

The Economist

Is generative AI built on theft?

How to counter Iran

Musk v Brazil's supreme court

Shrinking America

APRIL 20TH-26TH 2024



GENZ

Reasons to be cheerful



Welcome to Now

Delivering
innovation to any
environment.
Including yours.

Dell Technologies and Intel are supporting scientists as they tackle one of the biggest challenges in conservation—protecting the coral reef. We are also helping small businesses everywhere manage their challenges, big and small. With the power to collect critical data, reduce IT complexities and keep systems secure, technology is helping businesses protect many environments. See what we can do for yours.

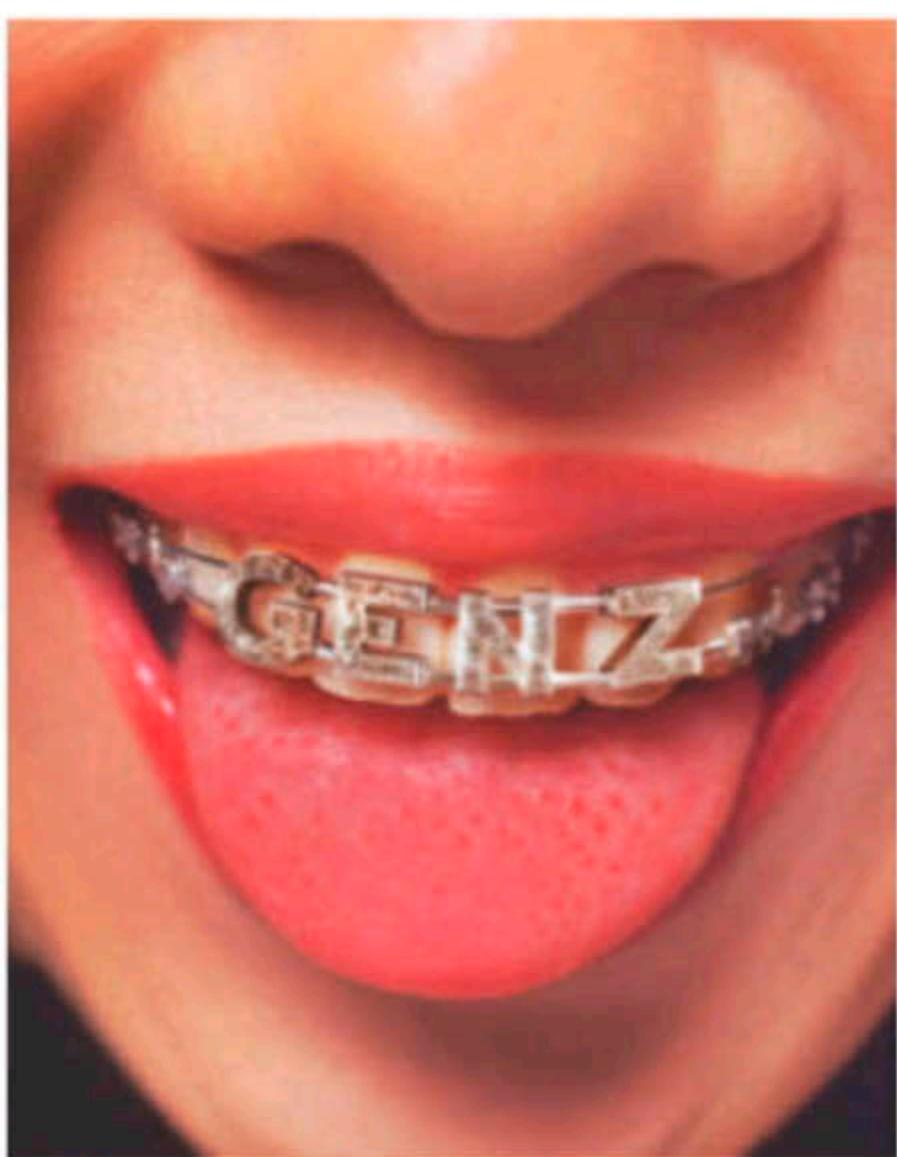
Explore more at
Dell.com/WelcomeToNow



intel.

Intel® Innovation Built-in

Contents



On the cover

Reasons to be cheerful about the young: leader, page 9. The world economy has been kind to Generation Z, page 57. Demands grow to restrict young people's access to phones and social media, page 67. Our number-crunching shows that the plight of graduates in China is much worse than previously thought, page 32

Is generative AI built on theft? Lawyers v large language models, page 51. Moving beyond today's LLMs will require some fundamental breakthroughs, page 64

How to counter Iran Israel should try a novel tactic to respond to Iran's missile attack: restraint: leader, page 10. An old conflict enters a new phase, page 36. Iranians fear their brittle regime will drag them into war, page 37

Musk v Brazil's supreme court Elon Musk's latest feud, page 25

Shrinking America Much of America is shrinking, something its system of government makes even harder than it need be: briefing, page 15

→ The digital element of your subscription means that you can search our archive, read all of our daily journalism and listen to audio versions of our stories. Visit economist.com

The world this week

5 A summary of political and business news

Leaders

9 **Generation Z** Better off than you think

10 **India's opposition** Not fit for purpose

10 **Israel and Iran** Don't rush to retaliate

11 **Conscription**

First, raise soldiers' pay

12 **Monetary policy**

The second Powell pivot

Letters

14 On China, WEIRD countries, nuclear weapons, software engineers, banlieues, uniforms

Briefing

15 **Shrinking America** Emptying and fuming



Bartleby How to combine heritage and innovation, page 54



United States

19 Trump's trial begins

20 Busted trust

21 Tents in cities

21 Bribery voters

22 Touching fentanyl

23 Patentsville

24 **Lexington** A Trumpian triumph



The Americas

25 Brazil's mighty supreme court

26 Canadian maple syrup

27 Why Ecuador stormed Mexico's embassy



Asia

28 The last Gandhi?

30 China v the Philippines

30 Japanese journalism

31 **Banyan** Singapore's PM



China

32 The plight of graduates

33 A message for Taiwan

34 Frustrating poplar fluff

35 **Chaguan** The coming wave of Alzheimer's



Middle East & Africa

36 Iran's attack on Israel

37 Iranian hardliners

38 Israel's dilemma with Iran

39 Catastrophe in Sudan

40 Tanzania's hobbled opposition



► **Contents continues overleaf**

Contents

Europe

- 41** Germany's failing schools
- 42** China and Germany
- 43** Macron the hawk
- 43** Waiting for the Russians
- 44** Ukraine's drones
- 45** Charlemagne Repressing right-wingers



Britain

- 46** Election predictions
- 47** Tactical voting
- 48** Bagehot Madness and mayors



International

- 49** The rights and wrongs of conscription



Business

- 51** AI and copyright
- 53** LVMH's pups in cashmere
- 54** Bartleby Lessons of woke Scrabble
- 55** Insecure Chinese biotech
- 56** Schumpeter Epistolary CEOs



Volume 451 Number 9393

Published since September 1843
to take part in "a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."

Editorial offices in London and also:

Amsterdam, Beijing, Berlin, Brussels, Chicago,
Dakar, Dallas, Dubai, Johannesburg, Madrid,
Mexico City, Moscow, Mumbai, New Delhi, New
York, Paris, San Francisco, São Paulo, Seoul,
Shanghai, Singapore, Tokyo, Washington DC

Subscription service

For our full range of subscription offers, including digital only or print and digital bundled, visit:
Economist.com/offers

If you are experiencing problems when trying to subscribe, please visit our Help pages at:
www.economist.com/help
for troubleshooting advice.

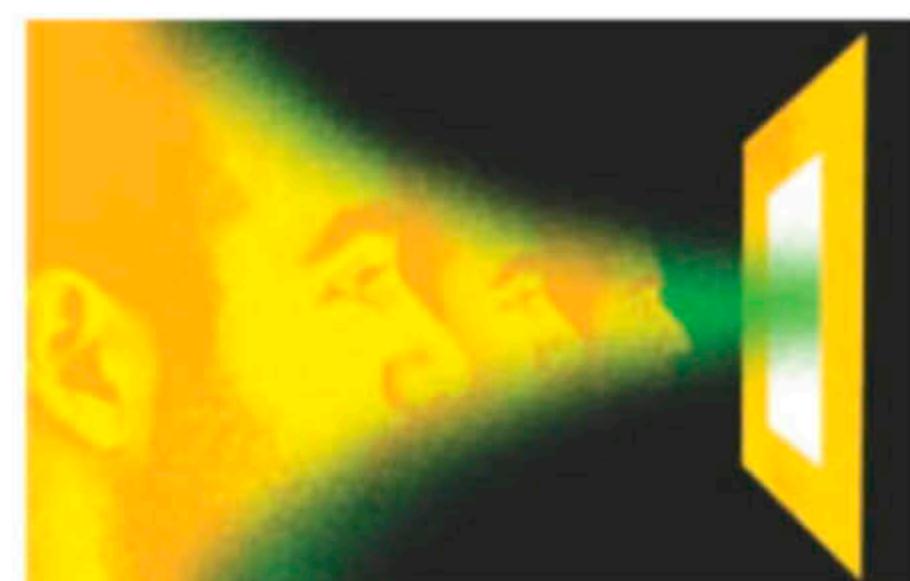
Finance & economics

- 57** Generation Z
- 59** Buttonwood Smaller stockmarkets
- 60** China's growth
- 60** Russian assets
- 61** Pricey petrol
- 62** Citigroup's turnaround
- 63** Free exchange How to solve debt crises



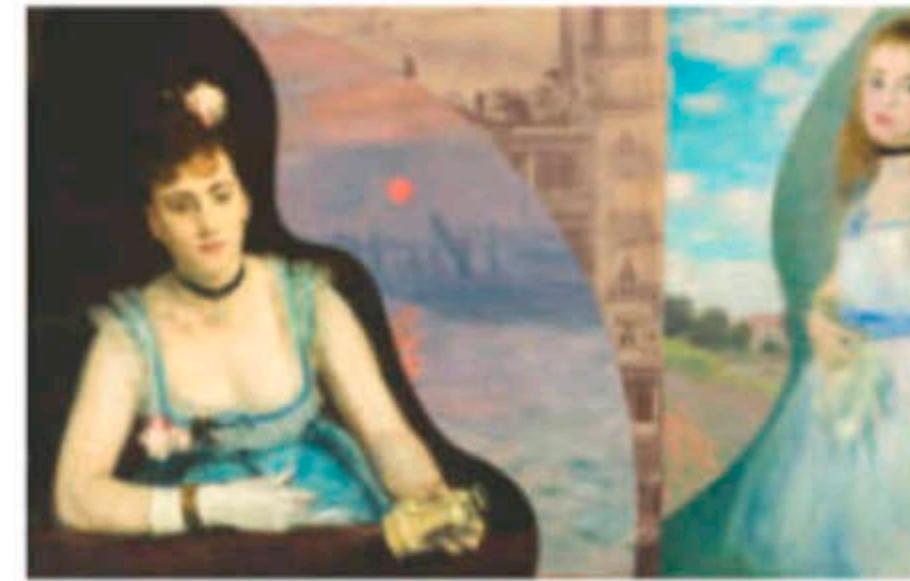
Science & technology

- 64** AI's next top model
- 66** Locust control
- 67** Smartphones and anxiety



Culture

- 68** Impressionism turns 150
- 69** Video-game adaptations
- 70** Crossword puzzles
- 70** Climbing Everest
- 71** The first world war, re-examined
- 72** Back Story Salman Rushdie's "Knife"



Economic & financial indicators

- 73** Statistics on 42 economies

Obituary

- 74** Akebono, the first foreign-born sumo champion

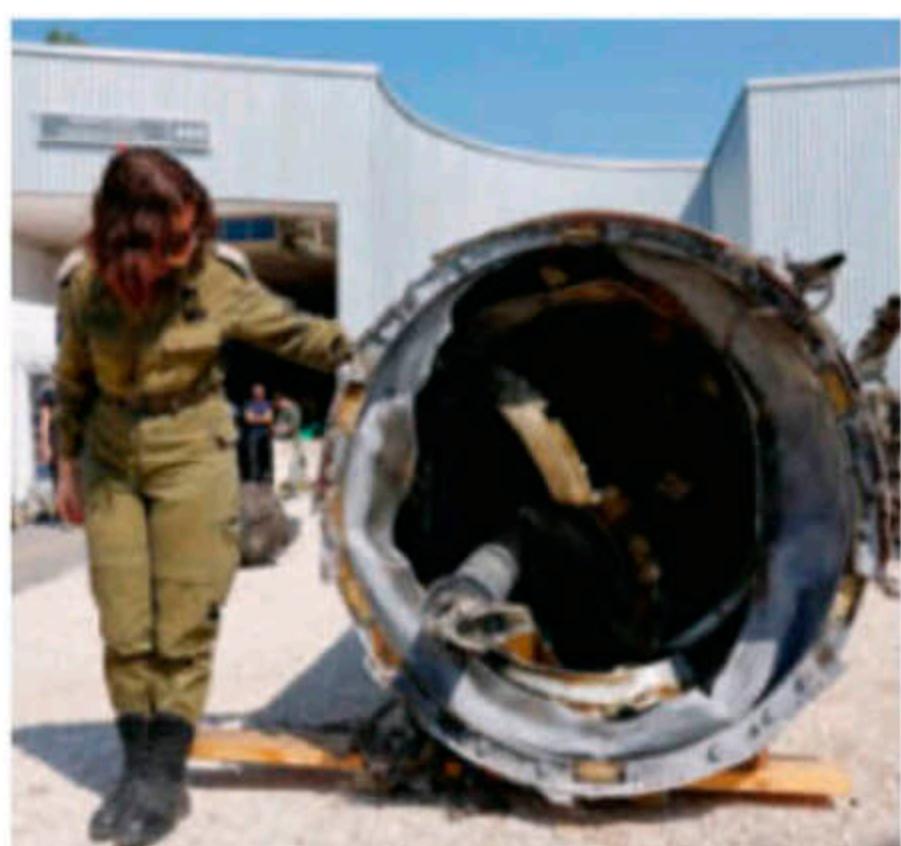
To manage your account online, please visit my.economist.com where you can also access our live chat service which is available 24/7. To call us, contact our dedicated service centre on:

North America: +1 888 815 0215
Latin America & Mexico: +1 646 248 5983



PEFC certified
This copy of *The Economist* is printed on paper sourced from sustainably managed forests certified by PEFC
www.pefc.org

The world this week Politics



Iran launched an unprecedented direct attack on **Israel** in retaliation for a strike at the beginning of April that killed two generals at its embassy compound in Damascus, Syria's capital. Almost all of the more than 300 drones and missiles launched by Iran were successfully intercepted. America, Britain, France, Jordan and other Arab states contributed to Israel's defence. Binyamin Netanyahu, Israel's prime minister, said his country was determined to defend itself. Joe Biden, America's president, urged him to show restraint to avoid regional escalation.

Local officials said that four Palestinians were killed by Israeli settlers in the **West Bank**. Their deaths took place amid violence that erupted after the killing of a 14-year-old Israeli boy in what the Israeli army said was a terrorist attack.

Gulf states were battered by storms that caused floods leading to the deaths of 20 people. The **United Arab Emirates** saw its heaviest rainfall since records began 75 years ago. Dubai airport, the world's second-busiest, told passengers to stay away.

Donors pledged around \$2.1bn to humanitarian relief in **Sudan**, which is facing the world's largest humanitarian crisis because of a year-old civil war. Experts warn that the country is entering the grip of famine, which could lead to 500,000 deaths.

Ghana failed to reach a deal on debt forgiveness with its creditors, which holds up its efforts to emerge from default and an

economic crisis. Without a sufficiently large write-off of debt it will be unable to access a \$3bn bail-out from the IMF.

Nigeria's inflation rate climbed to 33.2%, a 28-year high, following a collapse in the value of its currency, the naira. Although the central bank has increased interest rates, prices have continued to rise because of economic reforms, including the removal of a fuel subsidy.

Stable government

The prime minister of **Singapore**, Lee Hsien Loong, announced that he would step down on May 15th, after 20 years in office. In a long-planned succession Mr Lee is handing the reins to Lawrence Wong, his deputy, who is also the finance minister. Mr Wong will be only the fourth prime minister in the city-state. Mr Lee's father, Lee Kuan Yew, held the job from 1959 to 1990.

Two violent incidents shocked **Sydney**. A man stabbed five women and a man to death, before he was shot dead by a policewoman. The perpetrator had mental-health issues. And in what police described as a terrorist attack, a 16-year-old boy stabbed and injured a bishop at an Assyrian Orthodox church during a mass that was being streamed live. A mob confronted police outside the church, where the boy was being held for his own safety.

Australia's Labor government announced plans to increase defence spending by A\$50bn (\$32bn) over the next decade. That would raise defence spending from 2% of GDP to 2.4%. Australia, America and Britain have created the AUKUS security pact to counter Chinese ambitions in Asia Pacific.

America is to reimpose oil sanctions on **Venezuela** for failing to keep to the spirit of an agreement to allow a free and fair presidential election. The Venezuelan authorities have since barred the opposition's most popular candidate.

American firms have until the end of May to wind down their business in the country's energy sector, although some existing licences to sell Venezuelan oil, such as the one granted to Chevron, will still be valid.

The Democratic-controlled Senate in America voted swiftly to toss out the **impeachment** of Alejandro Mayorkas, the homeland security secretary, dismissing the trial and rejecting claims by Republicans that Mr Mayorkas had wilfully ignored border-security law.



The first-ever criminal trial of an American president, former or sitting, got under way in New York. **Donald Trump** faces charges of illegally concealing hush-money payments to a porn star, which he denies. Dozens of potential jurors were dismissed during jury selection because they could not promise to be impartial. The trial could last six to eight weeks.

Mike Johnson, the speaker of America's House of Representatives, pushed forward with a complex package of bills that would provide **military aid to Ukraine**, Israel and other allies. The Senate had passed a single bill, but it ran into opposition in the House, not least from supporters of Mr Trump, who gripe about giving more funding to Ukraine.

Meanwhile, **Ukraine's** president, Volodymyr Zelensky, said his army had been unable to thwart a Russian attack that destroyed a power plant, because "We ran out of missiles." Separately, a Russian missile attack on Chernihiv, in northern Ukraine, killed 18 people.

In **Germany** police arrested two German-Russian men for allegedly spying for Russia. One of the men is suspected of planning to sabotage an American facility in Bavaria that trains Ukrainian troops. He is also thought to have fought for pro-Russian forces in the Ukrainian region of Donetsk from 2014 to 2016.

Cancelled

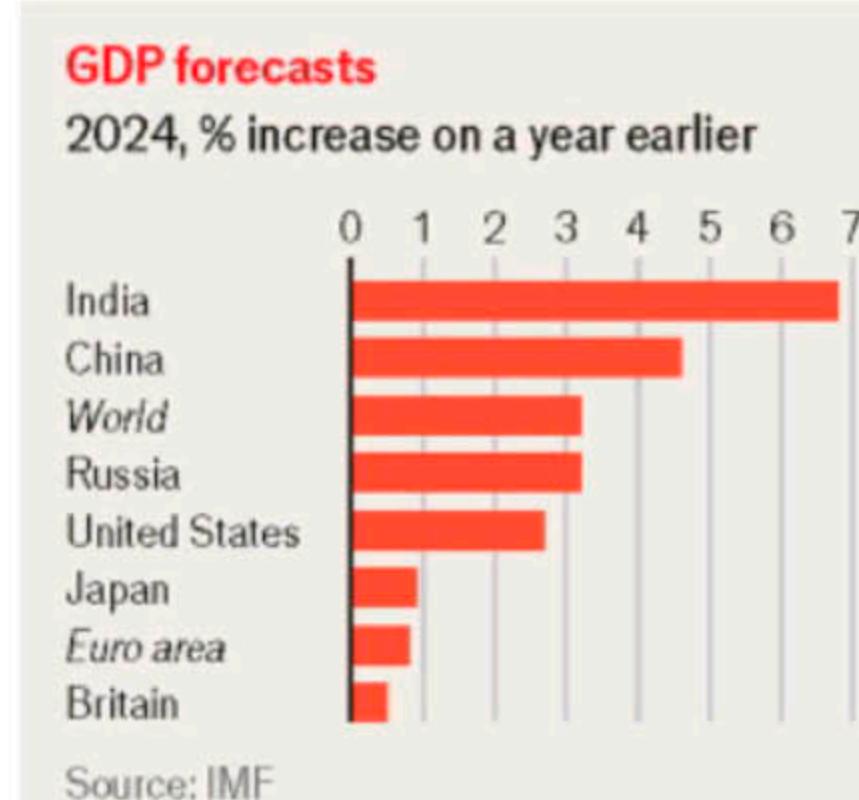
The prime minister of Belgium, Alexander De Croo, sharply criticised the decision by a district mayor in Brussels, Emir Kir, to order police to shut down a conference being held by **national conservatives**, an emerging political alliance in Europe. The event's speakers included Nigel Farage, who championed Brexit in Britain, and Viktor Orban, the populist prime minister of Hungary. Mr Kir, a Socialist, said he wanted to shut the conference because protesters were targeting the venue (the courts disagreed and the conference resumed). Mr De Croo, a liberal, said that "Banning political meetings is unconstitutional. Full stop."

An envoy for business in the EU who was controversially hand-picked for the role by Ursula von der Leyen, the president of the **European Commission**, quit just hours before he was supposed to start the job. Markus Pieper, who comes from the same party in Germany as Mrs von der Leyen, had scored lower on a test for the position than other candidates.

Britain's plan to ban anybody born after 2008 from ever buying cigarettes passed its first big hurdle. Rishi Sunak, the prime minister, easily won a vote in the House of Commons by 383 to 67. A significant number of those who voted against the bill came from his own Conservative Party; no opposition Labour MPs voted against it. The bill now moves to its next stages. If implemented, the ban would be among the strictest in the world. New Zealand scrapped a similar plan earlier this year.

The world this week Business

As it adjusts to slower demand for its electric vehicles, **Tesla** is reportedly set to shed 10% of its global workforce, or around 14,000 jobs. Adding to the woes of Elon Musk's firm, two senior executives said they were leaving. Tesla's deliveries fell in the first quarter of this year. As other carmakers, especially in China, step up their EV ambitions, Tesla is facing intense competition in markets that it used to have to itself a few years ago. Its share price is down by 37% this year. The company wants shareholders to reaffirm Mr Musk's pay at its annual general meeting in June, after a court in Delaware struck it down in January.



The latest estimates from the IMF suggest that global GDP is on track to grow by 3.2% this year. The fund said the **world economy** "remains remarkably resilient" and that there would be "less economic scarring" than it had thought from the pandemic. The biggest upgrades to its forecasts for the largest economies it tracks were for America, where the IMF now thinks GDP will expand by 2.7%, and Russia, projected to grow by 3.2%.

China's economy grew by a better-than-expected 5.3% in the first quarter of 2024, year on year, helped by a 6.1% rise in industrial production. Much of the growth came in January and February. In March retail sales struggled, and the output of cement plummeted, highlighting the problems besetting the country's property market.

Markets were rattled by figures that showed **retail sales** growing rapidly in America, more

evidence that the economy remains red-hot. Investors pushed back their bets on an interest-rate cut from the Federal Reserve. They were also perturbed by comments from Jerome Powell, the Fed's chairman, about inflation taking "longer than expected" to fall to the central bank's 2% target.

The numbers game

Britain's annual **inflation** rate slowed to 3.2% in March, from 3.4% in February. Inflation is now lower in Britain than in America, where it is 3.5%, but higher than the euro area, where it stands at 2.4%. Still, the figures caused traders to think that the Bank of England might not reduce interest rates until September or November.

Goldman Sachs released a set of quarterly earnings that at last delighted investors. Net profit surged by 28% in the first quarter, year on year, to \$4.1bn, helped by a 32% jump in revenue from investment banking and a 10% rise in revenue from trading. The results take some of the pressure off David Solomon, the bank's chief executive, who faces a shareholder proposal at the impending annual general meeting to vote against his pay award.

Microsoft announced a \$1.5bn strategic investment in G42, a firm developing artificial-intelligence technology in Abu Dhabi, which is backed by the emirate's government. The deal has the blessing of the Biden administration, which persuaded G42 to divest from China and focus on America.

A little of the shine came off **ASML**, Europe's most valuable tech company, when it reported a big drop in quarterly sales. The value of the company's order book for the lithography machines it supplies, which are an essential component in chip manufacturing, plunged to €3.6bn (\$3.8bn) in the first quarter, from €9.2bn in the final quarter of 2023. ASML expects the second half of the year to be stronger "in line with the industry's continued recovery from the downturn" in the chip cycle.

LVMH saw its weakest quarter for sales growth since the post-pandemic boom three years ago. The luxury-goods company recorded a big drop in revenue from champagne and watches and jewellery in the first three months of 2024, though sales in Japan grew by double digits, helped by the

weak yen and an influx of Chinese shoppers. Meanwhile Bernard Arnault, LVMH's boss, shored up his succession plan by asking shareholders to approve the addition of two of his sons to the board; they join two other siblings.

CVC Capital Partners, one of Europe's biggest private-equity firms, announced its intention to list shares on the Euronext exchange in Amsterdam. CVC had planned an IPO in 2022, which was upended by Russia's invasion of Ukraine. It also considered a float last year, but postponed it in November amid market uncertainties.

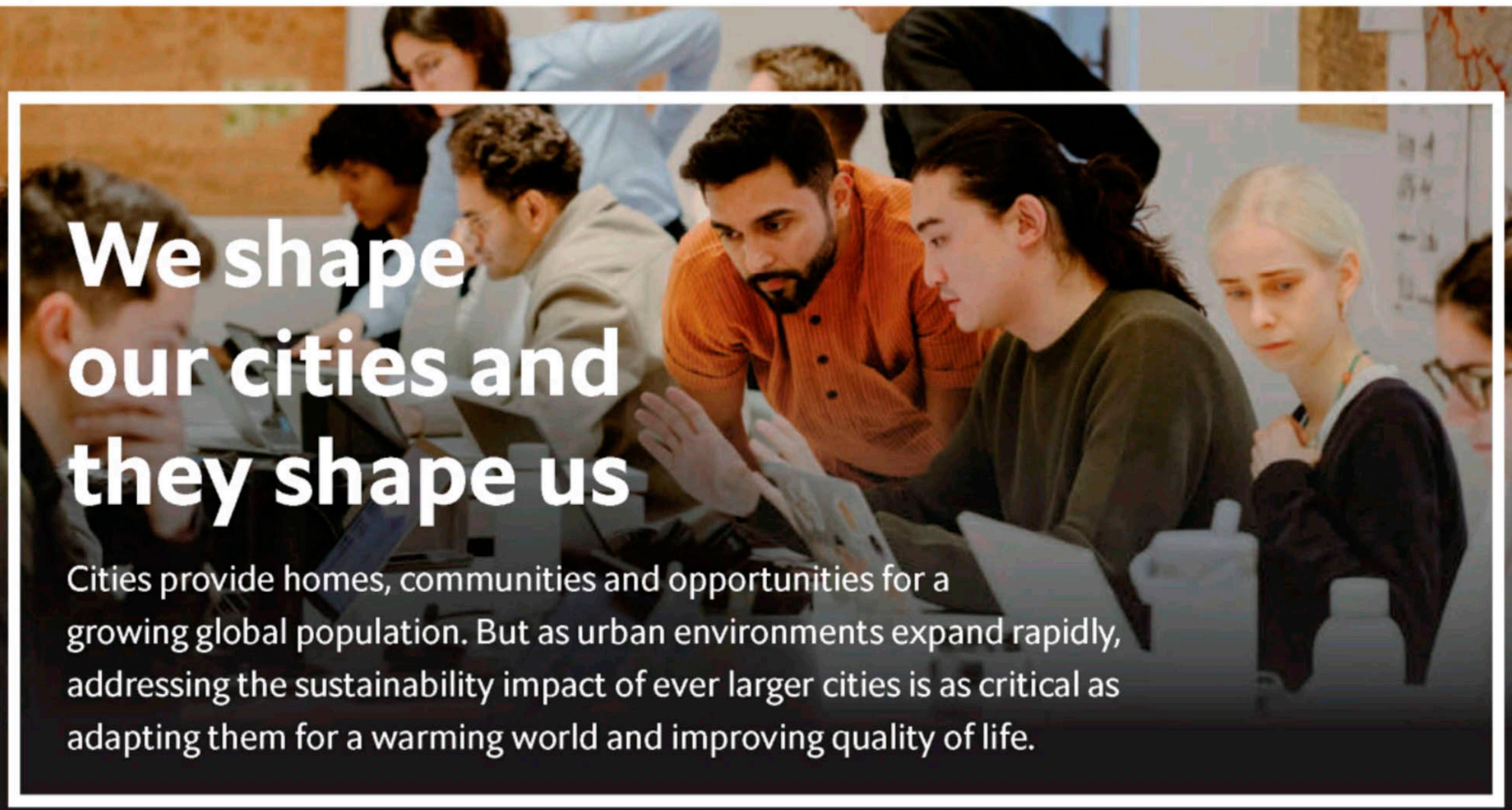
Running ahead

Following its first annual loss in three decades, **Adidas** raised its profit guidance for the year on the back of strong sales in the first quarter. Adidas may face a new reputational problem, however, with the revelation that Rishi Sunak, Britain's prime minister, has a penchant for its popular Samba trainers. Mr Sunak, whom one newspaper has described as a "geeky tech bro", recently made a humorous "fulsome" apology for reducing the hip appeal of the shoes. I've worn them for "many, many years", he said.



We shape our cities and they shape us

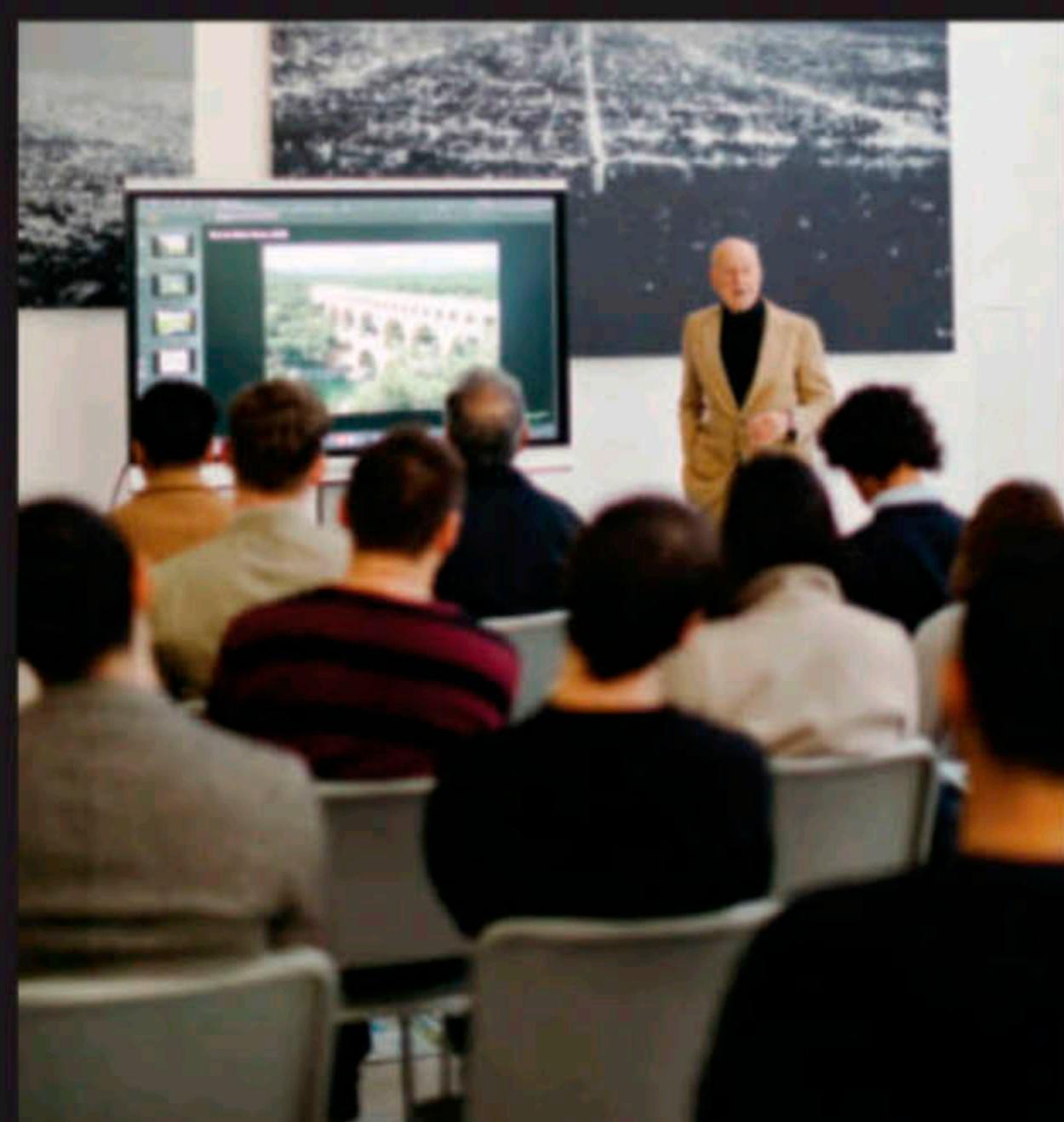
Cities provide homes, communities and opportunities for a growing global population. But as urban environments expand rapidly, addressing the sustainability impact of ever larger cities is as critical as adapting them for a warming world and improving quality of life.



That's why the Norman Foster Institute has created the Programme on Sustainable Cities, a Master's course recognised by the Universidad Autónoma de Madrid, aimed at the civic leaders of the future. Combining the best of academia with hands-on experience, the programme brings together engineers, planners, architects and future policy leaders to learn and share ideas and best practice across disciplines to enable better decision-making – ensuring cities become healthier, greener, cleaner, quieter and more secure.

"If most of humanity are living in cities, then it's about the health of the individual, the community, the society and the planet."

- Norman Foster



Welcoming students from around the world, the Master's programme brings together the latest technology, data analysis and thinking on environmental, social and economic issues, to encourage evidence-based decision-making to flourish as graduates return to their unique home cities and set to work transforming them for the benefit of the planet and its people.

How to apply:

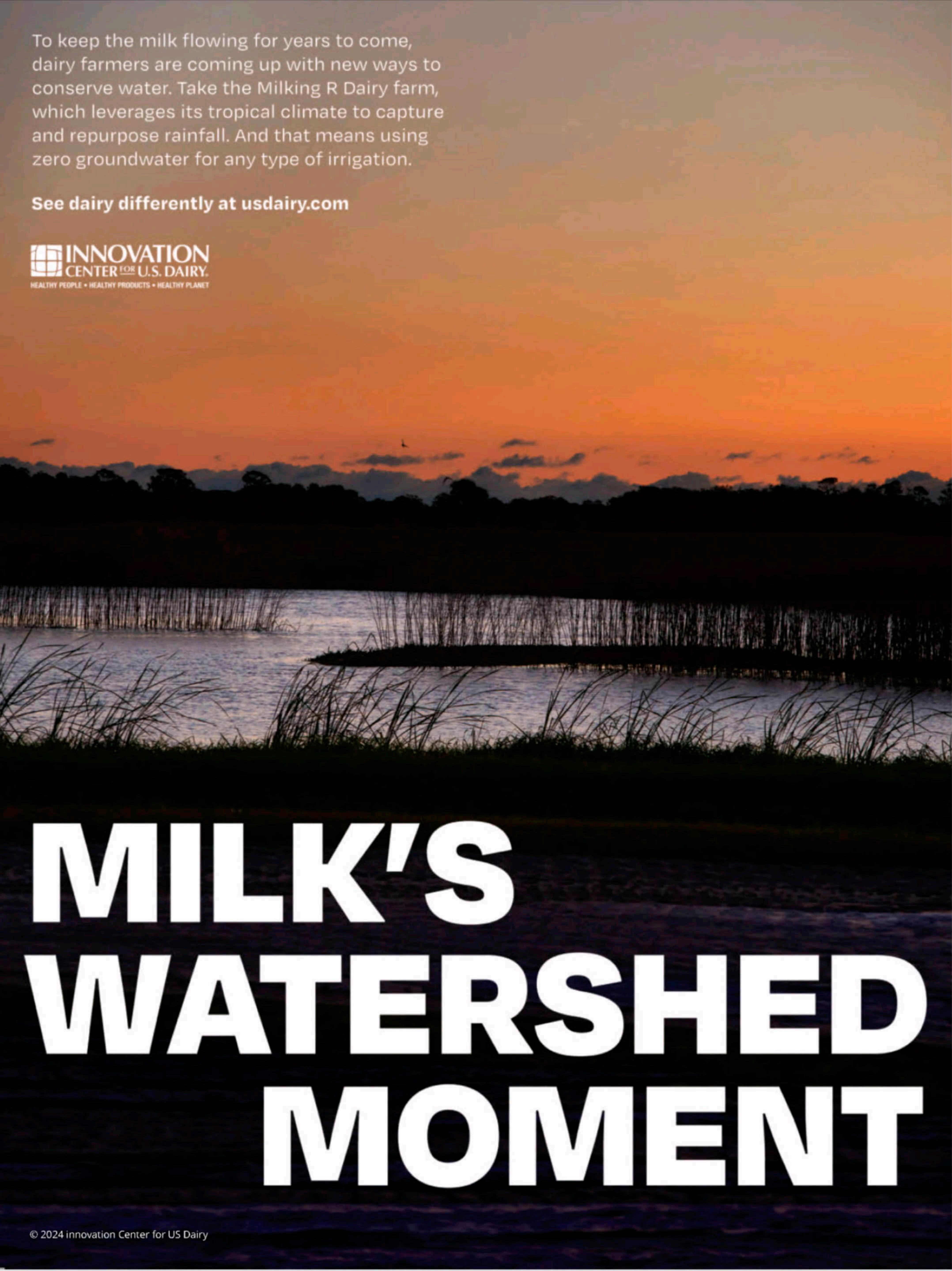
www.normanfosterinstitute.org

@NormanFosterFdn

#NormanFosterInstitute



Norman Foster Institute
NFI on Sustainable Cities



To keep the milk flowing for years to come, dairy farmers are coming up with new ways to conserve water. Take the Milking R Dairy farm, which leverages its tropical climate to capture and repurpose rainfall. And that means using zero groundwater for any type of irrigation.

See dairy differently at usdairy.com



MILK'S WATERSHED MOMENT

Generation Z

Reasons to be cheerful about the young

A VAST COHORT is coming of age. Globally, some 2bn people were born between 1997 and 2012, and so are part of “Generation Z”. In America and Britain this group makes up a fifth of the population, rivalling the share of baby-boomers; in India and Nigeria the young far outnumber the old. For each generation there is a simple narrative: that boomers were shaped by post-war plenty, for example, or millennials by the financial crisis of 2007-09. For Gen Z the popular view is that smartphones have made them miserable and they will live grimmer lives than their elders.

More and more people in the West tell pollsters that today’s children will be worse off than their parents. Youngsters themselves worry about everything from the difficulty of buying a home to the looming dangers from climate change. Social scientists fret that Gen Z-ers, having spent their formative years doomsrolling and suffering from FOMO, are now gripped by an epidemic of anxiety and depression. Politicians in America and Britain are mulling banning smartphones and restricting social media for the under-16s; parents and schoolteachers everywhere are trying to police screen time.

All this can make it hard to feel optimistic about Gen Z. But when you look around the world, and at a wider set of measures, the Zoomers are far from doomed. In many respects, they are doing rather well.

For a start, the popular narrative makes an important omission: the roughly four-fifths of the world’s 12- to 27-year-olds who live in emerging economies. Thanks to growth and the spread of technology, youngsters in places like Jakarta, Mumbai or Nairobi are far better off than their parents were. They are richer, healthier and more educated; those who have smartphones are better informed and connected. Small wonder that, in a survey by the UN in 2021, the young in emerging economies were more optimistic than those in the rich world.

Yet in some places there is a fear that the rapid progress of recent decades might fail to repeat itself. That anxiety is evident in China. Thanks to economic uncertainty and an emphasis on quantity over quality in higher education, over a third of degree-holders there may be unemployed (see China section).

In the rich world the picture is rosier than people think. Those of Gen Z who are in work—and in America there are nearly as many of them in workplaces now as there are boomers—are doing nicely (see Finance & economics section). Red-hot demand for workers helps, as does the fact that Gen Z-ers are wisely acquiring marketable skills. More of them are pursuing science, engineering and medical degrees; the humanities have fallen out of favour.

Wages for Gen Z are rising at a much faster pace than they are for older workers, and the youth-unemployment rate across the rich world is at its lowest in decades. In America the income of the average Zoomer, after adjusting for taxes and transfers, comfortably exceeds that of a millennial or a Gen X-er at the same age, in real terms. True, housing affordability has worsened since the 1980s. But, thanks to Gen Z-ers’ stron-

ger wage growth, house prices as a multiple of earnings are roughly where they were for millennials a decade ago. And young people today are at least able to put more of their salaries into savings.

Already Gen Z-ers are transforming the world of work. They have bargaining power—and they know it. Many millennials came of age in the shadow of the global financial crisis; they felt so precarious that they were afraid to ask for pay rises. Gen Z seems to have fewer qualms about quitting for a better opportunity, or taking things slowly and enjoying life. Bosses, unused to being on the back foot, complain. But older workers will be quietly thankful if overall pay and perks go up.

Gen Z will shape society in other ways, too. Young people’s concern about climate change will, as they reach voting age, make states more likely to act. More broadly, Zoomers tell pollsters they want bigger government. They may change their minds when they have to pay more taxes—or they may not.

They are a serious bunch, less given to late nights, binge drinking and promiscuity than their elders were. There is a dark side to this. They socialise in person less, have less sex, and are more likely to say they are lonely. Reported rates of anxiety and depression are rising in much of the West. Some of this probably reflects a greater willingness to open up about mental health. But other factors play a role.

The extent to which social media fuel mental distress among the young is furiously debated. In the West the rise in anxiety coincides with the adoption of social media. However, hard evidence of causation is limited, and most of it comes from studies of adults in the rich world (see Science & technology section).

What is clear is that Generation Z has been at the sharp end of a technological revolution. The speed with which smartphones and then social-media apps were adopted around the world left users, and young people in particular, scrambling to figure out how best to navigate them. Social media have brought benefits, such as entertainment and connectivity, but also costs. Some content may be harmful, and time spent scrolling could have been devoted to study or sleep.

OK Zoomer

Transformative technologies often have downsides. In the past, people have adapted: think of the seat belts and regulations that made cars less deadly. Encouragingly, there are signs that social-media habits are already shifting as users weigh the costs and the benefits. Instead of posting about themselves publicly, for example, many are retreating to private groups on messaging apps. So far, the evidence that would justify a blanket ban on smartphones for the young does not exist, though schools should be free to bar them from classrooms, and parents are right to restrict screen time.

It is only natural for the old to worry about the young. If that leads to better mental-health treatment, or fewer restrictions on building more homes, well and good. But celebrate Gen Z’s resourcefulness, and its successes, too. ■



India's election

An ossified opposition

The Congress party is too weak to hold the government to account. Blame dynasty and dysfunction

OVER THE next six weeks nearly a billion Indians will cast their votes. If the polls are right, the general election will be a triumph for Narendra Modi, the prime minister. His Bharatiya Janata Party (BJP) will secure another big majority; he will serve a third term. For the opposition, disaster beckons. The Congress party, which led the struggle for Indian independence and dominated politics for decades afterwards, is headed for a third consecutive defeat (see Asia section). With luck, this will be a Schumpeterian moment that forces it to reform: the health of India's democracy depends on it.

It is hard to overstate the role Congress has played in modern India. Under Mahatma Gandhi it marshalled (largely non-violent) resistance to British imperialism. Under Jawaharlal Nehru and his successors it ruled India for 54 years, positioning itself as a one-nation, multi-faith, left-of-centre movement.

Yet it remains a family firm. Nehru and his descendants have led the party, or India, or both almost continuously since independence in 1947. Congress's current de facto leader is Nehru's great-grandson, Rahul Gandhi (who is not related to the Mahatma). Under him, Congress is not expected to improve much on the 20% of the vote it won in 2019, down from nearly 50% in the 1980s. That could translate into a paltry 10% or less of seats in parliament.

Congress complains that the contest is rigged. Mr Modi has stifled dissent, cowed the media and harassed his opponents. Arvind Kejriwal of the Aam Aadmi Party, another opposition group, recently became the first sitting chief minister to be arrested. Last year Mr Gandhi was suspended from parliament for four months after being convicted of defamation for mocking Mr Modi's name (the Supreme Court suspended a two-year jail sentence). Congress has had its bank accounts frozen.

But a skewed playing field is only part of the problem. Mr Modi is an exceptionally gifted politician. His approval rating,

in some polls, is over 75%. His strongman persona, combining Hindu chauvinism and Muslim-bashing with an emphasis on economic development and national renewal, appeals to many Indians. His powerful oratory and humble roots as the son of a tea-seller help him connect with ordinary folk. By contrast, Rahul Gandhi is easy to dismiss as a privileged amateur leading an ossified party with neither the talent nor the ideas to govern the world's most populous country.

A big electoral defeat should be a clarifying moment for India's opposition. There is strong demand for an alternative to the BJP: more than half of voters support other parties. The trouble is, these are mostly a mosaic of regional movements that cannot plausibly aspire to national power. Congress is still the best bet to lead a national opposition, but to do so it must change.

First, the Gandhi family, and the party elders around them, should make way for younger, more dynamic leaders. Second, Congress must transform how it communicates, not just grumble about media bias and censorship. Mr Modi has mastered technology to reach ordinary Indians, as our analysis of his monthly show, relayed on everything from YouTube to WhatsApp, illustrates. Congress must learn to compete.

Finally, Congress needs better ideas, rather than a timid reheating of the welfarism of the past or griping that the BJP has stolen its more innovative policies, such as India's digital identity scheme. Mr Modi's economic management has been competent, but India faces giant problems, from improving its dismal schools to managing migration from farms to cities.

To avoid sliding into autocracy, India needs a serious opposition, as capable as the BJP but less divisive. If Congress does not change, its young, would-be reformers should split and create a new movement. Mr Modi has remade Indian politics. Time for the opposition to remake itself. ■



The Middle East on fire

Don't rush to retaliate

Israel should try a novel tactic to respond to Iran's missile attack: restraint

THE WAR cabinet in Israel is grappling with a perilous decision: how to respond to Iran's unprecedented drone and missile attack on April 13th (see Middle East & Africa section). The barrage was, fortunately, blocked with help from friends and neighbours. Should Israel "take the win", as President Joe Biden is urging, letting a blatant act of war go unanswered? Or should it retaliate and risk sparking a regional conflagration?

A small country with many enemies, Israel has long prized massive—some would say disproportionate—deterrence. It has wrecked Gaza in the attempt to crush Hamas, which massacred Israeli civilians on October 7th. Israeli retribution

against Iran now seems inevitable. But Israel's government should stay its hand.

There is a precedent. In 1991 Saddam Hussein, Iraq's despot, hit Israel with dozens of Scud missiles. His aim was to provoke Israeli retaliation, and thus divide an Arab coalition poised to help America evict his forces from Kuwait. At America's urging, Israel did not retaliate. Today, too, Israeli restraint could make it easier to build a coalition against a regional threat: Iran. But only America can muster such a coalition.

Iran claims Israel invited the attack by killing seven members of its Islamic Revolutionary Guard Corps (IRGC), includ-

▶ ing two generals, with an air strike on its diplomatic compound in Damascus. This is cant. Iran cared little for diplomatic premises when it took American diplomats hostage in 1979, and when its agents or allies blew up the American embassy in Beirut in 1983 and the Israeli one in Buenos Aires in 1992. Regardless, Iran's recent strike is disproportionate.

It fired 170 drones, and about 120 ballistic and 30 cruise missiles. It made overt the long covert war with Israel, breaking the taboo against openly attacking each other's territory. The strike is a challenge to America, too. Mr Biden has repeatedly warned Iran and its allies "Don't". They ignored him. First proxies started shooting at Israel; now Iran has joined in.

As the war in Ukraine shows, drones and missiles favour the attacker because they are hard and costly to shoot down. But they can be thwarted by technology and co-ordination. American, British and French forces—and more quietly Jordanian and perhaps Saudi ones—took out many of the Iranian warheads. The rest were almost all destroyed by Israel. The few that got through did little damage.

The attack proves the menace of Iran's ever more zealous rulers. Its proxies in Lebanon, Yemen, Iraq and Syria hollow out states and destabilise the region. This "axis of resistance" has fired drones and missiles not only at Israel but at Saudi Arabia, the United Arab Emirates and Pakistan. Iran's weapons are being used against Ukraine, too, as it aligns itself with Russia, China and North Korea. The danger is all the greater because Iran is alarmingly close to having nuclear arms.

Even so, Israel should bide its time. Restraint would help to heal the rift with America over the conduct of the war in Gaza. It would allow the budding air-defence partnership to grow into a bigger and more lasting coalition. The more Israel can



create a common front with like-minded countries, the better. Co-ordinated sanctions, diplomatic isolation, cyber-attacks and support for Iranian dissidents—and rapprochement between Israel and Arab states—may prove better at containing Iran than strikes. If Israel acts rashly, its neighbours will bear a heavy cost in a wider regional war; America and Europe will be sucked into hostilities; oil prices will soar; and global trade will be disrupted. Only Iran's "axis of resistance" would welcome chaos. Iran itself could cross the nuclear threshold.

America would be vital to creating a coalition to contain Iran. America and European powers can start by co-ordinating sanctions on the IRGC and allowing the "snapback" of UN pen-

alties suspended under a now-defunct nuclear deal from 2015. Diplomacy with Iran, direct or indirect, should continue but with no illusions. America and Israel—and ideally others—need to make a calibrated but credible threat of military action if Iran makes a dash to acquire nukes.

To make all this possible, however, Israel needs to end the war in Gaza, starting with a temporary ceasefire and the exchange of prisoners and hostages. The more Hamas loses hope of fomenting a regional war, the likelier it is to agree to such a deal. Progress towards Palestinian statehood, under a reformed Palestinian Authority, would unlock the big prize—normalisation with Saudi Arabia.

None of this will be easy or without risks. But Iran's attack highlights the dangers of escalation in a never-ending war. It also shows that Israel alone cannot defeat Iran and its network. To counter it, Israel needs its own network—with America, Europe and emerging Arab friends. A moderate coalition is the surest way to end the perpetual conflict with the Palestinians, which feeds Islamic radicalism, and to contain Iran. ■

Military recruitment

Your country needs (more of) you

Western armies are short of people. Conscription is not the answer—yet

MANDATORY MILITARY service is under discussion once more in Europe. The reasons? The possibility of Ukraine's defeat looms large (see Europe section), as does the threat of a future president Donald Trump abandoning NATO. Boris Pistorius, Germany's defence minister, says that Europe must be ready for war before the decade's end. He describes dropping a one-year period of service for school-leavers in 2011 as "a mistake". Britain's army chief, General Patrick Sanders, has called for a "citizen army".

Compulsory stints in the armed forces can take several forms, including the conscription of civilians of any age, call-ups using lotteries and a standard period of military service for young people after they leave school. Compulsion is being considered because many rich countries struggle to recruit enough people for their all-volunteer professional forces (see International section). Some countries look admiringly at NATO's Nordic and Baltic members, all of which have some form of mandatory service which enjoys high levels of public support. Sweden ended it in 2011, only to resurrect it in 2018.

Is this an approach that other countries should follow? The

short answer is not yet. Armies should be designed to reflect both geography and how they expect to fight. In countries with relatively small populations that have borders close to Russia, such as Estonia and Finland, public acceptance of conscription is high and training prepares forces for a "porcupine" defence against an invader. There is a strong sense of a shared national endeavour. For similar reasons, military service in Israel, which faces constant security threats, is uncontroversial (aside from resentment that the ultra-Orthodox do not have to serve). Taiwan and South Korea have conscription because they, too, are close to bellicose powers.

Citizens in most of the rest of the rich world do not yet feel an imminent threat. So for conscription to be workable, there would need to be a clear and shared understanding of why it was needed. That is lacking in countries such as Britain and France, where it is not obvious what conscripts could do in a modern, technologically sophisticated army. Besides, "in a crisis" each country must field a full division (30,000 troops with heavy equipment) within 30 days if needed by NATO. Dealing with lots of conscripts could be a distraction. ▶

▶ Because conscripting young people infringes harshly on their liberty, the policy would need public support. Even Ukraine, in existential peril, found lowering the call-up age from 27 to 25 this month politically tricky. Undoubtedly the difficulties faced by most of Europe's armed forces in recruiting regular soldiers and building proficient reserves need redress. But they can mostly be resolved by means other than compulsion.

First, consider raising soldiers' salaries. Older folk sometimes grumble about the supposed character flaws that make young people unwilling to serve. But poor pay and conditions are by far the biggest obstacles to recruitment when job-seekers have other choices. Defence budgets are rising but will need to do so faster. NATO members' target of spending 2% of GDP on defence will not be enough to cover both higher wages and new kit. There should also be more experimentation, for instance with one-year trials of service that can be combined

with university studies or other training. And despite much discussion, few armies have done enough to recruit women and combat sexual harassment.

Second, more civil-society support is needed to attract those with the specialist skills required in emergencies. In addition to wooing more volunteers to augment regular forces, armies could swell reserves by making soldiers who leave the forces agree to annual training days until they reach their mid-40s. In this way Britain could mobilise as many as 300,000 such people if needed. The numbers might be even higher in France and Germany, as they have larger armies.

In these tense times countries should still maintain plans for how, if the worst came to the worst, a much wider mobilisation might occur. To deter the most dangerous enemies, you must be ready for a war that you do not want to fight. Just ask the courageous Ukrainians. ■

Monetary policy

The second Powell pivot

America's interest rates are unlikely to fall this year. There will be painful consequences

FOR MOST of the year everyone from stockpickers and homebuyers to President Joe Biden has banked on the Federal Reserve cutting interest rates soon. Over the past two weeks those hopes have been dashed. Annual consumer price inflation in March, at 3.5%, was higher than expected for the third month in a row; retail sales grew by a boomy 0.7% on the previous month. On April 16th Jerome Powell, the Fed's chairman, warned that the battle against inflation was taking "longer than expected". Investors had begun 2024 pricing in more than 1.5 percentage points of interest-rate cuts over the course of the year. Today they expect rates to fall by only 0.5 points.

Mr Powell has conducted a pivot upon a pivot. The euphoric expectations for rate cuts took on a life of their own after the Fed turned too doveish in December. That unduly stimulated the economy and will force the central bank to retrace its steps, and then some. The consequences of higher-for-longer interest rates will reverberate around America, financial markets and the world economy.

America's economy has demonstrated that it can withstand at least a temporary period of higher rates. On April 16th the IMF forecast that it would grow by 2.7% in 2024, up from the 2.1% it expected in January. Yet its resilience to prolonged exposure to high rates is less certain.

Many companies issued corporate debt during the pandemic when rates were much lower. That has helped them cope with high rates so far; but eventually they will have to refinance and pay up. Mortgage-interest rates of nearly 7% have frozen much of the housing market. America's high and rapidly growing government debt is also becoming much more expensive to service: the yield on ten-year Treasury bonds has risen to about 4.6% from 4.2% at the end of March. Already the most recent forecasts, predicated on lower rates, saw net interest absorbing more of this year's federal budget than defence.

Financial markets will also feel the effects of continued high rates. The Fed's doveishness in December propelled a

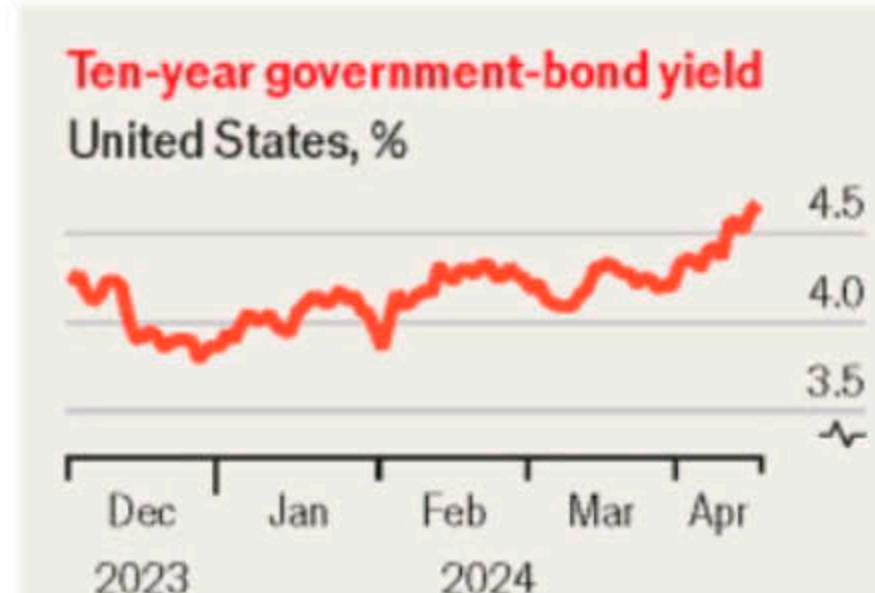
stockmarket boom; though that recently lost steam, the S&P 500 index of stocks remains a fifth above its level at the end of October, when rates were last expected to stay higher for longer. Stocks now look vulnerable to a correction.

Moreover, the problems that high rates exposed in America's banking system in 2023 still lurk. At the last count there were \$478bn of unrealised losses on banks' balance-sheets, much of which result from higher rates reducing the value of government and mortgage-backed bonds. That figure will have risen now that bond yields have shot up again.

The consequences of higher rates in America will also ripple out to the rest of the world. Though there are signs of somewhat sticky inflation elsewhere—Britain's consumer price inflation was also higher than expected in March—no major economy is as hot as America's. The IMF's forecast for euro-zone growth this year, for example, is just 0.8%. The result is a strengthening dollar, which is up about 5% against its biggest trading partners this year. Strikingly, the Japanese yen has slipped to nearly 155 against the greenback, despite a historic (though modest) monetary tightening in March, prompting speculation that the government may intervene to defend the currency directly.

In theory a stronger dollar should help the rest of the world by making its exports more competitive, and growth in America should spill across borders as it sucks in imports. But a surging greenback can also disrupt trade and borrowing that is denominated in dollars. Economies that rely on commodity imports, such as Japan's, face a double squeeze from a stronger greenback and a rising dollar price of oil, which is up by about 20% since early December and could rise a little further if strife in the Middle East worsens (see Finance & economics section).

If high interest rates in America end its enviable economic run, rate cuts will eventually follow. Until that time comes, America's monetary policy will remain a problem for the rest of the world. ■





Unique Access to Confidential Opportunities

InterExec is the global leader in assisting Top Executives to access £200k to £2m+ unadvertised vacancies worldwide.

We act discreetly through our 15,000 strong Headhunter network.

london@interexec.net www.interexec.net +44 (0)20 7256 5085

EST 1976

Inter Exec

UNIQUE NETWORK • OUTSTANDING TALENT

Jane Leighton
READER, CREATIVE INDUSTRIES
TEACHER, MATHS TEACHER

ARE YOU READY FOR A CHANGE?

Come back to school nowteach.org.uk

NOWTEACH

UNDP GPN ExpRes Roster Global Call for Experts



Join UNDP in Making a Global Impact!

The United Nations Development Programme (UNDP) is the United Nations' lead agency on international development. Through the Global Policy Network (GPN) ExpRes Roster, UNDP annually deploys over 2,400 consultants to support its work on building resilience and achieving the Sustainable Development Goals. The GPN ExpRes Roster consultants also boost the organization's capacity to swiftly respond to emerging crises around the globe. In-demand fields of expertise include climate, finance, digital transformation, rule of law, disaster risk reduction and recovery, humanitarian-development-peace (HDP) nexus, tax, health and many more.

Contribute to UNDP's mission of eradicating poverty and reducing inequality by being part of the GPN ExpRes Roster's enhanced talent pool. Your expertise could be the perfect fit for our global initiatives – we invite you to make a difference with UNDP.

To learn more and apply, please visit <https://www.undp.org/crisis-global-call-global-policy-network-expres-roster> or scan the QR code below.

Application submissions are open until **17 May 2024**.

Join us and become a catalyst for positive change!



Letters

China's economic quandary

You described the “new productive forces” strategy adopted by China’s leadership as the country’s gravest economic test since Deng Xiaoping relaunched reforms in the 1990s (“China’s risky reboot”, April 6th). The significance of this new approach goes beyond the economy, and could pose a threat to the regime that Xi Jinping has fashioned over the past dozen years, which is centred on buttressing the power of the Communist Party around its core chieftain.

Deng struck a simple bargain with China’s population after the repression of protests in 1989: leave politics and power to the Communist Party and, in return, the party will make you materially better off through high growth. The means used to generate the second element of that deal have now proved unsustainable, as was inevitable given the reliance on investment, overcapacity, weak domestic consumption, the build-up of debt and other interlocked factors. This presents the party with the puzzle of what to put in place of high growth to enable it to claim political legitimacy and enjoy popular appeal.

Given the likely failure of Mr Xi’s programme to provide a convincing answer, the danger for the leadership is that a faltering economy may now have a severe knock-on effect. That will bring the first part of Deng’s equation into question in a manner for which even Xi Jinping Thought cannot provide a ready answer.

JONATHAN FENBY
London

WEIRD countries

Two articles in the April 6th edition, “The white-collar mafiosi of Naples” and “Meet the political nepo babies” on Asia’s damaging dynasties, are similar in that they report on cultures that place an emphasis on looking after their own. But according to Joseph Henrich, neither the Italian mafia nor Asian nepotism is that peculiar.

In “The WEIRdest People in the World”, Mr Henrich showed that it is the citizens of WEIRD (Western, educated, industrialised, rich, democratic) societies that seem weird to everyone else.

WEIRDos keep riches for themselves, rather than sharing their gains with their clan, and snitch on friends for the sake of upholding the law. Mr Henrich ascribes the split between WEIRD and non-WEIRD countries to the policies of the Catholic church in the 5th century, which sought to undermine kinship.

JOHANN WIRSING
Hohenschäftlarn, Germany

The risk of nuclear weapons

Your claim that nuclear deterrence has worked up to now is questionable (“A world without America’s protection”, April 6th). There is no corroborative evidence for this, only the correlation of the possession of nuclear weapons by rival countries with the fact that they have not been used since 1945. Even in the case of Ukraine, which you cite as evidence of deterrence in operation, there is no way of knowing whether NATO really would have sent combat troops to join the fight against Russia if the Kremlin did not have nuclear weapons.

Deterrence doctrine is an unproved theory based on the naive assumption that political leaders will act rationally 100% of the time. It assumes each side always has accurate information about its opponent’s intentions. It fails to consider the possibility of accidents, miscalculations, terrorist groups, cyber-attacks or simple mistakes. We now know it was a matter of luck that a Soviet submarine did not fire a nuclear torpedo at blockading American navy vessels during the Cuban missile crisis.

Rather, it is the devastating humanitarian impact of nuclear weapons, as shown in Hiroshima and Nagasaki, and the threat they pose to the whole world, not just the states that possess them, that led to

LETTERS ARE WELCOME AND SHOULD BE ADDRESSED TO THE EDITOR AT:
THE ECONOMIST, THE ADELPHI BUILDING, 1-11 JOHN ADAM STREET, LONDON WC2N 6HT
EMAIL: LETTERS@ECONOMIST.COM. MORE LETTERS AVAILABLE AT: ECONOMIST.COM/LETTERS

the adoption of the Treaty on the Prohibition of Nuclear Weapons in 2017. Almost half the world’s countries have signed or ratified the treaty.

The nations with nuclear weapons and their allies must learn from that. Instead of putting their faith in a flawed theory of deterrence, they should join the treaty and finally remove this existential threat. Eliminating nuclear weapons is simply good risk management.

MELISSA PARKE
Executive director
International Campaign to
Abolish Nuclear Weapons
Geneva

Drafting software engineers

I was not surprised to learn that an engineer at Microsoft discovered the attack on XZ Utils, open-source software which is incorporated into Linux systems (“Cyber-scary”, April 6th). Skilled developers typically work on important projects either as a hobby or because their employer needs a bug fix or new feature to support a business function. Policymakers should consider two initiatives.

First, offering tax credits to developers for time spent writing, fixing and reviewing code on open-source projects that are maintained by registered charities would give people with the required skills a reason to spend a few weekends each year contributing to these public goods. We already offer tax credits to volunteer firefighters or teachers.

Second, the armed forces should consider open-source software development as a model for their cyber-reservist programmes. Since 2002 various government initiatives in America have been trying to find ways to put America’s professional programmers to work at the weekends. Asking them to help maintain code on open-source projects used by the government would be better suited to a weekend and night-time work regime than transitional full-time software engineering. Personally I

would be interested in joining such a programme. What young techie wouldn’t love also to be a sergeant.

JON WIGGINS
Machine-learning engineer
Salt Lake City

On the edge of French cities

Karim Bouamrane, the mayor of Saint-Ouen, is quoted as saying that “etymologically the word *banlieue* means the ‘place of the banished’. It’s the place where we don’t like you” (“Making a splash”, April 6th). Although this interpretation certainly supports the gist of the article, the truth is less dramatic. Historically, the *banlieue* was the area around a city (usually within one league, or *lieue*) where the authority of the city applied and its decisions were relayed via proclamations, or *bans*.

ANDREW JOHNSTON
Paris

What to wear to work

Bartleby’s column on corporate uniforms missed an important point (March 30th). Uniforms help us realise when our own values are at odds with an organisation’s. As a new management consultant, I was told that I could wear a charcoal suit, a navy suit, a white shirt or a pale blue shirt. I looked down at the yellow tartan dress I was wearing and realised that this was not my place, and that these were not my people.

I quit, and joined a company where I was complimented on my long-standing and deeply held belief that sequins are daywear.

SIÂN DAVIES
Oxford

Frank Zappa was interrupted from playing once by a member of the audience who heckled him about some concert-guards in uniform. Zappa’s reply was “Everybody in this room is wearing a uniform, and don’t kid yourself.” You can hear the live exchange on “Burnt Weeny Sandwich”, an album released in 1970.

DENIS BONACCOLTA
Nashua, New Hampshire

Briefing Shrinking America



Emptying and fuming

CAIRO, ILLINOIS

Much of America is shrinking, something its system of government makes even harder than it need be

CAIRO, A TOWN at the southern tip of Illinois founded in the early 19th century, was given that name because it was expected to grow into a huge metropolis. Located at the confluence of the Mississippi and Ohio rivers, it was the transport hub of a region that became known as "Little Egypt" because of its huge deltaic plains where farmers could grow anything.

Today, however, the name is redolent of lost civilisations. To walk around is a strange experience. Turreted Victorian houses gently crumble, being reclaimed by the weeds. What was once downtown (pictured) resembles an abandoned film set. Cairo has no petrol stations, no pharmacies and no hospitals. It has gone from six schools to two, both half-empty. "When I was growing up in the 1970s, we had two grocery stores, we had two gas stations. You know, a lot of businesses were still open," says Toya Wilson, who runs the city's still operating and beautiful Victorian library. One modest grocery store remains, but it is run at a loss by a charity

and, when your correspondent visited, was deathly quiet, with many bare shelves.

Cairo is on its way to becoming America's newest ghost town. Its population, having peaked above 15,000 in the 1920s, had fallen to just 1,700 people by the 2020 census. Alexander County, Illinois, of which it is the capital, lost a third of its people in the decade to 2020, making it the fastest-shrinking place in America.

Huckleberry Finnished

Its collapse has many causes. A century ago the supplanting of river transport by railroads started the decline. In the wake of civil-rights legislation in the 1970s, white-owned businesses fled to avoid hiring black people. In the past decade the demolition of public housing displaced yet more residents. But its biggest problem now is a national demographic headwind. Between 2010 and 2020 over half of the country's counties, home to a quarter of Americans, lost population (see map on next page). Over the coming decades still more will,

because America's population is growing more slowly. The change will be wrenching, because of America's demographic and administrative peculiarities.

Between 2010 and 2020 the number of people in the country grew by around 7.4%. That was the slowest decade of growth since the Great Depression (when the population grew by 7.3%). In the 1990s the growth rate was 13%. The main culprit is falling birth rates. The total fertility rate—a measure of how many children a typical woman will have in her lifetime—was steady or rising for 30 years from the mid-1970s. In 2008, however, it fell below 2.1, the level needed to keep the population stable, and has since declined to 1.67 (see chart on next page). If it remains below 2.1, only immigration can keep the population growing in the long run. Yet net immigration, too, has been falling since the 1990s.

The pandemic almost stopped the population growing altogether. In 2020 over 500,000 more people died than in 2019, even as the birth rate also fell. With bor-

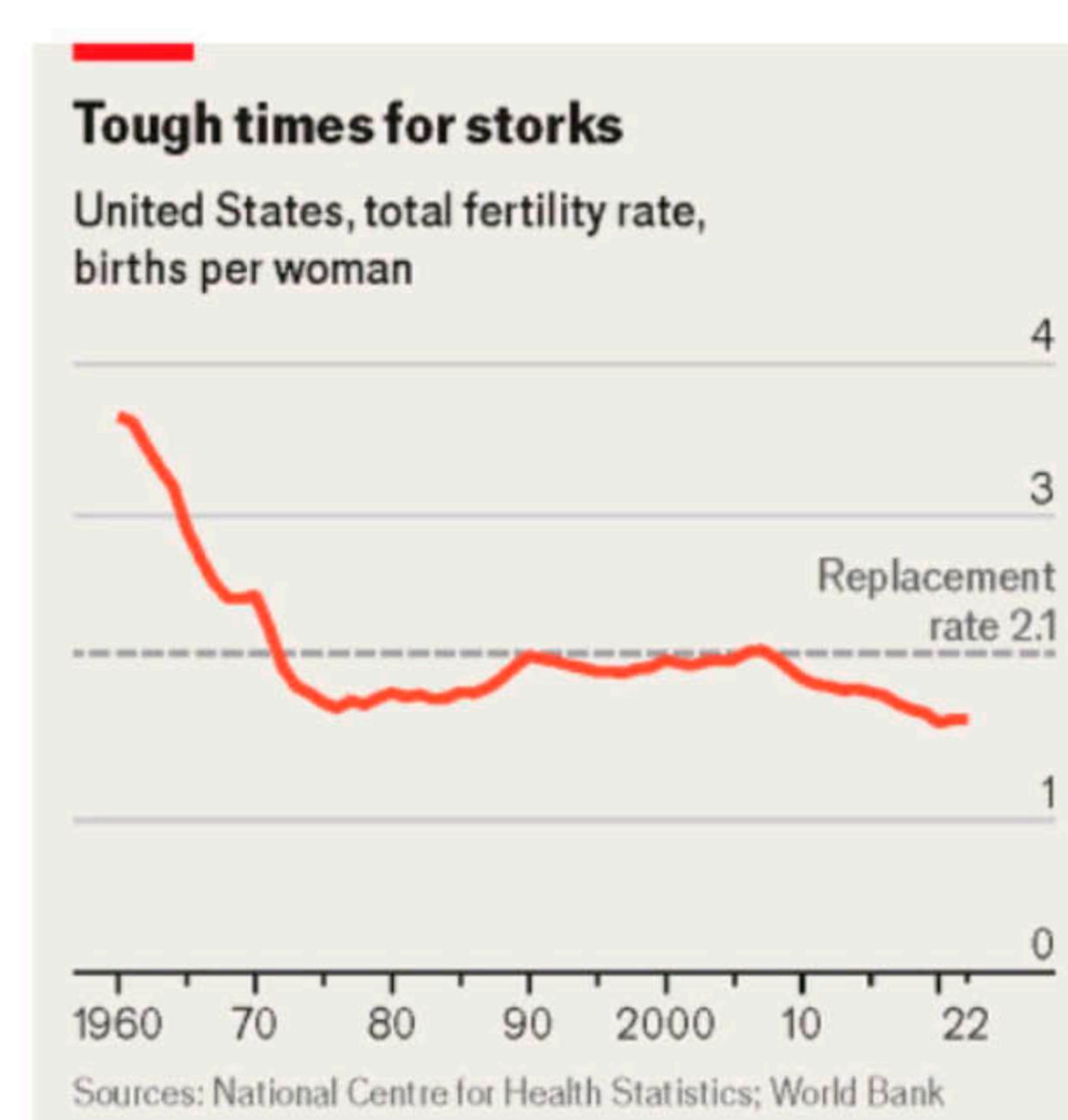
ders closed and American diplomatic outposts shuttered, net immigration dropped precipitously. In 2021 the Census Bureau estimated that the population expanded by just 0.2%, the lowest showing in the country's history. As covid-19 has receded, deaths have fallen back. And in the past year or so, according to estimates published in January by the Congressional Budget Office, immigration has increased, largely owing to people crossing the southern border illegally. But demographers do not think this surge will alter the long-term trend. This decade, according to William Frey, of the Brookings Institution, a think-tank in Washington, DC, the population will probably grow by around 4%. Even if you assume immigration stays high, Mr Frey notes, America "would still show slower growth in coming decades than in any decade in the nation's history".

The phenomenon is hardly unique to America. The populations of many other rich countries are growing even more slowly or shrinking. So are those of many developing countries. That of China, America's biggest geopolitical rival, shrank in 2023 for the second year in a row. Its fertility rate has tumbled to just 1.15 children per woman. Russia's population is smaller than it was in 1991. America's demographic problems are much smaller than those of its peers. Yet there are reasons to worry that America will adapt to slow growth even less readily than other countries.

Celebrated jumping frogs

America's population is growing at about the same rate as those of Britain and France. But America is different from Britain or France in that its population is much more prone to move around the country. Some parts of America are extraordinarily successful at attracting new people. The population of the state of Nevada has grown ten times larger since the early 1960s, when it was so empty it could be used to test atom bombs. That of Texas has more than tripled over the same period. In general Americans have long flocked to "Sunbelt" states in the South and southwest. In the past that was not a problem, because the national population was growing fast enough that lots of people could leave the colder, cloudier states in the north-east and Midwest without causing their populations to shrink. But if the population as a whole is barely increasing, for one region to grow fast, another must contract, notes Beth Jarosz of the Population Reference Bureau, a non-profit research organisation that works with the Census Bureau. Growing becomes a zero-sum game.

Between 2010 and 2020 just two states lost population: Mississippi and West Virginia. The population of Illinois was essentially unchanged. All the rest grew. But in 2021, 17 out of 50 shrank. The pandemic



doubtless exacerbated the trend, but internal migration shows no sign of stopping, so these contractions are in all likelihood a sign of things to come.

Shrinking is bad for many reasons. As people leave a place, once beloved businesses become less viable and close. Schools without enough pupils struggle to maintain sports teams, or bands, or to teach a wide curriculum, even if their funding per pupil remains generous.

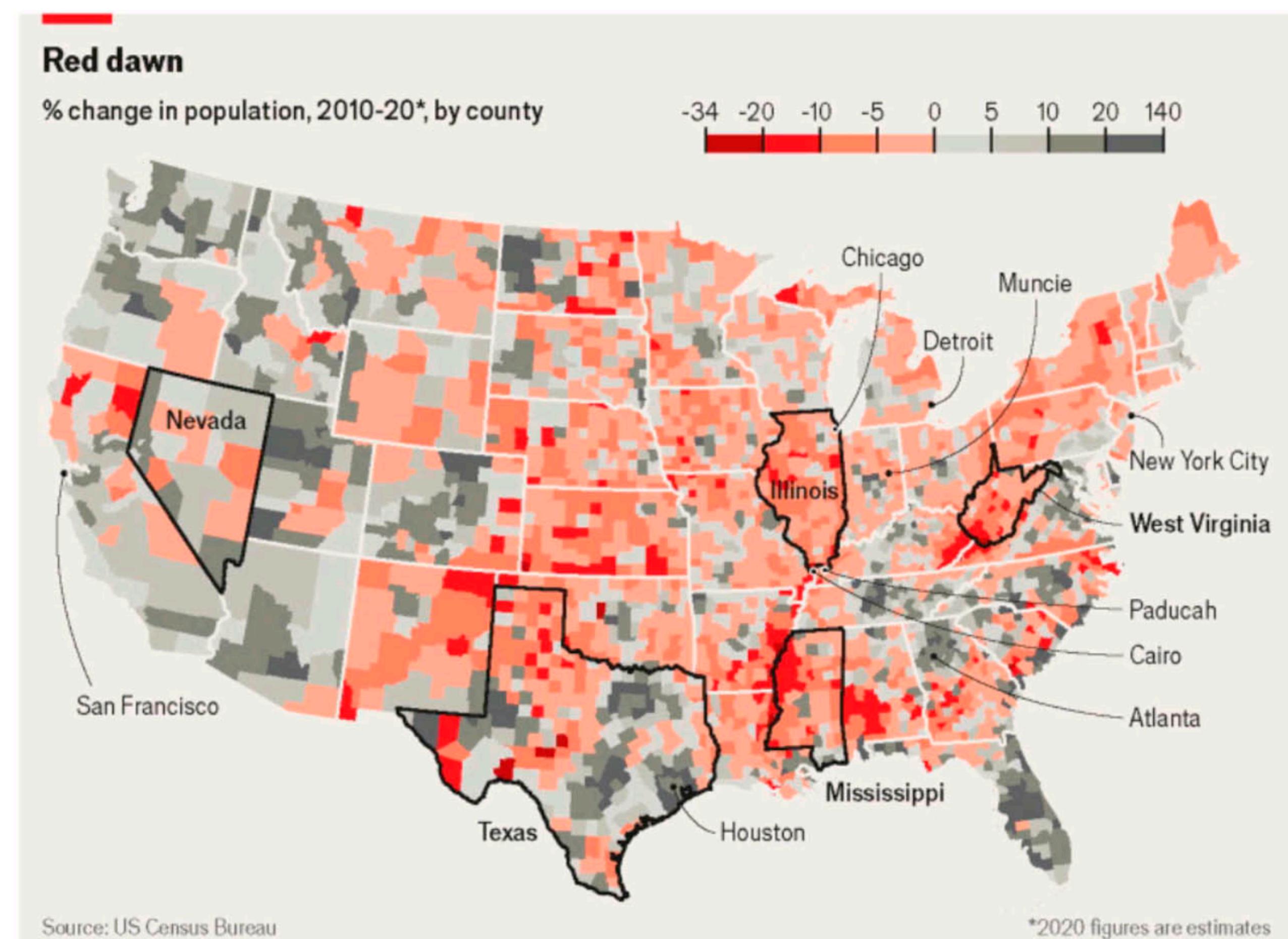
But the biggest problem is that, once a place starts shrinking, it can set in motion reinforcing cycles that accelerate the decline. For example, when there is far more housing available than people to fill it, the result tends to be a collapse in the value of homes. If it is severe enough, landlords and even homeowners stop maintaining their properties, because the cost of repairs is higher than the return they will generate. As the resulting blight spreads and neighbourhoods begin to feel hollowed out, the incentive to stay is reduced even further.

This is what is called a death spiral.

Death spirals tend to be worse in America because of the remarkable level to which the government is decentralised. Just 8% of spending on primary and secondary education comes from the federal government, for example, and less than a quarter of the spending on law enforcement. Local and regional authorities levy 48% of all tax collected in America, compared with just 20% in France and 6% in Britain. And even America's federal spending typically comes in the form of grants linked to population levels. So when local tax revenues shrink, services must be cut or taxes must rise.

Research by Christopher Berry of the University of Chicago finds that, as cities lose population, the cost of providing public services tends to stay about the same. "Virtually nowhere reduces the public sector in line with the population," he says. Exactly why that happens is unclear: it could be that servicing a given geographical area entails fixed costs, regardless of population; it could be that laying off municipal workers is politically tricky. Whatever the reason, the result is that the remaining taxpayers must pay more simply to support the same services.

When high taxes combine with deteriorating public services, people leave. Austin Berg of the Illinois Policy Institute, a right-leaning think-tank, notes that people in southern Illinois have an easy way to escape higher taxation: they can simply go to the next state. Whereas Alexander County in Illinois has shrunk drastically, neighbouring counties just to the south are still growing. The population of Paducah, Kentucky, 30 miles away on the other side of the Ohio river from Cairo, grew by 8.4% in



► the 2010s. Many who have stayed put still leave Illinois to buy petrol and groceries, to benefit from lower sales taxes elsewhere. As revenue gradually diminishes in this way in much of Illinois, the state is becoming ever more dependent on the taxpayers of its one metropolis, Chicago.

The biggest contributor to death spirals is often pensions for government workers. As America's population ages, the overall burden of paying for such pensions is getting heavier everywhere. But many pensions are funded locally—and there are often shortfalls. Taxpayers in cities or states that shrink end up lumbered with a pension bill from when the population was much larger and so was the number of teachers, firemen and police officers. As a result, says Mr Berry, "Places that shrink are screwed."

When Detroit went bankrupt in 2013, the state of Michigan bailed out its pensioners. But such bail-outs are dependent on the state having reasonably healthy finances. When the population of a state as a whole is stagnant or shrinking, that becomes much less likely. Across Illinois the total burden of unfunded state and local pension liabilities is estimated to be around \$210bn, or roughly four times the state's entire annual budget. Despite recent reforms, the state government does not expect state pensions to be fully funded for another 25 years. Chicago, meanwhile, is grappling with its own pension problems. That does not leave much cash to bail out or revive places like Cairo.

Does it matter if places die? Some would argue no. People are better off if they can move to opportunity, instead of becoming trapped in dying cities or jobless rural areas. Indeed, competition between cities helps explain America's economic dynamism; many economists would like there to be even more movement. Although people are flocking to new jobs in places like Houston or Atlanta, high housing costs stop workers from moving to even better paid jobs in places like San Francisco or New York City. If those cities built more housing, they would attract more workers from other parts of America. Places like Cairo would shrink even faster, but America as a whole would be richer.

Yet in reality, shrinking is hugely politically unpopular because, inevitably, many people are left behind, and the lives of those unwilling or unable to move worsen as their neighbours depart. Federal, state and local officials know this. And so they will do almost anything to avoid shrinking. All manner of big government facilities, from air-force bases to prisons, can be located in rural areas, ensuring there are jobs that in turn sustain the rest of the economy. For decades cities and states across America have also competed to attract new businesses, handing out land, tax breaks or

cash to firms that open factories or offices.

Now cities and states are wooing workers directly, too. Take Muncie, Indiana, a city of 65,000 people about 50 miles northeast of Indianapolis. Since 2021 it has offered a \$5,000 grant to remote workers who agree to move there. The cash is in essence a marketing device to get potential movers to consider a town they might not otherwise have heard of, says Dan Ridenour, the city's Republican mayor. "It's become very competitive—and not just for remote workers, for all workers," he says.

So far 152 people have moved to the city under the scheme, which is run by MakeMyMove, a firm based in Indiana which helps promote the incentive schemes of cities that are willing to pay people to move there. From its foundation in 2017 MakeMyMove has expanded enormously, says Christie Hurst, its spokeswoman, not least thanks to the pandemic, which freed many workers from having to go to an office. The result is a much larger pool of potentially mobile workers over whom cities can compete—hence the growth of the business. Yet a taxpayer gained by Muncie, Indiana, is one lost to somewhere else. And with growth overall slowing, not everywhere can win. In fact, remote-working may only hasten the decline of some struggling places, by making it possible for a worker in, say, Muncie, to relocate to a pretty mountain town in Colorado.

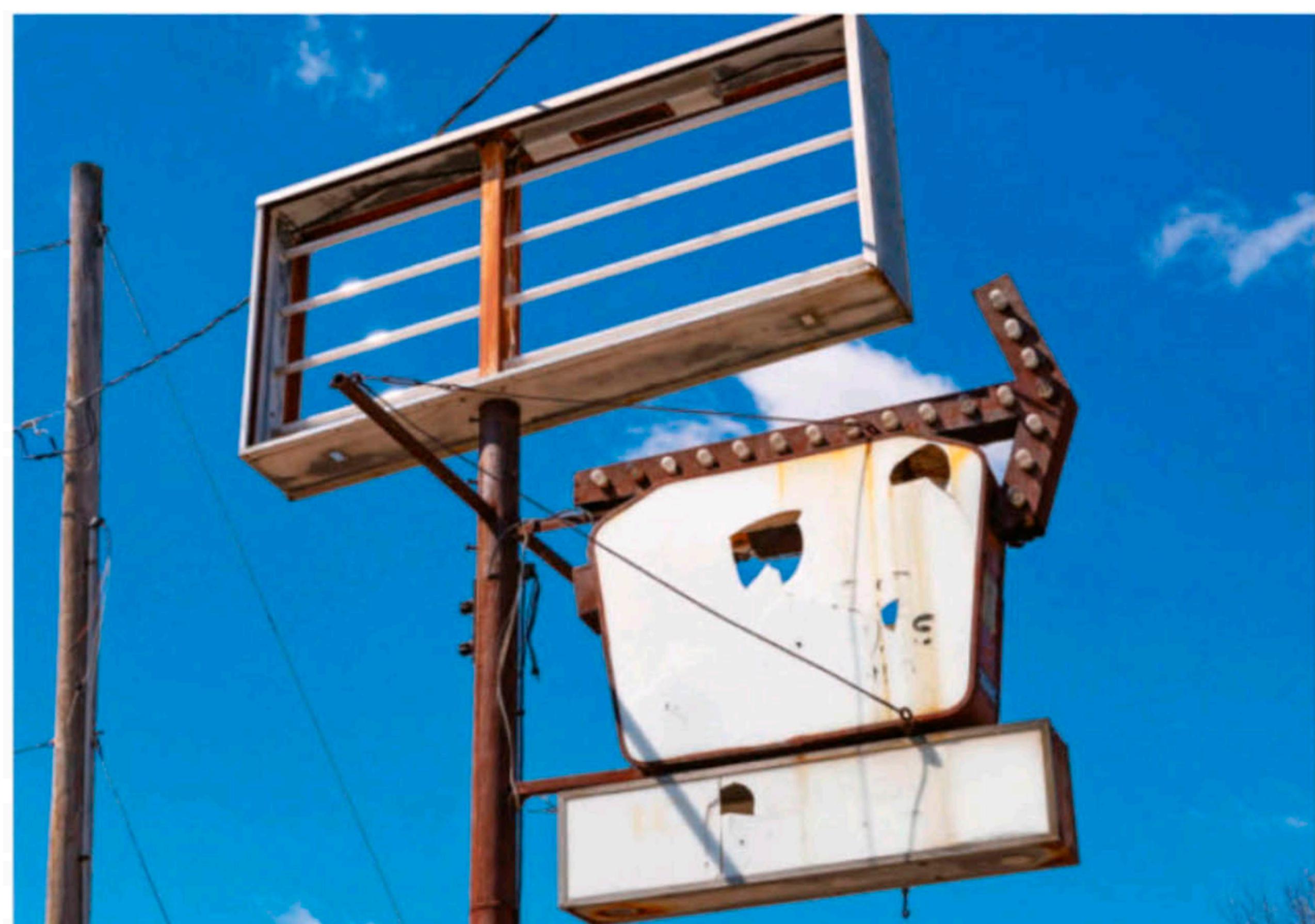
Ultimately, the risk is that all of this is at best "keeping places on life support", says Mr Berry. If America's population does not grow faster, far more places will begin to die. The politics of that will be ugly. Of the counties that lost population in the decade to 2020, 90% voted for Donald Trump in 2020. Presumably, his fulmina-

tions about American decline resonate.

Yet much of the recent slowdown in America's population growth dates to Mr Trump's presidency when, even before the pandemic, net migration fell by a quarter as his administration deliberately gummed up the immigration services. If he is re-elected, Mr Trump promises "the largest domestic deportation operation in American history", to remove illegal immigrants. (Admittedly Mr Trump says that he is in favour of legal immigration. He occasionally promises a "big beautiful door" as well as a "big beautiful wall". But he wants to let in only people from "nice" countries.)

No life on the Mississippi

Driving your correspondent around Cairo, Phillip Matthews, the chairman of the Democratic Party in Alexander County, lists services that have been cut over the years: public housing closed, government offices moved, schools shut down. He points out the public hospital in which he was born—now a derelict concrete hulk. "A lot of this is done by design," he declares, of his town's decline. What he means is that politicians took many of the decisions that have contributed to the decay. Mr Matthews is pinning his hopes on a stalled plan to spend \$40m on a new river port in Cairo, which has been backed by J.B. Pritzker, the state's Democratic governor. If the port is ever built, perhaps Cairo will recover somewhat. But in the meantime, Mr Matthews, a black pastor, says he understands why more and more people in his region support Mr Trump. "The Democratic Party is failing its constituents," he says. "People are scared to say it, but truth is truth." The worse things get, the more votes Mr Trump will win. ■



All signs point to trouble

Programmed by

ECONOMIST
IMPACT

Sponsored by

TATA
COMMUNICATIONS

Transforming the digital foundation for a future-ready enterprise

May 2nd 2024 | New York

As business leaders build a more tech-driven culture, how are companies navigating their digital strategies to be more agile, secure and resilient? Sponsored by Tata Communications, this event will identify emerging trends and explore how business leaders can create digital ecosystems capable of weathering disruption. Discuss how the right tools and effective implementation can enable connectivity and security, enhancing efficiency and customer experience to stay competitive.

We invite you to register for our event on May 2nd in New York. Don't miss the opportunity to learn and network with executives involved in technology strategy, IT, digital and customer experience.



Find out more

transformingdigitalfoundation.economist.com

United States



Donald Trump on trial

Do I look guilty to you?

NEW YORK

What to expect from the first criminal prosecution of a former president

MANHATTANITES ONCE rolled their eyes at Donald Trump. Then they came to revile him. Soon 12 will decide if he is a felon. Jury selection in his first criminal trial, expected to last up to eight weeks in a shabby courtroom, has sped along; prosecutors will set out their case in a matter of days. One prospective juror confessed that the weight of the task at hand had kept her up at night: "This is, like, a big deal in the grand scheme of things."

Yes and no. Manhattan's district attorney, Alvin Bragg, has brought the first criminal indictment against a former president, who also happens to be running again. But the felony charges are low-level and the details tawdry. The case is about sex, money and blackmail. Mr Trump's former lawyer and fixer, who will testify against him, once described the conduct at issue as the "filth and muck of politics" and, less delicately, a "shit sandwich".

The charges centre on Mr Trump's efforts to buy the silence of Stephanie Clifford, a former porn star better known as

Stormy Daniels, before the 2016 election. Prosecutors allege that the payment was made to protect his candidacy and thus amounted to an undeclared campaign expense. Mr Trump is accused of falsifying business records to hide the pay-off. He denies any such scheme.

Early in his first campaign Mr Trump met his lawyer, Michael Cohen, and his friend David Pecker, then the boss of a tabloid publishing company. Mr Pecker agreed to be Mr Trump's "eyes and ears"—to look out for damaging stories and alert

the campaign to them. When a former Trump Tower doorman tried to sell a bogus story to tabloids about how Mr Trump had fathered an illegitimate child, Mr Pecker warned team Trump, which directed him to buy exclusive rights to the story and bury it, a practice known as "catch and kill". A similar deal was struck when Karen McDougal, a former *Playboy* model, emerged from the woodwork to allege an affair with Mr Trump starting in 2006.

About a month before the election Ms Daniels surfaced, shopping around her story about a sexual encounter with Mr Trump, also in 2006. The "Access Hollywood" tape, in which Mr Trump bragged about grabbing women's genitals, had just appeared in the press and nearly sunk his candidacy. The campaign could ill-afford headlines about how he had slept with a porn star while his wife was nursing their newborn son. This time Mr Cohen paid Ms Clifford \$130,000 from his own pocket.

To reimburse Mr Cohen, Mr Trump allegedly agreed to pay him in monthly instalments and mislabel them as legal expenses in the company's accounts. Hence the 34 felonies alleged by Mr Bragg: 11 related to invoices, 12 to ledger entries and 11 to cheques. Normally these would be misdemeanours. To upgrade them, prosecutors must show that the records were falsified to commit or conceal another crime. They have suggested a few: that the hush money violated federal campaign-finance

→ ALSO IN THIS SECTION

20 Busted trust

21 Tents in cities

21 Bribery voters

22 Touching fentanyl

23 Patentsville

24 Lexington: A Trumpian triumph

► rules, and that tax wasn't properly paid on the reimbursements.

A parade of witnesses should bolster the prosecutors' case. Mr Cohen and Mr Pecker will testify to Mr Trump's alleged involvement in the scheme. There is an ample paper trail, including cheques that Mr Trump personally signed, and a recording of him discussing the payment for Ms McDougal's silence.

Mr Trump's lawyers, for their part, will contend that there was nothing illegal about the hush money: that it was paid purely to protect his personal reputation and spare his wife embarrassment, not to influence the vote or skirt campaign-finance rules. John Edwards, a former Democratic candidate for president, successfully made that argument and was acquitted of breaking campaign-finance laws to hide an affair and a child out of wedlock during the 2008 election. But it will not help that Mr Cohen has admitted in court that it was a crime. In 2018 he pleaded guilty to making an undeclared campaign contribution (among other charges) and spent just over a year in prison.

Mr Trump's principal strategy, then, will be to impugn Mr Cohen's credibility and paint him as a fabulist. Indeed Mr Cohen has an impressive record of lying under oath and a well-documented animus towards his former boss, who reportedly relished treating him like garbage. If Mr Trump is convicted, sentencing will be decided by the judge, Juan Merchan. Jail time seems unlikely for a first-time, white-collar felon. There is no mandatory minimum sentence. Each count carries a maximum of four years in prison.

Would a conviction sway voters? That Mr Trump wanted his philandering kept quiet is neither surprising nor news; Americans are inured to his sex scandals by now. Compared with his other indictments this is small bore. Voters consider it the least serious of the four and a plurality thinks a guilty verdict will have no bearing on his political career, according to polling by YouGov. An acquittal would vindicate Mr Trump's claim to be the victim of a political crusade by Mr Bragg, an elected district attorney who is a Democrat.

The indictment has come in for heavy criticism, even among lawyers on the left. There was doubt about whether state prosecutors could bring a case that rests on a federal campaign-finance violation, since that is the domain of federal prosecutors. Those questions might arise on appeal, but for now they are academic: judges have refused to toss the case out. Of the four indictments against Mr Trump, it may be the only one to produce a verdict before the election in November. The other, weightier charges, about alleged election interference and the mishandling of classified documents, are beset by delays. ■

Incredulous America

Busted trust

WASHINGTON, DC

America has startlingly lower trust in its institutions than other rich democracies

AS FAR AS stereotypes go, brash national self-confidence has long been a defining feature of how Americans are viewed abroad. In 2006, when Gallup first started asking Americans about their trust in key institutions, the country ranked at the top of the G7 league table, tied with Britain. In 2023, for the first time, America came last.

New data from Gallup, a pollster, show that American trust in several national institutions is on the decline. That may not be surprising, given the fraught state of the country's politics, but the cumulative fall over the years is startling (see chart). Twenty years ago Americans had the highest confidence in their national government of people in any G7 country. Today they have the lowest. Americans are tied with Italians in having the lowest trust in their judicial system, and come last in faith in honest elections. Even the army is suffering from a dip. Although still high at 81%, American trust in its armed forces is now lower than at any point since 2006, and—gasp—lower than in France.

The reasons behind this crisis of confidence in the self-declared greatest country on Earth are varied. The roots of a (healthy) scepticism of government can be traced back to the Vietnam war and the Watergate scandal of the early 1970s. The gradual dying-out of the second world war generation, which had significantly higher institutional trust than later generations, also plays a role. However, more recent developments help explain the sharp decline of the past years.

Donald Trump's "constant barrage" of unfounded accusations about the 2020 presidential election clearly plays a big

Outlier

G7 countries, confidence in national institutions*, %



*Key national institutions: the military, the judicial system, the national government and the honesty of elections
Source: Gallup

role in Americans' low trust in the electoral system, says Henry Brady of the University of California, Berkeley. This no doubt also contributes to growing distrust of the judiciary—just last week Mr Trump called the criminal "hush money" trial against him "a communist show trial". But few things seem to have done more to directly erode trust in the judiciary than the Supreme Court's decision in 2022 to overturn *Roe v Wade*. Before this ruling removing a constitutional right to abortion in America, Democrats and Republicans trusted the court in roughly equal measure; afterwards, confidence among Democrats dropped through the floor.

The divergence with Britain is especially striking. Whereas British confidence in the country's judiciary and electoral system is higher than at any point in the history of the survey, America has moved in the opposite direction. Some 70% of Britons now say that they have confidence in the honesty of elections, compared with only 44% of Americans.

"Like America, the UK has seen a pretty steady decline in confidence in national government," observes Benedict Vigers, from Gallup, "but this more core belief in the foundation of the democratic system and in fair elections is still pretty strong." The same cannot now be said about America. Even within the broader OECD club of mostly rich democracies, only Hungary, Turkey and Colombia have less trust in honest elections.

Yet more than the loss of trust overall, what really worries Mr Brady is the increased polarisation of trust in America. Having some institutions that Democrats trust more (journalism, higher education, science) and others that Republicans trust more (religion, the armed forces and the police) is a matter of concern, particularly for the institutions themselves. The problem is even starker when the workforces of such institutions become increasingly homogenous, something that has happened in predominantly progressive higher education as well as in the predominantly conservative military services.

Strong and credible institutions count among the best guarantors of a country's long-term stability. People who broadly trust authority are more likely to comply with government directives, such as filing their tax returns. During the pandemic, people who had high trust in government were more likely to get vaccinated and comply with public-health guidance on lockdowns or social-distancing rules, according to a meta-analysis by Daniel Devine of the University of Southampton and colleagues. Blind trust in authority is dangerous, and a degree of scepticism can be healthy. But America's slide towards becoming an ever more distrusting place has perils of its own. ■

Homelessness

Sleeping rough

LOS ANGELES

Is ticketing homeless people a cruel and unusual punishment?

IN 2013 LOCAL leaders in Grants Pass, Oregon, held a meeting to brainstorm ideas for how to tackle the city's growing "vagrancy problem". A record of that meeting states that participants suggested "driving repeat offenders out of town and leaving them there", and buying homeless people a bus ticket to anywhere else. "The point", said Lily Morgan, a city-council member, "is to make it uncomfortable enough for them in our city so they will want to move on down the road."

The city, tucked between the Cascade and Siskiyou mountains north of the California border, banned sleeping and camping in public places. Over the next few years Ed Johnson, the director of litigation for the Oregon Law Centre, a legal charity, started to hear from homeless people in Grants Pass. They were woken by police, he recalls, slapped with fines they couldn't pay and thrown in jail. In 2018 Mr Johnson sued the city on behalf of his homeless clients. On April 22nd the Supreme Court will hear oral arguments in *Grants Pass v Johnson*. The question at the heart of the case is whether penalising homeless people for sleeping outside when they have nowhere else to go counts as cruel and unusual punishment, which is banned by the Eighth Amendment.

Two cases will serve as important precedent. In 1962 the Supreme Court found in *Robinson v California* that a Golden State law making drug addiction illegal—rather than the use, purchase or sale of drugs—was unconstitutional. Jail time alone is not cruel and unusual, wrote Justice Potter Stewart, in his majority opinion. But the law criminalised a status rather than an act, and "even one day in prison would be a cruel and unusual punishment for the 'crime' of having a common cold."

In 2018 the Ninth Circuit Court of Appeals, which covers nine western states, applied the logic set out in *Robinson v California* to homelessness. In *Martin v Boise* the court held that the city of Boise could not penalise people for sleeping rough when no shelter was available to them, as such citations ran afoul of the Eighth Amendment. The Supreme Court declined to review the case in 2019. Deciding to hear *Grants Pass v Johnson* gives the court, now more conservative than it was five years ago, another crack at the issue.

Western politicians are hoping the court's ruling will offer clarity on how to



John Roberts's next case

tackle the proliferation of tent encampments. Half of the growth in America's homeless population between 2020 and 2023 came from the nine western states that comprise the Ninth Circuit. More than a quarter came from California alone. Oskar Rey, a lawyer who advised cities on

how to comply with the Boise and Grants Pass rulings, argues that they are narrower than many think. "Sweeping" or breaking up encampments is allowable so long as cities aren't ticketing homeless people who have no other shelter, argues Mr Rey. Sweeping encampments is anathema to activists who argue that tearing down tents is traumatising, but doing so does not criminalise homelessness.

Still, some policymakers argue that the courts have tied their hands. In some cases that is true. In 2022 a federal judge interpreted the *Boise* and *Johnson* rulings broadly, and blocked San Francisco from clearing encampments when there is no other shelter available. Politicians have another reason to blame the courts: it is easier to whine about judges than to shoulder the blame themselves for failed policies.

The interest in *Johnson* is also revealing of a larger trend. As recently as the early part of the covid-19 pandemic, Democrats were leery of sweeping away encampments. That liberal mayors around the West are now trumpeting their attempts to eradicate them is testimony to how fed up their voters are with homelessness in Los Angeles, San Francisco and Portland. Tents have come to symbolise disorder and failed policies. No wonder politicians who hope to stay in office want them gone. ■

Bribing voters

Regressive Democrats

WASHINGTON, DC

The White House unveils a pair of bad policies to woo voters

IT IS A Washington truism that little gets done in Congress during an election year. This means that pandering politicians, and particularly the president, need to get creative. Consider two recent moves by President Joe Biden to shore up support among blocs traditionally supportive of the Democratic Party.

On April 17th Mr Biden called for a 25% tariff on certain Chinese steel and aluminum products; in some cases that amounts to more than tripling existing import taxes. This is in addition to tariffs put in place by Donald Trump on some products. Mr Biden also told a steelworkers' union that his administration will investigate Chinese shipbuilding subsidies and work with Mexico to block Chinese tariff evasion.

The day before the tariff announcement, the Department of Education proposed a regulation that would forgive unpaid interest for Americans who owe more on their student loans than they originally borrowed. Around 25m voters could bene-

fit. The plan would also help more than 2m borrowers who have held loans for at least 20 years and an additional 2m who qualified for existing assistance programmes but didn't sign up. Those who attended "low-financial-value programmes or institutions" could get relief as well.

The rule faces a month-long public-comment period, then a review. The administration hopes to implement the new proposal by the autumn. All this follows an announcement on April 12th of another student-loan cancellation for 277,000 borrowers that adds up to \$7.4bn. The Education Department is working on yet another proposal to help those "experiencing hardship" repaying their loans.

These moves are the latest in a long White House campaign to relieve hundreds of billions of dollars in student debt. The White House estimates that it already has approved \$153bn (or 0.6% of GDP) for more than 4m borrowers. The Committee for a Responsible Federal Budget (CRFB)

► believes the new policies cost \$147bn. The hardship cancellation could range between \$100bn and \$600bn, depending how stringent the final proposal is.

This is probably good politics for Mr Biden, as the Democratic Party continues to consolidate support among college-educated voters and worries about losing rank-and-file union members seduced by Mr Trump's overtures towards them. As policies, they are retrograde bungs to favoured groups at the expense of other Americans.

The steel and aluminium tariffs are inflationary, which makes them worse for low-income Americans. As for student-loan forgiveness, helping borrowers at high default risk could be progressive. But many borrowers in relatively good financial health carry debt because they choose to cover only their minimum monthly payments. Some voters might wonder whether law-school graduates really need more federal help than plumbers.

Congress has given the presidency broad but not unlimited authority to enact tariffs; Mr Biden's student-loan actions are more dubious. The Supreme Court struck down a previous proposal, which relied on an overly expansive reading of a law that allowed for debt forgiveness during national emergencies. "This one is a lot more targeted, but if you pick enough targets, you get to a similar place," Marc Goldwein of the CRFB says of the new proposal.

Both parties see value in having a debate about the cost, legality and fairness of Mr Biden's student-loan efforts. While that goes on, the country is avoiding a more serious conversation about what has made college so expensive in the past few decades. And Mr Biden's tariff play is only the latest sign that embracing protectionism is now a bipartisan habit. ■

Panics

Can touch this

WASHINGTON, DC

Lots of state legislators believe any contact with fentanyl is fatal. It is not

IN AN EPISODE of the cop drama "Blue Bloods", Detective Maria Baez touches a dish covered in fentanyl, a powerful synthetic opioid. Moments later she is rushed to the hospital, fighting for her life. In the real world, viral videos show first responders seemingly harmed by the drug. In one, an officer is warned not to get too close to the substance. Within seconds he staggers back and falls to the ground. His peers administer naloxone, a drug that reverses the effects of opioid overdose, and he slowly regains consciousness.



Banning it harder

The fear is so widespread that Florida's governor, Ron DeSantis, even signed a bill on April 8th making it a felony, punishable with prison time, to recklessly endanger the life of a first responder by causing "inhalation" of fentanyl or "absorption through skin" which leads to "an overdose or serious bodily injury". Yet there is no documented case of this taking place and medical researchers say it is extremely unlikely. "The law creates a felony assault charge for something that is scientifically impossible and has never happened," says Ryan Marino, a toxicologist at University Hospitals Cleveland Medical Centre.

The Drug Enforcement Agency (DEA) has a webpage from 2017 warning first responders about the dangers of fentanyl. "The opioid epidemic nationwide has caused havoc and heartbreak...Any fentanyl exposure can kill innocent law enforcement, first responders and the public." Fentanyl is indeed a scary drug. It is responsible for 70% of drug-overdose deaths per year. And policing is also a tough job. By the nature of the role, officers are at greater risk than the general public.

But toxicologists show that such incidental exposures are not harmful. The American College of Medical Toxicology and the American Academy of Clinical Toxicology say that "fentanyl and its analogs are potent opioid receptor agonists, but the risk of clinically significant exposure to emergency responders is extremely low." According to the Centres for Disease Control and Prevention, no law-enforcement officers have died from fentanyl exposure while performing their duties.

If fentanyl were truly as toxic as claimed by agencies like the DEA, then everyone would be at risk. Researchers have found trace amounts of the drug in

public spaces, such as buses. Yet passengers and drivers are not dying. Nurses and doctors administer the drug and treat overdose victims every day. Drug-dealers would also "be dropping dead left, right, and centre", says David Juurlink of the University of Toronto, unless they wore protective equipment. But Brandon del Pozo, a former police chief and public-health professor at Brown University, says that during fentanyl-related drug busts, the scene was often quite casual. "There's one guy watching TV, one guy eating Chinese take-out, another guy cutting fentanyl on the table," he explains. "They are not wearing hazmat suits and gas masks."

Perpetuating the myth of incidental harm makes an already tough job that much more fraught. "Imagine being a cop and believing that any time I go near these people, I could just die," says Dr Del Pozo. "That is an incredibly needless source of stress." Some medical professionals say that the officers in those viral videos probably had real physical reactions, but they do not resemble the symptoms of an opioid overdose. Some think the officers may have been stricken with panic instead.

Confusion about the potency of fentanyl could also have consequences for people who are actually overdosing. Drug users may now hesitate to call for help for an overdose victim for fear of punishment. If first responders take time donning unnecessary protective gear, the victim could die.

Lawmakers in Florida passed the bill anyway. Jay Collins, a Green Beret army veteran and state senator who sponsored it, is undeterred by the naysayers. "We have to make sure we protect and preserve our law enforcement," he says. "I want our law enforcement to know that, unequivocally, we here in Florida have their back." ■

Niche towns

If you build it, they will sue

MARSHALL AND WACO

How two small Texas towns became the patent-law centre of America

IN 2019 A federal judge named Alan Albright gave a presentation to a group of lawyers. His courthouse in Waco, Texas, where he is the only judge, sits near a sweet shop. The talk was called “Why You Should File Your Next Patent Case Across the Street from the ‘Hey Sugar’”.

The intellectual-property lawyers who heard his pitch were apparently persuaded. Less than two years after being appointed to the bench, Judge Albright had nearly 20% of the country’s patent cases, according to Lex Machina, a legal-analytics firm. By 2021, he had 23%. Trial teams of white-shoe attorneys from New York and California, representing clients such as Google and Intel, began streaming into Waco, a city of 140,000 people in central Texas more widely known for being the birthplace of Dr Pepper, a questionable fizzy drink.

Bill Wettermann, a real-estate developer and Waco native, spotted a business opportunity. In 2021 he opened up Legal Lawfts, rentable offices—“war rooms”, in the parlance—that come outfitted with security cameras, back-up internet and, by request, gluten-free Oreos.

In Waco Mr Wettermann’s competitors include Connect Litigation, a firm that runs a few war rooms downtown. But Connect focuses its operations about 200 miles north-east. The “patent docket” is a familiar term in Marshall, a faded but quaint town of about 24,000 people near the Louisiana border. Between 2000 and 2020, more than 17% of all patent cases filed in federal court were in the Eastern District of Texas—roughly 13,500. By comparison Delaware, where most big American companies are incorporated, had fewer than 10,000 cases; the Northern District of California, where Big Tech firms are based, had fewer than 5,000.

T. John Ward, Marshall’s federal judge from 1999 to 2011, is responsible for the town’s puzzling popularity. Patent cases are technical. Judges must referee the sharing of sensitive source code, for example: plaintiffs argue it will prove their case; defendants resist, fearing their secrets will leak. They also interpret what a patent’s words actually mean, which can be “outcome determinative”, says Mark Siegmund, a patent litigator in Waco. Cases can also take years to get to trial.

Mr Ward learned that Northern California’s court had implemented local rules to build what lawyers call “certainty”—a

predictable process—into the unwieldy cases. He adopted similar ones, tweaking them to prioritise speed. Litigants reached trial in half the time it took in California. Around the same period, “it also happened that there was an explosion of patent-troll litigation,” says Paul Gugliuzza of Temple University, referring to plaintiffs who own bad patents and seek quick and cheap settlements. By the mid-2010s Mr Ward’s successor, Rodney Gilstrap, had about a quarter of the country’s patent cases.

Patentsville, USA

The caseload in Marshall books up the courthouse and boosts businesses downtown. One hotel bought a subscription to PACER, an online database for court records, to keep track of potential clients. In an apparent bid to make locals (read: jurors) like it more, Samsung, a frequent defendant, sponsored an ice rink across from the courthouse. TiVo spent \$10,000 on a champion steer at a livestock auction, and named it TiVo.

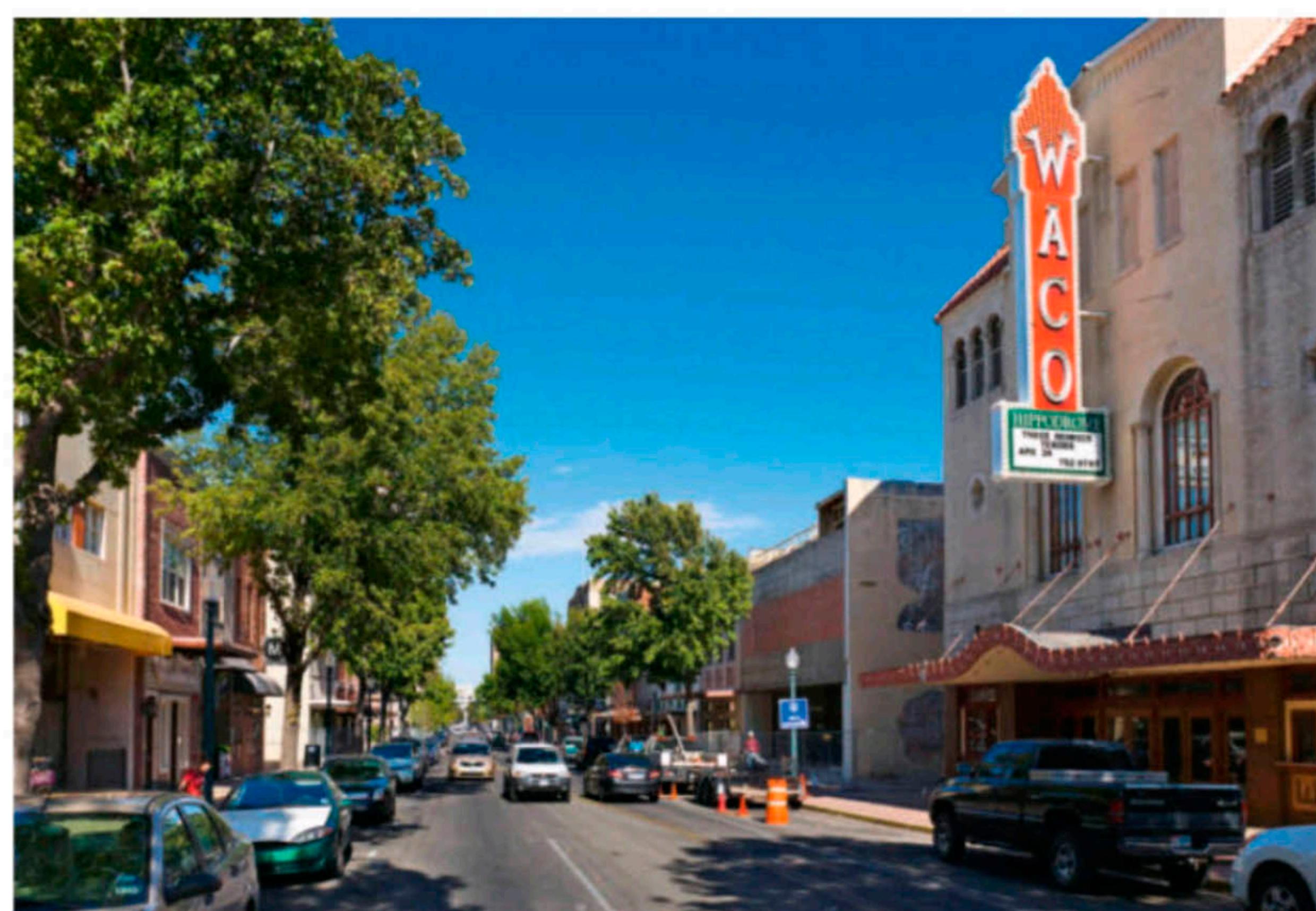
This sits uneasily with some. Federal judges are meant to be generalists, and courts are not supposed to power their local economies. And the rules “tend to be more plaintiff-friendly”, says Andrew Russell, a patent litigator in Delaware. Defendants often try to transfer their cases elsewhere. Yet that is partly because the speedy

tempo suits plaintiffs, as deep-pocketed defendants can afford to drag out litigation. Early on, verdicts in the Eastern District were lopsided, because the posh defence lawyers were “terrible” at arguing before juries, says Michael Smith, a longtime patent litigator in Marshall. Verdicts in the Eastern District now conform to national averages: in Waco, defendants actually win more, according to Lex Machina.

But the optics in Marshall were sufficiently bad that in 2017 the Supreme Court made it harder, in effect, for plaintiffs to file lawsuits there, by requiring defendants to have “regular and established” business where they are sued. Apple shut down its nearby stores. (Samsung did not and, despite the ice-rink, was hit with a \$303m jury verdict in Marshall last year.)

By 2021 Waco’s patent docket—similarly speedy, thanks to local rules—was attracting scrutiny, too. John Roberts, the chief justice of the Supreme Court, acknowledged senators’ concerns about the “extreme concentration of patent litigation” there. Starting in 2022 Waco patent cases were required to be put into a lottery, so that any of the Western District of Texas’s 12 judges could draw them. In 2023 fewer patent cases were filed overall, and Waco saw a steep drop-off.

Patent litigation could reasonably warrant a specialised court, similar to the system America uses to handle bankruptcy cases, stacked with experienced judges. “There are compelling reasons why Congress might think it was wise to create a national patent court,” says Steve Vladeck of the University of Texas. “The problem is that it’s for Congress to decide, not the judge of the 37th-largest city in Texas.” Waco in fact ranks 24th in the state. Marshall is tied for 138th. ■



Caution, lawyers crossing

LEXINGTON

Truth Social is a win for Donald Trump

And disturbing evidence of how he destabilises reality for Americans



SINCE SHARES in Donald Trump's media firm began trading publicly on March 26th, their value has slid by more than half, prompting headlines, and some crowing from the left, about the decline. Which still seems less newsworthy than that anyone is buying at all: even at roughly \$26 per share, investors are prizing Mr Trump's social-media platform, Truth Social, at a heroic value relative to its performance or apparent potential.

One must write "roughly" \$26 per share because even the *Wall Street Journal* has struggled to ascertain just how many shares are outstanding. Other possible red flags for investors include the company's independent auditor reported on March 25th that its "operating losses raise substantial doubt about its ability to continue as a going concern". After forecasting sales of \$144m for 2023, Truth Social delivered just \$4.1m, and a loss of \$58.2m.

Truth Social says it is contending with such entrenched giants as Facebook and Amazon, but it does not disclose its audience numbers. In a regulatory filing it tried to make a virtue of this by arguing that "adhering to traditional key performance indicators" such as traffic or advertising results—the sorts of results that typically obsess media investors—could "potentially divert its focus from strategic evaluation" of its business. For March, the analytics firm Similarweb found Truth Social had about 7.7m unique visitors, or roughly 0.05% of Facebook's traffic.

Maybe such realities will suddenly drag down the stock. But it has a long way to fall to depart the reaches of faith for the realm of reason. John Rekenthaler, a vice-president of Morningstar, an investment research firm, has estimated that if people valued Truth Social as they did the initial offerings of such firms as Tesla, Google and Facebook, the shares would be selling for 50 cents.

Investors in Truth Social, compared with those in other start-ups, are clearly not relying upon the same sort of analysis or even indulging the same sort of dream. They are not even playing the same game as the very online investors who drove up such meme stocks as AMC and GameStop to irrational valuations that were also relative fractions of the paper value of Mr Trump's company.

Something else is happening here, a tremor in market logic, even a rupture with common sense. Maybe investors believe that

Mr Trump will win in November and, as the first president with his own social platform, insist on making all his pronouncements upon it. Maybe they adore him and want to multiply his billions. Whatever their motives, the performance of Mr Trump's stock so far represents the purest demonstration of his power not just to bend reality, but to convert illusion into reality—and also, maybe, of how Americans are coming to confuse the two.

For years Mr Trump has used his mastery of the virtual world—the controversy and excitement he generates online—to increase his political power. He has just 7m followers on Truth Social, compared with 87m followers on X. But by taking ownership himself of the virtual events he is so skilled at provoking, he has created tremendous paper value, and he appears to be on his way to turning that virtual value into real wealth. Mr Trump holds 78.8m shares in the company, or about 57% of the total, and he is due to receive 36m more if the share price stays above \$17.50 until late April. Under a "lockup" agreement Mr Trump cannot sell for six months, until September 25th, unless the company's board releases him from the restriction.

What Mr Trump has called "truthful hyperbole", and others call lying, has been central to his success. When he built Trump Tower it had 58 floors, but in numbering them he skipped ten to claim 68 instead. This tactic has occasionally caught up with him, most severely in the \$355m penalty imposed on him in February after a New York judge found Mr Trump had lied for years to secure loans and make deals—trebling the size of his penthouse apartment, for example, and valuing his Mar-a-Lago estate in Florida based on its potential for residential development, though he had surrendered the rights to develop it as anything but a club.

Yet Mr Trump's trademark hyperbole is the very foundation of Truth Social. Its value rests on his participation—his agreement with the company constrains his posting elsewhere—and his posts are full of exaggerations if not lies, whether about the criminal cases against him, President Joe Biden, or the state of the country. Is that some sort of fraud? Or is it just life online, and how value is best created there, to be exchanged for an offline currency via advertising, the stockmarket or the ballot box?

There is no spoon

Virtual reality always seems to be a step away. Alternative digital worlds like "Second Life" have not caught on, and clunky AR headsets have proved more aversive than immersive. But Americans may not recognise the degree to which reality online—a reality that did not exist for most just a generation ago—has washed back into the real world, distorting their politics, their relationships, their apprehension of what is true or what has value. The rules governing all of this have changed, and it is not clear what the new rules are. Mr Trump and others are still inventing them.

Officials in the administration of President George W. Bush used to deride what they called the "reality-based community" and insist they could "create our own reality". They were pikers compared with Mr Trump. It seemed like a joke, during his campaign for president in 2016, when he referred to his political following as a "movement". Now it is reasonable to call him the most consequential figure in American politics since Ronald Reagan. Maybe Mr Trump will lose the election in November, and maybe that will cause stock in Truth Social to crash, if it does not collapse before then. But it does not seem like a crazy act to buy a few shares now, just in case. ■

The Americas



Brazil's supreme court

Elon v Brazil

SAO PAULO

Elon Musk is feuding with Brazil's powerful Supreme Court

OVER THE past two weeks Elon Musk, a serial entrepreneur, has been on a very public tirade against Alexandre de Moraes, one of the Brazilian Supreme Court's 11 judges. The dispute is about X, a social-media company that Mr Musk owns. On April 6th X announced that a Brazilian court had ordered it to block an undisclosed set of "popular" accounts or face hefty fines. Instead, Mr Musk said he would lift restrictions on previously suspended Brazilian accounts, and threatened to close down X in Brazil. Mr Moraes then opened an inquiry into Mr Musk for obstruction of justice. That prompted Mr Musk to rail that censorship in Brazil is worse than in "any country in the world in which this platform operates", and to call Mr Moraes a "dictator" who should be impeached and put "on trial for his crimes".

So far, so hyperbolic; on April 15th it emerged that X had sent a letter to Brazil's Supreme Court, assuring the court that X would comply with its orders. But the row is revealing on two issues. One is the power

of Brazil's Supreme Court, which enjoys outsize authority over the lives of Brazilians. The other is the debate over how to regulate social media without hurting freedom of speech. Brazilians adore social media. According to GWI, a market-research firm in London, they spend an average of three hours and 49 minutes a day swiping and scrolling, more than people anywhere else (see chart on next page). They also send the most messages on WhatsApp, a messaging platform, and rely heavily on social media for news. This makes Brazil fertile ground for the spread of misinformation and efforts to regulate it.

So far, regulating has been left to Brazil's Supreme Court. The body draws its strength from the period after the military dictatorship that ended in 1985, when an

assembly was called to rewrite the country's constitution. It produced one of the world's longest charters, covering everything from maternity leave to public wages. It also let political parties, trade unions and some other organisations file cases directly with the court, rather than having them filter up from lower bodies.

A prolix constitution combined with the empowerment of a wide range of actors to file petitions means that "just about anything can get to the court", says Luis Roberto Barroso, the court's president. The US Supreme Court receives around 7,000 petitions a year, and reviews the 100-150 it deems of national relevance. Brazil's heard over 78,000 new cases in 2023 and made more than 15,000 judgments.

To deal with this workload, Brazil's court allows individual judges to rule on cases. Requiring the full bench to rule would take months or even years. In an average year only around 10% of the court's decisions are taken by the full court, says Diego Werneck of Insper, a university in São Paulo. The rest are unilateral. This has led to accusations that unelected judges have too much power. "We decide cases that in other parts of the world are left to politics and ordinary legislation," says Mr Barroso. Since 2019 the most visible target of criticism has been Mr Moraes.

That year Jair Bolsonaro, a far-right populist, became president. He was no fan of the court. After he took office, threats to

→ ALSO IN THIS SECTION

26 Canada's maple syrup boom

27 An unusual arrest in Ecuador

► the court's justices and their families increased dramatically, says Felipe Recondo of *Jota*, a news website focused on Brazil's judiciary. In response, the court launched a probe into "fake news" under the leadership of Mr Moraes, and gave itself the power to investigate threats and defamatory statements made against it online. Usually this power rests with prosecutors. The court thus became victim, prosecutor and arbiter all at once.

Mr Moraes repeatedly used this trinity to order social networks to take down the accounts of politicians and influencers, saying they threatened Brazil's institutions. In February 2021 he ordered the arrest of a far-right congressman, Daniel Silveira, who had uploaded an expletive-laden rant about the court's members to YouTube. Such decisions are almost impossible to appeal. In 2022, one day after the full court upheld Mr Silveira's prison sentence, Mr Bolsonaro pardoned him. But the pardon was later overturned by the Supreme Court. Mr Silveira is still detained.

In the buildup to the presidential election of 2022, which Mr Bolsonaro lost, he spread lies about voting machines being rigged against him. Mr Moraes, who is also president of the electoral tribunal, expanded his crusade. In August 2022 he authorised police to raid the homes of eight businessmen, froze their bank accounts, and ordered social networks to suspend some of their accounts. This was prompted by WhatsApp messages from the two men which had been made public, and which appeared to express support for a coup.

Critics call Mr Moraes's tactics heavy-handed and opaque. Pablo Ortellado of the University of São Paulo notes that it is unclear how many accounts have been suspended, why, and for how long. Davi Tangherino, a criminal lawyer, says that an "endless inquiry without a defined scope" is not compatible with the rule of law.

Yet many Brazilians believe these unorthodox tactics were justified at the time.

Hooked

Social-media use, average hours per day per person*, top ten countries[†]

● 2018 ● 2023



Source: GWI

Fired up by Mr Bolsonaro's baseless claims of fraud, his supporters camped outside military barracks in the capital for two months before the election, urging the army to stage a coup. On January 8th 2023, a week after his opponent Luiz Inácio Lula da Silva was inaugurated, *bolsonarista* zealots stormed Congress, the presidential palace, and the Supreme Court. Instead of conceding defeat, Mr Bolsonaro continued to question the result from Florida, where he briefly went into self-imposed exile.

Other institutions failed to restrict Mr Bolsonaro's behaviour. As president he appointed a pliant attorney-general, who shelved over 100 requests to investigate him. Some members of the army supported staging a coup. Police did not dislodge the coup-mongers camped outside the barracks. In February this year investigators revealed that Mr Bolsonaro possessed a document that outlined his plan for a coup. It would have involved arresting Mr Moraes and calling new elections. Police also ►

79 million litres

It's on the flag, after all

The world has an insatiable appetite for Canada's maple syrup

HAMMER A TUBE called a spile into the bark of a maple tree and its translucent yellow sap will start flowing out; the tree has been tapped (see picture). This gloop drips from some 55m Canadian maple trees today, raw material for the tangy golden syrup which is one of the country's proudest exports.

Poring over the numbers reveals that maple-syrup production reached new heights in 2022. Some 79m litres were produced, 54% more than in 2021. Production has grown seven-fold in the past 50 years. But a warming climate is making output erratic. Ice storms helped to reduce syrup flow by 40% in 2023 compared with 2022. Industry representatives expect a return to growth this year.

Canada produces 78% of the world's maple syrup, 92% of it from the province of Quebec. Strong recent production helps to replenish Canada's International Strategic Reserve. This stockpile is at its lowest level for 16 years.

Yet the price of the golden goo won't fall even if there are more record-setting years to come. Perversely, the syrup's price is tightly controlled by a handful of large wholesalers, who every year negotiate a minimum price at which the product must be sold in bulk to domestic and international buyers. The industry operates in this way with the approval of the government "so that maple producers can have a predictable and sufficient income to earn a good living", says Joël Vaudeville of Quebec Maple Syrup Producers. Consumers pay the price.

The 2024 season is showing that a warmer climate is a boon to production. Temperatures near zero help the sap to run. Production is beginning earlier than in the past, says Mr Vaudeville.

But climate change may also be put-

ting the industry in a sticky situation. More frequent ice storms and strong winds can wreak havoc on maple groves, and pests thrive in warmer weather too. Mr Vaudeville says it is too early for the industry to draw conclusions about the overall impact. But producers in Quebec are talking to forestry engineers about planting new groves in northern regions where they weren't previously viable. They also want to create a kind of industry-specific insurance against weather as dodgy as it was in 2023.

Forest management is becoming more important. Canada suffered the worst fire season on record last year. Loss of tree cover increased five-fold between 2022 and 2023. The leaves of deciduous trees like maples hold more moisture than pine needles and are therefore less flammable. Prioritising them might be good both for big maple and for Canada's forests.



Sapping sap with a tap

► claim to have found evidence that Mr Bolsonaro's aides were monitoring Mr Moraes's whereabouts. Mr Bolsonaro denies wrongdoing. Against this fragile backdrop the Supreme Court was "the last bastion of democracy", says Mr Tangerino, though he thinks its actions have since gone too far.

Meanwhile Brazil's Congress was sitting on legislation that would regulate online speech. A bill influenced by the European Union's Digital Services Act, which came into force in February, was approved by Brazil's Senate in 2020, but stalled in the lower house. It would have required social-media platforms and search engines to produce reports detailing their content-moderation efforts. The firms would have been forced to tell users when their posts were taken down and provide them with instructions for appealing the decision. Yet legislators got bogged down in quarrels over

which institutions should administer the new law. Tech companies were enraged by its requirement for them to pay influencers and journalists for their content. The law floundered, leaving regulation to the Supreme Court, says Peter Messitte, a judge who runs a programme on Brazilian law at the American University in Washington.

On April 9th, spurred by Mr Musk's spat with Mr Moraes, the speaker of the lower house said he would create a working group to draft a new social-media bill within 45 days. The dispute between judge and tech boss rumbles on; on April 18th Mr Musk accused Mr Moraes of violating Brazilian law. X says the United States' Congress has asked to see the Brazilian Supreme Court's orders on content moderation. To avoid foreign pressure, Brazil's other institutions would do well to reclaim their responsibilities. ■

ceived another eight-year sentence on a separate bribery charge. In 2022 Mr Glas was conditionally released by Emerson Curipallo, a judge.

In December 2023 Ecuadorian prosecutors said they had found evidence that Leandro Norero, a drug lord, had paid Mr Curipallo a bribe of \$250,000 to secure Mr Glas's release. In March Marcelo Lasso, a cellmate of Mr Norero's, gave evidence in the state's investigation into organised crime and corruption. He said he had seen Mr Norero take video calls with Mr Glas's former boss, ex-president Rafael Correa, in which they discussed Mr Glas's release. Mr Curipallo is now in prison for unlawfully releasing 60 people with links to organised crime. He says his detention is illegal.

Sonia Vera, the former vice-president's lawyer, says he is being persecuted and that there is "no due process". Ms Vera also says that Mr Glas attempted suicide three days after he was seized. He has since been refusing to eat. She also claims that Mr Glas has been tortured, and says he has yet to be given medicine he needs for a chronic medical condition, treatment for two broken thumbs, or antidepressants that he was prescribed after witnessing a massacre in Cotopaxi prison. The German foreign office says it is trying to establish contact with Mr Glas, as he has German as well as Ecuadorian citizenship.

To many Mr Glas, who faces more than 30 charges, is deplorable. Comunicaliza, a pollster based in Quito, reckons that a mere 16% of Ecuadorians approve of the former vice-president. A few, though, see him as an opposition politician who is being hounded by the government for his association with the divisive figure of Mr Correa. The debate around Mr Glas has been polarised, but both sides could be right. It is possible to be a bad man fleeing from justice and a victim of political persecution at the same time. ■

Security in Ecuador

The Glas affair

Why Ecuador risked global condemnation to storm the Mexican embassy

ON APRIL 5TH Ecuadorian police scaled the walls of the Mexican embassy (pictured) in Quito, Ecuador's capital. They stormed the building and seized Jorge Glas, Ecuador's former vice-president. He had been granted asylum by Mexico just hours earlier. (Andrés Manuel López Obrador, Mexico's president, is sympathetic to Mr Glas's party.) For domestic police to raid an embassy is extremely unusual. It has outraged diplomats and been condemned around the world. Mexico immediately brought the case to the International Court of Justice in The Hague.

At first glance the assault seems foolish. Why would Daniel Noboa, Ecuador's president, jeopardise his country's reputation when it needs international support in its battle against drug gangs, which have threatened parts of the state itself?

The answer seems to be that Mr Noboa believes that Mr Glas is a central figure in that struggle. Ecuadorian prosecutors say Mr Glas is entangled with the gangs. Had he been able to evade justice and flee to Mexico, it would have been embarrassing for the president, especially after two drug bosses, Adolfo Macías and Fabricio Colón Pico, escaped from prison in January, just weeks after Mr Noboa took office. On April 21st Ecuadorians will vote on a set of security measures proposed by Mr Noboa, including harsher penalties for gang-related crimes such as kidnapping, and legalising extradition for gang members.

To boost his standing at home, Mr Noboa is prepared to risk international opprobrium. For many Ecuadorians Mr Glas is the embodiment of the corruption that has long plagued their country. In office he was known as "the constructor" for his success in getting things built, most notably eight hydroelectric plants. But prosecutors allege that all the while he was taking bribes, including some \$13.5m from Odebrecht, a Brazilian construction firm. In 2017 he was sentenced to six years in prison on those charges, and in 2020 he re-



Not your typical Glas house

Asia



India's general election

The last Gandhi?

NASHIK

As India heads to the polls, the opposition is weak, divided and ineffective

RAHUL GANDHI seems angrier now. For years, even close friends wondered if he had the drive to follow in the footsteps of his father, grandmother and great-grandfather, all of whom were Indian prime ministers. When he fronted the Congress party's ill-fated campaign for a general election in 2014, his speeches, often in faltering Hindi, mostly fell flat. Five years later, he led his party to another bruising defeat, even losing his own parliamentary seat in the long-time family stronghold of Amethi, in northern India. Soon afterwards he resigned as party chief.

And yet in the run-up to the general election, which starts on April 19th, Mr

Gandhi has found the fire in his belly. That was one takeaway when *The Economist* joined the final leg of a 6,300-mile (10,000km) journey across India that he finished last month. In rallies across the state of Maharashtra he denounced Narendra Modi, the prime minister, as a threat to democracy. He castigated the tycoons who

→ ALSO IN THIS SECTION

30 Tensions in the South China Sea

30 How to have a scoop in Japan

31 Banyan: Singapore gets a new PM

dominate its economy. And he deplored its rampant inequality. "There's no space for you in this country," he told one crowd in (now fluent) Hindi. "I don't understand why you're not doing anything about it."

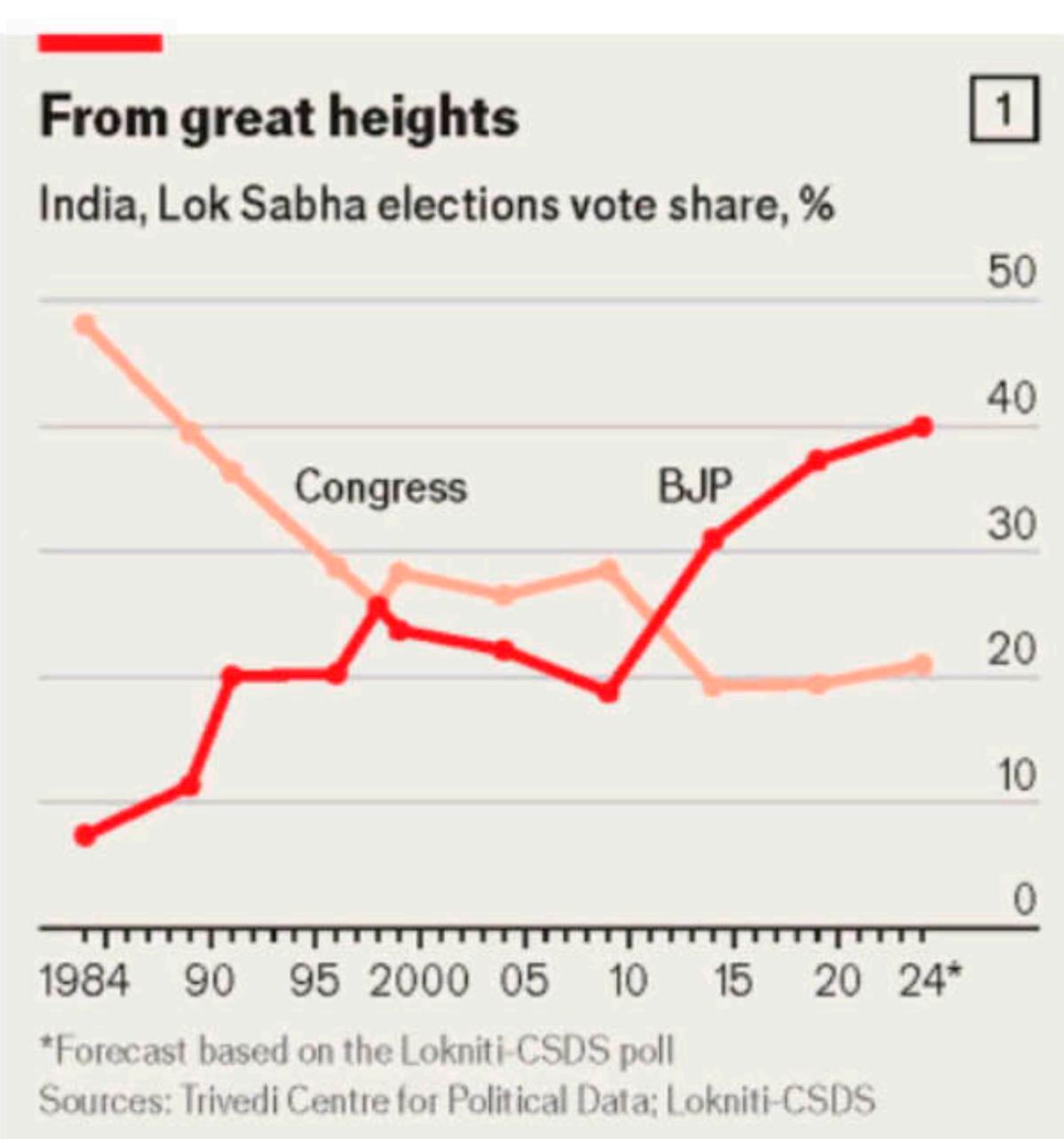
Mr Gandhi's newfound zeal has almost certainly come too late to swing this year's result, due on June 4th. Mr Modi's Bharatiya Janata Party (or BJP) is widely predicted to win again. But the hope among Congress loyalists is that it will help to revitalise the party in the years ahead and to position Mr Gandhi as a more serious challenger in 2029. By then, they say, public anger over unemployment and inequality may have dented Mr Modi's popularity. And Mr Gandhi has time on his side. At 53, he is two decades younger than Mr Modi.

The question, then, is no longer if Mr Gandhi has the stomach for the fight. It is whether the Cambridge-educated, half-Italian scion of a political dynasty is the right person to overhaul a party that even some allies liken to a dysfunctional family business. Loyalists argue that the party needs a Gandhi to bind it together and that Rahul has proved his mettle on his two-stage trans-Indian tour, much of which he completed on foot. But after a series of prominent defections, even some supporters are starting to wonder if a third consecutive general-election loss should signal the end of the Gandhi family's nearly eight-decade grip on the party.

To be fair to Mr Gandhi, the odds have been stacked against him lately. Mr Modi has curbed the independence of the media, the courts and civil society. His tax and investigative agencies have targeted dozens of the opposition's politicians, arrested two of its party leaders and frozen Congress bank accounts. Mr Gandhi himself is being probed for alleged money-laundering (he denies wrongdoing) and was suspended from parliament for four months in 2023 after being convicted of defamation for mocking Mr Modi's name. So uneven is the contest that Congress leaders have discussed boycotting the poll.

Nonetheless Congress is still the only viable national alternative to the BJP. Although its national vote share has declined steadily from a peak of 49% in 1984 to 20% in 2019 (see chart 1 on next page) it retains a hard core of support among secular-minded Indians, Muslims and other minorities, especially in the south. And there is still a pathway back to national power—if Mr Gandhi can confront three urgent challenges that are within his purview.

The first is ideological. In the past decade, Congress has struggled to identify a coherent message to compete with the BJP's combination of Hindutva (Hindu nationalism) and development. Branding Mr ➤



More troubling still for Congress is the apparent disconnect between voters' everyday concerns and their political choices. While many care about unemployment and want a caste census, they still back Mr Modi. That suggests that many voters do not trust Congress to deliver, especially on jobs, says Rahul Verma of the Centre for Policy Research, a Delhi-based think-tank. Nor can the party cite a state that it recently transformed, as Mr Modi could with Gujarat pre-2014. "The challenge is harder for Congress because it was in power for so long," says Mr Verma. "It comes with baggage."

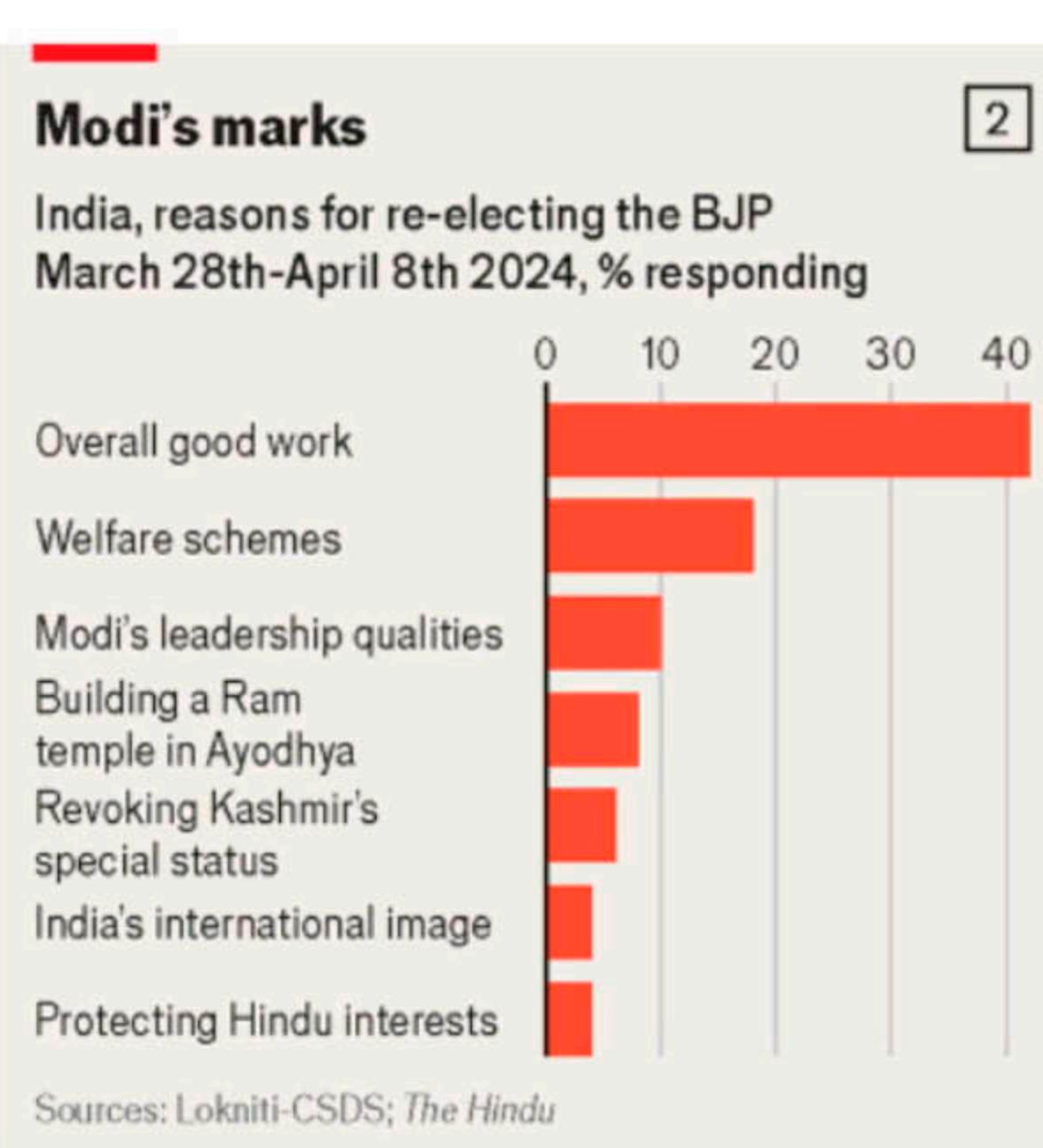
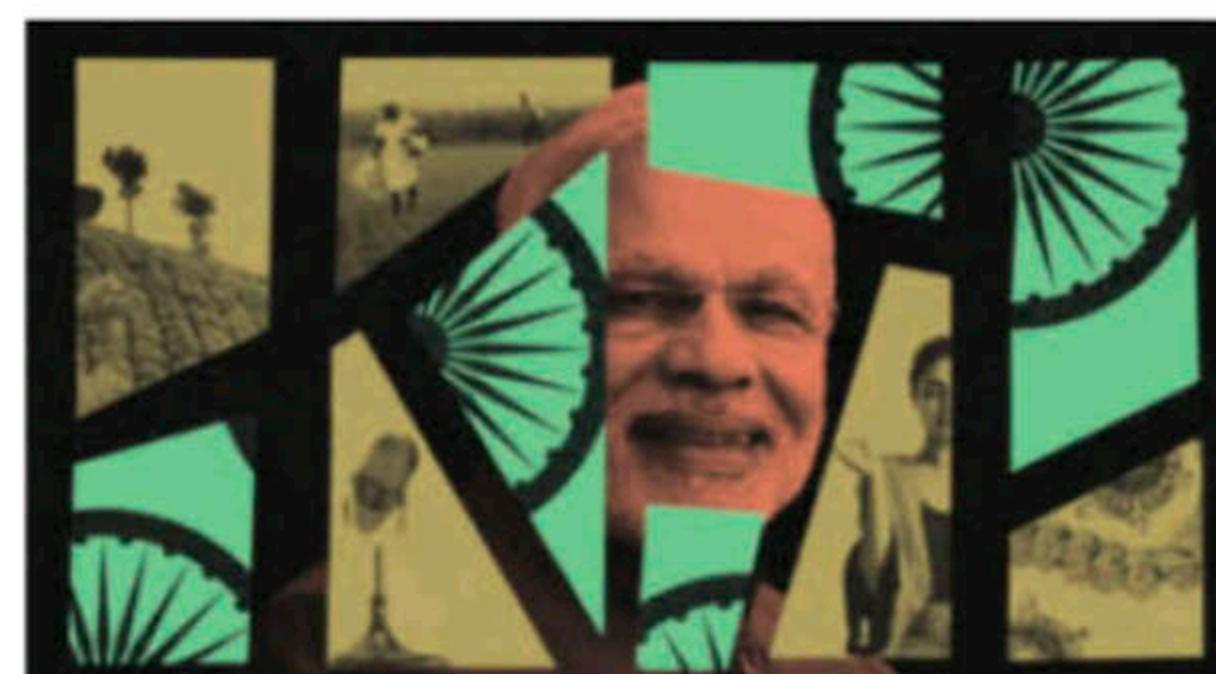
Mr Gandhi's second big challenge is with organisation. The BJP's recent electoral success is based in part on its ruthlessly efficient party management and messaging. Congress, by contrast, is plagued by slow, opaque and sometimes erratic decision-making. It has often been reluctant to jettison candidates loyal to the Gandhi family, even after they have lost elections.

Its message discipline is also notoriously sloppy. Senior Congress figures often disagree openly or say things that upset alliance partners. Last year the party flip-flopped over its response to the Hamas attacks on Israel. In January, Congress leaders split publicly over whether to attend Mr Modi's opening of a controversial Hindu temple. And in March, one senior Congress figure wrote an open letter challenging its support for the caste census.

Two years ago the party tried to enlist Prashant Kishor, an electoral strategist who helped engineer the BJP's 2014 victory (and is now starting a new political party). He presented the Gandhis with a detailed plan to overhaul the way Congress organised itself, picked candidates and ran campaigns. They rejected it. "They are yet not ready to accept that there is a problem and they need to change," says Mr Kishor. "They still believe that this is just a temporary phase, that it will blow over, and sooner or later they will be back."

Modi on the air

Narendra Modi has for a decade sweet-talked voters via his monthly radio show. We analysed all 110 of his broadcasts to show how he carefully moulds his image, and to gain insights into his vision for India. Read and listen at economist.com/radio-modi



The third challenge facing Mr Gandhi is personal. Although more energised now, he still prefers the intellectual side of politics. While relishing deep discussions on social issues, he dislikes the dealmaking needed to manage his party. His enthusiasm for initiatives often wanes when he meets resistance. And he lacks experience, having never run a state or a ministry. "Gandhis are only prime ministers," one former party insider recalls being told, after proposing that Mr Gandhi join the cabinet when Congress was in power.

A bigger concern is that Mr Gandhi lacks the steeliness to grasp control of his party. In the 2000s he led a drive to introduce new blood by holding open elections for its youth wing and promising the same for the party leadership. That brought an influx of young talent. But over the next decade they were repeatedly sidelined by Congress elders, leading many rising stars to defect. Since 2019 at least 25 prominent figures have deserted Congress. Failure to overrule party elders contributed to its defeat in three state elections last year.

Some party insiders worry that Mr Gandhi is still in limbo, neither fully in control of Congress nor willing to let others take charge. After resigning as party leader in 2019, he was replaced by his Italian-born mother, Sonia. In 2022, a Congress veteran, Mallikarjun Kharge, replaced her. But Mr Kharge, now 81, is no match for Mr Modi and decision-making is still dominated by the Gandhis and a cluster of family loyalists. So far the party has not nominated a prime ministerial candidate, leaving Mr Modi with no direct rival.

Congress officials say Mr Kharge's appointment proves the party's commitment to meritocracy. Besides, they add, this is not a presidential race; prime ministers are normally chosen after an election. Even so, Mr Gandhi's ambiguous role in the party leaves him vulnerable to suggestions that he is shirking a head-on fight with Mr Modi. If Congress is to reverse its decline in the years ahead, Mr Gandhi will have to make a choice: step up or step aside. ■

- ▶ Modi a threat to democracy hardly dents his support base in the Hindu majority, much of which admires his muscular leadership (see chart 2). Congress leaders have dabbled in "soft Hindutva", schmoozing with holy men and making high-profile temple visits. But that seems only to anger Congress stalwarts, while failing to steal many BJP votes.

Recently Congress has made inequality its central campaign theme. A manifesto put out on April 5th (and denounced by Mr Modi as pro-Muslim) made commitments including a legal right to apprenticeship, a minimum support price for farmers, cash transfers of 100,000 rupees (\$1,200) to poor families and a minimum wage of 400 rupees a day. It promised to carry out a nationwide census of all groups in the Hindu caste system, to strengthen an affirmative-action scheme and to reverse several BJP policies it considers anti-democratic.

It's not just the economy

The manifesto has also pledged to create millions of jobs in manufacturing and mining. But the focus on government intervention and handouts (with few details of how to finance them) gives it a distinctly left-wing flavour. That partly reflects Mr Gandhi's personal politics. Associates say he is less concerned about boosting economic growth than distributing its benefits more evenly. "Most Indian politicians would accept inequality as the price of rapid economic growth," says Jairam Ramesh, a party spokesman. "He refuses."

There is a logic to Mr Gandhi's leftward tilt. To counter the BJP's majoritarianism, he seeks to mobilise lower castes and minorities that represent around 80% of Indians. Still, it can be a hard sell coming from a product of wealth and privilege. Mr Modi, by contrast, is the son of a tea-seller, from a relatively low caste. He has won many votes among the poor by expanding digital welfare. And the BJP has pledged more handouts in its own manifesto, released on April 14th (and denounced by Congress as an "empty jugglery of words").

South China Sea

Maritime manoeuvres

MANILA

Tensions are mounting between China and the Philippines

COULD THE Philippines be the next big flashpoint in the South China Sea? On April 13th a Chinese coastguard vessel blocked a maritime-research vessel and its escort, both belonging to the Philippines. The incident was just 35 nautical miles from the coast of the Philippines and barely inside China's notorious "nine-dash line", which it uses to claim territory over its waters. Reports have also emerged of Chinese coastguard vessels firing water cannons at supply boats trying to reach troops on the *Sierra Madre*, a rusty warship grounded on purpose by the Philippines within its exclusive economic zone. Chinese boats are also swarming around islands occupied by the Philippines and conducting patrols within its waters.

China has long had a contentious relationship with countries in the South China Sea. The recent spate of incidents has had more publicity partly because the government of the Philippines now highlights China's actions as part of a "transparency initiative". This policy shift has been driven by President Ferdinand "Bongbong" Marcos who, after being elected in 2022, returned the country to its usual pro-Western stance. By contrast, Rodrigo Duterte, the previous president, appeased China, generally staying silent about its growing aggression in the South China Sea. "He didn't even want us to patrol our exclusive economic zone, that's how far he went," says Rommel Ong, a retired rear admiral.

Mr Duterte's reticence yielded no benefits. Instead, China encroached ever more forcefully on the Philippines' waters. In February 2023 China pointed a military-grade laser at a coastguard ship on a resupply mission to the *Sierra Madre*, which sits atop the Second Thomas Shoal, temporarily blinding the crew. "We finally decided that it doesn't help to suppress these things," says Jay Batongbacal of the University of the Philippines. Since early 2023 the Philippines' government has been releasing videos of China's growing aggression and taking journalists on its patrol ships to witness China's "grey-zone" tactics (strategies to harass and intimidate that fall short of an all-out war).

This increased transparency has raised awareness among Filipinos over Chinese aggression. It also helps Mr Marcos win international support. Amid growing concerns over China's coercion in the South China Sea, the president met Joe Biden, his

American counterpart, and Kishida Fumio, the prime minister of Japan, in Washington earlier this month for the first high-level meeting between the three leaders. Mr Biden warned at the summit that "Any attack on Philippine aircraft, vessels or armed forces in the South China Sea would invoke our mutual defence treaty."

So far, publicising China's aggression has not deterred it. The number of Chinese ships around Second Thomas Shoal increased in 2023, according to the Asian Maritime Transparency Initiative, a project run by CSIS, an American think-tank. It uses data from automatic identification systems to track Chinese ships in the South China Sea. Chinese researchers also claim to have developed an AI-controlled water cannon. Expect more escalation in the world's most contested waters. ■

Journalism in Japan

Waving the red flag

TOKYO

A relatively obscure communist newspaper shapes Japanese politics

SINCE JAPAN'S parliamentary session began three months ago, one issue has dominated the agenda: a financial scandal within the ruling Liberal Democratic Party (LDP). At the end of last year, prosecutors launched an investigation into factions of the LDP which had failed to report revenue from fundraising events, thereby evading taxes. Several people linked to the LDP, including accountants and parliamentarians,

have been indicted. In December four cabinet ministers and five vice-ministers were sacked. On April 4th Kishida Fumio, the prime minister, asked two of his party's heavyweights to quit and punished 37 other LDP members.

What is perhaps surprising is that this political turmoil can be traced back to *Shimbun Akahata* ("Red Flag Newspaper"), a relatively niche newspaper run by the Japan Communist Party (JCP). It is read by 850,000 subscribers, down from a peak of around 3.5m in 1980. It first reported on the funding discrepancies in 2022. "I didn't expect things would blow up," says Sasagawa Kamiyu, the 33-year-old journalist who first reported on the scoop after scrutinising government documents. He worked with Kamiwaki Hiroshi, a law professor at Kobe Gakuin University, who filed a criminal complaint with prosecutors.

This is not the first time that *Akahata* has punched above its weight. In 2013 it led investigations on *black kigyo* ("black companies"), which shed light on the prevalence of abusive workplaces and pushed the government to introduce tighter regulation. In 2019 it reported on politicians subsidising dinners for supporters during an annual cherry-blossom-viewing party. Abe Shinzo, then prime minister, was questioned by prosecutors; though he was never charged, the scandal hounded Abe until his resignation in August 2020. The paper reports on issues "that everyone else is too afraid to touch", says Nick Kapur at Rutgers University in America.

The paper's tumultuous history contributes to its "strong will to stand up against power", says Kogiso Yoji, its chief editor. *Akahata* was founded in 1928, six years after the JCP was established. Japan's ►



Tomorrow's news, today

► militarist regime banned the communist party because it was viewed as subversive. *Akahata* was produced and circulated underground; police arrested and tortured those reading it. After the second world war, American occupying forces made the JCP a legal party, as it claimed to promote democracy and free speech.

But *Akahata*'s accomplishments point to an awkward truth. Traditional media remain powerful in Japan. *Yomiuri* and *Asahi*, two of Japan's national newspapers, have

some of the largest circulations in the world, printing 6.8m and 4m copies a day respectively. Yet such mainstream outlets often fail to hold politicians to account. Self-censorship is widespread as journalists develop close-knit ties with authorities and try to avoid upsetting ultra-nationalist groups, which the police estimate have tens of thousands of members. These can be an intimidating force in public life.

According to Reporters Without Borders, an NGO based in Paris, Japan's free-

dom-of-press ranking slipped from 11th in 2010 to 68th in 2023. *Akahata*'s scoops usually derive from information available to the public, including government reports and social media posts. Regarding the cherry-blossom scandal, journalists were invited to and attended Abe's banquet every year. Yet they failed to realise that he might be violating political-funding rules. "Usually, the big media outlets already know what we know," says Mr Kogiso. "We just have a different perspective." ■

BANYAN

Installing the 4G network

Singapore's next leader promises continuity and change

IN THE REPUBLIC'S 59-year history, Singapore has had only three leaders. On May 15th it gets its fourth, when the prime minister of 20 years, Lee Hsien Loong—who is 72 and whose father, Lee Kuan Yew, ruled with an iron will for 31 years—will resign. At a ceremony at the presidential palace, Lawrence Wong, the current finance minister, will be sworn in. He is Mr Lee's junior by two decades. Singapore now faces the prospect of a future without a Lee at the helm.

The investiture also marks when the ruling party, the People's Action Party (PAP), passes the baton from a “3G” (third generation) of senior party cadres to the “4G” cohort who chose Mr Wong as their man. Mr Wong will then call a general election, likely sometime this year. The PAP has made sure never to lose one, and Mr Wong will certainly not lose his. He is guaranteed a majority to make the leaders of many other countries weep. Yet never think that elections do not matter to the PAP. More is at stake than meets the eye.

Singaporeans no longer judge the PAP merely on its traditional emphasis of delivering economic growth and of keeping Singapore, a tiny, multi-ethnic dot of prosperity in a sea of troubles, safe from threats to its extraordinary success and social cohesion.

Indeed many younger Singaporeans, less respectful of hierarchy, want more fairness in terms of who shares in growth: they think that a country sitting on such gargantuan financial reserves should more generously support welfare. They also want politics to be more participatory rather than heavily directed from the top. At stake for Mr Wong, when he goes to the country, is not his (and the 4G's) formal mandate but rather moral legitimacy.

The party likes to leave little to chance, and before change comes continuity. Mr Wong downplays expectations of major cabinet reshuffles before the election. After it, Mr Lee, as did his father before him, will stay on, as senior minister (more commonly called SM—the party loves initials). At least one key member of the old guard, K. Shanmugam, will stay in post. Since 2008 he has served as law minister and runs the home ministry, too.

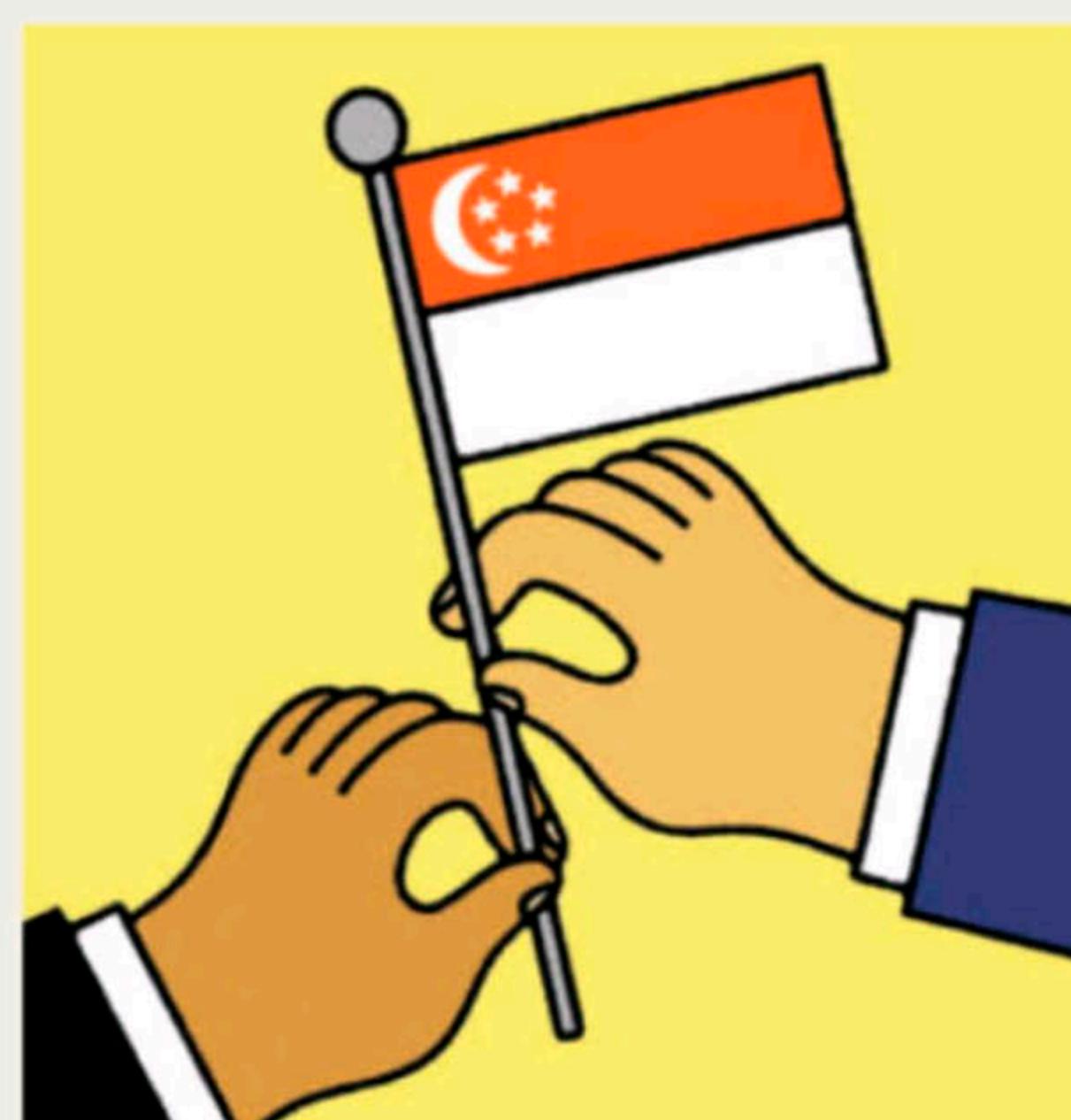
Mr Shanmugam takes a bleak view of threats to Singapore. They range from extremism spilling over from majority-Muslim Malaysia and Indonesia; to disinformation campaigns by foreign states; to great-power rivalry and other trade-wrenching forces to which Singapore's open economy is especially vulnerable. Vigilance is the watchword. The PAP also likes to warn of the dangers of populist politics elsewhere; it presents itself as the guard against profligacy.

Yet Mr Wong has promised a break from the past. This week he described a “rapidly changing environment” which demanded fresh approaches and a readi-

ness “to break new ground”. Some think his agenda will be thwarted by a shortage of political capital. He was not the 4G's first choice. Heng Swee Keat, currently the economy minister, was Mr Lee's anointed successor until he suddenly withdrew in 2021. Mr Wong, a highly competent former technocrat who entered politics in 2011, was the public face of the administration during the pandemic. Still, he remains relatively unknown among Singaporeans.

In reality, being the compromise candidate may be no bad thing. No 4G member can hope to rule with the charismatic authority of earlier leaders. Mr Wong's is likely to be a more collective leadership, one that reaches for consensus—perhaps, even, including outside the party. Promisingly, two years ago Mr Wong led a consultative initiative, known as Forward Singapore, that sought opinions among citizens about such issues as raising taxes on the rich and strengthening social welfare. The mild-mannered Mr Wong is more relatable to Singaporeans than most of the governing elites. The guitar-strumming, self-confessed nerd brought up on an East Coast housing estate did not go to any of the elite schools that the PAP high-flyers often judge themselves by. To many, that is a plus.

Mr Wong, then, kicks off with a degree of goodwill. Still, the election will be his key test. The PAP will win thanks to formidable organisation, unrelenting attacks on the opposition, a docile press, a record of good governance and a not always subliminal message that its survival and that of Singapore are synonymous. Yet if the opposition gets many more than the ten out of 87 elected seats it currently holds, the change candidate will start off on the back foot.



China



Unemployment

Degrees and difficulty

Our number-crunching suggests that the plight of graduates could be much worse than previously thought

AROUND THIS time each year companies visit university campuses in China looking for potential employees. This year the mood is grim. At a job fair in Wuhan a firm was looking to hire management trainees—but it wanted only elite graduates and offered just 1,000 yuan (\$140) per month, claimed a post that went viral on social media. At a fair in Jilin most of the advertised positions required advanced degrees, said a soon-to-be graduate online. “Next time don’t bother inviting us.” Another griped that firms are not hiring. The recruitment process is “a lie”, she wrote.

The data paint a similarly bleak picture. The unemployment rate for people aged 16 to 24 in cities reached a record high of 21.3% last June. That was perhaps too embarrassing for the government, so it stopped publishing the data series while it rejigged its calculation to exclude young people seeking jobs while studying. (Amer-

ica, Britain and many other countries include such students when calculating their rates.) The new numbers are lower, but still depressing: in March 15.3% of young people in cities were unemployed. That’s nearly three times the overall jobless rate.

For young graduates the situation is probably even more dire. China does not release an unemployment rate for this cohort. But we combed through data from the country’s decennial census and its statistical yearbooks in order to produce an estimate. By our calculations (including students who are seeking jobs), the unem-

ployment rate for 16- to 24-year-olds with a university education was 25.2% in 2020, the last year for which census data are available. That was 1.8 times the unemployment rate for all young people at the time.

It could be that things have got better since 2020 or that the variables affecting our calculations have changed in unpredictable ways. But it is also possible that things have got worse. To simplify, if we assume that the proportional relationship from 2020 still holds, over a third of young graduates might be unemployed today.

One reason to believe that things are not improving is that graduates as a share of unemployed youth are increasing faster than might be explained by broader demographic trends (see chart 1 on next page). Graduates of universities and vocational and technical colleges accounted for 70% of the unemployed young in 2022, up from 9% two decades ago. As a percentage of the youth population, those graduates amounted to 47% in 2020.

China’s sluggish economy is at least partly to blame. Demand for graduates has stagnated. Meanwhile, the supply of them is growing. This year nearly 12m students are expected to graduate from higher-education institutions, an increase of 2% compared with last year. Between 2000 and 2024 the number of Chinese graduates per

→ ALSO IN THIS SECTION

33 A message for Taiwan

34 Frustrating poplar fluff

35 Chaguan: An Alzheimer’s test



am, the *gaokao*, than public institutions. But the acceptance rate at all colleges and universities has been rising. Before 1999 less than a quarter of *gaokao*-takers were accepted by these institutions. Today most make it in (see chart 3).

The rising number of graduates might not be such a problem if they were learning skills desired by employers. But Chinese companies complain that they cannot find qualified candidates for their open positions. Part of the problem are low-quality *minban daxue*. Yet the skills mismatch extends across higher education. For example, the number of students studying the humanities is growing even though demand for such graduates is much lower than that for specialists in other fields.

Some students are trying to dodge the tough private-sector job market. The number of people sitting for China's civil-service exam hit a record high of 2.3m in 2024, a 48% increase year on year. Others are pursuing postgraduate studies. The number of master's and doctoral students has increased by so much that some campuses have run out of housing.

Unable to find work befitting their degrees, a number of graduates are settling for low-skilled jobs, such as delivering food. Last year a memo from an airport in Wenzhou noted that it had hired architects and engineers to be its groundskeepers and bird-control personnel.

Xiaoguang Li of Xi'an Jiaotong University and Yao Lu of Columbia University have studied underemployment in China. Using national survey data, they found that 25% of workers between the ages of 23 and 35 were overqualified for their job in 2021, up from 21% in 2015. The problem is likely to get worse, says Ms Lu, as graduates facing unemployment have no choice but to accept menial work.

As a result of all this, the returns from pursuing higher education seem to be falling. In a working paper published last year, researchers led by Eric Hanushek of Stanford University found that in China the wage premium associated with higher edu-

cation dropped from 72% to 34% between 2007 and 2018 for those under the age of 35.

In 2008 an official in the education ministry seemed to admit that the state had made a mistake in expanding college and university enrolment so quickly. But the ministry quickly backtracked. Today the government seems to care more about the size of the education system than the quality of it. Sixty-one new colleges and universities opened in China last year. "Our country has built the largest higher-education system in the world," boasted the *People's Daily*, a party mouthpiece.

In his state-of-the-nation speech last month Li Qiang, the prime minister, at least paid lip service to the idea of making sure more graduates were learning the skills needed in sectors such as advanced manufacturing and elderly care. But many will continue to find that their degree is not a ticket to a good job. Told for years that higher education was a ladder to a better life, their frustrations are growing. ■

China and Taiwan

A meeting and a message

TAIPEI

China is talking to Taiwan's next leader, just not directly

After 11 days in China, during which time he was granted an audience with Xi Jinping, its supreme leader, Ma Ying-jeou came back to Taiwan this month with a message. The island's former president, posting on Facebook, wrote that Mr Xi had "extended an olive branch to us". Mr Ma hoped that Lai Ching-te, Taiwan's next president, would "put the people first and respond pragmatically".

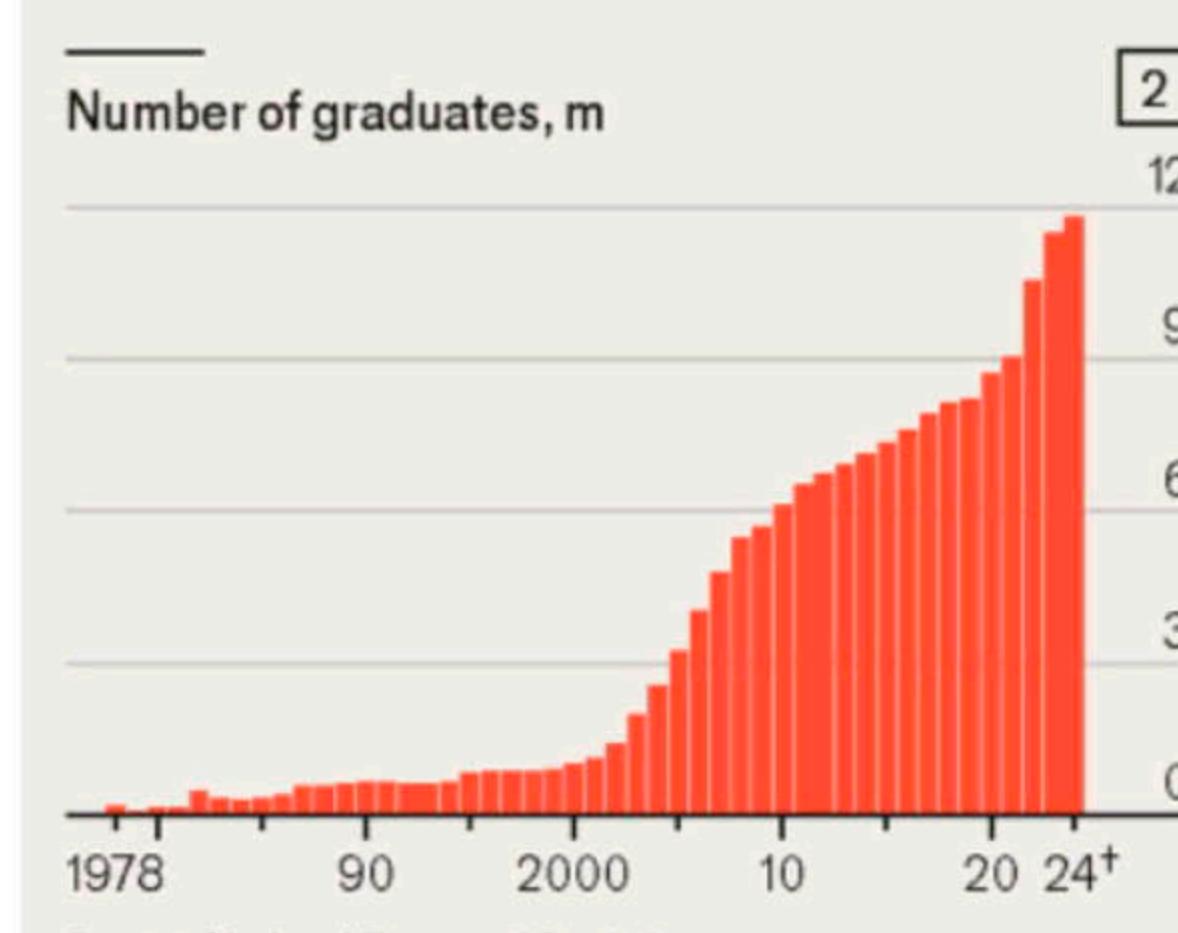
Much has changed since Mr Ma left office in 2016, having pursued closer relations with China. His successor, Tsai Ing-wen, has asserted Taiwan's status as a sovereign, democratic country. Mr Lai has called himself a "pragmatic worker for Taiwan independence". China froze high-level contacts with Taiwan years ago. During Mr Lai's successful campaign for president, Chinese officials denounced his party as separatists and called the election a choice between "war and peace".

So it is no surprise that Mr Xi's supposed olive branch comes with conditions. Mr Ma counselled Mr Lai to confirm that China and Taiwan are not two countries and to promise that he would not pursue independence. Little is expected to come of all that. China has ignored Mr Lai's offers to talk, calling them insincere.

The question, then, is why did Mr Xi even meet Mr Ma, a diminished figure? ■

Scads of grads

China, universities*



whose views are outside the mainstream in Taiwan? Mr Ma, for example, believes that people on both sides of the Taiwan Strait share a common national identity. But more than 60% of those on the island say they are Taiwanese, not Chinese. During the election campaign Mr Ma was sidelined by his own Kuomintang (KMT) party after saying that Taiwan had to trust Mr Xi. Less than 10% of Taiwanese believe China is a trustworthy country.

China, though, thinks there is still a benefit to embracing people like Mr Ma. Officials in Beijing stress the importance of supporting Taiwan's "patriotic unification forces". China's Taiwan Affairs Office (TAO) receives a steady stream of delegations made up of Taiwanese religious leaders, businessmen and students. Andrew Hsia, the KMT's vice-chairman, has visited China at least seven times since 2022. Chinese leaders seem to believe that by dividing the island now they may one day win it over. Even though Mr Lai was victorious, his Democratic Progressive Party (DPP) lost its majority in parliament and most Taiwanese back more cross-strait talking.

There is also a domestic component to China's strategy. "Beijing is telling its own people that it has not lost control over the Taiwan issue and that there is still time to achieve unification," says Amanda Hsiao of Crisis Group, a think-tank. The Ma-Xi meeting, front-page news in China, aimed to make that point. China's leaders may want to give themselves more "political space" on Taiwan, says Ms Hsiao, as they deal with economic challenges and await the outcome of America's election.

But that does not mean China is sitting back. As it embraces so-called patriots, it is also exerting pressure on Taiwan. Chinese warplanes have continued to cross the Taiwan Strait's median line (the de facto maritime border) on a regular basis. And on February 1st China's Civil Aviation Administration changed a flight path to allow Chinese civilian planes to fly closer to the median line, too. Taiwan responded by accusing China of trying to "unilaterally alter

the status quo". In 2015 the Chinese authorities planned a similar move, only to compromise after Mr Ma's administration complained. Now the TAO is saying there is "no such thing" as the median line because Taiwan is part of China.

The TAO said something similar after a recent incident around Kinmen, an archipelago that is controlled by Taiwan but lies only 3km from China. On February 14th two Chinese fishermen drowned while being chased by Taiwan's coastguard. Taiwan said they were in "prohibited waters"; the TAO said there is "no such thing". Soon after, China's coastguard boarded and in-

spected a Taiwanese tourist ship, an unprecedented move. It also began carrying out patrols close to Kinmen, encircling the island and entering waters that Taiwan deems restricted.

In the air and on the sea, China's manoeuvring falls well short of war. But its actions amount to claims of sovereignty in the affected areas, says Lee Jyun-yi of the Institute for National Defence and Security Research, a Taiwanese think-tank. The message from China seems clear: a president who seeks more sovereignty for Taiwan will see it diminish; but think and act like Mr Ma, and we can talk. ■

Poplar trees

A puff piece

BEIJING

Examining the fluff that frustrates northern China

LIKE MOST blizzards, it begins with just a few white wisps swirling about. Gradually the volume increases and the stuff starts to accumulate on the ground. During the heaviest downfalls the air is so thick with it as to impair visibility. But this is no winter scene. It is what happens every April across much of northern China, when poplar trees start giving off their cotton-like seed-pods.

The phenomenon has already begun in Beijing. On April 8th an eddy of fluff balls wafted around the American treasury secretary, Janet Yellen, as she held a press conference in an embassy garden.

To call this a nuisance is an understatement. In many people the fluff triggers allergies, asthma and other respiratory problems. Experts say the white balls—produced by the trees' catkins—are not themselves allergenic, but that they distribute irritating pollen.

They also clog rain gutters, drain pipes and car radiators. Worse, they pose a fire hazard. Officials have warned that the fuzz balls have a low ignition point and called for extreme caution on the part of smokers, welders or anyone inclined to burn them "out of curiosity".

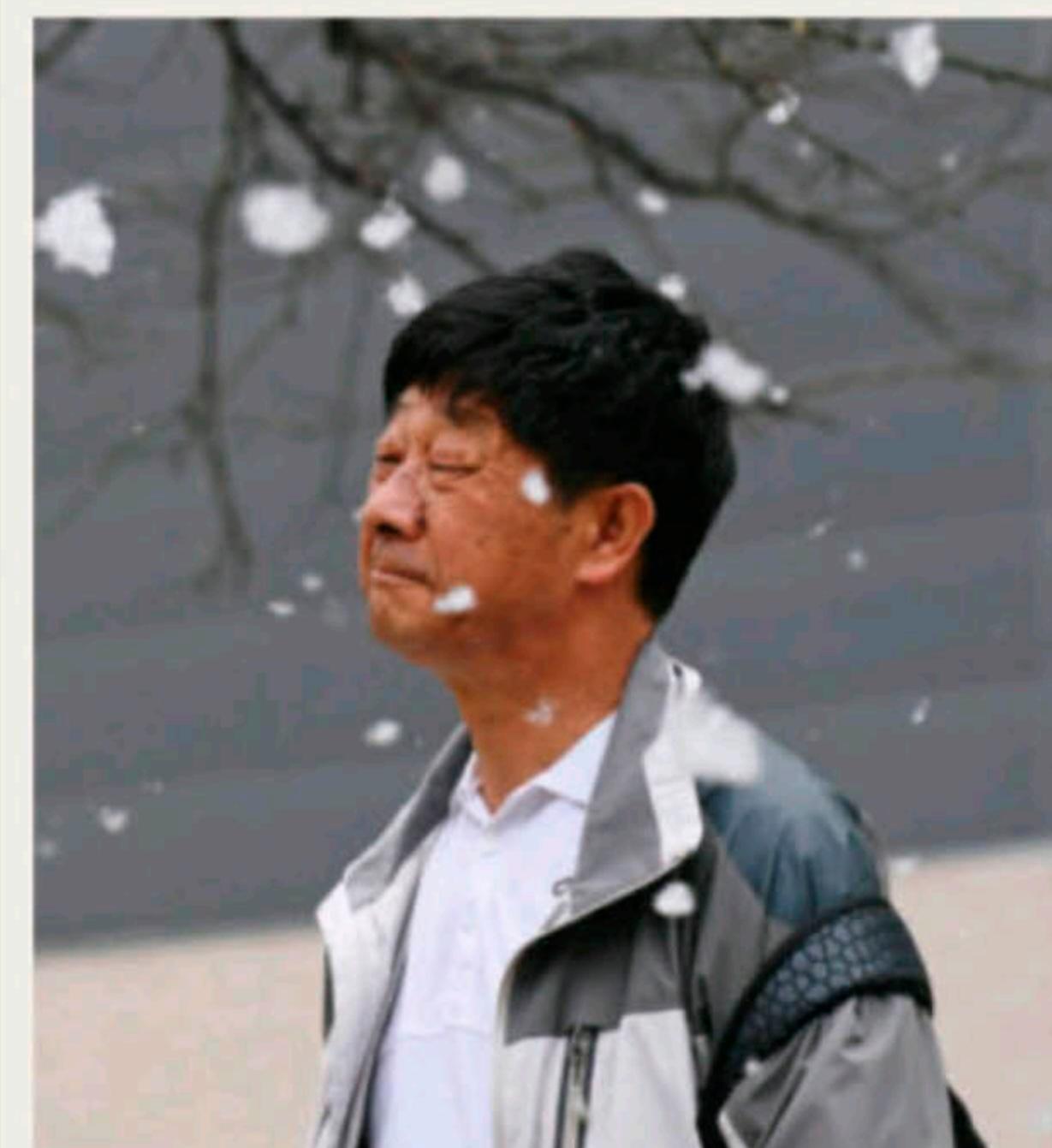
China's catkin problem is the unintended consequence of an old effort to improve the environment. Intensive tree planting began in the 1950s with the aim of ending the scourge of sandstorms caused by winds sweeping out of barren areas. The trees were also meant to firm up the soil and slow desertification. Poplar trees, along with willows, were selected because they are cheap, fast-growing and drought-resistant.

In some ways the plan worked. Today

sandstorms are less severe and the threat of desertification has faded. But the annual onslaught from catkins is another legacy. Female trees are the cotton-ball culprits. There are millions of them (poplar and willow) in Beijing alone.

Authorities have sought to mitigate the mess. The simplest way is to spray water on the trees, turning the fluffy flyers into damp squibs. More advanced solutions involve "birth control", or injecting female trees with chemicals that suppress catkin production. Another option is "gender-reassignment surgery", in which branches on female trees are cut and replaced with male grafts.

But experts say that these efforts will take time. The good news is that the flurries of poplar fluff will only last for a few more weeks. The bad news is that wafts of willow fluff will then begin.



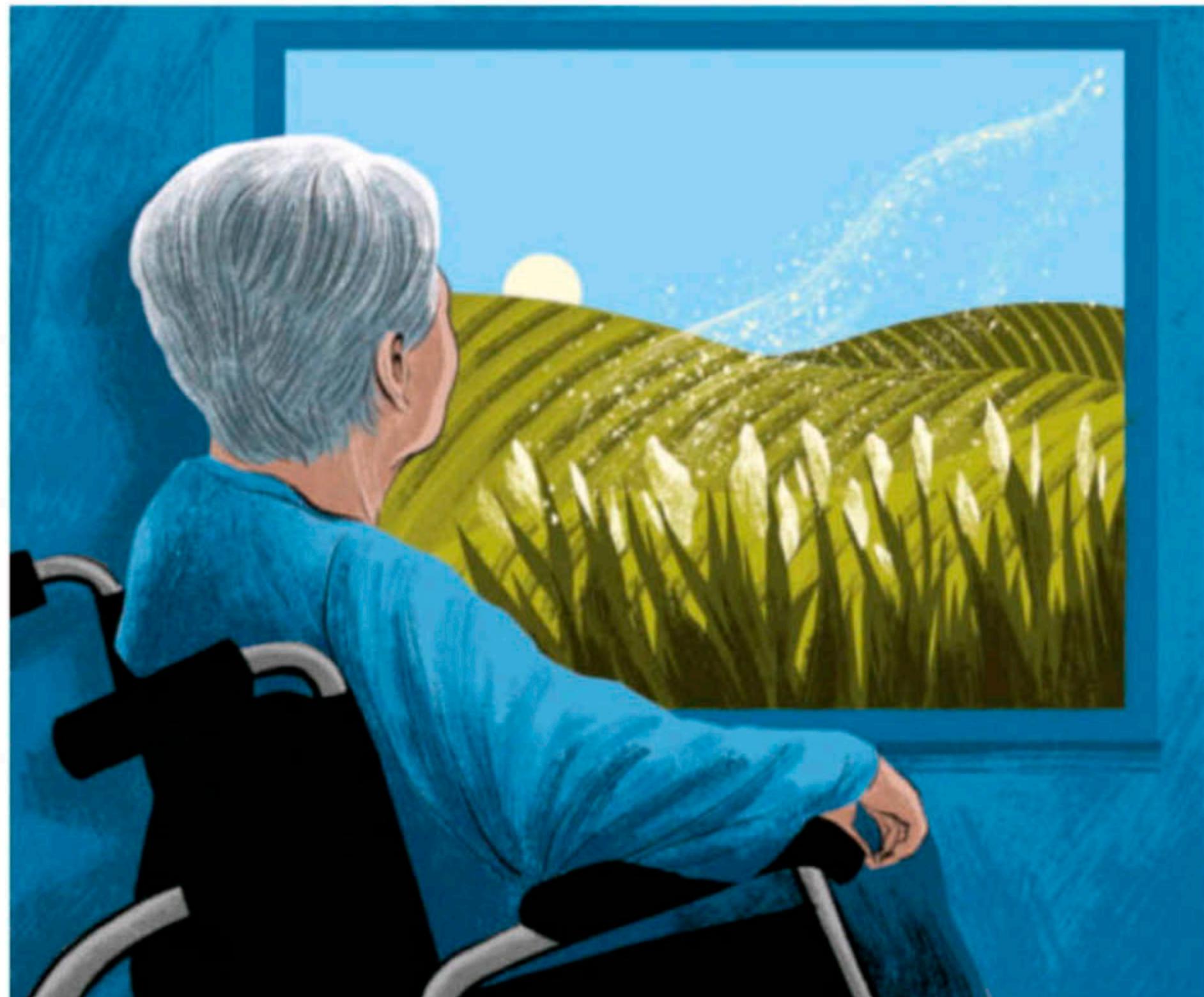
When catkins attack



CHAGUAN

The dark side of growing old

A coming wave of Alzheimer's and other forms of dementia will test China to its limits



MR ZHANG HAS stared down death during his 90 years on Earth. He has been diagnosed with cancer twice. During his latest bout doctors gave him 18 months to live. "That was 16 years ago," he recalls wryly. Trim, snowy-haired and energetic—the key is "no exercise" and "no smoking", he says—the retired manager cuts a dash in a blue shirt, green trousers and black cotton slippers. Yet on this spring afternoon in the city of Hangzhou, Mr Zhang is afraid. Not of death, but of dementia. In his youth, the old who lost their faculties were called "crazy". Later the Chinese learned about a disease named by foreigners: Alzheimer's. He has feared it for years. Advanced sufferers cannot recognise their families and so always feel alone or numb, he sighs: "That is the most terrible thing." Quietly he adds that he has begun to forget things.

Mr Zhang is luckier than many. He lives in his own apartment with his wife (88). Hangzhou is one of China's richest cities. His home district of Gongshu is a pioneer, used to test government plans for tackling dementia, a disease on the rise as China ages.

Officials estimate that 53m Chinese have some form of cognitive impairment, of whom 10m have Alzheimer's. That number will grow as Chinese live longer, for the risk of Alzheimer's soars after the age of 75. Various dementias already have 16,000 inhabitants of Gongshu in their grip. The district's residents are older than the national average and enjoy a life expectancy of 83, similar to Japan's, explains Li Qiuyang, who directs old-age services at the local Centre for Disease Control, a public-health agency. Mr Li has made early detection of dementia a priority. He invites specialists to hold clinics in neighbourhood health centres and asks university professors to give popular-science talks, working to overcome a pervasive belief that memory loss is just part of ageing.

Chaguan encounters Mr Zhang in a publicly subsidised, privately managed community centre full of features designed to slow cognitive decline. The 90-year-old has dropped in to collect a coupon for a cheap haircut and is not staying long. The same centre offers residential care, charging around 5,000 yuan (\$691) a month. On an upper floor, residents with dementia are being helped to make clay-and-paper collages. A corner is filled with Mao-era items to stir long-dormant memories, from old enamel

mugs to a green canvas satchel. The surrounding neighbourhood is a pilot scheme in its own right, with large graphic signs on shop fronts to help those with dementia buy fruit or find the pharmacy.

Public and private hospitals are expanding old-age services, preparing for the time, around mid-century, when China expects to have more than 500m people over 60. The community centre in Gongshu is operated by Lejoy, a private health-care firm. A company executive, Fan Yixin, says that old-age services barely turn a profit for now, in part because today's elderly have low expectations for their own comfort, after enduring the Cultural Revolution and other disasters. Those born in the 1960s will be more demanding as they age, she says. When they begin to ask for high-quality services "that will really be an opportunity for us."

For now Gongshu is an exception, not the norm. Few places are as prosperous as Hangzhou, one of 50 pilot cities chosen by the central government to test a range of elder-care programmes. And though lots of countries face challenges as they age, China starts with some disadvantages. Half of adult Chinese men smoke. Chronic conditions including high blood pressure, depression and diabetes are common and poorly managed. All those are risk factors for dementia. For a country boasting a space programme and aircraft-carriers, China has a weak primary health system. Many community doctors spend three years or less at medical school. As a result, sick city-dwellers crowd into large hospitals to seek care from specialists. Lots of rural patients receive traditional Chinese medicines from poorly trained village doctors.

Insurance coverage is patchy. Cognitive tests for detecting dementia are widely available, but brain-imaging scans—an important tool for confirming Alzheimer's—are expensive for patients. This January China became the third country, after America and Japan, to approve lecanemab, a new treatment for Alzheimer's. But at up to 200,000 yuan (\$28,000) a year, it will be unaffordable for most. Dementia is not one of the chronic diseases that public insurance schemes must cover. Chinese families already save at high rates, fearing ruinous health crises. More awareness of dementia will reinforce that behaviour, sapping consumer demand.

A cruel disease that finds society's weak points

Dementia threatens to widen rural-urban divides. In China families must fund residential elder care themselves. The largest state-run pension scheme, for salaried urban workers, pays retirees 3,600 yuan a month on average. Migrant workers or farmers may receive pensions of just 200 yuan a month, putting nursing homes out of reach. In rural areas, many of these homes are bleak places, reserved for the poor without families to support them.

Typically, urban families rely on grandparents for child care. In villages the old raise left-behind children, while working-age adults toil elsewhere. The age at which Chinese marry and have children is rising, so future grandparents will be older and more prone to dementia. Daughters (and daughters-in-law) will face pressure to quit work or return to villages to care for stricken elders. Young women are already reluctant to have children. It cannot help if a growing number must look after sick parents (often with no siblings to lend a hand, thanks to the one-child policy).

China's leaders have taken for granted free labour from the old and from adult daughters and daughters-in-law. The state relies on family savings and on local governments of very different means to fund health and social services. That already creates dramatic inequalities. Dementia will test that system to its limits. ■

Middle East & Africa



Iran and Israel

Striking out

DUBAI

One of the Middle East's oldest conflicts has entered a new era

EVEN AN INEFFECTIVE act can be transformative. The Middle East spent the first half of this month waiting for Iran to retaliate for an Israeli air strike, on April 1st, which killed two generals at its embassy compound in Damascus. When it came, on the night of April 13th, it was bolder than expected, a barrage of more than 300 missiles and drones aimed at Israel. That it caused no death and little destruction did not diminish its import: this was the first time Iran has struck Israel directly.

Now the region waits nervously again, this time to see when and how Israel conducts its almost inevitable response. Its partners in the West, particularly America, must strike a delicate balance between defending their ally and restraining it. Friendly Arab states are in an awkward position, too. And the belligerents themselves, Iran and Israel, must now navigate a conflict in which the old rules of engagement have been abruptly shredded.

No one doubted that Iran would retaliate. Months of Israeli strikes had wiped out

almost the entire leadership of its Islamic Revolutionary Guard Corps (IRGC) in Syria. The attack on a consular building was a last straw for hardliners, who demanded a muscular response (see next article). But most observers, including Israel, thought Iran would do so in a less direct way, pursuant to a long-standing policy of fighting Israel through proxies rather than head-on.

Iran's strike was telegraphed for days. That gave ample time to prepare: not only for Israel, but also for an ad hoc coalition that included America, Britain, France, Jordan and other Arab states. They shot down all but a handful of the projectiles. Four missiles hit Nevatim air base, in southern

→ ALSO IN THIS SECTION

37 Hardliners in Iran

38 Israel's dilemma with Iran

39 Catastrophe in Sudan

40 Tanzania's hobbled opposition

Israel, but caused little damage.

Israel's leaders have vowed to hit back. "Any enemy that fights against us, we will know how to strike him, no matter where he is," Yoav Gallant, the defence minister, said on April 16th. Their options range from a response in kind against military bases in Iran to cyber-attacks on key infrastructure or strikes on the IRGC abroad.

Allies have spent days pushing for restraint. Joe Biden told Binyamin Netanyahu, the Israeli prime minister, that America would not support a direct counter-attack. The American president worries that it would lead to expanding tit-for-tat bombardment—the sort of regional war he has sought to avoid since October 7th. European leaders sent a similar message.

To dissuade Israel, they will need to convince it that they take the Iranian threat seriously. That is easier said than done. America promises new sanctions on Iran's missile and drone programmes, but that alone will not reassure Israel. Some American officials suggest a loftier idea. They point to the unprecedented co-operation between Western and Arab states during the Iranian attack: Jordanian jets downed dozens of Iranian drones, while Qatar, Saudi Arabia and the United Arab Emirates (UAE) helped behind the scenes. Such co-ordination seems to fulfil a long-held American goal. For years it has urged Arab states and Israel to integrate their air defences, hoping to blunt Iran's arsenal.

If Israel refrains from a spectacular counter-attack, these officials argue, there is an opportunity to reinforce a regional coalition. The idea appeals to Israeli officials as well. "This event is not over," said Benny Gantz, a member of the war cabinet. "The regional co-operation which we built, and which withstood a significant test, needs to be strengthened."

Don't forget Gaza

Such talk makes Arab officials uncomfortable. They are still furious with Israel over Gaza and also worry about the threat from Iran, which has threatened to attack Jordan if it co-operates further with Israel.

Jordan says, rightly, that it shot down Iranian drones because they violated its airspace. It also probably saw a diplomatic benefit. The kingdom is among the world's most aid-dependent countries. America, its largest single donor, provided \$1.2bn, along with military aid worth around 20% of Jordan's defence budget in 2022. Helping protect Israel gives King Abdullah a boost with lawmakers in Washington.

Gulf states had their own motives. Some officials were miffed to watch America rush to Israel's defence. They saw a contrast with 2019, when Iranian-made drones struck Saudi oil facilities, and 2022, when they hit Abu Dhabi, the capital of the UAE. America did little in response. The incidents are not quite analogous. There was no advance warning of the attacks on Saudi Arabia and the UAE. Saudi Arabia is pushing for a defence treaty with America. By helping shoot down Iranian drones, Gulf leaders hoped to show that a formal arrangement would offer tangible benefits.

Like Israel, many Arab states see Iran as their main threat. But a sense of shared danger will not override their anger about Gaza or their fear of an Iranian attack. The prerequisites for deeper co-operation, they insist, are a ceasefire in Gaza and a commitment from America to defend them if attacked. Neither seems imminent.

Israeli leaders should not be overconfident. Their air defences were impressive, albeit they had days of advance warning and ample foreign help. A surprise attack might be more effective. Still, Iran can only repeat the trick so many times. America estimates it has around 3,000 ballistic missiles. So it used 4% of its arsenal—and a much larger share of those able to reach Israel—in a single night, to no great effect.

Iran had two goals: to appease hardliners and to deter Israel from future strikes. It almost certainly failed at the latter. Firing hundreds of missiles and drones and hitting nothing of value makes Iran look belligerent yet weak—a mix that invites, not deters, further attacks.

That suggests a longer-term worry. Mr Biden spent the first half of his presidency trying to revive the nuclear deal with Iran,

which imposed strict caps on enrichment work in exchange for relief from economic sanctions (and which Mr Trump abandoned in 2018). The effort failed. Iran now has a stockpile of 122kg of uranium at 60% purity, enough to produce three nuclear bombs if refined further to weapons-grade.

The Iranians have been cautious. They have walked up to the "nuclear threshold" but refrained from crossing it, lest they trigger tougher multilateral sanctions or a military strike. The past few weeks may change their calculus. If drones and missiles are not enough to deter Israel, they may reckon they need a nuclear weapon to do so. That, in turn, would greatly increase the chances of an Israeli attack on their nuclear facilities. Iran chose to move its decades-long conflict with Israel into the open—but the consequences of that decision will be hard for anyone to predict. ■

Iranian politics

Who's in charge?

Iranians fear their brittle regime will drag them into war

DESPITE ITS 45-year-old hostility towards the "Little Satan", Iran had never fired a shot at Israel from its own territory. Instead, the road to Jerusalem went through Karbala, an Iraqi city holy to Shias, said the Islamic Republic's founder, Ayatollah Ruhollah Khomeini. Hence he waged war with Iraq. Ayatollah Ali Khamenei, Iran's supreme leader since 1989, used its proxies—Hizbullah, a Shia militia in Lebanon, and Palestinian militant groups, Hamas and Islamic Jihad—to hit Israeli targets and avoid direct confrontation. When in recent years Israel attacked Iran's

→ Middle East Dispatch

Subscribers to *The Economist* can sign up for Middle East Dispatch, our new weekly newsletter that keeps you in the loop on a complex and consequential part of the world, by visiting economist.com/newsletters/middle-east-dispatch



nuclear programme and its scientists in Tehran, the capital, Mr Khamenei's advisers called for "strategic patience".

That has all changed. The salvo of more than 300 drones, cruise and ballistic missiles launched at Israel on April 13th heralds "a paradigm shift", says Ahmad Dastmalchian, Iran's former ambassador to Lebanon. The firepower stunned many Iranians, far exceeding that used after America assassinated Iran's top general, Qassim Soleimani, in 2020. The head of Iran's Islamic Revolutionary Guard Corps (IRGC), Major-General Hossein Salami, has said the regime is now working with "a new equation". "The era of strategic patience is over," said an adviser to Iran's president on X (formerly Twitter) on April 14th.

Foreign pressure partly explains the policy change. Israel has ratcheted up its attacks on Iranian targets throughout the Middle East since the start of the war in Gaza in October. It has killed 18 IRGC commanders and about 250 Hizbullah fighters in attacks on Syria and Lebanon. Israel's air strike on April 1st proved that Iran's proxies were no longer providing the deterrence on which it has relied for so long.

But domestic forces in Iran are also shaping decision-making. For most of his career Mr Khamenei relied on gruff conservative pragmatists like himself. Many were commanders in the IRGC, the regime's most powerful fighting force, and ready to work with the West if they thought that would bolster the regime. But more recently a group of ideological diehards has risen to prominence. They are to Iran what the religious hard right is to Israel. The Paydari Front, or Front of the Stability of the Islamic Revolution, are Shia supremacists who oppose any kind of compromise with anyone inside or outside Iran. They consider any reconciliation with the West such anathema that some of their ilk burnt the text of the JCPOA, the deal Iran signed with seven world powers in 2015 that limited its nuclear programme—in parliament. They liken "strategic patience" in the face of Israeli attacks to appeasement.

Their opponents speak of state capture. Ebrahim Raisi, the hardline cleric elected president in 2021, has given them prominent positions in his government. His father-in-law is perhaps Iran's most radical cleric; his sermons fire up the Paydaris' zeal. They tightened their grip on power in parliamentary elections last month after many people boycotted the vote. They have passed new chastity laws. Against the advice of IRGC old-timers, they want to reimpose the mandatory hijab after its de facto suspension following widespread protests in 2022. On the day Iran struck Israel, they sent the morality police back onto the streets after a year-long hiatus.

Realists in Iran know that their military hardware is no match for Israel's. Its air

► force projected regional power under the shah, but has not been upgraded since then. Its 1960s F-4 American warplanes are no match for Israel's F-35s, the world's most advanced fighter jet. Many of its tanks date back to the 1960s and 1970s. But the Paydari Front sees its earthly battle in divine terms. "When you shot arrows at the enemies, you did not shoot; rather God did," said the zealots, quoting the Koran after Iran's attack. They pray for a conflagration that could trigger the coming of Imam Zaman, a messianic leader who will inaugurate the end of days. After Iran's strike their followers celebrated in the streets and distributed sweets. They have plastered Tehran with banners in Hebrew warning Israelis to stock up on supplies in anticipation of another attack.

Paydari clerics have also infiltrated the ranks of the IRGC. The most recent generation of commanders spent their careers attending summer camps run by Paydari clerics, many of whom are also posted to their units. "The new generation is more ideological and abrasive, less experienced and less pragmatic," says Saeid Golkar, an expert on the IRGC at the University of Tennessee at Chattanooga. Unlike earlier generations, they have no memory of the Iran-Iraq war in the 1980s. They use religious texts to devise strategy. "Those who don't know war are more eager to fight," he says, quoting an Iranian saying.

Mr Khamenei still calls the shots. His senior commanders say they gave Israel and its allies three days' notice of the attack. They signalled when it was over. But some Iranians question the 84-year-old's strength to withstand the Paydari campaign. Under Mr Raisi, the religious right has purged the civil service of reformists and other naysayers. It has used Israel's continued attacks to marginalise the remaining pragmatists within the regime and to rebuff their calls for restraint. Some claim to welcome the prospect of an Israeli strike on Iranian soil. They reckon it would unite Iranians, a nationalist bunch.

But for all its power, the Paydari Front's rise may be making the regime more brittle. The gap between Iran's rulers and its subjects grows ever wider. Mr Raisi is almost as unpopular with his people as Benjamin Netanyahu is in Israel. Many Iranians blame his inexperienced ideologues for crippling the economy (the rial reached a new nadir against the dollar after the April 13th attack). And they fear that their zealotry could drag Iran into all-out war. Such is the antipathy towards them that many view the regime's enemies as friends. Graffiti have appeared calling for Israeli reprisals. "Hit them, Israel. Iranians are behind you," read one in Tehran. As an Iran-watcher noted, Iranians' reaction to an Israeli strike could prove a greater threat to the regime than the attack itself. ■



Iran's attack

Israel's dilemma

JERUSALEM

How does Israel retaliate against Iran without squandering a new coalition?

IN THE SPACE of two weeks Israel has been dealt two major strategic surprises. The first came in the aftermath of Israel's air strike against Iran's embassy compound in Damascus on April 1st. Intelligence indicated the Islamic Republic was about to abandon its decades-long strategy of confronting Israel through proxies and this time retaliate directly from its territory.

The Iranian attack came on April 13th in the shape of hundreds of drones and missiles launched towards the Jewish state. With it came the second surprise. A coalition of Western and Arab nations deployed fighter jets in the skies over the Middle East and, along with Israel's missile-defence systems, intercepted nearly all the incoming threats. Together they reduced the immediate impact of the attack to one wounded girl and some minor damage to an Israeli air base. But they also left Israeli decision-makers with a dilemma.

For Israel, a small nation that has built its survival in a hostile region on military deterrence, failing to respond to a direct attack on such a scale on its territory is all but unthinkable. The missiles fired by Iran could have been devastating. Few in Israel doubt the need for a response.

But Israel has a lot to lose if it fails to calibrate its response. The international coalition formed at the urging of President Joe Biden to foil Iran's attack could continue to be a big strategic asset. "All the countries involved, both from the West and the

Arabs, have already been working quietly together for years," says an Israeli security official. "This is the first time they've been seen openly in action against Iran—and that's a massive development."

Mr Biden, anxious to avoid a regional war, urged Benjamin Netanyahu, Israel's prime minister, to "take the win" and avoid further escalation. The Arab regimes that were involved, particularly Jordan and Saudi Arabia, do not want to be seen as Israel's protectors; most of the Middle East is still focused on the bloodshed in Gaza. Preserving the coalition will be no easy task.

The Iranian attack has shifted some of the international focus away from Gaza. After months of condemnation of its actions in Gaza, Israel has unexpectedly found itself once again in the position it was in the wake of the Hamas massacres on October 7th—supported by its allies. "We've been given another moment of grace. Let's see how quickly we waste it," says one jaded Israeli general.

The consensus among Israel's war cabinet and generals is that Israel will retaliate. But the timing and nature have been hotly debated in a series of inconclusive cabinet meetings. Plans for an immediate counter-attack were already in the works in the early hours of April 14th, while Iran's drones and missiles were on their way to Israel. The failure of the Iranian attack and the phone-call from Mr Biden stopped Israel in its tracks. But this may not last.

As the ministers and generals argue, the biggest mystery has been the position of Mr Netanyahu. Since the 1980s he has been warning of the Iranian threat and the need for the West to co-operate with Israel and the Sunni Arab nations against it. But in the days since Iran's strike he has fallen notably silent. He has appeared once in public, in front of new IDF conscripts. All he had to say was that "Iran stands behind Hamas" and that Israel is determined "to defend ourselves in all sectors".

Mr Netanyahu's dilemma is that even as he is being offered the coalition against Iran that he has demanded for so many years, his far-right allies in government are demanding he take action which would squander that opportunity. They are clamouring for "a crushing attack", in the words of Itamar Ben-Gvir, the national-security minister. The far right is also worried that America will force Israel into agreeing to a ceasefire in Gaza and the return of the Palestinian Authority there. Mr Netanyahu's silence is explained by his dependence on the support of such political allies.

But Aryeh Deri, one of the prime minister's closest allies in the government, hinted at Mr Netanyahu's position in a radio interview. "We have to remember that there is still an unfinished campaign in Gaza," said Mr Deri. "At a time like this, we shouldn't open more fronts." ■

Sudan's civil war

Ever deeper into hell

EL-FASHER

After a year of bloody civil war, Sudan faces starvation

IT HAS BECOME a morbid sort of trivia game. Which country has the world's largest population of internal refugees? The highest number of people facing famine? And where do aid agencies have the biggest humanitarian load, but until this week were short of 95% of the funding they need? The answer is not, as many might assume, Gaza or Ukraine. It is Sudan.

When the conflict in Africa's third-largest country began a year ago it might have been mistaken for a clear-cut fight between two generals, each vying for control of the central state. On one side were the Sudanese Armed Forces (SAF), led by General Abdel Fattah al-Burhan; on the other the Rapid Support Forces (RSF), a paramilitary unit under the command of Muhammad Hamdan Dagalo (a Darfuri warlord universally known as Hemedti). Even after fighting exploded in the capital, Khartoum, and quickly spread to Darfur, some observers still imagined it could be contained or that the two sides would grind themselves to a stalemate, and then strike a power-sharing deal.

Instead the conflict has metastasised into a nationwide conflagration so vast and anarchic it could yet destabilise several of Sudan's neighbours. If there were, at first, two broadly coherent armed blocs under identifiable leadership, now there is a mosaic of competing militias and rebel movements, each with its own interests and agendas. Arms and mercenaries are pouring over the border from Chad, Libya and the Central African Republic, and across the Red Sea (see map). Even fighters from as far afield as Russia and Ukraine have reportedly joined the fray. With neither side having managed to land a decisive blow, both the SAF and the RSF have begun to splinter. "We are hurtling towards a failed state," frets Tom Perriello, America's recently appointed special envoy. "There is a real risk of a 20- to 25-year setback for the people of Sudan and the wider region."

More immediate is the risk of mass starvation. "The situation is catastrophic," says Michael Dunford, the head of the UN's World Food Programme in east Africa. "When you look at the sheer size and scale, we're desperately concerned about where this is headed."

On April 15th donors pledged around \$2.1bn to fund humanitarian efforts. Yet this may already be too late to avert a famine, which is expected by June and may kill



500,000 people, according to the "most likely scenario" in a study by the Clingendael Institute, a Dutch think-tank. In its "extreme" scenario forecast, up to a million may perish. Because of the war, large parts of Sudan—in particular Darfur—collected almost no harvest in 2023. National cereal production collapsed by almost half; the price of basic food commodities shot up by as much as 83%. These trends are set to worsen with fighting having now reached the breadbasket state of Gezira.

Though the UN has yet to declare a famine, few experts doubt that one is already



Losing hope

under way in parts of Sudan. In the worst-affected areas, which include the capital, people are eating leaves to survive. Children are already beginning to die from malnutrition or related diseases. Some 70% of health facilities in war-stricken areas are no longer functional, according to Deepmala Mahla of CARE, an aid group. For most of last year refugees arriving in Chad, which borders Darfur, said they were escaping a fearsome campaign of ethnic cleansing unleashed by RSF troops and allied Arab militias against local black Africans. Now the new arrivals tell aid workers they are fleeing hunger.

Both sides are obstructing humanitarian assistance. RSF fighters regularly attack aid lorries and loot warehouses belonging to NGOs. In February the SAF banned aid agencies from delivering supplies via Chad. Since then it has partially relented, but it continues to withhold visas and travel permits for aid workers. Crossing the lines between territory controlled by the SAF and RSF to deliver assistance is "cumbersome and deliberately time-consuming", notes a UN official. As a result, whole regions have for months been cut off from emergency supplies. "Previous food crises in Sudan were localised," argues Alex de Waal, an expert on famines at Tufts University. "Now we are witnessing something we haven't seen since the 19th century: a nationwide food emergency."

Consider el-Fasher, North Darfur's capital and the SAF's last major holdout in the west. Before the war the city was a sanctuary for those escaping violence and hunger elsewhere: tens, if not hundreds, of thousands of civilians had sheltered there since the previous round of ethnic cleansing in Darfur 20 years ago. Yet these days it is a microcosm of the chaos that prevails elsewhere in Sudan. In theory the national army remains in charge, with several thousand troops holed up in barracks in the city centre. But in reality rebels from the local Zaghawa ethnic group provide most of the security, while much of the outskirts is under the control of the RSF and affiliated militias. Crossing from one side of the city to the other means navigating multiple checkpoints, each manned by a different armed group. Though the SAF conducts frequent air strikes on RSF positions, they often end up hitting civilian areas, including those under the army's control.

With movement in, out and around el-Fasher so costly and dangerous, life inside is growing desperate. "We are already too late," says Justine Muzik of Solidarités Internationale, a French humanitarian charity. Dengue fever and malaria are running rampant. Every two hours in Zamzam, a refugee camp on the south-western side, a child dies from lack of food or medical care, says Médecins Sans Frontières, another French charity. With new arrivals

streaming into the city from other parts of Darfur, basic supplies are dwindling. Though food is still available in the market, a sack of rice can cost almost eight times what it did before the war.

Across large parts of the country soldiers from both sides are raping women and girls, in some cases because of their ethnicity. In Khartoum state alone more than 1,000 rapes have taken place, according to lawyers and doctors. Ghada Abbas, a human-rights lawyer who recently fled Sudan, describes an incident in which soldiers violated three sisters aged 12, 16 and 18 in Omdurman, a city close to the capital. Although people heard their cries, "nobody dared to go out," she says.

Elsewhere there are some hopeful signs. Discreet ceasefire talks are under way in the Egyptian capital, Cairo. A separate process backed by America is also to resume in Saudi Arabia soon. However, in recent weeks the regular army has reversed some of the RSF's earlier gains in Khartoum, raising hopes among its supporters of a decisive victory. Just a few weeks before it had been the RSF that appeared triumphant. "What this looks like now is musical chairs," not a genuine sea-change, argues Kholood Khair of Confluence Advisory, a Sudanese think-tank. With both sides still determined to gain the upper hand, the prospect of peace is slim. ■

Democracy in Tanzania

Pleading no contest

DAR ES SALAAM

The next elections will be both uncompetitive and unfair

THE MOST recent Tanzanian general election, held in 2020, made a mockery of democracy. Agents of the ruling CCM party stuffed ballot boxes, pre-marked voting slips and erected fake polling stations. Police officers rounded up opposition candidates and their supporters. To hide the fraud, the authorities shut down the internet, gagged journalists and suppressed rights groups. The few opposition supporters brave enough to protest were shot at. At least 14 were killed. John Magufuli, then Tanzania's president, duly won re-election with 84% of the vote. The CCM did even better, securing all but seven of the directly elected seats in the country's parliament.

Overturning such a whacking majority in a single electoral cycle would be tough anywhere. Yet, when Tanzanians return to the polls next year, the opposition ought not despair. The execrable Mr Magufuli is dead. His successor, Samia Suluhu Hassan, is more tolerant of criticism.



Brighter than their prospects

She is also more vulnerable electorally than her predecessor. The margin of Mr Magufuli's victory may have been inflated, but he was undoubtedly popular. By demonising foreign investors, denouncing Western imperialism and championing the poor, he built a broad support base. Mrs Samia, by contrast, has rebuilt ties with the West, welcomed foreign investors and declined to engage in rabble-rousing. These may be sensible policies, but there are few votes in them.

Tanzania's GDP per person is among the 30 lowest in the world. Some 44% of people are poor. Given that the CCM has held power since independence from Britain in 1961, there must be a sizeable chunk of Tanzanians yearning for change.

Even so, diplomats and analysts think it may take 15 years before the opposition has a shot at winning power. "Politicians like to say 'we will win, we will win', but we have to be practical," says Zitto Kabwe, who stepped down as the leader of Tanzania's second-biggest opposition party, ACT-Wazalendo, in March. Mr Kabwe reckons the best the combined opposition can hope for next year is about 25% of the vote.

This is because Mr Magufuli eviscerated the opposition in a five-year reign of terror. The trigger was an election in 2015, when the opposition won 40% of the presidential vote and 45% of the parliamentary vote. In response, Mr Magufuli intimidated, bought off and silenced his critics. Defections from Chadema, the principal opposition party, were encouraged. The business interests of opposition members and donors were relentlessly targeted.

Those who could not be induced to defect faced arrest, or worse. Tundu Lissu, Chadema's presidential candidate in 2020, survived after being riddled with bullets by unknown assassins. Freeman Mbewe, its

chairman, was assaulted and had his leg broken. Mr Magufuli may be dead, but the chilling effect of his presidency lingers.

Worse than the fear, though, was the systematic dismantling of the opposition at a local level. In 2016 Mr Magufuli banned the opposition from holding political rallies. These allow politicians to forge connections with potential voters, particularly in villages and the countryside. More people attend political rallies in Tanzania than anywhere else in the world, as far as available statistics show, according to Dan Paget of the University of Sussex, who is writing a book on the subject. Although Mrs Samia lifted the ban last year, it had silenced the opposition across swathes of Tanzania for six years.

Perhaps the most grievous blow Mr Magufuli struck against the opposition came not in the general elections of 2020 but in the local polls the year before. The electoral commission barred 94% of Chadema candidates from standing, prompting an opposition boycott. As a result, the CCM won 99% of local seats.

It took two decades from the restoration of democracy in 1992 for the opposition to become competitive. Its emergence at national level was built on its successes in running local governments. Without a presence in parliament or local government, the opposition can hardly present itself as a government-in-waiting. "Under Magufuli our focus was on survival," says Mr Kabwe. "Now we have to rebuild."

Tanzania's election process has long been laughably skewed. Every official involved in running previous polls, from returning officers to the electoral commission, was either directly appointed by the president or was a public servant whose livelihood depended on not upsetting the ruling party. Losing candidates were forbidden from mounting court challenges in a legal system where, in any case, judges are also appointed by the president.

Negotiations between Chadema and the government for electoral and constitutional reforms have broken down. Mr Lissu, who opposed the talks, says that the CCM "flatly rejected" all proposals for meaningful change that Chadema put forward. "While uttering pretty phrases, she has actually been consolidating authoritarianism," he says of Mrs Samia. Now, he fears, the CCM is intent on ensuring that local elections in December will be a repeat of those in 2019, with Chadema candidates again excluded on technicalities.

In this gloomy view, any prospect of rebuilding and securing even 25% of the vote next year therefore looks remote. "Without electoral reform, there is no hope that we will get democracy peacefully," says Mr Lissu. "We will have to advance our cause on the streets through demonstrations and mass action." ■

Europe



Education in Germany

Schuling around

BERLIN, COLOGNE AND DORTMUND

Germany's scores are heading down, as its schools fail to adapt

FROM MAY 1ST the proud holders of doctorates will no longer be allowed to put the title Dr in front of their name in German passports. For a country obsessed with qualifications—Prof Drs are fairly common and even Dr Drs not so rare—this decline in standing may be hard. But it is not as hard as the decline in German educational standards.

The most recent results from three very different testing regimes, comparing pupils of varied ages, point in a single direction: downwards. The best-known, the Programme for International Student Assessment (PISA), tests performance in maths, reading and science among 15-year-olds across some 80 countries every three years. Its most recent scores confirm steep plunges in all three subjects in the past decade in Germany (see chart on next page).

A separate study that measures reading competence among fourth-graders across 65 countries, known by the acronym IGLU,

found that 25.4% of the German cohort lacked adequate skills in 2021, up from 18.9% five years earlier and 17% in 2001. Meanwhile the latest survey of German-language competence among ninth-graders by IQB, an educational-research institute that compares outcomes between German states, found that the proportions nationwide that fail to reach minimum standards in reading, listening and spelling had risen respectively by 9, 16 and 9 percentage points since 2015.

→ ALSO IN THIS SECTION

- 42 Scholz in Beijing
- 43 Macron the hawk
- 43 Waiting for the Russians
- 44 Ukraine's drones
- 45 Charlemagne: Repressing rightists

The failure is not catastrophic. Germany's leading universities are still among the world's best, as are its opportunities for vocational training. Even in decline, its schools perform in the middle rank of European standards; but that still means that they do worse than Austria, Poland, the Czechs and the Swiss—Germany's neighbours. Nor is the alarm new. When their schools first underwent comparative tests, back in 2000, the results so surprised Germans that the ensuing “PISA-Schock” prompted a wave of reform.

What is new is that Germany is achieving mediocre and diminishing results despite having tried varied reforms since the *Schock*, and despite spending a similar proportion of its GDP on schooling as better-performing neighbours do. Nor can the poor showing be ascribed simply to either the covid-19 pandemic or to immigration, though the system's failure to respond well to the influx of 1m refugees in 2015-16 is certainly part of it.

The causes lie deeper. Germany “is failing to adjust to the learning needs of the 21st century, as in Asia and the Nordic countries”, says Andreas Schleicher, director for education at the OECD, which runs the PISA tests, in Paris. The system's rigidities start with unhelpful cultural attitudes. In the country that invented the kindergarten, many parents shun pre-school educa-

tion in the belief that it encourages excessive competition. German children start school at six, but early schooling is often lax and playful, because children "should not be overstressed". Fourth-graders, for instance, spend almost 30% less time reading in class than the OECD average.

Teachers, traditionally unquestioned masters of their classrooms in Germany, often resist evidence-based new methods or standardised tests that might "stigmatise" poor performers. Many see education not in terms of building core competences, but as a mission to create cultured citizens. In most German states primary school lasts just four years; pupils are then divided between those destined for academic studies or for technical/vocational careers.

All these traits mean that children from less-educated, poorer or non-German-speaking families are far less likely to be chosen for the academic secondary schooling that leads to better-paying careers. Of children with at least one parent holding a higher degree, 79% will go on to university; of those with only professional qualifications, just 27%; of those who speak a foreign language at home, 23%; and of those whose parents hold no professional qualification, a mere 12%.

Such things are slow indeed to change. On the day Nele McElvany's son was born 19 years ago in the Berlin district of Kreuzberg, another mother in the same building also gave birth. Ms McElvany—now Prof Dr McElvany—was dismayed at the time to think that while her own child would almost certainly end school holding an *Abitur*, the certificate for university entrance, her neighbour's would not, simply because of their contrasting backgrounds. The problem is compounded, says Mr Schleicher, by the fact that nearly everyone in a position of power is a product of the academic track. They simply cannot see the shortcomings of a system that they themselves benefited from.

Even so, would-be educational reformers have repeatedly tried to shake up a system unique to a clutch of German-speak-

ing countries. One result is that across Germany high-school students relegated to the non-academic track can now more easily cross over, or simply study to take the *Abitur*. Since education falls under state rather than federal control, German states have also tinkered by introducing longer school days, by extending primary school (as in Berlin) or by altering the length of high school (as in the southern state of Baden-Württemberg).

But as Ms McElvany, an education expert and vice-president for research at TU Dortmund University, notes, too many such efforts have stalled or gone into reverse. The obstacles are numerous. Education is a heated subject, involving stakeholders from anxious parents to powerful teachers' unions. Election cycles are short. Politicians have a lot to lose from meddling in schooling, notes Ms McElvany, and little to win from projects that are often expensive and long-term.

The city-state of Hamburg has experimented successfully. But other states suffer from systemic inertia. This often extends down to district level and to individual schools. A survey in 2017, for instance, discovered that whereas schools in the Netherlands exercised direct control over 92% of decision-making, including the hiring of teachers, Germany's level of independence trailed at a meagre 17%. "When I had to replace some simple parts that a kid broke in a science lab, I found that our school doesn't even have a bank account," says a teacher at a Berlin high school. "Every spending decision has to go through the district council."

Asked how she would ideally tackle school reform, Ms McElvany unhesitatingly ticks off a dozen measures she would take. Luckily for Germany, none of them sounds very hard: following Hamburg's example of language pre-schooling; emphasising core competences such as reading; loosening budget strings to let underperforming schools fix their own problems. Unluckily for Germany, the political will to do much of this is absent. ■

Germany and China

An awkward meeting

BERLIN

It is time for Xi Jinping to accept that Germany isn't America's puppet

AN OFFICIAL CHINESE read-out said at the summit meeting in Beijing that ended on April 16th reflected the strong ties that bind the world's second- and third-largest economies. A morning of talks with Xi Jinping, China's president, punctuated by a comradely stroll in the garden and ending in a cordial lunch, seemed to have marked a friendly climax to the three-day visit to China by Olaf Scholz, Germany's chancellor.

But not all is as rosy as spring. For a start, the German home audience was denied a live view of their chancellor's frolic in Beijing because ZDF, a German public broadcaster, could not get Chinese press accreditation from the host country's notoriously awkward bureaucrats. But behind that quibble lurked much bigger troubles. Just before the trip to China—his second since he became chancellor in 2021, and one for which he has attracted a fair amount of criticism from within Europe—Mr Scholz told an interviewer that although an American-style "decoupling" of the German economy from China is a bad idea, "de-risking" would be wise. "In Germany, the peacemaking effect of economic contacts was certainly overemphasised," said the former mayor of Hamburg. "Nobody has that illusion today."

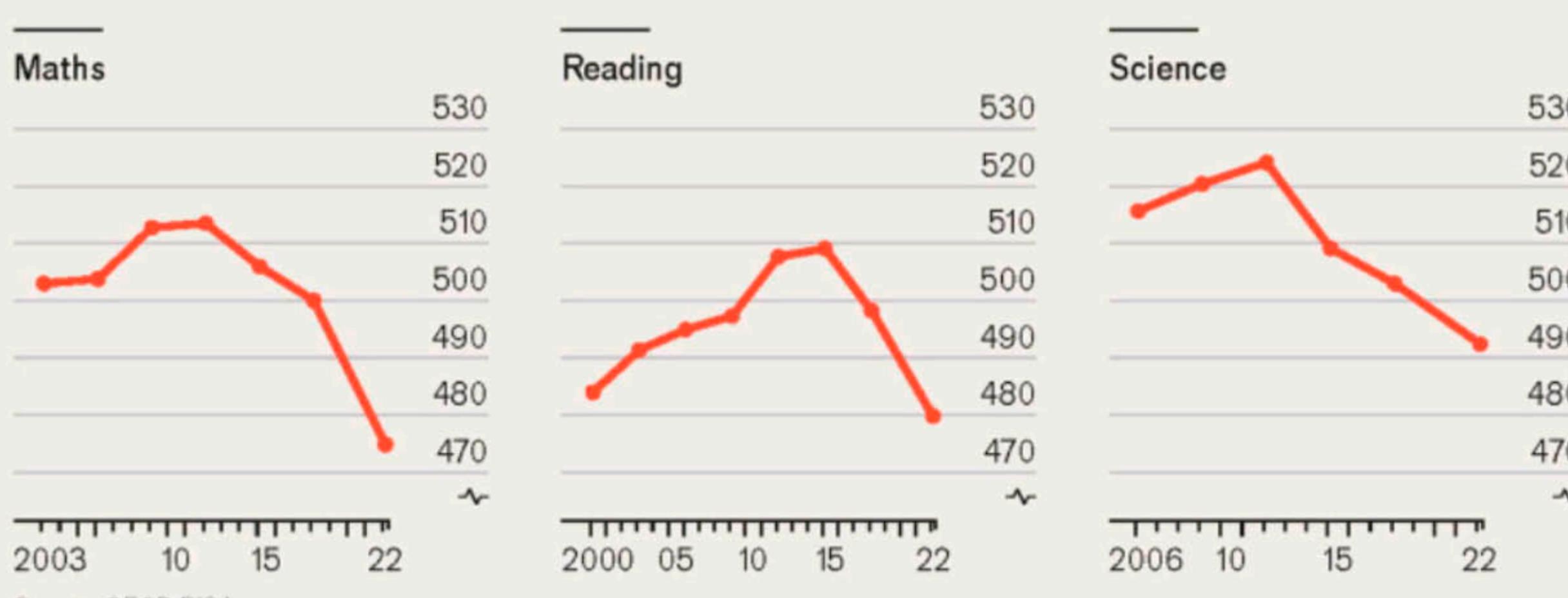
This may be true for Germany, which learned a lesson after wooing Russia for decades with fat energy contracts, only to see it invade Ukraine. Yet the statement from Mr Xi stressed a contrary message. It said that the intertwining of economies is not a risk but an opportunity, as well as "the guarantee of a stable relationship".

This difference means a lot to the bosses of 12 big German firms who accompanied Mr Scholz. Many are deeply exposed as investors in China, or face stiffening Chinese competition. A recent report by economists at Allianz, a German insurance giant, suggests that the two countries are moving "from complementarity to substitution", as China begins to replace Germany even in high-value manufacturing. One example: since 2019 German machinery exports to ASEAN countries have fallen by 14%, and Chinese exports of the same goods have risen by 31%. China is pushing Germany aside even in Europe. In some sectors, such as solar panels and basic ingredients for essential pharmaceuticals, it already enjoys a near-monopoly.

So when Mr Xi argued against protec-

Across the board

Germany, mean PISA test scores of 15-year-olds





An unequal relationship

tionism, the response from Mr Scholz is likely to have been as stilted as the Chinese leader's response to German nagging on such subjects as Ukraine or human rights. The fact is that although both countries would like to insulate their bilateral relationship from the more strident behaviour of their allies (for China that means Russia; for Germany it is America and some of the more hawkish European countries), they both sense that this is not sustainable. Soon enough, China will have to stop pretending that Germany, and indeed Europe, is acting tougher only because of American pressure, and accept that Europeans do indeed have their own reasons to be wary of China. And Germany will have to stop pretending there is much of a difference between "de-risking" and "decoupling". ■

France, Russia and Ukraine

Le nouveau faucon

PARIS

How Russia targeted France and radicalised Emmanuel Macron

ON JANUARY 16th the French president, Emmanuel Macron, announced that he would send another 40 long-range Scalp cruise missiles to Ukraine. Later that day Russia bombed Kharkiv, in north-eastern Ukraine, claiming French mercenaries were based there and supplying a list of names that the French army says is fake. Shortly afterwards the French uncovered 193 websites set up to undermine public support for Ukraine in France (as well as in Germany and Poland), run by a Russian firm based in Crimea. Days later Sébastien Lecornu, the French defence minister, said Russian air-traffic controllers had threat-

ened that a French aircraft patrolling over the Black Sea would be shot down.

In recent months France has catalogued an intensified Russian campaign to sow division, discredit the country and test its army. Russian security services, say French sources, commissioned the stars of David stencilled on walls in Paris last October, to stir up inter-religious tensions. In March cyber-attacks briefly took down some of the French government's websites, and hackers stole data from its jobs agency. With the added help of Russia apologists in France, Russian bot farms turbocharged scare stories about bed bugs in Paris, used a deepfake French news report to fabricate a supposed attempt on Mr Macron's life, and spread vile false rumours about his wife, Brigitte.

This systematic targeting, say those close to the president, underlies a shift that continues to puzzle many observers: Mr Macron's conversion from a leader who sought to engage with Russia's Vladimir Putin to one of Europe's most hawkish voices. The president who once urged allies not to "humiliate" Russia has now called for Russia's defeat, urged allies not to be "cowardly", and warned that a Russian victory would spell "the end of European security". Mr Macron has not spoken to Mr Putin since September 2022. On February 26th he refused to rule out sending ground forces to help Ukraine.

What explains this shift? At a basic level, says Bruno Tertrais of the Institut Montaigne, a think-tank, Mr Macron was "mugged by reality". Mr Putin lied to him and played him. The French president's pre-war diplomatic outreach was a failure, even if he knew it was high-risk at the time. The assassination of Alexei Navalny in February served as a further jolt. As a former minister told *Le Monde*, Mr Macron was "radicalised by disappointment".

Ukraine's difficulties on the ground, as well as the prospect of another Donald Trump presidency, have made standing up to Russia more urgent. This comes at a time when Mr Macron has already concluded, in a speech in Bratislava last May, that bringing Ukraine into both the European Union and NATO would actually strengthen his ambition for European collective defence, not dilute it.

"For decades France had believed that when it came to Europe, smaller was better," writes Célia Belin of the European Council on Foreign Relations, in the American magazine *Foreign Affairs*. Russian aggression, she notes, has transformed the case for a wider EU. A French ten-year security commitment to Ukraine is now entrenched in a bilateral agreement, signed by Mr Macron and Volodymyr Zelensky in February. It is worth €3bn (\$3.2bn) in 2024 and includes a French promise to support Ukraine's entry into NATO.

Sceptics still query the sincerity of Mr Macron's conversion, pointing to French efforts to cap Ukrainian farm exports. Fine words are one thing; concrete action another. Figures from Germany's Kiel Institute suggest that French bilateral military aid is a fraction of Germany's, though the latest numbers go up only to mid-January. With a budget deficit in 2023 of 5.5% of GDP, France is strapped for cash, its army has little kit to spare and its industry is struggling to produce stuff much faster.

Others dismiss Mr Macron's hardline stance as electioneering, intended to distinguish his geopolitics from Marine Le Pen's, whose National Rally (RN) was once financed by a Russian bank. While this is indeed a campaign theme, its effectiveness is doubtful. The RN looks set to crush his party at polls for the European Parliament in June. The idea of sending ground forces to Ukraine is deeply unpopular in France.

It is noteworthy that Mr Macron's *volte-face* has won the loudest approval from Europe's once sceptical eastern fringe. "I do think it's genuine," says Nicu Popescu, a former foreign minister of Moldova. "Macron has concluded that the EU's security depends on the security of its neighbours." Mr Macron backs Estonia's idea of joint EU borrowing to pay for arms to Ukraine, an idea that is hated in frugal Germany. French diplomats recently drew up alarming scenarios about the implications of a Russian victory. Mr Macron, says a French military source, no longer harbours any doubts about Moscow's expansionist ambitions. If Russia wins, the president said last month, Mr Putin will not stop at Ukraine. Now Mr Macron needs to act on his new understanding. ■

Ukraine's defences

The Russians are coming

SUMY PROVINCE, UKRAINE

Ukraine is digging in as the Kremlin steps up its offensive. Will it be enough?

THE SUNKEN faces that peer from behind battered fences are aged, whether or not the bodies that carry them are old. Russia, eight kilometres away, isn't hiding. In the past 24 hours, three guided bombs landed in the village, with two of them exploding to devastating effect. Everyone here is in waiting mode. Oleh, the officer in charge of constructing a new network of fortifications on the outskirts of the village, shouts back a warning. "If you hear a whistle, you've got a few seconds to drop down on the floor. And hope for the best."

The construction of three new lines of fortifications in Sumy province is part of a

► billion-dollar Ukrainian scheme to shore up defences ahead of an expected Russian summer offensive. Diggers are working around the clock, as they are in Kharkiv, Zaporizhia and Donetsk provinces, where the main push is expected. Construction follows a master plan of interlocking trenches, underground command-points, observation posts, and sleeping quarters that double as field hospitals. The general rule is that army brigades build the first line. Engineering forces, local authorities and occasionally local businesses take care of the rest. The outer line, about 30km back, is the sturdiest, built in relative calm with diggers and reinforced concrete. After a long delayed start, the first part of the project is due to be completed by the end of the month. The question is whether that will be soon enough.

Things are already critical in part of the Donetsk area. On April 14th Ukraine's commanding general, Oleksandr Syrsky, said he was particularly concerned by a deterioration around the small town of Chasyv Yar. Russian troops had been ordered to seize it by Victory Day on May 9th, he said, and were amassing a huge strike force. There is frankly little to seize. Anton, a drone-company commander, describes the once-quiet town in apocalyptic terms. The earth is ash-grey; the air heavy with the smell of gunpowder and burning. Most buildings have been destroyed by artillery and guided bombs, he says, "dozens" of which land every day.

In Anton's view, the Kremlin is repeating scorched-earth tactics it used with success to seize nearby Avdiivka in February. With Russian guns firing at least seven times more than Ukrainian ones, it was just "a matter of time" before the process would be completed once again. Ukraine has spent most of the war in serious artillery deficit, he says, but the shortages have been more pronounced since December. With Ukraine lacking the means to suppress infantry advances, the Russian army is now able to approach its positions with ease. "You're always trying to preserve the ammunition you have, to defend against more serious advances. And so they keep creeping up, and you keep falling back."

The vulnerabilities have many people worried. Some media reports, quoting unnamed Western officials, have even suggested Ukraine may be on the verge of military collapse. Those fears are exaggerated. Mr Kostenko, who oversees groups in the south and east, assesses that there is only a "minimal" risk of a major Russian breakthrough in the near future. Ukraine is addressing its manpower shortages, he says. Things already look better than they did in December, when Ukraine's draft system essentially "broke down". But the critical factor remains ammunition. As long as a minimum keeps arriving, which so far it is,

Ukraine

Droning on

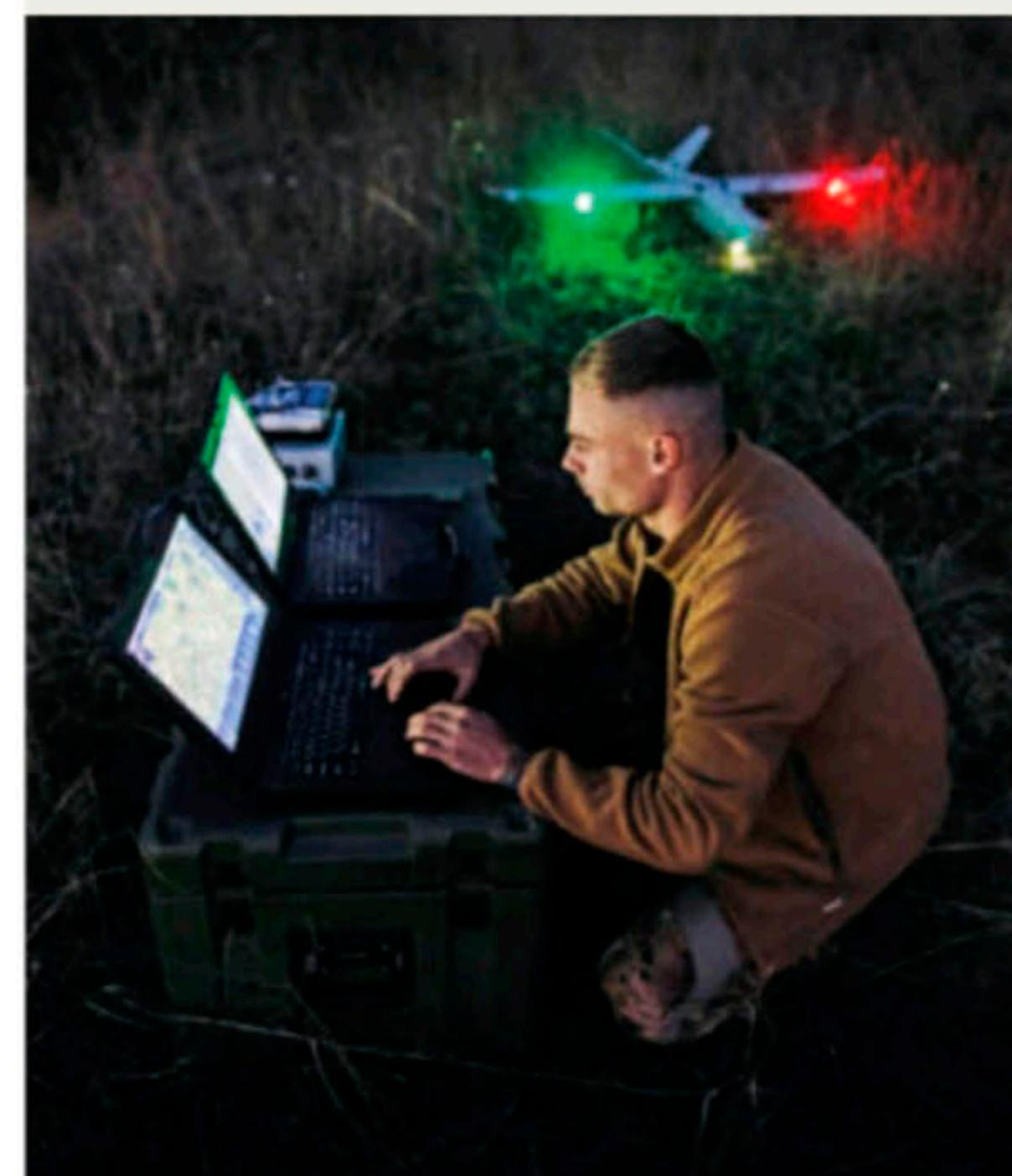
KYIV

The sky's no limit for Ukraine's deep-strike programme

A GUARD LOOKS on nervously. With every step, the air thickens with the smell of petrol. Around a corner is the workshop, and the buzz of manufacturing. Inside, lab-coated technicians are busy assembling grey birds under the glow of overhead lights. Young men in T-shirts scuttle about, before packing the drones in boxes for onward delivery. The destination for some of them will be 1,000km away and more—hunting for important targets inside Russia.

Since President Volodymyr Zelensky prioritised the technology, Ukraine has invested hundreds of millions of dollars into long-range drones, capable of searching out and striking distant targets. Half a dozen firms now make them.

The best of the new models has a range of 3,000km, able to reach Siberia.



Modern war

Born out of necessity—the West has been reluctant to provide Ukraine with long-range weapons—the programme has disrupted much of Russia's oil and military infrastructure. But the White House is not happy. It is pushing the Ukrainians to stop the strikes.

America's concerns have varied, from a rise in the oil price to the prospect of an uncontrollable tit-for-tat in which Ukraine could end up the loser. Fears of the latter rose in late March, when Russia inflicted millions of dollars of damage on Ukraine's energy infrastructure. The attacks revealed gaps in air defences and vulnerabilities to Russia's new Kh-69 low-altitude cruise missile. On April 11th such missiles destroyed Ukraine's Trypillia power station, 40km from Kyiv, though it was in range of the capital's Patriot air-defence systems.

So far, Ukraine is ignoring American advice to call off the strikes. "Detective", an intelligence officer responsible for part of the programme, says he has not received instructions to dial down operations. Yes, there has been a switch away from aiming at oil infrastructure in the past week, but it is probably temporary. "Our targets change day to day. We keep the Russians on their toes."

One long-range-drone producer claims that not every American representative agrees with its policy. His contacts "winked" while they delivered warnings. "They're privately telling us to keep going." The producer predicted an expansion of Ukraine's drone programme in the months to come. "Russia is scorching Ukrainian earth. It's time we did the same to European Russia."

Russia will find it difficult to achieve anything other than limited tactical success in small places like Chasyv Yar. "The front lines aren't pleasant, but the Russians have real problems too."

Not that any of that is calming nerves in Kharkiv, Odessa or even Kyiv, where rumours of imminent large-scale offensives have been stimulated by Russian influence operations and confused Ukrainian communications. A defence insider, who asked to remain anonymous to speak freely, insists that none of the supposed Russian operations looked particularly viable. He suggests "chaos" within Ukraine's main

staff had made the military picture seem worse than it was. "We are losing the information war to Russia," he complains. Another source suggests that bureaucratic paralysis had resulted from the worsening military situation, with few people willing to take the initiative.

For some, the delays in starting the fortification programme are a case in point. Ukraine long denied the reality, they say, and waited far too long, until February, to begin digging. But knee-deep in the black soil, the upbeat Oleh counters the critics. "Try constructing a trench in snowy, frozen minefields," he retorts. ■

CHARLEMAGNE

When farce meets petty tyranny

How a conservative conference in Brussels morphed into a crisis of liberalism



ONE OF THE few benefits of Britain leaving the European Union, at least for denizens of Brussels, was that Nigel Farage all but disappeared from the city's parliament, pubs and speaking circuit. The blowhard Brexiteer's return to the Belgian capital on April 16th will have done little to rekindle his passion for the place. As the former MEP addressed several hundred fellow-travellers of the hard right at a conference, Belgian police swooped into the venue with orders to shut the event down. Outnumbered, the coppers ended up beating a discreet retreat, allowing Mr Farage to deliver a few more quips about gravy-train Eurocrats and fake-news media. After some to and fro, the police opted to seal the conference venue instead, leaving the afternoon's speakers stuck outside and—worse, for attendees including Charlemagne—caterers unable to deliver food. Not to worry: lunch was replaced by a stern lecture from Suella Braverman, Britain's former home secretary, about the dastardliness of human-rights lawyers.

The half-hearted police raid at a reactionary gabfest was the culmination of a discomfiting series of events around the "National Conservatism" conference on April 16th-17th. At the ninth such jamboree, organised by the Edmund Burke Foundation, an American outfit, the star attraction of this iteration was Viktor Orban, Hungary's proudly illiberal prime minister. Unsurprisingly, some speakers held views outside the centrist consensus, albeit ones endorsed by plenty of voters. This *lèse-libéralisme* sent local Belgian authorities on a misguided mission to prove the "cancel culture" decried by conservatives is not just a conspiracy. A policy that aims to exclude hard-right parties from coalition governments, known as the *cordon sanitaire*, metastasised into an ugly variant whereby merely expressing such ideas is beyond the pale.

The first sign of trouble came a few days before the event, when its original venue, a posh set of heavily gilded rooms near the EU institutions used by political parties and diplomats for their own shindigs, decided to turf out the conservatives. One of Brussels's 19 district mayors had ginned up fears of "anti-fascist" protests, arguing that security was impossible to arrange. This is clearly nonsense. Brussels hosts dozens of summits featuring grandees that run into no such problems. Nor had policing been

an issue when the National Conservative bunch had held a similar event at the same venue in 2022. Discomfiting as that show of censorship was, more was to come. A backup Brussels venue was secured at a cavernous Sofitel near the European Parliament also well used to political confabs. As the conservative organisers were in the midst of setting up their stage on the day before the event, another Brussels district mayor worked to evict them, taking pride in foiling the conference of people whose views he disagrees with.

And thus it was that the homeless nationalists ended up cramped inside the Claridge, a former nightclub turned into a concert venue and part-time conference hall (with no connection to the luxurious London hotel, nor anything remotely posh). If the site originally booked was the Ritz of political rallies, this was more akin to a roadside motel, jammed between a second-hand clothes shop and a kebab joint in Belgium's poorest district; upcoming events include a Shrek-themed rave ("Bring out your inner ogre!"). Even then, yet another Brussels mayor sent in the cops.

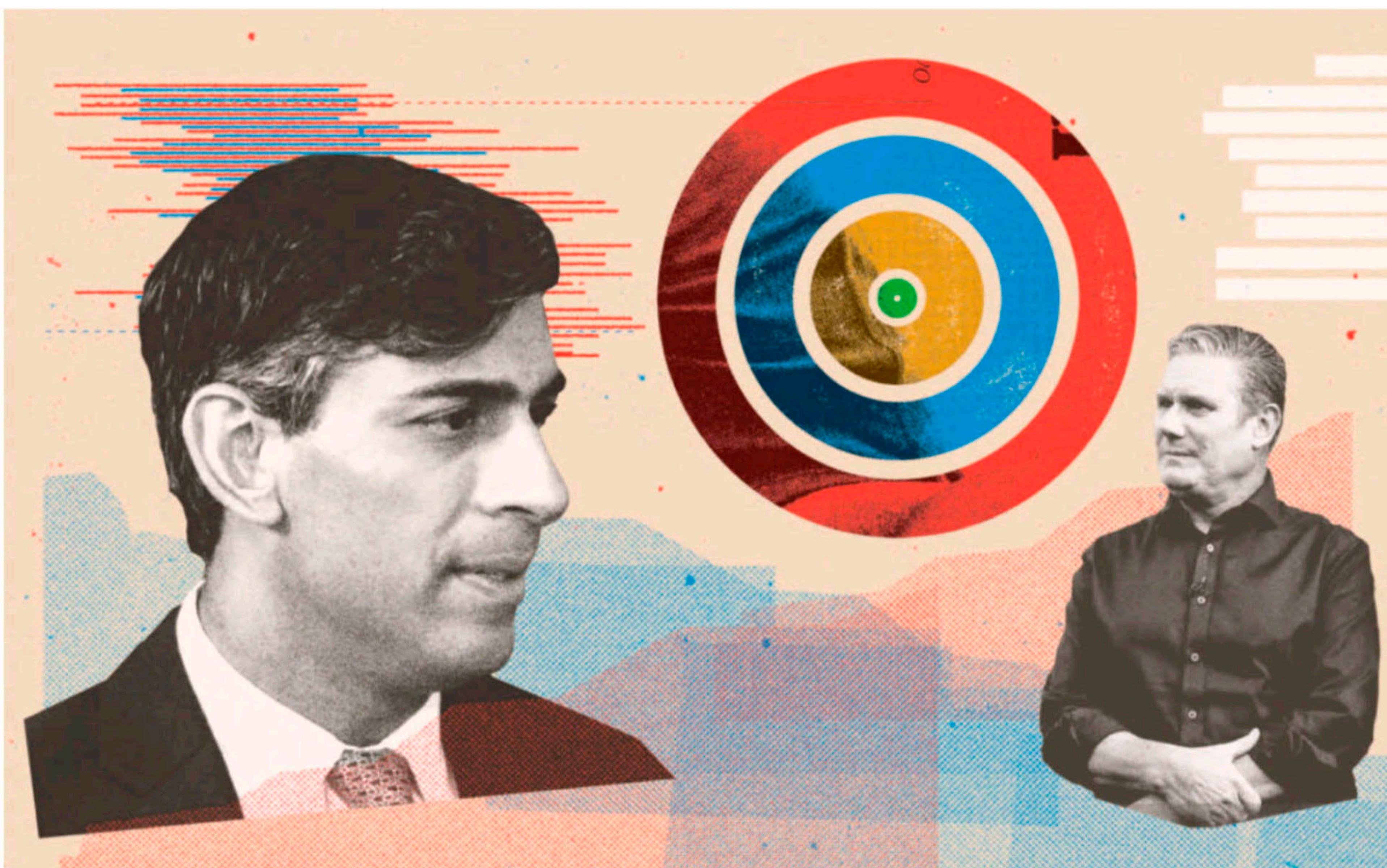
The offstage rigmarole spiced up what was otherwise predictable globalist-bashing fare. Those speakers who could attend—Eric Zemmour, a French firebrand, was among them though barred by police on the first day—delivered platitudes about family values and bent elites. Among the forces to be combated: the European Parliament, the European Commission, the mainstream media, polite society, the UN, immigrants, political correctness, NGOs, "Bolshevokism", George Soros, and green regulation. Things liked by conference speakers included the freedom-loving owners of the Claridge, farmers, Donald Trump, national sovereignty, motherhood and "the will of the people". Conspicuously absent, as well as lunch (which did arrive later, for there is only so much self-sacrifice even conservatives will put up with), was any kind of speech a liberal society should not be able to tolerate.

Conservatives at the gates

Charlemagne holds little truck with the ideas featured at the conference. Many well-meaning speakers, notably from America, do not seem to realise their Hungarian patrons (who helped fund the event) are abusers of their conservative ideology, using it as cover to build a patronage system benefiting cronyish insiders. Some, like Mr Zemmour, hold truly reprehensible views. But to be misguided is their business, not that of either the thought police or the Brussels variant. Happily, the ham-fisted censorship proved surmountable. As the first day of the conference closed, Alexander De Croo, the Belgian prime minister, decried attempts to shut it down as "unacceptable". An overnight court ruling quashed the original order to ban the event. Boosted by the furore around the efforts of his liberal enemies to silence him, Mr Orban got to address his fans, railing against the EU and the very liberal norms that (belatedly) ensured his right to speak.

Stuck between the hubbub of police blockading the venue and persecuted conservatives within, your columnist got to chat for a few minutes with the owner of the Claridge. A first-generation migrant from Tunisia, Lassaad Ben Yaghla has run the place with his family for a decade. When he got the call to host the event, he thought before agreeing, then decided there could be no harm in providing anyone a room to debate in. The conservative organisers were a polite lot, he said. Didn't he mind that some speakers were spewing migrant-bashing rhetoric from a stage he was providing? The 59-year-old shrugged and asked: "What's a democracy if you say, 'You can listen to this guy but not that one'?" ■

Britain



The general election

All change

The Economist's new model drives home the scale of the task facing Rishi Sunak

THERE HAVE been 17 elections in Britain since the start of 1959 and the Conservative Party has been successful in ten of them. The next one is almost certain to take place in the second half of this year. It is safe to say that Rishi Sunak's Tories are very unlikely to add to their victory tally: they currently trail Labour, led by Sir Keir Starmer, by 20 percentage points in the polls. But it is tricky to predict how many MPs each party will have, partly because national voting intentions do not convert simply into seats in Parliament. In 1997, for example, the Labour Party won 63% of the seats on 43% of the vote.

To tackle this problem, *The Economist* has built a new prediction model using 9,398 individual constituency-level election results along with available polling data from every election since 1959. Our model builds on the simple principle of uniform national swing—the idea that sup-

port for parties rises and falls across all constituencies in the country by the same magnitude—and augments it with specific regional polling from Scotland, Wales, London and so on. The output is not so much a forecast as a “nowcast”—a prediction of what would happen if the election were held tomorrow. If you happen to be Mr Sunak, you should look away now.

Our modelling concludes that Labour

→ ALSO IN THIS SECTION

47 Tactical voting

48 Bagehot: Mad mayors

→ Read more at: Economist.com/Britain

— Where are the robots?

— Decriminalising abortion

— The black-mass problem

has a near-certain chance of being the largest party in Parliament, and an 87% chance of winning the 326 seats needed for an outright majority. Our central estimate is that it would win 372 seats if polling stations were to open tomorrow (though the range of possible outcomes is wide). The mid-point estimate for the Conservatives is 198 seats. Labour would retake many of the Conservatives' 2019 “red wall” gains in the north and the Midlands; the Tories would be left with just 55 seats north of the Watford Gap, compared with 147 now.

Labour is expected to gain at the expense of other parties, too. Scottish politics is in a febrile state at the moment, but our central estimate is that the Scottish National Party (SNP) would end up with 32 seats, 16 fewer seats than it would have won if the last election had been fought under newly redrawn constituency boundaries. We think Labour has a 40% chance of winning between 350 and 399 seats, and a 27% chance of winning more than 400, as Sir Tony Blair did in 1997.

If all that sounds bad enough for Mr Sunak, the real picture may be even worse. The biggest determinant of the final composition of Parliament is the nationwide gap between Labour and the Conservatives; our model translates that into seat counts pretty reliably. But it does not take ➤

into account the full possibilities of tactical voting (see box) or the attention that parties' campaign managers will give to particular seats. These effects may, if anything, push the Tory seat tally even lower.

In our model's central estimate, for example, the Liberal Democrats, who are hoping to become the third-largest party again in Westminster after being surpassed by the SNP in 2015, are expected to win 21 seats. But if enough Labour voters switch votes in constituencies where the Lib Dems are the only credible challengers to the Tories, they could do much better. A different prediction approach, enticingly called multi-level regression with post-stratification (MRP), attempts to capture these local effects; a recent MRP from YouGov, a polling firm, reckoned that the Lib Dems would win 49 seats.

The waters are muddied further by uncertainty over the impact of Reform, an insurgent right-wing party that is critical of mass immigration and that is currently polling at 13%. In 2019 the Brexit Party, which was renamed Reform UK in 2021, did not have candidates in 317 constituencies held by the Conservatives. There will be no such respite for the Tories this time. Our model thinks it is unlikely that Reform will win any representation in Parliament, because Britain's first past-the-post system punishes parties whose support is diffused across constituencies. (Reform's best shot at a seat is in Barnsley North, in South Yorkshire, where it would currently attract around 30% of voters.) But its ability to hurt the Tories by taking votes away from them is both real and unpredictable.

So should Sir Keir begin measuring up for the curtains in Downing Street? Not quite yet. Predictions are not promises. Our swing model does reasonably well if asked to predict the outcome of the elections it was trained on. It correctly anticipated a hung parliament in the 2010 election, for instance. But it is not foolproof: like most pundits and pollsters it gave the Tories only a small chance of an outright majority at the following election in 2015.

The biggest source of hope for Mr Sunak is that voting intentions can still change. Our prediction is based on a scenario in which the election takes place tomorrow. We only account for the pattern of voters' behaviour today and in the past, so shifts in the polls will affect our predictions (which will be regularly updated online). If the gap in the national polls between them and Labour narrowed to 15

Who will win the next election?

You can explore our seat-by-seat predictions, track the latest polling and build your own voter profiles by visiting our new interactive. Go to economist.com/britain-election-forecast

Red-letter day

Britain, predicted seats in 2024 general election*, April 15th 2024



*If an election were held tomorrow †Based on recently adopted constituency boundaries

Sources: British Election Study; Colin Rallings & Michael Thrasher, University of Plymouth; Electoral Calculus; ONS; National Records of Scotland; The Economist

percentage points, the Tories would increase their own chances of electoral success to one in ten—still measly, but better.

It is ever plainer, however, that the Tories have a very steep mountain to climb. No governing party has entered the final nine months of a parliamentary term with

a 20-percentage-point polling gap and won the subsequent election. The fact that the Tories' poll deficit has been impervious to Mr Sunak's various efforts suggest that their chances of victory are increasingly slim. However long there is to go until polling day, time may already have run out. ■

The general election

Crossover voters

There are signs of co-ordinated anti-Tory behaviour

IF AN ELECTION were held tomorrow, our prediction model is sure that the Tories would lose. But it may still be being too kind, since it does not explicitly consider the potential for a jump in tactical voting. When the Conservatives have suffered landslide defeats in the past—as they did in 1906, 1945 and 1997—these have been at the hands of co-ordinated anti-Tory coalitions. Another such coalition may be forming now.

That is because of a big rise in the number of centre-left crossover voters who are prepared to cast their ballots for more than one party (see chart). This increases the chances that people will opt for a party other than their first choice in order to defeat the Tory candidate in their constituency. In 2019 around 17% of all voters were considering both Labour and the Liberal Democrats, compared with only around 13% in 2015. In May 2023 it was almost 22%.

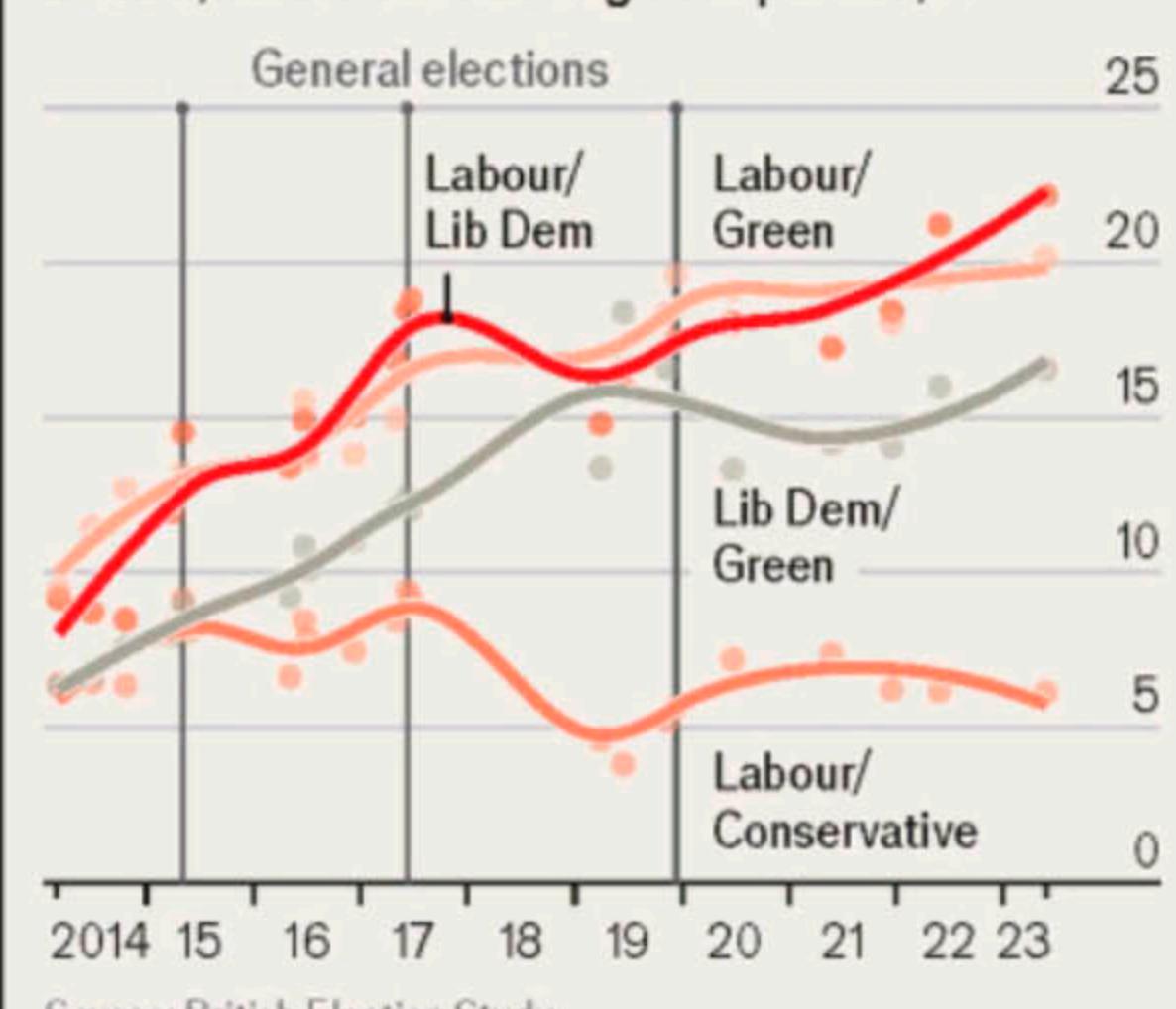
This number may be even higher now. Labour is more palatable to crossover voters under Sir Keir Starmer than Jeremy Corbyn. And constituencies that have held by-elections since 2019 show evidence of tactical voting. In by-election seats targeted by the Lib Dems, the Labour vote fell by an average of 7.5

percentage points; in seats where the Lib Dems were not going for victory, Labour's vote rose by ten percentage points. This may partly be because Labour chose not to campaign hard in seats where the Lib Dems were stronger. But it is also likely to reflect voter behaviour.

Less politically engaged voters, who are more likely to vote in a general election than in by-elections, may not be as attuned to these possibilities. But if they also vote tactically, the Tories could fare even worse than our model suggests.

Open to switching

Britain, voters considering both parties, %



Source: British Election Study

BAGEHOT

The good, the bad and the mad

Local politics is always much messier—and weirder—than people think



BUILDINGS OF ENGLAND", the Bible of architectural historians, is effusive about the Grand Hotel in Scarborough, a chilly, rather tired seaside resort on the coast of Yorkshire. It is "a High Victorian gesture of assertion and confidence: of denial of frivolity and insistence on substance, than which none more telling can be found in the land".

Other reviews vary. "ABSOLUTELY HORRENDOUS," reads one. "If I could give it 0 I would!!!" says another. A third vividly recalls: "The first room I got had pubic hair all over the sheets." When Bagehot visited, he avoided that fate. But he found that the "glorious hall" highlighted in "Buildings of England" now hosts an air-hockey table and a luminous arcade machine, where punters can win prizes like an Xbox controller or a bottle of Prime, a sickly energy drink. In the bar four bored pensioners watched "The Chase", a quiz show, at a disconcertingly loud volume.

The Grand Hotel's owner is Britannia, which is consistently ranked the country's worst hotel chain. Soon it could have a new one: British taxpayers. Keane Duncan, the 29-year-old Conservative candidate for the newly formed York and North Yorkshire Combined Mayoral Authority, has pledged to buy the decaying hotel if he wins office in local elections on May 2nd. If Britannia refuses to sell, then Mr Duncan says he will use compulsory-purchase powers bestowed on the mayor to force it to do so. "Sounds bonkers, I know," says Mr Duncan.

When it comes to devolution in England, there is a broad consensus. The Conservatives are proud of introducing regional mayors in every major urban area and now in some rural ones. Under a future Labour government the powers of mayors will be juiced up further. Wonks generally agree that devolution is "a good thing". What gets forgotten is that it is also a very messy thing. Some ideas will work. Others will fail. Some will be insane. Local politics is always a mixture of the good, the bad and the mad.

For a taste of all three, drive 70 minutes north up the A171 to Teesside, a struggling industrial region. Ben Houchen, the Conservative mayor of this traditionally Labour region, is fighting for re-election. His offer to voters is one of unapologetic economic interventionism. Almost £560m (\$700m) of public money has been

pledged to overhaul a 1,800-hectare site by the Tees in an effort to turn the graveyard of a former steelworks into something productive. Lord Houchen even bought a loss-making airport on the basis that executives could fly in to invest while Teessiders could fly out to spend the proceeds on the Med. "Dirigisme" is the idea that the state can orchestrate an economy; "Houchisme" is a shrunken version, with a local economy bossed by a regional big man.

The scheme has been dogged by accusations of mismanagement and worse. Andy McDonald, a local MP, made allegations of "industrial-scale corruption" while speaking in Parliament, which is exempt from England's libel laws. Lord Houchen in turn labelled Mr McDonald a "liar", a "coward" and a "disgrace". A report has found no evidence of corruption but a litany of governance failures, with 28 changes recommended for the complex set-up.

The project has, at times, taken a unique approach to stakeholder management. During one disagreement about access rights to the site with a neighbouring business, the then vice-chair of the development corporation opted for film-dialogue threats: "I want your eyes out of your head; I want the fucking roof off your house; I want your kids out of private school; I want no shoes on your fucking feet." Devolution succeeds in putting the spotlight on sometimes forgotten areas; the glare will not always flatter.

Sometimes devolved schemes are wacky but largely harmless. In the West of England Combined Authority, the mayor introduced a birthday bus pass, giving people free travel during the month of their birthday (at a cost of £8m). Other local decisions have bigger consequences. In Greater Manchester Andy Burnham, the Labour mayor, has attracted plaudits for bringing the region's bus system into public ownership but chickened out of a "clean-air zone" that would have charged polluting vehicles for driving in the centre of the region. In London Sadiq Khan expanded a similar scheme at some political cost. Pollution in the capital has plunged; pollution in Manchester is the country's worst. If Manchester's residents choke, at least it is due to their own choices.

This is part of the point of devolution. The British government and, in particular, its mighty Treasury are good at stopping sins of commission. White elephants do exist but they are rare, since so many projects are aborted moments after conception. As a result, however, sins of omission are common. Devolution means more things will be tried because of decisions made by local politicians. But that will, inevitably, lead to mistakes.

Having a right mayor

At the moment, a place like Scarborough is stuck in limbo. Central government has neither the guts to let it die nor the will to try to resuscitate it. A mayor will neither change the weather (it is still woolly-hat temperatures in spring) nor return the town to its Victorian pomp. But someone might end up cleaning the layer of grime and seagull droppings that covered the window in Bagehot's filthy hotel room. Whether that is a good use of taxpayer money is for voters—or at least the fraction of them who bother to vote in local elections—to decide.

Devolution is a long-term punt that local politicians will, on the whole, make better decisions about their area than national ones. Boosters insist a virtuous circle will kick in: more powers will attract higher-calibre candidates, which will lead to more scrutiny, which will mean better policy. Everyone in British politics has signed up to the gamble. The price in the short term? Whatever a 413-room Victorian hotel in Scarborough goes for these days. ■

International



Military service

Raining on their parade

ERMELO

Why many young people don't want to fight for their country

BELLY DOWN in a muddy Dutch forest, Sabrina van den Goorbergh fires blanks from a Colt C7 assault rifle. The third-year medical student is taking part in the *Dienjaar* (service-year), a new programme that lets young Dutch sign up for a year-long trial in the armed forces rather than the regular four-year enlistment term. The programme is a success, drawing three applicants for each spot, and the government plans to scale it up from 625 to 1,000 trainees next year.

Yet it can hardly begin to solve the country's recruitment problems. The Dutch armed forces number 49,000, less than a fifth of their size during the cold war, and one in ten positions is vacant. Last year regular enlistment yielded just 3,600 of a hoped-for 5,000 new soldiers. This is at a moment when, in the face of the largest war on the continent since 1945, many European countries actually want to expand their armed forces, not just main-

tain them. By 2030 Germany hopes to raise its troop strength from 182,000 to 203,000, and France from 240,000 to 275,000 (see chart 1 on the next page). Poland plans to go from 197,000 to 220,000 by the end of this year, and eventually to 300,000.

The problem is that today's career-oriented, individualistic young people are reluctant to join up. And it is not just Europe that is struggling with recruitment. In and around the world's conflict hotspots the question of how to get more people into uniform is vital. Some countries are reconsidering an old solution: mandatory military service for young people (or young men), often for school-leavers. Terminology varies. Conscription typically means compelling civilians to enlist in the armed forces, whereas military service often refers to a subset of that—ordering young people to do a stint in the forces.

At the start of the 20th century around 80% of countries had conscription in some

form; by the mid-2010s it was just under 40%. The practice reached its peak during the world wars, and many countries continued to rely on it throughout the cold war. Thereafter the West's focus turned to high-tech counterinsurgency campaigns such as those in Afghanistan and Iraq. Mass-conscript armies were mostly replaced by smaller, professional volunteer forces. Since 1995, 13 members of the OECD, a club of mostly rich countries, have scrapped conscription. All but eight of NATO's 32 members have done away with it. But authoritarian countries such as Iran, North Korea and Russia have doubled down on their press-ganged armies.

The most urgent discussion around mandatory military service and conscription is in countries that face a serious threat of war, or are already in one. Take Ukraine. More than two years on from Russia's invasion, thousands of men there are fleeing across the country's borders, or hiding, to avoid being served enlistment papers. On April 2nd a lack of troops meant Ukraine's government was forced to lower the minimum age of conscription from 27 to 25. Russia has thrown hundreds of thousands of forcibly mobilised men into the meat-grinder of its war.

In Israel, military duties are a central pillar of citizenship. After the October 7th attacks, some 300,000 Israelis left civilian

▶ life and rushed to join their units. Israel wants to lengthen male conscripts' service to three years (young women currently serve for 24 months and young men for 32) and to extend the call-up age for reservists to 45. At the same time, ultra-Orthodox Jews' exemption from service is the subject of a bitter political struggle.

Meanwhile in Asia, Taiwan is trying to prepare for a possible war with China as Sino-American tensions persist. Taiwan extended military service in 2022, from four months to a year. But the island still boasts just 169,000 active soldiers (China has around 2m). South Korea, where military service has a brutish reputation, is trying to make it more appealing. Service has been shortened to 18 months, wages are rising and sadistic drill-sergeants have been pruned. The government also wants to hire more women (men-only conscription has fuelled male resentment and anti-feminist politics).

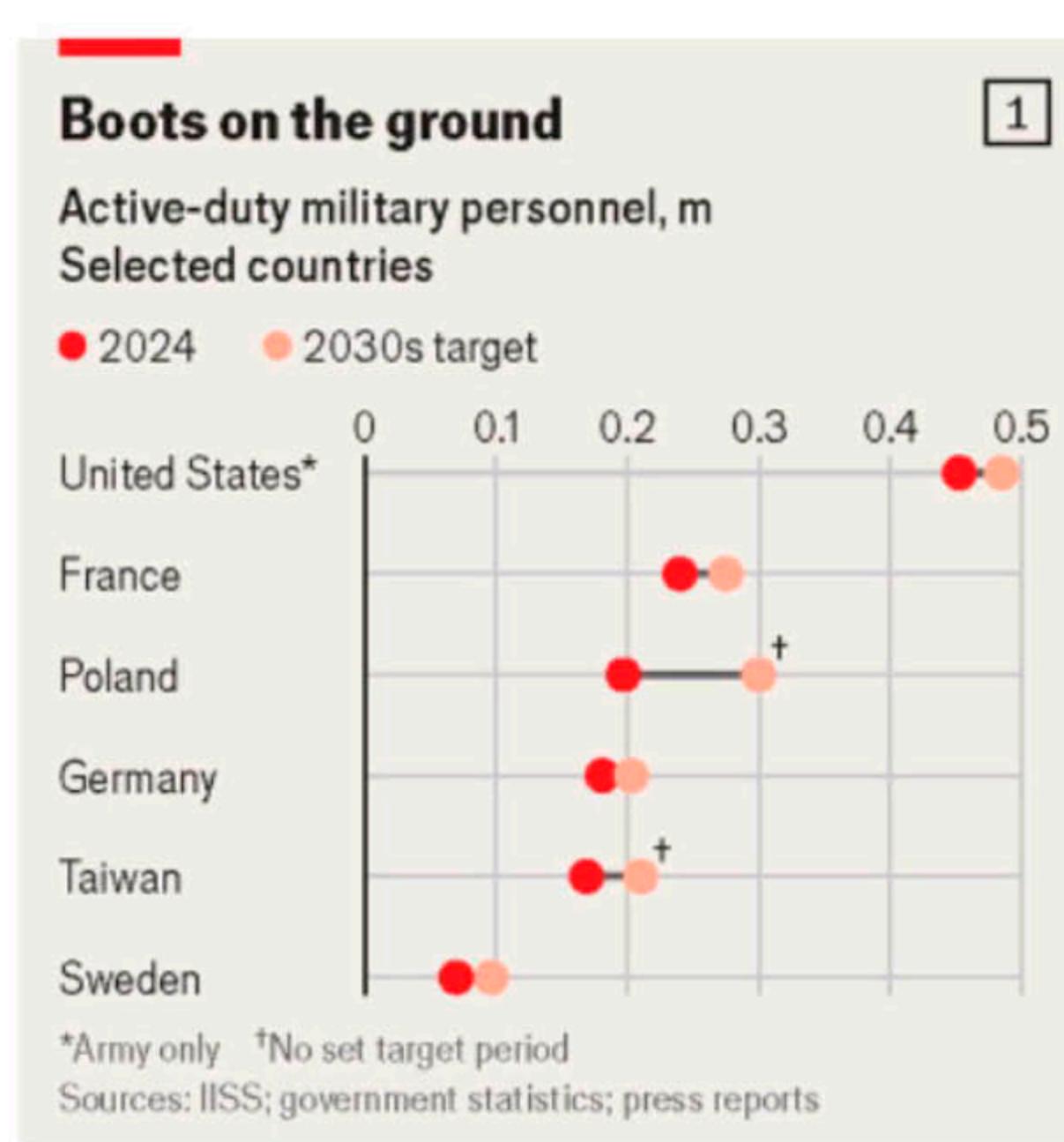
In many places recruiters for the armed forces are struggling in the face of shifting values: young people have grown averse to fighting even in defensive wars. For decades the World Values Survey (WVS), an academic research project, has been asking people around the world the same question: "Would you be willing to fight for your country?" In the survey's most recent round, between 2017 and 2022, just 36% of Dutch 16- to 29-year-olds said yes (see chart 2).

Recruiters try to counter with the rhetoric of patriotism, self-fulfilment and shared values; the emphatic slogan of Germany's armed forces, the Bundeswehr, is *Wir. Diensten. Deutschland.* (We. Serve. Germany.) They also run campaigns with influencers on TikTok and Instagram. But it does not seem to be enough to hit their targets.

This is partly to be expected. As countries get richer, their citizens tend to become less eager to sacrifice themselves for the nation. Herfried Münkler, a German political scientist, called Western democracies "post-heroic" societies, in which "the highest value is the preservation of human life" and personal well-being. History certainly plays a role. Willingness to fight is low in the countries that lost the second world war (Germany, Italy and Japan). In Spain and Portugal, decades of military dictatorship left many citizens suspicious of the armed forces.

But things can change when conflicts draw near. According to a forthcoming paper by Wolfgang Wagner and Alexander Sorg of the VU University in Amsterdam and Michal Onderco of the Erasmus University in Rotterdam, proximity to war makes citizens more willing to fight. In Europe, this helps explain why countries close to Russia are less doveish.

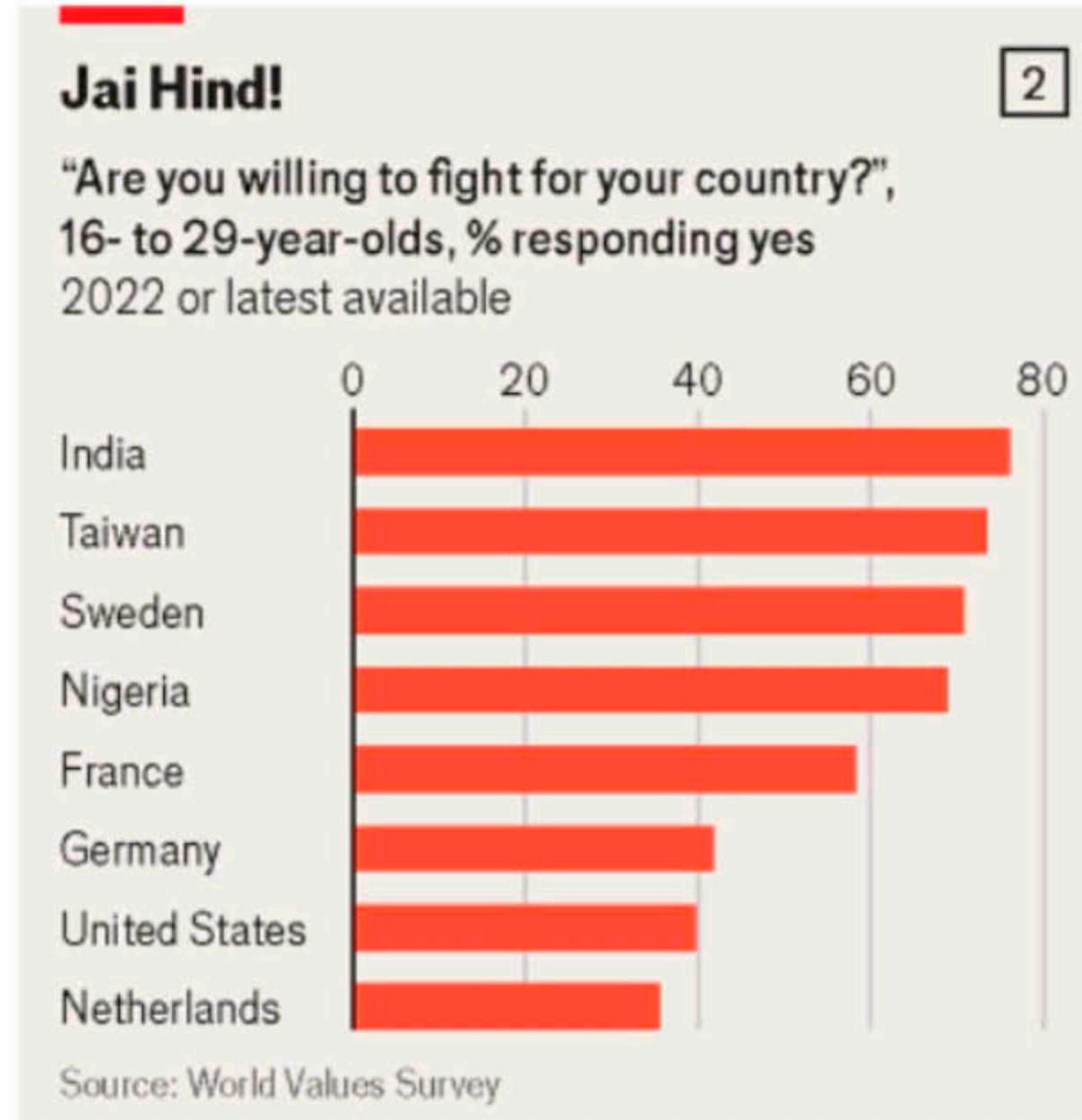
Political alignment is a poor predictor of willingness to bear arms. "The radical



right is not so eager to fight," says Mr Wagner, at least in Germany and the Netherlands. Last year he and his colleagues commissioned a study in those countries which found that few people who planned to vote for either far-left or far-right parties were willing to fight for their country. Those who backed centrist parties, such as Germany's Social Democrats and Christian Democrats, were more prepared to do so.

Besides changing values, military recruiters face an economic hurdle: young people currently have lots of employers bidding for their services. In most wealthy countries, Generation Z has its pick of jobs (see Finance & economics section). Unemployment among 15- to 24-year-olds in the European Union was 14.5% last year, down from 22.4% in 2015. In Germany it was just 5.8%. In such tight labour markets, armies have a hard time competing with the private sector. And sitting at a desk is rather nicer than crawling through mud.

In some wealthy countries, however, young people's willingness to fight remains high. In France the share is 58% in the WVS. The figure is higher still in Singapore, Taiwan and South Korea. In Denmark, Finland, Norway and Sweden, four of the wealthiest and most peaceful countries in the world, two-thirds or more of citizens say they are willing. (All are close



to Russia.) Their expanding armed forces also have no trouble finding soldiers: all four have compulsory military service for young people.

Sweden actually eliminated the practice in 2011, but brought it back in 2018 after failing to meet recruiting targets. It is an intriguing case study for others. Having just joined NATO, it is scaling up from 69,700 to 96,300 soldiers, an endeavour which requires about 10,000 recruits a year. All the country's 19-year-olds (men and women) must fill out service questionnaires; a bit under a third qualify, and then a tenth are ultimately inducted.

Rather than souring young people on the armed forces, in Sweden mandatory service seems to make them more enthusiastic. In exit surveys at the end of their stints, "about 80% of the conscripts would recommend other young people to do military service", says Pal Jonson, the defence minister. Some 30% re-enlist as soldiers or reserves. Because more young people qualify than are needed, only the best candidates make it in, and military service looks good on one's CV.

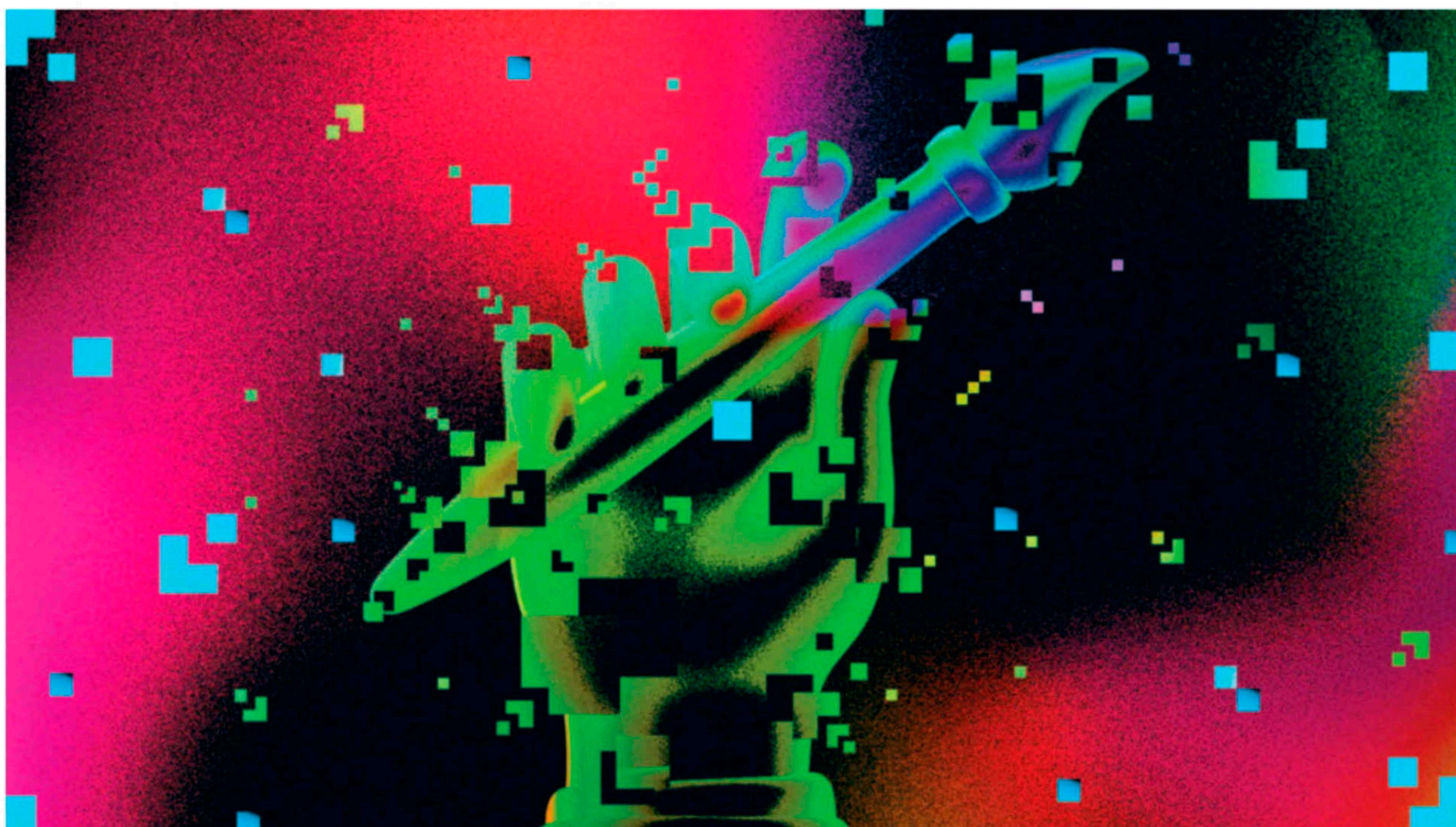
This kind of conscription helps keep Nordic armies a melting-pot for different classes, and discourages political polarisation. (Volunteers in armed forces tend to skew towards the right; in Germany neo-Nazi cells have been uncovered in the Bundeswehr.) In the Middle East too, many states see military service for young people as a social adhesive. The United Arab Emirates introduced it in 2014 partly to forge a sense of shared identity among its youth. Morocco, Jordan and Kuwait have followed suit.

You got no time to lose

Shortfalls across many democratic states suggest that better recruitment strategies can do only so much to boost troop numbers. Few medical students have Ms Van den Goorbergh's drive to take up infantry training on the side. In liberal societies, large segments of the population have come to see serving in the army as someone else's job. Reintroducing obligatory military service for youngsters might be politically and practically unworkable for the same reason recruitment is falling short: citizens feel alienated from the armed forces.

Yet the Nordic model seems to help bridge that gap, ensuring that military service remains a natural part of social life and nudging more school-leavers to consider a related career. Other youngsters may still only join up in a crisis. "It is fear that moves you to action," says Andrei, a former television producer now fighting in eastern Ukraine. He signed up the day after Russia invaded. Most Ukrainians did not believe they would ever have to fight for their country, either. ■

Business



Artificial intelligence and copyright

The imitation game

Generative AI is a marvel. Is it also built on theft?

THE FOOTBALLERS look realistic at first sight but, on closer inspection, something is wrong. Their faces are contorted, their limbs are bending in alarming directions, the ball is slightly egg-shaped. Strangest of all, running across one footballer's left leg is the ghostly trace of a watermark: Getty Images.

Generative artificial intelligence (AI) has caused a creative explosion of new writing, music, images and video. The internet is alive with AI-made content, while markets fizz with AI-inspired investment. OpenAI, which makes perhaps the most advanced generative-AI models, is valued at nearly \$90bn; Microsoft, its partner, has become the world's most valuable company, with a market capitalisation of \$3.1trn.

But some wonder how creative the AIs really are—and whether those cashing in have fairly compensated those on whose work the models were trained. ChatGPT, made by OpenAI, can be coaxed into regurgitating newspaper articles that it appears to have memorised. Claude, a chat-

bot made by Anthropic, can be made to repeat lyrics from hit songs. Stable Diffusion, from Stability AI, reproduces features of images, including the watermark of Getty, on whose archive it was trained.

To those who hold the rights to these creative works, generative AI is an outrage—and perhaps an opportunity. A frenzy of litigation and dealmaking is under way, as rights-holders angle for compensation for providing the fuel that powers the creation of AIs. For the model-makers it is an anxious period, notes Dan Hunter, a professor of law at King's College London. "They have created an amazing edifice that's built on a foundation of sand."

→ ALSO IN THIS SECTION

53 LVMH's pups in cashmere

54 Bartleby: Lessons of woke Scrabble

55 Insecure Chinese biotech

56 Schumpeter: Epistolary CEOs

AIs are trained on vast quantities of human-made work, from novels to photos and songs. These training data are broken down into "tokens"—numerical representations of bits of text, image or sound—and the model learns by trial and error how tokens are normally combined. Following a prompt from a user, a trained model can then make creations of its own. More and better training data means better outputs.

Many AI companies have become cagey about what data their models are trained on, citing competitive confidentiality (and, their detractors suspect, fear of legal action). But it is widely acknowledged that, at least in their early stages, many hoovered up data that was subject to copyright. OpenAI's past disclosures show that its GPT-3 model was trained on sources including the Common Crawl, a scraping of the open internet which includes masses of copyrighted data. Most of its rivals are thought to have taken a similar approach.

The tech firms argue there is nothing wrong with using others' data simply to train their models. Absorbing copyrighted works and then creating original ones is, after all, what humans do. Those who own the rights see a difference. "I've ingested all this incredible music and then I create from it," says Harvey Mason Jr, a songwriter and chief executive of the Recording Academy, which represents musicians. "But the difference is, I'm a human, and as a human, I want to protect humans...I have

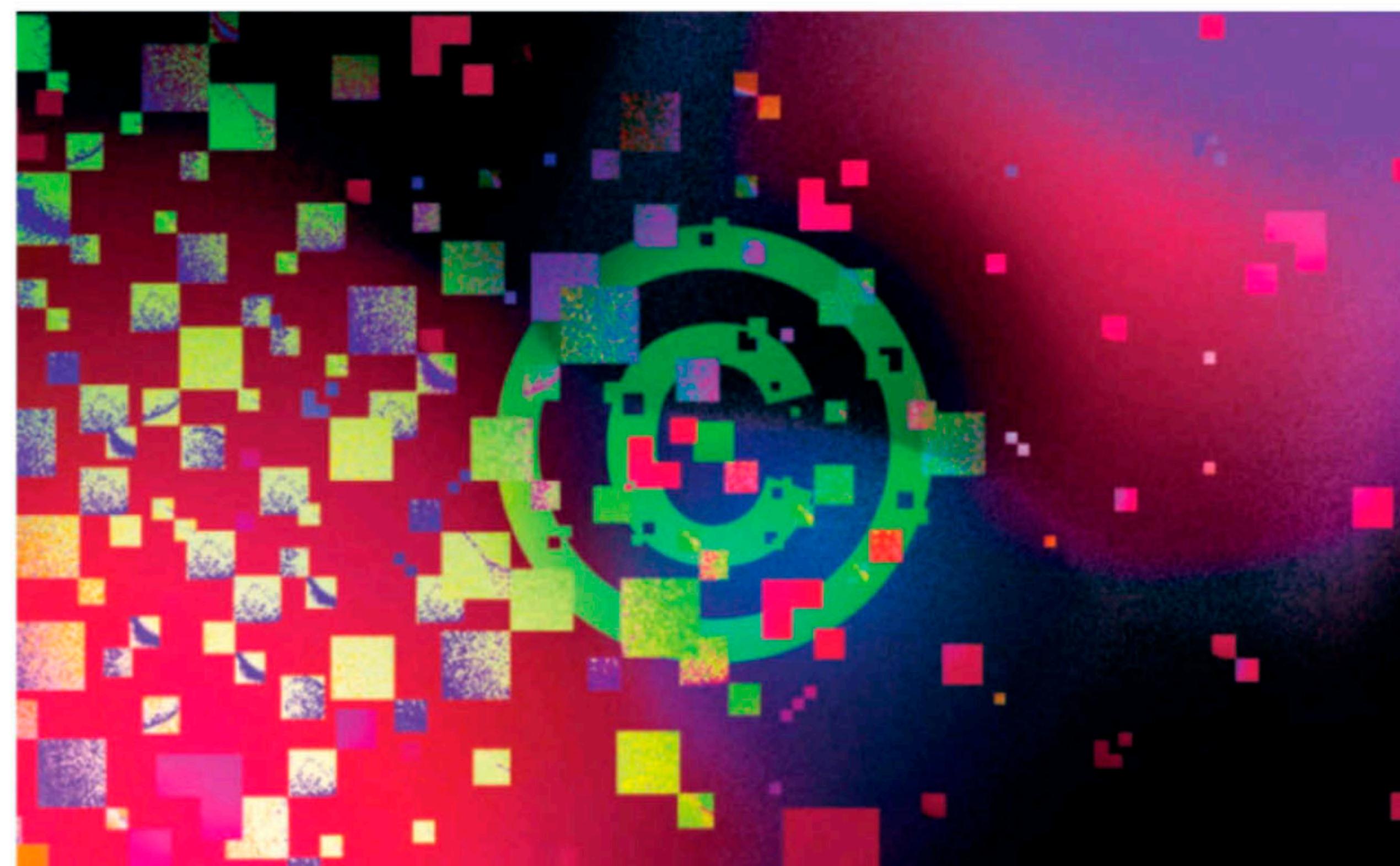
► no problem with a little bit of a double standard." Roger Lynch, chief executive of Condé Nast, which owns titles such as *Vogue* and the *New Yorker*, told a Senate hearing in January that today's generative-AI tools were "built with stolen goods". AI companies "are spending literally billions of dollars on computer chips and energy, but they're unwilling to put a similar investment into content", complains Craig Peters, chief executive of Getty.

Media companies were badly burned by an earlier era of the internet. Publishers' advertising revenue drained away to search engines and social networks. Record labels' music was illegally shared using applications like Napster. Content-makers are determined not to be caught out again. Publishers (including *The Economist*) are blocking AI companies' automated "crawlers" from scraping words from their websites: nearly half of the most popular news websites block OpenAI's bots, according to a ten-country survey by Oxford University's Reuters Institute in February. Record companies have told music-streaming services to stop AI companies from scraping their tunes. There is widespread irritation that tech firms are again seeking forgiveness rather than permission. "A \$90bn valuation pays for a lot of lawyering," says Mr Hunter. "That's the business plan."

The sincerest form of flattery

The lawyering is now happening. The biggest rights-holders are leading the charge. The *New York Times*, the world's largest newspaper by number of subscribers, is suing OpenAI and Microsoft for infringing the copyright of 3m of its articles. Universal Music Group, the largest record company, is suing Anthropic for using its song lyrics without permission. Getty, one of the biggest image libraries, is suing Stability AI for copying its images (as well as misusing its trademark). All four tech firms deny wrongdoing.

In America the model-makers are relying on the legal concept of fair use, which provides broad exemptions from the country's otherwise ferocious copyright laws. An encouraging precedent comes courtesy of a ruling on Google Books in 2015. The Authors Guild sued the search giant for scanning copyrighted books without permission. But a court found that Google's use of the material—making books searchable, but showing only small extracts—was sufficiently "transformative" to be deemed fair use. Generative-AI firms argue that their use of copyrighted material is similarly transformative. Rights-holders, meanwhile, are pinning their hopes on a Supreme Court judgment last year that a series of artworks by Andy Warhol, which had altered a copyrighted photograph of Prince, a pop star, were insufficiently transformative to constitute fair use.



Not all media types enjoy equal protection. Copyright law covers creative expression, not ideas or information. Computer code, for example, is only thinly protected, since it is mostly functional rather than expressive, says Matthew Sag of Emory University in Atlanta. (A group of programmers aim to test this in court, claiming that Microsoft's GitHub Copilot and OpenAI's CodexComputer infringed their copyright by training on their work.) News can likewise be tricky to protect: the information within a scoop cannot itself be copyrighted. Newspapers in America were not covered by copyright at all until 1909, notes Jeff Jarvis, a journalist and author. Before then, many employed a "scissors editor" to literally cut and paste from rival titles.

Image-rights holders are better protected. AI models struggle to avoid learning how to draw copyrightable characters—the "Snoopy problem", as Mr Sag calls it, referring to the cartoon beagle. Model-makers can try to stop their AIs drawing infringing images by blocking certain prompts, but they often fail. At *The Economist*'s prompting, Microsoft's image creator, based on OpenAI's Dall-E, happily drew images of "Captain America smoking a Marlboro" and "The Little Mermaid drinking Guinness", despite lacking express permission from the brands in question. (Artists and organisations can report any concerns via an online form, says a Microsoft spokesman.) Musicians are also on relatively strong ground: music copyright in America is strictly enforced, with artists requiring licences even for short samples. Perhaps for this reason, many AI companies have been cautious in releasing their music-making models.

Outside America, the legal climate is mostly harsher for tech firms. The European Union, home to Mistral, a hot French AI company, has a limited copyright exception for data-mining, but no broad fair-use

defence. Much the same is true in Britain, where Getty has brought its case against Stability AI, which is based in London (and had hoped to fight the lawsuit in America). Some jurisdictions offer safer havens. Israel and Japan, for instance, have copyright laws that are friendly for AI training.

Tech companies hint at the potential threat to American business, should the country's courts take a tough line. OpenAI says of its dispute with the *New York Times* that its use of copyrighted training data is "critical for US competitiveness".

Rights-holders bridle at the notion that America should reduce its protections to the level of other jurisdictions just to keep the tech business around; one describes it as unAmerican. But it is a reason why the big cases may end up being decided in favour of the AI firms. Courts may rule that models should not have trained on certain data, or that they committed too much to memory, says Mr Sag. "But I don't believe any US court is going to reject the big fair-use argument. Partly because I think it's a good argument. And partly because, if they do, we're just sending a great American industry to Israel or Japan or the EU."

Copyrights, copywrongs

While the lawyers sharpen their arguments, deals are being done. In some cases, suing is being used as leverage. "Lawsuits are negotiation by other means," admits a party to one case. Even once trained, AIs need ongoing access to human-made content to stay up-to-date, and some rights-holders have done deals to keep them supplied with fresh material. OpenAI says it has sealed about a dozen licensing deals, with "many more" in the works. Partners so far include the Associated Press, Axel Springer (owner of *Bild* and *Politico*), *Le Monde* and Spain's Prisa Media.

News Corp, which owns the *Wall Street Journal* and *Sun* among other titles, said in

► February it was in “advanced negotiations” with unnamed tech firms. “Courtship is preferable to courtrooms—we are wooing, not suing,” said its chief executive, Robert Thompson, who praised Sam Altman, OpenAI’s boss. Shutterstock, a photo library, has licensed its archive to both OpenAI and Meta, the social-media empire that is pouring resources into AI. Reddit and Tumblr, two online forums, are reportedly licensing their content to AI firms as well. (The Economist Group, our parent company, has not taken a public position on whether it will license our work.)

Most rights-holders are privately pessimistic. A survey of media executives in 56 countries by the Reuters Institute found that 48% expected there to be “very little” money from AI licensing deals. Even the biggest publishers have not made a fortune. Axel Springer, which had revenue of €3.9bn (\$4.1bn) in 2022, will reportedly earn “tens of millions of euros” from its three-year deal with OpenAI.

“There is not a big licensing opportunity. I don’t think the aim of [the AI models] is to provide alternatives to news,” says Alice Enders of Enders Analysis, a media-research firm. The licensing deals on offer are “anaemic”, says Mr Peters of Getty. “When companies are...saying, ‘We don’t need to license this content, we have full rights to scrape it,’ I think it definitely diminishes their motivations to come together and negotiate fair economics.”

Some owners of copyrighted material are therefore going it alone. Last year Getty launched its own generative AI, in partnership with Nvidia, a chipmaker. Getty’s image-maker has been trained only on Getty’s own library, making it “commercially safe” and “worry-free”, the company promises. It plans to launch a video-maker this year, powered by Nvidia and Runway, another AI firm. As well as removing copyright risk, Getty has weeded out anything else that could get its customers in trouble with IP lawyers: brands, personalities and less obvious things, from tattoo designs to firework displays. Only a small percentage of Getty’s subscribers have tried out the tools so far, the firm admits. But Mr Peters hopes that recurring revenue from the service will eventually exceed the “one-time royalty windfall” of a licensing deal.

A number of news publishers have reached a similar conclusion. Bloomberg said last year that it had trained an AI on its proprietary data and text. Schibsted, a big Norwegian publisher, is leading an effort to create a Norwegian-language model, using its content and that of other media companies. Others have set up chatbots. Last month the *Financial Times* unveiled Ask FT, which lets readers interrogate the paper’s archive. The *San Francisco Chronicle*’s Chowbot, launched in February, lets readers seek out the city’s best tacos or

clam chowder, based on the paper’s restaurant reviews. The BBC said last month that it was exploring developing AI tools around its 100-year archive “in partnership or unilaterally”. Most big publications, including *The Economist*, are experimenting behind the scenes.

It is too early to say if audiences will take to such formats. Specialised AI tools may also find it difficult to compete with the best generalist models. OpenAI’s ChatGPT outperforms Bloomberg’s AI even on finance-specific tasks, according to a paper last year by researchers at Queen’s University, in Canada, and JPMorgan Chase, a bank. But licensing content to tech firms has its own risks, points out James Grimmelmann of Cornell University. Rights-holders “have to be thinking very hard about the degree to which this is being used to train their replacements”.

Fake it till you make it

The new questions raised by AI may lead to new laws. “We’re stretching current laws about as far as they can go to adapt to this,” says Mr Grimmelmann. Last month Tennessee passed the Ensuring Likeness Voice and Image Security (ELVIS) Act, banning unauthorised deepfakes in the state. But Congress seems more likely to let the courts sort it out. Some European politicians want to tighten up the law in favour of rights-holders; the EU’s directive on digital copyright was passed in 2019, when generative AI was not a thing. “There is no way the Europeans would pass [such a directive] today,” says Mr Sag.

Another question is whether copyright will extend to AI-made content. So far judges have been of the view that works created by AI are not copyrightable. In August an American federal court ruled that “human authorship is a bedrock requirement of copyright”, dismissing a request by a computer scientist to copyright a work of art he had created using AI. This may change as AIs create a growing share of the world’s content. It took several decades of photography for courts to recognise that the person who took a picture could claim copyright over the image.

The current moment recalls a different legal case earlier this century. A wildlife photographer tried to claim copyright over photographs that macaque monkeys had taken of themselves, using a camera he had set up in an Indonesian jungle. A judge ruled that because the claimant had not taken the photos himself, no one owned the copyright. (A petition by an animal-rights group to grant the right to the monkeys was dismissed.) Generative AI promises to fill the world with content that lacks a human author, and therefore has no copyright protection, says Mr Hunter of King’s College. “We’re about to move into the infinite-monkey-selfie era.” ■

LVMH

Pups in cashmere

BERLIN

A titan of luxury sizes up his heirs apparent

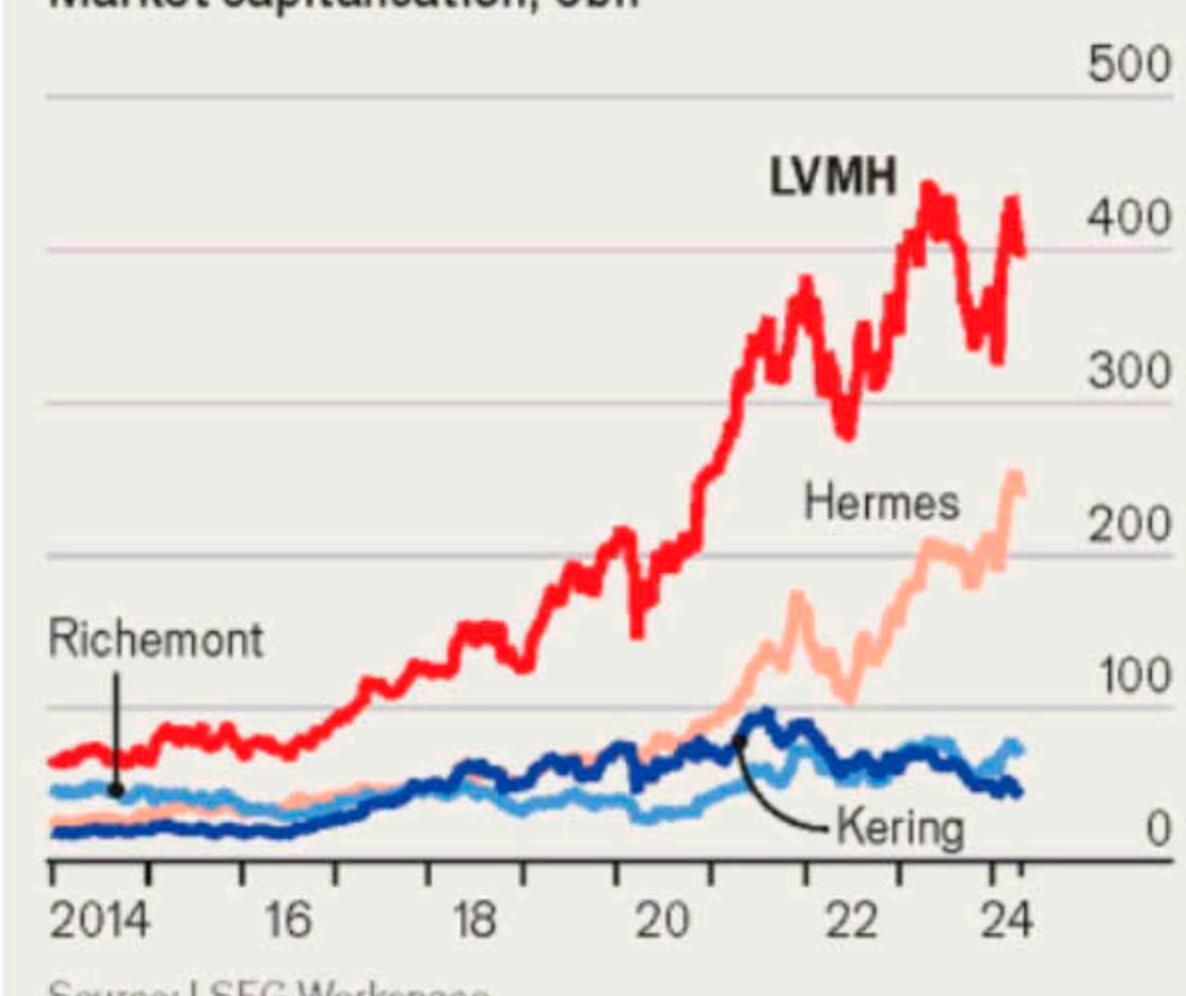
BERNARD ARNAULT likes to describe LVMH as *une affaire de famille*. The world’s richest man calling the €400bn (\$425bn) luxury empire, of which he is chief executive, chairman and controlling shareholder, “a family business” is both a humblebrag and true. All five of his children work for him. And at LVMH’s annual general meeting on April 18th, after we published this, two of his sons (Alexandre and Frédéric) are poised to join Delphine and Antoine, his eldest offspring from his first marriage, on its board. Only 26-year-old Jean, the youngest, does not have a board seat (yet).

Arnault *père* can head LVMH for another five years. In 2022 shareholders, who credited the then-73-year-old with minting their fortunes as well as his own (see chart), happily amended the company’s by-laws to raise the mandatory retirement age for the CEO from 75 to 80. The wolf in cashmere, as the billionaire is known thanks to his killer dealmaking instincts, is showing no signs of letting up. But the boardroom reshuffle and other recent job moves suggest the succession plans for his lupine litter are well under way.

Last year Delphine took over as head of Christian Dior, the iconic fashion house which is LVMH’s second-largest brand (and which had a sparkling run under Pietro Beccari, who quadrupled sales in five years and was recently put in charge of Louis Vuitton, the group’s crown jewel). Antoine is now chief executive of the family holding company which controls LVMH. Alexandre is the de facto number-two at Tiffany & Co, a jeweller. Frédéric and Jean have senior roles in the group’s watch business. ►

In Paris, no match

Market capitalisation, €bn



► Erwan Rambour of HSBC, a bank, sees three possible succession scenarios. One is for the 49-year-old Delphine, who since 2000 has worked her way up through Dior and Vuitton, to inherit the top job from her father. Another is the enthronement of 31-year-old Alexandre, who did well as boss of Rimowa, a German luggage-maker that he persuaded his father to buy. He is now jazzing up Tiffany's old-fashioned image through collaborations with superstars such as Beyoncé, an American pop icon,

and Jay-Z, a rapper. The third is a collegial approach in which the five scions run five divisions of the group.

If Mr Arnault has made up his mind, he is keeping his decision to himself. Either way, he will hand over an enviable business. True, after a stellar 2023, when sales rose by 9%, revenues in the first quarter of 2024 did dip by 2% year on year, to €21bn, chiefly owing to softening demand from Chinese shoppers worried about their country's economy. In January Mr Arnault

foreshadowed the slowdown by talking of "normalisation" following a period of post-pandemic revenge shopping for bling.

This first-quarter disappointment may, though, prove to be a blip. And Mr Arnault's new normal could still mean rude health. Fabbio Cereda of GAM, an asset manager, expects global luxury sales to expand by 6-7% annually in the next few years—and LVMH to keep gaining market share. A tidy inheritance, for whichever Arnault fils or fille prevails. ■

BARTLEBY

The lessons of woke Scrabble

How to combine heritage and innovation

"THICK", SCOFFED the headline on the *Daily Mail* website on April 9th, in response to the news that Scrabble has had an overhaul. In some parts of the world the word-play game has been relaunched with a double-sided board; one side now shows a new, simpler design that is meant to be less intimidating and more inclusive than the original.

The idea that Scrabble needs to be made less competitive in order to be attractive to Gen Z was always going to make some people rather vexed (16 points). "Next, they'll turn to chess, but with only one piece each and only two squares on the board," ran one typically balanced reader comment. Rants about snowflakes and wokeness aside, the new version of the game, which Mattel is introducing outside North America, looks like a perfectly good solution to a common strategic problem: how to make changes to much-loved products.

Reams of innovation research focus on the need for managers to draw on diverse sources of thinking. The more you rely on a group of the same old faces for new ideas, the more you constrain the chances of breakthroughs. To take one example among many, a recent paper by Paul Vicinanza of Stanford University and his co-authors analysed the emergence of prescient ideas in court rulings, earnings calls and speeches by American politicians. It found that such ideas tended to come from the periphery. But the perils of entrenched thinking can also apply to customers. If the people who buy your products and services view them as traditional, they are more likely to resist changes.

Such resistance is most obvious for brands with a long heritage and a loyal following. Consumers like the notion of longevity. In a study by Fabien Pecot of

TBS Business School Barcelona and fellow researchers, the authors showed people two logos for an unfamiliar chocolate company, one with an old-school font and a black-and-white photo of a building, the other with a more modern font and a picture of a contemporary office. Participants were willing to pay more for the brand that had apparently been around for aeons (five points but really handy if you have a lot of vowels).

But a rich history—even an entirely fictional one—also makes it harder to make changes. In another study, by Minju Han of Singapore Management University and her co-authors, people were told about a made-up cosmetics company. Some heard it had been founded in 1917, others that it had been established 100 years later. Each group then tested two hand creams, one ostensibly made to the original formula and the other a newly developed product. Even though the cream was the same in every instance, people who thought the firm had been founded in the early 20th century rated the new product as inferior to the original;

those who thought it had been established recently gave them the same ratings. Heritage can command a premium but it can also be a prison.

These trade-offs are also visible in a paper by Giulia Cancellieri of Ca' Foscari University of Venice, Gino Cattani of New York University and Simone Ferriani of the University of Bologna, which looks at the programming decisions made by Italian opera houses. Directors of such cultural institutions have to balance respect for the traditional canon with a desire to put on original productions; in management terms, they have to innovate while being true to their *qi* (which is not the right word but does give you 11 points and gets rid of that stranded "q").

The researchers examined in particular how attendance was affected by reinterpretations of classic operas. They categorise these changes depending on whether they are more cosmetic (the plot of "La Bohème" remains unchanged, for example, but takes place in a Dunkin' Donuts) or more radical (Mimi has incredibly warm hands, say). They find that opera-goers liked novelty but that they reacted differently depending on its extent: season-ticket holders, who were more familiar with the classics, were less tolerant of radical changes whereas single-ticket visitors were keener on them. Freedom to innovate depends in part on how much you depend on loyal, repeat customers.

Given all these pitfalls, Mattel's innovation works well. It allows traditionalists to play the game they grew up with while also permitting an experiment that might bring in new players. Despite the sound and fury, it is all rather elegant (which gives you a bingo, 58 points and total, annihilating victory).



Business and geopolitics

The health-care horserace

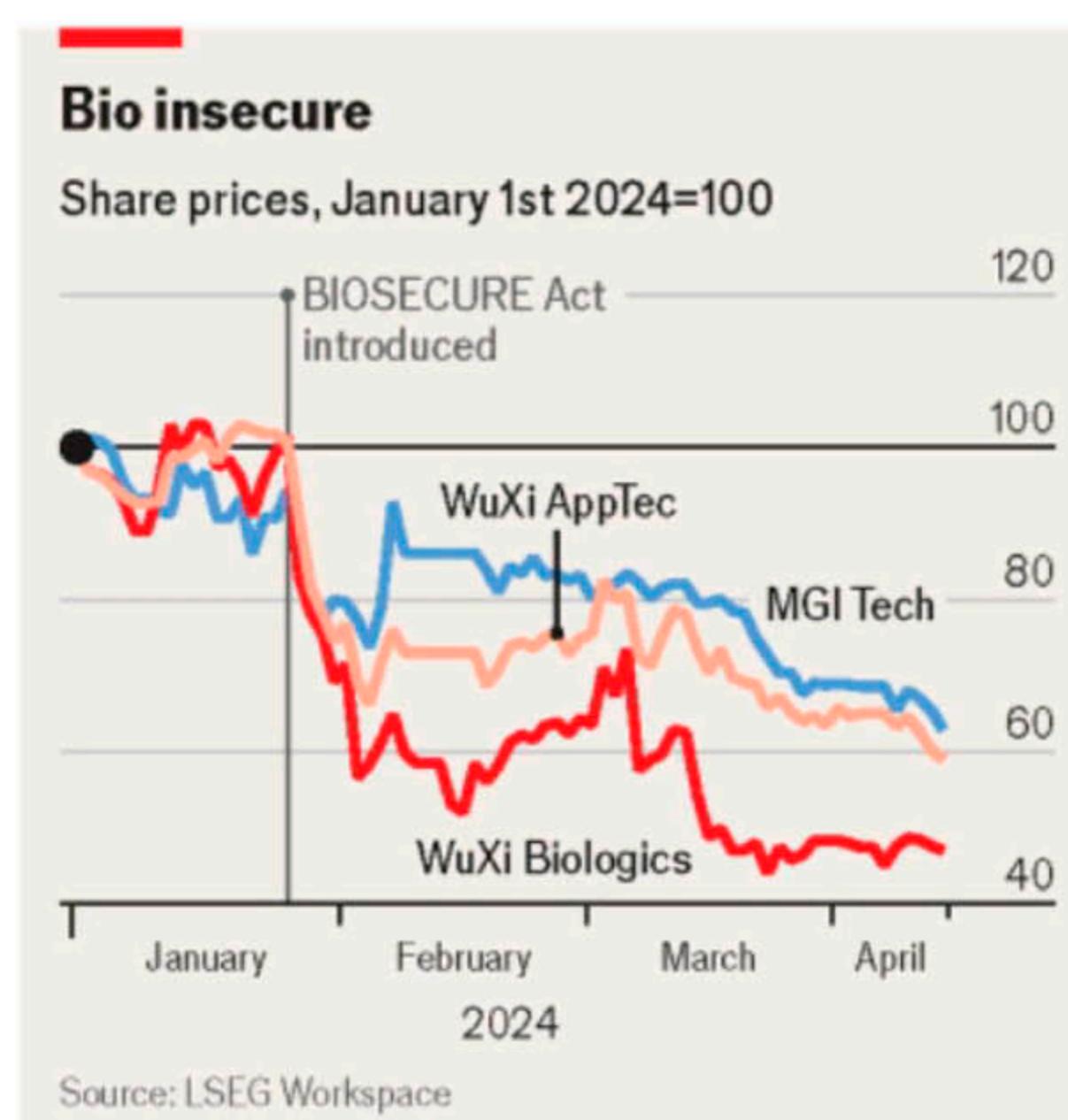
America wants to nobble Chinese biotech

AMERICAN HEALTH-CARE costs are sky-high; as treatments get pricier and the number of patients swells owing to an ageing population, they are getting higher. Chinese biotechnology is increasingly sophisticated and, as its companies gain scale, getting cheaper. A growing number of American drugmakers, from startups to big pharma, rely on firms like WuXi AppTec and WuXi Biologics, which conduct drug research on behalf of clients and manufacture compounds used in drug-making. MGI Tech, a maker of gene-sequencing machines, is offering American hospitals kit that is cheaper to buy and half as expensive to run as American-made alternatives. A match made in heaven?

Not to America's Congress. A bill currently before the Senate would forbid the federal government from buying health-care products from companies that do business with partners like the WuXi sister firms and MGI Tech. A bipartisan group of lawmakers in the House of Representatives is pushing for the BIOSECURE act, which would do much the same.

The politicians worry about American health data falling into the hands of the Chinese authorities. They also fret about American intellectual property (IP), for example in the form of drug recipes that big pharma shares with contract manufacturers, flowing to Chinese rivals. And they are concerned about American money going to Chinese firms that collaborate with the People's Liberation Army (PLA) and with the Chinese government's repression of Uyghurs, an ethnic minority. Should the bills' sponsors succeed, America's patients may be left bearing some of the costs.

Despite irreconcilable differences on most other subjects, Democrats and Republicans are united in their dislike of China. Last month the Senate version of the legislation cleared the relevant committee by 11 votes to one. Investors seem to believe it has a good chance of becoming law. The share price of WuXi AppTec, which generates two-thirds of its revenues in America, has fallen by 40% since the BIOSECURE bill was introduced in the House in late January (see chart). WuXi Biologics, half of whose sales come from American customers, has lost more than 50% of its value. MGI Tech has lost more than a third. The three companies, which the House bill name-checks, have shed a combined \$22bn in market capitalisation



in the past two and a half months.

The knock-on effects for the Chinese firms' American customers are also likely to be profound. Start with the contract manufacturer-researchers. WuXi is to big pharma what Foxconn, the Taiwanese assembler of iPhones, is to Apple—a high-quality supplier entrusted with sensitive IP. It says its clients include the world's 20 biggest drugmakers. Dozens of American pharma firms have notified investors that, should the BIOSECURE bill pass, they may be unable to meet demand for their products or to complete clinical trials on schedule. WuXi AppTec says that the proposed legislation "relies on misleading al-



In Congress's crosshairs

legations and inaccurate assertions". WuXi Biologics says it "has not, does not and will not pose any national-security risk to the US or any other country".

Western customers have not yet severed ties with the WuXi companies, says Lila Hope, a lawyer specialising in biotech partnerships at Cooley. Some drugmakers are reportedly sounding out alternative suppliers from India, a big provider of similar services. But that would require a thumbs-up from American regulators, who have longstanding concerns about Indian companies' lax quality standards.

Jefferies, an investment bank, reckons that replacing Chinese capacity would take big Western drug firms at least five years and almost certainly end up costing more. For biotech startups, which tend to rely on Chinese partners with proven records to save time and money on research and manufacturing, the BIOSECURE bill could be an existential threat. According to a survey conducted in March by BioCentury, a consultancy, biotech bosses and their investors expect a slowdown in drug development in the event of its passage.

Cutting ties with the lawmakers' second target—China's genomics industry—would have a less immediate impact on American firms. MGI Tech is only just entering the American market for gene-sequencers, having settled a patent dispute with its bigger American rival, Illumina, in 2022. BGI Genomics, which sequences more human genomes than any other company (and is also named in the BIOSECURE bill), makes just 3% of its profits in America. But both Chinese firms bring welcome competition to a highly concentrated industry. Despite being blocked by trust-busters from acquiring a rival in 2019, Illumina has 80% of the global market for high-end gene-sequencers.

MGI Tech's American subsidiary, Complete Genomics, says it "is not a sequencing-service provider and does not have access to, collect, or maintain genetic data". Independent investigators it brought in to inspect its sequencers have confirmed that the company cannot access patient data through the devices. BGI Group says that the allegations made in the BIOSECURE bill that it collects, stores and analyses personal genetic information for the purpose of infringing human rights, that it supports the surveillance of minorities and that it is controlled by the Chinese government or the PLA are all "false".

The law, if passed, would almost certainly face legal challenges from the Chinese firms and, maybe, their American clients. It may be watered down, especially once big pharma's lobbyists on Capitol Hill get to work on it. But the anti-Chinese sentiment guiding its congressional sponsors is not going away—even if that spells trouble for American health care. ■

SCHUMPETER

America, Ink

Shareholder letters reveal a lot about how CEOs see the world



SCHUMPETER LIKES to write—and receive—handwritten letters. When he got out his pen last year and wrote to Larry Fink, boss of BlackRock, he explained to the passive-investing billionaire that he was doing so because he believed they shared a mutual interest: letter-writing. Your columnist went so far as to use a John Donne quote, “letters mingle souls”, to elicit a response. Evidently soul-mingling, whatever its merits in Elizabethan England, is not the done thing in Hudson Yards. Mr Fink agreed to an interview but not, sadly, to an exchange of correspondence.

The personal touch is not quite dead, though. You can see that in Mr Fink’s latest letter to shareholders, as well as those of Warren Buffett, America’s most celebrated investor, and Jamie Dimon, Wall Street’s top banker. Mr Fink, to explain the importance of retirement savings, tells an uplifting story about his late mum and dad. Mr Buffett writes of his sensible (and now very rich) sister, Bertie. Mr Dimon, though hardly heart-on-sleeve, sounds like he carries the cares of the world on his shoulders. The least personal is Amazon’s Andy Jassy, who in a shareholder letter on April 11th came across as an Amazonian to the marrow of his bones. No matter. The day the letter was published his firm’s stockmarket value soared by \$30bn to a record high of almost \$2trn. That is an ROI—return on ink—of \$6m a word. For shareholders, pure poetry.

There is more to these letters than self-publicity. They give a sense of how America’s corporate bigwigs see the world. Two letters, from Messrs Dimon and Jassy, are particularly relevant as the country enters the spring earnings season. After three Goldilocks months from January to March, when the stockmarket rallied on hopes of lower inflation, falling interest rates and a soft landing, they are less upbeat than you might expect.

The main pressure on companies in this round of results will be to prove their worth. Buoyed by expectations of lower interest rates, the recent rally has lifted the share prices of the big companies that make up the S&P 500 index. The index’s ratio of price to earnings looks high compared with the average of the past five years. Yet inflation has not fallen as fast as hoped—and therefore nor have rates. For the lofty valuations to be justified, in other words, earnings must rise. That should be easy enough for benefi-

caries of the artificial-intelligence (AI) boom—Amazon and Microsoft, which provide the computing power; Nvidia, which supplies them with AI chips; and Meta, whose advertising business has been strengthened by AI. It will be harder for less techie firms. Unless they, too, show strong earnings growth, the market’s mood may sour.

When it comes to AI, the big question on earnings calls will be to what extent big tech’s investments in AI infrastructure and services are in fact generating higher revenues. In his letter, Mr Dimon indulges in the hype. AI, he writes, may be as transformational as “the printing press, the steam engine, electricity, computing and the internet”. But he also makes clear it is still early days. His bank, JPMorgan Chase, appears to be experimenting with “generative” AI, the type that has grabbed attention in the past 17 months, rather than deploying it at scale. Mr Jassy describes a three-layer system of building blocks that Amazon’s cloud-computing arm, AWS, is creating to help customers train generative-AI models, feed their data into existing ones and develop AI-related applications. For such services to make real money, however, big firms like JPMorgan Chase must move from experiments to deployment.

Look beyond big tech, propelled by the tailwinds of AI, and bosses’ main concern is the business cycle. In recent weeks expectations of a soft landing have given way to those of a “no landing”: growth and inflation staying higher for longer, keeping long-term interest rates elevated. If those forecasts come true, investors will be asking whether revenues and profits can grow fast enough to offset the drag of higher rates. If not, fears of stagflation, seemingly put to rest last year, may resurface. On this score, Mr Dimon sounds almost prophetic. Consumer spending, and thus the American economy, have remained resilient, he writes, partly thanks to government largesse. But sloshing buckets of public money into clean-energy investments, military spending and so on risks making inflation stickier—and keeping rates higher—than markets expect. Adding to the uncertainty is “one of the most treacherous geopolitical eras” since the second world war.

Days after Mr Dimon’s letter was published, his words came back to haunt him. Fears of a long spell of higher interest rates contributed to a rare slump in JPMorgan Chase’s share price on April 12th, decent first-quarter results notwithstanding. Meanwhile, tensions in the Middle East put upward pressure on oil prices, further stoking fears of inflation. Mr Jassy also alluded to economic uncertainty in inflationary times. Though consumers continue to spend, he warns shareholders, they are doing so carefully. To save money, people are trading down whenever they can.

The write stuff

Mr Dimon and Mr Jassy lead giant companies. The bigger a business, the more it tends to benefit from faster economic growth. The richer it is, the less it fears an interest-rate crunch that could curtail its access to capital. Other large, deep-pocketed firms, such as oil producers and obesity-drug sellers, may reinforce big tech’s and big banks’ hopeful earnings narrative. Smaller, more indebted ones will struggle if their interest costs do not fall.

In business, the worse your balance-sheet, the higher the interest-rate risk. That is true in society at large. As Mr Dimon points out, nearly 40% of Americans do not have \$400 in savings to deal with emergency payments such as medical bills or car repairs. His was not a cheerful letter. It was a bleakly powerful one. ■

Finance & economics



Earning power

Winning the generation game

KALAMATA AND NEW YORK

The world economy has been kind to today's youngsters

GENERATION Z IS taking over. In the Grich world there are at least 250m people born between 1997 and 2012. About half are now in a job. In the average American workplace, the number of Gen Z-ers (sometimes also known as "Zoomers") working full-time is about to surpass the number of full-time baby-boomers, those born from 1945 to 1964, whose careers are winding down (see chart 1 on next page). America now has more than 6,000 Zoomer chief executives and 1,000 Zoomer politicians. As the generation becomes more influential, companies, governments and investors need to understand it.

Pundits produce a lot of fluff about the cohort. Recent "research" from Frito-Lay, a crisp-maker, finds that Gen Z-ers have a strong preference for "snacks that leave remnants on their fingers", such as cheese dust. Yet different generations also display deeper differences, in part shaped by the economic context in which they grow up. Germans who reached adulthood during

the high-inflation 1920s came to detest rising prices. Americans who lived through the Depression tended to avoid investing in the stockmarket.

Many argue that Gen Z is defined by its anxiety. Such worriers include Jonathan Haidt, a social psychologist at New York University, whose new book, "The Anxious Generation", is making waves. In some ways, Gen Z-ers are unusual. Young people today are less likely to form relationships than those of yesteryear. They are more

→ ALSO IN THIS SECTION

- 59 Buttonwood: Smaller stockmarkets**
- 60 China's misleading economic growth**
- 60 How to use frozen Russian assets**
- 61 Pricey petrol is here to stay**
- 62 Citigroup's surprising turnaround**
- 63 Free exchange: Debt crises**

likely to be depressed or say they were assigned the wrong sex at birth. They are less likely to drink, have sex, be in a relationship—indeed to do anything exciting. Americans aged between 15 and 24 spend just 38 minutes a day socialising in person on average, down from almost an hour in the 2000s, according to official data. Mr Haidt lays the blame on smartphones, and the social media they enable.

His book has provoked an enormous reaction. On April 10th Sarah Huckabee Sanders, the governor of Arkansas, echoed Mr Haidt's arguments as she outlined plans to regulate children's use of smartphones and social media. Britain's government is considering similar measures. But not everyone agrees with Mr Haidt's thesis (see Science & technology section). And the pushing and shoving over Gen Z's anxiety has obscured another way in which the cohort is distinct. In financial terms, Gen Z is doing extraordinarily well. This, in turn, is changing its relationship with work.

Consider the group that preceded Gen Z: millennials, who were born between 1981 and 1996. Many entered the workforce at a time when the world was reeling from the global financial crisis of 2007-09, during which young people suffered disproportionately. In 2012-14 more than half of Spanish youngsters who wanted a job could not find one. Greece's youth-unemployment rate was even higher. Britney

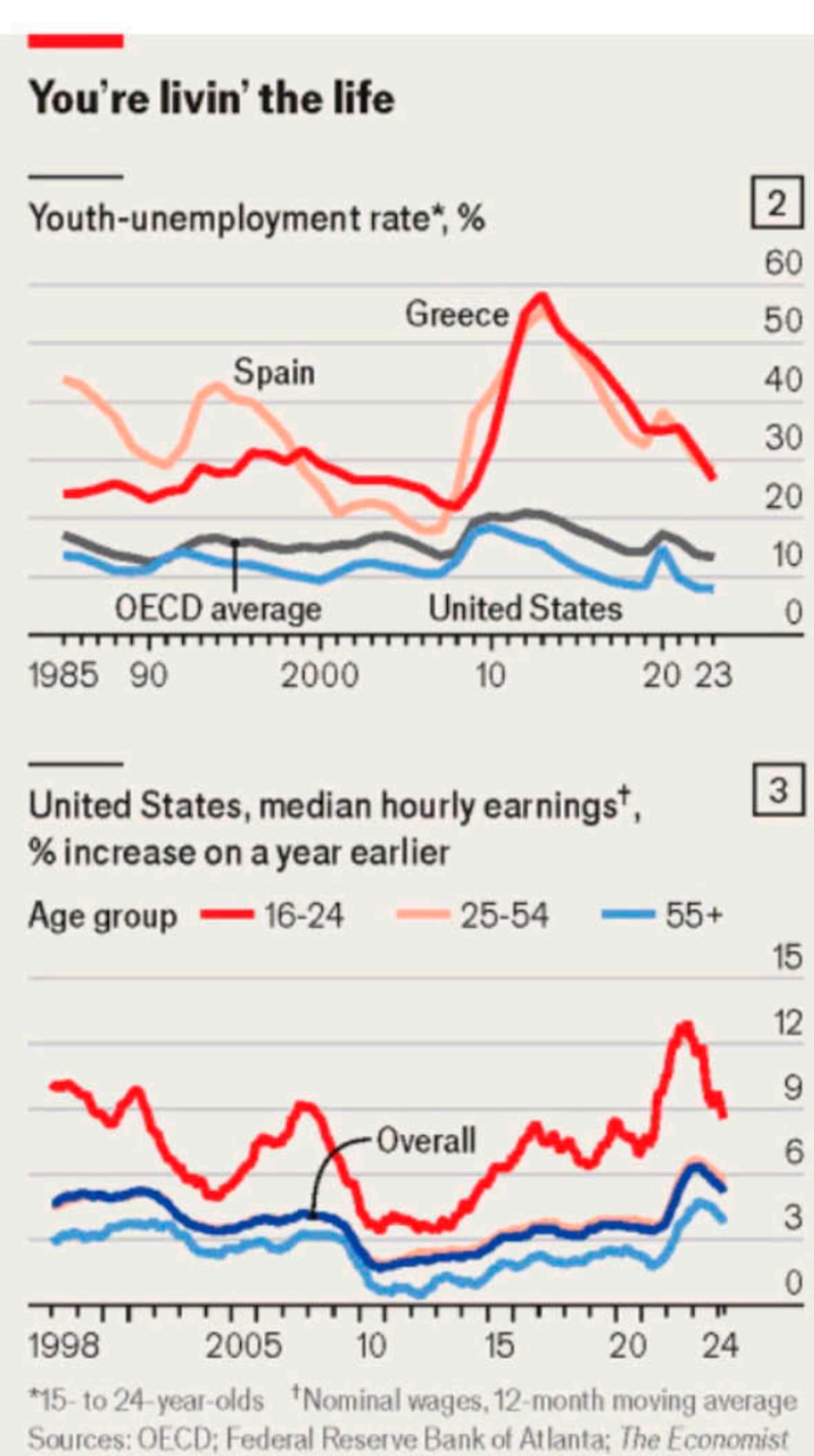
▶ Spears's "Work Bitch", a popular song released in 2013, had an uncompromising message for young millennials: if you want good things, you have to slog.

Gen Z-ers who have left education face very different circumstances. Youth unemployment across the rich world—at about 13%—has not been this low since 1991 (see chart 2). Greece's youth-unemployment rate has fallen by half from its peak. Hoteliers in Kalamata, a tourist destination, complain about a labour shortage, something unthinkable just a few years ago. Popular songs reflect the zeitgeist. In 2022 the protagonist in a Beyoncé song boasted, "I just quit my job". Olivia Rodrigo, a 21-year-old singer popular with American Gen Z-ers, complains that a former love interest's "career is really taking off".

Many have chosen to study subjects that help them find work. In Britain and America Gen Z-ers are avoiding the humanities, and are going instead for more obviously useful things like economics and engineering. Vocational qualifications are also increasingly popular. Young people then go on to benefit from tight labour markets. Like Beyoncé's protagonist, they can quit their job and find another one if they want more money.

In America hourly pay growth among 16- to 24-year-olds recently hit 13% year on year, compared with 6% for workers aged 25 to 54. This was the highest "young person premium" since reliable data began (see chart 3). In Britain, where youth pay is measured differently, the average hourly pay of people aged 18-21 rose by an astonishing 15% last year, outstripping pay rises among other age groups by an unusually wide margin. In New Zealand the average hourly pay of people aged 20-24 increased by 10%, compared with an average of 6%.

Strong wage growth boosts family incomes. A new paper by Kevin Corinth of the American Enterprise Institute, a think-tank, and Jeff Larrimore of the Federal Reserve assesses Americans' household in-



come by generation, after accounting for taxes, government transfers and inflation (see chart 4). Millennials were somewhat better off than Gen X—those born between 1965 and 1980—when they were the same age. Zoomers, however, are much better off than millennials were at the same age. The typical 25-year-old Gen Z-er has an annual household income of over \$40,000, more than 50% above baby-boomers at the same age.

Gen Z's economic power was on display at a recent concert by Ms Rodrigo in New York. The mostly female teenagers and 20-somethings in attendance had paid hundreds of dollars for a ticket. Queues for merchandise stalls, selling \$50 T-shirts, stretched around the arena. Ms Rodrigo will have no trouble shifting merchandise in other parts of the world, as her tour moves across the Atlantic. That is in part because Gen Z-ers who have entered the workplace are earning good money throughout the rich world. In 2007 the average net income of French people aged 16-24 was 87% of the overall average. Now it is equal to 92%. In a few places, including Croatia and Slovenia, Gen Z-ers are now bringing in as much as the average.

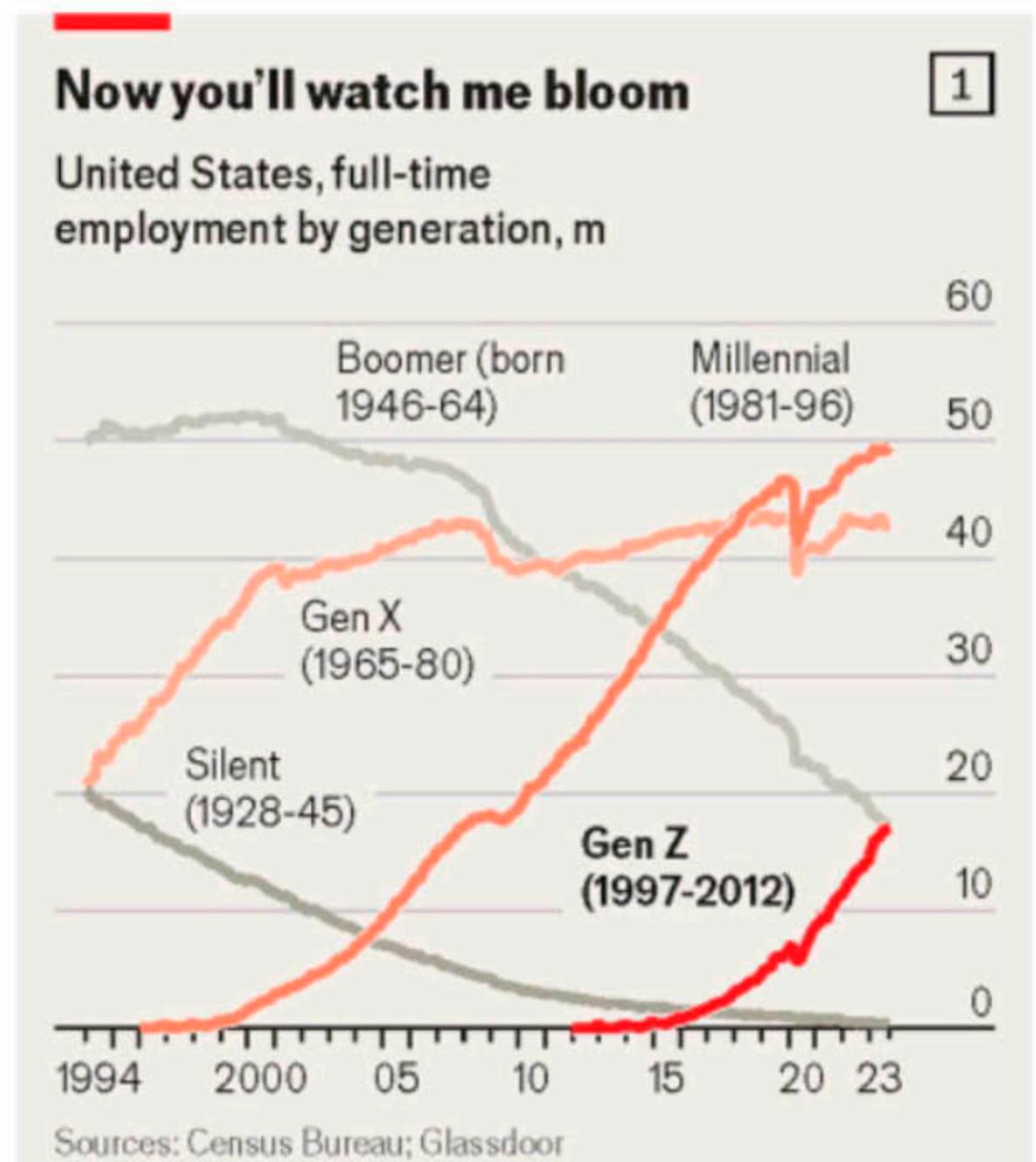
Some Gen Z-ers protest, claiming that higher incomes are a mirage because they do not account for the exploding cost of college and housing. After all, global house prices are near all-time highs, and gradu-

ates have more debt than before. In reality, though, Gen Z-ers are coping because they earn so much. In 2022 Americans under 25 spent 43% of their post-tax income on housing and education, including interest on debt from college—slightly below the average for under-25s from 1989 to 2019. Bolstered by high incomes, American Zoomers' home-ownership rates are higher than millennials' at the same age (even if they are lower than previous generations').

What does this wealth mean? It can seem as if millennials grew up thinking a job was a privilege, and acted accordingly. They are deferential to bosses and eager to please. Zoomers, by contrast, have grown up believing that a job is basically a right, meaning they have a different attitude to work. Last year Gen Z-ers boasted about "quiet quitting", where they put in just enough effort not to be fired. Others talk of "bare minimum Monday". The "girl-boss" archetype, who seeks to wrestle corporate control away from domineering men, appeals to millennial women. Gen Z ones are more likely to discuss the idea of being "snail girls", who take things slowly and prioritise self-care.

The data support the memes. In 2022 Americans aged between 15 and 24 spent 25% less time on "working and work-related activities" than in 2007. A new paper published by the IMF analyses the number of hours that people say they would like to work. Not long ago young people wanted to work a lot more than older people. Now they want to work less. According to analysis by Jean Twenge of San Diego State University, the share of American 12th-graders (aged 17 or 18) who see work as a "central part of life" has dropped sharply.

Another consequence is that Gen Z-ers are less likely to be entrepreneurs. We estimate that just 1.1% of 20-somethings in the EU run a business that employs someone else—and in recent years the share has drifted down. In the late 2000s more than 1% of the world's billionaires, as measured



We're hiring an economics writer. Journalistic experience is not necessary; the ability to write clearly and a thorough understanding of economics are crucial. For more information visit economist.com/econwriter



► by *Forbes*, a magazine, were millennials. Back then pundits obsessed over ultra-young tech founders, such as Mark Zuckerberg (Facebook), Patrick Collison (Stripe) and Evan Spiegel (Snapchat). Today, by contrast, less than 0.5% on the *Forbes* list are Zoomers. Who can name a famous Gen Z startup founder?

Gen Z-ers are also producing fewer innovations. According to Russell Funk of the University of Minnesota, young people are less likely to file patents than they were

in the recent past. Or consider the Billboard Hot 100, measuring America's most popular songs. In 2008, 42% of hits were sung by millennials; 15 years later only 29% were sung by Gen Z-ers. Taylor Swift, the world's most popular singer-songwriter, titled her most famous album "1989", after the year of her birth. The world is still waiting for someone to produce "2004".

How long will Generation Z's economic advantage last? A recession would hit young people harder than others, as recessions always do. Artificial intelligence could destabilise the global economy, even if youngsters may in time be better placed to benefit from the disruption. For now, though, Generation Z has a lot to be happy about. Between numbers at Madison Square Garden, Olivia Rodrigo sits at the piano and counsels her fans to be thankful for all that they have. "Growing up is fucking awesome," she says. "You have all the time to do all the things you want to do." The time and the money. ■

BUTTONWOOD *Was it all a dream?*

Why the stockmarket is disappearing

THE LAW of supply and demand is one of the first things that students of economics learn. When the price of something goes up, producers bring more to market. What, then, is going on in global stockmarkets?

Global share prices have never been higher, having risen by 14% over the past year. At the same time, the supply of stocks is shrinking. As analysts at JPMorgan Chase, a bank, note, the pace of company listings is slower this year than last, and last year was already a slow one. This means that equity issuance net of stock buy-backs so far this year is already negative, at minus \$120bn—the lowest such figure since at least 1999. Companies including ByteDance, OpenAI, Stripe and SpaceX have valuations in the tens or even hundreds of billions of dollars, and remain private.

Jamie Dimon, JPMorgan's boss, is among those to have voiced concern. He identifies demand for environmental, social and governance reporting and the pressure of quarterly earnings reports as part of the trend's explanation. But for the most part, the disappearing stockmarket is a side-effect of something more positive for company founders: they simply have more options. Private-equity funds managed \$8.2trn by the middle of 2023, according to McKinsey, a consultancy—more than twice the amount in 2018. If founders do not want to go public, they now face less pressure to do so. There are plenty of funds that are willing to invest in them regardless.

Founders have many reasons to stay private. The rise of intangible assets is a big one. Such assets range from copyrights, software and other intellectual property to brand recognition. René Stulz of Ohio State University notes that requirements for disclosure of financial

information and strategy favour companies with tangible assets, such as machinery and real estate. When a firm announces it owns a building, competitors can hardly steal the asset. When it comes to ideas, research and other intangibles, the less rival firms know, the better. If a company tries to withhold information when listing, it may be undervalued. Worse still, it may be breaking the law.

People other than company founders may be worried by the trend, however. Public markets are more transparent than private ones. Thus their reduced importance matters not just for investors, but for regulators monitoring financial stability and analysts assessing the market. Stocks also still tend to be the cornerstone of portfolios for less sophisticated retail investors. Alexander Ljungqvist, Lars Persson and Joacim Tag, three economists, suggest that the disappearance of markets may reduce public support for business-friendly government policies, as voters benefit less from corporate profits.

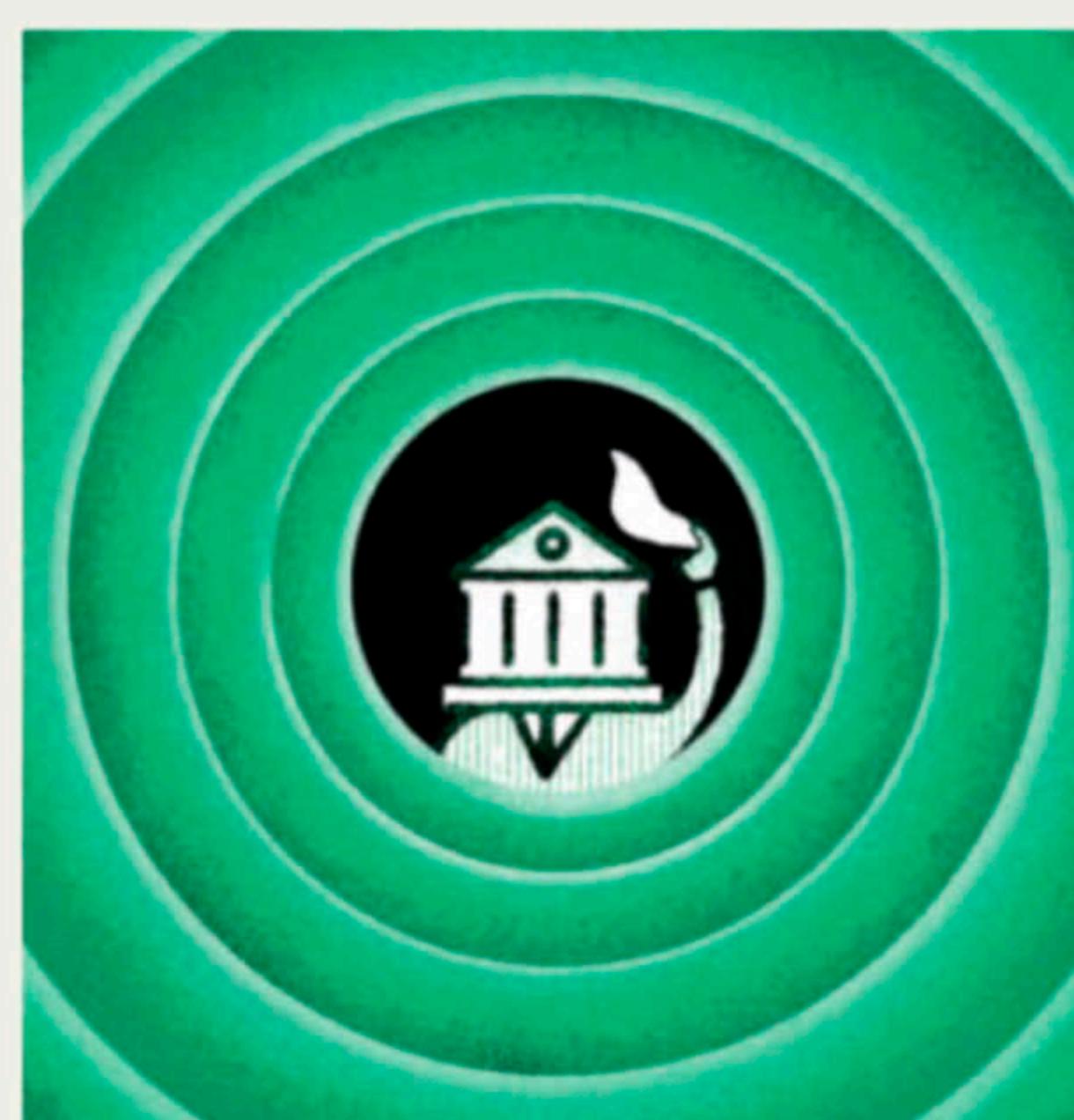
Might anything be done to revive stockmarkets? The changing behaviour of

institutional investors may blunt some of the trend's more damaging consequences. Allocations from such investors to private equity have grown in recent years, rising to 10% of their assets in 2023 from 6% five years earlier, at the same time as allocations to listed equities have dropped by a similar amount. This will provide households with exposure to privately held investments through their pension and mutual funds.

But institutional investors will do little to improve transparency in private markets. One option that might appeal to regulators is to impose tighter requirements on large companies that choose not to list, in order to close the gap between the rules faced by public and private firms. A less coercive option would be to reduce the amount of information that companies are forced to share when they go public.

Unfortunately, such efforts have produced mixed results in the past. The Jumpstart Our Business Startups (JOBS) Act, which was introduced in America in 2012, reduced disclosure requirements for public firms. Although an assessment in 2015 indicated that it had boosted initial public offerings by 25%, another in 2022 suggested that it had done so by encouraging low-quality offerings that ended up underperforming the market.

As a result, the best hope for stockmarkets may lie with the greed of private-equity investors. Public markets still provide an unparalleled exit route for those who would like to turn corporate holdings into ready cash. Bain, another consultancy, notes that private-equity funds are currently sitting on \$3.2trn in unsold assets. At some point, end-investors will want the money back. But until then, Mr Dimon is right: shrinking public markets are cause for concern.



China's economy

Manufacturing miracles

HONG KONG

Better growth hides reasons to worry

WHEN CHINA'S leaders set an economic-growth target of "around" 5% for this year, the goal was widely agreed to be ambitious. Now the country looks increasingly likely to meet it. Several foreign banks have raised their forecasts. Data released on April 16th show the economy grew by 5.3% in the first quarter, compared with a year earlier—quicker than expected and faster than the target requires.

How is this happening? Countries at China's stage of development often shift towards services. Yet China's leaders have a soft spot for "hard" output. Xi Jinping, the country's ruler, sees manufacturing as a source of both prosperity and security. He covets what officials call a "complete" industrial chain that would free China from reliance on foreign powers for vital technological inputs. His latest five-year plan aims to stop the steady decline in manufacturing's share of GDP.

The first quarter was consistent with that goal. Manufacturing output grew by 6.7% compared with a year ago, faster than the overall economy. High-tech manufacturing fared even better. China's leaders have talked a lot about the need to cultivate "new quality productive forces", buzzwords that appeared in the monthly statistical press release for the first time.

But even as China weans itself off foreign suppliers, it remains reliant on foreign buyers. The volume of exports grew by 14% in the first quarter compared with a year earlier, according to Zhiwei Zhang of Pinpoint Asset Management. Falling prices and a competitive currency have helped. America's Bureau of Labour Statistics reckons the price of goods from China fell by 2.9% year-on-year in the first quarter. That is the third-steepest drop on record.

China cannot rely on strong exports for long without provoking a protectionist backlash from its trading partners. Olaf Scholz, chancellor of Germany, raised fears about Chinese overcapacity when he met Mr Xi in Beijing on April 16th. Germany used to benefit from China's economic progress. It sold sophisticated industrial goods to China, even as China's manufacturers conquered lower-end markets around the world. Now the two countries have become rivals in many industries Germany holds dear, including chemicals, machinery and, of course, cars.

China's reliance on markets abroad reflects some enduring weaknesses at home.

Retail sales were surprisingly poor in March. Consumer confidence remains low. And the property market's misery continues. The price of new flats in 70 of China's biggest cities fell by 2.2% on average in March compared with a year earlier, the steepest drop since 2015, according to Reuters, a news agency. Sales of newly built residential housing fell by over a fifth.

The slump in China's property market has contributed to falling prices in many related parts of the economy, such as building materials and housing appliances. That has deepened deflation's grip on the economy. Factory-gate prices have now fallen for 18 months in a row. Consumer price inflation, after a brief uptick during the lunar new year holiday in February, remained near zero in March. Declining prices are a double-edged sword, as Ting Lu of Nomura, a bank, has pointed out. They have increased China's competitiveness abroad, which is one reason why the country's exports have been surprisingly strong. But if deflation persists it could erode revenues, making debts harder to bear. It might also force companies to cut wages, which would do nothing to restore household morale or spending.

For all the paranoia of China's leaders, they seem worryingly complacent about the danger of deflation. Perhaps they view it as a blip, which should not distract them from long-term aims to fortify China against shifts in the global balance of power—what Mr Xi calls "changes unseen in a century". Falling prices can, though, turn a passing downturn into a protracted slump. This week's figures showed that China's GDP deflator, a broad measure of prices, has fallen for four quarters in a row. That has not happened since 1999. Or to put it in terms Mr Xi might appreciate, it is a change unseen this century. ■



A bit of bounce

Conflict finance

Drip into torrent

A novel idea to make use of frozen Russian assets gathers support

AFTER RUSSIA destroyed the Trypilska power plant on April 11th, Ukraine blamed a lack of anti-missile ammunition. The country's leaders are also desperate for more financial support. The two shortages—of ammunition and money—reflect different constraints among Ukraine's allies. Whereas the lack of ammunition is mostly the product of limited industrial capacity, the lack of money is the product of limited political will.

In one area, though, there are signs of progress: over what to do with Russia's frozen assets. After Vladimir Putin invaded Ukraine, Western governments quickly locked down €260bn-worth (\$282bn) of Russian assets, which have remained frozen ever since. Proposals about what to do with them have ranged from the radical (seize them and hand them over to Ukraine) to the creative (force them to be reinvested in Ukrainian war bonds). Until recently, none has found widespread favour with Western governments.

Could that soon change? On April 10th Daleep Singh, America's deputy national security adviser for international economics, declared that the Biden administration now wanted to make use of interest income on frozen Russian assets in order to "maximise the impact of these revenues, both current and future, for the benefit of Ukraine today". Six days later David Cameron, Britain's foreign secretary, announced his support, too: "There is an emerging consensus that the interest on those assets can be used."

The approach is an elegant one. Income earned on Russia's foreign holdings can be seized in a manner that is both legal and practical. Many of the country's bonds have already matured. Cash from redemption of bonds is held by the depository in which it currently sits until it is withdrawn, paying no interest to the owner as per the depository's usual terms and conditions. Any interest earned thus belongs to the depository—unless, that is, the state decides to tax it at a rate close to 100%.

Next, as suggested by *The Economist* in February, would be to transfer the net present value of that income stream to Ukraine. Investing Russia's cash holdings into five-year German bunds would yield €3.3bn a year, enough to service EU debt of about €116bn at the same maturity. The rest is financial plumbing: set up a G7-guaranteed fund that receives the deposi-

▶ tories' incomes on Russian cash, issue that fund's debt to the markets and send the proceeds in bulk to Ukraine.

Although the EU has agreed to seize profits from depositories, it has not agreed to the subsequent steps. Under the bloc's current plans, the proceeds will be used to pay for Ukrainian ammunition by July if all goes well, with a small portion set aside to compensate depositories for any Russian legal action or retaliation. But many in Europe remain suspicious about America's desire to unlock more money through financial engineering. On April 17th Christine Lagarde, president of the European Central Bank, suggested that such proposals face a "very serious legal obstacle".

A drip of funds would be welcomed by Ukraine, but a big wedge of cash, as promised by America's proposal, would be better still. European politicians would therefore be wise to sign up to it before there is a new occupant of the White House. ■

Oil prices

Explosive material

Even without war in the Gulf, more expensive petrol is here to stay

WHEN IRAN'S missiles whizzed towards Israel on Saturday April 13th, oil markets were closed. When they opened on Monday, their reaction was a loud "meh". Brent crude, the global benchmark, dipped below \$90 a barrel. It has since hovered around that level (see chart).

Traders had expected an attack of precisely this variety: big enough to cause concern; obvious enough to be foiled. They are now betting that Israel will avoid anything too rash in response. Yet even if oil prices do not surge, they remain uncomfortably elevated and seem likely to rise higher still in the summer, when increasing demand amid tight supply will probably tip the market into deficit. A cast of decision-makers—from central bankers to President Joe Biden, who faces re-election in November—is watching anxiously.

Geopolitical risk explains, in part, why oil prices have risen by a quarter since December. Brent passed \$90 for the first time in nearly six months after Israel bombed Iran's consulate in Damascus on April 1st. Supply disruptions are playing an even bigger role. Mexico is slashing shipments in order to produce more petrol at home. A leaky Scottish pipeline was forced to close. Turmoil in Libya is disrupting output; war in South Sudan could do the same.

Meanwhile, tougher sanctions on Russia are leaving more of its oil stranded. In

March refiners in India—Russia's second-biggest buyer since 2022—said they would no longer welcome tankers owned by Sovcomflot, Russia's state-owned shipping firm, for fear of Western retribution. Most of the 40-odd tankers subject to sanctions by America since October have not gone on to load Russian oil. The reimposition of sanctions on Venezuela could further dent supply. America may also decide to better police its embargo on Iran's oil sales.

The biggest supply disruption is deliberate. It is coming from the Organisation of the Petroleum Exporting Countries and its allies (OPEC+). In November the group pledged to cut output by 2.2m barrels a day (b/d), or 2% of global production. Most observers had expected that, with prices likely to rise throughout 2024, members would take the chance to row back on the cuts. Instead, several announced in March that they would extend them until the end of June. Russia even said it would deepen its cuts by another 471,000 b/d, reducing output to 9m b/d, from 10.8m b/d pre-war.

Last year supply growth outside the cartel more than made up for the rise in demand. This year non-OPEC output will rise again—Brazil and Guyana are expected to pump record amounts—but growth will slow. Global oil stocks are already falling. They will shrink faster this summer, as holidaymakers in America take to the road.

All this is happening at the same time as demand becomes more pressing. Measures of manufacturing activity in America, China and Europe have surprised on the upside, leading the International Energy Agency, an official forecaster, to predict that global crude demand will rise by an average of 1.2m b/d this year, up from the 900,000 b/d it suggested in October. Others, including some big traders and OPEC itself, reckon demand growth may near or surpass 2m b/d.

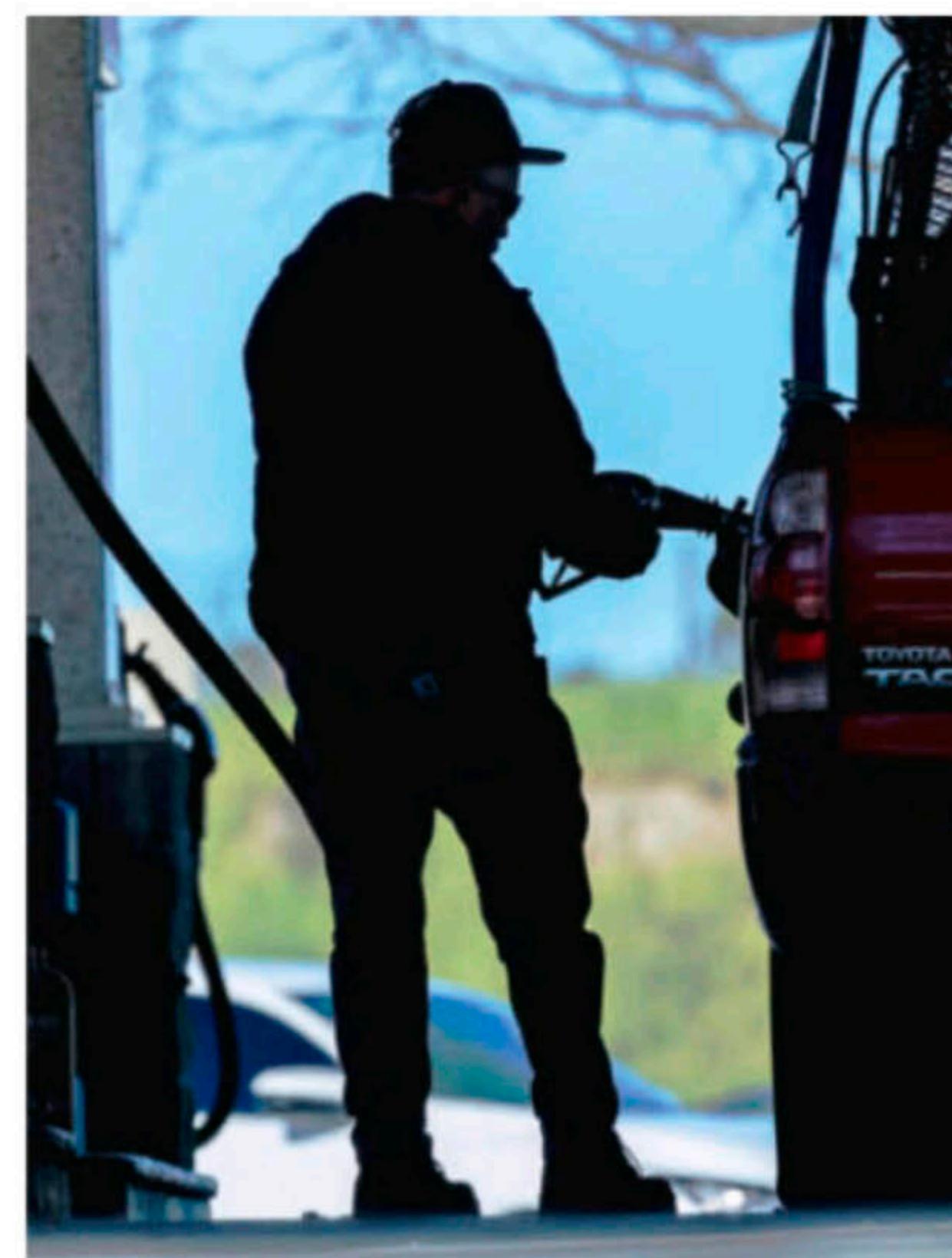
Where will the oil price go next? If OPEC+ keeps its cuts unchanged, it could reach \$100 within months. But that is not an outcome the cartel really wants. Many members, not least Saudi Arabia, worry

Russia's revenge

Brent crude oil price, \$ per barrel



Source: LSEG Workspace



The next Trump voter

that a rapid rise in the oil price could destroy demand. Dearer crude is pushing American petrol prices, already at \$3.60 a gallon, closer to \$4. A surge past that point could shave 200,000 b/d off petrol demand over the summer, estimates JPMorgan Chase, a bank. Thus OPEC+ may signal its intention to produce more at its next meeting. Jorge León, a former OPEC analyst now at Rystad Energy, a consultancy, expects crude to average \$90 a barrel in the third quarter of the year and \$89 in the final quarter. Futures markets are even more sanguine: buying crude for delivery in December costs around \$85 a barrel.

Even if the tit-for-tat between Israel and Iran escalates, it is unlikely to change much. Any reduction in Iran's exports—worth 1.6m b/d in March—might be balanced by more pumping from the rest of OPEC. In a worst-case scenario, Iran could decide to close the Strait of Hormuz, a waterway that connects the Gulf to the Indian Ocean, through which 30% of the world's seaborne oil, and nearly all of the Gulf's, must pass. Yet doing so would anger just about everyone in the region, and cut off Iran from its sole oil buyer: China. Although Iran could opt to cause trouble in less self-harming ways, such as harassing ships in the Gulf, this may not have a big impact. Even the tanker war of the 1980s—when hundreds of tankers were attacked—failed to durably boost prices.

The most likely scenario, therefore, is that oil prices remain tolerable to the world economy, at somewhere in the region of \$85-90 a barrel, while allowing OPEC members to earn juicy margins. Prices are unlikely to fall soon, though. And whether such a level is tolerable to American voters, who see gasoline prices advertised in big red numbers by the highway every day, is another matter entirely. ■

Citigroup

House of Fraser

NEW YORK

Wall Street's biggest loser at last looks to be on the up

UNMANAGEABLE AND uninvestable. That is how investors have long considered Citigroup. For over a decade the bank, which was once the largest and most valuable in America, has been a basket case. It trades at half the value it did in 2006, making it the only big American bank to fetch a valuation lower than its peak before the global financial crisis. Pick any measure and Citi is invariably dead last compared with its rivals. The firm has more staff than Bank of America, yet makes only a third of the profit.

Its prize for this miserable drubbing is not a participation trophy, but a consent order from regulators instructing it to improve internal oversight and change how it measures risk. The firm became the laughing-stock of Wall Street in 2020 when it accidentally wired \$894m to creditors of Revlon, a failing company. That Jane Fraser became the first woman to run a Wall Street bank following the mess attached an asterisk to her appointment. "Glass cliff" is a term used to describe the phenomenon of women being appointed to top jobs at companies in deep crisis.

It seemed as if Ms Fraser was bound to fall from that cliff. Some Citi staff grumbled that she was a consultant, not a real banker, because she spent a decade at McKinsey before joining the firm in 2004. Those who bought shares on her first day in 2021 were choking down annualised returns of -15% by mid-September last year. But a remarkable turnaround now appears under way. On September 13th Ms Fraser announced a restructuring. She later laid out plans to sack 20,000 people by the end of 2026, some 7,000 of whom have already been shown the door. Investors seem to be rediscovering their faith in the firm. Citi's share price rose by more than 50% between September and March, meaning that Ms Fraser now appears to be on the path to an accolade far more elusive than "first woman to do something". She may become the banker who turned around Citi.

To understand what an achievement that would be, look to the bank's creation in 1998. Citi was going to be "everything to everyone, everywhere", recalls Ernesto Torres Cantú, who has worked at the bank for 22 years and runs its international business. That was its ambition under Sandy Weill, who was a legend on Wall Street. Mr Weill had bought and merged financial institutions to form a "financial supermar-

ket". In 2000 Citi was the largest bank in the world, as measured by its capital base.

Flaws are clear in hindsight. Harmonies between businesses never materialised. Instead, Citi became bloated. Layers of management obscured what was happening—which was, in the mid-2000s, a vast amount of bad mortgage lending. In 2008 Citi required more bail-out money than any other bank. It laid off 75,000 people, a quarter of its workforce. Its share price, which at over \$500 in 2007 had valued the firm at \$270bn, had fallen to less than a dollar by 2009. After the financial crisis, Citi's bosses promised to simplify the firm. Assets were sold. But "all of the other restructurings we have made, until this one, wanted to preserve that idea [of being in all businesses in all markets] in some way or another," says Mr Torres Cantú.

Ms Fraser has ditched the mission once and for all. Her first act was to outline plans to sell 13 consumer banks. Nine are gone; three are being wound down. Only one in Poland, where the process has stalled owing to war in Ukraine, remains.

These cuts have paved the way for the next phase: restructuring. A tangled mess of reporting lines has been replaced by five businesses that report directly to Ms Fraser: markets, which includes debt and stock trading; banking, which houses investment banking; services, which is where Treasury management and securities ser-

vices are located; wealth management; and the American consumer-bank and credit-card businesses. Citi now details the capital allocated to each of these and their returns, as well as their revenues and profits.

The reorganisation has cut red tape. Before, "if you wanted to get something done with a client, you had to get the approval of the corporate-bank chain, and then you would move to the approval from the geography management and then you had to get the approval from the legal entity, from the CEO of the regional bank," says Mr Torres Cantú. It has cut thousands of jobs. And it has also shed light on performance. "We want these business heads to compete with one another to achieve their return targets," says Mark Mason, chief financial officer at the firm. "Everything is out in the open now." What has become clear is that Citi has a crown jewel: its services arm, which uses a sixth of the firm's capital and has returned 20-25% on that capital over the past year (excluding the fourth quarter of 2023, which included significant restructuring costs). Other business returns are poor or, at best, average.

Get the polish out

Ms Fraser wants a bigger crown jewel. Because Citi is a global bank, it has an advantage with corporate clients that operate across borders. The bank now hopes to gain smaller mid-market customers. Ms Fraser would also like to turn around the two laggards—banking and wealth management—for which she has brought in new blood. Andy Sieg, who ran wealth management at Bank of America, joined in September. Vis Raghavan, the head of JPMorgan Chase's investment-banking business, will join in the summer.

Investors are delighted. Citi's share price has risen by almost twice as much as those of America's other large banks since September. But will the changes produce the goods? Citi is still under regulatory scrutiny. The firm's results from the first quarter, released on April 12th, were mediocre; its share price slipped. Just because investors can now see how poorly wealth management and banking are performing does not mean those businesses will improve. And talent is expensive. As the firm sacked thousands, Mr Sieg was paid \$11m for his first three months of work.

There is nevertheless a sense that Citi is at last changing. Reflecting on the firm's decision to abandon its global consumer-banking businesses, Anand Selva, the firm's chief operating officer, recalls how "years ago we were competing with all of these big regional and global banks". But as regulations changed, many packed up, leaving just local banks as competitors. "You decide where you want to focus...and build scale," he says. Citi will no longer be everything, to everyone, everywhere. ■

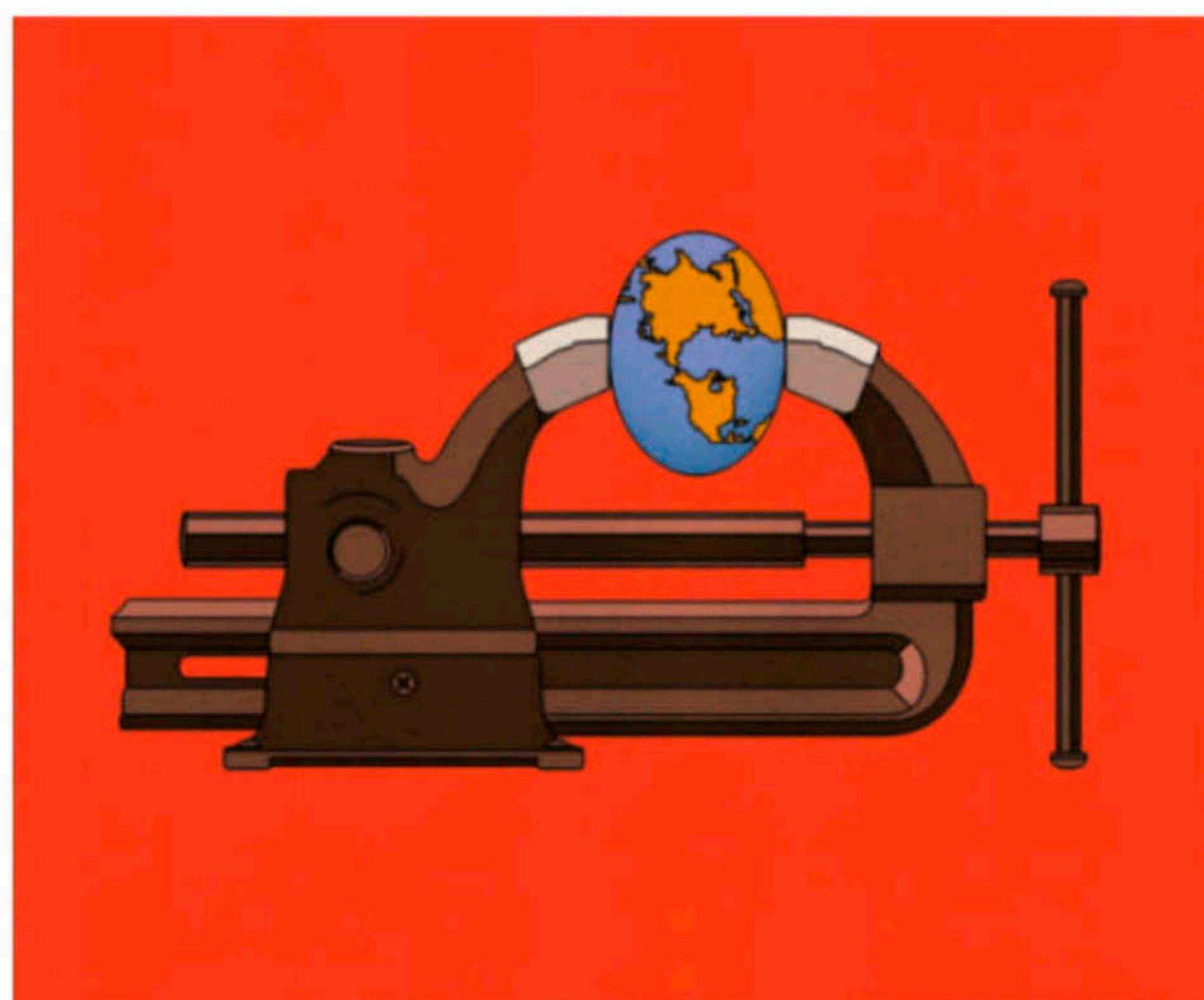


The first woman to turn around Citi?

FREE EXCHANGE

Time for some hardball

The IMF unveils a tough new plan to solve the poor world's debt crisis



IT IS NOW four years since the first poor countries were plunged into default because of spiralling costs from covid-19 spending and investors pulling capital from risky markets. It is two years since higher interest rates in the rich world began to put even more pressure on cash-strapped governments. But at the spring meetings of the IMF and the World Bank, held in Washington, DC, this week, many of the world's policymakers were acting as if the worst debt crisis since the 1980s, by portion of world population affected, had come to an end. After all, the poorest countries in the world grew at a respectable 4% last year. Some, such as Kenya, are even borrowing from international markets again.

In reality, the crisis rolls on. The governments that went bust still have not managed to restructure their debts and dig out of default. As such, they are stuck in limbo. Over time more—and bigger—countries could join them. So in between the spring meetings' embassy dinners and think-tank soirées, the IMF's board announced a radical new step to deal with the problem.

The core of the difficulty in resolving debt crises has been that there are more creditors, with less in common, than in the past. Over 70 years of debt restructurings, Western countries and banks came to do things a certain way. Now decisions require the assent of a new group of lenders, some of which see no reason to comply. Each part of the process, even if it was once a rubber stamp, can be subject to a protracted negotiation.

Chief among the new lenders is China. Even though the country is now the world's biggest bilateral creditor, it has yet to write down a single loan. India has doubled its annual overseas lending from 2012 to 2022; it sent \$3.3bn to Sri Lanka soon after the country was plunged into crisis. The United Arab Emirates and Saudi Arabia are in the group, too. They have together lent more than \$30bn to Egypt. The Gulf creditors' preferred method is to deposit dollars at the recipient's central bank—a form of lending so novel that it has never been subject to a debt restructuring before.

As a result, the seven countries that have sought restructuring since the start of the pandemic have been unable to strike a deal to whittle down what they owe. Only two small countries have made progress: Chad, which rescheduled rather than reduced debts,

and Suriname, which reached a deal with all its creditors but the biggest, China. Zambia has waited four years for a deal. Since no creditor wants a worse bargain than any other, there has been next to no principal debt relief during the worst debt crisis in four decades. Four years ago G20 countries signed up to the Common Framework, an agreement to take equal cuts in restructurings, but creditors have split over the degree of generosity needed.

The IMF, which usually cannot lend to countries with unsustainably high debts, has been unable to do much. Yet on April 16th it made a move. It said it would lend to countries that have defaulted on debts but have not negotiated a deal to restructure all their debts. The policy is known as "lending into arrears".

In the past the fund, worried about getting its cash back, has lent into arrears sparingly and only with the permission of creditors still tussling over restructuring. Now all it is asking for is a promise from borrowing countries and co-operative creditors that its cash injections will not be used to pay off the holdouts. The IMF's economists have long feared that such a step would antagonise problem creditors, which are also countries with stakes in the fund itself. It seems the fund's patience has run out: officials want to get debt restructuring moving.

The new policy has the potential to impose discipline on the holdouts. In theory, restructurings work because easing the burden on borrowers maximises creditors' chances of getting some—perhaps most—of their money back. The fund lending into arrears sharpens the incentive to comply because lenders who hold up negotiations face the prospect of not getting anything. They would be the ones frozen in limbo, while everyone else strikes a deal and carries on. The policy also strengthens the hand of debtors. In the past they may have feared walking away from their debts to, say, China, which is an easy source of emergency cash even after a default. Now if they wish to do so, they will have an alternative lender in the form of the IMF.

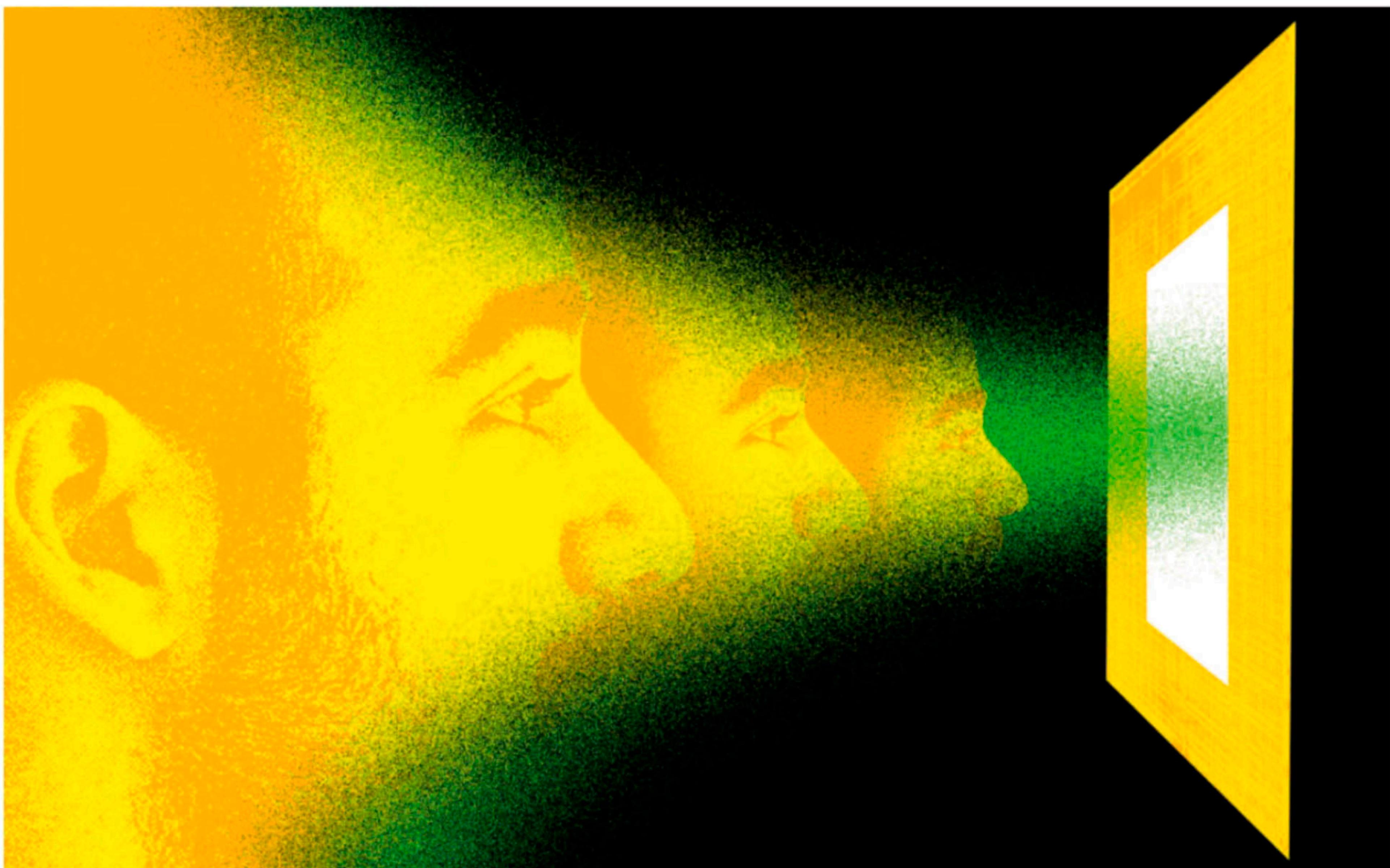
Getting cash flowing would certainly be good for populations of the troubled countries. Doing so might also keep the fund honest. Its debt-sustainability analyses are used as a benchmark for restructurings, and it may have an incentive to be too optimistic about sustainability, to avoid pushing a borrower into restructuring limbo. In a process that does not depend on playing down poor countries' problems so as to avoid impossible restructurings, the fund will probably become a better broker, distinguishing between countries that need debt write-downs and those that just need a little more liquidity to make their next payment.

Arrears and tears

The question is whether the IMF can stomach the costs. Its threat will only bring creditors into line if it chooses to make use of its new powers. But in Washington officials still worry about aggravating the newer creditors, particularly China, with which the fund prizes its relationship. They might turn their back on co-operative restructurings altogether. Some borrowers could walk away from the IMF and take bail-outs from elsewhere.

In the end, though, the fund may have little choice. Too many countries are in crisis. A clutch of big developing countries that have avoided default are teetering closer than ever to the edge. To avoid a catastrophe for hundreds of millions of people, international financiers need a way to get governments out of default before a country like Egypt or Pakistan goes under. Lending into arrears is the best available tool. ■

Science & technology



Computing power

AI's next top model

Moving beyond today's LLMs will require some fundamental breakthroughs

IN AI-LAND, technologies move from remarkable to old hat at the speed of light. Only 18 months ago the release of ChatGPT, OpenAI's chatbot, launched an AI frenzy. Today its powers have become commonplace. Several firms (such as Anthropic, Google and Meta) have since unveiled versions of their own models (Claude, Gemini and Llama), improving upon ChatGPT in a variety of ways.

That hunger for the new has only accelerated. In March Anthropic launched Claude 3, which bested the previous top models from OpenAI and Google on various leaderboards. On April 9th OpenAI reclaimed the crown (on some measures) by tweaking its model. In the coming weeks Meta is expected to release Llama 3. OpenAI is sure to make a splash at some point thereafter when it releases GPT-5, which may have capabilities beyond any current large language model (LLM). If the

rumours are to be believed, the next generation of models will be even more remarkable—able to perform multi-step tasks, for instance, rather than merely responding to prompts, or analysing complex questions carefully instead of blurting out the first algorithmically available answer.

For those who believe that this is the usual tech hype, consider this: investors are deadly serious about backing the next generation of models. GPT-5 and other next-gen models are expected to cost billions of dollars to train. OpenAI is also reportedly partnering with Microsoft, a tech giant, to build a new \$100bn data centre. Based on the numbers alone, it seems as

though the future will hold limitless exponential growth. This chimes with a view shared by many AI researchers called the “scaling hypothesis”, namely that the architecture of current LLMs is on the path to unlocking phenomenal progress. All that is needed to exceed human abilities, according to the hypothesis, is more data and more powerful computer chips.

Look closer at the technical frontier, however, and some daunting hurdles become evident.

Beauty's not enough

Data may well present the most immediate bottleneck. Epoch AI, a research outfit, estimates the well of high-quality textual data on the public internet will run dry by 2026. This has left researchers scrambling for ideas. Some labs are turning to the private web, buying data from brokers and news websites. Others are turning to the internet's vast quantities of audio and visual data, which could be used to train ever-bigger models for decades. Video can be particularly useful in teaching AI models about the physics of the world around them. If a model can observe a ball flying through the air, it might more easily work out the mathematical equation that describes the projectile's motion. Leading models like GPT-4 and Gemini are now

→ ALSO IN THIS SECTION

66 A golden age of locust-busting

67 How is screen time affecting children?

► “multimodal”, capable of dealing with various types of data.

When data can no longer be found, it can be made. Companies like Scale AI and Surge AI have built large networks of people to generate and annotate data, including PhD researchers solving problems in maths or biology. One executive at a leading AI startup estimates this is costing AI labs hundreds of millions of dollars per year. A cheaper approach involves generating “synthetic data” in which one LLM makes billions of pages of text to train a second model. Though that method can run into trouble: models trained like this can lose past knowledge and generate uncreative responses. A more fruitful way to train AI models on synthetic data is to have them learn through collaboration or competition. Researchers call this “self-play”. In 2017 Google DeepMind, the search giant’s AI lab, developed a model called AlphaGo that, after training against itself, beat the human world champion in the game of Go. Google and other firms now use similar techniques on their latest LLMs.

Extending ideas like self-play to new domains is hot topic of research. But most real-world problems—from running a business to being a good doctor—are more complex than a game, without clear-cut winning moves. This is why, for such complex domains, data to train models is still needed from people who can differentiate between good and bad quality responses. This in turn slows things down.

More silicon, but make it fashion

Better hardware is another route to more powerful models. Graphics-processing units (GPUs), originally designed for video-gaming, have become the go-to chip for most AI programmers thanks to their ability to run intensive calculations in parallel. One way to unlock new capabilities may lie in using chips designed specifically for AI models. Cerebras, a chipmaker based in Silicon Valley, released a product in March containing 50 times as many transistors as the largest GPU. Model-building is usually hampered by data needing to be continuously loaded on and off the GPUs as the model is trained. Cerebras’s giant chip, by contrast, has memory built in.

New models that can take advantage of these advances will be more reliable and better at handling tricky requests from users. One way this may happen is through larger “context windows”, the amount of text, image or video that a user can feed into a model when making requests. Enlarging context windows to allow users to upload additional relevant information also seems to be an effective way of curbing hallucination, the tendency of AI models to confidently answer questions with made-up information.

But while some model-makers race for

more resources, others see signs that the scaling hypothesis is running into trouble. Physical constraints—insufficient memory, say, or rising energy costs—place practical limitations on bigger model designs. More worrying, it is not clear that expanding context windows will be enough for continued progress. Yann LeCun, a star AI boffin now at Meta, is one of many who believe the limitations in the current AI models cannot be fixed with more of the same.

Some scientists are therefore turning to a long-standing source of inspiration in the field of AI—the human brain. The average adult can reason and plan far better than the best LLMs, despite using less power and much less data. “AI needs better learning algorithms, and we know they’re possible because your brain has them,” says Pedro Domingos, a computer scientist at the University of Washington.

One problem, he says, is the algorithm by which LLMs learn, called backpropagation. All LLMs are neural networks arranged in layers, which receive inputs and transform them to predict outputs. When the LLM is in its learning phase, it compares its predictions against the version of reality available in its training data. If these diverge, the algorithm makes small tweaks to each layer of the network to improve future predictions. That makes it computationally intensive and incremental.

The neural networks in today’s LLMs are also inefficiently structured. Since 2017 most AI models have used a type of neural-network architecture known as a transformer (the “T” in GPT), which allowed them to establish relationships between bits of data that are far apart within a data set. Previous approaches struggled to make such long-range connections. If a transformer-based model were asked to write the lyrics to a song, for example, it could, in its coda, riff on lines from many verses earlier,

whereas a more primitive model would have forgotten all about the start by the time it had got to the end of the song. Transformers can also be run on many processors at once, significantly reducing the time it takes to train them.

Albert Gu, a computer scientist at Carnegie Mellon University, nevertheless thinks the transformers’ time may soon be up. Scaling up their context windows is highly computationally inefficient: as the input doubles, the amount of computation required to process it quadruples. Alongside Tri Dao of Princeton University, Dr Gu has come up with an alternative architecture called Mamba. If, by analogy, a transformer reads all of a book’s pages at once, Mamba reads them sequentially, updating its worldview as it progresses. This is not only more efficient, but also more closely approximates the way human comprehension works.

LLMs also need help getting better at reasoning and planning. Andrej Karpathy, a researcher formerly at OpenAI, explained in a recent talk that current LLMs are only capable of “system 1” thinking. In humans, this is the automatic mode of thought involved in snap decisions. In contrast, “system 2” thinking is slower, more conscious and involves iteration. For AI systems, that may require algorithms capable of something called search—an ability to outline and examine many different courses of action before selecting the best one. This would be similar in spirit to how game-playing AI models can choose the best moves after exploring several options.

Advanced planning via search is the focus of much current effort. Meta’s Dr LeCun, for example, is trying to program the ability to reason and make predictions directly into an AI system. In 2022 he proposed a framework called “Joint Embedding Predictive Architecture” (JEPA), which is trained to predict larger chunks of text or images in a single step than current generative-AI models. That lets it focus on global features of a data set. When analysing animal images, for example, a JEPA-based model may more quickly focus on size, shape and colour rather than individual patches of fur. The hope is that by abstracting things out JEPA learns more efficiently than generative models, which get distracted by irrelevant details.

Experiments with approaches like Mamba or JEPA remain the exception. Until data and computing power become insurmountable hurdles, transformer-based models will stay in favour. But as engineers push them into ever more complex applications, human expertise will remain essential in the labelling of data. This could mean slower progress than before. For a new generation of AI models to stun the world as ChatGPT did in 2022, fundamental breakthroughs may be needed. ■





Pest control

Who you gonna call?

Locust-busting is entering a new, more high-tech era

IN THE LIST of plagues inflicted upon the people of Egypt in the Book of Exodus, only darkness and death get higher billing than locusts. That ranking is apt. Today, *Schistocerca gregaria*, also known as the desert locust, is considered the most dangerous migratory pest in the world. Measured by the volume of foliage consumed, a small swarm can devour as much food in a single day as 35,000 people. In places with fragile food security, the effect can be devastating. Outbreaks are regrettably common. As of April 2024 the Food and Agriculture Organisation (FAO), an agency, was monitoring five active outbreaks of *S. gregaria* in countries near the Red Sea.

The problem is that swarms grow fast. In the right conditions, 1,000 locusts can become 20,000 within three months, and 160m within a year. The last big upsurge, which began in the Arabian peninsula in 2018, lasted three years and affected countries as far afield as Tanzania and Iran. Fortunately, this invasion also drove investment into new locust-hunting tools. Some of this is now beginning to pay off.

The desert locust lives in the belt of drylands that stretches from Mauritania, on the west coast of Africa, to India. The harsh conditions, low in water and vegetation, normally keep its numbers down. But human activity is starting to make their lives more comfortable. Climate change is bringing heavier storms to deserts, driving greenery in unexpected places. At the

same time, forest environments that were once too damp for locusts to lay eggs in are being transformed through desertification into drier habitats where they can thrive. Add in hotter temperatures, says Arianne Cease of Arizona State University, and the future looks rosy for the desert locust.

Controlling this pest depends on locust hunters spotting dens in the desert and snuffing them out early. Patrolling known hotspots in the aftermath of rainstorms, these scouts spray pesticide on smaller dens by hand or truck, and douse larger ones by aeroplane. But this work burns up time and resources, and is rarely comprehensive—especially in countries with limited means or ongoing conflicts. In 2018, for example, a pair of cyclones lashed rain upon a remote Yemeni desert. As civil war had left the government powerless and distracted, three generations of desert locusts were left to breed unobserved. Their descendants invaded 12 countries.

A break in the clouds

The resulting disaster also bred innovation. Keith Cressman of the FAO estimates 16 significant developments have resulted from the upsurge. Among them are tools that use data to make expeditions more efficient. Desert locusts are creatures of habit: females like to lay eggs in soil that is moist, but not sodden, and juveniles are more likely to survive if they are surrounded by ample foliage to eat. Advances in re-

mote sensing mean that some of these environmental features are getting easier to detect from space.

By comparing satellite readings with massive data sets from ground sensors, as well as the ample historical record, researchers are building statistical models to better predict which nests pose the greatest risk. One such model was rolled out in October 2023 by an FAO commission co-ordinating desert-locust work in ten north and west African countries. It provides field officers with an online map complete with probabilities of finding locusts at specific locations. This will help field scouts prioritise routes, saving money and time.

Drones can help them cover even more ground. The FAO and the Hemav Foundation, a Spanish non-profit, have jointly designed dLocust, a portable drone shaped like a Stealth bomber and launched by slingshot. It is designed to fly a loop up to 80km long, autonomously snapping high-resolution pictures of suspicious greenery. Field scouts review these by tablet or smartphone and choose which to visit. Twenty-three dLocust units are in field operation, mostly in Africa.

Attack drones are also in the works. Kenyan researchers have run experiments to determine the optimal height for a drone to unleash a pesticide over its hungry targets. (Spray it too high, and the wind dissipates the deadly mist; spray too low, and some may be wasted). The ideal height was found to be ten metres.

Pesticides, too, are overdue for an upgrade. In the panic following the latest upsurge, some governments carpet-sprayed organophosphate pesticides, chemicals that serve as locust nerve agents. The effect was as satisfying as it was swift. "You could more or less see the insects falling dead from the sky," said Wim Mullié, an environmental toxicologist in Dakar.

Any humans nearby would have felt poorly too: such compounds are banned in the EU, Dr Mullié says, because of their toxicity to other species. In Ethiopia, pesticides may have killed or scared off billions of honeybees. More targeted chemicals do exist, including Novacrid, a fungus-based biopesticide first developed in the 1990s. Somalia, which used Novacrid throughout the latest upsurge, got its locust problem under control. The problem, however, is that it costs more than its competitors and takes three weeks to kill the insect. This has left many governments hesitant to rely on it. Better chemicals are needed.

Such technological advances will not fix the problem on their own. Locusts thrive in conflict zones and under-resourced regions; field agents may well stay home if they risk being shot at, or if there is insufficient power to run their equipment. Where there is death and darkness, locusts remain close behind. ■

Screen time and anxiety

Time for a digital detox?

Demands grow to restrict young people's access to phones and social media

TWO MONTHS ago Daisy Greenwell and Clare Fernyhough set up a WhatsApp group to discuss how to stave off their young children's demands for smartphones. After they posted about their plans on Instagram, other parents wanted in. Now their group, Smartphone-Free Childhood, has more than 60,000 followers debating how to keep their children away from the demon devices—a debate they are naturally conducting on smartphones of their own.

This group, based in Britain, is not the only one worried about children's screen time. Last month the state of Florida passed a law banning social media for under-14s. Britain's government is reportedly considering a ban on mobile-phone sales to under-16s. The concerns are summed up by a recent book by Jonathan Haidt, "The Anxious Generation", which argues that smartphones, and especially the social networks accessed through them, are causing a malign "rewiring of childhood".

In a contentious debate two things are fairly clear. First, smartphones and social media have become a big part of childhood. By the age of 12 nearly every child has a phone, according to research in Britain. Once they get one, social media is how they spend most of their screen time. American teens spend nearly five hours a day on social apps, according to polls by Gallup. YouTube, TikTok and Instagram are most popular (Facebook, the world's largest social network, is a distant fourth).

Second, most agree that in much of the rich world there has been a decline in mental health among the young. The share of American teenagers reporting at least one "major depressive episode" in the past year has increased by more than 150% since 2010. Perhaps such terms have simply become less taboo, sceptics suggest. But it is more than talk. Across 17 mostly rich countries, there has been a sharp rise in suicide among teenage girls and young women, though their suicide rate remains the lowest of any cohort (see chart).

Are the phenomena linked? The timing is suggestive: mental health began to slide just as smartphones and social apps took off, in the 2010s. Some studies also suggest that children who spend more time on social media have poorer mental health than lighter users. But such correlations do not prove causation: it may be, for instance, that depressed, lonely children choose to

spend more time doom-scrolling than happy ones do.

A small number of randomised experimental studies are chipping away at the causal question. In 2017 Roberto Mosquera of the Universidad de las Américas, and colleagues, got a group of Facebook users in America to stay off the platform for a week. The abstainers reported being less depressed than the control group and took part in more varied activities; they also consumed less news.

In 2018 researchers at Stanford and New York University did a similar experiment, again in America. After a month away from Facebook their detoxees felt happier than the control group, spent less time online, more time with family and friends and were less politically polarised. (Again, they knew less about the news, and spent more time watching television alone.) The effects on well-being in both studies were modest.

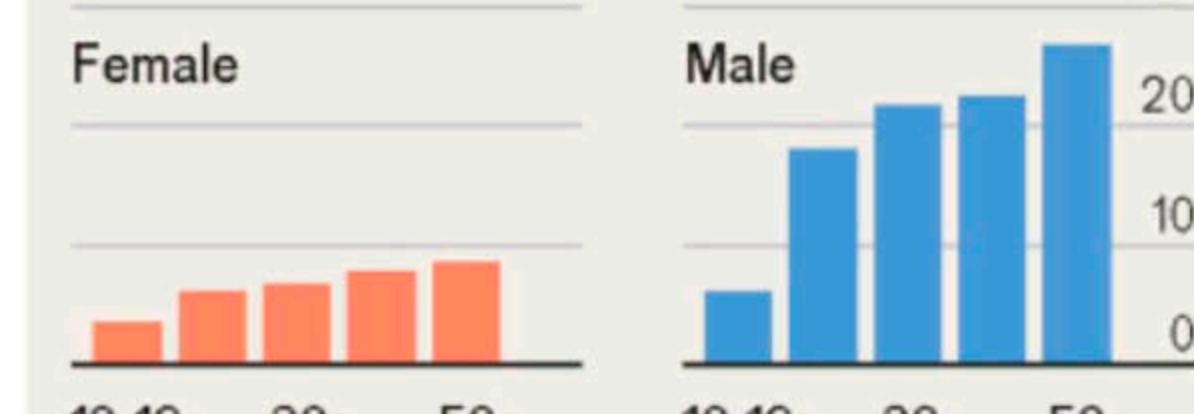
"The really convincing causal evidence

Generation gaps

Suicide rates*, by age group, 10- to 59-year-olds



Per 100,000 people, 2019-21†



*Australia, Austria, Belgium, Czech Republic, England, Estonia, Germany, Ireland, Italy, Mexico, Netherlands, Norway, Slovenia, South Korea, Sweden, Switzerland, United States and Wales
†Three-year moving average

Source: National statistics

we have is quite limited," admits Matthew Gentzkow of Stanford University, one of the authors of the 2018 study. But, he argues, most points in the same direction as the circumstantial evidence around timing. "If you put all that together, I think it's enough to say there is a substantial probability that these harms are large and real."

Much remains uncertain. The best randomised experiments have been done on adults, who are not the main objects of concern. Most studies focus on Facebook, which these days is a small part of teens' media diet. And they are mostly in America, which is unlike the countries where most of the world's teenagers live. A 72-country study last year by the Oxford Internet Institute found that Facebook adoption correlated with a small improvement in well-being among the young.

People's relationship with social media also defies categorisation. The Mosquera experiment found that, although people said they were happier when they didn't use Facebook, they nonetheless valued its utility at \$67 a week—and, after a week of abstinence, the detoxees valued it even more highly. Asking whether social media are good or bad for mental health is the wrong question, argues Pete Etchells of Bath Spa University, author of "Unlocked", a somewhat more upbeat book about screen time. Perhaps a better question, he says, is: "Why is it that some [children] really thrive online? And why is it the case that others...really struggle?"

Unless that question is answered, banning phones or social media until a later age would simply delay the problem, he fears. It is also unclear what should be covered by such a ban. Social media include everything from Facebook to the chat function in games like "Fortnite", points out Dr Etchells. Dr Gentzkow, who supports a higher minimum age for some social media, warns against limiting all of it. "Actual communication with your friends"—by phone, text or video chat—"those may well be things we want to encourage more of," he says. Most social apps offer a mixture of functions, which can be enjoyed or misused.

There are some signs that, while experts ponder how to rein in the worst of social media, ordinary users are working out how to do so themselves. Posting about oneself in public is becoming less common: last year only 28% of Americans said they enjoyed documenting their life online, down from 40% in 2020, according to Gartner, a research firm. Messages are moving from open networks to private chats. On Instagram, more photos are now shared in direct messages than on the main feed, the company says. As middle-aged folk identify the problems with the social networks they grew up with, youngsters may already be moving on. ■

Culture



Impressionism turns 150

Show me the Monet

PARIS

What the once-derided movement reveals about art today

THE WORLD was not always an arena of Claude Monet superfans. “Wallpaper in its embryonic state is more finished than that seascape,” sneered Louis Leroy, an art critic, when describing Monet’s “Impression, Sunrise”. The painting of a hazy port in Normandy was hung in a show put on by the Anonymous Society of Painters, Sculptors and Engravers Etc that opened on April 15th 1874. Some of the comments about the sketchy style adopted by Monet and some of his fellow “rebels” were so acerbic that they sound more like put-downs from social-media trolls than professional art commentary. An “appalling spectacle of human vanity losing its way to the point of dementia” was how another critic in the 1870s described the new style.

The Anonymous Society’s show 150 years ago is remembered as the Impressionist movement’s birth; it was then that the painters were called “Impressionist” by Leroy, though the artists would not claim the label themselves for another couple of years. (An *impression* was a sketch, in the

lingo of painters in 1874.) That show is now the subject of another exhibition, “Paris 1874: Inventing Impressionism”, which recently opened at the Musée d’Orsay. In September it will travel from Paris to the National Gallery in Washington, DC.

Today Impressionist paintings are among the most recognisable, beloved and valuable, so it is easy to forget the shock many people felt when first confronted by them. The startled reaction was as much a result of the subject matter as it was the rough brushwork depicting the fleeting quality of natural light. The artists rejected

→ ALSO IN THIS SECTION

69 Video games, reimagined

70 The history of crossword puzzles

70 Will interest in Everest ever peak?

71 Re-examining the first world war

72 Back Story: Salman Rushdie’s “Knife”

the focus of traditional painting—classical myths, history and idealised portraits—in favour of scenes of contemporary life, including the theatre and Paris’s boulevards.

Theirs was a democratic and capitalist undertaking: the 31 artists who took part in the Anonymous Society’s show wanted to select which of their works to exhibit and to sell them directly. This was in response to a government-sponsored *Salon* put on by the Académie des Beaux-Arts, which screened paintings with a jury and had conservative taste. Only four paintings sold during the Anonymous Society’s exhibition; the company formed to put on the show dissolved within months.

Viewers regarding these paintings from the past can see some parallels with the present. The Impressionists evoked the destruction of the natural world, with a pure environment altered by railroads and smokestacks. They also painted in the shadows of violence and political uncertainty: only a few years after France’s defeat in a war with Prussia and a subsequent insurrection against the government, known as the Paris Commune. The way the artists “deliberately or maybe unconsciously erased anything having to do with war from the paintings”, focusing instead on “happy scenes of modern life”, is “in itself fascinating and intriguing”, says Anne Robbins, co-curator of the show at the Musée d’Orsay. She posits that this is not unlike how people are anxious to move

▶ on from dislocations wrought by covid-19.

The Impressionists were also reacting to new technology, which influenced the creation of art, as it does today. They worked outdoors, rather than in studios, thanks to the invention of portable paint in tubes. Their pictures were influenced by another innovation: photography. Some other artists tried to emulate photography's clarity. But with the Impressionists' thick, visible brushstrokes, it is "almost as if they were saying, 'Look, this is paint. This is not photography,'" says Philip Hook, author of "*The Ultimate Trophy*", a history of Impressionism.

Déjà vu

Fittingly, the Musée d'Orsay makes good use of innovative tech to present these works, harnessing virtual reality to imagine what the exhibition in 1874 might have looked like. Visitors can don a headset and go on a startlingly realistic guided tour. You can almost touch the paintings you could have bought back then for 1,000 francs (if only you had!). Many museums have tried to use tech to complement their old-fashioned shows and lure in younger audiences; this is one of the most successful attempts to date.

This exhibition is about the art world in 1874, but it makes you ponder art's current state. It raises the question of what has happened to the avant-garde today. In going from shocking audiences to gaining broad acceptance, the Impressionists set a "template that has been repeated regularly with every new modernist art movement", says Mr Hook. In subsequent decades artists played with style, subject matter and form, challenging viewers to consider what exactly art is, from Marcel Duchamp's urinal to Tracey Emin's unmade bed.

Today there is much less revolutionary experimentation. "Artists challenge much less today," says one art dealer, who finds contemporary architecture more willing to break with norms. "In a moment when I thought more artists would be reaching out more politically, they seem to be reaching in more conservatively," agrees Josh Baer, an art adviser and gallerist. Depicting beauty and personal identity are today's popular artistic preoccupations. "I thought we'd be seeing something a little bit more aggressive," Mr Baer adds.

This year's Whitney Biennial in New York is a collection of sleek works that take little risk. The Venice Biennale, which opens on April 20th, will be another pulse-taking. With prizes and pavilions, it is often described as the Olympics of the art world, and it usually captures the zeitgeist. This year's theme is "foreigners everywhere" and focuses on artists whose identity and sexuality make them outsiders.

Many feel the political correctness that has strangled dissent on college campuses

has infected the art world, with artists becoming afraid to ruffle feathers and go against consensus. In today's political climate museums are "terrified" to push the envelope, says Leslie Ramos of the Twentieth, a firm that advises on art and philanthropy: they have to be "woke but not too woke, interesting but not too scholarly, not too expensive but not too cheap". Others blame the internet: a premium is now put on creating large, vibrant canvases that look good on social media.

Those paintings by young artists (called "ultra-contemporary" in today's parlance, according to Clare McAndrew of Arts Economics, a research firm) can sell for six- and seven-figure sums. Here the Impressionists also offer a humbling reminder. Of the 31 artists who presented at the Anonymous Society's show in 1874, fewer than ten are remembered today. A handful are so obscure that the curators could find virtually nothing about them, says Ms Robbins of the Musée d'Orsay.

The odds are that an even smaller proportion of artists working now will be celebrated in 150 years. As Helena Newman of Sotheby's, an auction house, puts it: "Look at what we see today, and we know in our bones that only a small amount will stand the test of time." ■

Video-game adaptations

Press play

How Hollywood fell in love with gaming

A NEW INSTALMENT of "*Fallout*", a long-running series of video games, was released recently to rave reviews. Critics called the post-apocalyptic adventure a "rare gem" and an "absolute blast". In its look and feel, the new "*Fallout*" is much like previous releases. The difference is that the latest iteration is not a game at all, but a television series.

Converting pixelated adventures to live-action narratives long defeated script-writers in Hollywood, resulting in turkeys like "*Street Fighter*" (1994) and "*Doom*" (2005). The developer of one celebrated game confides that its silver-screen adaptation around a decade ago was the worst movie he had ever seen.

But now studios are reworking games and finding commercial and critical success. Last year "*The Super Mario Bros*" was the second-highest-grossing film at the worldwide box office. "*The Last of Us*", a TV show based on a PlayStation game, won a haul of Emmy awards in January. More game adaptations are on the way: IGN, an



Taking it to the next level

entertainment website, counts more than 70 games in development for film or TV, including shows based on "*Tomb Raider*" and "*League of Legends*" and films based on "*Zelda*" and "*Minecraft*".

What explains the enthusiasm for these game-shows? One reason is that Hollywood's favourite source of creative material, comic books, is getting boring. For two decades the box office has been ruled by superheroes. But more recently each Marvel film has seemed to be less successful and lauded than the last. "*The Marvels*", released in November, was the lowest-grossing so far. Games offer an alternative: "A deep well of franchises, a built-in audience, years of storylines and endless spin-off franchise possibilities," says Fred Black of Ampere Analysis, a research firm.

The pioneers of the new wave of adaptations have been Amazon Prime Video (which commissioned "*Fallout*") and Netflix. These streaming companies, relative newcomers to Hollywood, have been on a commissioning binge to attract subscribers. Unlike older rivals such as Disney, which owns Marvel, they have a limited archive of intellectual property. "Most of the comic franchises were already owned, so they needed to find something else," says Mr Black. Games were that something. Their success with titles like "*Castlevania*" (2017) and "*The Witcher*" (2019) got the attention of Hollywood studios.

Changes in the gaming world have also helped. The game-playing public has ballooned, thanks to smartphones (which put a miniature console in everyone's pocket) and the covid-19 pandemic (which created millions of new gamers through sheer boredom). Big titles like "*Minecraft*" are played by more than 100m people each month, guaranteeing a large potential audience for film spin-offs. The broader and

▶ ageing pool of gamers makes it easier to get video-game projects greenlit in Hollywood. Previous generations of producers were befuddled by youngsters' games; today's moguls grew up playing them.

Most significant, modern games are better fodder for adaptation than their precursors. Amazon's "Fallout" has a sharp script and a strong cast. But its epic, post-apocalyptic setting, twisting plot and rich back story all come from the game. The PlayStation version of "The Last of Us" was so cinematic that the opening scenes of Warner's TV adaptation were barely changed. Its central characters, Joel and Ellie, were already vividly drawn; the TV series borrowed plenty of dialogue from the game.

For all the recent hits, game adaptations are not yet such reliable performers as superheroes. Paramount's "Halo" and Netflix's "Resident Evil" did not live up to expectations. The biggest hits, says Mr Black, tend to be either so well known that even non-gamers recognise the brand (think "Mario", "Sonic" or "Angry Birds"), or so engaging that their digital origin ceases to matter ("The Last of Us" or "Fallout"). The explosive first episode of "Fallout" is entitled, "The End". For games on screen, it is just the beginning. ■

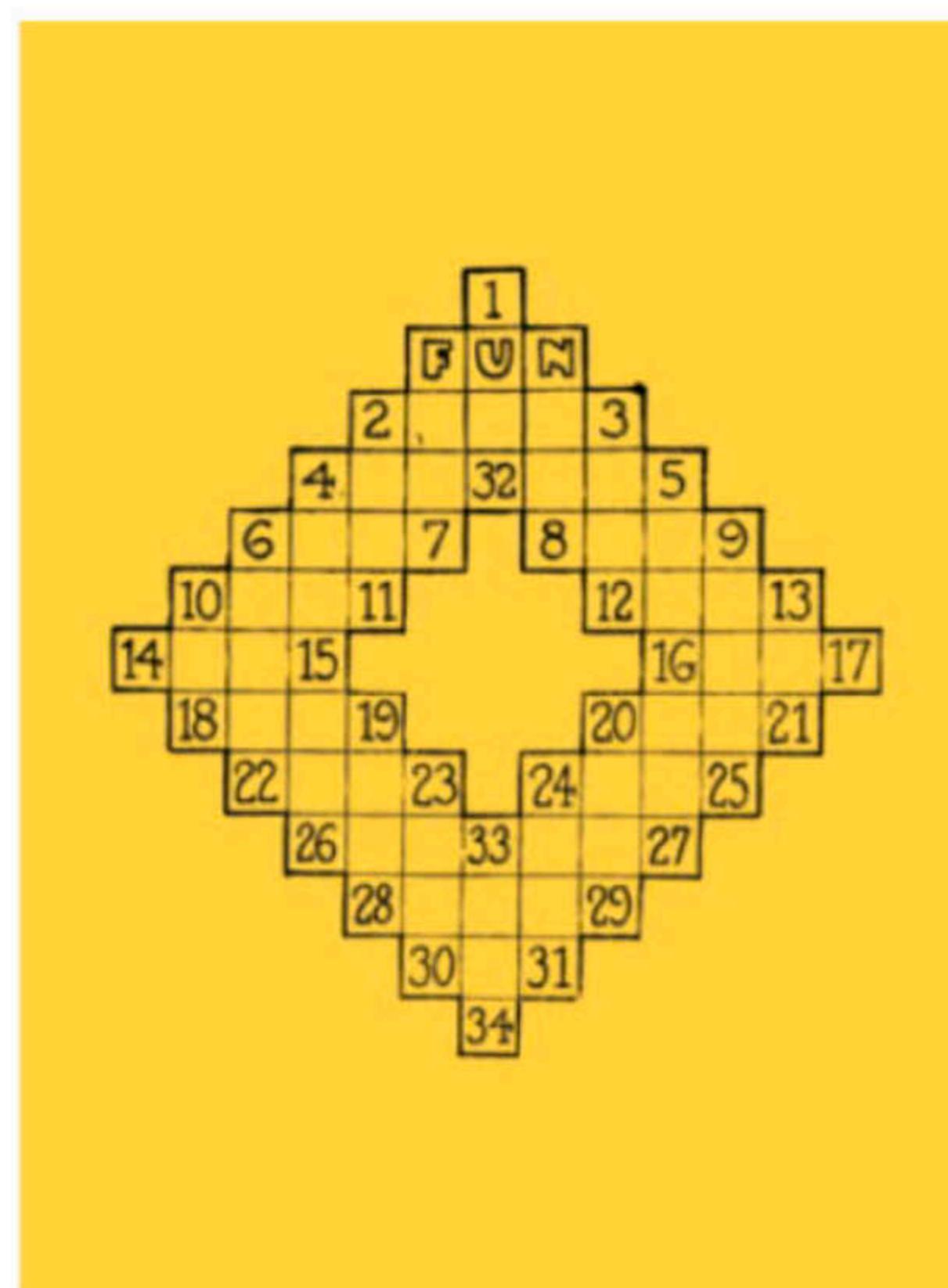
The history of crossword puzzles

Get a clue

The Riddles of the Sphinx. By Anna Shechtman. HarperOne; 288 pages; \$29.99 and £22

WHAT IS A three-letter word for "preppy, party-loving, egotistical male, in modern lingo"? Answer: "Bro". When Anna Shechtman, a cruciverbalist (crossword constructor), introduced this clue to the *New York Times* crossword puzzle in 2014, readers took notice. "Bro" was traditionally clued as "sibling for sis". Ms Shechtman was modernising the puzzle and capturing the zeitgeist.

What makes a word puzzle-worthy? Since its appearance in the Sunday edition of the *New York World* in 1913 (pictured), the crossword has helped define the canon of common knowledge. Though it was invented by Arthur Wynne, an editor, in its early days, women—especially bored housewives—were the primary constructors and solvers. In "The Riddles of the Sphinx", Ms Shechtman, who now creates crosswords for the *New Yorker*, traces the history of the crossword in America



Back to square one

through the women who helped create it.

In the 1920s and 30s, newspapers warned of "crossword puzzleitis", an "epidemic" they claimed was draining America's brainpower and distracting women from their household duties. But by the 1940s, the *New York Times*, which had resisted the crossword craze, introduced the puzzle, partly to offer readers relief from unrelenting news about the second world war. "You can't think of your troubles while solving a crossword," wrote Margaret Farrar, its founding editor. Farrar, who edited the *Times* crossword until 1969, insisted on decorum. Words and clues too unsavoury for a morning breakfast on Sundays were stricken from the grid. The clue offered for "LSD", for example, was "British currency" instead of "psychedelic drug".

As more women entered the workforce, the number of them producing puzzles declined. In 1989 Eric Albert, a computer scientist, developed constructing software, which helped designers fill a grid by enabling them to create and manage word lists. The world of crossword creation began to look more like the heavily male tech industry. Ms Shechtman interweaves this history with a memoir of her puzzle-making and eating disorder (reflecting a need for control that she sees in the rigid format of the grid). In constructing, she thinks about cultural representation. Should crosswords push solvers to expand their knowledge or keep them comfortable?

Since the covid-19 pandemic, the popularity of the crossword and similar online games like Wordle has only increased. The *New York Times* acquired Wordle in 2021, and in 2023 subscriptions to the *Times*'s Games app climbed to over a million, around a tenth of the newspaper's total subscriber base. Games, now a big driver of revenue, are a five-letter strategy. ■

Adventure quests

Ain't no mountain high enough

Everest, Inc. By Will Cockrell. Gallery Books; 352 pages; \$29.99 and £20

Climbing Mount Everest used to be a feat of staggering bravery, endurance and skill. In the 40 years after Sir Edmund Hillary and Tenzing Norgay first reached the summit in 1953, an average of 12 people a year followed in their footsteps. In 2023 more than 1,200 people attempted the climb, with 655 making it to the top.

What was once an "almost certainly fatal" endeavour is "the new Ironman triathlon", argues Will Cockrell, a journalist, in "Everest, Inc", a fascinating new book. High-tech equipment and better understanding of the physiological impact of high altitudes have brought new hopefuls to Everest. But the biggest reason for the rising number of Everest conquerors is the establishment of a professional guiding industry. For a hefty fee—between \$35,000 and \$110,000—experienced climbers will put novices on top of the world.

As with many extreme sports, Everest offers a test. Amateurs want to know if they can achieve something physically and mentally demanding. According to some psychologists, people undertake Herculean endeavours to deny their own mortality. Mr Cockrell believes this helps explain why interest in climbing Everest increases after deaths are reported: people are more attracted to the adventure if they are reminded of its dangers. ▶



The high life

The guiding industry exists in large part because of a foolhardy but irresistible character called Dick Bass. The heir to an oil fortune, Bass had the lunatic idea of climbing the highest mountains on all seven continents. He bought his way onto three different Everest expeditions and, in 1985, aged 55, he became both the oldest and least experienced climber to reach the summit. The sight of an average Joe on top of the world generated a media frenzy—and the establishment of companies that could cater to the new demand for tours.

The early years of guided expeditions in the 1990s were mostly successful. In 1992-95, around 150 people paid to be led up the mountain, and a third succeeded. But in 1996, Jon Krakauer, an American writer, joined one of two simultaneous expeditions that went wrong. A storm “dropped down on the climbers like a piano on a cartoon character”. The guides, eager for their clients to reach the top, delayed turning them around. Three guides and two climbers died. In a bestselling book, “*Into Thin Air*”, Mr Krakauer argued that Everest had become a high-end tourist trap. He decried the judgment of the guides and the selfishness of inexperienced climbers. Many businesses assumed that the book would crush them. Instead, fascination with Everest soared.

The industry has depended on local labour. Large numbers of Nepalis were hired by companies in the West to install ropes and carry equipment for clients. The guiding firms made efforts to build lasting relationships with their teams on the ground. But, Mr Cockrell notes, “The reasons Westerners and Sherpas were climbing mountains remained very different.”

Two accidents in the 2010s brought change. In 2014, 16 Sherpas were buried by falling ice while transporting clients’ gear. Their colleagues went on strike and forced the cancellation of the season. Then, in 2015, an avalanche killed ten Sherpas and nine foreign clients. In the aftermath, many Western operators lost their enthusiasm for Everest; today all the biggest guiding firms are Nepali-owned.

“*Everest, Inc*” ends on a confounding note. More people are reaching the summit, but more are dying en route, too: 18 people perished in 2023, the highest-ever number. Nepalese authorities say climate change has caused more extreme weather. Mr Cockrell argues that there was no negligence on the part of the firms. He suggests that Nepali guides consider themselves in the logistics business and generally leave decisions of safety to clients.

But amateur climbers make bad choices. The disaster in 1996 showed that even guides get these decisions wrong. Experts know more than ever about how to navigate Everest safely. But that does not make it a safe place. ■

The first world war

All quiet about the Eastern Front

The Eastern Front. By Nick Lloyd. *Viking*; 672 pages; £30. To be published in America by W.W. Norton in August; \$42

JUST 29 YEARS old, Karl I was desperate to lead Austria-Hungary out of the first world war. He was crowned as Habsburg emperor in November 1916 after the death of his great uncle, who had ruled for 68 years. Though the empire had been instrumental in starting the conflict following the assassination of its archduke, Franz Ferdinand, in June 1914 by a militant Serb nationalist, now Karl could see only the nightmarish cost. Austria-Hungary’s increasingly ramshackle, polyglot army had suffered devastating losses at the hands of Aleksei Brusilov, a Russian general, five months earlier. To function it depended on its ally, Germany. Vienna was starving. But secret peace talks went nowhere, and Austria-Hungary was dragged limpingly along in Germany’s wake to disaster.

Karl, ultimately exiled in Madeira, died from pneumonia in 1922. Though unsuccessful, Karl was beatified by the pope 82 years later for his peacemaking efforts. He is one of a small number of sympathetic figures in Nick Lloyd’s superb history of the Eastern Front in the first world war and one of even fewer who had some inkling of how it might end. But apart from the heroism and resilience of the ordinary soldiers, this is a story of vainglory, cynicism, incompetence and callousness.

Fascination with the Great War endures. The name has stuck despite the even larger conflict—and death toll—that came later. Though the books devoted to the first world war’s Western Front are extensive, the story of the Eastern Front has been mostly neglected. Mr Lloyd, a professor of modern warfare at King’s College London, has produced the first major history of the Eastern Front in English in nearly 50 years.

The first world war drew in 32 countries; its Eastern Front stretched over 900 miles “from the Baltic to the Alps, from the peaks of the Carpathians to the shores of the Aegean”. Some of the fiercest fighting was in Galicia, a region that includes what is today western Ukraine. It was very different from the war on the Western Front where, other than in its opening and closing stages, the armies of both sides were locked into a highly concentrated, trench-bound stalemate. In the east, there was often the space and terrain for manoeuvre warfare and pitched battles—and even the potential for dramatic, cavalry-led breakthroughs.

Although more fluid, the Eastern Front was as lethal as its Western counterpart, due to the destructive power of modern artillery and the machine gun. Mr Lloyd estimates that the two doomed empires, Russia and Austria-Hungary, lost upwards of 2.3m and 1.2m men respectively. Some 450,000 Germans were probably killed on the Eastern Front. Because the fighting was less static but also because of simmering ethnic hatreds, many more civilians died or were displaced than in the west.

When Winston Churchill wrote about the Eastern Front in his sixth and final volume on the Great War, published in 1931, he described it as both the “greatest war in history” and the “most frightful misfor-



Death and the horseman

▶ tune" to fall upon mankind since the destruction of the Roman Empire. Yet the book was called "The Unknown War".

Some individual episodes are still remembered, such as the Russian loss at Tannenberg early in the war and Brusilov's offensive, which was Russia's greatest and bloodiest feat of arms, resulting in nearly 2.5m casualties on both sides in three months. But so much has been forgotten, including the course of the war in the east across multiple theatres of operation and

the strategies pursued by both sides. It is all this and more that Mr Lloyd has resurrected in compelling detail.

Unusually for such a vast confrontation of forces, all three major belligerents ended up as losers. Russia collapsed into chaotic revolution in 1917; Austria-Hungary's stricken empire was formally dissolved in 1919; Germany met with humiliating defeat on the Western Front.

The first world war redrew the world map. With conflict raging in the Middle

East and Ukraine today, some might find the prospect of turning to a story of gruesome conflict from the past unattractive. But it was such a painfully consequential war that it continues to demand attention. As the German-American historian, Fritz Stern, ruefully observed, the conflict was "the first calamity of the 20th century, the calamity from which all other calamities sprang". The calamity of the "unknown" Eastern Front is inseparable from everything that occurred afterwards. ■

BACK STORY

The knife and the heart

Salman Rushdie's gripping take on being stabbed is also a love story

THREE ARE, writes Sir Salman Rushdie, "three important characters" in "Knife", a new memoir of his near-fatal stabbing in August 2022 and his arduous recovery. The first two are predictable: the author and his blade-wielding assailant. The third character turns this chronicle of violence into a surprisingly tender and redemptive story.

Sir Salman was about to speak at a festival in upstate New York when a black-clad man charged the stage. His first thought was: "So it's you. Here you are." It was 33 years since Ayatollah Ruhollah Khomeini of Iran had called for his death because of the alleged blasphemy of his novel, "The Satanic Verses". It was more than 20 since he moved to America after years of police protection in Britain. Now the half-expected, still-astonishing assassin was upon him. "I raise my left hand in self-defence. He plunges the knife into it."

And into his neck, face, abdomen and eye—15 wounds in a 27-second frenzy. Violence, he notes, is confounding to its victims: "Reality dissolves and is replaced by the incomprehensible." But he was alert enough to think this was the end. In a book that is both passionate and illusionless, he is clear there was no out-of-body experience: "My body was dying and it was taking me with it." He seemed unlikely to survive but was stitched and stapled together. His blinded eye bulged from its socket "like a large soft-boiled egg".

Only after a few weeks did Sir Salman see his disfigured face in the mirror. When he left hospital there were more scares and treatments and nightmares. He dreamed of the blinding of Gloucester in "King Lear"; he thought of the knife that kills Kafka's protagonist in "The Trial". Among the supporting cast

in "Knife" is the knife itself—at once a cold, sharp object and a metaphor for hatred, fanaticism and life's ruptures.

Intermittently he thinks of the second character, the young Lebanese-American who has pleaded not guilty to attempted murder and assault, and who, typically, had barely opened "The Satanic Verses". Omitting his name—he is "My Assailant", then "the A"—Sir Salman wavers over whether he wants to confront him. Instead he makes up a jokey-serious dialogue between them, probing the imaginary suspect about faith, failure and loneliness. "You aren't capable of understanding me," the suspect insists. Standing outside the jail where the real man was awaiting trial, Sir Salman had an urge to dance.

All he wanted was to be a novelist, but the ayatollah and the knife have made him a global champion of free speech. He reaffirms its value here. "Without art," he writes, "our ability to think, to see freshly, and to renew our world would wither and die." He decries the "false narratives" of bigots and autocrats and extols openness and debate. "Language was my knife," he

avars, "the tool I would use to remake and reclaim my world."

Yet the principal riposte to the brutality in "Knife" comes from its third main character: Rachel Eliza Griffiths, an American writer and photographer and Sir Salman's fifth wife. In forensic detail, he recounts the "coin-toss moments" that led them to meet and fall in love, his giddy infatuation and eventual proposal. All this is more than a gushy ode: it is essential to his underlying themes.

One of those is time. His next thought, up on that stage, was: "Why now?" The knifeman was "a murderous ghost" seeking "to drag me back in time". The past, he sees, is both inescapable and fixed. He poses lots of questions and what-ifs about the assault, including why he "just stood there like a piñata". He nearly pulled out of the talk but needed the fee for an air-conditioning bill. He knows, though, that time allows no do-overs. Nor, because of Eliza, does he ultimately want it to: "We would not be who we are today without the calamities of our yesterdays."

His other deep theme is the challenge of living in a bleak world; or, to put it another way, the riddle of human nature. He "experienced both the worst and best" when onlookers tackled his attacker and saved his life. Above all, however, the counterbalance to evil is the love and devotion of Eliza, with whom Sir Salman salvaged "a wounded happiness".

"Knife" is a love story about being stabbed, a paradox captured in the skewed symmetry between the attack and another central scene. On the night he met Eliza, Sir Salman walked klutzily into a glass door; he lay on the floor, blood streaming down his face, until she ministered to him. He got up then, and, triumphantly, he has risen again now.



Economic & financial indicators

	Gross domestic product			Consumer prices		Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units	
	% change on year ago latest	quarter*	2024†	% change on year ago latest	2024†	rate %		% of GDP, 2024†		% of GDP, 2024†		10-yr gov't bonds latest,%	change on year ago, bp	per \$ Apr 17th	% change on year ago
United States	3.1	Q4	3.4	2.0	3.5	Mar	2.7	3.8	Mar	-2.8	-6.1	4.6	99.0	-	
China	5.3	Q1	6.6	4.7	0.1	Mar	1.0	5.2	Mar‡	1.4	-4.6	2.1	55.0	7.24	-5.1
Japan	1.2	Q4	0.4	1.3	2.8	Feb	2.3	2.6	Feb	2.7	-4.7	0.9	40.0	155	-13.0
Britain	-0.2	Q4	-1.2	0.4	3.2	Mar	2.6	4.2	Jan††	-2.8	-4.2	4.3	60.0	0.80	1.2
Canada	0.9	Q4	1.0	1.7	2.9	Mar	2.5	6.1	Mar	-0.6	-0.3	3.7	60.0	1.38	-2.9
Euro area	0.1	Q4	-0.2	0.8	2.4	Mar	2.4	6.5	Feb	2.7	-3.2	2.5	-1.0	0.94	-2.1
Austria	-1.7	Q4	0.2†	0.5	4.1	Mar	3.5	4.7	Feb	2.4	-2.4	3.0	-18.0	0.94	-2.1
Belgium	1.5	Q4	1.4	1.1	3.8	Mar	2.2	5.5	Feb	-0.5	-4.4	3.0	-10.0	0.94	-2.1
France	0.7	Q4	0.2	0.9	2.4	Mar	2.7	7.4	Feb	-0.7	-4.9	3.0	1.0	0.94	-2.1
Germany	-0.2	Q4	-1.1	0.1	2.3	Mar	2.1	3.2	Feb	6.2	-1.5	2.5	-1.0	0.94	-2.1
Greece	1.1	Q4	0.6	2.8	3.4	Mar	3.2	11.0	Feb	-5.4	-2.1	3.5	-90.0	0.94	-2.1
Italy	0.6	Q4	0.7	0.6	1.2	Mar	1.7	7.5	Feb	0.9	-5.3	3.9	-44.0	0.94	-2.1
Netherlands	-0.4	Q4	1.4	0.9	3.1	Mar	2.4	3.7	Feb	8.3	-2.4	2.7	-12.0	0.94	-2.1
Spain	2.0	Q4	2.3	1.7	3.3	Mar	2.9	11.5	Feb	1.8	-3.5	3.2	-13.0	0.94	-2.1
Czech Republic	0.2	Q4	1.8	1.2	2.0	Mar	2.1	2.7	Feb‡	-0.5	-2.5	4.5	-27.0	23.7	-9.7
Denmark	3.5	Q4	10.8	1.3	0.9	Mar	1.8	2.9	Feb	9.4	1.2	2.5	-27.0	7.02	-2.7
Norway	0.5	Q4	6.2	1.0	3.9	Mar	2.6	3.9	Jan††	14.4	12.0	3.9	72.0	11.0	-5.1
Poland	1.0	Q4	nil	2.8	2.0	Mar	4.1	5.3	Mar§	nil	-5.2	5.8	-39.0	4.09	3.7
Russia	4.9	Q4	na	1.9	7.7	Mar	6.4	2.8	Feb§	2.2	-1.8	13.5	252	94.2	-13.2
Sweden	-0.1	Q4	-0.2	0.3	4.1	Mar	2.4	8.5	Feb§	5.6	-0.9	2.6	19.0	11.0	-5.8
Switzerland	0.6	Q4	1.2	1.0	1.0	Mar	1.4	2.3	Mar	9.0	-0.3	0.7	-34.0	0.91	-1.1
Turkey	4.0	Q4	3.9	3.1	68.5	Mar	52.4	9.2	Feb§	-3.0	-4.6	26.2	1,441	32.5	-40.4
Australia	1.5	Q4	1.0	2.0	4.1	Q4	2.7	3.8	Mar	0.5	nil	4.1	93.0	1.56	-4.5
Hong Kong	4.3	Q4	1.8	3.2	2.1	Feb	2.2	2.9	Feb††	7.0	-1.4	4.0	94.0	7.83	0.3
India	8.4	Q4	8.0	6.6	4.9	Mar	4.8	7.6	Mar	-0.8	-5.3	7.2	-4.0	83.5	-1.9
Indonesia	5.0	Q4	na	5.1	3.0	Mar	2.9	5.3	Q3§	-0.1	-2.4	6.9	30.0	16,220	-8.8
Malaysia	3.0	Q4	na	4.4	1.8	Feb	2.6	3.3	Feb§	1.9	-4.4	4.0	7.0	4.79	-7.7
Pakistan	nil	2023**	na	1.0	20.7	Mar	21.0	6.3	2021	-2.9	-7.2	14.2	+++	-93.0	278
Philippines	5.5	Q4	8.7	5.7	3.7	Mar	2.7	4.5	Q1§	-2.2	-6.1	6.9	62.0	57.2	-2.4
Singapore	2.7	Q1	0.2	2.4	3.4	Feb	3.1	2.0	Q4	18.5	0.1	3.4	60.0	1.36	-1.5
South Korea	2.2	Q4	2.5	2.3	3.1	Mar	2.5	3.0	Mar§	1.9	-1.3	3.6	29.0	1,387	-5.5
Taiwan	4.9	Q4	9.7	3.3	2.1	Mar	2.0	3.4	Feb	14.4	0.1	1.8	50.0	32.5	-6.1
Thailand	1.7	Q4	-2.3	3.2	-0.5	Mar	1.2	1.0	Feb§	3.0	-3.5	2.8	24.0	36.8	-6.6
Argentina	-1.4	Q4	-7.3	-3.5	288	Mar	258.3	5.7	Q4§	0.2	-1.1	na	na	869	-75.1
Brazil	2.1	Q4	-0.1	1.8	3.9	Mar	4.1	7.8	Feb§††	-1.5	-7.2	11.7	-69.0	5.24	-5.5
Chile	0.4	Q4	0.4	2.8	3.2	Mar	3.5	8.5	Feb§††	-3.5	-2.5	6.2	66.0	974	-17.6
Colombia	0.3	Q4	0.1	1.2	7.4	Mar	5.8	11.7	Feb§	-3.1	-5.1	10.9	-58.0	3,905	13.4
Mexico	2.5	Q4	0.3	2.3	4.4	Mar	4.2	2.6	Feb	-0.6	-4.7	10.0	107	17.0	7.0
Peru	-0.4	Q4	0.9	2.4	3.0	Mar	2.6	7.0	Mar§	-0.4	-2.9	7.5	-6.0	3.74	1.1
Egypt	2.7	Q3	na	2.6	33.4	Mar	31.8	6.9	Q4§	-3.4	-11.0	na	na	48.5	-36.3
Israel	-4.7	Q4	-21.0	1.9	2.7	Mar	2.8	3.3	Mar	4.9	-6.3	4.9	91.0	3.79	-3.7
Saudi Arabia	-0.8	2023	na	2.0	1.6	Mar	2.1	4.4	Q4	0.7	-1.9	na	na	3.75	nil
South Africa	1.2	Q4	0.2	1.6	5.3	Mar	4.7	32.1	Q4§	-2.0	-5.7	10.7	66.0	19.1	-3.9

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. Note: Euro area consumer prices are harmonised.

Markets

In local currency	Index	% change on:			Index	% change on:		
		one week	Dec 29th	2023		one week	Dec 29th	2023
United States S&P 500	5,022.2	-2.7	5.3		Pakistan KSE	70,333.3	nil	12.6
United States NAScomp	15,683.4	-3.0	4.5		Singapore STI	3,154.7	-2.6	-2.6
China Shanghai Comp	3,071.4	1.5	3.2		South Korea KOSPI	2,584.2	-4.5	-2.7
China Shenzhen Comp	1,700.8	-1.1	-7.5		Taiwan TWI	20,213.3	-2.6	12.7
Japan Nikkei 225	37,961.8	-4.1	13.4		Thailand SET	1,366.9	-2.9	-3.5
Japan Topix	2,663.2	-2.9	12.5		Argentina MERV	1,172,353.0	-5.0	26.1
Britain FTSE 100	7,848.0	-1.4	1.5		Brazil Bovespa	124,171.1	-3.0	-7.5
Canada S&P TSX	21,656.1	-2.4	3.3		Mexico IPC	55,415.7	-2.3	-3.4
Euro area EURO STOXX 50	4,9							

OBITUARY

Akebono

The first foreign-born grand champion of sumo died in early April, aged 54



LUMBERINGLY, HE paced to the centre of the ring, then back to his corner again. Several times he did this, flexing his arms. Then he squatted, and fixed his opponent with his stare. *That* stare, of absolute focus, which he could keep for days.

Except for his loincloth, he was naked. His mountainous torso glistened with sweat, oil, fat and muscle. Moments before he had rinsed his mouth with power-water, rubbed his body with power-paper and grabbed a handful of purifying salt to scatter in the ring. His long hair was caught up in a topknot styled like a leaf of the ginkgo tree. He had clapped his hands to alert the gods, stamped his feet to scare off evil spirits, and shown with a few deft postures that he had no weapons. He was more than ready.

Then it was over. In seconds he had charged forward, lunged for the throat, and pushed his opponent out of the ring. Job done.

So ended many of Akebono's matches. At 2.03 metres, he towered above his rivals. (His name meant "dawn", because when he stood up it was like the sun rising.) He also outweighed most of them, swelling from 154kg, when at 18 he started training, to 235kg five years later. His long arms could shove a rival off-balance in a heart-beat, making him touch the ground with something other than the soles of his feet, which doomed him. Brute force was all it took; no matter if they were on your belt, push them, and fast.

Much of his size-advantage came from the fact that he was a *gaijin*, a foreigner. It had been enhanced for sure by sumo training, which involved huge meals of chicken-broth stew and litres of beer, followed by naps, to build bulk. But Akebono was also American, a Hawaiian, one of very few foreigners before the 1990s who endured the training regime. He was big when he arrived, a handy centre in high-school basketball games, and his first coach feared he might prove too lanky for sumo. He was wrong. His pupil romped through the regular 15-match tournaments, rose swiftly through the rankings and became, in 1993, the first-ever non-Japanese *yokozuna*, or grand champion.

His ascent seemed quite improbable. He had been brought up poor on Oahu Island as Chad Rowan, the son of a half-Irish taxi-driver. His boyhood was spent learning street-smarts and watching wrestling on TV, and his future seemed to be as a beach bum.

Then a Hawaiian sumo-recruiter spotted him, and that was that.

The first months were tough, since he spoke almost no Japanese and pined for a decent American steak. But in the wrestlers' training stable he suffered no more nor less than all the others in the lowest ranks, getting up at 4am to exercise before breakfast, slopping out for his superiors, cooking their rice and serving it before getting a mouthful himself. The only differences were his dumbness, but he was shy anyway, saying little either in Japanese or English; his Hawaiian horror of cold winters; and the need to forget all the codes of life he had learned over 18 years.

But he stuck it out, and felt as he progressed that, when he wrestled, he was neither American nor Japanese: just a wrestler, whose body by the end did the thinking for him. It was never a matter of planting his flag in the middle of the ring and taking on a rival nation. He was learning a great, ancient skill.

The more serious racial frictions emerged as he climbed higher. An essential virtue of the sumo wrestler was *hinkaku*, dignity. He should be sober, uncomplaining, and modest, celebrating his triumphs with nothing more than a wave of the right hand. The sumo elders doubted that foreigners could ever possess that. In 1992 another hefty Hawaiian, Konishiki, "the Dump Truck", had been turned down for the title of *yokozuna*. In terms of tournaments won, he deserved it; but, said the elders, he did not have enough *hinkaku*. Konishiki called this racism, pure and simple. Only eight months later, however, Akebono was promoted to that foremost rank and stayed there for eight years.

His elevation calmed the controversy, for he had the sumo ethos in spades. Already, as a *sekitori* or senior wrestler, he qualified for a car and driver, customised kimonos to wear in public and a host of assistants. But he was not a man for showing off. As a *yokozuna* his new monthly salary of \$15,000, though huge for a sumo wrestler, was still tiny by American standards. And it was all he needed. Once the splendid belt was off he stayed dignified and humble, an ordinary Hawaiian who loved welcoming high-schoolers, plying them with snacks and teaching them how to wrestle. To American visitors, he was still "Chad".

His example brought many more foreign wrestlers to sumo. Some were Hawaiian; more were Mongolian. Eastern Europeans came. By 2000 many Japanese worried that their national sport did not have enough native recruits, let alone champions. In 2002 the elders reduced to one the number of foreigners allowed in each stable. But the truth was that, among the young, sumo was increasingly seen as hidebound and audience-unfriendly. Akebono himself wanted it to be more exciting and open to anyone. But when he asked to join the rule-imposing body that governed sumo—just for a year, perhaps—he was told, firmly, "No". At that point he retired as a *yokozuna*, feeling he had no future there. He had worried sometimes that Japan was becoming too Americanised; but clearly not as far as that.

In 2001, at his retirement as a *yokozuna*, he sat in the ring in his robes. He had no plans to abandon martial arts in general, and was to win several pro wrestling championships before both knees and heart gave out. But he was laying down his sumo career. Eleven thousand people watched as, one by one, 320 friends and colleagues came up to snip a few strands from his topknot with a pair of gold-plated scissors. He felt sad, much more than he thought he would. His head felt lighter, but not with the loss of his hair; more with the loss of a great honour, and the responsibility he had carried to bring two nations together. ■

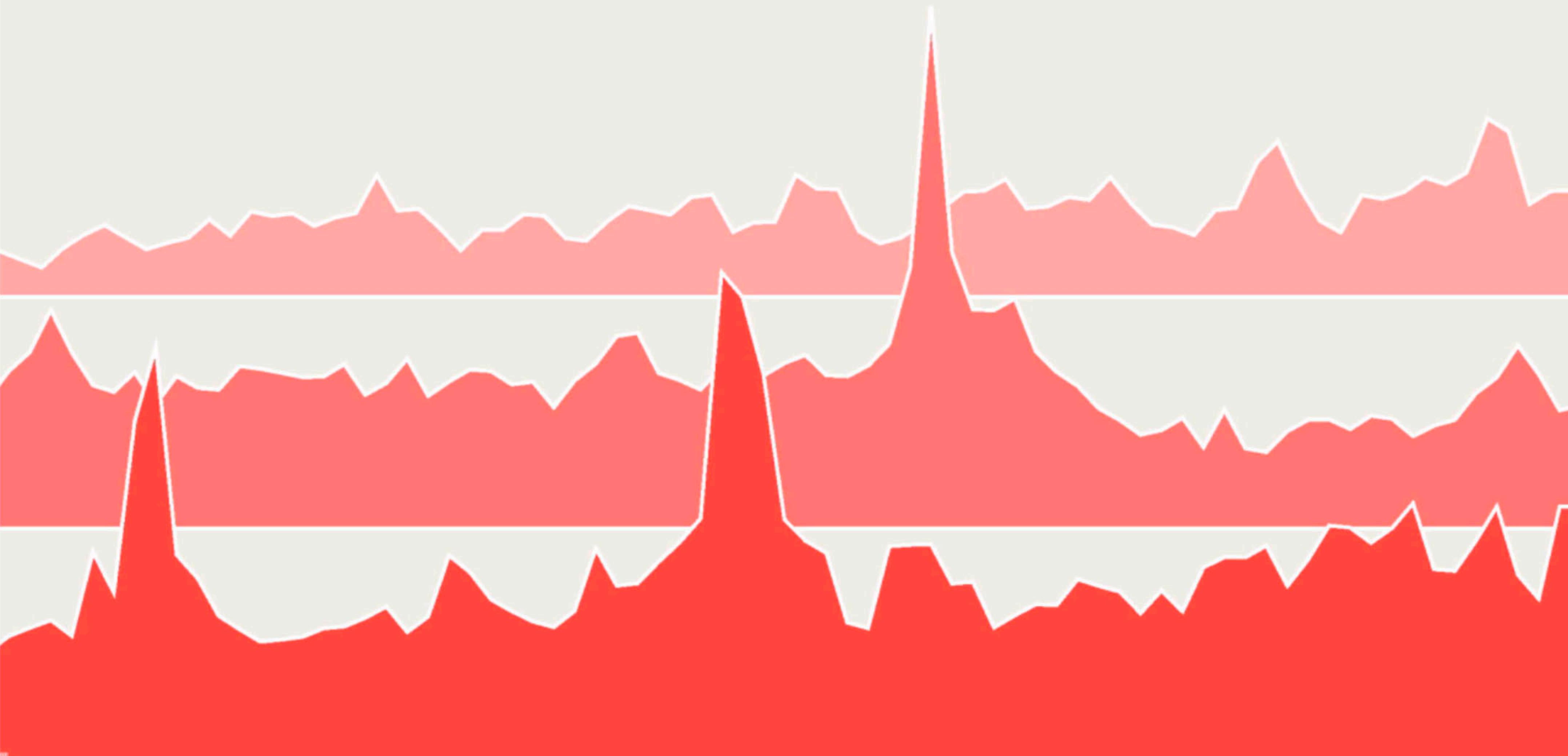
Develop a powerful data mindset for business

Communicate with numbers in our practical, online course

Explore and practise ways to depict different types of data to convey clear, powerful messages, reveal new insights and aid decision-making.



For details, visit
economist.com/data-course



THERE IS ETERNITY IN EVERY BLANCPAIN

The spirit to preserve.

"Creation"
Wildlife Photographer
of the Year 2021
Grand Title winner
© Laurent Ballesta



Fifty Fathoms

Collection



A Fifty Fathoms is for eternity.

Launched in 1953, the Fifty Fathoms is the first modern diver's watch. Created by a diver and chosen by pioneers, it played a vital role in the development of scuba diving. It is the catalyst of our commitment to ocean conservation.

JB
1735
BLANCPAIN
MANUFACTURE DE HAUTE HORLOGERIE