell broke loose. Sensing that their man was about to lose, allies of Raila Odinga, the outgoing government's favoured candidate, rushed the stage as the electoral commission's chairman, Wafula Chebukati, prepared to declare William Ruto, the anti-establishment candidate, the winner. Throwing punches, they hurled the podium into the auditorium. Mr Chebukati fled, as did assembled Western ambassadors. A choir, supposedly symbolising national harmony, sang bravely on.

When Mr Chebukati returned under police protection he was alone. Of his six fellow commissioners, two were receiving medical attention, while four others had gone off in a huff after finding fault with the final tallying process. He duly an-

nounced that Mr Ruto had secured 50.5% of the vote, just enough to avoid a run-off. Mr Odinga, with 48.8%, was defeated for the fourth time in a row.

The declaration will not, however, be the end of the affair. Mr Ruto may be president-elect, but Mr Odinga has signalled that he will challenge the result in the Supreme Court. The split in the electoral commission will feature heavily in his petition. Yet the dissenting commissioners gave little substance to their grievances.

Among their main objections was the claim that the number of votes declared by Mr Chebukati added up to 100.01%. This

amounted to 142,000 unaccounted ballots of the 14.2m cast, potentially enough to prompt a run-off, they insisted. As Kenyans quickly noticed, however, Mr Chebukati had merely rounded the results to two decimal places. Besides, 0.01% of 14.2m is 1,420—not 142,000. Mr Odinga will need more than four innumerate commissioners to convince the judges.

Kenya's judiciary has a reputation for independence. The Supreme Court upheld Mr Odinga's petition against the previous election in 2017 and ordered it to be held again; Mr Odinga boycotted the rerun. This time, despite the messy finale, electoral officials appear neither to have bungled the count nor winked at rigging. Electronic results from 46,000-plus polling stations were uploaded for all to see and scrutinise within hours of the polls closing on August 9th. So Mr Odinga faces an uphill battle to prove something was amiss. Mr Ruto seems untroubled.

The transparency of the count, coupled with faith in the judiciary, has so far limited unrest to a handful of protests in Mr Odinga's strongholds. Political apathy may also be helping to douse passions. Mr Odinga has spent most of his working life as an opposition firebrand. This time he ran as the establishment's candidate after making up with Uhuru Kenyatta, the outgoing president, who vigorously endorsed ▶▶

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him (and appointed the dissenting commissioners). With his reformist image tarnished by this co-option, Mr Odinga, who is 77, may find it harder to raise the street. Even some of his own Luo people whisper that he has had his day.

Provided that the last-minute row within the electoral commission does not lead to mayhem, Kenya should still be able to burnish its claim to be one of Africa's best-functioning democracies. Mr Kenyatta is the third president in a row to respect constitutional term limits, making him a rarity on the continent. None of Kenya's neighbours can match its history of holding truly competitive elections. Only one outgoing Kenyan president has managed to get his favoured successor to replace him. So it is an irony that the man who could pose the greatest threat to this progress is Kenya's new president.

Mr Ruto, presuming he is confirmed in power, may prove a capable leader. He is a formidable, hard-working, eloquent politician with a prodigious ability to organise and inspire. But he also has the whiff of the strongman about him. "He will make the trains run on time, both in the good sense and the bad," says a seasoned analyst.

His past inspires little confidence. A disputed election in 2007 unleashed the worst political violence since independence. Mr Ruto, who had positioned himself as the kingpin of the Kalenjin tribal federation, was charged by the International Criminal Court (ICC) at The Hague with helping to instigate violent clashes that killed more than 1,300 people. The court later suspended the case but, noting allegations that witnesses had been intimidated, pointedly declined to acquit Mr Ruto. He has also been dogged by allegations of corruption ever since taking high office, first as a cabinet minister and then, from 2013, as deputy president to Mr Kenyatta. Mr Ruto denies everything.

His past aside, much about Mr Ruto echoes the tones of populist strongmen elsewhere. Like India's Narendra Modi, who once sold tea for a living, he makes much of how he used to flog chicken to lorry drivers to make ends meet. Like Brazil's Jair Bolsonaro, he has forged a coalition that combines liberal economists with thuggish types. His running mate has been charged with corruption; three political allies are being investigated on murder charges. Yet he has charmed some Western diplomats, politicians and journalists.

By presenting himself as the voice of the poor, he has at least partially transcended ethnicity to become the first leading Kenyan politician to win support based more on class than tribe. Mr Kenyatta, who hails from the grandest family of the country's biggest ethnic group, the Kikuyu, stridently backed Mr Odinga. Yet most Kikuyus plainly plumped for Mr Ruto.

Mr Ruto played energetically to the gallery. Dynasts like Mr Kenyatta, with whom he fell out, and Mr Odinga, sons of Kenya's first president and vice-president respectively, were responsible for Kenya's inequality and corruption, he declared. Who better to take them on than someone who had once been a poor nobody himself?

But Mr Ruto's political outlook is changeable, to say the least. Just as he has promised to drain the political and dynastic swamp which he has cheerfully inhabited for the past 30 years, he also pledges to defend Kenya's progressive constitution of 2010, despite having led the campaign against its adoption. Poor Kenyans are unused to someone who speaks so clearly for them. That Mr Ruto is vastly rich only adds to his appeal as a self-made man. If he has a ruthless streak, many think, so much the better. "Kenya needs a strong leader," said Njoki Maina, a Kikuyu kiosk operator, after casting her ballot for Mr Ruto.

Why nerves are jangling

Senior Kenyan journalists say that some of the most disturbing pressure they have experienced in the past ten years has come from Mr Ruto's office. Seeing that his coalition will hold the largest number of seats in both houses of parliament, Kenya's civil society is already crossing its fingers that the new president accepts constitutional restraints. It will be essential that the opposition hold him to account with unabated zeal. Mr Odinga once filled that role. But his famous reconciliation with Mr Kenyatta in 2018 took the sting out of Kenya's opposition. Human-rights campaigners and journalists will have to rediscover their voices to protect the constitution, should it come under attack.

Mr Ruto will anyway face big challenges. The poor will have high expectations. He promises to end the profligacy of the Kenyatta years by eschewing expensive vanity projects funded by China. Instead he says he will lend to poor farmers and small businesses. As food prices soar and a debt crisis looms, he may find this hard.

To divert attention he may go after the vastly rich Kenyatta family. Under Mr Kenyatta Kenya's public debt nearly quintupled. Should Kenya default, the ex-president would make an easy scapegoat. On balance Mr Ruto is likely to stay his hand, since seeking to have his predecessor punished would set a dangerous precedent.

But whatever the difficulties ahead, Mr Ruto's victory suggests the era of the tribal kingpins who have dominated Kenyan politics for the past three decades may be passing into history. Mr Odinga is unlikely to contest the next election. Mr Kenyatta did not try to groom a Kikuyu heir. The election rows and economic headaches may look worryingly familiar, but Kenyan politics may be changing for the better. ■

Angola's election

Dead but not forgotten

JOHANNESBURG

The ghost of José Eduardo dos Santos haunts Angola's coming poll

HOW MUCH is a dead dictator worth? Quite a lot, judging by the squabble over the corpse of José Eduardo dos Santos, the kleptocratic ruler of Angola from 1979 to 2017, who died in a hospital in Barcelona on July 8th. João Lourenço, current president of the southern African country, wants to bring his predecessor's body home for a state funeral ahead of a general election on August 24th. He hopes that a grand ceremony would unite supporters of the ruling People's Movement for the Liberation of Angola (MPLA).

But Mr dos Santos's children have other ideas. They say it is a matter for the family; one daughter, Welwitschia dos Santos, popularly known as Tchizé, insists that the burial should be in Spain. She denies that the family is using the body as a bargaining chip to seek amnesty for the various corruption charges faced by its members.

However unseemly, the saga reveals much about Mr Lourenço's presidency. When he took office in 2017 the former defence minister pledged to root out alleged corruption centred on the dos Santos clan. He said he would diversify the economy. But the campaign against graft has stalled and the economy still depends on oil.

Opening the MPLA's election campaign almost five years later, he called on Angolans to "honour the memory" of his predecessor, who led the country during a long civil war, by voting for the ruling party. The rhetoric hints at how Mr Lourenço's popularity has waned since his heady early ▶▶



The president's bully pulpit

► days—and how the MPLA faces its strongest electoral challenge since it took power after independence from Portugal in 1975.

The president has been dealt a poor hand. Oil accounts for about half of Angola's GDP and nearly all its exports. The low price of crude for most of his tenure meant prolonged recessions, a bail-out from the IMF and a negotiated delay of debt repayments to China. The pandemic exacerbated the economic pain and complicated the government's efforts to curb wasteful public spending. The recent rise in the oil price has been welcome, but will be mostly channelled into a pre-election spending binge. Though a stronger local currency has helped ease inflation this year, Angola's prices are still more than 20% higher than they were a year ago.

Such economic difficulties have helped opposition parties, most notably the National Union for the Total Independence of Angola (UNITA), the MPLA's old opponent in the civil war. Under the leadership of Adalberto Costa Júnior, the party is attracting large crowds, especially in the urban areas that account for 65% of the country's population. A survey published in May by Afrobarometer, a pan-African pollster, suggested that support for the MPLA had dipped from 38% in 2019 to 29% earlier this year, while backing for UNITA had risen from 13% to 22%. (Some 31% refused to say whom they would support, while the rest did not know or said they would not vote.)

An upset is unlikely, however. Like ruling parties across the continent, the MPLA uses the power of the state to tilt the playing field. Another Afrobarometer survey this year found that only 21% of Angolans said they trusted the national electoral commission, down from 27% three years ago, making it the least trusted of all the country's institutions, a notch below the dreaded tax authorities. Nearly half of Angolans questioned by the same company two years ago said that they "felt unfree to speak their minds".

The constitutional court, which is packed with pliant judges, has hounded UNITA, forcing it to redo its internal elections and preventing it from forming an opposition coalition. Last year the rubber-stamp parliament changed the electoral law to centralise vote-counting, a move that opposition parties say is designed to make rigging easier. The powerful security apparatus around the president suppresses protests quickly and violently.

All this shows how little has changed under Mr Lourenço. Angola remains under the thumb of the MPLA, a paranoid party dominated by securocrats, spouting revolutionary rhetoric while gorging on the fruits of crony capitalism. Even if Mr dos Santos's body is not buried in Angola, his spirit will still haunt the country as it goes to the polls. ■



Arab central banks

Follow the Fed

DUBAI

Arab central banks tag along with America's, not always happily

OVERSEEING MONETARY policy in the Middle East these days, jokes a banker, is like taking your kids on a rollercoaster. You would rather be watching from the ground, but there you are, strapped in, trundling up a hill and waiting fearfully for the drop on the other side.

America's Federal Reserve has raised interest rates four times this year, most recently on July 27th, when it increased its benchmark rate by three-quarters of a percentage point. That has compelled many Arab central banks to do the same—even if they would rather not. Some countries worry that higher borrowing costs will act as an unnecessary drag on economies that are not overheating. Others fear that, to maintain capital inflows, they will need to push rates painfully high, hobbling their economies and squeezing budgets.

To one side are the six members of the Gulf Co-operation Council (GCC), a club of oil-producing monarchies. Five of them peg their currencies to the greenback. This helps provide stability, given that most government income and economic activity is tied to the price of oil, which is typically traded in dollars. But to maintain the pegs, they must usually follow the Fed's interest-rate decisions, irrespective of local economic conditions.

Since the start of the year Saudi Arabia has raised its main rate from 1% to 3%. The United Arab Emirates (UAE) has more than doubled its lending rate to 3.75%. If the Fed raises rates again later this year, as expected, most Gulf states will go along, at least

partially matching America's moves.

They will do so despite modest inflation, which the IMF projects will reach just 2.5% in Saudi Arabia and 3.7% in the UAE this year. Energy subsidies and cheap migrant labour are holding down prices relative to other rich countries. Annual economic growth (excluding the volatile oil industry) is a healthy 3-4%.

The impact of higher rates may be muted. Flush with cash from an oil boom, governments will not need to borrow much this year. Consumers may put off buying new cars and other expensive items, but the property market should be less affected. Mortgages are less common in the GCC than in other parts of the world. Brokers have seen a flood of new applications for loans in the first half of 2022, as borrowers rush to lock in rates before they rise more.

Businesses may feel the biggest pinch. The UAE's central bank says demand for credit in the first quarter of 2022 was the highest since 2014. It has already begun to drop. Credit growth has dipped slightly in Saudi Arabia, too, to its lowest level in almost two years, says Emirates NBD, a bank.

But the region's oil importers will suffer much more—Egypt in particular. It had not raised rates since 2017 but has done so twice since March, including a monster jump in May of two percentage points. The central bank had reason to be resolute: annual inflation is running above 13%.

Fighting inflation is not its only concern, however. Since it reached a deal worth \$12bn with the IMF in 2016, Egypt has relied on inflows of private capital to finance its hefty imports and government deficit. Investors were happy to oblige. Egyptian debt offered some of the world's best yields, at a time when returns elsewhere were minuscule.

As rates climb elsewhere, though, Egypt faces more competition. It admitted in May that \$20bn (5% of GDP) in foreign capital had flowed out of the local debt market this year. Fitch, a rating agency, thinks the government will "feel pressure to preserve the attractiveness of Egypt's real interest rates"—by raising them.

This will be painful for the already anaemic private sector. The purchasing-managers index, a measure of business activity, has shown a contraction in all but nine of the past 72 months. Local investors have parked their money in banks rather than channel it into businesses.

Egypt's bill for debt service has quadrupled in the past decade. Next year's budget assumes \$36bn in payments to creditors (45% of total revenue) and a deficit of \$30bn. It will have to borrow at higher rates, swelling the interest bill even further. The government is back in talks with the IMF about another bail-out. The Gulf states may get off the rollercoaster next year. Egypt faces a longer, wobblier ride. ■

Demography in the Holy Land

Go forth and multiply

TEL AVIV

Birth rates are converging between Jews and Muslims in Israel

IF AN ISRAELI woman has fewer than three children, she feels as if she owes everyone an explanation—or an apology.” That, at any rate, is the view of a leading Israeli demographer. When she visits London she is struck by its dearth of toy shops. Israelis have many more children than their counterparts elsewhere in the rich world. Whereas the average Israeli woman has 2.9, her British and French peers have 1.6 and 1.8 respectively.

Demography in the Holy Land has geopolitical as well as economic consequences. Of Israel’s population of 9.5m, Israeli Arabs, mostly Muslim, make up about 21% of the total, while Jews account for roughly 74%. But include people in the Israeli-occupied West Bank and Gaza, and the Jewish majority falls to barely half.

This, in a nutshell, is the basis of Israel’s trilemma. It cannot have at the same time a strong Jewish majority, all the land it conquered in 1967 and full democracy that does not discriminate against Arabs. So numbers matter. Israeli and Palestinian leaders have long scrutinised birth rates.

Yasser Arafat, who led the Palestinians for three-and-a-half decades, described “the womb of the Arab woman” as his “strongest weapon”. Demographic projections used to suggest that Arabs living between the Jordan river and the Mediterranean would eventually outnumber Jews. This certainly worried Binyamin Netanyahu before he became Israel’s longest-serving prime minister. In 2003 he lamented that the birth rate of Israeli Arabs, then much higher, was imperilling Israel’s Jewishness, irrespective of the trend in the West Bank and Gaza.

At the time there was indeed a wide demographic gap. In Israel itself Arab women were having almost twice as many babies on average as Jewish women. But in the past few decades this gap has disappeared, as the birth rate of Israeli Arabs has fallen while that of Israeli Jews has risen.

In 1960 the fertility rate of Israeli Arabs stood at 9.3. In the next 35 years it dropped by almost half, to 4.7, before sliding to 3.0 today (see chart). The birth rate of Palestinians in Gaza and the West Bank also declined, from 4.6 in 2003 to 3.8 in 2019. In this Palestinians and Israeli Arabs have followed a path trodden by women elsewhere. Across the OECD, a club mostly of rich countries, the average fertility rate has fallen from almost three in 1970 to 1.6, well

below the rate of about 2.1 needed to keep a population from shrinking.

Globally Muslims have the highest fertility rate of any religious group, according to the Pew Research Centre. Yet even this rate has fallen sharply, from 4.3 in 1995 to 2.9 in 2015. Seven Arab countries were among the 12 recording the world’s biggest drops in fertility between the late 1970s and mid-2000s. In Iran, whose religious leaders have long called on women to have more babies, the birth rate has fallen from 7.0 in 1984 to 1.7.

This makes the rising birth rate of Jewish Israelis all the more surprising. Between 1960 and 1990 their fertility declined from 3.4 to 2.6, suggesting they were in step with their sisters elsewhere. But then they began to buck the trend, driving the birth rate back up to its current level of 3.1.

Prayers v productivity

Almost all this increase is caused by Israel’s growing number of ultra-Orthodox (or Haredi) Jews, who have a fertility rate of 6.6, more than double the national average and three times the rate of secular Jews. As a result the share of Haredim in Israel’s population has more or less doubled every generation, notes Dan Ben-David, an economist at Tel Aviv University and the Shores Institute, a think-tank. Though Haredim are just 13% of the population, their offspring make up 19% of Israeli children under the age of 14, and 24% of those under the age of four. Israel’s statistical agency reckons that under present trends half of Israeli children will be Haredi by 2065.

Such fruitfulness may please rabbis and Jewish nationalists. But it is also changing

the character of Israel and threatening its economy, argues Mr Ben-David. Most ultra-Orthodox Jews send their boys to study Torah in religious schools rather than make them learn subjects, such as maths and science, needed for a job in Israel’s high-tech economy. Less than half of Haredi men enter the workforce: most keep studying ancient texts in adulthood. They are often financially supported by their wives and subsidised by the state.

There are several reasons why the birth rate among Haredim has remained so high. Many want big families to make up for the millions of Jews killed in the Holocaust, or believe they are serving God by multiplying. “I didn’t do any [family] planning,” says Yerach Toker, who has six children. “A lot of things are in God’s hands, and this is one of them.”

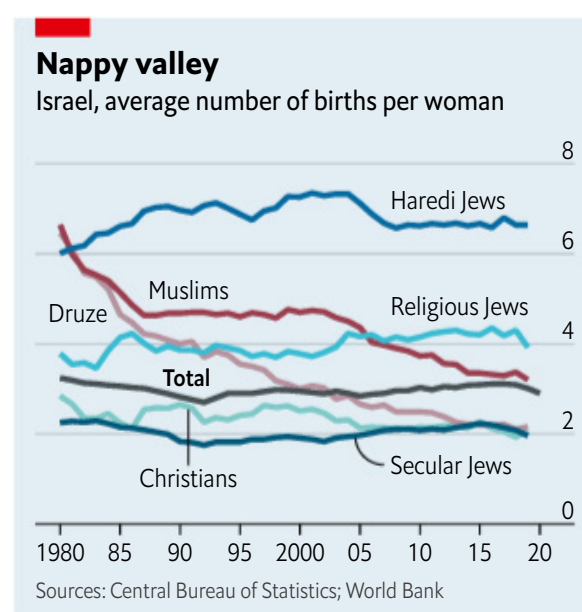
Haredi women also tend to marry and have children at a younger age than secular Jews. And because ultra-Orthodox communities have tried hard to close themselves off from outside influences such as television and the internet, they may be somewhat insulated from the forces pushing down fertility in the rest of the world.

But it is harder to explain why secular Jewish Israelis also have more children than the norm. Most work; paid leave for Israeli parents is not especially generous. Nor is child care cheaper than in other rich places. Some argue that Jewish Israelis make more babies because they foresee a rosier future: Israel ranks among the world’s top ten countries in happiness.

Another reason may be that the state encourages baby-making by, for instance, bankrolling fertility treatment. It subsidises in-vitro fertilisation to the tune of \$150m a year. Tiny Israel has about the same number of frozen embryos as America. This may have only a slight effect on Israel’s birth rate, but it signals that the government wants its citizens to procreate.

One more explanation may be that Israeli grandparents tend to help out more than their peers in many other rich countries. Since Israel is small and densely populated, grandma is never far away. In one survey 83% of secular Jewish mothers aged 25-39 said they were supported by their child’s grandparents, whereas only 30% of German mothers said the same. In Israel the traditional family structure is still strong. In France and Britain more than half of babies are born out of wedlock. In Israel it is under 10%.

The convergence of birth rates between Israeli Jews and Arabs suggests demography will be far less important than either Israeli doom-mongers feared or Palestinian nationalists once hoped. Since neither community is likely to swamp the other with babies, both will still have to work out how to live together peacefully in their disputed slice of the Middle East. ■





Kherson

Stick or twist?

KRYVYI RIH

Ukraine needs to show progress on the battlefield. But its army may not be ready

THE GREAT wars of the 20th century pivoted on counter-offensives: the Allied landings at Normandy; Douglas MacArthur's surprise attack on Inchon in the Korean war; Norman Schwarzkopf's "left hook" to cut off Iraqi forces in Kuwait. Now Ukraine, with a fifth of its territory in Russian hands, hopes to join that list. But a much-vaunted operation in southern Kherson province seems to have been overhyped. That may be intentional.

For months Ukrainian officials have hinted that an attack in the south is imminent. In late July, American-supplied HIMARS rocket launchers began destroying bridges to Kherson city to isolate the Russian forces west of the Dnieper river. On August 9th, a spectacular attack on Russia's Saky air base in Crimea, beyond the range of Ukraine's known weapons, was depicted by Ukrainian officials as the start of that offensive. Kherson would be liberated by the end of the year, boasted Dmytro Marchenko, a Ukrainian general.

The lofty expectations will be hard to meet. HIMARS attacks have softened Rus-

sian defences, including by stopping artillery reaching the front lines. On August 13th Ukraine said it had destroyed a bridge over the Nova Kakhovka dam, tightening the noose around Kherson. But only infantry can seize territory. Conventional wisdom holds that attacking forces need three times as many troops as there are defenders to capture a well-defended position, and more in urban areas. If Ukraine ever had such an advantage, it no longer does.

In recent weeks Russia, anticipating a southern offensive, has withdrawn forces from Izyum on the eastern front and reinforced Kherson and its environs. Konrad

Muzyka of Rochan Consulting, a firm which tracks the war, thinks there were 13 Russian battalion tactical groups (BTGs) in the province in late July (a BTG usually has several hundred troops). Now there may be 25 to 30. "We believe that this window of opportunity has passed," says Mr Muzyka. "Ukrainians do not possess enough manpower to match Russian numbers."

Though Ukraine does have a large pool of troops, most are conscripts with scant training. The most demanding fighting has been done by five brigades of Ukraine's most skilled soldiers, notes Jack Watling of the Royal United Services Institute. These units have taken heavy casualties. Training new brigades and equipping them for an offensive will take time.

Attacking usually requires more ammunition than defending. Attacking forces tend to take more casualties. "Since 1992, in our field exercises, we did not study offensive actions," lamented Sergiy Grab-skyi, a reserve colonel in Ukraine's army, speaking on the "Geopolitics Decanted" podcast on August 3rd. "After eight years of war, Ukrainian forces are brilliant in defensive actions, but they have very limited or almost zero experience of conducting large-scale offensive actions."

Russia's army has had time to prepare. For months they have been digging trenches in Kherson. They may already have artillery trained on the roads that Ukraine would use to advance. "If the Ukrainian assault looks like Russia's attack on Severo-▶▶

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► donetsk, it's probably a dead end," says Chris Dougherty, a former Pentagon planner, referring to a city that Russia captured in June using crude tactics. "It will cost Ukraine dearly in scarce manpower and materiel, and would likely be the last major Ukrainian operation of 2022."

Mr Dougherty says Ukraine should take an indirect approach: isolating Kherson city. Using irregular forces and artillery to choke off Russian supply lines would "wither Russia's defence". A drumbeat of partisan attacks, as well as strikes on Russian depots and command posts—another ammunition dump in Crimea blew up on August 16th—suggests that this may be Ukraine's true strategy. Some Ukrainian officials say they are content to wait, while steadily wearing down Russian forces with such attacks. "We want to avoid street warfare, because we don't want to destroy the city," says Major Roman Kovalyov, based north-east of Kherson province. "We want to surround them and force them to withdraw. We want to wring them out."

But encouraging the idea that an offensive is imminent has advantages. It raises spirits among civilians in Kherson (see next story). It keeps Russian troops on edge. It forces Russia to divert forces from the eastern Donbas region, which weakens its attacks towards the city of Slovyansk. Swaggering talk of a counter-offensive could even be a feint, drawing Russians towards Kherson and opening gaps in the Russian line that might be exploited.

Ukraine's political and military strategies are in tension. Volodymyr Zelensky, the president, is eager to show his Western backers that the arms they have poured into Ukraine are making a difference, and that the economic travails of the war, such as Europe's energy crunch, are not in vain.



Russia's army is also replacing lost men over time. That, and the muddier ground in autumn, could make an offensive more difficult in a few months. "Right now, we have a unique chance and window of opportunity", said Colonel Grabskyi.

The risk is that hyping counter-offensives which fail to materialise will eventually harm morale. But if attacks take place and fizzle, the disillusionment would be worse. An offensive driven by political considerations, in defiance of military realities, would be "a really bad idea" says a military analyst, "but we may not be able to control what they do and where". The analyst points to Severodonetsk, where Mr Zelensky, some sources say, overruled military advice and insisted his armed forces defended the city much longer than was prudent. "They barely got out of it alive." ■

Occupied Ukraine

At the sharp end

NATALYNE AND ZAPORIZHIA

Life in occupied Kherson is grim

LEAFLETS BEARING the names of people who have gone missing hang from trees in Kherson, a city in southern Ukraine that Russia has occupied since March. The city's biggest shopping centre lies in ruins. Local banks have closed, and companies have started paying salaries in Russian roubles. Ukrainians can open accounts at one of two new Russian banks, but only if they get a Russian passport.

Ukrainian mobile numbers no longer work. Instead people with internet at home sometimes place their routers close to their windows, so that passers-by can connect. Schools are preparing to start teaching the Russian curriculum; staff who oppose the occupation have been sacked. "Russia is here for ever," proclaims a billboard. Yulia Gladkaya, a local blogger, says, "We've gone back in time 30 years."

These snapshots of life in Kherson are provided by residents who have left the city, and some who remain there. In September Russian officials plan to hold sham referendums that they hope will cement their rule over Kherson province and other parts of southern Ukraine. But Ukraine is pummelling Russian bases and supply routes with artillery, in the hope of forcing a withdrawal. Meanwhile civilians are streaming out of the area. Tens of thousands have left since the start of the war.

At a supermarket outside Zaporizhia, a city about 300km northeast of Kherson, refugees who have spent as long as four days on the road catch their breath. Volun-

teers are caring for an elderly woman who has fainted from exhaustion. Aleksandra—a woman travelling with her husband, daughter, and grandchildren—says Russians began shelling Ukrainian positions just as their convoy began crossing into Ukrainian-controlled territory. Back home in Kherson, Russians are said to be moving into apartments vacated by Ukrainians who have escaped.

Locals say that Russian soldiers, secret service agents and police officers loyal to the invaders have been rounding up former Ukrainian soldiers and suspected saboteurs in Kherson. Some are herded in front of television cameras and forced to admit to outlandish crimes. Ms Gladkaya says she saw one of her neighbours on a Russian news channel. He was saying that NATO forces and the Ukrainian government had trained him to "eliminate" peace-loving citizens.

Things can be even worse in the countryside. Vera, from a village in Kherson province, says troops raided her house in search of her husband, a former soldier. They threatened to kill her and her children if she did not say where he was. She told them she did not know, and they believed her. In early August, when Ukrainian shells began falling near the village, she decided to flee with her elderly mother and two children. "There's bombing every day," she says, "and it's going to get worse."

Memories of occupation are fresh in northern parts of Kherson province that have been recaptured by Ukraine. In Natalyne, a village reached by muddy roads lined with sunflower fields, Russian troops rounded up some local men and subjected them to mock executions. "They asked whether they had served in the Ukrainian army, and fired rounds over their heads," says Alina (not her real name). Nearby sits a green minivan Russian troops stole from Alina's neighbour, still daubed with z symbols. Shells land somewhere nearby.

Hanna Shostak-Kuchmiak, who heads a commune comprising several villages in the area, says at least 20 locals were taken away by Russians during the occupation and have not been heard from since. At least 600 people from Kherson province seem to have disappeared in this way, according to a report by Human Rights Watch, an NGO. Others have suffered torture. "Everyone knows what happened in Bucha," says Oleksandr Vilkul, an official in Kryvyi Rih, a southern city under Ukrainian control (he is referring to the suburb of Kyiv where Russian forces executed hundreds of people). "I think when we liberate Kherson, we will hear many stories like Bucha, or even worse."

It could be a while before Ukrainian forces are in a position to retake Kherson. In the meantime partisan attacks are ticking up. Since late July rockets have blown ►►

► up a train delivering Russian weapons and troops from Crimea; a roadside bomb has killed two police officials loyal to the invaders; the head of the puppet administration in Kherson province is said to have fallen into a coma after being poisoned; and an official in Nova Kakhovka, another city in the province, has been shot dead. Ukrainian officials say resistance fighters had a hand in each incident.

Locals are helping Ukraine's army in many other ways—sometimes at great cost. “Mast”, a Ukrainian soldier fighting near Kherson, says people living behind enemy lines frequently send his men information about Russian positions, using their mobile phones. Occasionally these spotters are arrested by Russian troops, says “Mast”. He thinks at least one of them has been killed. ■

Religious freedom

No room for doubt

Russia compels religious leaders to show rapturous support for war

DURING HIS three decades as chief rabbi of Moscow, Pinchas Goldschmidt presided over a spectacular revival of Jewish worship, education and culture in a land where prejudice against his community has deep roots. Now the Swiss-born rabbi, who has just stepped down and left the country, says, “There is fear in the hearts of the Jews of Russia.” This is not just the anxiety many Russians share about the war in Ukraine. It is the fear that the authorities, having hitherto kept the lid on anti-Semitism, could unleash it—especially if Jewish leaders resist pressure to act as cheerleaders for the Russian army.

The rabbi recalls that before the war it was just possible for a religious group in Russia to maintain “correct but distant” relations with the authorities. But now clerics of all stripes are being told they have to support the invasion. In a carefully worded statement explaining his departure that was published last month, the rabbi said, “I could not remain silent, viewing so much human suffering.” However, he continued, “It became clear that the Jewish community in Moscow would be endangered by me remaining in my position.”

Every religious group in Russia is feeling the Kremlin's newly Manichean line towards faith. Patriarch Kirill (pictured), the head of the Russian Orthodox Church, echoes official justifications for the war and has come up with some of his own. Lately he has followed Vladimir Putin in deploring the federal structure of the Soviet Un-

ion (which they say led to its break-up) and suggesting that any future Russian empire must be unitary, like that of the tsars. Hilarion Alfeyev, his Western-educated external affairs chief, who had held off from actively supporting the war, was abruptly demoted in June and dispatched to a job as a bishop in Budapest.

Far worse punishments await ordinary clerics who speak out against the war—or simply decline to call it a “special military operation”, as the government demands. Two Russian Orthodox clerics face criminal charges for using religious arguments to denounce the war. One of them, Ioann Kurmoyarov, has been jailed in St Petersburg since June after posting a video in which he said that anyone “not disturbed by what is happening in Ukraine” could hardly be called Christian.

The loyal segment of Russia's Muslim leadership has perhaps outdone the Orthodox church in the zeal of its pro-war pronouncements. Talgat Tadzhuiddin, a senior figure in Russian Islam whose rhetoric has always been fiercely anti-American, last month backed the Kremlin's surreal claim to be engaging in the “denazification” of Ukraine. He said that the government should keep pursuing its war aims “so as to leave no fascists or parasites anywhere near us, because in future there may not be enough pesticide”.

He and other state-backed Muslim leaders have presented the battle against Ukraine as a holy war, implying that soldiers who are slain on the battlefield will go to paradise. This matters because soldiers from Russia's ethnic minorities, including many Muslims, are playing an outsize role in the campaign.

With big local congregations apparently toeing its line, Russia's government is

probably now hoping that their links with co-religionists can help it promote its propaganda abroad. In May it succeeded in drawing Islamic entrepreneurs and officials to an annual meeting in the city of Kazan in Tatarstan, a Russian republic where a majority of the population is Muslim. Participants came from more than 70 countries, despite the war. Many governments sent greetings. These included Turkey's, which is run by Recep Tayyip Erdogan, a strongman in Mr Putin's mould.

Maintaining diplomacy with Christians has proved somewhat more complex. Since the days of the cold war the Russian Orthodox Church has used the World Council of Churches (wcc), a forum based in Geneva, as a venue to offer the Kremlin's view of the world. But the war in Ukraine has horrified Western churches. Rowan Williams, former leader of the world's Anglicans, has called for the wcc to kick out the Moscow Patriarchate.

Next month Patriarch Kirill may meet Pope Francis on the sidelines of an interfaith gathering in Kazakhstan. The Holy See has strongly defended its determination to keep communicating with Russia's spiritual leaders—a position that some Catholic and Orthodox prelates in Ukraine and other post-Soviet countries lambast as hopelessly naive.

The Vatican's ideal scenario is for the spiritual masters of western Christendom and Russian Orthodoxy to jointly press secular leaders to make peace. But according to Tamara Grdzeldze, a theologian from Georgia who used to represent her country at the Holy See, the Vatican may well be overestimating Patriarch Kirill's influence. If he were to soften his line on Ukraine, he would probably not stay patriarch for very long. ■



Patriarch and propagandist

Europe's drought

Bombs and balance sheets

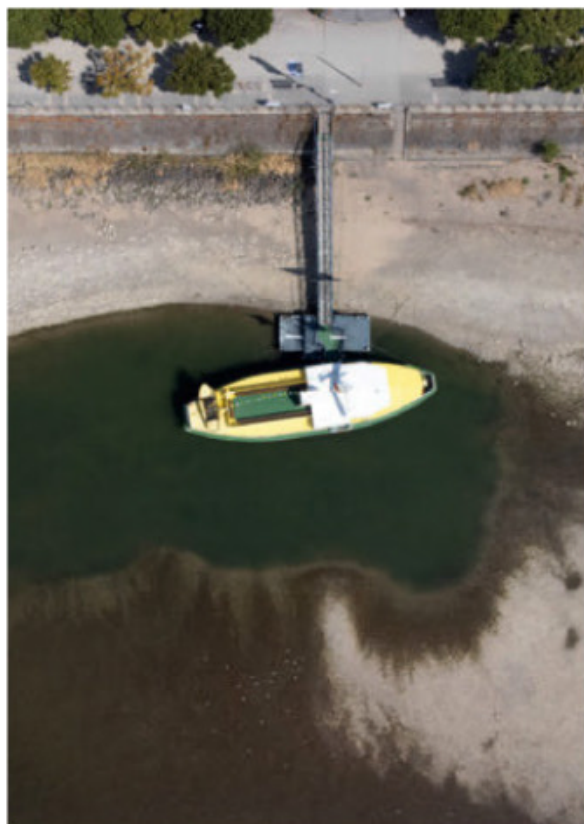
COLOGNE

River freight is hard to beat

ROUGHLY A THIRD of Germany's coal, crude oil and natural gas—as well as a big chunk of its grains and chemicals—travel along inland waterways of one type or another. Traffic on the Rhine, which twists from the Swiss Alps to the North Sea, accounts for about 80% of that. Hence the continuing concern about the sizzling conditions which, over several weeks, have threatened to bring shipping on the river to a halt. The water level near Kaub, a town close to the Rhine's shallowest section, has lately hovered at only about 30cm (see chart). It is going to take a lot of rain, falling in the right places, to push that up very much. To decrease their draughts, barges are carrying only 15-25% of their usual loads. Germany's most important waterway could yet shut.

Businesses along the river are nervous. BASF, a chemicals firm, uses barges to move 40% of the raw materials it needs for a gigantic factory in Ludwigshafen. A previous parched spell in 2018 cost it €250m (\$295m); it has since been investing in new vessels that can cruise on when others run aground. Christine Launert of Thyssenkrupp, a company that needs to keep feeding a big steel plant in Duisburg with coal and iron ore delivered by river, says that for the moment her firm is still getting the goods. But she says there is no good plan B. Transporting raw materials by road or rail does not make sense for the environment or for the economy, she says.

Businesspeople say politicians have neglected Germany's inland waterways. Federal funding for them will shrink in 2023, compared with this year. When the German public pays any attention to freight it



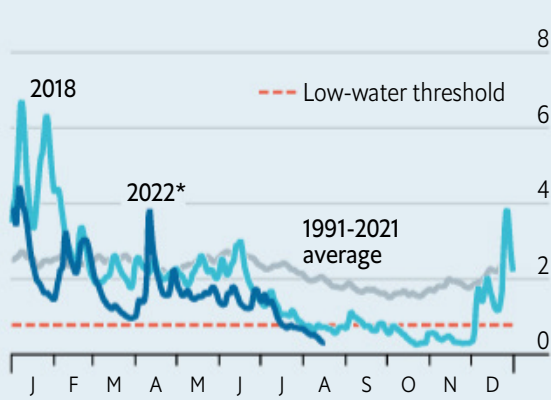
A day at the beach

is usually to decry the chronic problems of DB cargo, a train company operated by the state-owned railway. "But our industry transports around 200m tonnes for Germany industry every year, so we cannot be substituted," insists Steffen Bauer, the boss of HGK Shipping, Germany's biggest inland-waterway shipping company. A medium-sized lorry can move around 25 tonnes; a barge can easily haul 3,000 tonnes. Delivering stuff by river is usually cheaper than using road or rail, and can be the only option for massive or oddly shaped consignments.

How far the Rhine's woes will dent Germany's economy remains a lively debate. The crisis in 2018 shaved 0.4% from Germany's GDP, reckons the Kiel Institute for the World Economy, a think-tank. This year's water levels have been lower, so in theory the damage could be worse. Conversely, though, Germany's economy is limper than it was a few years ago, says Salomon Fiedler of Berenberg, a bank. That means industrial production—and thus the demand for stuff that comes on ships—was probably lower when this year's water shortage began.

Mr Bauer hopes that startling pictures of the Rhine's parched river bed will rouse politicians to action. Receding waters have revealed heaps of rusty ordnance, among other curious stuff; police have identified some 400kg of decaying explosives around just one harbour in Mainz. Volker Wissing, the minister of traffic, recently called for dredging of the Rhine to eliminate shallow spots. But he said it would take around ten years for the "giant project" to be completed. Until then, the companies that rely on the river must hope that the low water does not expose explosive flaws in their contingency planning. ■

On the rocks

Rhine river, water levels at Kaub gauging station
MetresSources: National statistics;
Berenberg; *The Economist*

*To August 16th

Tourism in Turkey
Rich pickings

CESME

New resorts target wealthy Russians

WHEN OMER ONAL was a child the Cesme peninsula was a beautiful backwater. It was in the 1990s that developers began throwing up the hotels that have since made this spot on Turkey's Aegean coast famous among middle-class tourists. Now Turkey's government has set aside another sixth of the peninsula for the sorts of projects that developers hope will draw in the very rich. Golf courses, marinas, hotels and residences could replace more than 5,000 hectares of forest. Wetlands hosting more than a hundred types of bird are also to be filled in. "Everything is about making money," sighs Mr Onal, a local historian.

Similar transformations are under way all along Turkey's coastline. Since the 1980s countless fishing villages have given way to sprawling, mostly low-cost resorts. These days tourism—and giant construction projects—are vital to the economy. And the growing trend is towards building posh resorts that attract ultra-rich visitors from the Arab Gulf and (this year) Russia. Several oligarchs are said to have moved their superyachts to Turkey's marinas after European countries imposed sanctions on their assets and began seizing boats.

Permission to develop the Cesme peninsula was granted by a decree issued by Turkey's president, Recep Tayyip Erdogan, in 2019. In a flash that edict also expanded the borders of dozens of other areas in Turkey that have been earmarked for the tourist industry. Watchdogs say the sweeping order is yet another illustration of the autocratic means by which Mr Erdogan rules. Environmentalists warn that the creep of concrete along coastline will probably raise temperatures in fragile regions that are already seeing worsening wildfires. Flames flashed across parts of Cesme in July, including some of the areas that are supposed to host the new developments.

Some on the peninsula are enthusiastic, nonetheless. They say the region sorely needs better accommodation and could also use more jobs. But opponents are challenging the project in court. The kind of people who stay at swanky hotels and in posh residences will not give very much of their money to local businesses, reckons Mujdat Timucin, a café owner. "They will fly in by helicopter," he sniffs.

Charlemagne | Old kid on the bloc

Our columnist returns to Brussels after a decade away. What has changed?



FEW BUILDINGS can match the absurd majesty of the Palais de Justice in Brussels. The courthouse complex was Europe's biggest structure upon completion in 1883. Its seemingly random jumble of classical columns, piled haphazardly on top of each other, dwarf even St Peter's Basilica in Rome. One atrium has a ceiling height of over 80 metres. UNESCO politely describes this architectural confection as "unique". Thus it was with pangs of regret that your newish columnist left the Belgian capital in 2012 after a three-year stint: much of the Palais had been wrapped in scaffolding the entire time. How exciting, as he returned this month after a decade away, to see the edifice in all its glory at last. Alas, the Palais is as concealed as ever. Political squabbling and dodgy brickwork mean the overhaul is now expected to take several more years to complete. The scaffolding has been up so long, it is itself in the process of being renovated.

Across town from the Palais, another mastodon has been under perpetual maintenance since 2012. The EU, whose main institutions are based in Brussels, is itself something of a fixer-upper. When your columnist left, in the depths of the euro-zone crisis, doom-mongers wondered whether the edifice might be brought low by structural flaws at the heart of the single currency, its signature project. The grim mood was all-pervasive, and in contrast with Europe's comfortable position in the wider world. Upon his return Charlemagne finds the opposite is true. Brussels is brimming with confidence, even as Europe's prospects look more tenuous. What happened?

Much of the buoyant mood in Brussels is the collective satisfaction of having come through a *decennium horribilis* in one piece (minus Britain). Barely had the strife around the euro been settled than a spat erupted over how to treat more than a million migrants demanding asylum in Europe. The Brexit vote of 2016 led to the bloc shrinking for the first time in its six-decade history. Then the pandemic struck, followed by war in Ukraine. Many Eurocrats feel there is nothing more the world can throw at them. The repeated heating and quenching of this permacrisis has strengthened the machinery of Brussels—and given it more influence. The pandemic, for example, resulted in a €750bn (\$762bn) recovery fund overseen by the European Commission, the bloc's executive arm.

The EU's mission has evolved as it has batted away these various catastrophes. A decade ago the mantra in Brussels was "more Europe": every problem had a solution that required power to be handed to the EU. An ever-closer union was its own reward, never mind the reservations in the mind of the public, which (then as now) keeps only a distant eye on what Brussels is up to. These days national leaders kick things up to the European level because they realise there is no way any single government can tackle them alone. Thus solutions to the problems faced the world over—climate change, the rise of authoritarian China, pandemic vaccination—are understood to be best crafted collectively. No national watchdog in Europe could boss around an Amazon or Google. The EU's regulation of such tech giants, in contrast, has given the concerns of Europeans, whether on privacy or rapacious business models, real heft.

Not all the mood-souring problems of yesteryear have disappeared. There is justified fretting about the war in Ukraine and the protracted energy crisis it has brought about. But these are troubles the EU is helping to fix, not ones that it has caused. (Much the same was true of Brexit, an act of self-harm crafted in Britain, not Brussels.) The threat of populism is as present today as it ever was: Giorgia Meloni of the hard-right could well win the Italian election next month, with unpredictable consequences. The bloc still has no way of handling national politicians who flout its rules. A decade ago Viktor Orban, Hungary's prime minister, was a budding autocrat brazenly defying EU norms on how a member-state should be run. These days he is a long-standing autocrat brazenly defying EU norms on how a member-state should be run.

Some changes were expected to materialise after 2012, but never happened. Attempts to turn the European Parliament and the commission into the political expression of a European *demos* were all the rage back then, following the adoption of a new constitutional treaty in 2009. Events pushed the EU in another direction: during the euro crisis Brussels became a venue for national leaders to broker late-night deals rather than the home of institutions which themselves made decisions. That model largely endures to this day. This is a disappointment to purists of European integration, for whom the project should aim to mitigate the power of selfish national governments, not enhance it.

Another brick in the wall

Finding imperfect solutions to challenges that national governments cannot face alone is a fine calling for the EU. Trouble is, the challenges seem ever more daunting. The mantra these days in Brussels is to provide "a Europe that protects", whether from the vagaries of globalisation, a changing climate or foreign tyrants. Fabian Zuleeg of the European Policy Centre, a think-tank, speaks of the risk of Europe feeling that "we will live in a world determined by others, with stifling constraints on our ability to shape our future". Some ways to counter that dread are sensible: cutting carbon emissions, say, or investing in defence, where the EU is still a weakling. Others, such as reshoring supply chains to bolster European industry, smack of desperation.

Facing up to these challenges leaves much for the denizens of Brussels to plot, plan and ponder. They do so in a city that seems to have fared well: once down-at-heel, the Belgian capital has been made more liveable by lots of new cycle lanes, more varied restaurants and even a smattering of shops that open on a Sunday. Perhaps that will induce Charlemagne to stick around until he can observe the Palais de Justice in all its glory. ■



British politics

The maverick v the wonk

The economy shows up the differences between Liz Truss and Rishi Sunak

AT THE HUSTINGS to choose the new leader of the Conservative Party, and Britain's next prime minister, Tory members have visceral responses to some issues. When Rishi Sunak and Liz Truss, the candidates, offer up canards about aspiration and freedom, grunts of approval rumble around the room. When they say that fields are for food, not solar panels, members clap. Barbs about the French get throatier roars than attacks on Vladimir Putin.

The crowd is more muted when it comes to the biggest issues facing Britain: cushioning households and firms against the immediate cost-of-living crisis, and dragging the country out of its long-run growth rut. There is just very little to cheer. In July annual inflation reached 10.1%, its highest level in 40 years. Workers' real incomes suffered the largest annual drop on record in the second quarter of this year.

The economy is also the area in which the differences between Mr Sunak and Ms Truss remain greatest. That is true not just of policies but also of philosophy and style. Mr Sunak is big on detail; Ms Truss is big-picture. He is a wonk and she is a maverick.

The gaps between them on economic policy have actually narrowed during the campaign. Mr Sunak started off by pledging no tax cuts until inflation was tamed. He pitched himself as the only candidate willing to tell voters hard truths. But as it became clear that Tory party members preferred the easier sort, he changed tack. He would temporarily scrap the 5% value-added tax on domestic energy bills, and is dangling big future cuts in the basic rate of income tax, from 19% in 2024 to 16% in 2029. These income-tax cuts would cost around 0.7% of GDP, according to *The Economist's* analysis of figures provided by Capital Eco-

nomics, a research outfit.

To help with soaring energy costs this autumn, he would spend perhaps £3bn-5bn (\$3.6bn-6bn) beefing up support for the neediest bill-payers. This pragmatism in the face of plummeting living standards does not extend beyond households to schools and hospitals, which also face climbing energy bills and rising wage pressures. He would fund the help through temporary borrowing and, implausibly, by squeezing savings from departments.

Mr Sunak's longer-run growth agenda does not depart radically from existing plans—no great surprise given his role in crafting them when he was chancellor of the exchequer. He would enact a planned increase in corporation tax, from 19% to 25% in April 2023, and concentrate on strengthening incentives for investment.

He argues that a falling headline corporate-tax rate in the 2010s did not obviously turbocharge investment, and that Britain's treatment of capital spending is unusually stingy compared with its peers in the OECD, a club of mostly rich countries. He plans reforms to make it easier for firms to raise capital. He would beef up technical education and make teenagers study maths and English until the age of 18.

Mr Sunak casts himself as pragmatic and competent: a fiscal conservative who will respond to the immediate crisis, a tech-savvy leader who can lower the tax burden after unlocking growth. But his claims to be a radical are not helped by comparisons with his opponent. ▶▶

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— Reusing graves

— Northern Ireland's census

— The Ugandan Asians, 50 years on

Platform choose

Britain, selected policy proposals from the Conservative leadership candidates, 2022

Topic	Liz Truss	Rishi Sunak
Cost of living	Scrap green levies on energy bills, expand energy supply, handouts as a last resort	Cut value-added tax on energy bills, expand household support announced in May
Tax	Cancel increase in corporation tax, cut national-insurance contributions	Cut basic rate of income tax to 16% by 2029
Health	Reduce management layers	Create a backlog task force, hubs for elective surgery, fines for repeatedly missing appointments
Defence	Spend 3% of GDP by the end of the decade	Spend at least 2% of GDP, less than current pledge of 2.5%
Europe	Supports Northern Ireland protocol bill	Supports Northern Ireland protocol bill
Net zero	Supports net-zero target, opposes solar panels in fields	Supports net-zero target, "energy independence" by 2045
Skills	Funding for technical education	Support for world-class technical colleges, teach maths and English until age 18

Source: *The Economist*

▶ No one could describe Ms Truss as cautious. She has consistently presented herself as a tax-cutter first and foremost. She wants to shake up institutions and do away with fusty economic orthodoxy. She is leery of handouts as a way of protecting people against rising energy bills. Her plans for growth are a Reaganite mixture of regulatory reforms, tax simplification and reduction in the size of the state.

In response to soaring gas prices, her first priority is to cut green levies on energy bills. These are meant to fund renewable-energy projects, and cost households around £153 a year (less than a tenth of the expected rise in average annual energy bills this autumn). Next she would expand North Sea gas supplies and allow fracking. She has left herself room to offer targeted support to poorer households when and if she gets into office, but has not committed herself to it in the same way as Mr Sunak.

Ms Truss is keener to spell out which other taxes she would cut. She would reverse a recent rise in national-insurance contributions, a payroll tax, and scrap the planned increase in corporation tax. Together, these changes would cost around 1% of GDP, but do very little to ease immediate pain for poorer households.

Beyond that, she would increase defence spending to 3% of GDP by the end of the next parliament, from around 2.1% now; she might allow a stay-at-home carer to transfer their tax-free personal allowance to a partner in paid work. This would take the cost of her pledges to around 1.8% of GDP. That need not spell financial disaster. But it would be imprudent given the long-term pressures of an ageing population and the transition to net zero.

Ms Truss's argument is that tax cuts and other supply-side reforms will generate growth and pay for themselves. Some of those other reforms echo ones put forward by Mr Sunak: changes to financial regulations to unlock capital; investment zones that combine looser planning regulations with tax incentives.

But in general she has a more relaxed at-

titude towards the public finances than her rival, and she is much more critical of Britain's institutions. She is suspicious of the Treasury, and thinks that regulatory frameworks which made sense when Britain led the world on privatisation need an overhaul. She would review the Bank of England's mandate, an exercise last done in 2013. That is not unreasonable in theory, but would be worrying if she embraced discredited ideas like money-supply targets.

Ms Truss is much likelier than Mr Sunak to be able to put her plans into practice. Tax cuts and a tone of optimism seem to play better with party members; she is the heavy favourite to become prime minister when the result is announced on September 5th. She does not have the better policies—in areas like health care, she seems not to have policies at all—but she does seem to know how to win. ■

Financial crime

Eye of the Neidle

In praise of financial professionals who turn into sleuths

DAN NEIDLE is a formidable foe. In July he tweeted concerns about possible tax avoidance by Nadhim Zahawi, the chancellor of the exchequer. When Mr Zahawi co-founded YouGov, a polling firm, 22 years ago, he took no shares; instead they went to a family trust. Mr Zahawi, through his lawyers, has denied wrongdoing.

Mr Zahawi's lawyers also sent a stropic letter to Mr Neidle, marked "confidential", which he promptly published. Missives of this sort routinely go out to publishers and broadcasters on behalf of clients; many are designed to intimidate. Mr Neidle has written to the Solicitors Regulation Authority asking it to confirm that recipients are not legally bound to respect their confidential-

ity. If it does so, he reckons many of the bullying tactics employed in such letters would end abruptly.

Mr Neidle is not some hard-bitten investigative hack. Until May he headed the tax practice at one of London's bluest-chip law firms, Clifford Chance. Mr Neidle gave up a lucrative partnership contract to set up a tiny tax-policy non-profit (motto: "understanding tax, improving tax"). He says he is more interested in helping to steer national policy than to expose individuals' tax shenanigans. He cites as an example Britain's tax regime for "non-doms", which he thinks is "ripe for abolition".

The number of such poachers-turned-gamekeepers in finance is small but it is creeping up. Among others who have crossed the divide are Jolyon Maugham, a controversial tax barrister who has used his blog to expose tax-avoidance loopholes; and Tom Keatinge, once of JPMorgan Chase, a bank, and now at RUSI, a think-tank, where he devotes much of his energy urging the British government to toughen up its financial-crime-fighting regime.

Another aisle-crosser is Tommaso Faccio, a former EY and Deloitte tax expert who now teaches accounting at the University of Nottingham and runs the secretariat for ICRICT, a committee of experts who want the international tax system to be fairer. The global financial crisis in 2007-09 was a turning-point: "It forced me to think harder about the impact that the tax-minimisation I was helping companies with was having on government finances. It reached the point where it was hard to sleep."

Antoine Deltour was one of the whistleblowers from PwC, a consultancy, who passed the "LuxLeaks" documents (revealing sweetheart deals between Luxembourg's taxman and multinationals) to a journalist. Today Mr Deltour works for the French statistical office, and with two NGOs that assist whistleblowers. "Journalists and NGOs interested in financial and tax issues are attacking a fortress with at least two walls. The first is opacity, the second is complexity," he says. "In both cases, the help of a citizen-professional is precious: first to access the information and then to decipher it."

Such work is particularly important in countries, such as Britain, where enforcement is weak. Most of the big tax-dodging and money-laundering scandals of the past decade with a strong British nexus—including the "laundromat" schemes that rinsed dirty money from the former Soviet Union—were primarily the result of digging by journalists, campaigners and whistleblowers, not spade work by official investigators. Reports suggest that headcount at both the National Crime Agency and the Serious Fraud Office could fall by up to 40% as civil-service cuts bite. If so, more citizen-pros will be needed. ■

Bagehot | The limits of technocracy

Silly policy can make for smart politics



LABOUR'S ENERGY policy is a technocrat's worst nightmare. Sir Keir Starmer's party this week pledged to cap soaring annual average energy bills at £1,971 (\$2,380) for the typical household, with the state paying the rest. At £29bn, or 1.3% of GDP, this promise is very expensive. Since energy prices are not likely to come down any time soon, the cost could double if the cap is extended beyond 2023. The policy is also badly targeted. Around £6bn will be spent on the top fifth of earners, who find the prospect of a £4,000 energy bill annoying but not impossible. It ignores businesses, which face astronomical bills.

Yet the policy is also refreshing. Sir Keir's tenure has been marked by too much technocracy and too little raw politics. An overreliance on boffins lulls politicians into the idea that there is a correct answer to every problem. Rather than accepting that there are competing interests, whether based on economics or class or place, technocrats turn politics into an impossible search for nirvana. Clever-clever solutions beat simple ones. Puritans fear that someone, somewhere, may be happy; technocrats worry that a middle-class family may enjoy a free lunch.

Labour's energy promise shows that the party is throwing off its technocratic blinkers in favour of bolder political choices. Sir Keir's pledge is unashamedly universal, which makes wonks wince. Other policies, such as increasing universal credit, a welfare payment, would help the poorest most. But it is not just the poor who will take a hit from rocketing energy prices. The median household income after tax is around £31,000; an extra £2,000 is not easily found. If you earn about £63,000, you are in the richest fifth of households.

Inefficiencies are a fact of life in any democracy. It is not progressive to hand well-off pensioners £10,000, no questions asked, every year until they die. Yet it would be electoral suicide to do anything else. The British state is increasingly run on the creed of "universalism for me, but not for thee", with working-age voters paying the price. On this occasion, Labour is offering everyone a handout. A technocratic wonderland in which every policy is perfectly progressive, with the poor paying least and receiving most and the rich vice versa is possible. But it would also probably result in officials hanging from meathooks on Whitehall.

Technocracy can be the enemy of simplicity. Some policy solutions are inherently complex. Just as often, however, the real problem is that they are either expensive or unpopular (or both). Technocratic tinkering can frequently be a substitute for meaningful action. It is little wonder that British politicians fell in love with nudge theory, the idea that tiny tweaks can have big effects without the need for lots of money or for sweeping legislation. Instead, it proved to be the political equivalent of homeopathy.

When it comes to their energy-cap policy, Labour has decided to do something different and pay the price upfront. It is big, it is dumb but it is wildly popular. A huge majority of all voters, including Conservative ones, support the idea of a freeze on energy bills, whose cost will partly be paid for by backdating a windfall tax on big energy companies and by some fiscal skulduggery. (Although the policy is "fully costed", about £7bn is paid for by lower interest payments on inflation-linked government debt; reducing people's energy bills will, Labour argues, reduce inflation.) Other than free puppies paid for with a paedophile tax, it is hard to imagine a policy with more appeal.

By ditching the technocratic worldview, at least in this instance, Labour has avoided a common mistake among opposition politicians. In government it is often necessary to do something unpopular but right. In opposition it never is. Doing things voters do not like, such as telling them to swallow higher energy bills, shows an unseriousness about power. Labour is often scrutinised as if it is in government, whereas the Conservatives are somehow able to campaign as an opposition in office. With its energy policy Labour has turned this weakness into a strength. Pledging to knock £29bn off voters' bills has the same effect on perceptions of the party as actually doing it.

The consequences of politicians appealing only to the head rather than to the heart have been visible in the past six years. While Conservative zealots were dragging Britain out of the EU in the most chaotic way possible, and a Jeremy Corbyn-controlled opposition engaged in leftist populism, technocratic centrists stood in the middle of the political spectrum, tutting loudly while being hammered by both wings. Failing to appeal to people's political instincts in such circumstances is akin to quoting Sun Tzu's "The Art of War" in a bar fight. Policy is pointless without power.

Technobabble

The new energy policy is expensive and ineffective. But it is nonetheless a step towards power for Labour. When it comes to making spending pledges, Labour is still enduring post-traumatic stress disorder. Until recently, grilling a shadow cabinet minister on the party's spending plans resulted in a thousand-yard stare, with memories of their beating in the 2019 election under Mr Corbyn fresh in their minds. But Mr Corbyn's failure was due more to the messenger than the message. After all, he lost heavily to Boris Johnson, who was merrily peddling a vision of free-spending, big-state Conservatism.

Too much technocracy rather than too much radicalism is the biggest threat to the Labour Party. Unless the next prime minister is terminally insane, the Tories will put together a generous package of support in the autumn to get people through the cost-of-living crisis. If Labour cannot match or beat it, there is much less reason for people to vote for them. Putting the wishes of wonks before the desires of voters is the quickest way to ensure defeat. It might not be sensible. But trying to be sensible is sometimes politically rather silly. ■



Urban warfare

Mean streets

With an eye on the future, Western armies are re-learning how to fight in cities

THE CITY doesn't exist any more," said Dmytro Kuleba, Ukraine's foreign minister, in April. By then Mariupol, on the Sea of Azov, had been under Russian siege for seven weeks—bombed, shelled and struck by rockets. The city fell the next month. Its mayor said that 1,300 high-rise buildings had been destroyed. Satellite images suggested almost half its built-up areas were badly damaged (see map on page 2). A pre-war population of over 400,000 had shrunk by more than 75%.

Mariupol's grim experience holds useful lessons for armies around the world. "For practically all of history, generals have loathed the prospect of fighting in cities and have sought to avoid it," write David Betz of King's College London and Lieutenant-Colonel Hugo Stanford-Tuck, a British officer, in the *Texas National Security Review*, a military and security journal. But whether they like it or not, modern armies are increasingly forced to do so. They are looking to the past for guidance, and pondering how urban battles might best be fought with modern weapons.

In July Britain's chief of general staff announced that the British army, which has spent the past two decades mostly fighting low-tech insurgents, would, in future, "major on urban combat". In a speech to the United States Military Academy in May, General Mark Milley, America's most senior soldier, told graduating cadets that they would have to retool for cities. That would transform armies, he warned, with "huge implications" for everything from camouflage patterns and weapons to vehicle design and logistics.

This growing interest has several causes. In one sense, armies are simply responding to recent history. Battles over cities have been central to many modern wars. The fight for Shusha, a town in the disputed territory of Nagorno-Karabakh, was the decisive engagement of the war between Armenia and Azerbaijan in 2020. The conquests of Mosul in Iraq and Raqqa in Syria marked the triumph of Islamic State (IS) in 2014; its expulsion from those cities by an American-led coalition two years later signalled the jihadists' fall. In

Ukraine, Russia has fought street-to-street to capture not just Mariupol, but also Severodonetsk and Lysychansk in the Donbas region. Ukraine hopes to retake Kherson, a city in the south (see Europe).

Deeper trends contribute, too. Until the start of the 21st century more people lived in rural areas than urban ones. Now over half the world's inhabitants live in towns and cities, a figure that is expected to rise to two-thirds by 2050. In some places the figure is higher still. A Chinese invasion of Taiwan, should it occur, would require the People's Liberation Army to slog through the island's towns and cities, where 80% of its population live.

That same historical trend means cities are becoming bigger. In 1950 only New York and Tokyo qualified as "megacities"—those with over 10m inhabitants. Today, the United Nations reckons 33 do. Though wars have been fought in and around cities since antiquity, few have been waged inside ones so big and complex.

And even as cities have swollen, armies have shrunk. In the past "mass armies swamped cities, forming large fronts around and through them", notes Anthony King of Warwick University, the author of "Urban Warfare in the Twenty-First Century". Eighty years ago almost half a million men fought over Stalingrad, which had a pre-war population of around 400,000. Today "cities envelop the armed forces." Barely 100,000 troops assaulted Mosul, a city of 1.7m, to rid it of IS in 2016. ▶

Urban warfare has a reputation for destructiveness and brutality. Built-up areas offer plenty of places to hide, so firefights occur suddenly and at close range. Buildings can be laced with mines and booby-traps. The need to be constantly alert frays soldiers' nerves. Fighting in jungles or woodland presents similar difficulties, but in cities the presence of civilians makes everything harder. "I can destroy a forest," says one European army officer, asked where he would prefer to fight. "I will not have permission to destroy a city."

The concrete jungle

One consequence of shrunken armies fighting in bigger cities is that urban warfare often ends up as a series of "localised micro-sieges", says Mr King, sometimes over individual structures. "A single building can consume an entire battalion [up to 1,000 troops] in a day's fighting," says Peter Mansoor, a retired colonel who commanded the 1st Brigade of America's 1st Armoured Division in Baghdad in 2003.

Modern explosive weapons were largely designed for cold-war battles on the plains of Europe. When they are used in populated areas, at least nine in every ten casualties are likely to be civilians, notes a report by Action on Armed Violence, an NGO which tracks such things. Indiscriminate Russian barrages have destroyed not only Mariupol, Severodonetsk and many smaller towns in Ukraine, but also Grozny in Chechnya and Aleppo in Syria.

Even smart bombs can level a city. In Mosul, American air strikes hit buildings with extraordinary precision, but insurgents simply fled to others—which would be hit in turn. The result, notes Amos Fox, a major in the American army, was that bombs simply followed the enemy from house to house. Over 10,000 civilians were killed in Mosul, about a third of them by the American-led coalition.

And a city's inhabitants are not always passive bystanders. John Spencer, a retired major and the chair of urban warfare studies at the Madison Policy Forum, an American think-tank, began publishing military advice for Ukrainian city-dwellers within days of the Russian invasion on February 24th. In June he visited Kyiv and learnt how it was defended by a lone Ukrainian brigade, supported by civilian volunteers who were handed tens of thousands of AK-47 rifles at the outset of war. Residents became an informal network of spotters, calling in the location of Russian units moving through their neighbourhoods.

Another feature of cities is that they tend to extend underground. Marko Bulmer, a scientist and reservist in Britain's army, describes how IS exploited sinkholes and caves around Mosul, and built new tunnels, some large enough for vehicles, using everything from hand tools to im-

proved boring machines. The most sophisticated were equipped with dormitories, hospitals and ventilation systems. Israel's armed forces claim to have destroyed 100km of tunnels under Gaza during a war with Hamas last year. And in Mariupol, Ukrainian defenders in the subterranean networks of the Azovstal steelworks kept a superior Russian force at bay for months.

Many of the newer technologies on which Western forces have come to depend simply do not function below the surface, including satellite navigation and surveillance with drones. They can be iffy on the surface, too. "Urban canyons" between tall buildings can interfere with radio signals. Civilian television and radio crowd the airwaves. "The main problem is that in such a crowded, populated and intricate area, we only see what we can see," says Gal Hirsch, a retired Israeli brigadier-general who commanded units in the West Bank and Lebanon. "We simply cannot see most of the threats, as large segments of the enemy are concealed from us."

Such difficulties partly explain why America's army has, until recently, shied away from thinking too much about city fighting, argues Liam Collins, a retired colonel and co-author, with Major Spencer, of "Understanding Urban Warfare", a forthcoming book. "It doesn't fit the model of war that we want to fight. We want to fight the Gulf war [much of which took place in open desert] again." Now that armed forces have concluded that urban combat is likely to become more common, they are wondering how some of its features might be turned to their advantage.

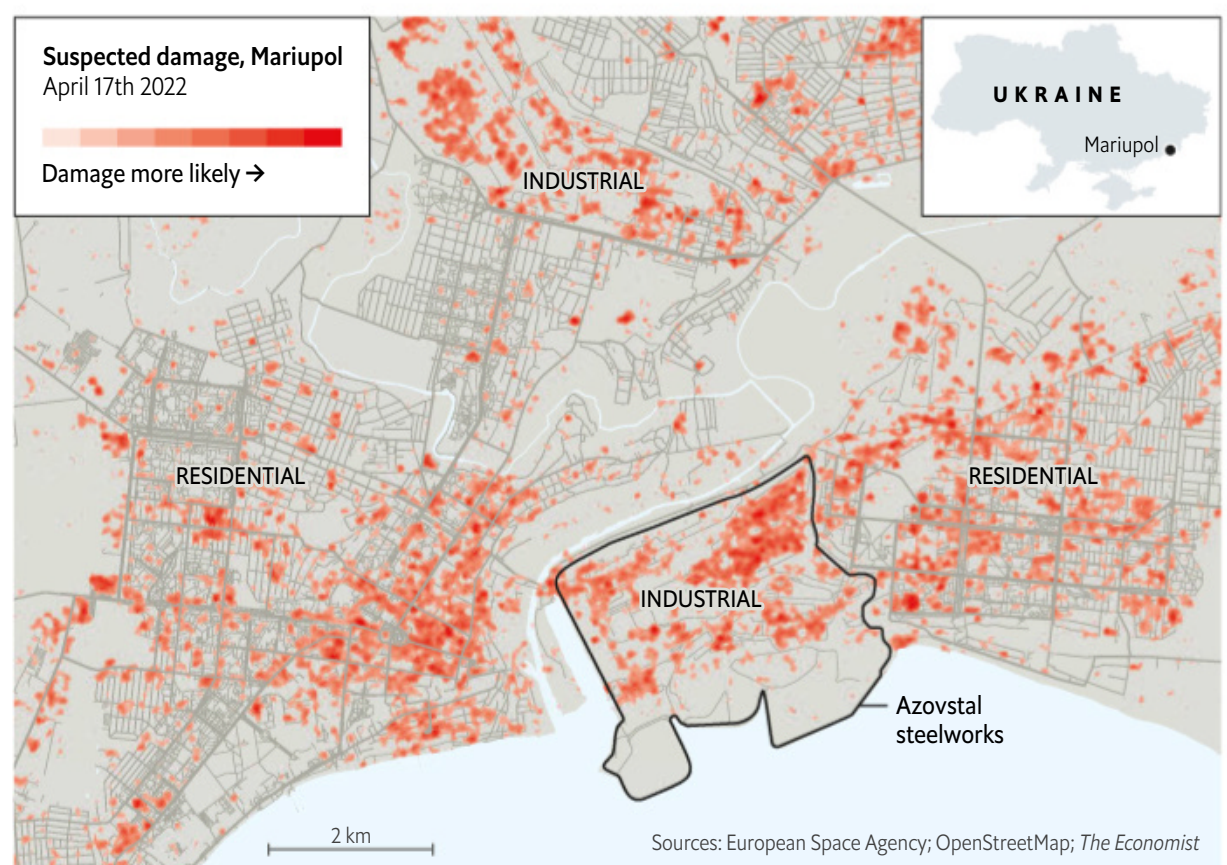
The British army has been analysing what the opening battles of a European war between NATO and Russia would look like and how they might be won. Major-Gener-

al James Bowder, in charge of that effort, described the army's working hypotheses at a conference at the Royal United Services Institute, a think-tank in London, in June. Armies will struggle to manoeuvre over open ground, he warned, as "multispectral" sensors—satellites that can see through clouds, or drones that see in infrared—become more common, and the firepower they direct becomes more lethal.

Moving between towns and cities would therefore entail "unprecedented jeopardy", said General Bowder. The flipside was that urban areas would become the "principal prize", not only for their political and economic value but, no less important, as sanctuaries from the enemy's ability to find units and strike at them. The implication is that places like Tallinn, Riga and Vilnius, though relatively small cities, would become citadels, offering shelter to NATO armies as they raided Russian supply lines and prepared counter-attacks.

Besides high-level discussions of strategy, armies are also thinking about tactics. One option is to learn from those with more experience of fighting in urban areas. Eyal Weizman, a British-Israeli architect, has described how Israeli soldiers fighting in the Palestinian town of Nablus in 2002 employed a strategy of "walking through walls". That involves blasting a route through buildings rather than using doors and roads, a technique first noted by French military theorists writing about 19th-century battles over Paris.

"Do you interpret the alley as a place, like every architect and every town planner does, to walk through, or do you interpret the alley as a place forbidden to walk through?" asks Aviv Koshavi, an Israeli general. "The enemy interprets space in a traditional, classical manner, and I do not ▶▶





A desolation called peace

▶ want to obey this interpretation and fall into his traps.” The result, says Mr Weizman, is almost a post-modern form of warfare: “a conception of the city as not just the site, but the very medium of warfare—a flexible, almost liquid medium.”

The lessons of the past

Western armies are ramping up training, too. A recent exercise in Leeds, in northern England, saw troops from Britain’s 21 Engineer Regiment navigating urban tunnels in sweltering conditions, low light and knee-deep water. The last time British military engineers conducted this sort of underground movement at scale was in the Korean war, says Sergeant Dale Mottley, who took part in the exercise.

The drill furnished a series of lessons. The total darkness made night-vision goggles all but useless, since they rely on amplifying the faint ambient light that is present above ground even at night. Disturbing stagnant water can release toxic gases into the air, and soldiers can quickly use up all the available oxygen. It is also colder, by as much as ten degrees Celsius. “You realise that unless you are properly drilled, and have spent a long time down there, you’re not moving fast,” says Sergeant Mottley.

The old ways are often best. Sergeant Mottley says that mining equipment in service since the 1960s, passed on to the army from the fire brigade, was more useful than some newer, fancier kit. But some of the old ways are now off-limits. The techniques once used to clear tunnels—America used tear gas in Vietnam; the Soviets a variety of chemical agents in Afghanistan—“would likely be regarded as unlawful today”, says Daphné Richemond-Barak, the author of “Underground Warfare”. (Despite its frequent use against domestic protesters, tear gas is largely illegal in war.)

The biggest question is whether a lack of familiarity with city fighting has over-

amplified its grim reputation. A study by Christopher Lawrence of the Dupuy Institute, which collects historical data on warfare, analysed urban operations towards the end of the second world war, including three battles over Kharkiv, a Ukrainian city which has been battered in the current conflict. It found, perhaps unsurprisingly, that cities slowed down armies: rates of advance were one-third to one-half what they were in non-urban combat.

But cities were not necessarily deadlier than other battlefields. The attacker’s casualties were no higher in urban operations than non-urban ones, and losses of vehicles were the same or lower. In more recent urban battles—those for Fallujah in Iraq in 2004 or Marawi in the Philippines in 2017—the attackers’ casualties were low, just over one death a day, and far lower than those of defenders. In fact the highest casualties in urban offensives have been borne by Soviet or Russian armies—a fact which says as much about Russian tactical prowess as it does about urban warfare.

Nor does this sort of fighting seem to be uniquely traumatic (at least for those carrying guns). A report by the RAND Corporation, an American think-tank, concludes that rates of combat stress—what was once called shell shock—were no higher than usual in the battles for Brest in Brittany in 1944, Manila in the Philippines in 1945 or Hue in Vietnam in 1968 (though most civilians had, wisely, left before the fighting started). The report suggests that the intensity of urban combat paradoxically gave soldiers a greater sense of initiative, control and purpose than those fighting in open terrain. Anecdotally, Ukrainian forces facing distant and relentless shellfire in Donbas say that the inability to see the enemy is as demoralising and disempowering as anything else.

If urban war is not necessarily bloodier, then it is at least more onerous? The con-

ventional military wisdom is that armies on the offensive must outnumber their opponents three to one to overrun a defended position. A manual published by America’s army and marines in July notes that in urban areas, this can rise as high as 15:1.

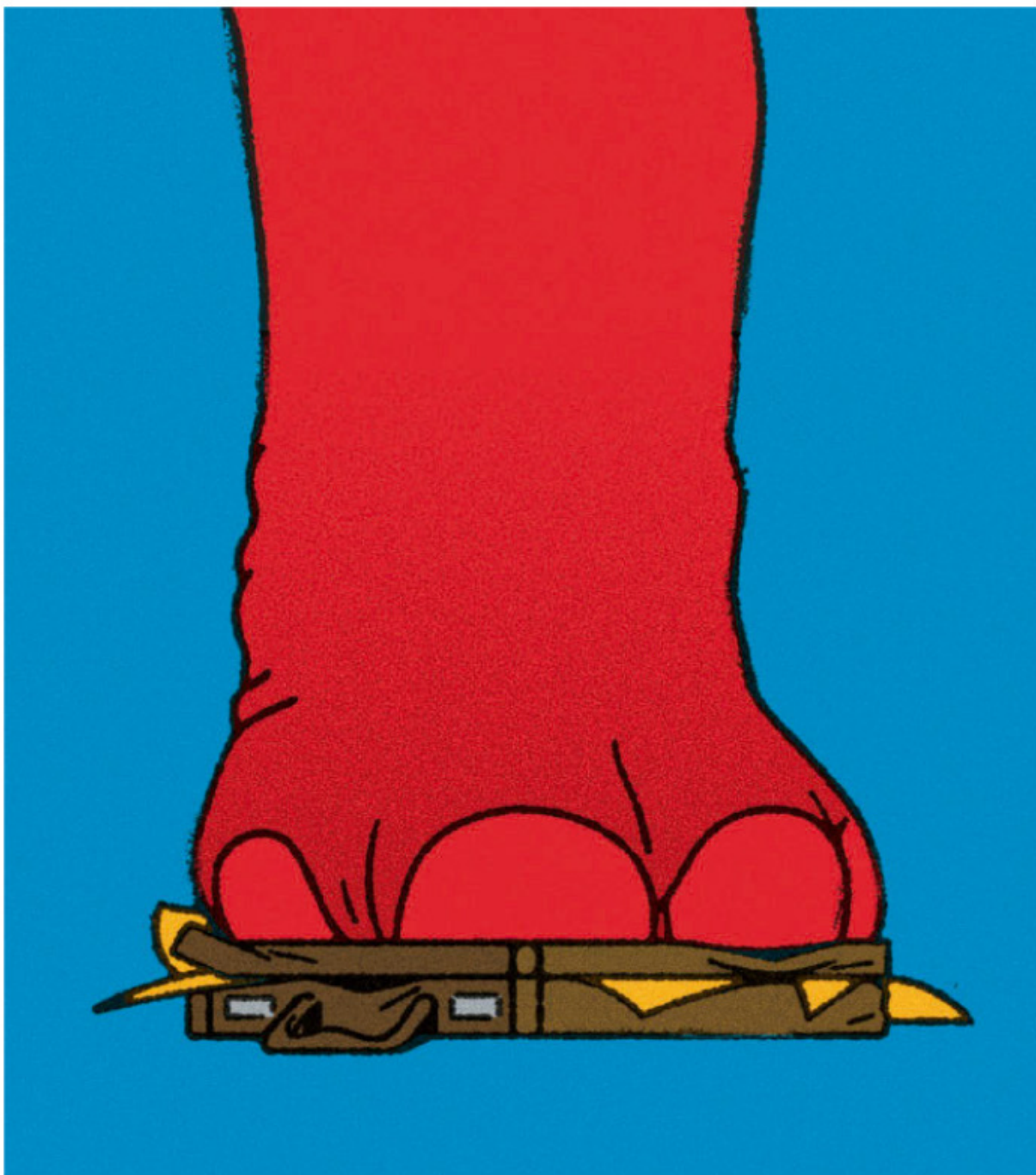
In theory, these ratios should mean that smaller forces have a better chance of holding off numerous attackers—as the Ukrainians managed to do in Kyiv. But it does not always work that way. After all, urban defenders face dilemmas of their own. A single battalion might defend a handful of buildings, but each unit will struggle to see beyond its surroundings, offer support to the others or replenish supplies and evacuate casualties. Large numbers of defenders can thus be pinned down in a small number of places—“fixed”, in military parlance—and either picked off or bypassed.

“In the majority of urban battles that we examined,” says Stuart Lyle, an urban expert at Britain’s Defence Science and Technology Laboratory, “the attacker wins.” Mr Betz and Colonel Stanford-Tuck point to battles for Aachen, Groningen and Medina in 1944-45, where smaller attacking forces defeated larger defenders, often with very low casualties and, in the latter case, in a few hours.

In all these cases, things turned less on the urban terrain than on sound tactics that apply as much outside cities as in them. Fast, powerful and multi-pronged advances can paralyse the enemy’s decision-making. Combined-arms warfare, with infantry, armour, artillery and aircraft working closely together, is vital.

Tanks, frequently thought to be ill-suited for narrow, debris-choked city streets, are often essential. Colonel Mansoor recalls that in the fight for Sadr City in Baghdad, Shia militants destroyed six light-weight Stryker armoured vehicles with rocket-propelled grenades within a week. American commanders were forced to send in much bigger Abrams tanks “which provided the overmatch that us troops needed to remain in the area”. And surprise is as important as ever: American doctrine points, with grudging respect, to the Viet Cong’s infiltration of Hue in 1968 ahead of the Tet Offensive.

In the end, those who see cities as the decisive battlegrounds of the next big war and those who view them as ruinous side-shows to be avoided at all costs tend to agree on one thing: that although much has been forgotten in the past two decades, the basics of urban warfare are not new. Cities have been razed, tunnelled and contested since antiquity. Soviet and Western armies alike thought deeply about a potential battle over Berlin, in case the cold war turned hot. “It’s all been learned before,” says Colonel Collins. “But we just don’t teach it and study it, and that’s probably the biggest disappointment.” ■



Business and politics (1)

The elephant in the boardroom

NEW YORK

Republicans are falling out of love with America Inc

TO AMERICAN EXECUTIVES, Rob Portman is the ideal politician. Clever, reasonable and experienced, he served as the top trade representative and budget director for George W. Bush, the Republican president from 2001 to 2009, before becoming a senator for Ohio more than a decade ago. Mr Portman has just one shortcoming: he is retiring. The party's nominee to replace him is J.D. Vance, backed by Donald Trump, the most recent Republican commander-in-chief. Mr Vance calls big technology firms "enemies of Western civilisation" and casts elite managers as part of "the regime", with interests anathema to those of America's heartland.

The Democratic Party, with its leftier lean, remains companies' most persistent

headache—firms were caught off-guard this month when Senate Democrats approved a rise in corporate-tax rates and new restrictions on the pricing of drugs. But, in the words of an executive at a big financial firm, "We expect Democrats to hate us." What is new is disdain from those on

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the right. There used to be a time, one lobbyist recalls with nostalgia, when "you would walk into a Republican office with a company and the question would be, 'How can I help you?'" Those days are over. The prospect of Republicans sweeping the mid-term elections in November and recapturing the White House in 2024 no longer sends waves of relief through American boardrooms.

Executives and lobbyists interviewed by *The Economist*, speaking on condition of anonymity, described Republicans as becoming more hostile in both tone and, increasingly, substance. Public brawls, such as Disney's feud with Ron DeSantis, Florida's Republican governor, over discussion of sexual orientation in classrooms, or Republicans blasting BlackRock, the world's largest asset manager, for "woke" investments, are only its most obvious manifestations. "It used to be the axis was left to right," says an executive at one of America's biggest firms. "Now it is an axis from insiders to outsiders; everyone seems intent on proving they are not part of the superstructure, and that includes business."

Long-held right-of-centre orthodoxies—in favour of free trade and competition, against industrial policy—are in flux. As Republicans' stance towards big business changes, so may the contours of American commerce.

The close partnership between Republicans and business has helped shape American capitalism for decades. Companies' profit-seeking pursuit of free trade abroad and free enterprise at home dovetailed with Republicans' credo of individual freedom and anti-communism. By the 1990s even Bill Clinton and other Democrats embraced new trade deals, giving American multinational firms access to new markets and cheaper labour.

As Glenn Hubbard, former dean of Columbia Business School and an economic adviser to Mr Bush, puts it, "Social support for the system was a given and you could argue over the parameters." The 2012 presidential battle between Barack Obama and Mitt Romney "felt like a big deal at the time", says Rawi Abdelal of Harvard Business School. "But in terms of the business stakes, it wouldn't have mattered at all."

Four years later Republicans were still attracting about two-thirds of spending by corporate political-action committees (PACs), which give money to candidates in federal elections, and a big corporate-tax cut in 2017 went on to be the main legislative achievement of Mr Trump's term. Yet Mr Trump had campaigned on the feeling of ordinary Americans that they were being left behind. Executives hoping that his fiery campaign rhetoric would be doused by presidential restraint had to contend in-▶▶

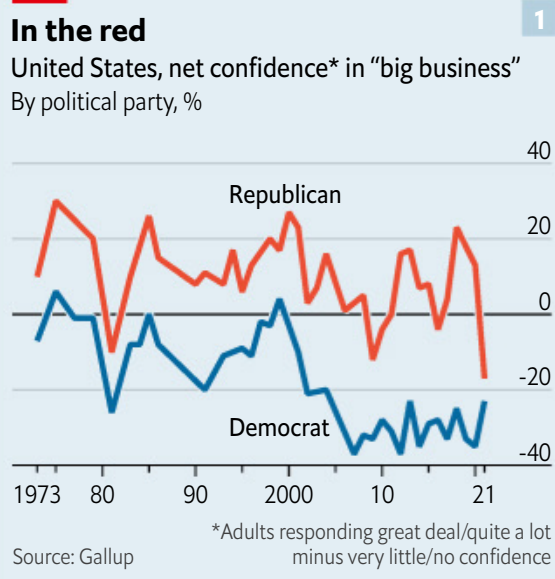
stead with his trade war with China, curbs on immigration and contentious positions on climate change and race. Bosses felt compelled to speak out against his policies, which appalled many of their employees and customers. In the eyes of Trump supporters, such pronouncements cast the CEOs as members of the progressive elite bent on undermining their champion.

After Mr Trump's defeat by Mr Biden, companies wondered if their old alliance with Republicans might be restored. In July 17 Republican senators voted in favour of a bill that provides, among other things, \$52bn in subsidies to compete with China by manufacturing more semiconductors in America—which chipmakers such as Intel naturally applauded. This month nearly all Republicans opposed the Democrats' \$700bn climate and health-care bill, known as the Inflation Reduction Act (IRA), which raises taxes on large companies and enables the government to haggle with drugmakers over the price of some prescription medicines.

This apparent business-friendliness-as-usual conceals a deeper shift, however. The Republican Party has attracted more working-class voters—an evolution accelerated by Mr Trump's willingness, on paper if not always in practice, to put the interests of the American worker ahead of those of the American multinational.

For most of the past 50 years more Republicans had a lot of confidence in big business than had little or no confidence in it, often by double-digit margins, according to Gallup polls. Last year the mistrustful outnumbered the trusting by a record 17 percentage points, worse than at the height of the global financial crisis of 2007-09 (see chart 1). Republican election war-chests are increasingly filled either by small donors or the extremely rich. Both these groups are likelier to favour ideologues over pragmatists, notes Sarah Bryner of OpenSecrets, an NGO which tracks campaign finance and lobbying.

The result of all this is growing Republican support for policies that are hostile to America Inc. Josh Hawley, a senator from Missouri, wants companies with more than \$1bn in annual revenue to pay their staff at least \$15 an hour. His colleague from Florida, Marco Rubio, has backed the formation of workers' councils at companies, an alternative to unions. In March Tom Cotton of Arkansas called for Americans to "reject the ideology of globalism" by curbing immigration, banning some American investments in China and suggesting Congress should "punish offshoring to China". Republicans in Congress have co-sponsored several bills with Democrats to rein in big tech. Mr Vance, who has a good shot at joining them after the mid-terms, has proposed raising taxes on companies that move jobs abroad. Mr



Trump himself repeatedly promised to lower drug prices.

The fact that Republicans opposed the IRA—and other business-wary Democratic initiatives—may mean simply that they loathe Democrats more than they dislike big business. Many bosses fret that the Republican Party will enact punitive policies once it is back in power. "There is no person who says, 'Don't worry,'" sighs one pharmaceutical executive. "You ignore what a politician says publicly at your peril," warns another business bigwig.

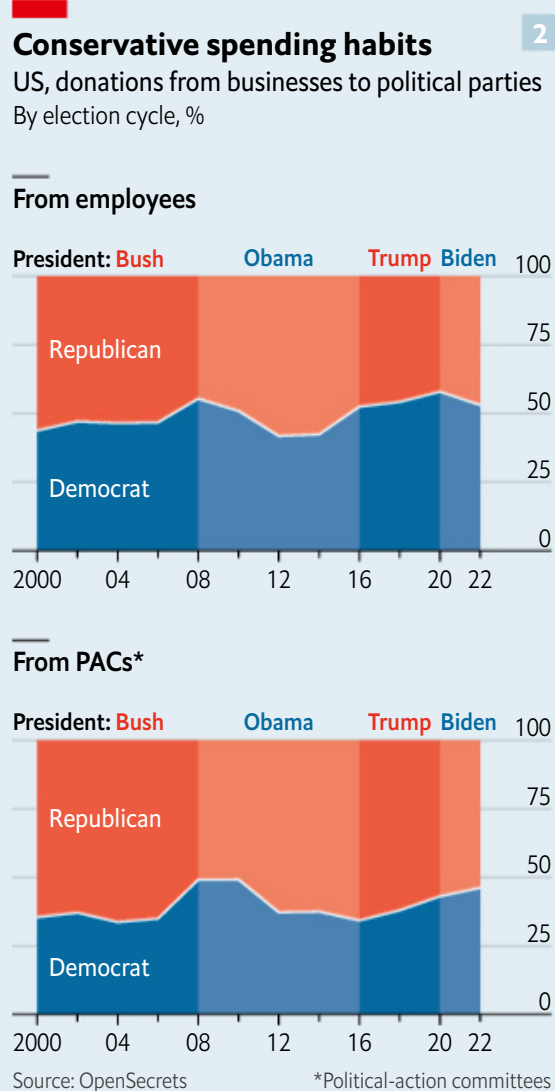
That is already evident at the state level, where Republicans often control all levers of government and are therefore free to enact their agenda in a way that is impossible in gridlocked Washington. After Disney

spoke out against a law in Florida that restricts discussion of gender and sexual orientation in schools, Mr DeSantis revoked the company's special tax status. Texas has a new law that restricts the state's business with firms that "discriminate against firearm and ammunition industries". Kentucky, Texas and West Virginia have passed similar laws barring business with banks and other firms that boycott fossil-fuel producers; about a dozen other Republican-controlled states are considering doing the same.

Such laws present a problem for companies. In July West Virginia's treasurer said that the anti-fossil-fuel policies of some of America's biggest financial firms—BlackRock, Goldman Sachs, JPMorgan Chase, Morgan Stanley and Wells Fargo—made them ineligible for state contracts. The definition of what counts as discriminating or boycotting is hazy. JPMorgan Chase, which does not lend to firms that sell military-style weapons to consumers, first said that the Texan law prevented it from underwriting municipal-bond deals in that state, then bid for a contract (unsuccessfully). In Texas, Republican lawmakers are threatening to prosecute firms that pay for staff to travel out of state for abortions, which the Texan legislature has severely restricted.

Right-wing culture-warriors have always been part of the Republican Party, but the line between them and their pro-business country-club colleagues has collapsed. These days, worries a business grandee, both parties see it as "acceptable to use state power to get private entities to conform to their viewpoints". "ESG is a four-letter word in some Republican offices," says Heather Podesta of Invariant, a lobbying firm, referring to the practice, championed by BlackRock among others, of considering environmental, social and governance factors, not just returns, in investment decisions. Senator Ted Cruz of Texas has blamed Larry Fink, BlackRock's boss, for high petrol prices. "Every time you fill up your tank," he growled in May, "you can thank Larry for the massive and inappropriate ESG pressure."

Companies are adjusting to this new, more volatile political reality. Some are creating formal processes for reviewing the risks of speaking out on social issues that may provoke a political backlash, including from Republicans. The way firms describe their strategies to politicians is changing, too. Lobbying is no longer confined to the parties' leaders in the two houses of Congress. Because politicians in both parties are increasingly willing to defy the leadership, says an executive, "you have to go member by member". Neil Bradley, policy chief of the US Chamber of Commerce, which represents American big business, says that his organisation has



▶ had to redouble efforts to “find people who have interest in governing”.

Sometimes that means supporting more Democrats. In 2020 the chamber endorsed more vulnerable freshman Democratic incumbents, who were mostly moderates, than in previous years. That prompted Kevin McCarthy, the leading Republican in the House of Representatives, to say he didn't want the organisation's endorsement “because they have sold out”. So far this year corporate PACs have funnelled 54% of their campaign donations to Republicans, down from 63% in 2012. Firms' employees have beaten an even hastier retreat, with just 46% donating to Republican candidates, compared with 58% ten years ago, according to OpenSecrets (see chart 2 on previous page).

If the upshot is divided government, that would suit American business just fine. As one executive remarks, “We might not have improvements, but we won't get more cataclysmic policies.” ■

Food companies

Lots of cattle, less hat

SÃO PAULO

The world's biggest food producer cleans up its barn

JUST OVER five years ago JBS and its then chief executive, Joesley Batista, embodied everything that was wrong with Brazilian business. Mr Batista, son of the meat giant's eponymous founder, José Batista Sobrinho, was fleeing Brazilian prosecutors, his Italian-made yacht *Why Not?* in tow, over his role in a gargantuan bribery scandal. (He was eventually caught.) JBS was fending off accusations of selling dodgy meat and razing the Amazon to raise cattle (both of which it denies). Investors and customers stampeded out.

“It took a lot of work to make sure what

happened in the past didn't happen again,” says Gilberto Tomazoni, who became the first non-Batista CEO in 2018. His efforts to rebuild JBS's image—and investors' trust—are paying off. On his watch its market value has nearly doubled, to \$14bn. Last year it sold \$67bn-worth of packaged food, more than any rival (see chart). On August 11th it reported revenues of 92bn reais (\$19bn) in the second quarter, up by 7.7% year on year.

Under Mr Tomazoni, JBS has “simplified and consolidated its ownership structure, making it more transparent to outsider investors,” explains Paulo Terra of FGV, a business school in São Paulo. It has drilled its 250,000 employees in compliance. It has also restructured its debt, selling off billions in assets to pay off creditors. That allowed it to go shopping. In 2021 JBS bought an American smoked-meat processor, an Australian hog breeder and an Italian sausage-maker. It is angling for a share of the seafood business, swallowing sellers of plant-based protein and gobbling up startups developing lab-grown meat.

Geographical diversification has made the company more resilient. It controls a quarter of beef processing in America, and last year benefited from a combination of low live-cattle prices and a hunger for beef. Now that inflation has made pricey meat less appetising to Americans, dragging JBS's beef sales there down by 4.6% year on year, it can lean more on growth in Australia and Brazil. At home in particular, a wider product range, which includes cheaper pork, poultry and fish, has helped it at a time when less diversified competitors struggle with rising prices of feed.

The whiff of scandal will continue to scare off some investors. Wesley, nephew of Joesley, was recently made the global president of operations. Joesley and his brother, both of whom spent time behind bars on charges of corruption, remain a powerful force. The family's holding company, J&F, retains a 42% stake. Some of their past deals remain under scrutiny.

In America, accusations of price-fixing and worries about workers' welfare have ▶▶

Business and politics (2)

A burgeoning relationship

BERLIN

The Greens and Deutschland AG cross-pollinate

IF GERMANS WERE to elect their chancellor directly they would, a new poll implies, vote for Robert Habeck, the economy minister in Olaf Scholz's coalition government. Mr Habeck and Annalena Baerbock, the foreign minister, who are both from the Greens, regularly top such surveys. The next chancellor could well be a Green.

Ten years ago this would have been a horror scenario for German business. They saw the Greens as a *Verbotspartei* (prohibition party) whose Birkenstock-wearing leaders lived in an unrealistic Green Utopia with no internal-combustion engines or short-haul flights. CEOs didn't talk to the party—and the party ignored their concerns.

Since then the Greens have joined more state coalition governments, most notably in Germany's industrial heartlands. Baden-Württemberg, a southern industrial powerhouse, has been led by a Green state premier, Winfried Kretschmann, for the past 11 years. The popular Mr Kretschmann is part of the moderate “*Realo*” wing of the party that seeks to combine pro-business centrism and green concerns. North Rhine-Westphalia, the most populous state, is led by a coalition of Greens and the conservative Christian Democratic Union.

Government has made the Greens less Utopian. They have redefined themselves as allies rather than adversaries of

German business. Their main aim—a carbon-neutral Germany in 20 years—is shared by most companies. In her “pact with industry” last year Ms Baerbock, who was then running for chancellor, proposed handouts for firms that cut their net emissions to zero and kept production at home.

“There is now lots of economic competence in the Green Party,” says Marcel Fratzscher, head of the German Institute for Economic Research, a think-tank. Danyal Bayaz, Baden-Württemberg's Green finance minister, used to work for the Boston Consulting Group. In 2018 Kerstin Andreae, an economist who was then a Green member of the Bundestag, set up the party's “economic council”. Members include CEOs such as Martin Brudermüller of BASF, a chemicals giant, and Gerd Chrzanowski of the Schwarz group, which owns Lidl, a discount grocer. Last year Joe Kaeser, the former boss of Siemens, an engineering giant, spoke at the Greens' party conference.

Unlike old-school Greens, Mr Habeck is a good listener, says Matthias Berninger, a former Green MP who is now a lobbyist for Bayer, a drugmaker. Unlike Mr Scholz, he is a good talker. If he steers Germany's economy through the winter, when Russia may cut off the flow of natural gas in response to EU sanctions over its war in Ukraine, business may see him as a good future chancellor, too.

Hunger games

World's biggest packaged-food companies by food revenues, 2021, \$bn



Source: Bloomberg

► made meatpackers the focus of congressional probes. Criticism of its links to deforestation in the Amazon has pressed JBS to declare sustainability its “core business strategy” and to pledge to emit no net carbon by 2040. Humankind is “eating the planet”, admits Mr Tomazoni, so it needs to produce food in a new way.

JBS may find it increasingly hard to sustain rapid growth. Even as sales rose, net profit declined last quarter, by 10% year on

year, as drought shrank grazing lands and the cost of animal feed spiralled. Weakening demand in America will continue to squeeze profit margins in beef and pork. So will a slowdown in China, a smaller but faster-growing beef market where the middle class is eating more beef. JBS’s share price is down by 17% since its recent peak in April. Having whetted investors’ appetites, Mr Tomazoni will need to keep working hard in order to keep them sated. ■

expected to push battery costs up in 2022 for the first time in more than a decade.

In June BloombergNEF cast doubt on its earlier prediction that the cost of buying and running an EV would be as low as for a fossil-fuel car by 2024. More distant targets, such as the EU’s coming ban on new sales of carbon-burning cars by 2035, may not be met. Could the EV boom run out of juice before it gets going in earnest?

On paper, there ought to be plenty of batteries to go round. Benchmark Minerals, a consultancy, has analysed manufacturers’ declared plans and found that, if they materialise, 282 new gigafactories should come online worldwide by 2031. That would take total global capacity to 5,800Gwh. It is also a big “if”. Bernstein calculates that current and promised future supply from the six established battery-makers—BYD and CATL of China; LG, Samsung and SK Innovation of South Korea; and Panasonic of Japan—adds up to 1,360Gwh by the end of the decade. The balance would have to come from newcomers, and being a newcomer in a capital-intensive industry is never easy.

The optimistic overall capacity projections conceal other problems. Matteo Fini of S&P Global Mobility, a consultancy, notes that gigafactories take three years to build but require longer—possibly a few extra years—to manufacture at full capacity. As such, actual output by 2030 may fall short. Moreover, manufacturers’ unique technologies and specifications mean that cells from one factory are usually not interchangeable with those from another, which could create further bottlenecks.

Most troubling for Western carmakers is China’s dominance of battery-making. The country houses close to 80% of the world’s current cell-manufacturing capacity. Benchmark Minerals forecasts that China’s share will decline in the next decade or so, but only a bit—to just under 70%. By then America would be home to just 12% of global capacity, with Europe accounting for most of the rest.

Americans’ slower uptake of EVs may ease the crunch for carmakers there. Deloitte, a consultancy, expects America to account for fewer than 5m vehicles of the 31m EVs sold in 2030, compared with 15m in China and 8m in Europe. Detroit’s auto giants already have joint ventures with the big South Korean battery-makers to build domestic gigafactories. In July Ford and SK Innovation finalised a deal to build one in Tennessee and two in Kentucky, with the carmaker chipping in \$6.6bn and SK Innovation \$5.5bn. The same month it struck a deal to import CATL batteries. General Motors and LG Energy are together putting more than \$7bn into three battery factories in Michigan, Ohio and Tennessee.

It is Europe’s carmakers that seem most exposed. Volkswagen plans to construct ►►



The EV revolution

Cell-side analysis

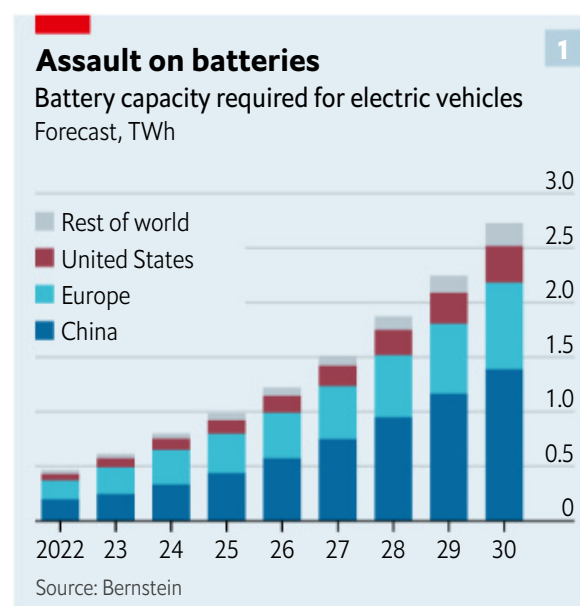
Could a battery crunch halt the electric-car boom?

ELECTRIC VEHICLES (EVs) appear unstoppable. Carmakers are outpledging themselves in terms of production goals. Industry analysts are struggling to keep up. Battery-powered cars may zoom from 10% of global vehicle sales in 2021 to 40% by 2030, according to BloombergNEF. Depending on whom you ask, that could translate to between 25m and 40m EVs a year. They, and the tens of millions manufactured between now and then, will need plenty of batteries. Bernstein reckons that demand from EVs will grow six-fold by 2030 (see chart 1), to 2,700 gigawatt-hours (Gwh). Rystad puts it at 4,000Gwh.

Such forecasts explain the frenzied activity up and down the battery value chain. The ferment stretches from the salt flats of Chile’s Atacama desert, where lithium is mined, to the plains of Hungary, where on August 12th CATL of China, the world’s biggest battery-maker, announced a €7.3bn (\$7.5bn) investment to build its second European “gigafactory”.

It is, however, looking increasingly as

though the activity is not quite frenzied enough, especially for the Western car companies that are desperate to reduce their dependence on China’s world-leading battery industry amid rising geopolitical tensions. Prices of battery metals have spiked (see chart 2 on later page) and are



▶ six gigafactories of its own by 2030. Some, such as BMW, are teaming up with the South Koreans. Others, including Mercedes-Benz, are investing in European battery-making through a joint-venture called ACC. A number of European startups, such as Northvolt of Sweden, which is backed by Volkswagen and Volvo, are also busily building capacity. Yet the continent's car industry looks likely to remain quite reliant on Chinese manufacturers. Some of those batteries will be made locally: CATL's first investment in Europe, a battery factory in Germany, is set to begin operations at

the end of the year. Some packs or their components may, however, still need to be imported from China.

That is not a comfortable position to be in for European carmakers. It may become even less so if the EU enacts levies based on total lifecycle emissions from vehicles, including EVs. Northvolt's chief executive, Peter Carlsson, reckons that proposed EU tariffs on carbon-intensive imports could add 5-8% to the cost of a Chinese battery made using dirty coal power. That could be roughly equivalent to an extra \$500, give or take, per pack. Such rules would boost his

firm's prospects, since it runs on clean Nordic hydroelectricity. It would also severely limit European carmakers' ability to source batteries from abroad.

These manufacturing bottlenecks, serious though they are, look manageable next to those at the mining end of the battery value chain. Take nickel. Thanks to a production jump in Indonesia, which accounts for 37% of global output, the market seems well supplied. However, Indonesian nickel is not the high-grade sort usable in batteries. It can be made into battery-compatible stuff, but that means ▶▶

Bartleby When to trust your gut

Deliberation is not always the best option

HUMANS HAVE been honed over millions of years of evolution to respond to certain situations without thinking too hard. If your ancestors spotted movement in the undergrowth, they would run first and grunt questions later. At the same time, the capacity to analyse and to plan is part of what distinguishes people from other animals. The question of when to trust your gut and when to test your assumptions—whether to think fast or slow, in the language of Daniel Kahneman, a psychologist—matters in the office as much as in the savannah.

Deliberative thinking is the hallmark of a well-managed workplace. Strategic overhauls and budget discussions are built on rounds of meetings, memos, formulas and presentations. Processes are increasingly designed to stamp out instinctive responses. From blind screening of job applicants to using “red-teaming” techniques to pick apart a firm's plans, rigour trumps reflex.

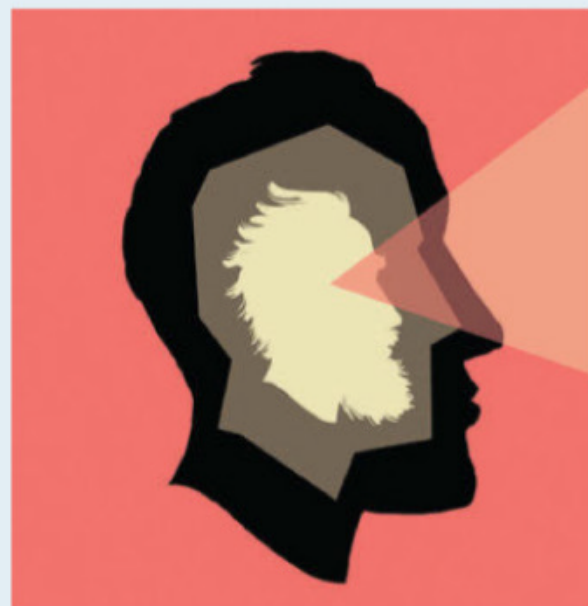
Yet instinct also has its place. Some decisions are more connected to emotional responses and inherently less tractable to analysis. Does a marketing campaign capture the essence of your company, say, or would this person work well with other people in a team? In sticky customer-service situations, intuition is often a better guide to how to behave than a script.

Gut instincts can also be improved (call it “probiotic management”). Plenty of research has shown that intuition becomes more unerring with experience. In one well-known experiment, conducted in 2012, volunteers were asked to assess whether a selection of designer handbags were counterfeit or real. Some were instructed to operate on instinct and others to deliberate over their deci-

sion. Intuition worked better for those who owned at least three designer handbags; indeed, it outperformed analysis. The more expert you become, the better your instincts tend to be.

However, the real reason to embrace fast thinking is that it is, well, fast. Instinctive decision-making is often the only way to get through the day. Researchers at Cornell University once estimated that people make over 200 decisions a day about food alone. The workplace is nothing but a succession of choices, a few big and many small: what to prioritise, when to intervene, whom to avoid in the lifts and, now, where to work each day.

To take one example, when your inbox brims with new emails at the start of a new day, there is absolutely no way to read them all carefully. Intuition is what helps you decide which ones to answer and which to delete or leave unopened. Emails that are part of existing threads: open. Messages from people directly above and below you: open. Reminders from the chief information officer that cyber-security really, really matters: delete.



Instinct is also at work on those occasions when people have completely zoned out. They might be working on something else during a Zoom call, or playing chess on their phones, or simply admiring the ceiling pattern. Suddenly they are aware of a silence, and realise that they have been asked something or are expected to make a contribution. This is the office equivalent of coming face to face with a lion. Those who are fit to survive will say something plausible like “I'd like to understand how we are measuring success,” prompting murmurs of agreement from everyone else who hasn't been paying attention but senses this might be a good answer.

Fast thinking is not just about self-preservation. It can help the entire organisation. The value of many managerial decisions lies in the simple fact that they have been made at all. Yet as data gushes from every pore of the modern organisation, the temptation to ask for one more bit of analysis has become much harder to resist. A well-established psychological phenomenon known as “verbal overshadowing” captures the danger of overthinking things: people are more likely to misidentify someone in a lineup if they have spent time writing a description of their faces. Managers often suffer from analytical overshadowing, mulling a simple problem until it turns into a complex one.

When to use intuition in the workplace rests on its own form of pattern recognition. Does the decision-maker have real expertise in this area? Is this a domain in which emotion matters more than reasoning? Above all, is it worth delaying the decision? Slow thinking is needed to get the big calls right. But fast thinking is the way to stop deliberation turning to dither.



▶ smelting it twice, which emits three times more carbon than refining higher-grade ores from places like Canada, New Caledonia or Russia. Those additional emissions defeat the purpose of making EVs, notes Socrates Economou of Trafigura, a commodities trader. Carmakers, particularly European ones, may shun the stuff.

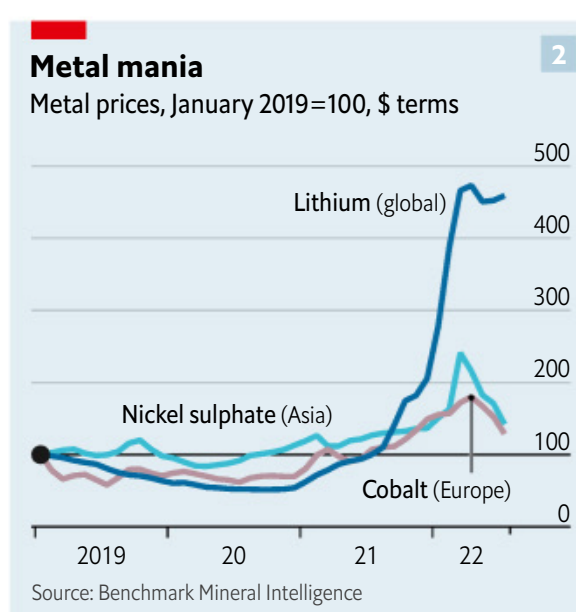
Cobalt has become less of a pinch point. A price spike in 2018 prompted battery-makers to develop battery chemistries that use much less of it. Planned mine expansions in the Democratic Republic of Congo (DRC), home to the world's richest cobalt deposits, and Indonesia should also tide battery-makers over until 2027. After that things get trickier. Getting more of the metal may require manufacturers to embrace the DRC's artisanal mining, the formalisation of which has yet to bear fruit. Until it does, many Western carmakers say they would not touch the sector—where adults and many children toil in harsh conditions—with a barge-pole.

Most uncertainty concerns lithium. A shortage is forcing some manufacturers to cut production. For now consumer-electronics firms are bearing the brunt. But their gadgets' smaller batteries represent a fraction of demand. EV-makers, whose battery packs use a lot more, could be next.

By 2026 the lithium market is projected to tip back into surplus, thanks to planned new projects. However, most of these are in China and rely on lower-grade deposits which are much costlier to process than those of Australia's hard-rock mines or Latin America's brine ponds. Mr Economou estimates that a price of \$35,000 per tonne of the battery-usable form of lithium carbonate is required to make such projects worthwhile—lower than today's lofty levels, but three times those a year ago.

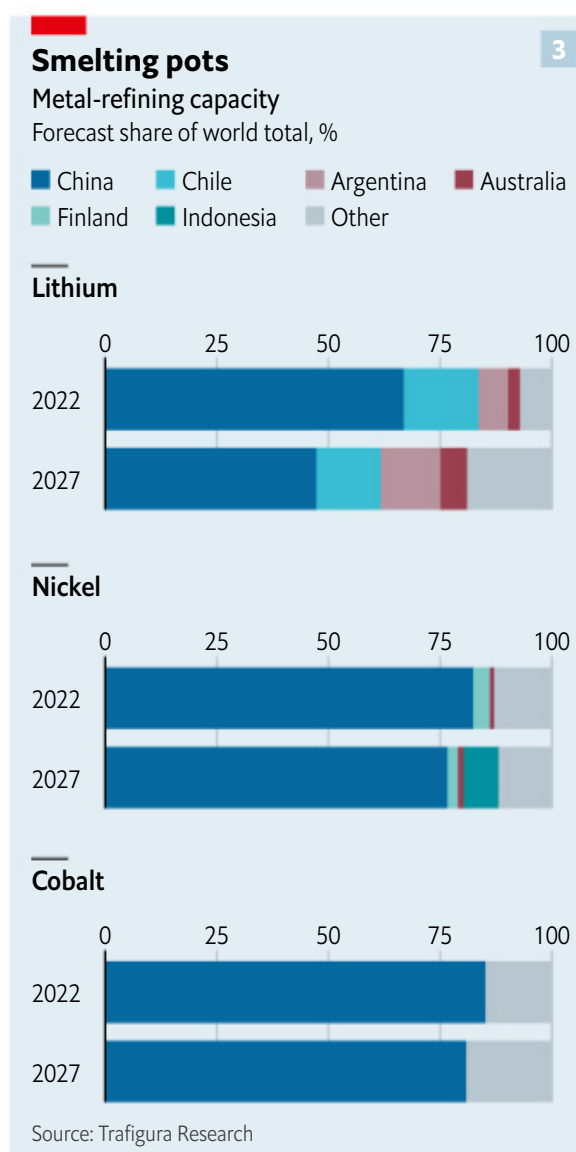
High-grade lithium due to come from elsewhere should not be taken for granted, either. Chile's new draft constitution, which will be put to a referendum in September, proposes nationalising all natural resources. Changes to the tax regime in Australia, which already has some of the highest mining levies in the world, could deter fresh investments in "green"-metal production. In late July the boss of Albemarle, the largest publicly traded lithium producer, warned that, despite efforts to unlock more supply, carmakers faced a fierce battle for the metal until 2030.

Because building mines can take anywhere between five and 25 years, there is little time left to get new ones up and running this decade. Big miners are reluctant to enter the business. Markets for green metals remain too small to be worth the hassle for the mining "majors", says the development boss at one such firm. Despite their reputation for doing business in shady places, most lack the stomach to take a gamble on countries as tricky as the



DRC, where it is hard to enforce contracts. Smaller miners that usually get risky projects off the ground cannot raise capital on listed markets, where investors are queasy about the mining industry, which is considered risky and, ironically, environmentally unfriendly.

The resulting dearth of capital is attracting private-equity firms (often founded by former mining executives) and manufacturers with a taste for vertical integration. Battery-makers like LG and CATL have backed mining projects. Since the start of 2021 car firms have made around 20 investments in battery-grade nickel, and five others in lithium and cobalt. Most of these projects involved Western compa-



nies. In March, for example, Volkswagen announced a joint venture with two Chinese miners to secure nickel and cobalt for its EV factories in China. In July General Motors said it would pay Livent, a lithium producer, \$200m upfront to secure lumps of the white metal. The American EV champion, Tesla, is signing deals left and right.

Mick Davis, a coal-mining veteran now at Vision Blue Resources, a firm that invests in smaller miners, doubts all this dealmaking will be enough to plug the funding gap. Recycling, which makes up a quarter of supply in many mature metals markets, is not expected to help much before 2030. Tweaks to battery designs may moderate demand for the scarcest metals somewhat, but at the risk of lower battery performance. Lithium in particular will remain hard to substitute. Technologies that do away with it entirely, such as sodium-based cathodes, are a long way off.

Even if the West's EV industry somehow managed to secure enough metals and battery-making capacity, it would still face a giant problem in the middle of the supply chain, refining, where China enjoys near-monopolies (see chart 3). Chinese companies refine nearly 70% of the world's lithium, 84% of its nickel and 85% of its cobalt. Trafigura forecasts that the shares for the last two of these will remain above 75% for at least the next five years. And as with battery manufacturers, Chinese refiners gobble up dirty coal-generated electricity. On top of that, according to Trafigura, both European and North American firms are also expected to rely on foreign suppliers, often Chinese ones, for at least half the capacity to convert refined ores into the materials that go into batteries.

Western governments grasp the urgent need to diversify their suppliers. Last year Joe Biden, America's president, unveiled a blueprint for a domestic battery supply chain. His huge infrastructure law, passed in 2021, set aside \$3bn for battery-making in America. The Inflation Reduction Act, which he signed into law on August 16th, also includes sweeteners for the industry, so long as the ores, refined materials and components come from America or allied countries. The EU, which created a battery alliance in 2017 to co-ordinate public and private efforts, says €127bn was invested last year across the supply chain, with an additional €382bn expected by 2030. Most of this is likely to land downstream, helping the West become self-sufficient in the production of finished cells by 2027.

That is something. And newfound deposits, better mining technology, cleverer battery chemistry and sacrifices on performance may yet combine to bring the market into balance. More probably, as Jean-François Lambert, a commodities consultant, puts it, the EV industry is "going to be living a big lie for quite some time". ■

Schumpeter | The parched throat

For business, water scarcity is where climate change first hits home



ONE OF YOUR columnist's favourite ways of passing a hot afternoon in Monterrey, three hours south of Mexico's border with Texas, is with a cold bottle of locally brewed Bohemia beer alongside a plate of *cabrito* (roast kid). For a business writer, it is a justifiable use of the expense account. Beers like Bohemia helped make Monterrey the industrial hub that it is. The Cuauhtémoc brewery, now owned by Heineken, a global giant, was started in 1890 by members of the Garza and Sada families, who went on to become Mexico's biggest industrialists. Lacking suppliers in the arid north, they made their own bottles, caps and packaging, giving rise to conglomerates that fuelled the country's modernisation. Today Mexico is the largest exporter of beer in the world.

Monterrey is still awash with beer. But it is also stricken by drought. This has left millions of residents reliant on leaky public pipes desperately short of water, even as the industries that employ them guzzle the stuff, thanks to higher-quality private infrastructure. The brewers say they consume less than 1% of the local water, most of which is used by farmers who have no incentive to conserve it. That has not stopped President Andrés Manuel López Obrador, never one to waste an opportunity to bash the rich, from blaming the industrialists. He has told the beer firms to up sticks and move south, where rivers still run in torrents.

The industry is keeping its head down, treating this as populist rhetoric rather than a genuine demand to transplant breweries lock, stock and barrel to the other end of the country. Yet the imbroglío is illustrative, too. It shows how water shortages, combined with reputational damage and regulatory overreach, could affect many hydro-dependent industries, from food production, mining and power generation to apparel and electronics. Colin Strong of the World Resources Institute (WRI), an NGO, says that though the private sector is trying to use water more efficiently, scarcity will be exacerbated by climate change, population growth and the greater water use that comes with growing prosperity. He quotes a pithy refrain common in environmental circles. "If climate change is the shark, water is its teeth."

Heat and drought are leaving teeth marks everywhere. In Chile, the world's biggest copper producer, the driest decade on record has forced mining firms such as Anglo American and Antofagasta

to reduce output this year. In recent days companies such as Toyota, a carmaker, and Foxconn, which makes iPhones for Apple, halted production in south-western China after a drought caused hydropower shortages. On August 16th the American government took unprecedented steps to reduce water consumption in states in the Lower Colorado River Basin to safeguard reservoirs crucial for generating electricity. Norway, known as the battery of Europe for its abundant hydropower, says that water shortages may force it to curb supplies to its neighbours' grids. In Germany, the Rhine has fallen so low that it has affected the ferrying of cars and chemicals north, and coal and gas south. Across unusually rain-free Europe, grain crops have frazzled in the heat. So have cotton fields in thirsty Texas.

The problem is not a lack of water *per se*. Climate change may make some places drier and others wetter. It is the uneven distribution of freshwater—of which fast-growing places like India are woefully short—that provide the conditions for a crisis. This is made worse by waste, pollution and the near-universal underpricing of water. Some governments, notably China's, have created pharaonic projects to transport water to where it is needed. Others, such as Mr López Obrador's, peddle the quixotic idea of moving demand to where the water is. The best outcome in the long term, on paper at least, is the simplest: that less of the stuff is used, and more of what is used is treated better. It is something the private sector is just starting to grapple with.

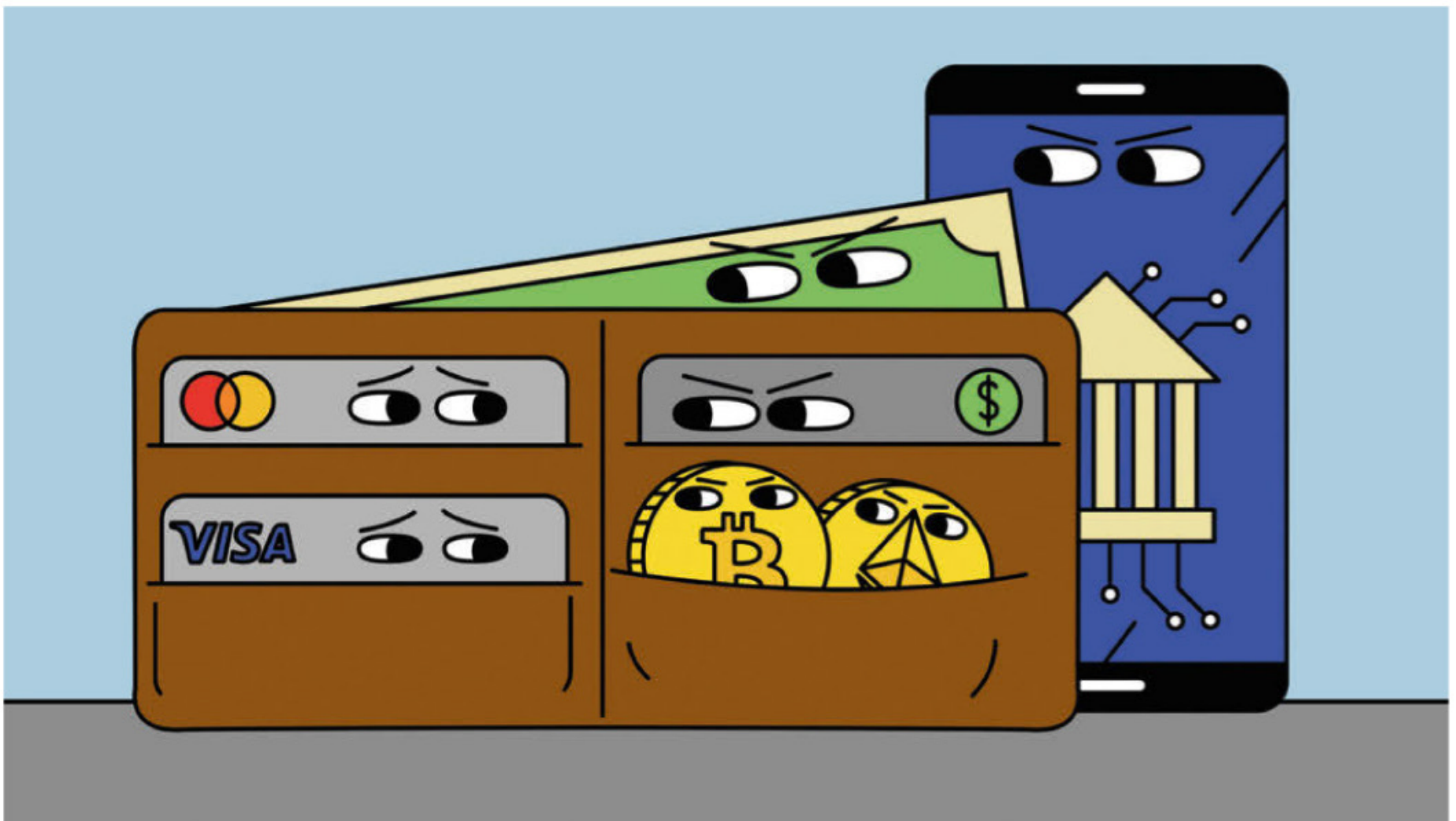
Industries directly affected by water shortages have got a head start. Global mining firms are using desalination plants in Chile. Beer and soft-drinks companies, existentially reliant on clean water, have targets for improving efficiency (Heineken says it uses 2.5 litres of water to make a litre of beer in Mexico, about half the global industry average). In collaboration with the WRI, Cargill, an agro-industrial behemoth, recently extended the monitoring of water use from its own operations to the farmers who supply its crops. Fashion retailers, whose suppliers are often heavy users of water and dyes in dry areas, are considering similar moves, to avoid angry flare-ups by local residents who worry about being second in line to the taps.

This calls for careful stewardship. When Cape Town was in danger of running out of water in 2017, AB InBev, one of the world's largest brewers, helped municipal authorities reduce water loss from the network. Ingenuity also helps. In Singapore, NewBrew makes craft beer out of reclaimed sewage. Andre Fourie, head of sustainability at AB InBev, says that in the future many companies will have to treat and reuse water to overcome scarcity.

Last orders

The looming shortages still do not get the attention they deserve. As a heavily subsidised raw material, water is so cheap that many CEOs overlook it. A report this year by Planet Tracker and CDP, two NGOs, said that about a third of listed banks do not assess water risks in their portfolios. For shareholders, it mostly comes far behind carbon emissions as an environmental, social and governance (ESG) concern. It is not a risk that can easily be squeezed into oversimplified ESG ratings. It is so dependent on local conditions that it requires myriad approaches.

In the words of Will Sarni, a consultant, water is an enigma. "It's a personal thing. It's a social issue. It's got a spiritual dimension." He hopes new technologies that use solar power to capture moisture from the air could bring creative destruction to the supply of water. Schumpeter, Bohemia in hand, would drink to that. ■



Credit cards

Pay back

WASHINGTON, DC

The Visa-Mastercard duopoly hurts consumers and retailers. Can it be broken?

“IT’S LIKE VEGAS,” says Matt Moore, the owner of a small bike shop in Georgetown, a neighbourhood in Washington. “You know you’re going to get screwed, the only question is how to get screwed the least.” The system of interchange—whereby banks and credit-card issuers charge merchants for collecting payments—is loathed by many retailers. Merchants hand over \$138bn in fees each year; according to the National Retail Federation, a lobby group, it is their second-biggest cost after wages. And while shoppers are less likely to have strong feelings about the system, being mostly unaware of it, they also suffer as a result of higher sticker prices.

America is home to the heftiest interchange fees of any major economy—costs are an order of magnitude greater than in Europe and China. That largely benefits two firms: Visa and Mastercard, which facilitate more than three-quarters of the country’s credit-card transactions. Doing so has made them two of the most profitable companies in the world, with net margins last year of 51% and 46% respectively. Rank every firm (excluding real-estate-in-

vestment trusts) in the S&P 500 index by their average net-profit margins last year, five years ago and a decade ago, and only four appear in the top 20 every time. Two are financial-information firms, Intercontinental Exchange and the CME Group. The others are Mastercard and Visa.

At first glance their position appears insurmountable. Already dominant, in recent years the firms have been boosted by a covid-induced rise in online shopping. American consumers used credit or debit cards for 45% of their transactions in 2016; by 2021, that had reached 57%. The migration from cash is “a significant and long-running tailwind,” says Craig Vosburg of

Mastercard. Yet two threats loom. The first comes from Washington, where legislators hope to smash the duo’s grip on payments. The second is virtual. Payments have been transformed in Brazil, China and Indonesia by cheap, convenient app-based options from tech giants like Mercado Pago, Ant Group, Tencent and Grab. After a long wait, new entrants now look like they could shake up America’s market.

That would be good news for consumers and retailers. Much of Visa and Mastercard’s profits are ultimately driven by the fees that are charged when a shopper uses a credit or debit card to make a purchase. The EU has capped such fees for credit cards at 0.3% of the transaction value; intense competition in China means that WeChat and Alipay collect charges of just 0.1%. In America, debit cards are regulated by the “Durbin amendment”, which gives the Federal Reserve the authority to enforce a cap. But credit-card fees are unregulated and meatier, usually sitting at about 2% of the transaction and rising to 3.5% for some premium-reward cards.

These fees are set by Mastercard and Visa, but collected by banks, which take a slice and use them to fund perks, such as insurance and air miles, to entice customers. For the right to use the card networks’ transaction-processing services, banks hand over enormous fees. The result is that consumers pay through the nose for their perks while remaining largely oblivious. According to a paper published last year by Joanna Stavins of the Federal Reserve Bank ▶▶

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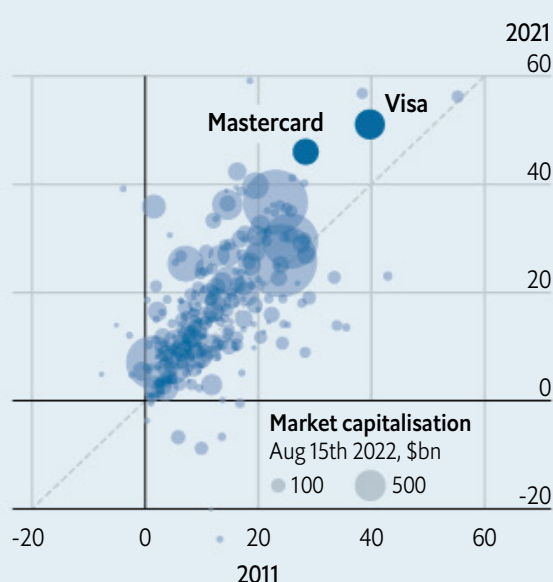
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Paying profits

S&P 500 companies, net profit margins*, %



*Annual net income divided by annual net sales.
Excludes real-estate investment trusts, eBay (27.7% in 2011; 130.6% in 2021) and Carnival (12.1% in 2011; -498.0% in 2021)
Source: Bloomberg

of Boston and colleagues, retailers raise prices at the tills by 1.4%, passing interchange costs on to households.

Poor Americans fare the worst. High fees are built into the price of goods, and prices are typically the same whether you pay with card or cash, which the poor are more likely to use. “The way to think about it is if you are not getting your points you are essentially funding everyone else’s,” says Brian Kelly, more commonly known as “the points guy”, who has forged an entire business out of encouraging people to use perks. Households with an annual income of less than \$25,000 (roughly a quarter of the total number) on average get no net rewards, since any they do receive are entirely offset by fees. Households that bring in more than \$135,000 a year recoup in points or perks around 0.6 percentage points of the interchange fees they pay.

These fees do fund some benefits, not least the sort of consumer protection that is provided by regulators or legislators elsewhere. In Europe, for instance, regulation ensures that customers can return goods, especially faulty ones, or that airlines compensate delayed passengers. In America card networks have stepped into the breach. They offer consumers the ability to “charge-back”—reverse their approval for a settled transaction—if something is not delivered as described. Card networks also use the fees to keep payment systems secure and free from fraud. In short, Americans rely more on capitalism and competition to protect consumers, rather than legislation and regulation.

“I certainly would not eliminate credit cards because they work great, they are convenient and people love them,” says Ms Stavins. Instead, she would like costs to be passed on: “If you come to the checkout, and you want to use a credit card, you

would pay \$103 for a \$100 item.” That way consumers would pay for the benefits, but only if they truly value them. Such a solution used to be impossible: in their agreements with merchants, the card networks explicitly banned the addition of such surcharges. But a class-action lawsuit that was first settled in 2013 forced Visa and Mastercard to permit merchants to impose a surcharge. Subsequent lawsuits have overturned state laws banning surcharges.

Even though adding surcharges is now permitted and legal, it is still difficult. “When we talk to merchants, a lot of them do not even know whether it is a plain card or a reward card, so they do not know what their processing cost is until they get their monthly bill,” says Ms Stavins. It would be a technological nightmare to implement a system that accounted for all the different interchange rates. It would also be off-putting for customers. Typically businesses that do surcharge are those, such as petrol stations or government enterprises, where consumers struggle to go elsewhere.

That might explain why legislators are eyeing up credit cards. On July 28th Richard Durbin, the same Democratic senator who regulated debit interchange a decade ago, introduced the Credit Card Competition Act (CCC). It does not propose a cap on interchange, as the debit rule does, since costs for credit cards are more variable than for debit cards, making it harder to find the right level.

Instead, the CCC would attempt to spur competition by breaking the links between card networks and banks. At present, when a bank issues a credit card every transaction on it is processed by the card network the bank stipulates, meaning the bank is guaranteed the interchange fee the network sets. If the CCC becomes law it will force banks to offer merchants the choice of at least two different card networks. Crucially, these choices could not be the two biggest—at least one smaller network would have to be offered. They could compete for business by offering lower interchange rates, and merchants would pre-

sumably jump at the offer.

The credit-card firms defend the existing system, arguing that consumers and merchants derive value from it, because it helps guarantee payments for merchants and protect consumers against fraud. Thus shoppers have more purchasing power than would otherwise have been the case.

Two factors help the bill’s chances. It is sponsored by Mr Durbin, the second-most senior Democrat in the Senate, and it is bipartisan, co-sponsored by Roger Marshall, a Republican from Kansas. The CCC’s best chance is probably as an amendment to another bigger piece of legislation, which is how debit-card regulation passed in 2010.

Even if the effort fails, or fails to work as intended, a potentially bigger threat to the giants looms. So far new entrants to the payments market have benefited Visa and Mastercard, by making it easier for consumers to use their cards online. But as the new fintechs have gained clout, their decisions about the sorts of payments they offer could influence how much money travels along the card networks.

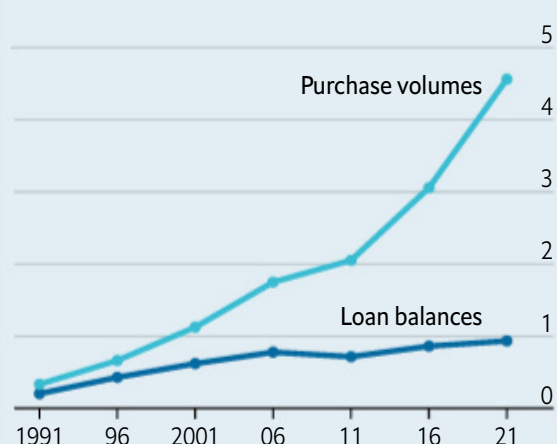
Stripe, a large payments-infrastructure firm, says it is working to provide merchants with payment methods that will lower their costs. Current options include a box for customers to enter card details, but also Klarna, a “buy-now-pay-later” provider through which customers can pay for purchases using bank transfers, thus avoiding the card networks. It could soon include things like FedNow, a real-time bank-transfer system being built by the Fed, which is due to be launched next year. In time, it could even include central-bank digital currencies or cryptocurrencies.

Competitors might make little headway if the perks for sticking with credit cards are sufficiently juicy. But merchants can offer their own incentives. When your correspondent recently went to purchase a pair of linen trousers from Everlane, an online retailer, she was encouraged to pay using Catch, a fintech app. The app linked to her bank account via another payment startup called Plaid. As a thank you for avoiding the card networks, Everlane offered a shop credit worth 5% of the transaction value. Catch has signed up a handful of fashionable, millennial brands including Pacsun, another clothing retailer, and Farmacy, a skincare firm.

For evidence that this poses a threat, look no further than Visa’s attempted purchase of Plaid. In 2020 the firm tried to buy the upstart for \$5.3bn, only for the deal to be scuppered by antitrust regulators on the grounds that the transaction would have allowed Visa to eliminate a competitive threat. Ultimately, Visa gave up, but the attempt was nonetheless telling. The house of cards carefully constructed by the two payment giants is formidable and longstanding. But it is not indestructible. ■

The cards are stacked

United States, credit cards, \$trn



Source: Nilson Report

The green transition

Cash guzzlers

There are better ways than subsidies to encourage electric-car use

“WE’RE COMING to Norway,” begins an advertisement for General Motors, an American carmaker. Supposedly enraged by the Nordic nation easily surpassing America in electric vehicles (EVs) per person, Will Ferrell, a comedian, sets off over land and sea to deliver the challenge to Norwegians, only to be told, after several mishaps along the way, that he has in fact arrived in Sweden.

American EV policy is similarly lost. As part of President Joe Biden’s bid to decarbonise the economy, the Inflation Reduction Act (IRA), a recently passed infrastructure bill, offers incentives for people to purchase EVs. It comes just when other rich countries, including Britain and Germany, are about to reduce theirs, having reconsidered how best to encourage people to use green transport. The evidence suggests they are right to do so—and that Mr Biden is heading down the wrong road.

America’s first problem is protectionism. The IRA offers subsidies to EV buyers, including rebates of up to \$7,500 for new cars and \$4,000 for used ones. For a new car to qualify, though, it must meet strict requirements. Half of the components in its battery must come from America, Canada or Mexico; by 2030, all of them will have to. At present, China controls most of the supply chain (see Business section).

As well as irritating America’s friends—the EU and South Korea have indicated they may challenge these restrictions at the World Trade Organisation—such protectionism runs counter to the bill’s green goals. The Congressional Budget Office, which assesses the tax-and-spending implications of legislation, estimates a total outlay over the next five years of \$1.8bn, or 237,000 EVs if all get the full subsidy—a paltry proportion of the 15m cars that were sold in America in 2021.

Although prices are falling, EVs are still dearer than vehicles with internal-combustion engines. That is true even after running costs are included. According to researchers at the Dallas branch of the Federal Reserve, at the start of 2021 the median cost per mile of range was \$214 for an EV, compared with \$104 for a regular car.

Encouraging EV purchases does not necessarily take older vehicles off the road, points out David Rapson of the University of California, Davis. Families may, for instance, buy a subsidised EV to complement another vehicle. Norway does not use sub-

sidies; instead, it gives EV owners an exemption from the heavy taxes the country levies on internal-combustion cars. As a bonus, such taxes encourage drivers to spend less on petrol and shy away from thirstier vehicles when buying a new car.

Retail-price subsidies also come with a high “deadweight” loss as many EV purchasers would have bought the car even without the discount. That is why countries with a higher proportion of EV sales than America are starting to bring their subsidy schemes to an end. Germany will start winding down its scheme from next year, before ending it altogether in 2024; Britain abolished many of its bungs earlier this year and plans to use the money to

build charging infrastructure instead.

Research from the World Bank suggests that Britain’s move is sensible. It calculates that on average \$10,000 or so is required to encourage the purchase of an electric car. The same result could be achieved by just under \$1,600 of spending on charging infrastructure. The most cost-effective means of promoting electric cars, however, come with a near-zero cost: China awards the country’s EV owners special “green” licence plates, allowing local governments to offer privileged access to parking or exemptions from congestion charges. America may want to keep foreign batteries out, but it could still welcome other countries’ ideas. ■

Indian finance

Death of a big bull

MUMBAI

An investor whose ascent mirrored India’s

FINANCIAL BIG SHOTS die all the time without making a stir. Occasionally, though, the death creates ripples because their approach to life mattered as much as their returns. So it was for Rakesh Jhunjhunwala, an investor and bull of a man, who inspired generations of Indian investors. On August 16th, in an unprecedented move, the Bombay Stock Exchange transformed its old trading floor into a prayer hall for Mr Jhunjhunwala, who died two days earlier, aged 62.

For hours, thousands of mourners shuffled through the once raucous room. Music played softly while a large screen mixed praise from India’s political and business grandees with the snippets of advice Mr Jhunjhunwala used to dispense on TV, to crowds at his favourite bar and to the legions who sought him out: “Always aspire, never envy”; “Growth comes with chaos, not order.”

Mr Jhunjhunwala was known as India’s Warren Buffett. He began investing with just 5,000 rupees (\$400) in 1985; by his death, his net worth was just shy of \$6bn. His ascent mirrored India’s—he benefited both from the economic liberalisation of the 1990s and an eclectic investment style. Some of his best-known positions were held for decades and earned vast returns, notably stakes in Titan, a jewellery chain, and Lupin, a generic-drug manufacturer. He traded furiously, had a Bloomberg terminal installed in his hospital room, and would entertain visitors while at a screen and taking calls, in sharp contrast to the secrecy typical of Indian business.

His biggest bet was easy for his followers to replicate: it was on India itself. He bought in when the country was in



Organised chaos

the doldrums and held on. When other successful investors moved themselves and their money to Singapore or London, he merely shifted from battered old offices spattered with betel spit a block from the exchange to nicer ones in nearby Nariman Point, where he could still stop on the way home for several pegs of whisky with friends. In his last public appearance he rolled his wheelchair up to the maiden flight of Akasa Air, an airline he founded last year because he believed India was truly taking off.

In 2003 Mr Jhunjhunwala recruited Priya Singh, then a young business-school graduate, to run a startup. He offered money and advice: sell all your possessions and invest the proceeds in Indian stocks. In the days before his death, he repeated the advice with added urgency. India’s golden decade, he insisted, was just beginning.

China's cities

Inland, comrades!

CHANGSHA

A second-tier city hints at the limits of Xi Jinping's economic revolution

TO GET A cup of milk tea from Chayan Yuese in the central Chinese city of Changsha, you may have to queue for an hour in the sweltering heat. The local company, known in English as “Sexy Tea”, has become a national sensation. Patrons insist that its method of steeping tea leaves and its ratio of water to milk produce a mellow brew that helps wash down fiery, pepper-laden local dishes.

It is part of what has made Changsha a *wanghong* hotspot, or a place where young people come to shoot videos for social media. Street vendors serving up spicy crayfish have become internet celebrities. Crowds throng the city's central shopping districts and eateries into the early hours of the morning, despite worries about covid-19. The local television station has become something akin to the Netflix of China. Chinese social media teems with photographs of young women, dressed in swanky outfits, posing in front of the city's 32-metre-high granite bust of Mao Zedong, the country's revolutionary leader who came from a nearby town.

China's recent development has concentrated wealth in eastern cities. Now President Xi Jinping wants to spread it inland to places like Changsha, and wants the process to be driven by innovation in emerging technologies such as artificial intelligence (AI), cloud computing and smart manufacturing—“industrialisation



4.0”, in his words. Central-government directives often seem far removed from real business activity. They are filled with lofty slogans and long-winded references to the importance of “Xi Jinping Thought”. Changsha offers a snapshot of how Mr Xi's revolution is actually playing out.

The city is one of 15 urban centres that is trying to make the leap into the country's elite. Together they are known as “new first-tier” cities, and already account for about a fifth of China's GDP. In Changsha, the local government is happy to have a *wanghong* economy: planners want to make the city a centre for culture and tourism that brings in 500bn yuan (\$74bn) in

revenues a year, up from less than 200bn in 2021. They hope fashionable tea shops will also help with a much bigger challenge, and the main focus of their growth strategy: upgrading the city's industrial base. That will mean attracting a horde of new companies and talented people to a region hundreds of kilometres from wealthy coastal areas.

Changsha's strong but old-fashioned industrial base makes it typical of the new first tier: industry drove rapid growth in the early 2000s, but in the years since Changsha's performance has converged with the Chinese average (see chart). The city is home to China's two largest construction-machinery firms, Sany and Zoomlion. Another firm, BSB, is one of the country's biggest specialists in prefabricated construction. In a city just south of Changsha is one of the main manufacturing hubs of CRRC, China's state-owned rail outfit. These distinct specialties mean it should not have to compete head-on with neighbouring cities such as Chengdu, which has a big aircraft-manufacturing base, says Wang Tao of UBS, a bank, and a native of Changsha.

The first challenge planners face is upgrading the city's existing industry through digitisation and automation. The government has handed out large subsidies to encourage internet-technology companies to cluster around existing machinery, building and transport firms. Thousands of automation-related firms have been set up as a result. Officials are monitoring what happens next. One recent reform in industrial parks measures the amount of tax companies pay per mu (0.06 hectares) of land they occupy, and will eventually push out low payers.

Industrial upgrades often involve integrating brand-new systems—5G internet or AI-powered logistics—into legacy firms in order to help boost efficiency, note analysts at Jefferies, an investment bank. Baosight, a state-owned industrial-digitisation giant, has helped do this at many steel plants. These sorts of changes can take years and require large, experienced technology providers. But most of the companies working in Changsha are small. The city is not home to any large tech firms, which are mainly based in China's eastern cities. Even some neighbouring industrial hubs such as Chongqing and Chengdu score better on this front. This ultimately means the pace of industrial digitisation will be slower in Changsha, says Xu Dihong, the founder of Cadstar, a local industrial-software company.

The second challenge is to hasten a boom in new tech companies. Like several neighbouring cities, Changsha is hurrying to build AI and smart-manufacturing parks; last year the Ministry of Science and Technology announced that it would build ▶▶



Move to Changsha: Spicy crayfish, AI hubs...a giant bust of young Mao

▶ a national AI innovation zone in the city. Some 5,180 firms claiming to offer AI-related services were set up in Changsha in the first seven months of 2022, up from about 3,000 in all of 2021, according to Qichacha, a corporate-intelligence firm. The trend has been mirrored across inland Chinese cities. Whether this reflects genuine tech entrepreneurialism is doubtful; experts believe many of the new AI firms do little in the way of real innovation.

A burgeoning tech hub also needs a steady supply of talent. In April the local government announced a list of 45 mea-

sures aimed at coaxing young professionals to the city, including grants of up to 100m yuan for top scientists and tech organisations. The cheapness of the city's *wanghong* lifestyle is another draw. Changsha has some of the lowest house prices of any large city in the country, making it especially attractive to young entrepreneurs. "A family can get twice the space in a flat here compared with a coastal city," says Mr Xu. The milk tea and late-night dining on crayfish do not hurt, either.

Yet they may not be enough. Wang Peng of Huijiang Automation Technology, a tech

firm that set up an office in Changsha last year, says that despite the generous incentives it is still hard to hire the right people. Even established tech hubs such as Suzhou and Shenzhen face shortages of talented staff. The city also has few international links. Its location deep in China's interior has made it difficult to bring in the highest level of talent, especially Chinese people returning from university or work abroad, says a professor at a local university. It is a problem that could prevent many of the new first-tier cities making the leap to the very top. ■

Buttonwood Don't look down

Investors used to be able to rely on safe havens for protection. No longer

"ALLOW ME TO explain about the theatre business," says Philip Henslowe, the owner of the Rose theatre in "Shakespeare in Love", a romantic comedy from 1998. "The natural condition is one of insurmountable obstacles on the road to imminent disaster." "So what do we do?" asks his companion. "Nothing," Henslowe replies, "strangely enough, it all turns out well." "How?" "I don't know. It's a mystery."

For a similar worldview, look at your average equity investor. America's stock-market has spent a decade and more climbing a wall of worry. It has shrugged off the aftermath of a financial crisis, geopolitical tensions and a pandemic that shut down industries. After slumping earlier this year, it has of late it has been on a tear, war and inflation notwithstanding. Like Henslowe, investors seem preternaturally keen to believe that, despite everything, it will be all right on the night. Again like Henslowe, who must sell a threatful of tickets to appease the debt collectors at the door, that may be because they have no choice. Stocks look risky. But the frantic sell-off in the first half of this year showed how little safety the alternatives offer.

"Safe-haven" assets are what investors dive for when share prices plunge and economies founder. During a market rout, they should preserve their owners' capital. If inflation debases an investors' currency, havens should hold their value. They typically fall into two categories. There are physical things with limited supply, guaranteed demand or both: think of gold, or other precious metals. And then there are promises of value that investors trust to be kept come hell or high water, such as American Treasuries or inflation-proof currencies like the Japanese yen.

Gold has been prized as a store of value for millennia; today its enthusiasts tout it as a hedge against geopolitical risk and the devaluation of state-administered currencies. Yet since the start of this year, war has broken out in Europe, inflation has surged—and the dollar price of gold has dropped by 3%. Lacking an income stream of its own, gold loses its lustre as real interest rates rise. Rise they have: the yield on ten-year inflation-protected Treasuries started the year at -1% and has since risen to 0.4%. Disappointed gold bugs must console themselves with the knowledge that bitcoin, a faddier supposed hedge against fiat-currency mismanagement, has halved in price over the same period.

If gold can't be trusted, how about the full faith and credit of America's Treasury Department? In one sense, debt owed by the world's biggest economy and the issuer of its reserve currency is a safe bet: the risk of default is extremely close to zero. But just as rising Treasury yields hit the value of other assets, so they hit the Treasuries themselves. (A fixed-coupon bond becomes worth less as the market

yield goes up.) So far this year, the US Treasury Total Return index constructed by Bloomberg has fallen by 9%. Go global and the picture is similar: the FTSE World Government Bond Index has shed 8%. In any case, the vast majority of bonds offer no defence against inflation, which erodes the value of their principal when it is eventually returned (inflation-protected Treasuries constitute just 8% of the market).

That might lead you to a currency that has proved stubbornly resistant to inflation, and has long offered a sanctuary from turbulent markets. For years, the Japanese yen rose whenever there was a blow-up, be it the fall of Lehman Brothers or Europe's sovereign-debt crisis. Today, Japan's inflation rate—2.4% in the year to June, compared with 8.5% in America in July—is the stuff of other central bankers' dreams. Yet the sanctuary doors have been blasted open. The Bank of Japan has spent the past decade purchasing huge quantities of bonds and equities in an attempt to ward off deflation. The result has been a weaker yen, and an end to its haven status. At the start of the year, a dollar would have bought you 115 yen; it now buys 135.

For those who count their returns in anything other than dollars, this hints at the ultimate haven. The greenback has risen relative to almost any currency or asset you care to mention. But for dollar investors, stashing capital in cash that is being eaten away by inflation doesn't feel like much of a strategy. Small wonder that they have turned back to the stock-market instead. Henslowe's blind faith is rewarded in the end: the insurmountable obstacles are overcome and his opening night ends in rapturous applause. Equity investors are hoping for the same, because they must. Break a leg.



Free exchange | Searching for slack

Does unemployment really have to rise to bring down inflation?



RARELY IN AMERICA'S past has an inflation rate of 8.5% felt so good. In July, for the first time since May 2020, consumer prices did not rise from one month to the next—though the year-on-year rate of increase remained high—thanks to a sharp drop in energy prices. But officials at the Federal Reserve are not celebrating. From their perspective the inflation problem remains unresolved as long as rapid growth in workers' wages continues to power a spending boom. While that remains the case, a drop in the price of any one thing, such as oil, only leaves more room for spending on another. The Fed thus needs to weaken workers' bargaining positions by introducing a bit of slack into the labour market.

Yet what counts as slack is very much up for debate. In its broad outlines, the concept is clear enough. It represents a supply of workers in excess of labour demand: too many people chasing too little employment. Under such conditions, firms do not need to work very hard to lure or retain workers, and pay packets thus grow slowly, if at all. At present, there does not seem to be much slack about. In the three months to July the hourly wage of the typical American worker rose at an annual rate of almost 7%—nearly double the fastest pace reached in the 2010s. This, rather than dear oil or soaring rents, is what most troubles the Fed, and what it seeks to address through higher interest rates.

Economists disagree, however, about how much give must be introduced into labour markets, and where. Much of the recent argument has focused on the level of job openings relative to the number of unemployed workers, a ratio that has been near its record high for most of the past year. Given that many firms are scrapping to hire from a tiny pool of available workers, it comes as little surprise that wage offers are rocketing.

Yet some Fed officials argue that precisely because the number of job vacancies is so high, it may be possible to introduce slack into the labour market through reductions in the number of posted openings—without having to push millions of people out of work. In July Chris Waller, a Federal Reserve governor, and Andrew Figura, also of the Fed, published a paper making this case, noting that the relationship between vacancies and unemployment may at current levels be a very steep one, such that tapping the monetary brakes yields a little extra unemployment but a big drop in

openings, which hampers workers' ability to move to higher-paying jobs. Jerome Powell, the Fed's chairman, has also expressed similar views.

Other economists are unconvinced. A recent analysis published by Alex Domash and Larry Summers of Harvard University and Olivier Blanchard of the Peterson Institute for International Economics, a think-tank, noted that there has never before been a large drop in the number of job openings that has not coincided with a meaningful rise in unemployment. This makes sense: conditions that deter some firms from advertising for new workers may well lead other employers to lay off staff. But given that vacancies are in uncharted territory, it is hard to know whether such historical rules of thumb apply. And since March, at least, the number of job openings in America has fallen by nearly 10%, even as the unemployment rate dropped.

There are other places, apart from the balance between job openings and unemployment, to look for more slack. An increase in labour supply, either through increases in average hours worked, or through the entrance of more people into the workforce, could have the effect of bringing down wage growth without unemployment having to go up. In a new paper David Blanchflower and Jackson Spurling of Dartmouth College and Alex Bryson of University College London suggest that, in the years since the global financial crisis of 2007-09, these potential sources of labour supply have been more important in shaping wage growth than either the level of unemployment or the number of job vacancies.

At present, American data for both hours worked and labour-force participation seem to show room for improvement. The number of average hours worked per employee is at roughly the level of the mid-2010s, and has actually fallen since the beginning of this year; it could easily go higher. Perhaps more important, rates of labour-force participation remain subdued. Indeed, among "prime-age" adults, those 25-54-years-old, the share of the population now working is currently a little lower than it was immediately before the covid-19 pandemic, and nearly two percentage points lower than the peak reached in 2000. There are, seemingly, more hours that could be worked by more people—a situation that certainly seems to meet the definition of slack.

Droops to conquer

Yet a lot hangs on whether those who left the workforce during the worst of the pandemic decide to return. Some people, for instance, may have retired permanently. Others might be enticed back in by heady wage growth, and could eventually add to slack. Research published last year by Bart Hobijn of Arizona State University and Aysegul Sahin of the University of Texas finds that participation tends to keep rising several months after the unemployment rate hits a bottom, which it is yet to do. If such a rise were to coincide with falling vacancies, wage growth could be checked without unemployment going up. Indeed, in the late 2010s pay stagnated amid an improving economy and falling unemployment, thanks to precisely this confluence of events. Yet a pessimist might point out that, if anything, America's labour-force participation has been falling in recent months, rather than rising. So far at least, rapid wage growth has not proved to be very tempting.

Moreover, having allowed inflation to get so far out of hand, the Fed may now feel bound to push unemployment up, rather than hoping for the emergence of less certain forms of slack. It may, in other words, be unwilling to cut optimistic interpretations any slack. ■



Air travel

Guilt-free flying

Green aviation fuel is on its way to an airport near you

TRAVELLING BY AIR is by no means the biggest source of anthropogenic greenhouse-gases. At the moment, it contributes about 2.5% of them. But, after a covid-induced dip, air travel is once again growing (see chart overleaf), and its emissions are high-profile and hard to deal with. For short-range, small-capacity planes batteries show some immediate promise. But for bigger aircraft the technofantasy of using compressed hydrogen (made from green sources, natch) either as jet fuel in its own right, or to run fuel cells which then drive electric motors, is likely to remain just that—a fantasy—for decades.

Hence the popularity of the idea of sustainable aviation fuel (SAF). This magical substance would match existing fuel in all relevant parameters and would thus, in the argot, be a “drop-in” replacement for the kerosene currently burned by planes. But instead of being distilled from crude oil, SAF would be manufactured either directly or indirectly from carbon dioxide.

Ideally, this CO₂ will have come recently from the atmosphere, so that when it returns to the air no net greenhouse effect is created. At minimum, though, it will be extracted from the exhaust of an industrial process, enabling it at least to substitute for fossil-fuel emissions elsewhere before it is released.

Do this at a price competitive with stuff from a refinery and the world is your oyster. Airlines have already undertaken some 450,000 flights using SAF as part of the fuel mix. The industry aims to be carbon neutral by 2050, and so far SAF seems the only practical way to get there. But making SAF is an uphill task. Stripped to its chemical essentials it means taking the equivalent of engine exhaust and turning it into something resembling what went into that

engine in the first place. This requires “fixing” the carbon of carbon dioxide into big energy-rich molecules. Not surprisingly, the result is around three times as costly as ordinary jet fuel.

Such SAF as has so far made it to market relies on photosynthesis to do the carbon fixing. It is derived from discarded cooking oil and animal fats, the triglyceride molecules of which trace their existence to the action of sunlight on chlorophyll.

To make SAF, triglycerides are hydro-treated, an established way of producing biodiesel for ground transport. A triglyceride molecule consist of three hydrocarbon tails attached to an oxygen-containing head. Hydrotreating combines the oxygen with hydrogen, to yield water. This liberates the tails and turns the head into a molecule of propane. The liberated tails can then be processed into drop-ins.

Boarding now

At the moment, the biggest producer of hydrotreated SAF is Neste, a Finnish firm. It is expanding a biodiesel plant in Rotterdam for SAF production and also enlarging a purpose-built one at Porvoo, in its home country. Neste aims, by the end of 2023, to be turning out 1.9bn litres of SAF per year—some 15 times total world production in 2021 (though still less than 2% of global jet-fuel consumption). A milestone of sorts was reached in July when American Air-▶

→ Also in this section

69 Standards in America

lines took delivery of the first batch of SAF to be verified as green by CORSIA, the Carbon Offsetting and Reduction Scheme for International Aviation, which benchmarks aviation-emission standards.

Neste, though, is not the only company using hydrotreating to make SAF from recycled cooking oils and fats. In America a firm called World Energy employs a former oil refinery in Paramount, California, to do something similar. Paramount was, indeed, the first plant to make SAF commercially, having been converted to do so in 2016 by Bryan Sherbacow, a green entrepreneur. World Energy, to which Mr Sherbacow sold the plant in 2018, has teamed up with Air Products, a specialist in industrial gases, and Honeywell, an engineering firm, to expand the operation. By 2025, it expects to make around 1.3bn litres of SAF a year. Mr Sherbacow himself, meanwhile, has set off in a different direction. This is to widen the range of waste materials that can be turned into SAF.

A big obstacle to expanding the triglyceride approach to SAF is the supply of raw materials. Adding value to catering waste is something all can applaud. But for it to make a serious contribution to the jet-fuel market would mean buying fresh oils and fats that might otherwise be used as food. This would raise prices and encourage the spread of oil-palm plantations, both of which will bring problems of their own.

Mr Sherbacow's new project, Alder Fuels, is on the case. Alder's raw material is also waste—but in this case, leftovers from forestry and agriculture. Such "biomass" consists mainly of cellulose, hemicellulose and lignin—three structural polymers that act, in essence, as a plant's skeleton.

Structural polymers cannot be processed by anything resembling hydrotreating. Instead, Alder uses pyrolysis, which breaks the material concerned into smaller molecules by applying heat. The result is condensed into a hydrocarbon-rich liquid that the firm calls greencrude. This can be processed into SAF in existing refineries and Boeing, America's biggest aircraft maker, announced in July that it would use some of its planes to test and qualify the result. Alder hopes to begin commercial production in 2024.

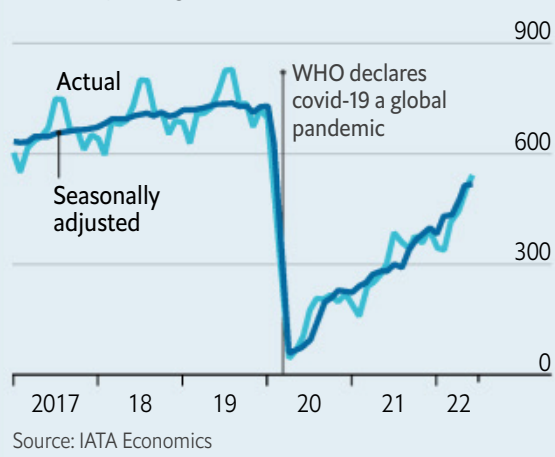
Waste not, want not

One problem with using biomass as raw material is that it is bulky, and thus expensive to gather, transport and store. To get around this, Alder is looking at a "hub-and-spoke" system, in which the processing plants are at the ends of the spokes, near sources of biomass, and the resulting greencrude is transported in tankers to a refinery at the hub.

According to Alder's calculations, forestry and agricultural waste are, if processed this way, abundant enough in

Come fly with me

World, monthly air traffic
Revenue-passenger kilometres, bn



America to supply three-quarters of the country's current demand for aviation fuel, with no need to establish new plantations, or to compete with food production. Even so, others propose yet a different strategy. This is to fix carbon dioxide directly in an industrial plant, rather than relying on biology to do the job.

The most popular approaches to such direct fixation are called power-to-liquid processes. These yield what are known as e-fuels (an abbreviation of electrofuels, as production relies, at least in part, on electricity). Power-to-liquid processes vary. But all have in common the creation of a mixture of hydrogen and carbon monoxide, known as syngas.

The value of syngas is that, at appropriate temperatures and pressures, and in the presence of suitable catalysts, its constituents react to yield hydrocarbons and water. This is called the Fischer-Tropsch process, after the German chemists who invented it in the 1920s, and it was used by Germany during the second world war to convert coal into liquid fuels, to make up for the country's lack of access to petroleum.

That wartime approach involved the partial oxidation of the coal to create carbon monoxide. But this ingredient can also be made by the partial reduction of CO₂—hence the interest in its use for SAF. The CO₂ in question could come from many sources. Some dream of plucking it directly from the atmosphere, using what is known as direct air capture (DAC) to filter it out. Others, more pragmatically, suggest extracting it as a by-product from methane-generating biodigesters, or from fermentation plants, such as breweries.

If renewable electricity is then used to make the hydrogen, by electrolysis of water, the resulting e-fuel is pretty green. One country with abundant hydro and wind power which can be taken advantage of in this way is Norway. And it is here that a consortium called Norsk e-Fuel is building a DAC plant to produce SAF. Production of 12.5m litres a year should start in 2024.

Another source of renewable power is

the sun. Synhelion, a Swiss firm, employs a field of mirrors to reflect sunlight to a receiver at the top of a tower. This heats a transfer fluid in the receiver to a temperature in excess of 1,500°C and that fluid, in turn, powers a reaction chamber which produces syngas by reducing water to hydrogen and CO₂ to carbon monoxide. To start with the company is using a nickel-based catalyst and taking gas from a biomass plant, although it is developing other processes and will later add DAC to the system. By having some of the transfer fluid pass through a heat store, to garner a proportion of its thermal load for later use, the process should be able to operate round the clock.

On August 17th Synhelion announced that an experimental plant was producing syngas at "an industrial scale", and it is now putting the finishing touches to a facility near Cologne, Germany, from which it hopes, next year, to deliver SAF to airlines in the Lufthansa group. If all goes well it will open a further plant in Spain, in 2025, to take advantage of higher levels of sunshine there. By 2030, with additional plants coming on stream, the firm's output could rise to some 850m litres a year—enough to meet around half the needs of Swiss carriers. The target, by 2040, is 50bn litres a year. That, if it came to pass, would make a serious dent in the jet-fuel market.

Jetting to a greener future

In a separate project, Synhelion has linked up with CEMEX, a Mexican company that is one of the world's biggest producers of cement. Part of cement-making involves heating limestone to drive off CO₂. This fact makes the industry responsible for about 8% of anthropogenic emissions of the gas. The CO₂ in question is pretty pure, though, and thus itself ideal as a raw material. Having tested the idea successfully in Spain, the two companies aim to build a trial plant at one of CEMEX's works. Though making e-fuel in this way would not be as green as plucking the CO₂ concerned from the atmosphere, it would extract at least some environmental value from a product that would otherwise be entirely waste.

Oil companies are also keen to get in on the act. Repsol, a Spanish firm, has teamed up with Saudi Aramco, Saudi Arabia's petroleum giant, to build a plant in Bilbao that will make fuel not just for planes, but also for cars, lorries and boats, using green hydrogen and CO₂ fed from a nearby oil refinery. This plant, planned to open in 2024, will employ a catalytic process developed by Johnson Matthey, a British chemicals company, to do the Fischer-Tropsch process.

Further down the track, a third approach to making SAF, distinct from employing organic waste or the Fischer-Tropsch process, is to use biotechnology. One idea which has been around for a ▶▶

▶ while is to utilise photosynthesis directly, by engineering single-celled algae to make conventional drop-ins. Another, suggested in July, is a decidedly unconventional bioengineered drop-in based on a molecule made by bacteria to defend themselves against fungi. So far, though, these proposals are confined to the laboratory.

One way or another, then, the technology for making green aircraft fuels does seem to be coming into existence. Nor need such alternatives replace standard jet fuel completely to meet the airlines' carbon-neutral-by-2050 target, says Sebastian Mikosz, head of environment and sustainability for IATA, the trade group which represents most of the airline industry. The group's calculations suggest SAF could account for 65% of aviation's carbon mitigation, with the rest coming from electric

and hydrogen-powered aircraft, more-efficient airline operations, offsetting emissions and carbon capture. Yet that still requires 450bn litres of SAF a year by the middle of the century.

Scaling up SAF production to such a level may need government nudging. To this end, Joe Biden's administration in America has announced tax credits and other incentives for SAF production as part of the country's new spending bill. Instead of carrots, the EU is using a stick. Member states are being asked to impose SAF targets at individual airports. One proposal suggests these would rise from 2% in 2025 to 85% by 2050. Get the incentives right to expand production and reduce costs, though, and a point may yet come when the environmentally sensitive can board an aircraft with a clear conscience. ■

different continents, or to compare results from different decades, researchers must all agree, to eye-watering levels of precision, the standards against which they are making their measurements.

NIST is America's agency charged with safeguarding those standards. Most big countries have something similar. Often they began as repositories for lumps of metal of precisely a kilogram's mass or a metre's length, though these fundamental units are now defined in terms of natural phenomena rather than iridium-platinum artefacts. Now, they have wider remits. In particular, they are crucial to smoothing commerce and upholding regulations. In practice, that means agencies need more than merely written definitions. They need physical embodiments of the standards they define.

Soon after its foundation in 1901 NIST's predecessor, the National Bureau of Standards (NBS), faced a growing problem. As railway networks expanded, the breakage of wheels and buckling of tracks led to more and more derailments. No one had yet set standards for the iron and steel used for these purposes, and some of the alloys employed were brittle. The nascent NBS worked with iron founders to define the precise alloys that railway-builders should use. These SRMs are still for sale today: numbers 41, 5m and 6g.

Staying on the rails

SRMs provide a material certified by the institute to contain exactly so many micrograms of this and percent-by-weight of that—the kinds of things regulators stipulate to ensure market harmonisation or safety or nutritional content. Manufacturers of everything from iron alloys to peanut butter have their own analytical kit to measure their own products. But every now and then they must ensure their methods and their equipment are up to snuff—and that their numbers are precisely as the law stipulates.

At this moment they buy in an SRM, which comes with a lengthy certificate. When the chemists run their usual measurements on such a sample they should come up with the numbers recorded on the certificate. If they do not, it is time to recalibrate the machine (or the chemists). The SRM might be exactly the product they make. Or it may be a material that, from an analytical-chemistry perspective, is a good enough proxy. All it must do is prove that their methods are sound and accurate.

Early on, NIST's SRM catalogue contained mainly alloys, ores, gases and other stuff of heavy industry. But the multiplication of regulations has led to a Topsy-like growth. Mussel tissue (catalogue number 2974a) is there because bivalves are good sentinels for pollution. Urban dust (1649b) acts as a reference point for those worried ▶▶



Metrology

Standard-bearer

In America, the painstaking work of making all things equal belongs to the National Institute of Standards and Technology

“ABOUT EVERY six months, I get an email: why is the peanut butter so expensive? Can I eat it? What does it taste like? Can you just send me a spoonful?”

Melissa Phillips is a research chemist at the National Institute of Standards and Technology (NIST) in Gaithersburg, Maryland, and makes a spirited defence of the peanut butter her agency sells—a snip at \$1,069 for 510 grams. The American government is notorious for overpaying its suppliers, but consider what it charges as a seller. That same \$1,069 gets you precisely 455 grams of baking chocolate. Meanwhile

60 grams of breakfast cereal or 50 grams of dry cat food will cost you a mere \$1,064. These are among more than 1,100 Standard Reference Materials (SRMs) in the catalogue, which also includes New Jersey soil, whale blubber, urban dust, mussel (not muscle) tissue and slurried spinach. The prices vary, but are invariably high.

Dr Phillips's department represents a fascinating facet of NIST's overarching mission: standardisation. Standard methods and units are the bedrock of scientific endeavours from atom-smashing to astronomy. To carry out equivalent work on

▶ about toxic chemicals known as PCBs and cancer-causing compounds called PAHs.

Among the food SRMs, options seem weirder still. And for foodstuffs the stakes can be enormous, with a litany of vitamin requirements and toxin limits to deal with. If regulators allege that a sample of a manufacturer's peanut butter contains some aflatoxin from a naturally occurring peanut mould, its makers may have to dump tonnes of their product, or recall it from store shelves. Or the matter might end up in court. That \$1,069 jar of peanut butter could be the arbiter in a multi-million-dollar lawsuit.

The price tag arises because developing SRMs is a complex business—taking, on average, six years and costing \$1m. First, NIST collaborates with manufacturers to establish what measurements are needed. Then it must acquire a big batch of the product in question, so that the same reference material will be available for a long time, as it is sold off bit by bit over the years. In 2007 its supply of fortified breakfast cereal (3233) arrived in a pair of 200kg boxes. Nestlé, a multinational food giant, has recently delivered a whole pallet of baby food.

Triangulating the truth

A suitable supply secured, the institute's scientists make their own measurements. They also send samples to outside laboratories and to manufacturers themselves, for reality checks. The final tally of nutrients, toxins and so on that each SRM's certificate lists is the result of a grand statistical number-crunching designed to minimise the many sources of error that can arise in the course of such measurements.

Apart from being solidly representative examples of the materials in question, there is nothing special about SRMs. "You're not paying for what's in there," says Greg Jaudzems, a senior chemist at Nestlé who regularly purchases them. "You're paying for the certificate." Here it should be said that the taste of NIST's peanut butter is reportedly unremarkable.

A peanut butter SRM is ideally suited to the needs of a peanut-butter maker. There is not an SRM for every food, though. Given the effort involved in developing them, there cannot be. This helps explain why the list contains slurried spinach (2385) but not slurried kale. And baking chocolate (2384) but not the kind for eating. Since the purpose of an SRM is to permit the calibration of equipment, something close, but not identical to a manufacturer's product will usually be good enough.

At a basic nutritional level, every foodstuff can be seen as a combination of fat, protein and carbohydrate. A triangle with those as its vertices contains everything edible. Peanut butter is a bit more than half fat, one-quarter protein and one-fifth car-

bohydrate. Breakfast cereal is nine-tenths carbohydrate and nearly no fat. The idea is that whatever food a manufacturer is measuring, there is an SRM near enough to it in the triangle to be used to validate its composition. Baking chocolate is, from this perspective, clearly a good proxy for the eating kind. But it is also not a bad comparator for avocados and black olives.

This matters because each spot in the triangle presents its own measurement challenges. There is no analysis machine so fancy that chemists can just throw peanut butter or chocolate or spinach into it. Foods must be separated into various components and then tested for many different things ("measurands", in the parlance). Vitamins A, D, E and K tend to hang around in fats, so an analytical process that involves skimming off the oily bits of peanut butter must ensure that all those vitamin molecules do in fact come along for the ride, and that the process of separation does not destroy any of them. In the end, a laboratory must develop methods which tot up all the things enumerated on a label, and usually quite a few more that are not.

This focus on completeness and precision reaches apotheosis with baby foods and, in particular, infant formula. It is not just a long history of scandals and scares in this area that contributes to paranoia here. Mr Jaudzems says that, from a regulator's point of view, formula is "right on the cusp of a pharmaceutical", because it is many babies' sole source of nutrition. Getting exactly the recommended levels of vitamins—not 90%, not 110%—is crucial.

Yet those recommended levels change year after year as the science changes. At the same time, the kit that sniffs out toxins gets ever more sensitive, bringing what was once "undetectably low" into quantitative view. That presses regulators to move the goalposts, as happened after 2017, when a charity called the Environ-

mental Defence Fund found that a number of foods, including products intended for babies, contained detectable levels of lead.

Along with other toxic elements, such as cadmium and arsenic, lead occurs naturally in soils. Some level of it in foods is therefore unavoidable. Paediatricians might reason that no level is acceptable. But, as Don Gilliland, a consultant chemist who has spent much of his career thinking about baby food and infant formula, puts it, "to an analytical chemist, there's no such thing as zero." Tellingly, a newly launched initiative by America's Food and Drug Administration (FDA), to revamp its baby-food limits, is called "Closer to Zero".

This thrust and parry between those doing the regulating and those doing the measuring presses relentlessly against the limits of technology. "I've been involved with a number of projects where there is a disconnect between what the regulators want and what the analytical capabilities can provide," says Dr Gilliland. Try not to think about how much lead, arsenic and the like you may have consumed, back when no one could measure it.

Even the regulators' in-house experts understand the limits. "There are hundreds of toxins, pesticides, nutrients," says Kai Zhang, a chemist who specialises in fungal toxins for the FDA. "There's no way you can check everything. You have to prioritise your to-do list."

Measure for measure

And that list is endlessly changing. Infant-formula makers, for example, are coming up with ever more additives that bring their products closer in composition to breast milk. This may affect what regulators want to be measured. Even altering the artificial flavour of a nutrition shake from vanilla to chocolate might change the way its contents are best measured accurately, says Mr Jaudzems.

Then there are the entirely new vistas that open from time to time. At NIST Dr Phillips is already thinking about a Wild West not so different from the golden days of the railway barons. Marijuana is legal for medical or recreational use in dozens of countries and in a majority of American states. Cannabidiol derived from hemp is sold around the world as a relaxing nutritional supplement, adding a potential new measurand to the list. In many places these industries have grown like weeds over the years without the kind of gentle guiding to market that results in standards.

At last NIST is stepping in. Dr Phillips is part of a team quantifying not only the psychoactive components of hemp and marijuana, but also more conventional fare such as metals, pesticides, fungal toxins and even moisture. Given time, they might just come up with the most expensive gram of marijuana ever sold. ■





Salman Rushdie

Freedom fighter

The author has long tracked the world's slide into rancorous sectarianism

SINCE INFANCY Salman Rushdie has been tenaciously resilient. In 1949, aged two, he fell gravely ill with typhoid and his father scoured pharmacies in Bombay to find a new, life-saving drug. In 1984 a bout of double pneumonia put him in hospital in London. After 1989, when Ayatollah Khomeini, the supreme leader of Iran, issued a *fatwa* that called for his murder, Britain's security services thwarted several assassination plots. In March 2020 the writer, then 72 and asthmatic, spent weeks seriously sick with covid-19. Now he is recovering from the ten knife injuries to his eyes, neck and torso inflicted on August 12th at a literary event in Chautauqua, New York. Sir Salman is persevering once again.

That tussle with pneumonia helped him quit smoking. A doctor likened his wretched coughing fits to the trailer of a movie about lung cancer and asked if he "would like to see the film". No thanks, Sir Salman said, and the author believes the metaphor saved his life. Yet the metaphors that drive his fiction—with its exuberant leaps between actual and figurative meanings, realism and fantasy, sacred and profane—have also imperilled him.

Literalists, religious fundamentalists above all, have found in Sir Salman an embodiment of all they distrust about art that dances among creeds, principles and dogmas and which pursues multiplicity and ambiguity as virtues in themselves. Outraged critics, most of whom have never read his work, branded his carnivalesque mode of satire and speculation as insult and blasphemy. For Sir Salman, the novel is "the form created to discuss the fragmentation of truth". His landmark essay "Is nothing sacred?" praises fiction as the place where "different languages, values and narratives quarrel", but do so in peace.

Sir Salman was attacked at the Chautauqua Institution during a discussion of the

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meanings of home: a core theme for the Indian-born, Cambridge-educated author who lives in Manhattan. "The Satanic Verses", the novel which prompted the *fatwa*, dwells far more on migration than religion. The wandering Indian-American hero of "Quichotte", his most recent book, treats the "broken people" displaced by poverty or war as "shining shards that reflect the truth" about the age of mass upheavals. He has affirmed that "the crossing of borders, of language, geography and culture", the "permeable frontier" between fact and imagination, and the lowering of barriers raised by "the world's many different kinds of thought policemen" have been at the heart of his "literary project".

For three decades, however, he has served as a target for those resentful and fearful of change. In the "age of oversimplification" that results from this backlash, doubt, play and metaphor must bow before the party or religious line. Although radical Islamists have menaced his work and life, Sir Salman has made plain that no faith has a monopoly on hate. Free debate flourished among his Kashmiri Muslim family in post-independence India. He evokes "the blurring of boundaries between religious cultures in that old, truly secularist Bombay" with nostalgic affection—in contrast to India's "bitter, stifled" present.

As the world darkened, he tracked its slide into rancorous sectarianism. His novel "Fury", published just days before the attacks of September 11th 2001, imagines New York as a seething cauldron of rage. "The whole world was burning on a ▶▶

▶ shorter fuse. There was a knife twisting in every gut, a scourge for every back. We were all grievously provoked." In fiction, essays and speeches, he has warned against the lure of righteous groupthink. He urges readers to question "the strait-jacket of a one-dimensional national, ethnic, religious or tribal identity" and deems such conformism "the evil from which flow all the other evils of our time".

Free speech, on the other hand, ranks not as a Western luxury but "the right without which all the other rights disappear". Yet in the West, equivocators thrive. He argues that "this is a historical mistake of the progressive left: the sense that people who say they're offended have a right to have their offendedness assuaged."

In his breakthrough novel, "Midnight's Children" (1981), Sir Salman brought historic events to bear on his hero, Saleem, born as the hour of Indian freedom struck. Since 1989 he has framed his own plight not as a unique misfortune, but as part of a historical pattern. In the memoir of his fugitive post-fatwa years, "Joseph Anton", published in 2012, he compares his sentence to the first ominous blackbird that heralds the fatal flock in Alfred Hitchcock's film "The Birds". Sir Salman thinks of his persecution as "kind of an early harbinger of what later became a storm".

His response to this unsought status as a human weathervane was not retreat but defiance. Even in the 1990s, with the fatwa a clear and present danger, he became a public face of artistic liberty. He gave speeches, taught students and later headed American PEN, not only acting as the group's president but launching and leading its festival of global literature. He supported other persecuted authors, such as Taslima Nasrin, an exiled Bangladeshi feminist. In 2005 he prominently campaigned against a proposed British law against "incitement of religious hatred", helping to blunt its censorious edge.

His commencement addresses to American students—a minor Rushdie genre in themselves—urged them to resist obedience and orthodoxy, and pay heed to "the rebels and refuseniks of the world". His very presence at Chautauqua testified to a decades-long refusal to be silent or invisible. Even at the height of the fatwa peril, he enlivened literary dinners while his protection officers from the Metropolitan Police kept their watch nearby.

Sir Salman is a resolute advocate of what he calls "the provisionality of all truths, the mutability of all character, the uncertainty of all times and places". History, and chance, have dealt him another blow from the believers in simplistic deeds, not playful, polyphonic words. A magazine once asked Sir Salman, "What do you consider your greatest achievement?" His answer: "To have continued." ■

American politics

Tracking right

The Destructionists. By Dana Milbank. *Doubleday*; 416 pages; \$30

Progressive Conservatism. By F.H. Buckley. *Encounter Books*; 254 pages; \$31

The Right. By Matthew Continetti. *Basic Books*; 484 pages; \$32 and £25

IT IS THE central question of American politics: how did a man like Donald Trump come to dominate the right, and how does he continue to do it? Since the businessman and television personality won the Republican nomination in 2016, authors, historians, journalists and political insiders have sought to provide an answer. Ahead of the mid-term elections in November, and in anticipation of a political comeback from Mr Trump, three more books anatomise his success.

In "Progressive Conservatism" F.H. Buckley, a professor of law at George Mason University, attempts to sketch a coherent intellectual theory of Trumpism. In his version, in 2016 "only Trump ran as a progressive conservative", the kind that champions civic virtue over corruption, the working man over the crony capitalist and nationalist pride over self-hatred. It is a capacious concept, one that takes in Presidents Abraham Lincoln, Theodore Roosevelt and Dwight Eisenhower. The author supplements this analysis with an examination of historical trends in conservative thought, such as the forgotten Western agrarian populists of the original Progressive era more than a century ago.

That is interesting, but the theory is hopeless. Mr Buckley calls Mr Trump "a



Playing to the crowd

Hegelian great man who incarnated the spirit and needs of his time". Yet he concedes that Mr Trump hardly embodied the values of progressive conservatism while in office. Anyone who encourages the sacking of Congress so that he might keep his grip on power illegitimately cannot have a strong sense of civic duty.

Instead—and tellingly—Mr Buckley's defence of Trumpian greatness depends on attacking others. "Let the Romneyite right-winger parade his indifference and the left-winger preen in his hatreds," he writes. "The progressive conservative will triumph over both by appealing to the civic virtue of Americans." The writing is shot through with complaints and whataboutisms directed at the intolerant left, from cracks at Hunter Biden, President Joe Biden's son, to gripes about "online Robespierres and LGBT bullies" and jibes at the 1619 Project, an essay collection about racism published by the *New York Times*. The book's muddled argument is instructive: the ultimate explanation of Trumpism is not a coherent ideology like "progressive conservatism", but a reaction to dark fears that the left is seeking to destroy America.

Seeing red

Dana Milbank offers a contrasting view in "The Destructionists". In his columns for the *Washington Post* he purports to examine "the foolish, the fallacious and the felonious in politics", usually on the right. In his splenetic new book, Mr Milbank dates the "crack-up" of the Republican Party to various "destructionists" and—to appropriate the author's trademark style—their depravity, deplorability, mendacity, moral turpitude, rapacity and sycophancy.

For Mr Milbank, the destructionism does not have deep roots; instead, the blame rests largely with Newt Gingrich, the inflammatory Republican leader in Congress in the 1990s. "The epic government failures of the last quarter-century can all be traced back to Gingrich and the savage politics he pioneered," Mr Milbank asserts. What follows is a litany of Republican misdoings over the past 25 years and a tour through the rogues' gallery of other alleged arsonists of democracy.

His targets include media pundits such as Tucker Carlson and Rush Limbaugh; John Roberts, the Supreme Court's chief justice; and officials including Mitch McConnell, Sarah Palin, Paul Ryan and, of course, Mr Trump. "They destroyed truth, they destroyed decency, they destroyed patriotism, they destroyed national unity, they destroyed racial progress, they destroyed domestic stability, and they destroyed the world's oldest democracy."

It is plain to see that Mr Milbank has a relish, and perhaps even a certain talent, for polemic (also demonstrated by one of his earlier books, "Tears of a Clown: Glenn ▶

▶ Beck and the Tea Bagging of America”). At times you may blink to check whether the author’s spittle is still visible on the page. But because all his characters are rendered in the same odious light, not much manages to stand out in relief. Seeing clearly requires a vision unclouded either by rage or by sycophancy.

Of the three books, Matthew Continetti, a conservative journalist, comes closest to achieving that clarity and thoughtfulness. For him, understanding Mr Trump’s grip on the modern Republican Party requires assessing the past century of right-wing thought. His thoroughly researched intellectual history, “The Right”, reveals many antecedents to Mr Trump in the margins of conservatism: Father Charles Coughlin, whose populist diatribes against Franklin Roosevelt were spread by radio (then a newfangled medium); Charles Lindbergh and his “America First” isolationism; the strongman Huey Long and his embrace of the welfare state; the paranoid conspiracism of anti-communists like Joseph McCarthy and the John Birch Society; George Wallace and his politics of white racial grievance; and Pat Buchanan and his angry politics of cultural revanchism.

What held the party together throughout this period of warring ideological factions was a common enemy, sometimes internal and sometimes external: the New Deal, communist saboteurs, the “evil empire” of the Soviet Union, and Islamic terrorism and the “axis of evil”. The brilliance of Mr Trump was to recognise the demise of the last common enemy after the failed “forever wars” in the Middle East. He reforged a winning, lasting coalition to counter a new enemy: the modern left and its allies in the media.

However crisp, Mr Continetti’s writing is not casual. There is a fondness for categorising and subcategorising various ideological cliques (as well as cataloguing the spats among them). But the careful historical preparation makes the eventual turn towards explaining the modern malaise of the Republican Party all the more convincing. “Heralded as a transformational president who would enact a second New Deal, Barack Obama ended up the midwife of an anti-elitist, isolationist politics of national populism,” he writes. “Donald Trump was the latest manifestation of a recurring anti-establishment spirit in America.”

Though Mr Continetti is no Democrat, his faction—the bookish writers who once staffed the now-defunct *Weekly Standard*—has been largely ostracised from the modern Republican Party. Partisan allegiances are not as strong in the wilderness, and his analysis is intellectually honest as a result. That lucidity, already in short supply, may grow even scarcer. The temperature of American politics is rising as Mr Trump’s return to the party’s helm beckons. ■



The age of discovery

Expanding horizons

A History of Water. By Edward Wilson-Lee. William Collins; 352 pages; £25

“MANY HISTORIANS begin their chronicles by praising history, but these praises always sell the matter short,” wrote Damião de Góis, a Portuguese royal archivist, in his account of the reign of Manuel I, published in 1566-7. “History is infinite,” de Góis reckoned, “and cannot be confined within any limits.”

It is an unusual manifesto for a chronicle, one of history’s drier literary forms. But to fulfil his expansive vision of his task, de Góis ranged freely across everything from the history of the Shia faith to the scholarship of Queen Mother Eleni of Abyssinia. Edward Wilson-Lee applauds such generous curiosity; in some ways he seeks to replicate it. His new book, “A History of Water”, is in part an exploration of de Góis’s life and thought, but it is also an argument for globalisation, for openness and undogmatic ideas about the world.

De Góis was well-travelled. As a young man in the 1520s he worked in the great mercantile city of Antwerp; later he went on diplomatic trips to Denmark, Poland, Prussia and Russia. His adventures exposed him to the intellectual ferment of the era. He lived with Erasmus in Freiburg, working as the elderly philosopher’s secretary. He dined with Martin Luther in Wittenberg. Ignatius Loyola, the founder of the Jesuits, visited de Góis in Padua.

He travelled farther still in his reading and writing. Portugal had initiated the age of exploration and was, in this period, the primary conduit—for goods, information

and, less happily, people—between Europe and the rest of the globe. The royal archive in the Torre do Tombo, the Tower of Records, was a central clearing-house for Europe’s awareness of the world beyond. De Góis, always drawn to marginal voices and ideas, had access to it all. In the Tower of Records he contemplated “the chaotic fullness of the world”.

Even in the 16th century, globalisation was provoking a reaction. Luther grumbled that “foreign trade...would not be permitted if we had proper government and princes”. When de Góis ate with him, he was served hazelnuts and apples: local produce free from ornament, ostentation and otherness. In this and other subtle ways, the book addresses the wider intellectual debates of the Reformation and of humanist and Renaissance thought.

Mr Wilson-Lee interleaves the life of de Góis with that of his contemporary, Luis de Camões, the author of “The Lusiads”, an epic poem celebrating Portugal’s voyages of discovery. Often in prison and always in penury, de Camões led a violent, disreputable existence. He spent 17 years in exile in far-flung Portuguese trading posts in Goa, Macau, Mozambique and elsewhere.

While de Camões may have briefly worked under de Góis, Mr Wilson-Lee is less interested in how their lives intersected than how they embodied Europe’s different responses to its discoveries. “A History of Water” artfully juxtaposes the confined spaces inhabited by its subjects—de Góis in his tower and de Camões in his various prisons—with the period’s great intellectual investigations. Where de Góis widened his horizons to let more of the world in, de Camões took his narrowness with him: he framed Portugal’s voyaging as a reclaiming of a classical destiny and a triumph over pagan disorder. The Inquisition arrested de Góis in 1571, aged almost 70, as his Catholicism was too diluted for their liking. It imprisoned him for 19 months, interrogating him throughout.

“A History of Water” explores European bafflement and fear at new ideas, and the book itself presents as a puzzle within a puzzle. It opens with the accidental death—or perhaps murder—of de Góis in January 1574, soon after the Inquisition released him. Sources described him as burnt to death, or strangled; Mr Wilson-Lee offers his own provocative account.

The author ponders the questions posed by a moment in history when societies “might have become global”—that is, might have embraced pluralism, as de Góis did—“but didn’t”. He resists offering simplistic answers as to why Europe chose its imperial course, yet there are many things to wonder at in the book’s pages, as well as some things to despair of. The journey is enthralling throughout—as all explorations should be. ■

World in a dish

Pineapple express

The world's greatest summertime drink relies on nature's magic

THE MAIN ingredient in the best warm-weather drink ever invented is detritus. Usually the tough core and peel of a pineapple go on the compost heap while the flesh is eaten. But if they are submerged in sugared water, perhaps with a cinnamon stick and a few whole cloves, and left at room temperature, the result is *tepache*, which has been made in Mexico for centuries. Like most wild ferments—meaning products that rely on naturally occurring rather than lab-created microbes—its creation is both simple and complex.

The simplicity lies first in the ingredients: just water, sugar, pineapple peels and optional spices. The requisite yeast and bacteria are both ambient and present on the peels. The sugar provides microbial nutrition. The process is also simple: just mix everything together and leave it. For the first couple of days it will taste like water with a slight pineapple-and-spice flavour. But at some point—probably around day three in a summertime kitchen—magic will happen. Neither as cloying as soda nor as sour as kombucha, *tepache* is delicious on its own, iced or with a glug of gin.

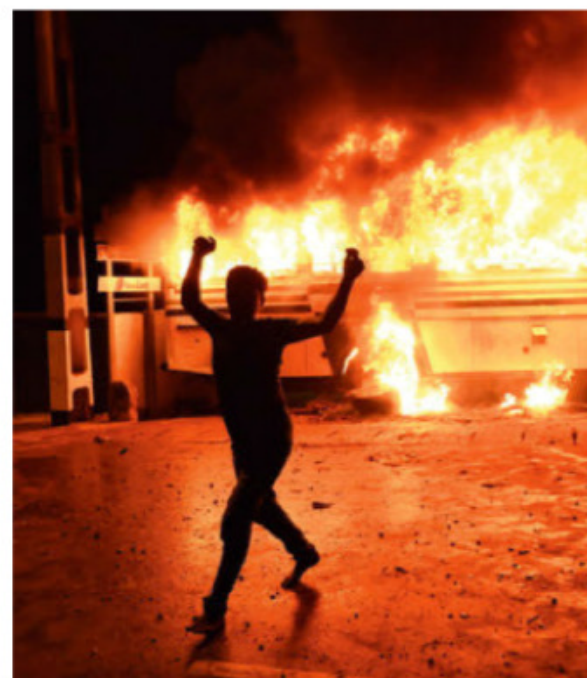
Microbial processes are responsible for the complex part: some *lactobacilli* consume sugar and produce lactic acid and carbon dioxide, giving *tepache* its effervescence and pleasant sourness. The fruit's acidity encourages their growth, while protecting against undesirable bacteria that cause spoilage or a vomit-like taste. For home brewers, each batch will probably taste slightly different, because the microbial content of pineapples varies.

The choice of ingredients requires consideration. Some advocate using only organic pineapples, but this is unnecessary: rinsing the peels before use would also wash away any pesticide residue. Using refined white sugar results in a straw-coloured drink with a monotone sweetness. Turbinado sugar is better but *panela* or *piloncillo*—dark brown, unrefined whole cane sugar—is best of all. It gives the beverage depth and a lovely amber colour.

Most municipal water is treated to remove microbes, which is sensible for public health but not ideal for fermentation: filter your tap water first to remove the chlorine. Some Mexican-American *tepache*-makers add pineapple juice or grated pineapple, both of which provide extra sugar to encourage bacterial growth and acid to inhibit the undesirable microbes.

This tremendously satisfying process offers three lessons to the home cook. First, choose wisely. Precisely because *tepache*-making requires so few choices, each one matters. Second, as with all fermented foods, timing is everything. Drink *tepache* too soon and it's pineappley water; wait too long and it's vinegar.

Finally, the microbes responsible for *tepache* are on hands, in mouths, on surfaces and in the air. As they perform their delicious work, they remind people how small a share of the world's living creatures humans comprise, and how essential it is to understand the goals and habits of other living beings. Every successful fermentation project testifies to the life-giving importance of co-operation. ■



Sri Lankan fiction

Ghosts of history

The Seven Moons of Maali Almeida.

By Shehan Karunatilaka. *Sort Of Books*; 368 pages; £16.99

BEING A GHOST, it turns out, much resembles being a war photographer: “Long periods of boredom interspersed with short bursts of terror”. Once a louche snapper with a taste for risky assignments and beautiful men, Malinda Almeida joins literature's long roll call of deceased narrators. Over the seven days and nights that follow his demise, Maali (as he is known) must make sense of his own murder and of the civil conflicts that convulse Sri Lanka while he floats invisibly around Colombo, that “stinking city where deeds go unpunished and ghosts walk unseen”.

The unhappy country produces illustrious writers but disordered politics. Many Sri Lankan authors flourish abroad, yet Shehan Karunatilaka has stayed to watch the serial calamities unfold. In 2010 his prize-winning debut, “Chinaman: The Legend of Pradeep Mathew”, used the search for a vanished cricketing icon as a vehicle for its scorchingly satirical journey. “The Seven Moons of Maali Almeida”, his second novel, returns to late 1989.

A bloody four-way struggle—between brutal government forces, Tamil separatists, Marxist-chauvinist guerrillas and Indian “peacekeepers”—has proved that “the chances of violence ending violence are one in nothing.” Peace of a sort arrived in 2009, although the country's current meltdown suggests that this novel's tropical dystopia has not dated. “Follow any turd upstream and it leads to a member of ▶▶



parliament,” snarls the photographer from his disembodied position of authority.

Maali has combined war-zone photojournalism with fixing for the competing spies who buzz around the corpses on Sri Lanka’s jungle battlefields. Whose death squad has left him among the “long slabs of meat” that “garbage men” will dump in fetid Beira lake? And will his killer negatives—images that expose the hidden state actors behind massacres—ever come to light? Maali has a week to settle his fate before the fustian celestial bureaucracy forces him to choose between an afterlife as a

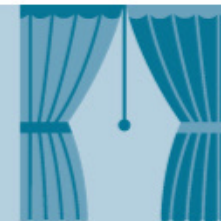
long-term phantom or passage through “The Light” into rebirth and oblivion.

The quest that ensues is comic, macabre, angry and thumpingly alive. Maali’s sardonic, scurrilous monologue fills in his back story as a gambling-addicted lensman who loves the son of a Tamil politician; he hopes that his photo exposés will “do for Lanka’s civil war what naked napaalm girl did for Vietnam”. It takes in the country’s manipulated ethnic strife and even the social geography of Maali’s quasi-Buddhist limbo. It has bite, brilliance and sparkle, though readers may sometimes

wish for steady illumination rather than another pyrotechnic burst.

Maali’s posthumous pilgrimage shows him “how ugly this beautiful land is”. Still, the furious comedy in Mr Karunatilaka’s novel never courts despair. Acts of love and loyalty can count beyond the grave. The dead militants who pursue revenge, not karma, because “the world will not correct itself” don’t get the final word. That goes, more or less, to the sage spirit of a leopard who asks “why humans destroy when they can create”. Neither ghosts nor writers have the answer to that yet. ■

Back Story The heat is on



In art, as in life, feelings rise and boundaries blur when a heatwave strikes

IN “SUMMERTIME”, THE livin’ is easy and the tempo is slow. Humidity seeps through the sultry rhythm of George Gershwin’s aria. In “Bathers at Asnières”, Georges Seurat’s painting of day-trippers on the banks of the Seine, shoulders slump beneath a hazy sky. Heat induces languor and stillness—but also debauchery and frenzy. Think of the febrile staff party in “Dirty Dancing”, or Glenn Frey sweating out the lyrics for “The Heat is On”, as, in the music video, Eddie Murphy swings from the back of a lorry.

In art, as in life, temperatures like those that have been scorching Europe and America provoke contradictory reactions, alike only in being as extreme as the weather. Heat liberates and suffocates. It opens up new worlds, ripe with feverish possibilities, or shrinks the universe to a pool or a patch of shade. People change states, their emotions rising with the warm air. Like crushed ice in a mint julep, boundaries dissolve.

Including the social and erotic kinds, as men and women from diverse backgrounds collide on streets and beaches, often wearing next to nothing—a recipe for bliss or disaster, depending on your point of view. “Hot weather encourage[s] loose morals,” warns a character in Ian McEwan’s “Atonement”. “Fewer layers of clothing, a thousand more places to meet. Out of doors, out of control.” In his song “Hot in the City”, Billy Idol has a different take: “Don’t forget you’re young,” he drools, “on a hot summer’s night.” A bondage-themed video underlines what he means.

The borders between the generations can evaporate, too, as unsupervised children roam about and get embroiled in grown-up business, sometimes combustibly. In “To Kill a Mockingbird”, on Alabama days so hot that “stiff collars

wilted by nine in the morning” and “ladies bathed before noon”, Scout and Jem hang around the courthouse or try to make Boo Radley come out. Life stands still, then speeds up, lassitude, excitement and catastrophe succeeding one another like readings on a thermometer.

The gospel of doomed heatwave flings is “The Go-Between”, L.P. Hartley’s stew of ages, classes and sex, in which the soaring mercury reflects the flush of embarrassment and the swelter of desire. “In the heat the senses, the mind, the heart, the body, all told a different tale,” says the sun-addled narrator. “One felt another person, one was another person.” A footman has a drier impression: “Quite a lot of people have gone mad.”

Heat warps perceptions along with morals, clouding visions or clarifying them. Secrets bubble into the open, fizzed along by ill-advised boozing. “Liquor goes fast in hot weather,” Stanley sneers at poor, clammy Blanche in “A Streetcar Named Desire”. In “The Great Gatsby”, on a day too hot to move, Daisy, Tom, Nick and Gatsby take a fateful jaunt into New York



and drink cocktails in a hotel. Sweat races down backs, tempers fray, truths are told, feelings run high and out of control. The beauty that had bloomed in a fierce summer shrivels and decays.

For if heat is a catalyst for sex, it also figures in that other great theme of art and life: death. It can be lethal and torturous as well as a heady thrill. In “The Good, the Bad and the Ugly”, Clint Eastwood is marched through a boiling wasteland by a vengeful Eli Wallach, who cackles dementedly from beneath a pink parasol. In “Walkabout”, two children lost in the ochre outback contend with scorpions and snakes. The hero of “Lawrence of Arabia” endures an all-night camel trek in search of water. Such scenes once felt dystopian and otherworldly; today they are more like bulletins from an arriving future.

When heat like this is on, it can seem to last for ever—right up until it breaks, and seems only ever to have been a mirage. In between, fleetingly, is the ecstasy of relief. The best cooling-off scene in cinema comes at the climax of “Ice Cold in Alex” (pictured), a wartime adventure in which three parched Brits struggle across a north African desert in the company of a likeable German spy. Led by Captain Anson (John Mills), they make it to a bar they have fantasised about through quicksand and ambushes.

The Brits know, but the spy doesn’t, that he is about to be arrested and possibly shot. As the clock ticks down on his fate, a parallel drama unfolds—over whether the beers served by an agonisingly unhurried barman will be as sublime as everyone hopes. After a reverential pause, Anson downs his in one. “Worth waiting for,” he pronounces: a line that fits both a heatwave’s delights and the merciful moment when it lifts.

Economic data

	Gross domestic product			Consumer prices		Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units			
	% change on year ago latest	quarter*	2022†	% change on year ago latest	2022†	%		% of GDP, 2022†	% of GDP, 2022†	10-yr gov't bonds latest,%	change on year ago, bp	per \$ Aug 17th	% change on year ago				
United States	1.6	Q2	-0.9	2.3	8.5	Jul	8.3	3.5	Jul	-4.1		-6.0	2.9	163	-		
China	0.4	Q2	-10.0	4.0	2.7	Jul	2.4	5.4	Jul [§]	2.8		-6.2	2.4	\$\$	-35.0	6.78	-4.4
Japan	1.1	Q2	2.2	2.0	2.3	Jun	2.2	2.6	Jun	1.5		-6.1	nil		-8.0	135	-19.1
Britain	2.9	Q2	-0.3	3.6	10.1	Jul	8.7	3.8	May ^{††}	-3.1		-5.0	2.1		142	0.83	-12.1
Canada	2.9	Q1	3.1	3.6	7.6	Jul	6.7	4.9	Jul	1.2		-3.5	2.9		170	1.29	-2.3
Euro area	3.9	Q2	2.5	2.7	8.9	Jul	7.8	6.6	Jun	1.6		-4.3	1.1		155	0.98	-13.3
Austria	9.5	Q1	10.0	3.9	9.2	Jul	8.0	4.3	Jun	-1.0		-4.6	1.6		186	0.98	-13.3
Belgium	3.3	Q2	0.8	2.2	9.6	Jul	9.3	5.5	Jun	-1.0		-4.8	1.7		192	0.98	-13.3
France	4.2	Q2	2.1	2.2	6.1	Jul	5.5	7.2	Jun	-1.4		-5.7	1.5		160	0.98	-13.3
Germany	1.5	Q2	-0.1	1.0	7.5	Jul	8.3	2.8	Jun	3.5		-3.2	1.1		155	0.98	-13.3
Greece	7.9	Q1	9.7	4.0	11.6	Jul	9.0	12.3	Jun	-5.8		-5.0	3.5		296	0.98	-13.3
Italy	4.6	Q2	4.2	2.7	7.9	Jul	6.8	8.1	Jun	0.7		-6.1	3.3		277	0.98	-13.3
Netherlands	5.3	Q2	10.9	2.6	10.3	Jul	10.8	3.4	Jun	7.4		-3.2	1.4		173	0.98	-13.3
Spain	6.3	Q2	4.6	4.7	10.8	Jul	9.2	12.6	Jun	0.5		-5.2	2.0		183	0.98	-13.3
Czech Republic	5.1	Q1	0.8	2.2	17.5	Jul	16.7	2.5	Jun [†]	-3.6		-5.7	4.0		218	24.2	-10.1
Denmark	6.3	Q1	2.8	2.1	8.7	Jul	8.2	2.5	Jun	8.3		0.8	1.4		157	7.32	-13.2
Norway	4.8	Q1	-3.8	3.2	6.8	Jul	4.8	3.2	May ^{††}	16.4		8.7	1.4		76.0	9.72	-8.5
Poland	9.4	Q1	-8.9	4.5	15.6	Jul	13.5	4.9	Jul [§]	-2.5		-3.7	5.7		402	4.63	-15.8
Russia	-4.0	Q2	na	-10.0	15.1	Jul	21.2	3.9	Jun [§]	10.1		-3.8	8.9		193	60.6	21.3
Sweden	3.8	Q2	5.7	1.8	8.5	Jul	6.9	8.6	Jun [§]	3.0		-0.3	1.4		130	10.4	-16.1
Switzerland	4.4	Q1	1.9	2.6	3.4	Jul	2.9	2.2	Jul	6.4		nil	0.5		91.0	0.95	-4.2
Turkey	7.3	Q1	4.9	3.2	79.6	Jul	69.7	9.7	Jun [§]	-3.7		-3.9	16.3		-51.0	18.0	-53.0
Australia	3.3	Q1	3.1	3.2	6.1	Q2	6.1	3.4	Jul	2.0		-2.4	3.3		217	1.45	-4.8
Hong Kong	-1.3	Q2	4.1	0.7	1.9	Jun	2.9	4.3	Jul ^{††}	1.4		-6.7	2.7		169	7.84	-0.6
India	4.1	Q1	1.9	6.9	6.7	Jul	7.3	6.8	Jul	-1.5		-6.5	7.2		95.0	79.5	-6.4
Indonesia	5.4	Q2	na	5.0	4.9	Jul	5.3	5.8	Q1 [§]	1.0		-4.3	7.0		69.0	14,768	-2.7
Malaysia	8.9	Q2	na	5.0	3.4	Jun	3.1	3.8	Jun [§]	2.5		-6.2	4.0		76.0	4.47	-5.2
Pakistan	6.2	2022**	na	6.2	24.9	Jul	18.5	6.3	2021	-5.3		-7.0	12.8	†††	298	215	-23.6
Philippines	7.4	Q2	-0.4	7.1	6.4	Jul	4.8	5.7	Q2 [§]	-3.6		-7.7	5.9		179	55.9	-9.8
Singapore	4.4	Q2	-1.0	3.6	6.7	Jun	5.6	2.1	Q2	18.1		-0.9	2.6		129	1.38	-1.4
South Korea	2.9	Q2	2.9	2.7	6.3	Jul	5.5	2.9	Jul [§]	3.1		-2.5	3.2		130	1,310	-10.2
Taiwan	3.0	Q2	-7.0	2.9	3.4	Jul	3.3	3.7	Jun	14.0		-1.2	1.2		79.0	30.0	-7.1
Thailand	2.5	Q2	2.7	2.8	7.6	Jul	6.0	1.5	Dec [§]	-0.3		-5.0	2.3		95.0	35.4	-6.1
Argentina	6.0	Q1	3.5	4.3	71.0	Jul	70.2	7.0	Q1 [§]	nil		-4.6	na		na	135	-28.2
Brazil	1.7	Q1	4.0	2.0	10.1	Jul	10.2	9.3	Jun ^{§††}	-0.4		-6.5	12.0		132	5.17	1.7
Chile	7.2	Q1	-3.0	1.5	13.1	Jul	11.1	7.8	Jun ^{§††}	-7.1		-2.8	6.6		181	892	-11.3
Colombia	12.6	Q2	6.0	6.3	10.2	Jul	9.8	11.3	Jun [§]	-5.3		-4.7	11.7		476	4,311	-10.2
Mexico	2.1	Q2	4.1	2.4	8.2	Jul	7.6	3.3	Jun	-0.8		-3.2	8.6		152	20.1	-0.3
Peru	3.8	Q1	8.1	2.5	8.7	Jul	7.6	7.6	Jul [§]	-3.6		-2.1	7.8		132	3.85	6.2
Egypt	5.4	Q1	na	5.9	13.6	Jul	12.9	7.2	Q2 [§]	-6.0		-5.9	na		na	19.1	-17.9
Israel	4.8	Q2	6.8	4.9	5.2	Jul	4.3	3.3	Jun	2.9		-1.7	2.6		158	3.25	-0.3
Saudi Arabia	3.2	2021	na	7.5	2.7	Jul	2.5	6.0	Q1	15.9		10.9	na		na	3.75	nil
South Africa	3.0	Q1	8.0	1.9	7.4	Jun	6.3	34.5	Q1 [§]	-1.1		-6.2	10.2		127	16.7	-10.2

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. ‡Not seasonally adjusted. §New series. **Year ending June. ††Latest 3 months. †††3-month moving average. §§5-year yield. ††††Dollar-denominated bonds.

Markets

In local currency	Index	% change on:	
		Aug 17th	Dec 31st 2021
United States S&P 500	4,274.0	1.5	-10.3
United States NAScomp	12,938.1	0.6	-17.3
China Shanghai Comp	3,292.5	1.9	-9.5
China Shenzhen Comp	2,242.5	2.8	-11.4
Japan Nikkei 225	29,222.8	5.0	1.5
Japan Topix	2,007.0	3.8	0.7
Britain FTSE 100	7,515.8	0.1	1.8
Canada S&P TSX	20,181.4	1.5	-4.9
Euro area EURO STOXX 50	3,756.1	0.2	-12.6
France CAC 40	6,528.3	0.1	-8.7
Germany DAX*	13,626.7	-0.5	-14.2
Italy FTSE/MIB	22,757.8	0.2	-16.8
Netherlands AEX	723.1	-0.2	-9.4
Spain IBEX 35	8,434.8	1.0	-3.2
Poland WIG	54,867.6	-0.2	-20.8
Russia RTS, \$ terms	1,136.4	1.6	-28.8
Switzerland SMI	11,128.2	-0.2	-13.6
Turkey BIST	2,980.0	5.3	60.4
Australia All Ord.	7,381.1	2.0	-5.1
Hong Kong Hang Seng	19,922.5	1.6	-14.9
India BSE	60,260.1	2.5	3.4
Indonesia IDX	7,133.4	0.7	8.4
Malaysia KLSE	1,518.2	1.7	-3.1

	index	% change on:	
		Aug 17th	Dec 31st 2021
Pakistan KSE	43,676.6	2.8	-2.1
Singapore STI	3,262.8	-0.7	4.5
South Korea KOSPI	2,516.5	1.4	-15.5
Taiwan TWI	15,465.5	3.5	-15.1
Thailand SET	1,639.7	1.4	-1.1
Argentina MERV	125,962.9	3.1	50.9
Brazil BVSP	113,707.8	3.1	8.5
Mexico IPC	48,734.0	1.9	-8.5
Egypt EGX 30	10,058.1	0.9	-15.5
Israel TA-125	2,081.6	0.3	0.4
Saudi Arabia Tadawul	12,646.7	1.7	11.6
South Africa JSE AS	70,967.4	1.8	-3.7
World, dev'd MSCI	2,822.9	0.7	-12.7
Emerging markets MSCI	1,015.6	1.8	-17.6

US corporate bonds, spread over Treasuries

Basis points	Dec 31st 2021	
	latest	
Investment grade	161	120
High-yield	446	332

Sources: Refinitiv Datastream; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

The Economist commodity-price index	% change on				
	2015=100	Aug 9th	Aug 16th*	month	year
Dollar Index					
All Items	155.8	151.8	0.8	-8.9	
Food	145.6	143.1	-0.9	8.7	
Industrials					
All	165.3	159.9	2.2	-19.8	
Non-food agriculturals	149.5	154.7	-3.6	10.2	
Metals	169.9	161.5	4.0	-25.5	
Sterling Index					
All items	196.7	191.5	0.3	3.5	
Euro Index					
All items	169.0	165.4	1.4	4.8	
Gold					
\$ per oz	1,792.7	1,777.2	3.7	-0.3	
Brent					
\$ per barrel	96.4	92.4	-14.0	33.7	

Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit [Economist.com/indicators](https://www.economist.com/indicators)

Network effects

Monkeypox may not spread beyond male sex networks

SINCE MONKEYPOX started spreading in Europe in May, over 38,000 cases have been reported around the world. Most of them are in cities in Europe and America, and not necessarily because of more testing for the virus there. Instead, the concentration of cases in those parts of the world is explained by how the virus spreads.

Although monkeypox infections have occurred in many places—so far, they have shown up in 92 countries—they affect a narrow group of people. Fully 99% of confirmed cases are in men, and among the third of cases for which more detailed information is available, 97% are in men who have sex with men. Those diagnosed tended to engage in high-risk sexual activity. In Britain, about a third of people testing positive reported having ten or more partners in the previous three months.

It is increasingly clear that the disease is almost always transmitted through sex. Where known, 91% of cases are reported to be contracted through sexual encounters. Only on rare occasions has the virus been passed on in other ways from someone to household members, including children. A study of 181 cases in Spain found the virus to be concentrated in lesions in the patients' genital areas, which were common.

After identifying numerous locations where two or more people who later tested positive said they had been at the same time, a group of British epidemiologists found that many were in places where casual sex is common, such as sex clubs, festivals and nightclubs, including some outside Britain. The sum of this evidence suggests that monkeypox is circulating within sex networks of mostly gay and bisexual men, many of whom travel internationally.

Will monkeypox see sustained spread in the general population? One recent paper, which has not yet been published in a peer-reviewed journal, suggests that this is unlikely. Too few adults have the number of sex partners needed to sustain transmission during the few days or weeks when they are contagious. Assuming sexual transmission, outbreaks will thus quickly hit a dead end.

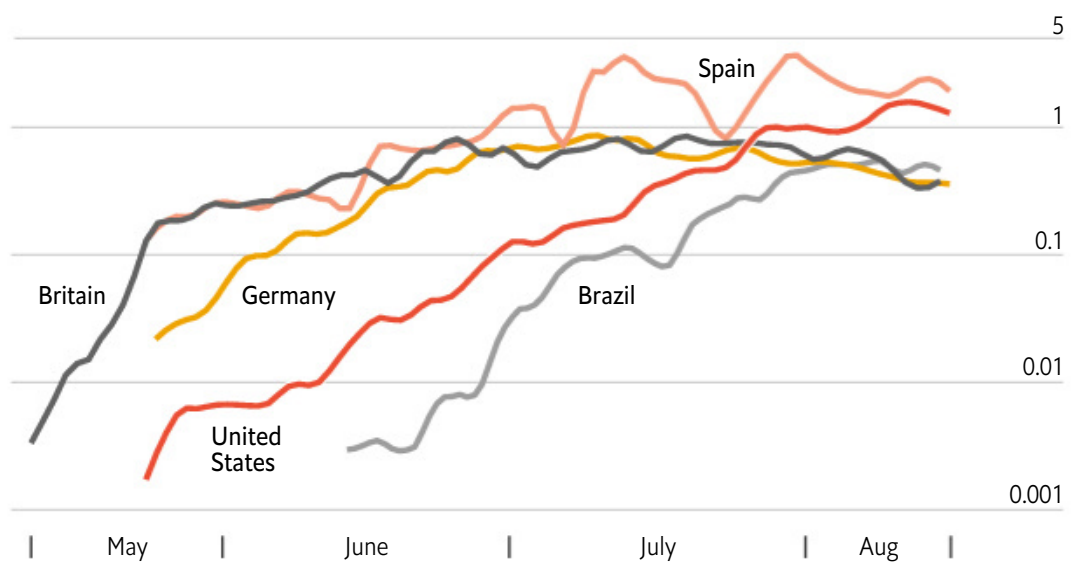
In the countries with the most cases, vaccination of high-risk men is proceeding apace. That, together with efforts to warn those at risk, will hopefully help curb new cases: in Britain, the outbreak is already slowing down. But whether monkeypox will ever disappear remains to be seen. ■

→ Monkeypox infections may have plateaued in some countries

Daily new confirmed monkeypox cases per million people, 2022

Selected countries accounting for around 70% of total cases, 14-day smoothed average

Log scale



→ It mostly spreads among men who have sex with men

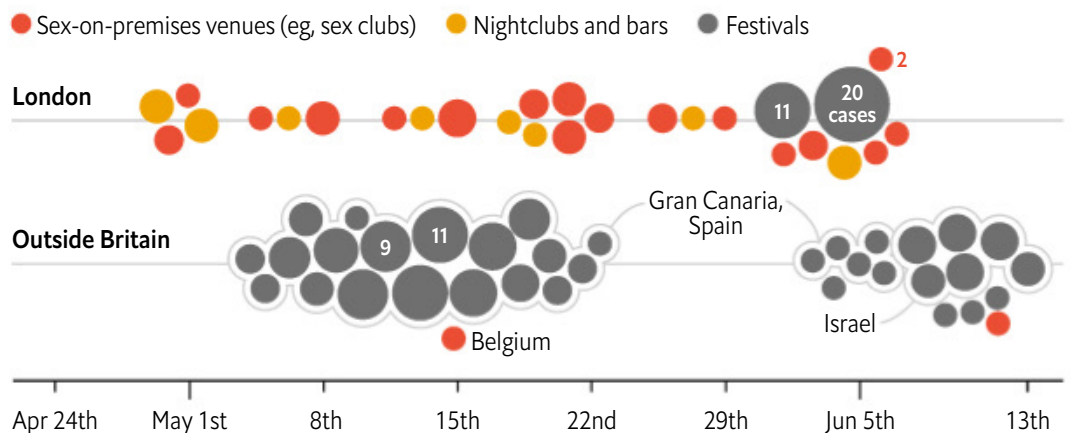
97% of cases worldwide are men who have sex with men

91% of transmissions are through sexual encounters

39% are in people living with HIV

Events attended by at least two people with monkeypox

Britain, sample of 274 cases

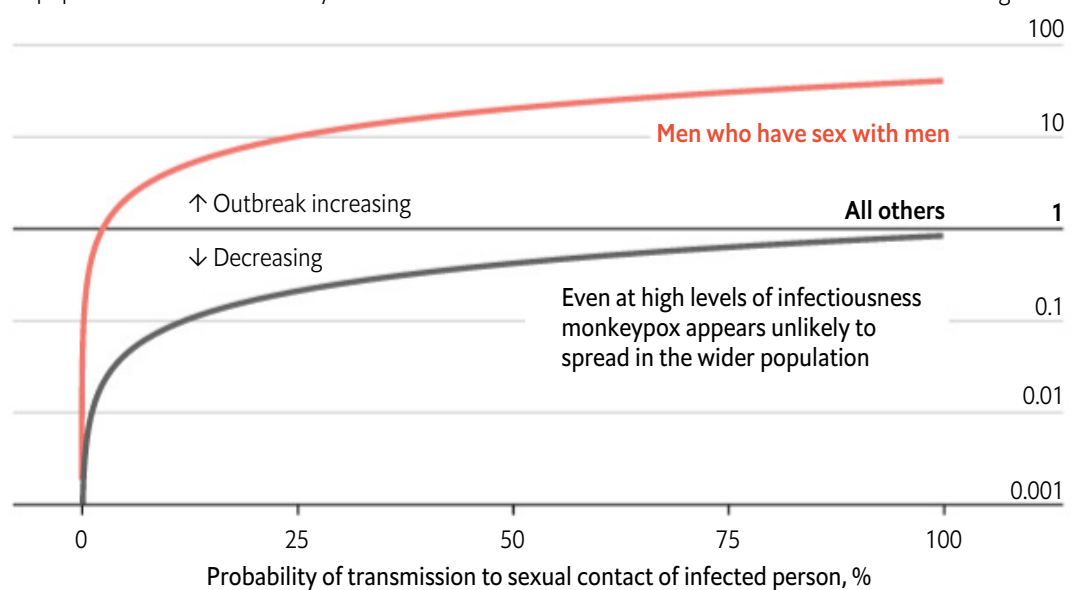


→ More sex partners among some in this group make them more vulnerable

Estimated transmissions per infected person, at different levels of infectiousness*

In populations with no immunity

Log scale



*Assuming infectious period of two weeks; original study also explored one to four week periods with similar results. Sources: Our World in Data; WHO; UKHSA; "Heavy-tailed sexual contact networks and the epidemiology of monkeypox outbreak in non-endemic regions", by A. Endo et al., 2022



The joy of small things

Jean-Jacques Sempé, cartoonist of human dreams, hazards and delights, died on August 11th, aged 89

AT THE EDGE of the gigantic sea, his clothes left in a pile, his arms hugging his shivering body, a frail, tiny figure wondered whether to take the plunge. In an immense plain, under a huge black cloud, a woman in a sunhat furiously pedalled her bicycle, with its basket of precious vegetables, towards some distant home. Amid an infinity of fir trees two ant-size cyclists almost met, but their paths diverged before contact. In a landscape of rampaging lushness and glorious views a pipe-smoking painter worked at his easel. His human subject, insignificant in the long grass, called “Remember not to forget me!”

In cityscapes—the tall grey buildings and mansard roofs of Paris, the massed skyscrapers of New York—the proportions were the same. Here the human ants often moved in crowds, through the rainy streets, into opulent concert halls, towards political rallies, usually in the same direction. Yet in the city, too, they broke away and became solitary among the enormous towers. On a flat roof, a little girl jumped a skipping rope. In one lit window, a trainer coaxed a tiger through a hoop. From one balcony, a couple leaned out dangerously to catch the crescent moon through a canyon of high walls. In an immense lamplit colonnade, a furtive tuba-player smoked behind a column.

Images like these, in ink and wash or gentle watercolour, featured for decades in dozens of French magazines, in Britain’s *Punch* and on the covers of the *New Yorker*. They filled books that sold in the millions. His little figures, coping with the world, made Jean-Jacques Sempé internationally famous. But why, he wondered, did humans assume they were big? They were tiny, little scraps of things. Their lives were a mess, his own especially. He had been brought up petit-bourgeois and poor in south-west France, never knowing his real father, feeling therefore he was built on nothing. His foster parents almost killed him, and his stepfather—when his sales of canned anchovies went well—

would come home drunk and beat him. He was expelled from school at 14 for being *distract*, too distractable. When he looked for work, everyone rejected him.

His tiny figures were haunted by notions of greatness. Under an enormous statue to music, in an overgrown park, a weary man trudged with a violin. Before a colossal monument to some ancient hero wrestling a stallion, a glum businessman waited for the crossing light to change. Backstage, among soaring fly-towers, half a dozen child ballerinas lined up nervously to go on. Dreams of what they might do were limitless, but what might befall if they tried? His own ambitions had been, first, to be a brilliant jazz pianist like Duke Ellington. He had even met him once, in Saint Tropez, and they had banged out “Satin Doll” for a few bars. He still dreamed of reprising that, duelling with the Duke. An even bolder hope had been to be centre forward in the French national team. But by some conspiracy he had not been called.

In default of greatness, his little figures did whatever they could. In the midst of one of his exuberant forests, a couple with a caravan laid out a garden and mowed a lawn. A middle-aged woman in a housecoat polished the railway tracks that ran past her cottage. One plump, balding husband, home from work, serenaded his wife with a cello; another, rising from the supper table, took a bow in the sunlight that streamed through the window. In a garden shed, a mousy little man forged a knight’s shining sword.

As for him, he became an artist. It was not easy. In his youth he had only doodled, nothing serious. He never drew from life, only from his head, which contained everything necessary. When he started to sell drawings for a living, a last resort, he came across copies of the *New Yorker* with drawings by Saul Steinberg and James Thurber. He decided they were just too great, little dreaming that in 1978 he would dare to ask to do the same. But at the *New Yorker*, as elsewhere, he felt he did nothing remarkable. Though he teased philosophers with the titles of his collections (“Nothing is Simple”, “Everything is Complicated”, “Unfathomable Mysteries”), he just drew the world as he saw it, striving for a new idea every day. He filled big sheets and canvases with the smallest details of grass, birds, mouldings, chandelier drops, creating a whole world for a single image which often required no words.

That world was old-fashioned, more interesting than the modern one. On his rural roads there were no cars. Women stayed around the house; men put on hats and went to work, or sat in neighbourhood bistros, among the half-net curtains and bentwood chairs, talking politics and football. His cartoon-novel, “Monsieur Lambert”, was set entirely there. He did not care to update himself. Nor would he do satire or mockery, only humour of the sort that friends and colleagues indulged in. The gently nudging sort. How could he mock, when in every image he was drawing his own vulnerability?

The hero of “Le Petit Nicolas”, a series of books for children created with René Goscinny in 1959, also looked vulnerable and small. But Nicolas caused chaos on all sides with his daydreams and his pranks. He lay on his bed with his football, scheming, surrounded by toy cars and the discarded pages of his lessons. He was scolded at school, while behind the master’s back his friends leered and laughed. Off diving boards he jumped cheerfully into nothingness, holding his nose for luck. Little Nicolas had the happy-go-lucky childhood he himself never had. That made his own a bit easier to take.

Childlike instincts helped generally. A middle-aged businessman kicked up fallen leaves in a park; an office worker, returning home, flicked the pedal of a drum kit. Another, smiling blissfully, rocked on a playground swing to contemplate the sunset. A plutocrat sat splashing in his villa’s private pool. Cyclists, the happiest of beings, raced down tracks together, brought cities alive with their colours and coasted solo above gridlocked traffic over the Brooklyn Bridge. At the edge of the gigantic sea, on a vast beach, a tiny figure in red shorts did a handstand for sheer joy. ■

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