The Economist

Crypto bros v cat ladies

The housing supercycle

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OCTOBER 5TH–11TH 2024

THE YEAR THAT SHATTERED THE MIDDLE EAST

A special edition


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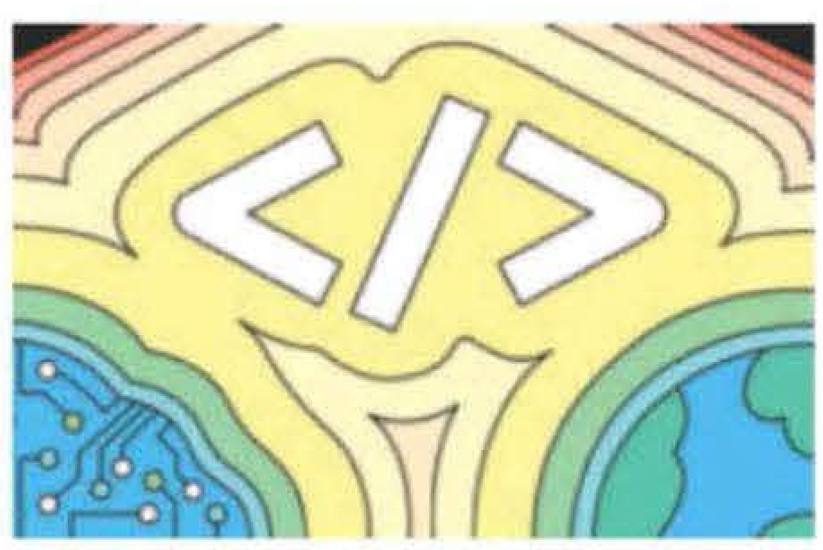

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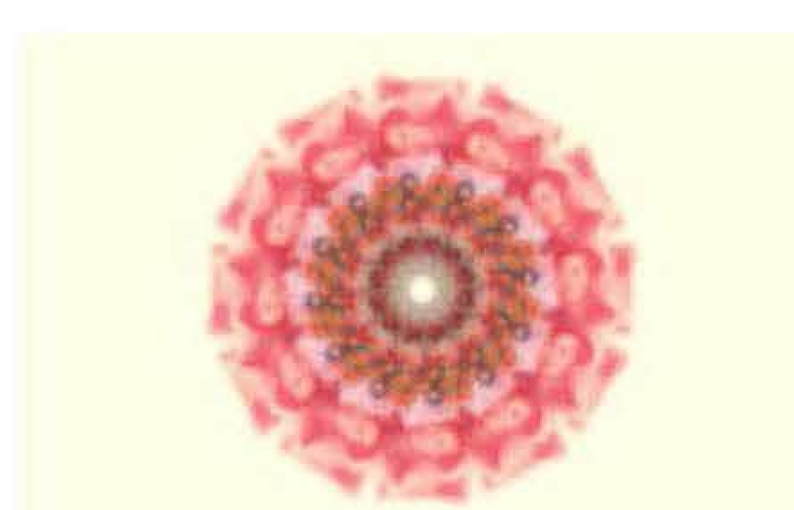

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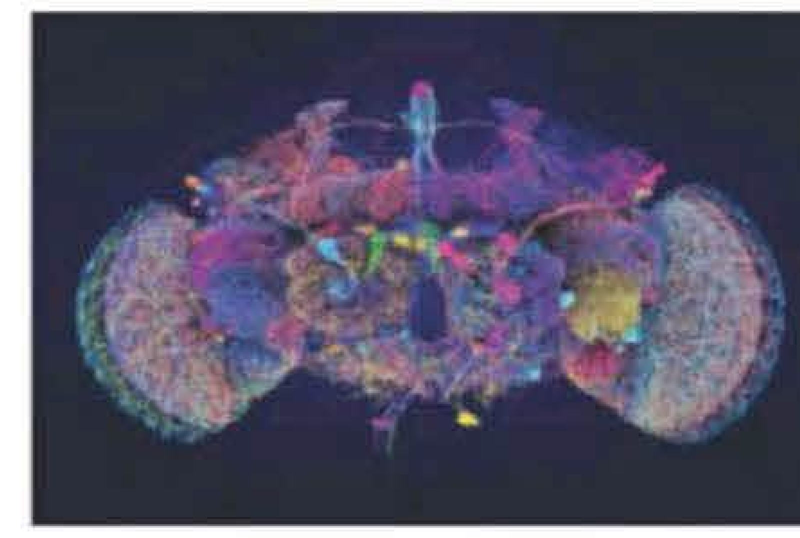

Culture

Economic & financial indicators

Obituary

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

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The world this week Politics

Israel launched a ground invasion of southern **Lebanon**, initially sending small numbers of troops over the border but then preparing to deploy additional forces. They were soon engaged in heavy fighting with Hizbullah, **Iran's** biggest proxy militia in the region, in which Israeli troops were killed. More than 1,000 Lebanese combatants and civilians have been killed and over 1m displaced. Iran lashed out with a direct attack on Israel, firing around 200 ballistic missiles. A man was killed in the West Bank when a missile fragment fell on him. No other deaths were reported. Binyamin Netanyahu, Israel's prime minister, said Iran would pay a "heavy price".

Iran's strike came in the aftermath of Israel's assassination of Hassan Nasrallah, the leader of **Hizbullah** in Lebanon since 1992, in air strikes on southern Beirut that targeted the group's headquarters. Israel has now killed most of Hizbullah's military leadership in the past two weeks and destroyed perhaps half of its 120,000 or more rockets and missiles.

Two Palestinian gunmen killed seven people in a shooting and knife attack in **Tel Aviv**. The two terrorists were shot and "neutralised" by a security officer and nearby civilians, according to the police.

Kenya's Parliament started proceedings to impeach Rigathi Gachagua, the country's deputy president, over his alleged role in anti-government protests in June. Dozens of people were killed in the protests, which nearly unseated the government.

At least 45 people died and more than 100 were missing after smugglers forced **migrants** off two boats travelling from Yemen to Djibouti. The incident makes 2024 the deadliest year on record for migrant sea crossings between the Horn of Africa and Yemen. Most recently, 196 people had drowned while trying to cross in June.

The hard-right Freedom Party (FPÖ) won the most votes in **Austria's** general election, the first time it has claimed victory. Its chances of forming a government are slim. Karl Nehammer, the country's incumbent chancellor, whose conservative People's Party (ÖVP) came second, may try to hammer together a coalition of Social Democrats, liberals and Greens. The ÖVP and the FPÖ have been coalition partners before; the last one ended in 2019. But Mr Nehammer has ruled out the inclusion of Herbert Kickl, the FPÖ's leader, in any new alliance.

Mark Rutte took over from Jens Stoltenberg as **NATO's** secretary-general. In his first speech Mr Rutte reiterated the alliance's commitment to **Ukraine**, warning that the cost to the West would be much higher if **Russia** won the war. Meanwhile, nine people were killed in Russian drone attacks on a hospital in Sumy, in north-east Ukraine. Six people were killed in Russian shelling on Kherson, which lies close to the front line. And Vuhledar fell to Russian troops. The town had managed to withstand the invaders for two years.

The end of a deep history

Britain's last remaining coal-fired power station officially shut down, bringing an end to 142 years of coal-fired electricity generation in the country. The world's first coal-power station was built in London in 1882 by Thomas Edison. Plans to phase out coal were announced in 2015, when about a quarter of Britain's electricity was generated by the fossil fuel. Britain's greenhouse-gas emissions have fallen by more than half since 1990.

Ishiba Shigeru became **Japan's** new prime minister, following a contest in the Liberal Democratic Party to replace Kishida Fumio. Mr Ishiba named his cabinet, but also called a snap general election for October 27th. The new finance minister is Kato Katsunobu, who was a health minister under Abe Shinzo and is a firm believer in Abenomics. He has called for a stimulus package that boosts wages and capital spending.

Responding to the latest bout of sabre-rattling from North Korea, **South Korea** displayed its Hyunmoo-5 ballistic missile at a military parade for the first time. The powerful weapon has been developed as a bunker-buster. Yoon Suk-yeol, South Korea's president, warned the North that if it attacked, "That day will be the end of the North Korean regime."

At least 224 people died in flooding and landslides in **Nepal**. Kathmandu, the capital, registered the highest daily rainfall for decades.

Claudia Sheinbaum was sworn in as **Mexico's** president, the first woman to hold the job. Ms Sheinbaum is from the same left-wing party as her predecessor, Andrés Manuel López Obrador. In a speech she sought to reassure investors that their investments in Mexico would be safe following judicial reforms that have been criticised for undermining the rule of law. She reiterated that the central bank would remain independent.

Argentina's statistics agency recorded a big jump in poverty, with 53% of Argentines living under the poverty line in the first six months of this year, compared with 42% in the previous six months. Javier Milei, the president, has cut subsidies for transport and fuel as part of his drive to normalise the economy. A spokesman blamed the rise in poverty on the "disastrous situation" that the government inherited from left-wing administrations.

In **Canada** Justin Trudeau survived a vote of no confidence in Parliament, the second in under a week. After two stinging by-election defeats the prime minister is facing calls to hold an early general election, especially from the opposition Conservatives, who are ahead in the polls. The Bloc Québécois, which wants independence for Quebec, has promised to support the Liberal government, but only if it boosts the state pension.

A deadly tempest

Hurricane Helene left a trail of destruction across six American states, killing about 200 people. Hundreds of people are reported to be missing. North Carolina bore the brunt. The category 4 storm made landfall in Florida's Big Bend region, packing sustained winds of 140mph (225kph).

J.D. Vance and Tim Walz, the two **vice-presidential candidates** in America's election, held a televised debate. The candidates were amiable, focusing on domestic policy. Viewers were equally split on who came off the better.

Jimmy Carter celebrated his 100th birthday. The former American president, who has been receiving hospice care for 19 months, has said he is determined to vote for Kamala Harris in November's election.

Correction Last week we said that the suicide pod used in Switzerland filled with liquid nitrogen, when we should have said nitrogen. Sorry.

The world this week Business

Dockworkers on America's east and Gulf coasts went on strike, their first since 1977. Some of the ports affected are the busiest in the country, and include New York and New Jersey, Savannah and Houston. The workers' union has rejected a pay rise of 50% over six years. With just a month to the election, the White House pressed employers to raise their offer, as businesses demanded that federal law is invoked to keep the ports open. A long strike will snarl up shipping and push up freight rates. Analysts at JPMorgan Chase estimate that it could cost the economy between $3.8bn and $4.5bn a day.

In reverse gear

The strike will also hit the **car industry**, as the ports account for a sizeable chunk of trade in vehicles and spare parts. It couldn't come at a worse time, with General Motors and Toyota reporting declining sales in America. Stellantis, owner of the Chrysler brand, cut its full-year guidance, driving its stock down by 13%. In Europe Volkswagen issued its second profit warning in three months because of the "challenging market environment". Aston Martin's stock fell by 25% after it, too, said annual profits would be lower than it had hoped.

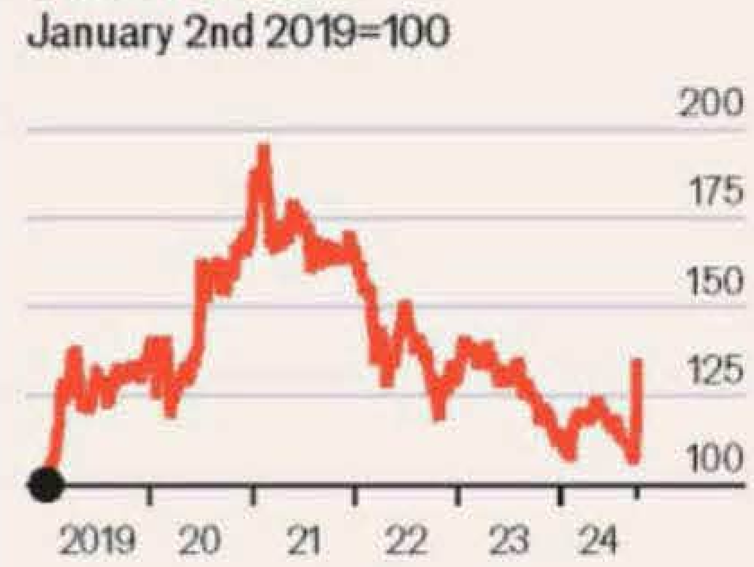
Bucking that trend, **Tesla** reported its first quarterly rise in deliveries this year. The carmaker delivered almost 463,000 vehicles from June to September, an increase of 6.4%, year on year.

Nike's woes continued, as it reported a 10% drop in sales for its recent quarter, year on year. The sportswear company withdrew its earnings guidance for the full year, shortly before Elliott Hill takes over as chief executive on October 14th.

OpenAI raised $6.6bn in its latest funding round, giving it a value of $157bn. **SoftBank** reportedly invested $500m. After a period of retrenchment following some disastrous investment decisions, Son Masayoshi, the Japanese tech conglomerate's boss, has said he is going on a "counter-offensive" to increase the group's spending on artificial intelligence.

California's governor, Gavin Newsom, vetoed a state bill that would have brought in strict safety requirements for the development of large-scale AI models. The bill called for AI to have full shutdown capabilities and security protocols to avoid "critical harms" to infrastructure and people. It was opposed by Google, OpenAI and Meta, but supported by Elon Musk.

CSI 300 index
January 2nd 2019=100



Source: Bloomberg

Chinese stockmarkets snapped out of their funk and rallied in response to the government's recent stimulus package, chalking up their biggest daily gains since 2008. The benchmark CSI 300 rose by 25% over five days, its most ever by that measure. The Shanghai Composite was up by 21% over five days, its largest gain since 1996. Hong Kong's Hang Seng Index also surged; it has risen by 30% since the start of 2024.

The Federal Trade Commission cleared **Chevron's** acquisition of **Hess**, an energy exploration company, but blocked the chief executive of Hess from joining Chevron's board. The regulator has lodged a complaint against John Hess, accusing him of communicating with OPEC and encouraging the cartel to "stabilise production and draw down inventories", which could cause oil prices to rise. The FTC says that giving Mr Hess a board seat would have let him "amplify" this message. Hess responded that the FTC's claims were "without merit", and that Mr Hess had said similar things to the American government.

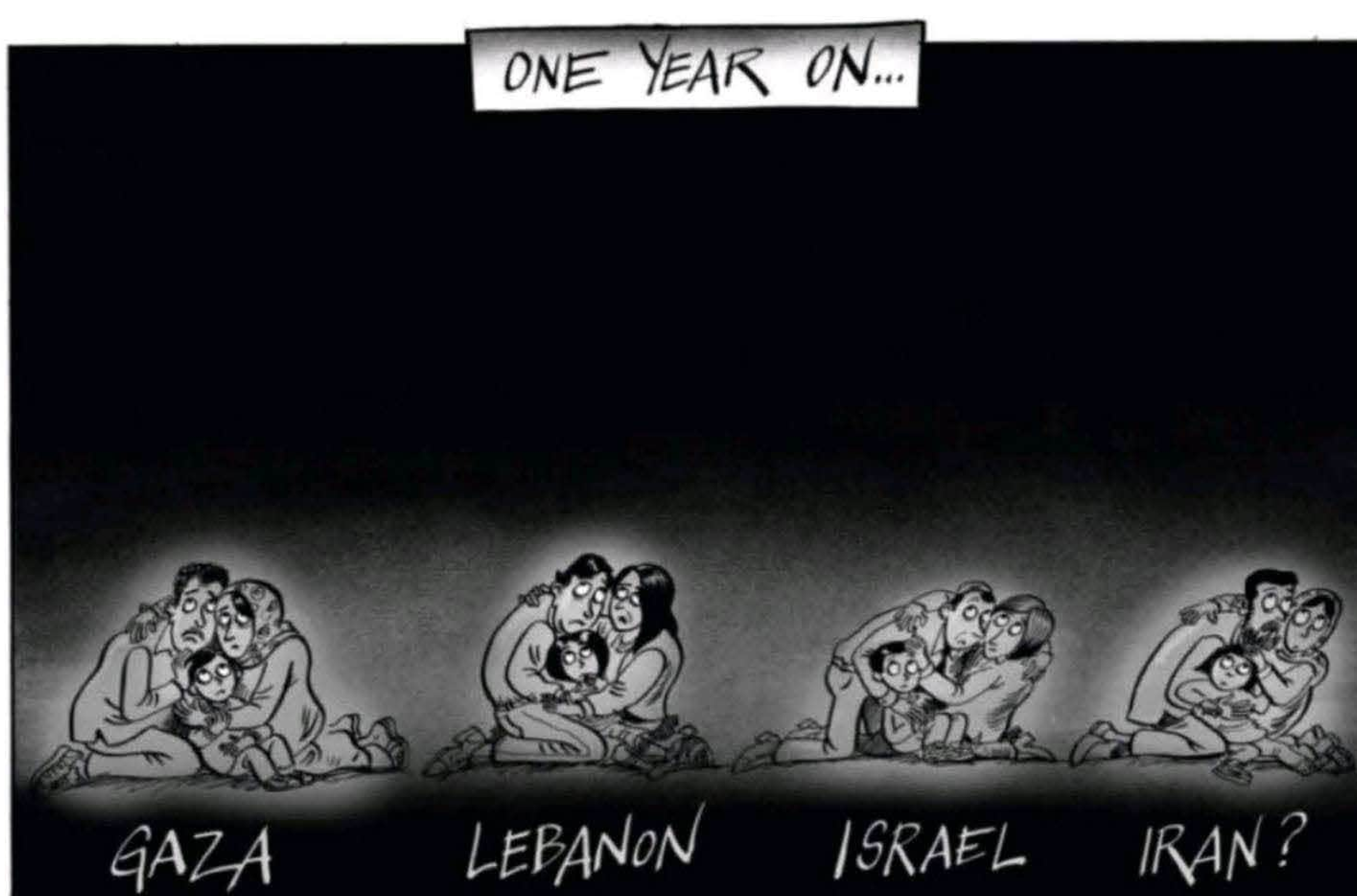
Abu Dhabi's state oil company offered to buy **Covestro**, a German chemical firm that was separated from Bayer in 2015, for €14.7bn ($16.2bn). If it passes regulatory muster in Europe the deal will be the largest-ever takeover of a foreign entity by the United Arab Emirates.

Oil prices rose sharply amid the latest turmoil in the Middle East, pushing the price of Brent crude above $75 a barrel. But over the month of September the price of Brent fell by 9% and by 17% over the whole of the third quarter, as traders weighed the likelihood of slowing global demand for oil against possible short-term disruption to supply.

The **euro zone's** annual inflation rate dropped sharply in September to 1.8%, the first time it has fallen below the European Central Bank's 2% target since mid-2021. That strengthens the case for the ECB to cut interest rates again when it meets on October 17th.

Money, it's a gas

Pink Floyd reportedly sold the rights to its catalogue of recorded songs to Sony for $400m (though not the song-writing rights). The deal brings an end to years of squabbling about rights among the band members. The decades-long feud between David Gilmour and Roger Waters is as legendary as Pink Floyd's music.



The Economist

The year that shattered the Middle East

Kill or be killed is the region's new logic. Deterrence and diplomacy would be better

EVER SINCE Hamas's slaughter of Israelis on October 7th 2023, violence has been spreading. One year on, the Middle East is an inch away from an all-out war between Israel and Iran. Israel's skilful decapitation of Hizbullah, a Lebanese militia backed by Iran, prompted the Islamic Republic to rain missiles on Israel on October 1st. Israel may retaliate, perhaps striking Iran's industrial, military or nuclear facilities, hoping to end once and for all the threat it poses to the Jewish state.

Iran is certainly a menace, and use of force against it by Israel or America would be both lawful and, if carefully calibrated, wise. But the idea that a single decisive attack on Iran could transform the Middle East is a fantasy. As our special section explains, containing the Iranian regime requires sustained deterrence and diplomacy. In the long run, Israel's security also depends on ending its oppression of the Palestinians.

Iran's latest direct attack on Israel consisted of 180 ballistic missiles. Unlike an earlier strike in April, this time Iran gave little warning. But as before, most of the projectiles were intercepted. The salvo was a response to the humiliation of its proxy, Hizbullah, which until two weeks ago was the most feared militia in the region. No one should shed tears for a terrorist outfit that has helped turn Lebanon into a failed state. For the past year Hizbullah has bombarded Israel, forcing the evacuation of civilians in its northern belt. Israel's counter-attack, unlike its invasion of Gaza, was long-planned. It has made devastating use of intelligence, technology and air power, killing the militia's leaders, including its chief, Hassan Nasrallah, maiming its fighters with exploding pagers and destroying perhaps half of its 120,000 or more missiles and rockets.

This humbling of Hizbullah has triggered a crisis of credibility for its sponsor. For three decades Iran has tried to intimidate Israel, Arab states and the West with a twin-track approach of threatening to race for a nuclear bomb and organising an "axis of resistance", a network of militias including Hamas, Hizbullah and the Houthis in Yemen. Now that axis is reeling: Israel has battered Hamas's military wing in Gaza and outwitted Hizbullah. Suddenly Iran's regime looks too weak to help its cronies—and, perhaps, to defend itself. Even its ballistic missiles are no match for Israel's air defences.

For Israel the danger now is hubris. There could be mission creep in Lebanon, with limited infantry incursions morphing into a full invasion, a mistake Israel made in 1982 and again in 2006. Its impending retaliation against Iran poses even greater risks. One option would be to destroy Iran's oil-export hubs, crippling the regime's finances and rattling energy markets. Another would be to strike its nuclear facilities. Some in Israel see a window of opportunity. For now, Iran's ability to hit back via Hizbullah is blunted, but in the next couple of years it has a strong new incentive to build its first nuclear weapon, to re-establish deterrence. The hard right of Israel's ruling coalition, including Binyamin Netanyahu, the prime minister, dream that a single, devastating strike on Iran now could end all major threats to Israel's security for the foreseeable future.

This view is seductive but dangerous. It is true that Iran's behaviour has grown worse since Donald Trump's administration abandoned the deal to freeze its nuclear programme. In the past year Iran has accelerated uranium enrichment, armed the Houthis, executed hundreds of dissidents at home and supplied vast numbers of drones to help Russia kill Ukrainians. Its newish president, Masoud Pezeshkian, is supposedly a reformer but really a captive of conservatives. Yet for all that, Iran is unpredictable. Its clerical-military regime is unpopular at home and faces economic decay and a succession crisis when the 85-year-old supreme leader, Ali Khamenei, dies. A one-off attack on its nuclear sites might destabilise the regime. But it could fail to destroy those facilities, which are deep underground, and embolden hardliners who might dash even faster for a bomb, perhaps aided by Russia.

A more effective way to deter Iran might look like this. Israel, backed by America, should make credible threats to conduct repeated military strikes on its nuclear programme for years to come to prevent it from obtaining a bomb. America and its allies should enforce tougher sanctions on its oil exports, if it seeks to re-arm its proxy militias. In addition, there must be incentives to help Iran's reformers. Diplomats should make clear that, if Iran stops its quest for nuclear weapons and arming its proxies and Russia, it will get sanctions relief. Though President Joe Biden has signalled he does not support a hasty attack on Iran's nuclear sites, Mr Netanyahu may hope that a future President Trump will back a more hawkish approach. What Israel needs, however, is long-term bipartisan support from America, tempered with counsels of restraint.

American support and Israeli restraint will also be crucial in tackling Israel's other big security problem: the Palestinians. Mr Netanyahu and his hardliners want Israelis and the world to look only at Iran, downplaying the threats in Gaza, where Hamas is all but crushed, and in the West Bank.

The narrow path to peace

Yet on the day of Iran's strike more Israelis died from a gun and knife attack in Tel Aviv than from missiles, and the biggest loss of Israeli life in a year of war has been from Hamas's home-grown killers. Never-ending repression, after the deaths of more than 40,000 Gazans in the past year, will breed a new generation of militants. In Israel, the settler movement and its toxic politics imperil the open values that undergird the country's high-tech economy. Any rapprochement with Saudi Arabia, which could help contain Iran, depends on treating Palestinians better. An eternal occupation, by contrast, guarantees more human-rights abuses that would corrode Israeli society and strain, perhaps even break, the alliance with America.

As war escalates in the Middle East, Israel's government believes it has the advantage. Perhaps it does. But the challenge is to translate military prowess into lasting strategic gains and ultimately peace. Without that, blood will keep flowing for years to come. ■

Stimulus in China

Too soon to celebrate

It will take more than a spectacular stockmarket rally to revive the economy

CHINA'S POLICYMAKERS have blinked at last. For 18 months, even as deflation set in and economic sentiment curdled, stimulus was half-hearted and piecemeal. Then last week came a belated turnaround. Officials unleashed a range of easing measures, suggesting that their pain threshold had been reached.

Stockmarkets are rejoicing. As Hong Kong's market reopened on October 2nd after a public holiday, shares rose by more than 6%, capping a rally of over 20% in a mere six frenetic trading days. But China will need even more stimulus to escape from its deflationary trap.

The mood shift began with the central bank. On September 24th, a week after America's Federal Reserve had eased policy and given it more room for manoeuvre, the People's Bank of China cut interest rates, eased reserve requirements for banks and reduced the cost of existing mortgages. It also introduced new tools to stoke the stockmarket (see Finance & economics section). Two days later, China's Communist Party promised to arrest the decline in the property market and to fight the economic slowdown more forcefully. Media reports suggest the central government may soon borrow an extra 2trn yuan ($285bn) or roughly 1.5% of GDP. Half will help local authorities deal with their debts; the other half will help consumers, including direct handouts to families with more than one child.


China, stockmarket indices

April 2nd 2024=100

The measures represent a long overdue change in the style and urgency of China's policymaking. For months it seemed that the government was scared of doing too much, rather than too little, to help the economy. Xi Jinping, China's ruler, had disdained generous handouts to households, which he feared would undermine their self-reliance. National leaders had failed to get a grip on the country's property slump, leaving it to individual cities to cobble together responses without enough help from Beijing. Local governments were so strapped for cash that they worsened the slowdown by cutting spending and harassing firms for fees and back taxes.

Compared with past stimulus efforts, the latest measures have been better communicated and co-ordinated, and more targeted at consumers. But after their sluggishness, officials will face an uphill task of reviving sentiment and spending. Even if all the reported fiscal measures are confirmed, they lack the necessary scale. To revive growth and inflation, many economists think China needs a stimulus of 7trn-10trn yuan, which would amount to 2.5-4% of GDP if spread over two years.

Officials must also say how they will stop the property slump. That may require the central government to guarantee the delivery of pre-sold but unfinished properties. It also needs to tackle the silent forests of flats that stand finished but unsold. Beijing wants state-owned firms to buy them and convert them into affordable homes. But it has not put enough money where its mouth is.

With a big enough stimulus, China's economy would have a shot at escaping from its deflationary doldrums. In time, consumers might feel confident enough to spend, and companies to invest. China's stimulus would also be felt around the world—but differently from in the past.

During the global financial crisis China helped revive the world economy, as the government unleashed a huge, infrastructure-heavy stimulus that stoked roaring demand for imported commodities. If a new package is targeted towards consumers, it will not fire up commodity markets as much. Instead, if Chinese households bought more cars and other manufactured goods, fewer of them would wash up in overseas markets that are fearful of Chinese competition. Stimulus would not just lift the spirits of shoppers at home. It might hearten China's economic rivals abroad, too. ■

Japan's new prime minister

From gadfly to leader

Ishiba Shigeru promises diplomacy, defence and a dash of social liberalism. But can he control his party?

IN A TURBULENT world, Japan is a quiet force for stability. Yet its domestic politics is stormy. Frequent scandals have undermined trust in the ruling Liberal Democratic Party (LDP) and recently led to the resignation of Kishida Fumio as prime minister. The LDP has now made an unexpected choice to steady the ship in his wake: Ishiba Shigeru, a popular gadfly who has long been an outsider and lost his previous four bids for the party presidency. To succeed, he will have to learn to lead, rather than merely criticise (see Asia section).

A policy wonk, he brings deep experience in defence issues. He is frank about Japan's wartime misdeeds, and will thus help to nurture the vital but tetchy relationship with South Korea. He combines a commitment to strengthening Japan's armed forces to enhance deterrence with a willingness to maintain dialogue with China. He is stubborn and outspoken.

On economic matters, he is less knowledgeable or passionate. Though he speaks often about reviving Japan's forgotten regions, he offers few specifics. He will probably let technocrats run economic policy. That means wild missteps are unlikely. But so, too, are reforms that would require political will and could help boost Japan's growth prospects, such as making labour markets more flexible. That is a pity. ▸▸

The LDP came close to picking a much worse leader. Takaichi Sanae, the standard-bearer of the LDP's right wing, won the first round of the leadership vote, besting eight other candidates, and lost the run-off to Mr Ishiba only by five percentage points. Had she prevailed, Japan would have had as prime minister a woman who plays down her country's imperial-era atrocities, and who insists on scratching already troubled relations with China and upending the fragile rapprochement with South Korea by visiting the Yasukuni Shrine, which houses the spirits of Japan's war dead, including war criminals. She favours big rises in defence spending, but offered no credible plan to pay for them. And she has pledged to preserve a law requiring married couples to have the same surname, which in practice means wives give up theirs. (This rule is widely resented as outdated and sexist, but social conservatives think it good for family harmony.)

That the ruling party mobilised against Ms Takaichi in the run-off is heartening. But the paucity of alternatives is much less so. Nine candidates ran, the largest field in decades, yet no transformational leader emerged: the more competent of the bunch had too little popular appeal, and those who rose in the polls were all deeply flawed.

Mr Ishiba has called a general election for October 27th. The LDP is expected to win, as it has for nearly all of Japan's post-war history, not because voters happily support it, but because the opposition is a shambles. People remember the most recent period of opposition-led government as chaotic: the Democratic Party of Japan (DPJ) cycled through three prime ministers in as many years, alienated America and bungled the response to a huge earthquake, tsunami and nuclear meltdown in 2011. If today's opposition were wise, it would try to convince voters that it has learned from the past and offer a fresh vision. Instead, last month the main opposition party selected as its leader a man voters rejected 12 years ago: Noda Yoshihiko, the last of the three DPJ prime ministers.

So Mr Ishiba is likely to win a mandate. His energy might help him break through long-standing political logjams, in particular on social issues, such as separate surnames and gay marriage, which is not recognised in Japan despite broad popular support. Mr Ishiba has displayed a liberal streak more in line with public opinion than his party's, which is encouraging.

Don't provoke superpowers

But his stubbornness could also lead him astray. He has long advocated some provocative ideas, such as creating an Asian version of NATO to counter China and revising the agreement that governs how American military forces operate in Japan, to reduce what he sees as imbalances in the relationship. Both ideas would at best be distracting and at worst destabilising. If he picks impossible battles, his administration will stumble and he will struggle to keep control of a party that has never trusted him. He will have to learn pragmatism, fast. ■

Google

Shake up, not break up

Dismantling Google is not the way to curb its monopoly power

THE PARALLELS draw themselves. In 1999 America's government prevailed in a high-profile antitrust suit against a tech giant it alleged was abusing a monopoly. The case then turned on the "power of the default" in internet browsers: Uncle Sam said Microsoft was forcing computer-makers to distribute its browser along with its Windows software. It resulted in proposals to break Microsoft up (though the firm won on appeal and remained whole).

Tech-watchers could be forgiven for feeling a sense of déjà vu. In August trustbusters scored their first major victory against big tech in a quarter of a century when Amit Mehta, a judge in the District of Columbia, ruled that Google was a monopolist in online search. Using the power of the default, he argued, Google had blocked rivals and raised prices for its ads beyond free-market rates. On October 8th the Department of Justice is due to file proposed remedies for this abuse of monopoly power. These may include a proposal to dismantle the tech giant—perhaps by hiving off Chrome, its browser, or Android, its operating system for mobile handsets.

This would be foolhardy. It is not at all clear that it would solve the central issue presented in the case. And besides, even though Google has long enjoyed the vast profits associated with its vice-like grip on search, it may not continue to do so. New generative artificial-intelligence (AI) tools, such as ChatGPT and Claude, are quickly gaining market share.

Google is the web's most-used search engine, handling about 90% of queries in America. That dominance, Mr Mehta ruled, has been cemented through "default search agreements". Open up Safari on an iPhone or Mozilla Firefox on a laptop and type a query into the search bar, and it will be Google that returns the results. For the privilege of doing so Google shares some of the advertising revenue its search engine generates. These payments amounted to $26bn in 2021. Some $20bn went to Apple alone.

For firms to pay to be first in the queue for potential customers is hardly an outlandish idea. Cereal-makers pay supermarkets to be "eye-level" on shelves; publishers pay booksellers for spots on their coveted "front table". The trouble with default search agreements is that they do not just make one option more prominent. They take choice away altogether.

Hiving off Chrome or Android would not fix this problem, as long as Google were still allowed to pay their eventual owners to be the default search engine. So the court should target default arrangements directly. It could limit Google to being able to pay to be one of a range of choices of search engine, a fix that European regulators have already put in place. Absent the fat cheque Google pays to be the default, Apple and other deep-pocketed tech firms might focus on building search engines of their own.

An order to force Google to make public some of the tech- ▸▸

nology that enables its search engine to work, such as its index of web pages and search-query logs, could make it easier for rivals to try. The trial revealed that it costs an estimated $20bn to build a search engine, plus $3bn-4bn per year in annual research and development. Reducing those costs would let smaller companies compete, too.

Another reason to avoid a remedy as drastic as a breakup is that technology moves far faster than any legal system can. Add in the appeals process and any action against Google is still years away. Yet already there is emerging evidence that Google's grip on search is slackening as generative-AI tools gain ground. A survey by Evercore, a bank, found that ChatGPT is the "go-to search engine" for 8% of Americans. Innovation dramatically weakened Microsoft's dominance a quarter-century ago, too. The firm was swiftly left behind as mobile technology took off.

Antitrust intervention may have sped the firm's decline. That is why it is important for regulators to look forward as much as back. If Google is left unchecked, the danger is that its incumbent position impedes competition. With its huge proprietary datasets, Google may one day build better AI tools than its rivals. Buoyed by its monopoly profits, it offers its current AI tools free, unlike newer competitors which must charge subscriptions to help cover their costs. If Google were indeed blocking future rivals, then limiting its ability to use its search engine to distribute its AI products might stop it from exploiting one monopoly to acquire another. A breakup, however politically appealing it may be to some, is not the answer. ■

Neuroscience

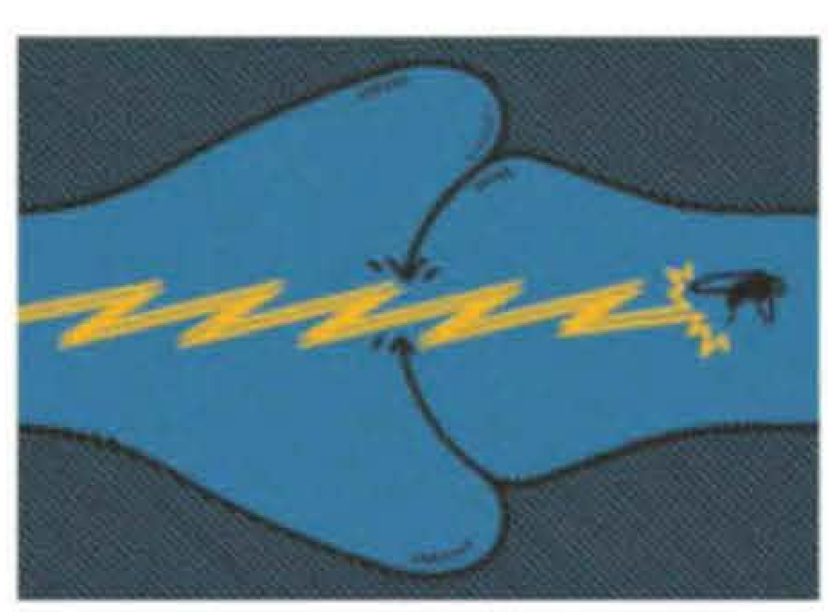
Know a fly, know thyself?

The first detailed map of a fruit fly's brain is a step towards understanding human brains

For billions of years, life was single-celled and boring. Even when it became multicellular and more interesting, it took the evolution of brains, and subsequent competition between them via the animal bodies they inhabited, to create the biodiversity that exists today. Greater complexity caused by brain-on-brain competition permitted better processing of information from special organs for vision, hearing, smell, taste and touch. This made for more cunning predators, more elusive prey and more demanding sexual partners. It also (because much physiology is regulated by the brain) allowed larger and more sophisticated bodies to evolve.

Even brainless plants owe a lot of their diversity to brains, for their lives are constantly shaped by their interactions, both beneficial and hostile, with brainy animals. Without pollinating insects there would be no flowers. Without grazing ungulates, grasses would not have evolved.

Since *Homo sapiens* appeared, brains have started to analyse themselves. And this week marks the publication of an important step towards the betterment of that understanding. Researchers have produced a complete map of the neurons in the brain of an adult fruit fly (see Science & technology section).



This map, called a connectome, traces the passage through the brain of the filamentary, data-carrying protuberances of almost 140,000 neurons and logs almost 55m connections between them. Earlier projects have mapped the nervous systems of a simple worm (300+ neurons), a fly larva (3,016) and the central part of an adult fly's brain (about 27,000). But this is the real McCoy, a complex, adult animal that can navigate in three dimensions, fight its rivals, evade its predators and warn its confrères of threats.

That is a tremendous achievement and is already helping researchers comprehend how flies' neurons collaborate to process sensory information and turn it into instructions for action. It should help them understand people, too. True, the brains of flies and humans operate differently; with more than 600m years of evolution separating them, they could hardly fail to. But what worked technologically to produce the fly connectome should, with a bit of scaling up and the application of enough dollars, work for vertebrates as well.

That will start with mice. But, eventually (with enough technological improvement and quite a lot more dollars) a human-brain connectome should be doable. If and when this happens, many questions that are intractable today, ranging from how to treat psychiatric diseases to what makes humans human, may be easier to answer.

Some human brains, however, are not content to leave it at that. These brains think the evolutionary trajectory of brains, far from having peaked with *Homo sapiens*, is only just getting going. For, besides self-analysis, another thing brains can now do is make simulacra of themselves. Having access to the way natural selection has built brains over the course of hundreds of millions of years will surely assist such efforts.

From their inception in the mid-20th century, computers have often been described as electronic brains. In the beginning, that was flattery. But, as the field of artificial intelligence (AI) advances, the flattery is becoming nervous, to the point where some human brains worry that something is being created which might run out of control.

Fortunately for the worriers, AI today is incredibly inefficient. It requires power inputs which would service a small city and such vast quantities of data to train itself that the entire internet is not enough. By contrast, flies, which are powered by rotting fruit, can do things no AI can yet manage. If their ability to navigate and avoid objects could be replicated, for example, then designing self-driving vehicles would be a doddle.

Adding what natural selection has created to the creativity of human brains might thus open up a whole new field of information technology in which describing the results as electronic brains would be no more than the truth. This would indeed carry brains on to the next stage of their evolutionary journey. Then the worriers might have just cause—for whether human brains, and their attendant bodies, would be wanted as passengers on that voyage cannot be foreseen. ■

Letters

LETTERS ARE WELCOME AND SHOULD BE ADDRESSED TO THE EDITOR AT:
THE ECONOMIST, THE ADELPHI BUILDING, 1-11 JOHN ADAM STREET, LONDON WC2N 6HT
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Finance in the Caymans

The claim that Britain's overseas territories are "key nodes in global money-laundering networks" is as unfair to the good people of the Cayman Islands as it is to those of the Falklands ("Laundry list", September 14th). An analysis by Transparency International in 2018 of cross-border money laundering cases in the past 30 years identified a grand total of only 32 that had any connection to the Cayman Islands. One prominent example was the 1MDB case in Malaysia, a fraud so expansive that few countries with financial centres would have escaped some connection.

The Transparency International report failed to note, as did your article, that companies in the Cayman Islands have long been required to verify their owners and reveal them to law-enforcement authorities in Britain. By contrast, until recently Britain's own vaunted register of beneficial owners relied entirely on self-reporting, leading to scores of Disney characters being recorded as owners. A high watermark indeed.

The Cayman Islands' government has made a commitment to make beneficial ownership information available to members of the public with a legitimate interest this year, another debunking of the long-outdated stereotypes peddled by Hollywood fiction.

STEVE MCINTOSH
Chief executive
Cayman Finance
Grand Cayman

Being female in Afghanistan

No one should be surprised that the Taliban are withdrawing the few liberties Afghan women had, one can only deplore it ("No country for women's rights", September 21st). Those liberties, it must be said, were available mostly for women from middle-income, well-educated families in Kabul. Yet there was hope for all and opportunity for some.

Afghanistan will be able to foster women's rights only after it ceases to be an enclave shut off from the outside world by hostile geography and a lack of infrastructure. The Western coalition strikingly had no interest in this and failed to tackle it despite the billions of dollars poured into the country over 20 years.

ROMAIN POIROT-LELLIG
Chief of staff to the EU special representative for Afghanistan, 2008-10
Lagos

Turkey needs help

"Not wanted here" (September 14th) summarised the growing discontent in Turkey with Syrian refugees. However, one of the root causes of the refugee crisis in Turkey is the failure of the European Union to keep its promise to support the country during the emergency. Turkey is the last buffer before the EU in protecting Europe from the full repercussions of migration. Stronger economic support in this area could smooth out the weight of refugees on the Turkish economy and thus the bias against them.

YIGIT TATIS
Izmir, Turkey

Paying for blood

You argued that blood donors should be paid to meet the global demand for plasma ("There must be blood", August 31st). However, collection capacity, not donor willingness, is the limiting factor in supply. When governments invest in expanding capacity, supply also increases. Belgium experienced a 30% rise in plasma donations after launching a national plan in 2018 and Denmark more than doubled its supply by investing in extra donor centres.

Moreover, although the cost for paid plasma is low, this is because companies take blood from poorer neighbourhoods, relying on frequent donors who need the money. These savings are often offset later when drug companies use their control of the entire plasma supply chain to inflate prices of plasma-derived medicines, which carry profit margins of up to 30%. Relying on voluntary donations is more cost-effective in the long run by keeping medicine prices in check.

We should also consider the impact of payments on the safety of donors and patients. Research shows that donating twice a week weakens the immune system of blood donors. Because of mad-cow disease Britain had to destroy its own plasma and relied on imported blood from 1998 to 2021. Had Britain's plasma in 1998 been part of a global supply chain, would we have stopped all plasma use worldwide, or would the whole world have been forced to accept the additional risk? The recent inquiry into infected blood in Britain made clear that global trade amplifies potential safety risks, with more than 30,000 patients infected by imported plasma from paid donors.

The world needs more plasma, but to increase the supply sustainably governments should invest more in public collection efforts rather than leaving this to the private sector, which will inevitably introduce payments.

PHILIPPE VANDEKERCKHOVE
Chief executive
Belgian Red Cross-Flanders
Mechelen, Belgium

Tutors in China

I agree that private tutoring in Asia is akin to an "arms-race dynamic" ("Cramming culture", September 21st). My friends at school boast about the quality of their private tutors. We have a popular phrase in Chinese to describe this: *nei juan*, which means internal stress. I fear the biggest challenge for China's youth is going to be maintaining basic mental health.

JACK WANG
Beijing

Learning from Tony Blair

Your article about the Labour government's approach to reforming public services in 1997 did not note that Tony Blair and his ministers took time to decide how to go about these changes and their methods evolved in the light of experience ("The vision thing", September 21st). The work of Michael Barber, an adviser, in the delivery unit was significant, but other approaches were of variable effectiveness. Sir Keir Starmer's government has an opportunity to learn from what did and did not work, but must do so quickly if it is to succeed.

SIR CHRIS HAM
Professor emeritus
University of Birmingham

The forbidden fruit

You noted that there was no "apple" in the story of Adam and Eve, apple being a translator's pun for evil ("Christianity's sex addiction", September 21st). In the 17th century Sir Thomas Browne pointed out that Saint Jerome's Latin translation of the Eden story uses the word *fructus* (fruit) to denote the object that Eve eats.

In the seventh book of his "Pseudodoxia Epidemica" (Vulgar Errors), which debunks various mistaken beliefs, Sir Thomas found that the Latin word *malum* in the sense of apple appears only later in the Song of Solomon, where it seems to have no bearing on the Eden story. The true source of this misconception probably involves later translations and how meanings of words evolved, as shown in Azzan Yadin-Israel's recent work, "Temptation Transformed".

JOSH GREENFIELD
New York

Further to your review of Diarmaid MacCulloch's book on sex and Christianity, in my early teens my friends and I were greatly helped by a sex-education lesson at our Christian school. The priest who held the lesson, an elderly paragon of primness, reached his climax only after long embarrassed rambles round the subject, telling us to "flee like the very devil from passionate women".

We have been on the lookout for them ever since.

ROD TIPPLE
Cambridge

Briefing Israel at war

On many fronts

JERUSALEM

The bloodshed in the Middle East is fast expanding

JEWS TRADITIONALLY mark the new year by eating an apple dipped in honey, an expression of hope that sweet times lie ahead. As Israeli families prepared to ring in the year 5785 on the evening of October 2nd, many must have hoped that it would at least be less bitter than 5784, which began with an atrocity. On October 7th 2023 Hamas, a militant Palestinian movement based in Gaza, burst through barriers walling Gaza off from Israel, massacred more than 1,100 people and took a further 250 hostage. During the year that has followed, Israel has not only fought non-stop with Hamas in Gaza, but also exchanged rockets with Iraq, Lebanon, Syria and Yemen. As the year drew to an end, on September 30th, it sent troops across the border into Lebanon, to battle Hizbullah, a Lebanese militia that has been bombarding northern Israel. The next day Iran, a patron of both Hamas and Hizbullah, launched a salvo of 181 missiles at Israel. As *The Economist* went to press, the region was awaiting the inevitable Israeli riposte. Israel is now fighting wars on several fronts, with no end in sight to any of them.

The Iranian attack on October 1st targeted two air-force bases and a military-intelligence facility. The intention seems to have been to overwhelm Israel's missile-defence systems by force of numbers. If so, it failed almost completely. Most of the missiles were intercepted and destroyed in mid-air. A handful evaded the dragnet, but caused few casualties. In the West Bank a Palestinian was killed by falling debris from a stricken projectile.

That was the second time this year that Iran has fired directly on Israel. The previous attack, on April 13th, came in retaliation for the killing of an Iranian general when Israel bombed Iran's embassy compound in Damascus. Nearly all of that barrage was intercepted as well. At the time America's president, Joe Biden, urged Binyamin Netanyahu, Israel's prime minister, to "take the win" and not respond with devastating force. Israel's retaliation consisted of an attack on a single Iranian air-defence radar installation. That was intended as a warning that Israel was capable of penetrating Iran's air defences and therefore doing lots of damage.

Iran has failed to heed the warning. There is little question that Israel's retaliation this time will be of a far greater magnitude. There are three sets of possible targets. Israel could go after Iran's leaders, in the same way that it has assassinated much of the top ranks of Hamas and Hizbullah. ▸▸

It could hit Iran's infrastructure, in order to push an already weak economy over the brink. In particular, strikes on the oil terminals at Iran's ports would stop the flow of its main export and starve the regime of much-needed cash. Two strikes Israel has carried out in recent months against the oil terminal at the Yemeni port of Hodeida, in response to missiles fired at Israel by the Houthi militia, which is backed by Iran, were seen as a trial-run for such an attack. Most alluring of all, however, would be strikes against facilities where Iran is thought to be developing nuclear weapons—something Israel has been contemplating for more than 20 years.

Israeli officials believe that Mr Netanyahu has been hoping for months to provoke Iran into launching an attack that would give Israel an excuse to target the nuclear sites. He has long faced scepticism, both in Israel and abroad, about his conviction that all Israel's security problems stem from Iran. On September 30th he said in a televised statement, "When Iran is finally free, and that moment will come a lot sooner than people think, everything will be different." That may be wishful thinking, but he would clearly like to see Iran's government toppled.

For much of the past year, as Israel pummelled Gaza, killing nearly 42,000 people and displacing most of its population, Iran's strategy of encircling Israel with proxies equipped with missiles and drones seemed to be working. Hizbullah bombarded Israeli communities near Lebanon daily, forcing more than 60,000 people to flee their homes. From Yemen, the Houthis fired both on Israel, in one case sending an armed drone as far as Tel Aviv, and on shipping passing through the Red Sea, in effect blockading the port of Eilat. Smaller militias in Iraq and Syria chipped in with the odd attack on Israel.

But as the bloody year draws to an end, Iran's friends are on the ropes. Although thousands of Hamas fighters remain in hiding in Gaza, they are in guerrilla mode. The group's command structure has been smashed, leaving it incapable of orchestrating elaborate attacks. The Houthis' income has been cut along with the flow of goods through Hodeida. Above all, Hizbullah, the most fearsome of all Iran's proxies, is reeling. Through a campaign of sabotage and bombing, Israel has killed or injured not only most of its senior leaders, but also lots of its mid-level commanders. Israeli intelligence estimates that air strikes have destroyed at least half of Hizbullah's massive stockpile of Iranian missiles. Israel now has troops on the ground in Lebanon seeking out the remainder of Hizbullah's arsenal. In spite of the ferocity of Israel's assault, Hizbullah has responded by launching only a handful of missiles towards Israel's big cities, presumably because it is too incapacitated to do more.

In short, the threat to Israel from Iran's proxies has been dramatically reduced. As a result, Iran's chief means of deterring an Israeli attack—that it would get its allies to pound Israel in return—no longer applies. What with Israel's demonstrated ability to evade and destroy Iran's air defences and its obliteration of Iran's missile barrage, it has much less to fear than it did a few months ago.

One of the few remaining obstacles to ferocious Israeli retaliation against Iran is the hesitation of its closest ally, America. Mr Biden has condemned Iran's attack and declared that Israel has a right to defend itself. Jake Sullivan, the national-security adviser, has promised "severe consequences" for Iran. But Mr Biden has also said that Israel's response should be "proportionate" and specifically opposed the idea of an attack on Iran's nuclear facilities.

America the meek

Yet one of the recurring themes of the past year has been America's apparent inability or unwillingness to restrain Israel, which has repeatedly and openly ignored American officials' requests, without repercussion. Less than a month ago Mr Biden's lieutenants warned that there was no "magic solution" to Israel's conflict with Hizbullah and that a full-blown war would be "catastrophic". Soon afterwards Israel began its campaign of assassinations and air strikes. Mr Biden then called for a three-week ceasefire, but was humiliated by Mr Netanyahu, who said in private that he was open to the idea only to reject it in public. Days later, when Israel killed Hassan Nasrallah, Hizbullah's leader, Mr Biden said he had not been briefed in advance. Nonetheless, he blessed the operation, but urged Israel not to proceed with a ground invasion. Israel went ahead anyway, and the Americans now say they are fine with an offensive so long as it remains small in scope.

Reported attacks, Sep 22nd-Oct 2nd 2024

● By Israel ● By Hizbullah

Sources: Institute for the Study of War; AEI's Critical Threats Project; United Nations; Israel Defence Force

America's apparently limitless indulgence of Israel has also been on display in Gaza, where Mr Netanyahu has repeatedly rebuffed Mr Biden's frequent calls for a ceasefire, more humanitarian aid and a plan for after the war. Arab diplomats are flabbergasted: the president and his aides, they marvel, must be extremely gullible or alarmingly dissembling. Either they naively accept endless hollow pledges from Mr Netanyahu or they secretly agree with his goals even as they insist otherwise.

In fact, the explanation for America's diffidence is probably more complicated than that. For one thing, Mr Biden's aides are divided. Some probably do agree with Israel's tactics, even if there is broad support among American diplomats for a tougher line. What is more, policy on Israel has become enmeshed in American domestic politics. Mr Biden's administration both wants to ward off criticism from the right that it is siding with terrorists against a close ally and at the same time demonstrate some friction with Israel, not least because it worries about the political consequences in Michigan, a swing state with a big Arab population, of too close an embrace of Mr Netanyahu. Either way, Mr Netanyahu has shown himself willing time and again to ignore America's objections.

But even if Israel has Iran and its allies on the defensive, and is unlikely to be restrained by America, its ever-expanding war may still go wrong. For one thing, there is no guarantee that an Israeli attack on Iran's nuclear programme would succeed. Israeli insiders, in their more candid moments, admit that the chance to set it back significantly with air strikes may have passed: the relevant facilities are too deeply buried and nuclear know-how too widely dispersed. Bombing might hold Iran up for only a few months, some speculate.

What is more, there are limits to what a country of 10m, already straining from a year's war on multiple fronts, can do. Two of the Israel Defence Forces' six combat divisions are deployed in Gaza. They are skirmishing with Hamas fighters and destroying parts of the intricate tunnel network under Gaza. Two further divisions are already involved in the ground campaign in Lebanon, and more are poised to join.

Although Israel insists its campaign in Lebanon will be "limited", past operations there have tended to balloon. The IDF has instructed residents to leave dozens of towns and villages across southern Lebanon and to move beyond the Awali river, some 60km north of the border. "Lebanon is a vortex that has swept us in before," warns Tamir Hayman, a former IDF general and the head of the Institute for National

Security Studies, a think-tank in Tel Aviv.

To maintain its current level of deployment the IDF has had to call up tens of thousands of reservists, many of them for three lengthy stints of duty since October 7th. Some nonetheless complain that the IDF lacks sufficient manpower. "We don't have enough men or tanks to carry out a large operation in Lebanon," says a reserve officer who has been called up. "And whatever they're saying in public, it's clear that this is what is being planned."

The ongoing war is also harming Israel's economy. GDP is still shrinking year-on-year and in recent days two rating agencies, Moody's and Standard & Poor's, have downgraded Israel's government debt. The prolonged absences of so many reservists is hurting businesses of all sorts. Railway stations have been forced to shut down for lack of security guards.

Mr Netanyahu has promised Israelis "complete victory", but has not defined what that means with respect to Gaza, much less Lebanon or Iran. Just before the Iranian missiles hit on October 1st, two Palestinians from the West Bank city of Hebron killed seven people and injured 16 in a stabbing and shooting spree at a commuter-rail station in Jaffa, to the south of Tel Aviv. Mr Netanyahu may believe Israel's future hinges on the defeat of distant foes like Iran, but however that conflict goes, Israelis and Palestinians will still be living cheek-by-jowl. Even this most tumultuous of years has not changed that. ■

Gaza and the Arab world

Yahya Sinwar's big mistake

DUBAI

The leader of Hamas hoped to inflame the region and draw in the "axis of resistance". Instead, his allies are battered and the region is passive

PERHAPS IN HIS final days he reflected on the irony. Last year Hassan Nasrallah had not been eager to start a war with Israel. Hizbullah's leader felt dragged into it by Yahya Sinwar, the head of Hamas in Gaza, who had declined to consult his allies before his men attacked Israel on October 7th. But Nasrallah joined the war anyway: his own rhetoric left him little choice. Almost a year later, that decision would cost him his life.

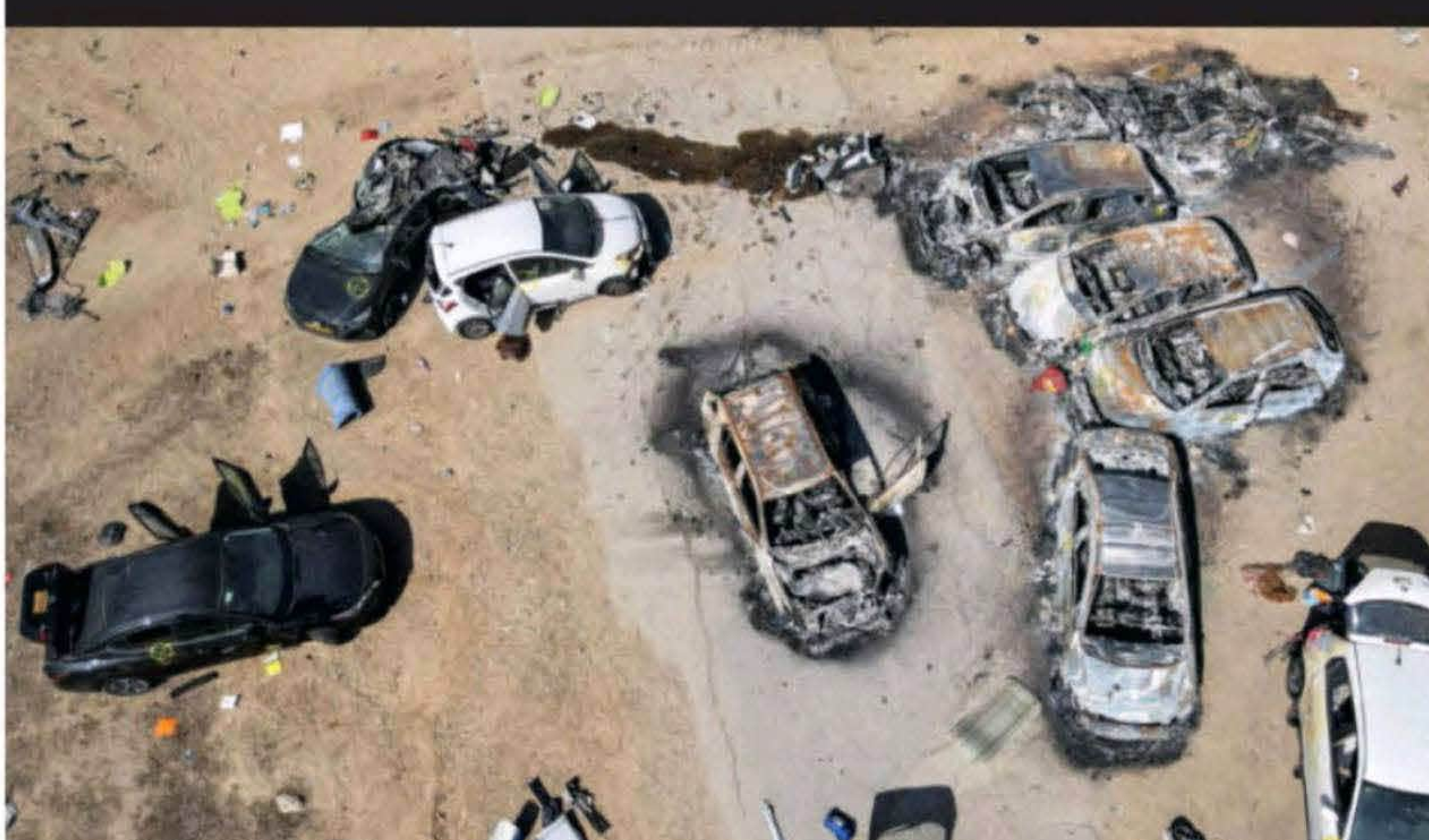
His assassination on September 27th was among the most momentous events in a momentous year. The worst massacre in Israel's history led to the deadliest war in Palestinian history, Iran's first direct attacks on Israel, even the first time in any war that missiles had been intercepted in space. None of this would have happened without Mr Sinwar's fateful decision last October. That is not to say the region would have been at peace—but this particular sequence of events would have been unthinkable had Hamas not killed more than 1,100 Israelis. Mr Sinwar wanted a cataclysmic war that would reshape the Middle East, and he got one.

But in many ways it has not gone to plan. Gaza is in ruins. Hamas is battered. Hizbullah has lost its leader, its military command and its reputation for competence, while Iran feels vulnerable. There has been almost no sustained and spontaneous protest in the Arab world. No regimes fell, wobbled or cut ties with Israel. Even the economic consequences have been limited. The price of Brent crude is $10 lower than it was the day before Hamas attacked Israel, regional war be damned.

Mr Sinwar went to war with two assumptions: that he would enjoy the support of a strong and united "axis of resistance", a constellation of pro-Iranian militias; and that Israel's conduct would inflame and mobilise the region. Those beliefs were shared by many Arab, Israeli and Western officials.

The Hamas leader would have had good reason to expect help from Iran and its proxies. For years Nasrallah had promoted what he called the "unification of the arenas", the idea that Iran-backed mili-

The year that shattered the Middle East **October 7th 2023**



Fighters belonging to Hamas and other militant groups in Gaza broke through a barrier fence into Israel where they attacked a music festival, nearby kibbutzim and army bases. They killed more than 1,100 people, mostly civilians, and took 251 hostages.

1,145

The number of people killed in Israel on October 7th

October 27th 2023

After an intensive aerial bombardment, Israel began a ground invasion of Gaza on October 27th with the aim of destroying Hamas and rescuing hostages. The fighting has smashed large parts of the coastal enclave, displacing 1.9m people, or about 85% of the population.

tias had forged a tight alliance and would co-ordinate to fight together against Israel and America. Battle-hardened from years of combat in Syria, Hizbullah would be *primus inter pares*. Israeli strategists were convinced by such talk. They warned that a "ring of fire" was encircling their country.

Yet when it came time to test the idea, Nasrallah was hesitant. An overwhelming majority of Lebanese, including around 50% of his Shia constituents, opposed going to war to support Gaza. Nor were his Iranian patrons enthusiastic. Hizbullah's arsenal was supposed to be preserved as their shield against a possible Israeli attack; they did not want to jeopardise that arsenal in order to protect Hamas.

The reluctant ally

Nasrallah settled for a half-measure, a campaign of short-range missile fire that depopulated a slice of northern Israel but failed to halt, or even slow, Israel's war in Gaza. It was hardly the full-throated support that Mr Sinwar expected. When Hamas officials met their Iranian sponsors in the weeks after October 7th, they complained about the lack of help.

The Houthis in Yemen were more eager to join the fight, but they had their own limitation: distance. Hizbullah could threaten to saturate Israel's air defences with short-range missiles and send its elite militants across the border. The Houthis could hit Israel directly only with a small stockpile of missiles and slow-moving drones with the range to fly 2,000km to their targets. Those can still be deadly, like the drone that hit a Tel Aviv apartment block in July, killing one person and wounding eight more. But they are hardly enough to sway the course of a war.

Iran and its proxies were victims of their own hype. For all their talk of unity, the "axis of resistance" is a network of disparate militias that operate out of failed or failing states. The past year has shown that they do not share the same interests, and that many have only a limited ability to wage a long-distance war. That leaves Iran in an uncomfortable position. The militias were meant to fight on its behalf—allowing Iran to stay out of direct conflict with Israel. Yet now the Islamic Republic feels compelled to fire ballistic missiles at Israel to avenge attacks on those militias, a step that will surely invite Israeli retaliation. Its shield has become a liability.

If Hizbullah was an immediate disappointment, it still seemed, in the early days of the war, as if another of Mr Sinwar's predictions would come true. On October 17th medics in Gaza said that an Israeli air strike had killed almost 500 people at a hospital. Within hours, it became clear that those claims were false: the blast was probably caused by an errant rocket fired by a Palestinian militia, and the death toll was considerably lower.

By then, however, the news had already sparked big protests in Jordan, Lebanon, Tunisia and the occupied West Bank. Even the United Arab Emirates (UAE), Israel's closest ally in the region, felt compelled to issue a sharp rebuke. It felt as if the Middle East was about to boil over. Arab and Western diplomats spent the night fretting about regional stability and wondering if they would need to try to restrain Israel.

Yet the streets were clear the following morning—and they never really filled again. In the months to come there would be remarkably few protests anywhere in the Arab world. Before Ramadan began in March, members of Hamas said that Mr Sinwar was counting on a wave of religiously inspired riots to pressure Israel. He was disappointed: the holy month was largely uneventful.

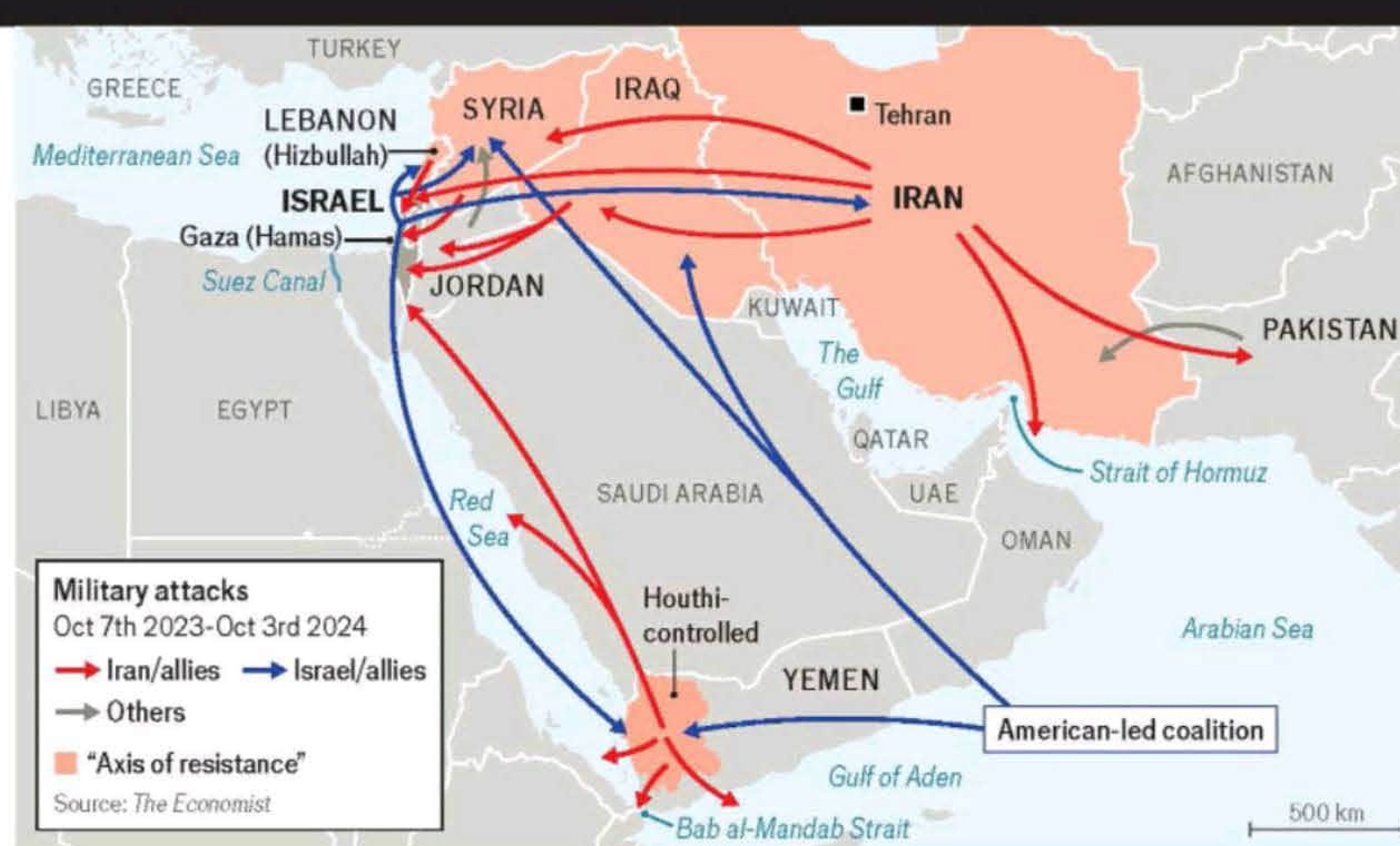
Keyboard warriors

That is not to say Arabs have lost interest in the Palestinian cause: Israel's conduct in Gaza is still a source of widespread fury. But it has not inspired the unrest it did in years past. Arab states have become more ruthless about suppressing dissent and no longer view pro-Palestine protests as a useful safety-valve for public anger. Posting on social media is displacing activism on the streets. Moreover, some people abhor Israel's actions but find it impossible to support Hamas, an Islamist group backed by Iran. Most of all, though, there is a deep sense of fatalism. After the traumatic decade that began with the Arab spring in 2011, people are too exhausted and resigned to protest about anything.

Sources: Tech For Palestine; C. Scher, CUNY Graduate Centre and J. Van Den Hoek, Oregon State University

The war has led to the deaths of 41,272 people in Gaza, according to Hamas-run health authorities. Israel claims to have killed some 17,000 Hamas fighters and destroyed most of its combat battalions as well as many of its tunnels.

October 31st 2023



Israel's defences destroyed ballistic missiles in the world's first combat in space. The Houthis, a rebel group in Yemen that launched these missiles, are one of several Iranian proxies that have attacked Israel since the start of the war. On April 13th Iran itself conducted its first direct strike on Israel from its own soil with a barrage of more than 300 missiles and attack drones. Almost all were intercepted by Israel's air defences and those of allied or neighbouring countries including America, Britain, France and Jordan.

All this has made for an odd paradox: Arab states have been bystanders to an Arab-Israeli war. They denounced Israel's war in Gaza but did not sever ties with the Jewish state, nor did they try to apply serious diplomatic or economic pressure on its Western backers. At the same time, they were desperate to avoid any confrontation with Iran, even when its proxies caused them real harm. So far this year Egypt has lost around $6bn in revenue from the Suez canal, more than half of what it expected to earn, because of Houthi attacks on commercial shipping in the Red Sea. Its response has been to shrug. Jordan was almost apologetic when it shot down Iranian drones that violated its airspace in April, lest anyone think it was siding with Israel.

Saudi Arabia and the UAE, the most influential Arab countries, have found themselves juggling a range of contradictory feelings. They worry that Israel's actions in Gaza will stoke religious fundamentalism in the region—but they also see Hamas as a fundamentalist group that should be extirpated. They are happy to see Iran and its proxies brought low, but are nervous that a widening conflict would reach their shores. In public they call for a ceasefire; in private they fret about a deal that would strengthen their enemies.

For almost a year these forces combined to produce a sort of stasis. The war stayed largely confined to Gaza and a narrow strip of land along the border between Lebanon and Israel. Life was intolerable for 2m hungry, displaced Gazans, and miserable for hundreds of thousands of displaced Israelis and Lebanese.

The rest of the region could seem deceptively normal. Until August it was possible to sit by the beach in Lebanon and pretend that Israel and Hizbullah were not bombing each other a few miles away. (Thousands of Lebanese expats returned and spent their summer holidays doing just that.) A war that was meant to reshape the Middle East instead ground into a localised stalemate, and it was possible to imagine that it would end with a return to the status quo ante.

Winds of change

The events of the past month seem to have put an end to that stalemate. In Lebanon the decapitation of Hizbullah, a militia-cum-political party, offers a chance to loosen its stranglehold on politics. A good place to start would be for parliament to select a president, filling a post that has been vacant for two years because Hizbullah and its allies insisted on choosing a crony. That vacancy has made it impossible for Lebanon to appoint a new government or fill key security posts.

Choosing a president could happen only with the assistance of Nabih Berri, the longtime speaker of parliament. Both an ally and a rival of Hizbullah—they compete for support among the same Shia constituency—Mr Berri insists that he will not convene lawmakers for a vote until the war ends. Perhaps this is because even a weakened Hizbullah may still be too strong a force for other Lebanese factions to challenge, especially if it regains a measure of popular support for fighting the Israeli ground invasion.

In neighbouring Syria, Bashar al-Assad sees an opportunity. Although he owes his survival to Hizbullah, which sent fighters to prop up his blood-soaked regime in 2012, he kept mum last month as Israel hammered the group. It took him two days after Nasrallah's assassination to issue a lukewarm condolence. Instead he is reaching out to Gulf states and hinting that he might distance himself from Iran. Scepticism is warranted: Mr Assad, like his father, is adept at playing off all sides against each other. But he hopes the mere promise of backing away from a diminished Iran will ease his global isolation.

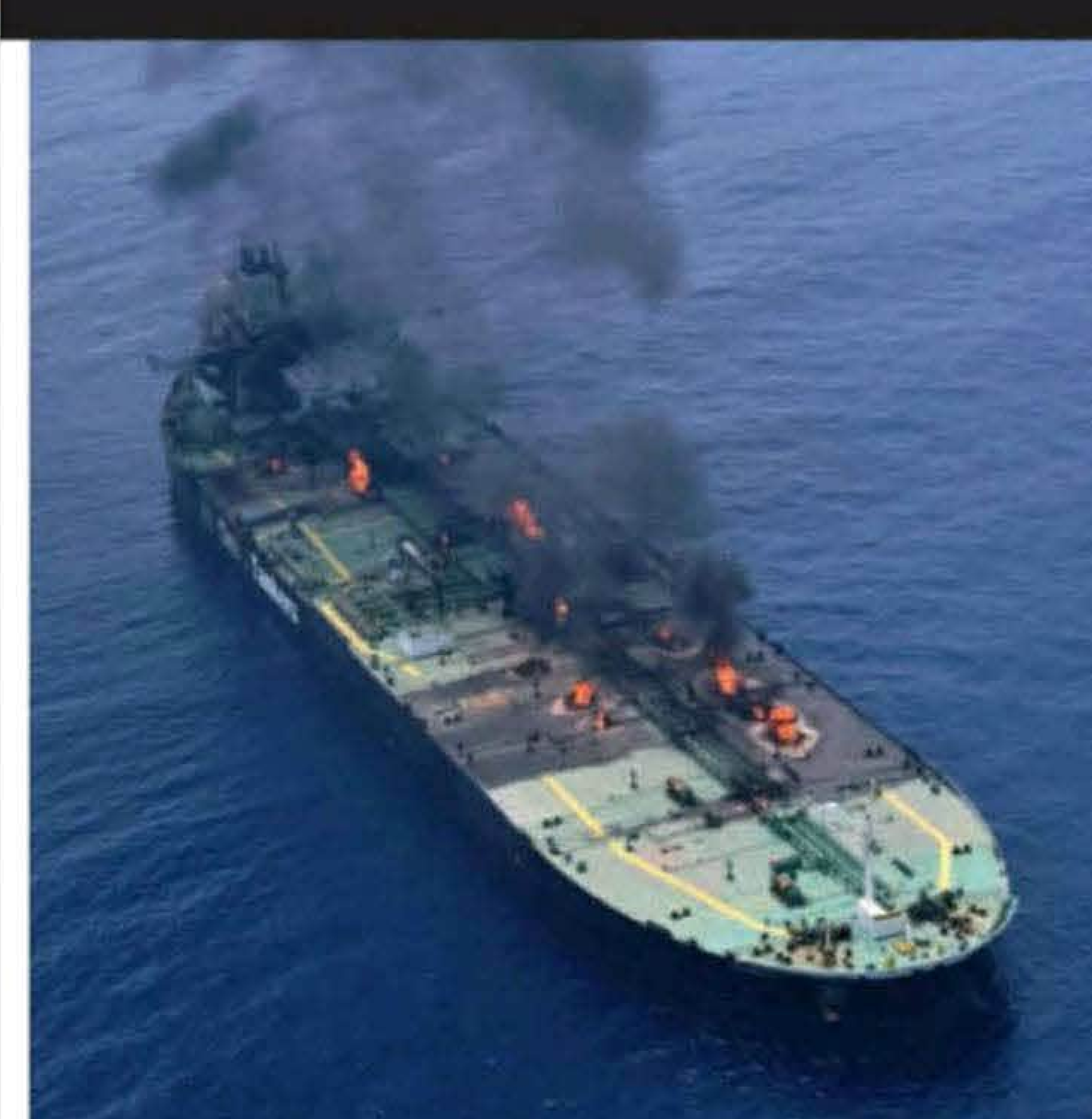
A decade ago, Gulf states might have been eager to try to steer the Levant in a new direction. But today's monarchs are less interested in playing in this region's politics, especially when it requires sending billions of dollars in aid. The Saudis have largely written off Saad Hariri, a former prime minister and once their main client in Lebanon, as a lost cause, too weak and unpopular to lead the country.

They will be even more reluctant to get involved in any fighting, whether as part of a peacekeeping force in Lebanon—an idea that some Western diplomats have mooted—or as part of a coalition against Iran. ▸▸

November 22nd 2023

Israel and Hamas agreed to a temporary truce and the release of 50 women and children held hostage in Gaza in exchange for 150 Palestinian women and children in Israeli jails. An extension led to the release of 105 hostages in all. Eight more have been rescued by Israeli forces, while the bodies of several others have been recovered. The fate of the 97 remaining hostages, around a third of whom are thought by Israel to be dead, is causing considerable anguish among Israelis and regular protests calling on the government to agree to a ceasefire.

December 3rd 2023



The Houthis, a Yemeni rebel group backed by Iran, fired missiles at three commercial ships sailing in international waters in the Red Sea, hitting the *Unity Explorer*. The attacks have disrupted maritime traffic on a vital trade route adding to transit times and costs.

Some media outlets linked to Iran's Islamic Revolutionary Guard Corps have already suggested that it might attack Gulf states in retaliation for possible Israeli or American strikes on Iran's oil facilities. That may well be an empty threat, since it would almost certainly invite a fierce American-led strike in response. Even so, the Saudis and Emiratis will be rather hesitant about calling Iran's bluff.

Policymakers in America and Israel are already crowing about the chance to craft a new Middle East. The region is hard to change, though—and it rarely changes for the better. Gulf states fear they will wind up being soft targets for a cornered Iran. And they see little upside in taking such risks. In a speech last month Muhammad bin Salman, the Saudi crown prince, said that the kingdom would not recognise Israel until the Palestinians had a state. It was the first time he made such a declaration. Prince Muhammad does not care much for the plight of the Palestinians; that he felt compelled to distance himself from Israel is a sign of the risk-averse mood across the Gulf.

Moreover, it is plain to see that Lebanon's ossified sectarian politics may prove hard to reform and that Syria's cynical dictator is showing no sign of changing his ways. Other countries in the region, such as Egypt and Jordan, are too weak to exert much influence. Even at such a dramatic moment, the Arab states may remain mere bystanders to history. ■

Inside Israel

No common purpose

HAIFA

A year on, Israeli society is divided about the lessons of October 7th

"WE HAVE RESTORED deterrence," declares Amos Yadlin, a former head of Israel's military-intelligence service, referring to the credibility Israel's security services lost on October 7th, 2023, when Palestinian radicals ran rampage across southern Israel, killing more than 1,100 people and kidnapping some 250. This has been regained by Israel's devastating assault on Hizbullah, a Lebanese militant group that has been bombarding northern Israel for the past year, displacing some 60,000 civilians. In just two weeks Israel has killed and injured many Hizbullah operatives using booby-trapped pagers and walkie-talkies, assassinated several of its leaders in bombing raids and sent troops into southern Lebanon to destroy the tunnels, bases and rocket-launchers Hizbullah has been using in its attacks.

Whereas Israeli intelligence had little inkling of the plans of Hamas, the Palestinian militant group that spearheaded last year's attacks, it had thoroughly penetrated and outwitted Hizbullah. Whereas the mastermind of Hamas's attacks, Yahya Sinwar, remains at large despite Israel's year-long war against Gaza, from which the attacks were mounted, Hassan Nasrallah, Hizbullah's leader, was killed by an Israeli bomb on September 27th. Whereas 97 of the hostages seized by Hamas and other militant groups on October 7th remain unaccounted for 11 months after Israel sent troops into Gaza in part to rescue them, the war against Hizbullah seems likely to reduce attacks on northern Israel—at least for a while—and thus allow residents to return safely to their homes. Most notably, neither Hizbullah nor its backers in Iran have succeeded in causing many casualties in their various attacks on Israel, including Iran's barrage of 180 missiles on October 1st, in contrast with the massacres that took place on October 7th. Fully 80% of Israelis support the assault on Hizbullah, according to a poll commissioned by the Israeli Democracy Institute, a think-tank.

Yet as pleased as most Israelis are by the campaign's success, the unity is only superficial. Israelis remain divided not just over the way forward in Gaza, where the Is-

Suez Canal

Average number of 20-foot containers transiting per day, '000

Israel, GDP, % change on a year earlier

2023 Q3	Q4	2024 Q1	Q2	Q3†
+4.0	-4.9	-0.5	-2.1	-0.2

*To Sep 29th †Estimate

Sources: Clarksons; Haver Analytics; Bloomberg

90%

Drop in container traffic through the Red Sea

September 17th 2024

Thousands of pagers used by Hizbullah in Lebanon and Syria exploded on September 17th, killing at least 12 people and injuring nearly 3,000. The attack, which was attributed to Israel, marked the first round of a campaign that has decimated Hizbullah's commanders and culminated in the killing of its leader, Hassan Nasrallah, in an Israeli air strike on September 27th. Three days later Israeli troops crossed the border into Lebanon. More than 1,800 Lebanese have been killed and 1m have fled their homes.

rael Defence Forces (IDF) are still battling Hamas, but also over the lessons of October 7th. Before the war began, Israel was riven by protests over the right-wing government's proposed reforms to the judiciary, which many believed would have diminished checks on the government and so weakened the rule of law. What is more, many Israelis blamed the prime minister, Binyamin Netanyahu, for tolerating Hamas's control of Gaza as a way to undermine Palestinian unity and support within Israel for any form of Palestinian autonomy. And as the war in Gaza has dragged on, many Israelis have concluded that his government is more interested in prolonging the fighting than it is in rescuing the surviving hostages.

Protesters and patriots

None of this has stopped Israelis from rallying around the flag and throwing themselves into the war effort. During the protests against the judicial reforms, many reservists, including 37 out of the 40 pilots in Air Force Squadron 69, threatened to suspend their military service. In the end the reforms got stuck in parliament and the courts and reservists have reported for duty as required. It was Squadron 69 that bombed Hizbullah's underground headquarters in Beirut, killing Nasrallah.

Yet the war is lasting far longer than almost anyone anticipated. In the first weeks after the war began three-quarters of Israelis told a pollster it would take no longer than three months. Only 1.6% thought it would go on for over a year.

At one of the two divisional headquarters directing the IDF's ground operations in Gaza, the feeling of urgency of the first months of the war is long gone. Soldiers sunning themselves outside the temporary offices in portable cabins no longer carry helmets and flak-jackets, although Gaza is only a few kilometres to the south. The constant missile fire has all but evaporated, as the IDF has destroyed nearly all of Hamas's launchers. Most combat units have been redeployed to the north, near Lebanon. Gaza feels like a sideshow.

"The battle isn't over, but the bulk of the fighting is," says one of the division's commanders. Inside Gaza, the main job of the IDF is to patrol two corridors: one cutting it in half, which prevents the return of a million displaced civilians to Gaza City, and the other along Gaza's border with Egypt, which prevents militants escaping and arms entering. Hamas's command structure has been dismantled but thousands of its fighters remain at large, some mounting guerrilla attacks. The IDF cannot carry out big offensives to hunt down these remnants since so much manpower has been sent north. Most of the remaining troops' time is spent protecting themselves from ambushes, blowing up sections of Hamas's tunnel network and escorting humanitarian convoys.

One way to drum up more troops would be to draft more ultra-Orthodox students, who are exempt from compulsory military service—something the Supreme Court has instructed the government to do anyway. Some 60,000 ultra-Orthodox men could in theory be eligible. But an attempt by the IDF to call up a few thousand of them led to rioting outside draft offices. The ultra-Orthodox parties in Mr Netanyahu's coalition have threatened to topple the government if he presses ahead with such a policy.

The current situation in Gaza is "stagnation", a general complains. "No alternative force has been prepared to take over Gaza and meanwhile Hamas is recovering in parts of the strip," says another officer. "We knew it was going to be a marathon, but not an ultra-marathon," sighs the divisional commander, a reservist who, in civilian life, is joint CEO of a finance company which he is struggling to keep going owing to the number of employees on military duty like himself.

Mr Netanyahu speaks vaguely of a "demilitarised" and "deradicalised" Gaza, without specifying what that means or how it will be achieved. The far right, on which his government relies, would like to see a permanent occupation, of the sort that pertained before Israel's withdrawal in 2005. The centre-left would prefer that Gaza be administered by the Palestinian Authority, which runs parts of the West Bank, with the support of Arab states.

The prime minister rules out both of these options. To the consternation of America and his own generals, he has refused to accept a ceasefire agreement that would allow the release of the surviving hostages, fuelling speculation that he prefers to keep the war in Gaza simmering, so that he can put off the moment of reckoning with Israeli voters.

Mr Netanyahu seems to hope that the campaign against Hizbullah will help restore his political fortunes. Although the polls have long indicated that more than 70% of Israelis would like him to resign, either immediately or once the war is over, he has clung doggedly to power. He has refused to take any blame for the failure to anticipate and prevent the massacre of Israeli civilians, and has instead promised "total victory". Although his Likud party has recovered somewhat in the polls (mainly at the expense of his far-right coalition partners), Mr Netanyahu's coalition would probably lose its majority if elections were held now. That likelihood, ironically, has helped keep him in power, since his allies do not want to risk their own jobs by precipitating an election.

Mr Netanyahu is also helped by the lack of an obvious successor. The official leader of the opposition and previous prime minister, Yair Lapid, a centrist, has failed to articulate a clear alternative to Mr Netanyahu's policies and is languishing in the polls. For much of the past year Benny Gantz, another centrist and former commander of the IDF, seemed the most plausible candidate. He joined a national-unity government days after October 7th and was considered by many to be a voice of reason. But he left the government in June, complaining that Mr Netanyahu had no plan to end the war. Since then his ratings have also declined. The most popular candidate according to the polls is Naftali Bennett, a right-winger who led a short-lived government after toppling Mr Netanyahu in 2021. But he has yet to set up a planned new party.

Michael Ohayon, a grizzled butcher

Keeping soldiers and students separate

from northern Israel, captures Israelis' mixed feelings about Mr Netanyahu. Having fled Hizbullah's rocket attacks last year, he is now living in a hotel in the coastal city of Haifa. On a recent evening, shortly after Hizbullah fired missiles at Haifa, too, he said, "Of course we blame Netanyahu for the situation Israel is in. But who else do you see who can replace him?"

Still processing

A year after October 7th Israelis are still trapped in a vortex of sadness, anger and recrimination. Nightly news programmes still devote lengthy segments to Hamas's atrocities, as new details continue to emerge. Politicians frequently compare the massacre to the Holocaust.

This anguish, in turn, has inhibited public debate about how the wars in Gaza and Lebanon are being prosecuted and how they might be brought to an end. "The trauma is too fresh among Israelis, on the centre-left as well, for us to have a discussion now on peaceful solutions to the conflict. The levels of rage are still too high," admits Mickey Gitzin, the head of the New Israel Fund, a progressive NGO which has directed funding to Israeli communities affected by the war, as well as humanitarian relief to Gaza.

A two-state solution, he admits, has become a non-starter for most Israelis. But polling his organisation commissioned shows an openness to enlisting the help of Arab countries such as Saudi Arabia in some alternative arrangement. "We're not at a point right now to talk of a Palestinian state, but there is an opportunity. The right wing's concept of 'managing the conflict' collapsed on October 7th and our responsibility is to present Israelis with a way forward." "Israel had a chance to emerge from the war in Gaza with a more stable regional framework in which the Saudis and other moderate Arab states would have been invested in maintaining the security," echoes Tamir Hayman, a former general and head of the Institute for National Security Studies, a think-tank in Tel Aviv. "That opportunity was squandered because of politics."

Zeev Raz, a retired colonel and former commander of Squadron 69, believes that Nasrallah's assassination has made Israel safer. In 1981 he led an air raid that destroyed an Iraqi nuclear reactor, which Israel feared would be used by Saddam Hussein's regime to develop nuclear weapons. But today he believes the greatest threat to Israel is not Iran's nuclear-weapons programme, but Israel's inability to engage with the Palestinians. "So now we're euphoric that we've eliminated Nasrallah and we're ignoring the mess we've got ourselves into in Gaza," he says. "Israel is still in an illusion that we can somehow manage the conflict with the Palestinians while we deal with Iran and its proxies." ■

The Palestinians

Life after death

NABLUS AND RAMALLAH

After Gaza, how do young Palestinians want to build their state?

Among the banks, law firms and luxury hotels of central London, a piece of Palestine is rising. Born in an adjacent falafel joint, Palestine House has spread over five floors. Each depicts a different period of Palestinian history. The walls of one recreate the wooden latticework of a traditional inner courtyard; another, the smashed rubble of Gaza. Palestinian flags and banners protesting against genocide decorate the walls and pavement outside. By the end of the year Osama Qashoo, its founder, plans to open a journalists' club, a radio station, a startup hub, an exhibition hall and a cultural salon in the building. "Each bomb Israel drops on Gaza is an amplifier," says Mr Qashoo, an exile from the West Bank city of Nablus: "We are the carriers making sure Palestine's story lives."

Mr Qashoo is part of a new generation of activists among Palestinians whose sense of identity had been waning. They have been mobilised by the horrifying bloodshed and destruction in Gaza. They are dismissive of an ageing and discredited Palestinian leadership and seek new ways to pursue their century-long struggle. Mr Qashoo's vision of the route to a Palestinian state is a peaceful one. Others sound more resigned to bloodshed. "Forget the dumb doves," says Zeina Hashem Beck, a young poet at a recital in support of Gaza in New York. Will the war in Gaza galvanise young Palestinians to new forms of struggle, or prompt further violence in their quest for a state?

The horrors of the past year are manifold. Nearly 42,000 have been killed in Gaza. Around 70% of Gaza's housing stock has been destroyed. Many feel that the shock is already as awful as the *nakba* (catastrophe) of 1948, when Israel was formed and around 15,000 Palestinians were killed and some 750,000 were driven from their homes or fled. Others compare it to the *naksa* (setback) of 1967, when Israel seized the West Bank and east Jerusalem. Measured by the numbers killed and the length of the conflict, the past year has been the worst in the Palestinians' recent history.

Israel again controls the lives of all 7m Palestinians in the land that was their ancestral home. In Gaza 2.2m Palestinians are as disorientated and fearful as they were in 1948. Polling by Zogby, a research firm, suggests that over half of Gaza's people have lost a relative and some three-quarters have been displaced at least three times during this war.

West Bankers liken their situation to that of pre-war Gaza. Checkpoints keep them locked under siege and shut out of Israel's labour markets. Strikes by drones, common in Gaza, frequently occur. Jewish settler violence has increased sharply since October 7th.

Meanwhile Israel's Arabs risk being reported to the police for empathising with their brethren in Gaza. When a 12-year-old Palestinian girl at a Hebrew-language school in Beersheva, in southern Israel, fretted about starving children in Gaza, her classmates threatened to burn her village. The education ministry accused her of incitement against the army and her headmistress suspended her. "We're fuming, but they make you think a thousand times before you open your mouth," says an Arab politician in Haifa, an Israeli city often hailed as a model of co-existence.

With Palestinian voices muzzled by Israel, Palestinians who live abroad, half of the overall 14m-strong population, are shaping their national struggle. The 1m-odd who live in the West and Latin America see their role as responding there to the Palestinians' plight. Michigan, an American state with a large Arab electorate, is a swing state in America's presidential election. The diaspora is trying to reshape how people think of the conflict. As the peace accords signed in Oslo in 1993 slip into history, Palestinians are seeking to replace the idea of a clash between two national movements with a generational liberation struggle against "settler colonialism".

Vain hopes are like certain dreams

At first, Palestinians hoped that this war, like previous conflicts in Gaza, would end swiftly. Western allies of Israel would force it into a ceasefire. Gaza would be rebuilt. Israel's prime minister, Binyamin Netanyahu, would fall. And the world might finally impose a two-state settlement, as they promised in the first weeks of the war. Palestinians in the West Bank and Israel hunkered down in anticipation.

A year on, that hope has faded. There has been no truce. Western governments have not forced Israel to relent. Iran and its proxies vowed to come to Gaza's rescue. But Israel has smashed Hamas and Hizbullah, and may clobber the Islamic Republic. Israelis show no sign of replacing Mr Netanyahu and his cabinet that includes Jewish supremacists. Many Palestinians fear that the displacement and hellfire in Gaza is a forerunner of the plans Israel's settlers and its army have for the West Bank. They feel "an existential threat", says Omar Dajani, a Palestinian-American in Jerusalem.

Perhaps driven by the desire for a safe haven, the war has consolidated support for a Palestinian state. A Palestinian poll in September put support for a state based on the borders of 1967 at 60%, compared with 10% who backed a single state with equal rights for Jews and Palestinians. Mr Dajani, who is the Palestinian representative abroad of A Land For All, which champions a confederation of a Jewish and Palestinian state with open borders, says Palestinian (but not Jewish) support for the movement has collapsed over the past year. He worries he will be ostracised as "a normaliser". "It's hard to imagine a rosy future with those who slaughtered your friends and family," he concedes.

Palestinians seem even more divided about how to achieve statehood. For some, resistance can be peaceful. They see it in their determination to stay put. Palestinians have remained in their villages in northern Israel, even as Hizbullah has bombarded the area with rockets and Jewish Israelis have been evacuated. "There's always this fear," says Ghousoon Bisharat, the editor of *+972*, a joint Israeli-Palestinian magazine based in Haifa, "that if you leave, you don't know if you'll be allowed back." Others see it in the celebration of merely being alive. "Drinking this beer is an act of resistance," says a 29-year-old tattooed Palestinian bartender, who left Jaffa in Israel for Ramallah, the Palestinians' seat of government in the West Bank.

But violence is also regaining its appeal. "This Israel understands nothing else," says one Palestinian who founded a civil-disobedience movement two decades ago but has since lost faith in a peaceful approach. Contrary to Israeli claims that force will beat Palestinians into submission, survey after survey shows the reverse since Israel invaded Gaza. In a poll conducted in the West Bank by the Jerusalem Media and Communication Centre, support for "military resistance" grew from 40% in May this year to 51% in September, whereas support for "peaceful political action" fell from 44% to 36% in the same period. A pollster in Ramallah has similar figures: support for violence in the West Bank grew from 35% in September 2022, when Yair Lapid was Israel's prime minister, to 56% in September this year. The pollsters say that shift is most pronounced among Palestinians who are too young to remember the costs of the second intifada (uprising) and past Palestinian wars.

Hamas is the beneficiary. In a rare flash of democracy in the West Bank, support for their programme of military confrontation versus the preference of the Palestinian Authority (PA) for negotiations and engagement helped them win student elections last year in Bir Zeit and Hebron Universities in the West Bank. Hamas's ability to continue to inflict casualties on the region's most powerful army, waging its longest war, has bolstered its support. In Jordan last month the group's sister organisation, the Islamic Action Board, emerged as the largest party in a general election, with 22% of the seats. According to one poll, support for Hamas in the West Bank and Gaza has grown from 22% last September to 36% a year on.

Many who back Hamas seem aware of the consequences. "Most of my friends will be killed," says a young resident of Jenin camp in the northern West Bank, despairingly. In August Hamas in the West Bank conducted its first suicide-bombing inside Israel in years. "People want to be martyred not because they get a load of virgins in paradise, but because they want to make their families and parents proud," says a student leader in Nablus.

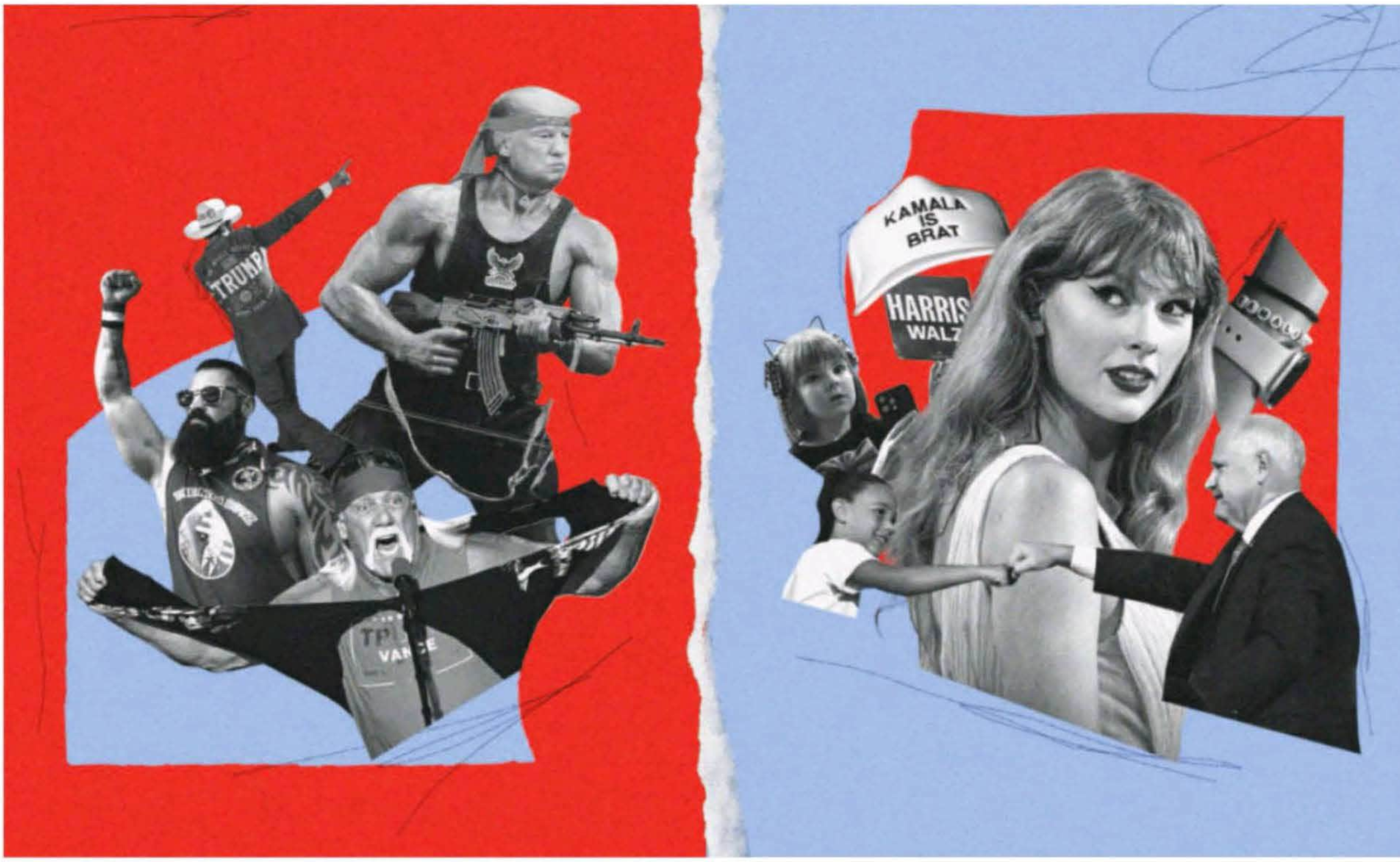
How much of the professed support for Hamas remains lip-service and how much a true commitment to perpetrate attacks is hard to tell. Many young Palestinians boast of their willingness to join the fight but pass their days in cafés doing little more than watching Hizbullah's promises to destroy Tel Aviv, broadcast on a loop by Al Jazeera, a seductive Qatari television channel. The eschatology of jihadism has not made a comeback; young Palestinians are less likely to support a sharia state than their parents are. And some Palestinians counsel against the futility of violence: each round provides a pretext for Israel to grab more territory, warns Maqbula Nassar, a journalist in Nazareth, the largest Arab city in Israel. There are reasons for Palestinians to eschew bloodshed. Despite the surging violence in the West Bank, many still have much to lose.

Still, few Palestinians doubt that a violent backlash is coming. As Iran was bombarding Israel with missiles on October 1st, at least seven people were shot and killed in Tel Aviv. Hamas has claimed responsibility, saying that the attackers were from Hebron in the West Bank. The Palestinians have no effective government. Hamas's days as an authority in Gaza seem over. A similar uncertainty hangs upon Mahmoud Abbas, the 88-year-old Palestinian president. And unlike their parents, most young Palestinians have no factional allegiance. In the coming months the PA could find it harder to control what little of the West Bank it still oversees, as settler and army attacks intensify and Palestinians retaliate. Without the political will to end it, few expect this cycle in the Israeli-Palestinian conflict to be the most lethal—or the last. ■

More coverage online

To listen to a recent podcast about dangerously rosy thinking on Gaza's future, go to **economist.com/gazapodcast**. To read a By Invitation article by the head of the UN's agency for Palestinian refugees, Philippe Lazzarini, go to **economist.com/LazzariniBI**

United States



The presidential election

Crypto bros v cat ladies

PITTSBURGH

How the campaigns are exploiting and reshaping the battle of the sexes

In a brewery in Pittsburgh's East End, six guys lounged on barstools talk about brawls and about women. "We can't stand by, we've got to get in the fight," says one. Another adds that as a husband it is natural to "go into defence mode" when his wife is under attack. The others nod vigorously. "The government should not be in the business of putting their hands on women's wombs," he concludes, to loud applause—and some spilled beer—at the tables around them.

This "manel" at East End Brewing, on September 20th, is one of many stops on the "Reproductive Freedom Bus Tour". The six men—a doctor, a social worker, a representative, two Hollywood actors and a man whose wife nearly died of sepsis due to Texas's abortion ban—are here to urge men to vote Harris. They talk about wanting to be good role models to their sons and win back rights for their daughters.

This strain of masculinity was on display at the Democratic National Convention (DNC) in August. It was a sharp contrast with the Republican National Convention, where Donald Trump walked on to "This is a man's world" and Terry Gene Bollea, better known as Hulk Hogan, a retired wrestler, ripped off his shirt and called the former president a "gladiator".

The 2024 election is a gendered election, and not just for the obvious reason that a man is running against a woman.

The parties are also telling very different stories about gender. Americans are much more likely to believe Kamala Harris would make things better for women and Mr Trump for men, according to a recent poll by Pew. That reflects the fact that men and women are, on average, growing apart in their political preferences. This trend started in 1980, but the chasm has grown wider over the past 16 years. In *The Economist*'s most recent polling with YouGov, men favour Mr Trump by four percentage points and women Ms Harris by ten.

Presidential elections have long been masculinity contests, says Dan Cassino, at Fairleigh Dickinson University. John Kerry had fun made of his kitesurfing (too coastal to be truly manly), while George W. Bush was photographed clearing brush at his ranch. The back-and-forth between Mr Trump and Joe Biden, in their TV debate, about who had the bigger golf swing was a low point in this type of mano-a-mano contest. But Ms Harris's declaration that if someone broke into her house "they're getting shot" fits into the genre too.

And presidenting is still seen as a manly occupation. Some 30% of Americans think Ms Harris's sex will hurt her chances of winning; only 8% believe the same about Trump. In fact, her two X chromosomes should if anything work in her favour. Several studies show that American ▸▸

voters, on average, do not discriminate against a female candidate because of her sex. According to a meta-study by Susanne Schwarz of Swarthmore College and Alexander Coppock of Yale, voters (particularly if they are Democrats) marginally favour hypothetical female candidates.

For a woman a presidential campaign is therefore a tightrope act. Subtle references to gender can improve her chances of victory but anything too overt has the opposite effect. Hillary Clinton liked to dress in white in 2016, a nod to suffragettes, and spoke of the historic nature of her nomination. Ms Harris avoids such references. Wisely so: polling suggests that men and older women hate it.

Ms Harris is therefore downplaying her sex, while at times reinforcing traditional gender roles: the DNC featured several references to her skills in the kitchen. Meanwhile Mr Trump has doubled down on projecting traditional masculinity. His defiant fist in the air after being shot in July was praised as a display of manly strength. In an interview with Aidin Ross, an online streamer favoured by young men, he talked about "taking out" Mr Biden and telling Kim Jong Un that his red button was bigger than the North Korean dictator's.

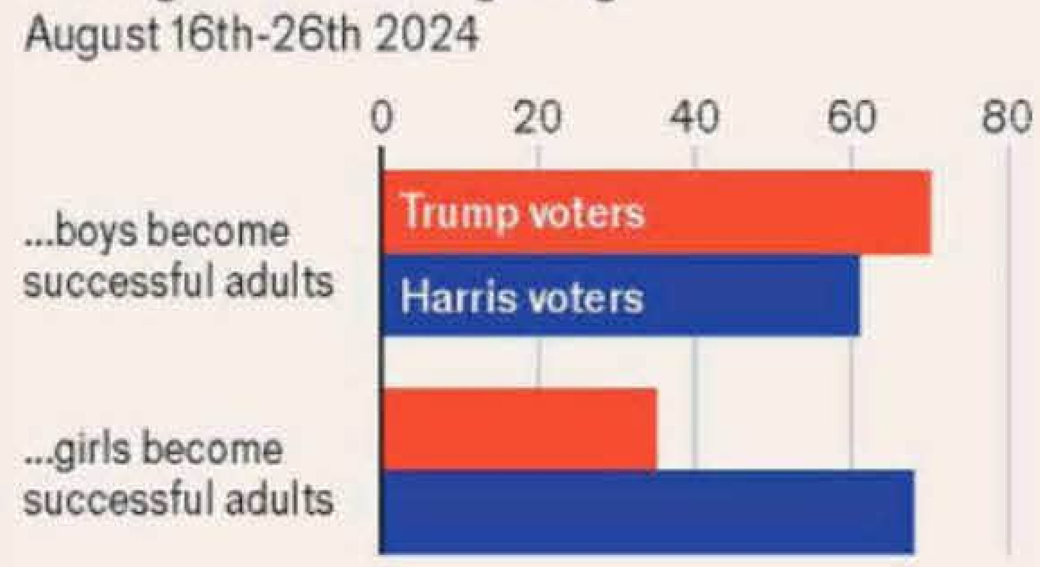
Mars and Venus

Mr Trump is playing to voters with his not-so-subtle innuendo. In 2020 strength was the most important characteristic in a leader for 72% of Republican voters, compared with 28% of Democrats. He is also shaping their attitudes. Recent work by Mr Cassino found that men who identify as "completely masculine" favoured Mr Trump by 30 points whereas those who do not favoured Ms Harris by 20 points.

Dave Gehring, a 37-year-old veteran knocking on doors in a Pittsburgh suburb for the Republican Party, is in no doubt why men like Mr Trump: "He's masculine." Young men gravitate towards the former president, he reckons, not just "because he's cooler", but because he is "still willing to give young men the opportunity to go and earn that better job based on merit, and take that strong male lead in a household". As the father of a daughter he does not think women should be attacked for their gender any more than men, but warns that "young men in America are under attack by the left every day."

Girls & Boys

"American society does not do enough to help..."
% of registered voters agreeing
August 16th-26th 2024



Source: Survey Centre on American Life

He is not alone in believing this. "There's a growing divide in views about how well men and women are doing in the US," says Daniel Cox of the American Enterprise Institute, a think-tank (see chart). Trump voters are much more likely to believe that men are the basis of sex discrimination, and the opposite is true of Harris voters. Nearly seven in ten Trump supporters think Ms Harris's policies will make things worse for men. The Trump campaign hopes to make use of this sense of grievance among young men who rarely vote. At a rally in New York last month Mr Trump concluded with an unusual pep talk: "Harry, get your fat ass out of the couch, you're going to vote for Trump."

Yet the changes on the right have been dwarfed by what has happened on the left. Whereas in the Obama years the gap between young men and women identifying as liberals was just five percentage points, during the Trump-Biden years this has tripled to 15 points, according to Gallup. This change has been caused almost entirely by young women moving to the left, rather than young men tacking to the right. The fact that this generation's formative years were during the #MeToo movement, the Trump years and the decision to overturn *Roe v Wade* helps explain it.

Republican candidates attempt a kind of chivalry, offering protection for women and their families, rather then feminism. At a recent rally in Pennsylvania, Mr Trump promised women he would be their "protector" and save them from fear and loneliness. "You will no longer be thinking about abortion," he said. That is what Mr Gehring and his fellow Republican door-knockers—who would rather talk about law and order and the economy—are hoping.

Dividing the electorate based on sex is, of course, reductive. In 2020 a majority of white women voted for Mr Trump; according to the latest polling, that might turn into a minority in 2024, but only just. And although the youth gender gap is wider than before, most young men still plan to vote for Ms Harris.

Yet leading among women is a real advantage. Since the 1980s a greater share of women than men has turned out to vote. In 2020 women made up 54% of the electorate. Whereas earlier this summer they were more likely than men to be on the fence about whom to vote for, Ms Harris's candidacy has helped many off it. A final indicator that Democrats might be winning this battle of the sexes: in battleground states, according to Target Smart, a data firm, between July and September, twice as many young Democratic women registered to vote than young Republican men. ■

Trade

October surprise

NEW YORK

A ports strike shows the stranglehold one union has on trade

"YOU'RE BETTER off sitting down and let's get a contract," said Harold Daggett, head of the International Longshoremen's Association, the dockers' union, a few weeks ago. If not, he said, "I will cripple you." This was no empty threat. On October 1st dockers at 36 ports from Texas to Maine walked off the job after their contract expired. The ports' giant cranes, which look like enormous metal giraffes, stopped loading and unloading. Ships that did not get to port in time anchored off shore. A few headed to Mexico. "We're going to show these greedy bastards you can't survive without us," said Mr Daggett on the first day of the strike.

The union has already disrupted the delivery of billions of dollars' worth of consumer goods during peak shipping season. About 60% of America's containerised trade is affected. The strike shut six of the ten busiest ports in North America.

Ports, carriers, retailers, warehouses and freight companies prepared for months for a shutdown. Ports on both coasts and the Gulf saw higher volumes than usual because shippers were trying to get in as much stuff as possible before the strike. "It was a huge rush for all truckers to move as much freight on and off as they could," says Donna Lemm of IMC Logistics, a company with 2,200 trucks moving cargo in and out of terminals. In a single day, "We have hundreds of containers stacked with four to five days' worth of work for our drivers to deliver." Storage facilities are jam-packed.

If the strike lasts longer than a week or two, says Adam Kamins, an economist at Moody's Analytics, that will lead to shortages and price pressures. He warns that even a modest increase in inflation could force the Federal Reserve to be more cautious about lowering interest rates. Mr Daggett told his union brethren that the strike—the first on the east and Gulf coasts since 1977—could last as long as three weeks and that "We are going to walk away with a great contract."

Talks between the dockers and the United States Maritime Alliance, which represents terminals and carriers, broke down in June. At one point the union wanted a wage increase of nearly 80%. The dockers rejected a nearly 50% increase. According to the now defunct Waterfront Commission of New York Harbour, more than a third in 2020 were paid $200,000 with

Hi, Jerome

overtime. Dockers are among the best-paid blue-collar workers.

There are whispers that the two sides may not be too far apart on wages. The bigger issue is the union's biggest fear: automation. The container liners do not want to concede too much on this. Peter Tirschwell of S&P Global Market Intelligence notes the basic cost to lift a container off a ship is higher in America than anywhere else in the world. Ports elsewhere are more automated, cheaper and more productive (measured by the number of lifts on and off a ship per hour). According to a container-port performance index published by S&P and the World Bank, no American port is in the 50 most productive ports. The highest-ranked American port is Charleston at 53. It is no coincidence that Charleston is one of the less unionised.

For President Joe Biden the strike is awkward. His labour and transport secretaries have been working the phones. Mr Biden has called on carriers, which he points out are foreign-owned, to present a "fair offer". He may be the most pro-union president ever. He was the first in office to walk a picket line, has said he does not believe in the Taft-Hartley Act, which would force the union to work under protest for 80 days, and presents greater unionisation as key to a healthy middle class.

That ardour is not reciprocated. The longshoremen have withheld their endorsement from Mr Biden. And Mr Daggett seems to favour Mr Trump, though he has not endorsed him either. He posed with the former president at Mar-a-Lago and said Mr Trump shared the union's opposition to automated terminals. Many of the rank-and-file appear to be Trump supporters too, even though Mr Trump recently said at a rally that he would get fresh workers in rather than pay overtime. ■

Campaign calculus

Blame the boss

Tim Walz is the most popular candidate on either ticket

FORMER PRESIDENT Donald Trump made an unusual foray into political science in July, arguing that "historically, the vice-president, in terms of the election, does not have any impact." At the time, his running mate J.D. Vance was stumbling through a gaffe-filled rollout, having been drafted two weeks earlier. It seemed as if Mr Trump's academic pronouncement was only intended to comfort himself—but it may have some merit. The vice-presidential debate did little to refute him (see Lexington).

Expectations were high for Minnesota's Governor, Tim Walz, the running mate of Democratic nominee Kamala Harris. The former high-school teacher and football coach has a folksy persona and a credible claim to being the most popular candidate on either ticket. In theory, this means the VP debate was an opportunity for the Harris-Walz campaign to reach voters who would not give Ms Harris a hearing. More likely, neither Mr Vance nor Mr Walz substantially moved the dial. Snap polling found voters evenly divided on the question of the debate's winner.

Christopher Devine and Kyle Kopko, two political scientists who study the effects of vice-presidential picks, find little evidence that running mates have a substantial effect on vote choice. Most voters are focussed almost exclusively on the top of the ticket, as Mr Trump suggested. But if the former president has been reading their book, he may have skipped over a less comforting finding—that the most substantive effect of the vice-presidential pick is how it reflects on the nominee themselves. Republicans will hope that Mr Vance's debate performance reassured voters about Mr Trump's judgement.

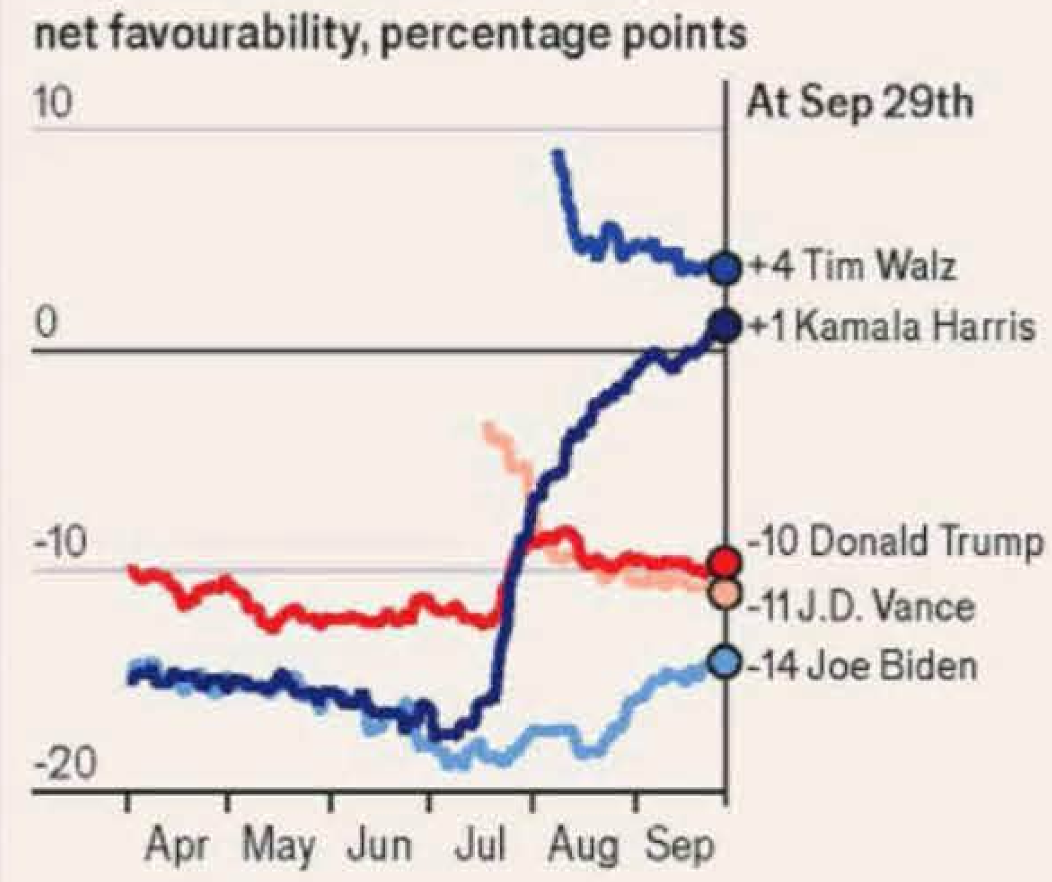
In pre-debate poll ratings, there was a gulf between Mr Vance and Mr Walz (see chart, which also illustrates Ms Harris's surge in popularity on assuming the Democratic nomination). Although the number of people with a favourable view of Mr Walz outweighed the number with an unfavourable view (by 4 percentage points), the opposite was true for Mr Vance (by 11 points). While Mr Walz outpaced his boss in net favourability, Mr Vance ran slightly behind his. In fact, Mr Vance was the most unpopular vice-presidential pick of recent history, according to analysis by FiveThirtyEight, a data-journalism outfit. He was even less popular than Sarah Palin, Alaska's former governor and John McCain's running mate in 2008, who has become the textbook example of a bad pick.

Mr Walz's high ratings could be explained to some extent by the number of people who did not have any opinion of him before the debate. In polling conducted by YouGov in September, an average of 8.9% of Mr Trump's supporters said they did not know if they had a favourable or unfavourable opinion of the Democratic vice-presidential nominee, compared with 6.4% of Ms Harris's supporters of Mr Vance. But this also posed an opportunity. Unlike in September's presidential debate, a substantial number of viewers saw the opposing party's representative on stage without many preconceptions.

A snap poll by CNN suggested that ratings of both debaters surged among viewers, from net positive 14 to 37 percentage points for Mr Walz and net -22 to -3 points for Mr Vance. It is too early to say whether this positivity will extend to the broader electorate but it is unlikely to have much bearing on the presidential race in either case. Both VP candidates are defined by their association with the top of the ticket and, in Mr Walz's case, the incumbent president, Joe Biden—who is more unpopular than either set of nominees. If they lose in November, both Mr Walz and Ms Harris can blame their boss.

Coach Class

US presidential election 2024, net favourability, percentage points



Source: FiveThirtyEight

Direct democracy

Taking the initiative

LOS ANGELES

Many Americans can decide their own policies. What will they choose?

"I WANT YOU to pick a sport to award $1m to," Sondra Cosgrove tells her audience. Ms Cosgrove, a community-college professor, is trying to teach Nevadans how ranked-choice voting (RCV) works. The five sports with the most votes in the first poll (the primary) advance. In the second poll (the general election) basketball wins more than 50% of votes in the first round, eliminating the need for a run-off. If no sport had won more than half of the votes, the last-place finisher would be eliminated and their votes reallocated based on how participants ranked them. This process would repeat until a clear winner emerged.

Ms Cosgrove hopes the illustration will help voters understand a measure on the ballot this November that would amend Nevada's constitution to allow the adoption of RCV and open primaries, where all candidates regardless of party affiliation are listed on one ballot. "I'll explain this at birthday parties if I have to," she says.

The race for the presidency and close Senate and congressional seats hog the attention in election years. But Americans will also vote this November on nearly 150 measures that can have a profound effect on state policy and society. By September 27th, over $600m had been spent on such initiatives. As with races near the top of the ballot, three things are dominating: abortion, electoral reform and immigrants.

Only 26 states allow voters to decide directly on policies via citizen-led initiatives or referendums. ("Initiatives" are placed on the ballot by citizens with thousands of signatures in support of a petition. A "referendum" allows voters to repeal or uphold a law.) Most of these states are clustered in the West. They joined the union later, and many wrote their constitutions under the influence of the Progressive movement at the beginning of the 20th century. Reformers wanted to give voters power as a check on political machines and special interests. In California, which has become a hotbed of direct democracy (often to its detriment), ballot measures were a way for reformers to counte the power of the Southern Pacific Railroad, which had local politicians in its pocket. Every state but one, Delaware, requires its legislature to put constitutional amendments on the ballot.

This year ten states will vote on measures that would protect access to abortion. The success of similar measures in recent elections has begun to spark a backlash against direct democracy. The Republican-dominated legislature in North Dakota hopes to increase the number of signatures needed to get an initiative on the ballot. In Arizona, lawmakers want to require signatures to come from different parts of the state so that, for example, reformers can't get all of the support they need from Phoenix. Alice Clapman, of the Brennan Centre for Justice, says it is common for lawmakers to try to claw back power from voters. But she reckons this has increased since the Supreme Court overturned *Roe v Wade* in 2022.

Seven states, including Nevada, are mulling open primaries, RCV or some combination of the two. The moves stem from a desire to elevate consensus candidates over fringe ones, and reduce mud-slinging. But research suggests that the effect of RCV on partisanship and extremism is limited. Lee Drutman, a political scientist who was once one of RCV's biggest champions, has lost his enthusiasm. "A lot of people are feeling really frustrated with how our democracy is working," he allows. "But if you're trying to use [RCV] as a solution to polarisation...you're just going to set yourself up for disappointment."

Alaska will decide whether to repeal RCV; Missouri, whether to ban it pre-emptively. Such measures could become more common in future years if other state parties begin to feel that the reforms could threaten their power.

During the presidential debate Donald Trump said Democrats were trying to get unauthorised immigrants to vote for Kamala Harris. He has made similar fictitious claims since 2016. That paranoia has trickled down. Eight measures would ban non-citizens from voting. It is already illegal for unauthorised immigrants to vote in federal and state elections, and there is no evidence that large numbers of them try to.

Several other measures deserve a mention. For the third time in a decade Ohioans will try to end partisan gerrymandering. Californians will unfold their lengthy ballot papers to see ten questions. Proposition 33, allowing cities to expand rent control, is the most expensive in the country. Among the most interesting is Prop 36, which would increase prison sentences for some thefts and for drug crimes. Direct democracy may be under attack elsewhere, but in California it is still king. ■

Weather

The toll

ATLANTA

America's deadliest storm in decades

WHEN HURRICANE HELENE hit Florida's Big Bend on September 26th it was hard to imagine that it would wreak the most devastation over 400 miles north in the Appalachian mountains. Officials report that flooding across the Southeast has killed about 200 people, more than any mainland tropical storm since Hurricane Katrina in 2005. In North Carolina's Buncombe County alone, home to the city of Asheville, at least 35 residents have died and 600 are missing. One woman who climbed to the roof of her house as the waters rose watched her seven-year-old son get swept away. Mules are delivering food to stranded survivors since roads were ravaged.

Warming temperatures, which let the air hold more moisture, made Helene wetter than hurricanes past. Experts estimate that 40trn gallons of water fell on the six-state region, enough to fill 60m Olympic-sized swimming pools. Soil made soggy from days of rain before the hurricane probably helped recharge the storm as it made its way inland. Some people in the razed North Carolina towns are "climate expats" who moved from Florida to escape extreme weather. Helene shows that even those far from rising seas are no longer immune.

Not here too

Military innovation

Reinventing the army

The US Army's chief of staff has ideas on the fighting force of the future

RANDY GEORGE joined the US Army in 1988. It had overhauled itself after the trauma of Vietnam. It had written a new doctrine, known as AirLand Battle, to defeat the Soviet Union in a war in Europe. And a few years later it would smash the Iraqi army in the first Gulf war, a conflict in which General George, as he is today, served as a young lieutenant. He is now in charge of that same army, and wants to reinvent it, continuously, for a new age.

General George took over as army chief of staff a year ago. His priority, he tells *The Economist*, is building "lethal and cohesive" teams. Everything else is secondary. The flab built up during the war on terror is being trimmed. Brigades have turned in up to 700 excess vehicles, he says. The remaining ones are being serviced less often, leaving more time and resources for training. Army ammunition factories are working at full pelt. They produced 40,000 rounds of 155mm artillery shells in August, up by one-third from February, and are "nearing" 50,000 per month. That is expected to double in a year's time. Manpower is improving, too. After years of missing its recruitment targets, the army last month exceeded its goal for the year by 10,000 soldiers.

A much bigger task still lies ahead. The army has two big challenges. One is where to look. America's national defence strategy is explicit: China is the priority. But any war over Taiwan would involve mainly air and naval forces, and the army maintains a big presence in Europe. "AirLand Battle was intellectually coherent because we had one enemy," says John Nagl, a professor at the US Army War College in Pennsylvania, "but a China-focused army looks different from a Russia-focused army—plus the Middle East is a mess."

The other is technology. The war in Ukraine has shown that weapons may work well for a while until the enemy adapts. America's GPS-guided shells have been blunted by Russian jamming. Drones' software and sensors need updating every six to 12 weeks to stay effective. "We're fully aware of how much the world has changed just over the last couple years, with commercial tech," says General George.

One scheme to tackle both challenges is what the army calls "transforming in contact". It has picked three brigades—the 2nd Brigade of the 101st Airborne Division in Kentucky, the Pacific-focused 2nd Brigade of the 25th Infantry Division in Alaska and the 3rd Brigade of the 10th Mountain Division in Germany—to serve as laboratories for innovation. The trio receive the newest kit and tech. They test it on exercises and give feedback on what works.

In the past, says Alex Miller, the army's chief technology officer, the army would set "gold-plated" requirements—insisting that a drone be able to survive in freezing and boiling conditions, say—and push this "over-engineered" kit down to every unit over a glacial three to seven years. The experimental brigades can instead quickly buy things that suit their environment. Robots that work well in Louisiana, notes Mr Miller, might struggle in the Pacific. "It's a big difference to actually do this on the ground, inside formations," says General George. "We have users, developers and testers that are all there together."

The days of picking one company—usually one of a handful of arms behemoths—and asking it to produce something for a decade or two are gone, he says. The future is "modular" systems, such as platforms whose sensors (cameras, radars or antennae) can be swapped out frequently, with a greater reliance on consumer tech. A new infantry squad vehicle, a jeep-like contraption, embodies this thinking. Built by General Motors, it is based on the Chevrolet Colorado and 90% of its components are commercially available.

Documents setting out what a new weapon or system has to do have typically been long tomes, page after page of specifications that quickly go out of date. A new one for the army's next command-and-control system amounts to a bureaucratic revolution: just five pages. General George recalls an instance where the army was told it would take six to eight months to get 20 new coolant-pump covers for Bradley armoured vehicles. It was able to 3D print them all in less than an hour—at 16 cents each. That capability is being pushed down to formations as small as brigades.

Despite all this, army insiders acknowledge that the present system is broken, constrained by suffocating Pentagon rules and rigid legislation. Take the example of first-person-view (FPV) drones, small, short-range attack drones used in massive quantities by both Russia and Ukraine to good effect. Why has the US Army been slow to produce these? Mr Miller notes that American law prohibits the Pentagon from buying components made in China. That has limited the supply of motors, speed controllers, antennae and video transceivers. The army has turned to American and European suppliers—the 82nd Airborne Division is cobbling together FPVs with legally compliant parts—but production is puny. "We're talking handfuls," he says.

The scale of the task

But how to ramp up? The army has 59 brigade combat teams; experimenting in a few of them only goes so far. Though the scheme will soon expand, General George accepts that his "ultimate grading" will be whether he can scale the new processes and kit across the whole army. Colonel David Butler, his spokesman, points to the example of 1940 to suggest that a little reform can go a long way. "We shouldn't forget that Germany only transformed one-third of their army," he says, "enabling them to take over most of Europe." ■

LEXINGTON

Vice to virtue

A high-toned debate let J.D. Vance launder Donald Trump. Until reality stepped in

WHY DID Tim Walz have to go and spoil things? For almost the entire vice-presidential debate on October 1st Americans were transported back to a different era in their politics, a time when candidates tried to seem—maybe even were—respectful of each other, open to compromise, mindful of their own weaknesses and intent on solving big problems. It was soothing, at times even informative, a bit dull in a good way. No one bragged about the size of their crowds, much less of their genitalia, or even called anyone else by a demeaning nickname.

But then Mr Walz, the Democratic candidate, turned to his Republican adversary, Senator J.D. Vance of Ohio, and asked a question about Donald Trump: "Did he lose the 2020 election?" Somewhere in the distance—could it have been in Springfield, Ohio?—a dog barked, and the illusion vanished.

"Tim," Mr Vance replied, "I'm focused on the future."

As long as the illusion lasted, it probably supplied some solace to Americans watching from home, and as a political matter it benefited Mr Vance. Smiling and nodding pleasantly as the moderators formulated their questions, he gave no hint of the trolling persona that has made him thus far the most unpopular vice-presidential candidate in recent history; he made no mention of cats, whether doted on by childless women or eaten by migrants. Mr Vance exuded empathy for people trying to pay their grocery bills, children fearful of guns in school and women seeking abortions.

The years of Mr Trump's presidency have never seemed more lustrous than when bathed in Mr Vance's smooth flow of words. In his telling Mr Trump became the keeper of global tranquillity, a leader wiser than all the experts combined, somehow, even, the saviour of Barack Obama's health-care plan. (For his part, the real Donald Trump—the one who tried to kill Obamacare, promising a plan he has yet to unveil—seemed intent during the debate on reminding voters who he truly was, spewing posts on his social media platform, Truth Social, attacking "Tampon Tim" and "Comrade Kamala Harris".)

A former teacher and football coach, Mr Walz, who is 60, served six terms in Congress before running successfully twice for governor of Minnesota. Despite his more extensive political experience, he turned in the less cogent performance. Where Mr Vance reeled off complete paragraphs, Mr Walz scattered sentence fragments and at times resorted to a shorthand that was Trumpian in its bewildering simplicity ("The drug mule is not true"). He left many of Mr Vance's claims unchallenged. Maybe he had prepared for the more belligerent Vance persona, rather than the adversary who warmly shook his hand before the debate and went on to say things like, "I agree with you. I think you want to solve this problem." Mr Walz repeatedly extended Mr Vance similar credit.

Mr Vance, just 40, has been in the Senate for less than two years, and this is only his second campaign. In his brief time on the national stage he has evolved from a harsh critic of Mr Trump and many of his policies to the most articulate spokesman for the "New Right" movement, which seeks to assemble a coherent, appealing ideology out of the odds and ends of Trumpism. He was hard at that work during the debate, never more so than on the subject of abortion.

Whereas Mr Trump likes to baldly state that "everybody" believed *Roe v Wade* should be overturned, Mr Vance offered a more nuanced, if still slippery, explanation of his position. Though Mr Vance once said he "certainly would like abortion to be illegal nationally", he insisted during the debate that he had never supported a national abortion ban.

Mr Vance spoke of a woman he knew growing up who had an abortion because she was in an abusive relationship. ("I know she's watching tonight, and I love you," he said into the camera.) He said from such conversations he had learned that "as a Republican who proudly wants to protect innocent life in this country" he and other Republicans have "got to do so much better of a job at earning the American people's trust back on this issue where they frankly just don't trust us". That meant, he said, being "pro-family in the fullest sense", by supporting fertility treatments and making it more affordable to raise children. It also meant, he continued, letting different states enact different policies regarding abortion. Amid the welter of words, it was not clear what principle Mr Vance was advancing to win voters' trust. He did not explain why, if he believes a fetus has a right to life, he would be comfortable with some states denying it, or why Americans who believe women should have full reproductive rights should be any more satisfied with a patchwork approach.

The only name-calling

Despite the sharp disagreements over matters like abortion, the debate was a reminder of how much overlap exists between the parties' agendas on matters from industrial policy to child care to housing to a certain indifference to budget deficits. Even on the politically fraught subject of guns in schools, the two candidates found some common ground. "This is a good start to the conversation," Mr Walz said.

CBS News, which hosted the debate, conducted a snap national poll afterwards that found voters divided almost evenly over who won. A poll by CNN found that each man was viewed more favourably after the debate than before it. That might have something to do with the largely positive tone of their exchange. The only name-calling of the night came from Mr Walz, and it was directed at himself, as part of a clumsy attempt to explain why he claimed he was in Hong Kong during the Tiananmen Square protests of 1989, when he was not. "I've tried to do the best I can, but I've not been perfect," he said. "I'm a knucklehead at times." ■

The Americas

Politics in Brazil

A long shadow

SÃO PAULO

Jair Bolsonaro still shapes Brazil's right wing

ON OCTOBER 6TH voters across Brazil will go to the polls to select more than 5,500 mayors and tens of thousands of city councillors (second-round run-offs will follow at the end of the month). The gigantic municipal vote provides a barometer of sorts for the next presidential election, which is due in 2026. Signs in the run-up are unsettling. Two years after Brazilians booted out Jair Bolsonaro, their inept and dangerous former president, right-wing politics remains in his thrall. An acolyte—or perhaps an imitator—could return Mr Bolsonaro's movement to power.

For a while optimists had dared to hope that the *bolsonaristas* were a spent force. After losing the presidential election in 2022 Mr Bolsonaro spent a few months in Florida, moping around fried-chicken shops and occasionally posing for selfies with fans. On January 8th 2023—one week after Luiz Inácio Lula da Silva, the left-wing current president, was inaugurated—supporters who believed their idol's claim that the election had been rigged ransacked Congress, the Supreme Court and the presidential palace. Brazilians were appalled. And even some of the extremists, unimpressed by Mr Bolsonaro's wimpy self-exile, ended up feeling let down.

In June 2023 Mr Bolsonaro was barred from holding public office for eight years for having used state television to cast doubt on the reliability of voting machines in advance of the election that he lost. His problems have only piled up since then. In March Brazilian federal police formally accused him of forging a covid vaccine certificate. In July they formally accused him of embezzlement in connection with gifts of jewellery and watches from Saudi Arabia. (Mr Bolsonaro denies both these accusations.) Numerous other probes are under way, including one examining to what extent Mr Bolsonaro played a role in stoking the riots on January 8th. The chances of his going to jail are rising.

Yet even if he is a much diminished figure, for the moment Mr Bolsonaro remains a kingmaker for the political right. His Liberal Party is the largest in Congress. This year he has proved able to attract tens of thousands—and sometimes hundreds of thousands—of fans to events, such as rallies where he criticises the Supreme Court, which is overseeing several of the investigations into him (he is pictured above at one such gathering, in September). For weeks he has been touring Brazil to drum up support for mayoral candidates he endorses. In 23 of Brazil's 100 or so largest cities, candidates with backing from Mr Bolsonaro are polling in first place. (By comparison, there are 16 races in which candidates supported by Lula, as the current president is known, are likely to win.)

All this disappoints people who had wondered whether, with Mr Bolsonaro barred from office, a more centrist opposition could emerge. Brazil's main centrist outfit, the Party of Brazilian Social Democracy, is weaker than ever. In 2016 seven of Brazil's 26 state capitals had mayors from that party; after the elections this month the number may be zero.

Many technocratic conservatives are tacking to the right. Leading the mayoral race in São Paulo, Brazil's biggest city, are Ricardo Nunes, the uncharismatic incum- ▸▸

→ ALSO IN THIS SECTION

bent, and Guilherme Boulos, a socialist backed by Lula. An endorsement from Mr Bolsanaro has helped Mr Nunes. But, in part to win that support, he picked as his running-mate Mello Araújo, a *bolsonarista* and former colonel who publishes pictures of his own children carrying semi-automatic rifles, and who has also criticised the use of body cameras by police.

The risk for politicians who choose to hold the middle ground is that they will be shoved aside by upstarts from the radical right—even ones who have not received Mr Bolsonaro's formal blessing. The most eye-catching story in São Paulo's race has been the startling rise of Pablo Marçal, a 37-year-old self-help guru and digital influencer who at present seems likely to win around 20% of the city's vote. His populist campaign apes much of what made the former president a sensation, and appeals to many of the same voters. During an election debate broadcast live on September 15th Mr Marçal goaded a rival, who then hit him with a chair.

At a rally held by Mr Marçal on September 24th, cars bore flags carrying the words "Out, Satan!" "Marçal has arrived to bring down the system," chirped a jingle blasting from one pickup truck. Regina Carvalho, a 63-year-old small-business owner, could not name any of Mr Marçal's election promises (they include building a skyscraper 1km high). But she said she would vote for him anyway. "Him saying 'out with the corrupt, out with the system, out with [leftist] activists' is enough for me."

The politicians who are most often tipped to lead the right into the election in 2026 seem to be sensing the mood. Tarcísio de Freitas, the governor of São Paulo state, Brazil's richest and most populous, looks like one of the best positioned. But despite having served as Mr Bolsonaro's infrastructure minister, he has long struggled to win *bolsonaristas'* trust. He has worked in left-wing governments, is considered friendly with Lula and is seen as too nice to bankers.

Lately Mr Freitas has been trying to toughen up his image. He has permitted the military police to intensify operations in his state's poorer neighbourhoods. In February a policeman was killed in a *favela*; in the following 36 days police officers killed 45 people in the same district. Civil-society organisations were outraged. "I couldn't care less," said Mr Freitas. *Bolsonaristas* have "started seeing him as one of them", says Camila Rocha of the Brazilian Centre for Analysis and Planning, a research institute.

For the moment Lula remains relatively popular. He has hinted that he will run for president again in 2026. Yet by then he will be nearly 81 (around the same age that Joe Biden is now). Should plans change, his Workers' Party might perhaps struggle without him. Its base—made up of Roman Catholics, manufacturing workers and the urban bourgeoisie—is shrinking. At the same time, the stock of Brazilians who are likely to be attracted to right-wing politics is growing. Mr Bolsonaro's biggest supporters were evangelical Christians, people in agribusiness who favour laxer environmental laws and voters worried about corruption and crime.

In 2002, the year that Lula won a first stint as president, evangelicals made up 15% of the population and Catholics 74%. Today 31% of Brazilians are evangelicals and only half are Catholic. Agricultural exports were 37% of Brazil's total in 2000, but today make up almost half; in the same period manufacturing has shrunk. The guise that Brazil's right wing now assumes could affect the country's course for decades to come. ■

Indigenous groups

World's end

LIMA

Peruvians debate how best to protect isolated tribes

JERSON DEL AGUILA was working for a logging company in the Peruvian rainforest when he came across a family of naked tribespeople. It was the first of two occasions in 2021 on which he would meet people from the Mashco Piro, an isolated indigenous group. He and his co-workers turned back and told a manager. But when his brother, Gean Marcos, was working in the same timber concession a year later, things turned out differently. Gean Marcos was shot with two arrows and killed.

That incident was one of at least eight bow-and-arrow attacks that have taken place since 2010 in the same part of the Peruvian region of Madre de Dios. Two have happened in the last three months, leaving two people dead and another three missing. Calls are growing for Peru's government to expand a reserve that is supposed to be protecting the Mashco Piro (see map), as well as people who might come into conflict with them. The case encapsulates issues that also challenge Peru's neighbours in the Amazon, which is home to more such groups than anywhere else in the world.

The Mashco Piro are among more than 100 tribes that live mostly or entirely apart from wider society, according to Survival International, an NGO. They are often referred to as an "uncontacted" group, but the truth is more complex. Anthropologists suspect they used to be less isolated, and that their ancestors fled into the forest to escape violence that came with a rubber boom that started in the 1890s. Some speculate that they are descendants of indigenous slaves held captive by Carlos Scharff, a notorious rubber baron killed in 1909 during a slave rebellion.

Romel Ponceano, chief of the village of Monte Salvado, which lies near their territory, is one of few outsiders to develop a rapport with members of the tribe. Mr Ponceano (who is a member of the Yine people, another indigenous group) says they have told him they have no interest in leaving the forest. The first time he spoke to them, they asked him to strip naked to show he was trustworthy. "Only bad people wear clothes," they said.

Loggers have been working in their vicinity since a mahogany boom in the 1990s. These days the big money comes from felling *shihuahuaco*, a giant, slow-growing tree used to make fancy floor panels. Much of the work is legal. When the government created the Mashco Piro's existing reserve, in 2002, it carved a large area of forest where the tribe was known to live into timber concessions. Mr Del Aguila says that when he worked in the area he would often come across footprints and abandoned camps (one of them littered with turtle shells and animal carcasses). "It's basically their land," he says.

Although contact can be dangerous for all involved, the stakes are highest for the Mashco Piro themselves. Like other isolated people, they are presumed to lack immunity to many quotidian illnesses. Carelessness of this and other risks has caused tragedies in the past. In the 1940s and 1950s Dominican missionaries made contact with another tribe in the region, the Harakbut: they started by dropping bags of machetes, food and blankets out of planes. Very many in that tribe subsequently died of disease. Eusebio Ríos, who is Harakbut, says his father and grandfather ended up in a Catholic mission, where a priest abused them and forced them to fell trees and pan for gold. The tribe is "still trying to recuperate", he says. ▸▸

Authorities seem to recognise that the status quo in Madre de Dios will not hold. In 2016 a Peruvian government commission recommended expanding the existing reserve by some 350,000 hectares. But six presidential administrations have failed to do it. Ricardo García, an official at the culture ministry, says the current government supports expansion. "We're taking up the issue again."

Money may be one hold-up. Expanding the reserve could mean modifying 14 logging concessions. In 2017 officials from Peru's forest service, Serfor, guessed that it would cost $88m to compensate timber companies. Moreover, Peru's forestry service tends to see formal timber companies as allies in the fight against swifter and less well-controlled forms of deforestation, says Claudia Ato, a former Serfor official.

It is possible that any new reserve might still not be big enough. The most recent Mashco Piro attack took place outside the area proposed for expansion. And lines on a map will not, on their own, keep people out. Civil-society organisations say that between 2020 and 2022 14 Peruvian environmentalists or indigenous leaders were killed defending land from illegal gold-miners, loggers, drug-traffickers and the like. "It would be great if the expansion meant the state puts more resources towards defending the area," says Ms Ato. "But that probably won't happen."

Mr Ponceano says the Mashco Piro sometimes approach remote indigenous villages like his own to secure things such as machetes and pots. So far they have always chosen to return to the forest afterwards. One day that might change, he says. But if so, he hopes it will happen "because they want it to, and not because of us." ■

Football

Everyone's a winner

MONTEVIDEO

Why is football in Latin America so complex?

LATIN AMERICA is a football powerhouse. Its teams include Argentina (the current men's world champions) and Brazil (the most successful national team in history). Yet if the region plays football with beauty and elegance, its league systems are achingly complex. Latin American competitions, now in full swing, can be more confusing than the offside rule.

For a fine example, look to Uruguay. In August cheers rang around your correspondent's street in Montevideo when Nacional, a local team, won the country's *Intermedio* (midseason) tournament. That competition sees Uruguay's 16 best teams split into two groups. The top performers from each group compete in a final. This seems simple enough.

Yet every year these same 16 teams also compete against each other in an *Apertura* (opening) league that takes place in the first months of the season, and a separate *Clausura* (closing) league that does not start until the year is nearing its end. An ultimate champion is decided in play-offs that include the winners of the *Apertura*, the winners of the *Clausura*, and whichever team has come top of an annual table (created, confusingly, by combining the results from all three competitions). If any squad wins more than one of those, a blizzard of fine print is consulted to work out what happens. "We don't even understand it ourselves," laughs Juan Francisco Pittaluga, a sports journalist.

Elaborate formats are common all across the region. Bolivia, Colombia, Ecuador and Mexico have *Apertura* and *Clausura* systems of their own. Mexico has play-offs for its play-offs. Working out which teams will be relegated at the end of a season can require a calculator: in Colombia and Uruguay, among other places, this is determined by an average of results over several seasons. Why is it all so complex?

One explanation relates to player transfers. Some years ago Argentina decided its football season should coincide with the European one, to make it easier to sell players to European clubs. Yet that meant playing through January, when temperatures can reach 40°C and many fans are away at the beach. In 1991 Argentina pioneered the *Apertura* and *Clausura* system in part to create a midsummer break.

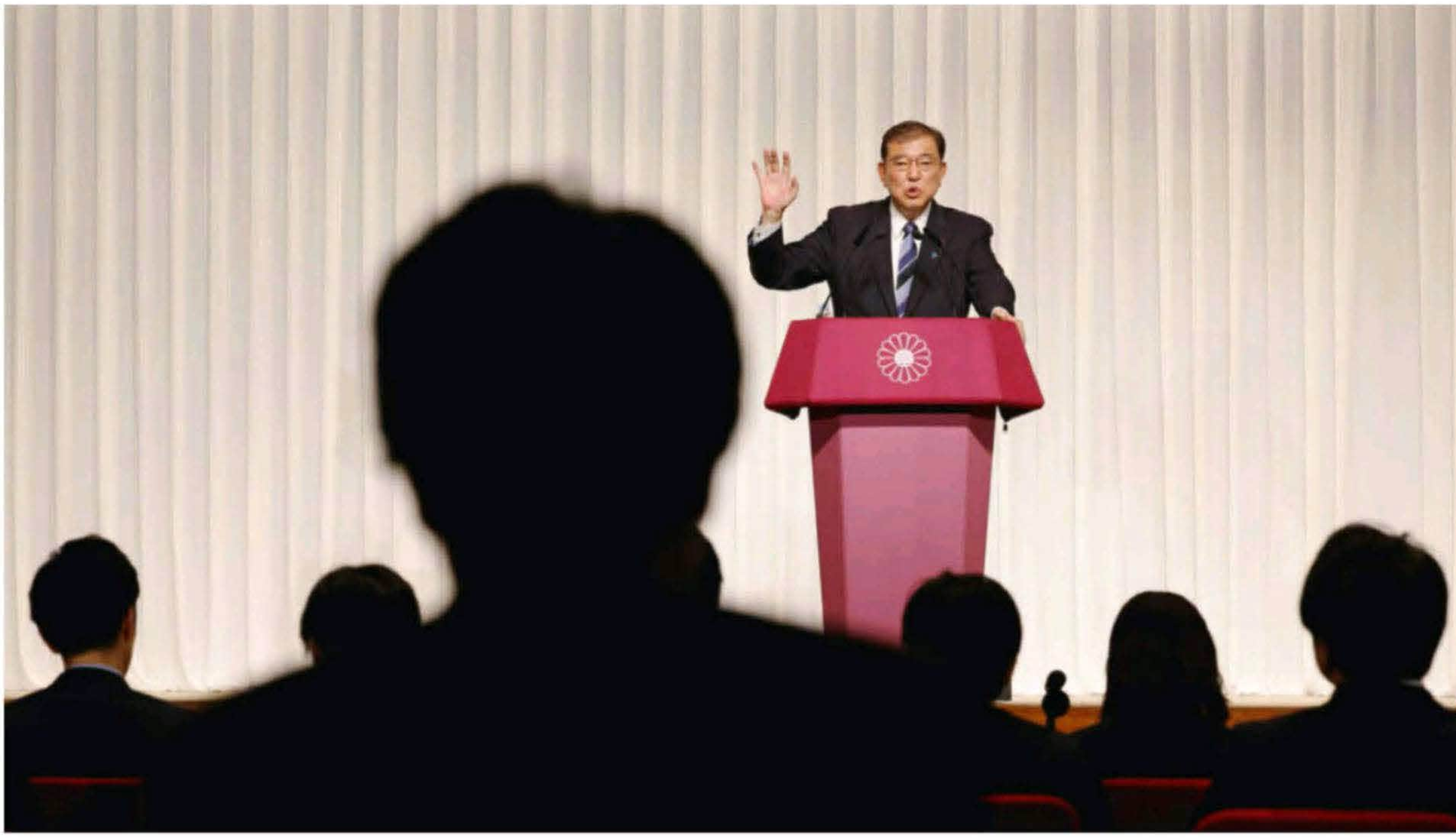
Yet there is clearly more to it than that. Running several short tournaments can allow for more matches in total (especially handy in Uruguay, a small country which has fewer teams in its top flight than, say, England or Italy). It is also supposed to create more matches that matter, boosting ticket sales and income from television rights. Latin American football is both cash-strapped by European standards and can be a route into politics (Mauricio Macri, a former president of Argentina, came to prominence running Boca Juniors, a big club). So bigwigs are forever creating new formats that might make money—and perhaps also a name for themselves.

Byzantine rules about relegation result from regulatory capture. When Grêmio, a famous club in Brazil, dropped down a division in 1991, authorities all but ensured it would shoot back up by declaring that a whopping 12 teams would be promoted the following season. European teams can only dream of the security some of their Latin American peers enjoy. In 2021 a dozen big European ones tried to start a league from which none of them could be relegated. Fans gave that plan a red card.

Jeopardy and simplicity are popular in the stands. Brazil boasts the region's best league. Like many European ones, it has 20 teams, one sole table and—since authorities blew the whistle on shenanigans—simple relegation rules. For most casual fans, that is worth a cheer. ■

What's the score?

Asia



Japan's new prime minister

Critic's choice

TOKYO

Can an outspoken outsider contend with the realities of governing?

ISHIBA SHIGERU, Japan's new prime minister, knows what his colleagues think of him. "I have undoubtedly hurt many people's feelings, caused unpleasant experiences and made many suffer," he said apologetically in his final speech during the race for the leadership of the ruling Liberal Democratic Party (LDP). Throughout his 38 years in parliament, Mr Ishiba has been a gadfly. That outspokenness endeared him to voters, but made him an outsider within the LDP. His first four leadership bids failed. Someone like him could win only if the LDP faced a major "roadblock" and "divine will" intervened, Mr Ishiba wrote in a book published this summer.

Divine will or not, Mr Ishiba triumphed on his fifth attempt last week, and on October 1st he became Japan's prime minister. His selection does not herald a drastic change of trajectory in Japan's foreign or economic policies. But the gadfly may struggle to govern. That would leave Japan less capable of meeting the myriad challenges it faces at home and abroad. Mr Ishiba's fate will depend largely on the LDP's showing in snap elections for the lower house on October 27th.

Mr Ishiba's surprise win reflects the sense of crisis inside the LDP, which has ruled Japan with only two brief interruptions since 1955. A recent scandal over the misuse of political funds has dragged the party's approval ratings down. Though it is not yet in danger of losing power, many in the LDP worry about losing swathes of seats. By choosing Mr Ishiba, the LDP opted for its most popular figure, hoping that a change of leadership style will mollify an angry public. His victory also illustrates the fear that many felt about Takaichi Sanae, a hard-right nationalist whom Mr Ishiba edged out in a second-round run-off.

Mr Ishiba defies easy categorisation "because he's so heterodoxical on the issues", says Tobias Harris of Japan Foresight, a political-risk consultancy. He entered politics after the death of his father, a long-serving LDP politician, in 1981. His mentor was Tanaka Kakuei, a powerful LDP leader who championed the country's poorer parts. Hailing from Tottori, a sand-dune-strewn prefecture on the northern coast of Japan's main island, Mr Ishiba inherited Tanaka's commitment to overlooked regions, as well as his emphasis on door-to-door campaigning. He calls himself a "conservative liberal".

The new prime minister has also used his personal obsessions to help build his popular appeal. Like many of his compatriots, he is a train aficionado and loves ramen (he made headlines for eating 12 bowls in a day). He once appeared in public in the costume of Majin Buu, a character from Dragon Ball, a popular *manga* series.

The character he has played throughout his own career has been consistent. "He's the party's critic," says Gerald Curtis of Columbia University. In the early 1990s he left the LDP, helping bring about its first electoral loss and earning himself a reputation as a traitor. After returning, he emerged as the most outspoken detractor of Abe Shinzo, Japan's longest-serving leader, whom he accused of stifling debate. ▸▸

→ ALSO IN THIS SECTION

He believes a politician's job is to "speak the truth with courage and sincerity".

His own policy positions are hard to pin down, however. A former minister of regional revitalisation and of agriculture, Mr Ishiba frames his economic agenda around a vague desire to elevate Japan's greying, depopulating countryside. On social issues, he has shown a liberal streak. He supports letting married couples keep separate surnames—a proxy for broader battles over sexism and family life.

A self-proclaimed defence *otaku* (obsessive), Mr Ishiba is a former defence minister and an avid collector of model planes and warships. He has long bristled at subordination to America, arguing for Japan to take on a bigger security role and create a more equal alliance. Although Mr Ishiba favours strengthening Japan's armed forces to counter China, he also places great importance on maintaining dialogue. He is clear-eyed about Japan's history of imperial aggression, and supports better relations with South Korea, its former colony.

Yet he has also advocated some provocative ideas that worry officials in Washington, as well as his own bureaucrats. Most notably, he has called for creating an "Asian NATO", to link America's various bilateral alliances in the region into a collective one. He has also suggested revising the agreement that governs how American military forces operate in Japan. The issue is a "classic Pandora's box", says Michael Green, a former American official.

As prime minister Mr Ishiba will face an uncomfortable choice. He can continue to pursue the provocative approach that won him public favour, but risk losing the support of fellow party members. Or he can bow to the realities of governing, but risk losing the public.

Some initial steps suggest that he will aim for pragmatism. Kishida Fumio, the outgoing prime minister, backed Mr Ishiba over the hard-right Ms Takaichi, in part to ensure that his diplomatic legacy remains intact. "We will inherit the entire foreign and security policy from the Kishida administration," says Nagashima Akihisa, a veteran lawmaker appointed as a national-security aide to Mr Ishiba. Yet the prime minister still has his preoccupations: during his first press conference he defended his ideas about the alliance with America.

Either way, Mr Ishiba may have a tough time hanging on. The LDP's right wing has been hostile to him: Ms Takaichi rejected the olive branch of a senior party post under the new leader. He has few loyal allies inside the party. He will have to navigate the upcoming lower-house elections, build ties with a new American president, and then face upper-house elections next summer. Many in Japan's political circles already suspect that another LDP leadership struggle will soon follow. ■

Taiwanese security

China's anaconda strategy

TAIPEI

It is surrounding and squeezing the island, says Taiwan's naval commander

CHINA'S DISLIKE of Taiwan's president Lai Ching-te is no secret. Chinese authorities call him a stubborn, confrontational "separatist" who may provoke war in the Taiwan Strait. But since Mr Lai's election in May, it is China's People's Liberation Army (PLA) that has been raising the chances of conflict by deploying more air and naval craft around Taiwan. "The PLA is using an 'anaconda strategy' to squeeze the island," says Admiral Tang Hua, Taiwan's navy commander.

In an interview with *The Economist*, Admiral Tang (pictured) warns that Chinese forces are "slowly, but surely" increasing their presence around his country. "They are ready to blockade Taiwan at any time they want," he says. His concerns are backed up by the data. The number of PLA air incursions across the median line, the de facto border in the middle of the Taiwan Strait, has jumped more than five-fold, from 36 in January to 193 in August. The number of PLA ships operating around Taiwan has steadily risen, too, doubling from 142 in January to 282 in August. These vessels are also coming closer to Taiwan—right along its contiguous zone, or 24 nautical miles from its coast. And they are patrolling for a few days at a time, up from a few hours previously, according to Taiwan's naval commander.

These are relatively new developments. Until August 2022 the PLA had operated mostly in Taiwan's south and west, around the Bashi Channel between the island and the Philippines. Taiwan's rugged east coast, home to aircraft hangars built underneath its mountains, was seen as safer and harder to reach from China. But that changed after a visit to the island that year by Nancy Pelosi, then a high-ranking American official. The trip enraged China and, soon after, the PLA conducted a mock blockade near Taiwan's east. That sent a signal that the region was no longer safe. Now the PLA has normalised patrols there and regularly encircles the island by sea and air. It has also increased the number of navy transits through the Yonaguni channel between Taiwan and Japan.

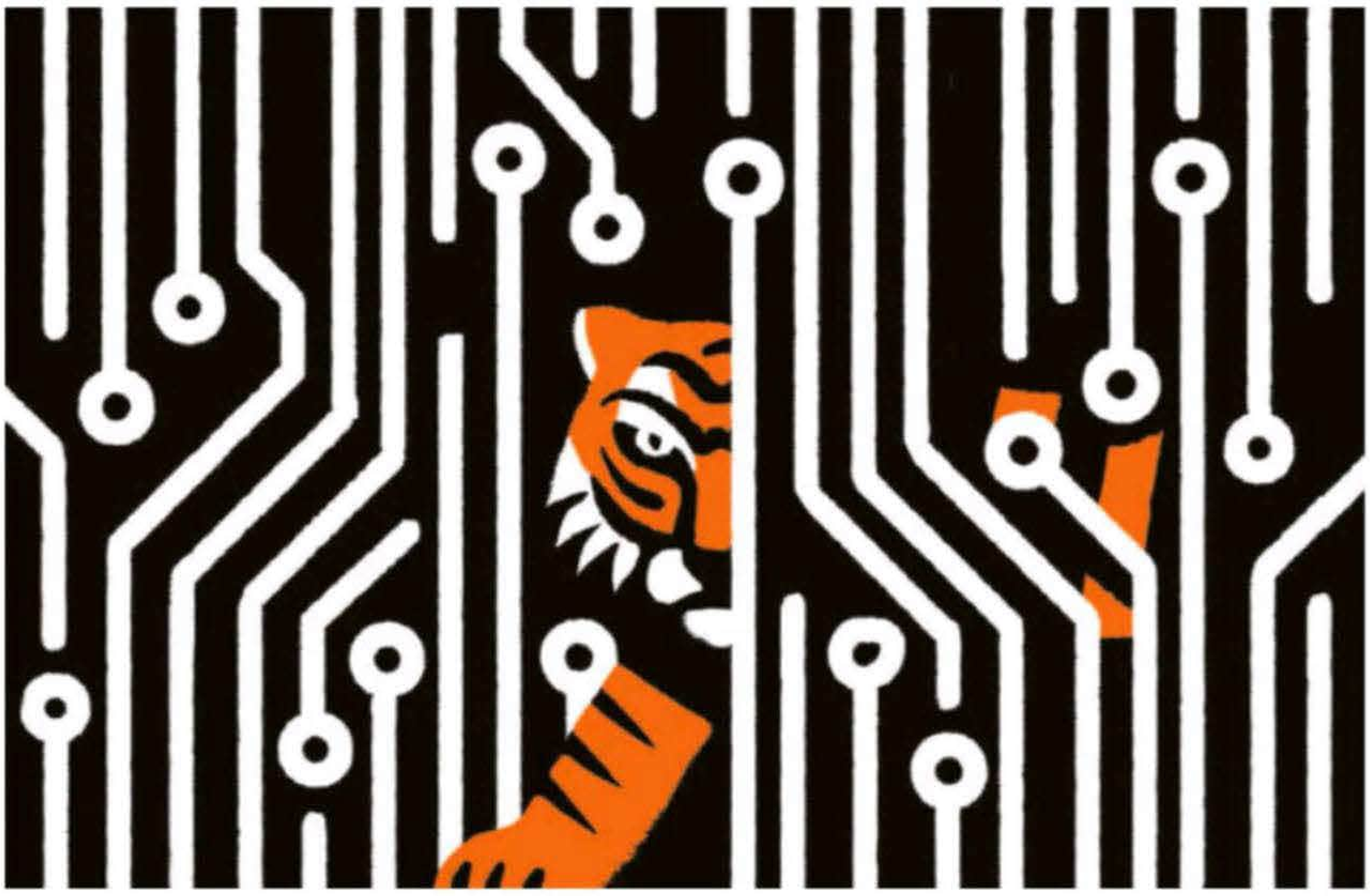
No choking matter

Few people in Taiwan are aware of how close and regular the PLA patrols are. Since 2020 Taiwan's defence ministry has published daily updates on air activity around the island, including maps of Chinese warplanes' locations. In 2022 it added updates on the number of PLA naval vessels operating "around Taiwan". But it does not specify what types of ships, where they go, or for how long. The government may be worried that too much disclosure would damage Taiwan's public morale or economy, says Admiral Tang.

The PLA's increased patrols are straining Taiwan's navy. China has twice as many frigates and ten times as many destroyers. Taiwan often has to deploy 25-50% of its combat vessels just to match China's patrols, according to Cheng-kun Ma and Tristan Tan, a pair of Taiwanese defence researchers. "They give you extreme pressure, pressure, pressure. They're trying to exhaust you," says Admiral Tang. A government audit found that more than half of Taiwan's main warships had fallen behind on regular maintenance.

As the PLA Navy presses closer to the island, Taiwan is focused on avoiding confrontation. "The PLA is trying to force Taiwan to make mistakes," says Admiral Tang, and looking for "excuses" to trigger a blockade. That is why Taiwan's military leaders issued new rules of engagement this year that define ethical and legal use of force in self-defence: "We restrain our guys, not to provoke or escalate."

Even as Taiwan's armed forces practise restraint its leaders are working with allies on how to keep sea lines of communication open in case of a blockade. Taiwan is also seeking international help to resist Chinese pressure. Japan's navy conducted a transit exercise through the Taiwan Strait for the first time in September, as did naval ships from Australia, New Zealand and Germany. America's navy sails through it several times a year. The exercises send a signal to China that the strait is international territory. The Chinese authorities protest. But they show no sign of loosening the anaconda's squeeze. ■



Indian technology

Putting the AI in Mumbai

MUMBAI

India lags behind America and China in AI. But it has a unique opportunity to lead

HINDI IS THE world's most widely spoken language after English and Mandarin. Yet it constitutes only 0.1% of all freely accessible content on the internet. That is one obstacle to India developing its own generative artificial-intelligence (AI) models, which rely on vast amounts of training data. Another is that Hindi is spoken by less than half the country. More than 60 other languages have at least 100,000 speakers. Data for some of them simply do not exist online, says Manish Gupta, who leads DeepMind, Google's AI arm, in India. Natives of those languages stand to miss out on the AI revolution.

Generative AI tools such as ChatGPT, a chatbot, are powered by large language models, or LLMs. The "language" bit is crucial: without a corpus of data it is impossible to make models, whether large or tiny. That is one reason why, two years into the new AI race triggered by the launch of ChatGPT, India has yet to produce any noteworthy AI innovations. But behind the scenes the government, non-profit outfits, Indian startups and global tech giants are working to adapt the technology to the country's needs. The pace and scale of their success will influence India's progress in the coming century. It will also offer lessons for other developing countries.

There are two big reasons for India to develop its own AI capabilities. First, as a rising power it is wary of depending on foreign technology. Second, it could be transformative for development. "The real value comes from how you apply these technologies to make a difference to people," says Nandan Nilekani, a tech grandee.

For a better sense of India's AI challenges—and opportunities—consider the analogy of cooking dinner. The raw ingredients for AI are data. In the absence of a well-stocked pantry India is doing the equivalent of growing its own food. AI4Bharat, a research lab at the Indian Institute of Technology in Chennai, has sent people across the country to manually collect voice recordings in 22 languages. Google is doing something similar. Both feed into Bhashini, a government project to create a translation system for Indian languages.

Textual dysfunction

GPT-4, accuracy score in question-and-answer test, selected languages, 2023, %

Source: OpenAI

Next, the data are blended, simmered and seasoned using a recipe known as a model. Models can be huge, with lots of ingredients and many complicated steps, or they can be relatively straightforward. The recipes behind ChatGPT or Google's Gemini are enormous. But for India's purposes, simpler ones may suffice. One idea is to use open-source models, such as Meta's Llama, as a base sauce, and then add ingredients or tweak the techniques according to local needs. Sarvam AI, a startup in Bangalore, is going down this route.

Lastly, cooking requires the skilful harnessing of power. Just as turning ingredients into food depends on the application of heat, so AI relies on specialised computer chips. The sort needed to build and run sophisticated AI models are expensive and in short supply globally. Earlier this year the government said it would acquire 10,000 of them at a cost of 50bn rupees ($600m) to make computation power available at subsidised prices. And Indian innovators are exploring other types of chips that may be better suited to their purposes.

What, then, will all this effort produce? As in the West, the most visible products will at first be chatbots. The difference is that these will be tailored to immediate, practical uses, revolving around translation and simplifying dealings between citizens and the state. Moreover, Indians use the internet largely as an audiovisual, rather than textual medium. So Indian AI products, unlike Western ones, will be voice-first or exclusively voice-based.

Take form-filling, which can seem like India's national pastime. Allowing citizens to verbally answer questions in their own language, which a machine inputs into forms, would widen access and remove middlemen. Automating checklists for compendious compliance rules or bots that assist in interpreting requirements could make the process less soul-crushing. "For the first time with UPI [a home-grown digital-payments system] we can say something in India is better than the rest of the world. But the truth is that every other damn thing is not better," says Vivek Raghavan, a co-founder of Sarvam. AI, he reckons, "has the ability to flatten that, if everything became easier to do".

AI could also help in areas such as education and health. One study in 2022 found that less than half of Indian students in year five could read at the level of year two. The health-care system, too, is in dire shape. Cheap, mass-scale personalised tutors could start tackling the crisis in learning. Systems that help in interpreting lab results, assist in diagnoses, or take on administrative work could free up doctors to see more patients. The sclerotic justice system could be sped up by automating some of the procedural tasks that take up as much as half of judges' time.

Many of these challenges exist across the developing world. With a few notable exceptions, non-European languages are poorly represented online. India's advantage will come not from pushing at the boundaries of AI, but from solving chronic, basic problems of the sort rich countries no longer think about. India has a unique perspective that could enable it "to build out the next set of AI-led companies in many more categories than exist," says Dev Khare of Lightspeed Venture Partners.

All this echoes the country's approach to "digital public infrastructure", its name for technology platforms backed by the government and built upon by private companies. India has invested in identity systems, digital payments, data management and open protocols, all built at a low cost. The success of these efforts at home has prompted the government to promote their use abroad as a means of winning goodwill and projecting power. If Indian techies can find ways to train and run AI systems frugally, that expertise, too, will be attractive to other developing countries.

India's AI success is by no means guaranteed. Some are sceptical of the government's 10,000-chip plan: the state has a poor record of using its research-and-development resources effectively, and the idea that bureaucrats would decide which projects are worthy is unappealing to many. The use of small models to solve big problems remains untested. And even if India lines up the ingredients, recipes and power it needs, it still faces a severe shortfall of chefs. According to the Takshashila Institution, a think-tank in Bangalore, 8% of the world's top AI researchers are from India. The proportion of them that actually work in India rounds to zero. ■

Asian diplomacy

No longer showing up

SINGAPORE

America is losing South-East Asia to China

EIGHT YEARS ago Barack Obama spent several days in the twilight of his presidency in Laos. He bought a coconut from a roadside stall, visited holy sites, then sat through two days of stultifying summitry. But when Asian leaders once again convene in Laos on October 11th, President Joe Biden will not be there. He is skipping the East Asia Summit, an annual meeting of 18 countries, for the second year in a row. Antony Blinken (pictured), his secretary of state, will represent America instead.

A big part of Mr Obama's "pivot to Asia" was a promise to join the East Asia Summit every year. Chaired and hosted by a rotating cast of South-East Asian leaders, the summit gives the region's politicians an opportunity to set the agenda and tell the American president what they think of his policies. It sent a signal that America would listen to small countries, and drew a contrast with China, which has a habit of hectoring its neighbours at the meeting. The year that America joined the East Asia Summit, Hillary Clinton, Mr Obama's secretary of state, joked that "half of diplomacy is showing up."

America's disengagement from Asia's top multilateral institution is partly the result of conflicts in Europe and the Middle East that have diverted its attention. But it is also deliberate. The Biden administration has mostly stopped trying to persuade the region of its position on China in talking-shops like the East Asia Summit. Instead it is focused on working with countries that already share its perspective, such as Australia, India and Japan, which along with America make up the Quad, a security grouping. Mr Biden hosted their leaders at his home last month.

But South-East Asia remains at the geographic and economic heart of the competition between America and China, so ignoring it carries risks. For the first time this year an annual survey of politicians, civil servants and business leaders by the ISEAS-Yusof Ishak Institute, a think-tank in Singapore, found that if forced to align with either America or China, South-East Asian elites would choose China.

Besides diplomacy, there are three reasons for this. First, American protectionism and industrial policy are alienating South-East Asia. America offers no new access to its market in free-trade agreements. Tariffs are upending established trade patterns. "Derisking" measures are driving up costs as supply chains split into two.

Second, South-East Asians have begun to question whether American policy on Taiwan is driving up the risk of conflict. America has always struck a careful balance on the self-governing island. It works to deter Chinese plans to retake it by leaving open the possibility of an American military response, while discouraging Taiwanese leaders from moving towards independence and thus provoking China.

But South-East Asians fear that America might be departing from this line. A visit to Taiwan in 2022 by Nancy Pelosi, the former speaker of the House, raised tensions in ways that South-East Asian states found dangerous. Mike Pompeo, who was secretary of state under Donald Trump, has said that America should support Taiwanese independence. If Mr Trump returns to government, Asian officials will worry more.

Third, America's backing of Israel in its conflict with Hamas has cost it support among Muslims and young people in the region. Many see a double standard between America's condemnation of China's persecution of Uyghurs and its support for Israel's bombing campaign in Gaza. So unpopular has Mr Biden become among Malaysians that its leader, Anwar Ibrahim, is said to be relieved that the American president is skipping the summit in Laos. ■

Not stepping up

China

The Communist Party

A fear of falling

China's Communists have now been in power longer than the Soviets. But worries of a Soviet-style collapse keep Xi Jinping up at night

IN LATE SEPTEMBER workers erected a new structure in Tiananmen Square. It is 18 metres tall, resembling a basket of fruit and flowers. Similar floral-themed displays have sprung up across Beijing in celebration of the 75th anniversary on October 1st of the founding of Communist China. This one bulges with giant peaches and gourds—symbols of long life. But China's leader, Xi Jinping, worries about how long-lived his party's rule will be.

Amid the festivities, state media have avoided mention of another milestone that this year's National Day represents. At the time of the Soviet Union's collapse in 1991, Communists had been in power for 74 years in Moscow. The Chinese Communist Party has now surpassed "big brother", as it once called the Soviet Union. When that empire disintegrated, the bloody suppression of the Tiananmen Square protests in 1989 was a recent memory. With ruthless resolve China's party crushed opposition and kept itself safe from the shock waves emanating from Moscow.

Now in his speeches Mr Xi frets about how officials' vigilance has been weakened by years of prosperity, raising the dangers of Soviet-style decay. Even after a dozen years in power, during which he has carried out purges of potential rivals from the party's senior ranks and waged relentless ideological campaigns to ensure the absolute loyalty of its nearly 100m members, Mr Xi appears far from satisfied.

The past few years have been tough. First came the chaotic abandonment in 2022 of Mr Xi's "zero-covid" policy. Since then there has been an anaemic economic recovery which has prompted a desperate attempt to revive growth with attention-grabbing stimulus measures (see Finance & economics section). Amid the gloom, reminders of the Soviet collapse have kept coming up in speeches, the media and party meetings. The purpose has not been to suggest that the country's immediate difficulties might topple the party, but to caution officials to be on their guard against long-term, persistent dangers.

At the end of 2021, around the 30th anniversary of the Soviet collapse, party officials began convening internal meetings to air a five-part documentary about it. The series railed against "historical nihilism", party-speak for criticism of the horrors of Stalinism and Maoism. It accused the Soviet leader, Nikita Khrushchev, of setting the trend with his "secret speech" of 1956 denouncing Stalin's personality cult. This "ignited the fire of nihilism", intoned the narrator. From then on, the documentary implied, the Soviet party was living on borrowed time. The viewings continued for weeks at government offices, state-owned firms and on campuses.

In October 2022, at a five-yearly party congress, Mr Xi hinted at the anxiety that the Soviet collapse still causes among China's elite. "We must always stay alert," he told the gathering, "and determined to tackle the special challenges that a large party like ours faces so as to maintain the ▸▸

people's support and consolidate our position as the long-term governing party."

The phrase "special challenges of a large party" has since become a leitmotif of party propaganda, much of it referring to the experience of the Soviet party, the only other big one that China truly cares about. Since the party congress, numerous books have been published with those words on the cover, including at least three this year. Academics have churned out papers on the topic. In July state television broadcast a two-part documentary on avoiding collapse, with part one on the special-challenges theme. Officials again organised viewings for party members.

Mr Xi has also kept on using the special-challenges term. It was the subject of a classified speech he gave in January 2023 to the party's Central Committee. Part of it was published in March this year. "As the party grows larger, some may form small cliques or factions or engage in behaviour that undermines party unity and fighting strength," he said. "A fortress is most easily breached from within. The only ones who can defeat us are ourselves." Most analysts agree that there are no obvious splits in the party today, but their possible re-emergence clearly worries him.

In August Mr Xi mentioned Soviet history again. The occasion was the 120th anniversary of the birth of Deng Xiaoping, the leader who launched China's "reform and opening" policy in the late 1970s. He praised Deng for "resolutely opposing the turmoil" in China in 1989 "against the background of the disintegration of the Soviet Union and dramatic changes in Eastern Europe". He quoted Deng as saying: "No one can crush us."

In the vast body of literature that China has produced since the 1990s on the Soviet collapse, a shift in emphasis has occurred under Mr Xi. Deng's supporters used the Soviet Union's fate as a way of pushing back against ideologues in the party who saw his economic reforms as a betrayal of Marxism. Similar dogmatism, they argued, had wrecked the Soviet economy, fuelling public discontent that hastened the country's fall. In essence, this was the message of Deng's "southern tour" of early 1992 that relaunched his reform programme.

Mr Xi appears more fixated on the Soviet party's loss of ideological and organisational discipline. This is evident in the huge effort he has made to rebuild the party at the grassroots, to beef up its presence in private firms and to enforce total obedience to his commands among party members. After the Soviet collapse Deng and his immediate successors abandoned talk of political reform but still tolerated limited experiments, such as allowing small NGOs to help victims of injustices. Mr Xi, in contrast, has crushed civil society. Chinese academics make clear why, arguing that Western-backed NGOs played a role in pushing the Soviet party over the edge.

China's propagandists prefer not to dwell on a problem that is common to autocracies: how to ensure a smooth transfer of power when a leader steps down or dies. In 2010, two years before Mr Xi took over, a book published in China—"The Truth About the Soviet Union: 101 Important Questions"—included analysis of its succession strife. During Communist rule in Moscow, it said, the choice of leaders was determined by "brutal internal power struggles, decided by a handful of elders behind the scenes or even resolved through party coups".

Mr Xi appears not to have drawn the lessons. He has shown no interest in grooming a successor and has changed unwritten rules to allow himself to lead for as long as he likes. The eventual transition to a post-Xi China may again evoke memories of the Soviet Union's turbulent history. ■

Nuclear weapons

Making a sPLAsh

A missile test by China raises concerns in America

THE LAST time China fired an intercontinental ballistic missile (ICBM) out over the Pacific, Xi Jinping was 27 years old, China's GDP per head was less than $200 and America had just lifted an arms embargo on the country. So the missile that rose from Hainan island on September 25th—carrying a dummy warhead and plunging into the waters around French Polynesia, some 12,000km to the east—was a mark of China's soaring nuclear ambitions.

The test comes at a time of heightened tensions in the region. On the same day as the launch, a Japanese warship sailed through the Taiwan Strait for the first time—a move that irked China, which claims both Taiwan and the strait (see Asia section). The two events are unlikely to be related, with the missile test probably planned well in advance. The warship was on its way to military exercises in the South China Sea, where Malaysia, Vietnam and the Philippines (an American treaty ally) are challenging China's territorial claims. With its aggressive behaviour, China is "testing us all across the region", President Joe Biden told the leaders of Australia, India and Japan on September 21st, in what he thought were private remarks.

Mr Biden's intelligence analysts are busy studying the nature and timing of China's missile test. It probably involved the DF-31AG, a nuclear-capable ICBM that is carried and fired from large lorries that can go off-road—the better to hide from American satellites. (If fired from China's new silos, it could strike anywhere in the continental United States.) For the past 44 years every Chinese ICBM test has been conducted inland, usually in the Gobi desert. But the range for such tests is less than 3,000km. In order for China to test the missiles at their full range, without them flying over other countries, it must fire them into the Pacific. Such tests ensure that the warhead's re-entry vehicle works as it should.

China may also have hoped to re-establish the credibility of the Rocket Force of the People's Liberation Army (PLA). Five current or former commanders of the force were removed from their political roles in December amid reports that corruption had resulted in missiles loaded with water

Not very pacific

instead of fuel. But more embarrassing news came a day after the missile test when the *Wall Street Journal* reported that China's most advanced nuclear attack submarine sank in May while sitting at a pier in the city of Wuhan. The sub, which was not yet in service, is likely to be salvaged and repaired. The cause is unknown.

Sunken vessels aside, American intelligence analysts are worried. In a report published last year, the Pentagon said that China was implementing a "launch on warning" policy, meaning it would fire its own nuclear missiles at the first sign of a nuclear strike—not after incoming nukes had landed, as would be the case under China's declared policy of "no first use". During the recent test, China may have hoped to assess how a missile crew would fare using a mobile launcher in an unfamiliar coastal location, says Decker Eveleth of CNA, an American think-tank. Working under such conditions might be expected in a "launch on warning" scenario.

The Pentagon report also said that China had 500 "operational" nuclear warheads (though many of these are thought to be at storage locations some distance from missiles). That is around twice the number it was thought to have had three years earlier. American officials estimate that China will have 1,000 warheads by 2030 and 1,500 by 2035. America has around 1,770 deployed warheads, and several thousand in reserve. "I see a lot of intelligence, but I've never seen anything that says they intend to stop at parity," said Lieutenant General Andrew Gebara, the US Air Force's deputy chief of staff for strategic deterrence, in September, referring to the deployed-warhead numbers. "Why would they?"

Nuclear doves retort that these assessments are overheated and uncertain. At present, America far outmatches China in overall warhead numbers. China, meanwhile, faces constraints on getting the fissile material needed to build new warheads. "It is far from certain that the future pace of China's arsenal growth will be constant," says Fiona Cunningham of the University of Pennsylvania.

America's defence department tends to see things differently. It admits to having underestimated the pace of China's advances. When crafting America's nuclear modernisation programme over a decade ago, the growth and diversification of China's arsenal were "something we neither anticipated nor accounted for", said Vipin Narang, then the department's top nuclear official, in August. But in this new nuclear age, he said, China's progress would be the "defining feature". ■

Chaguan, our China column, has been suspended. Our goal is to reinstate it when we have a new columnist resident in Beijing.

The dairy industry

Udder pressure

BEIJING

Chinese farmers are drowning in unwanted milk

MILK IS "INDISPENSABLE for a healthy China and a strong nation". So said officials in 2018 when they launched a campaign to supercharge the country's dairy industry. They wanted to boost China's food security by cutting its reliance on imported milk. At the same time, they hoped that the Chinese would become fitter by consuming more dairy products, which are rich in protein and calcium. Officials gave farmers subsidies to increase their herds of cows. They urged state propagandists to "nurture the habit of consuming dairy products".

The campaign has achieved some of its goals. Since it began, China's milk production has risen by a third. Last year the country's cows yielded 42m tonnes of the stuff, surpassing a government target two years early. But the public has not fallen in love with milk. The average Chinese person still consumes only about 40kg of dairy products a year. That is a third of the global average and less than 40% of what China's health authorities recommend.

Because production has outpaced consumption, China's dairy farms are awash in unwanted milk. As a result, they have been forced to lower their prices by 28% since August 2021 (see chart). At the end of September, one kilogram of raw milk sold for 3.14 yuan (45 cents) on average. That is below the cost of production for many farms. Most have been losing money since the second half of last year, reckons Lu Shi of StoneX Group, a financial-services firm.

Why aren't Chinese people consuming more dairy products? For a start, many are genetically predisposed to be intolerant of lactose, a sugar found in milk. Outside areas like the Mongolian steppe, where nomads have long herded cattle, dairy products are not a big part of traditional Chinese diets. In the 19th century some Chinese were shocked by the love of milk displayed by visiting Westerners. "In many places our practice of drinking it and using it in cooking is regarded with the utmost disgust," wrote an American missionary at the time.

These days Chinese parents are much more likely to tell their children to drink milk. Dairy companies sponsor the country's Olympic athletes. But dairy products have not become staples. Chinese consumption is largely limited to milk and yogurt. Butter and cheese, which account for lots of milk production in other countries, are unfamiliar in many parts of China. Most people still "don't understand the culture of cheese or how to appreciate it", grumbles Liu Yang, a cheesemonger in Beijing.

Chinese people are even less likely to buy exotic foodstuffs at the moment because of the ailing economy and its effect on incomes. Meanwhile, a baby bust has reduced demand for infant formula (made from cow's milk).

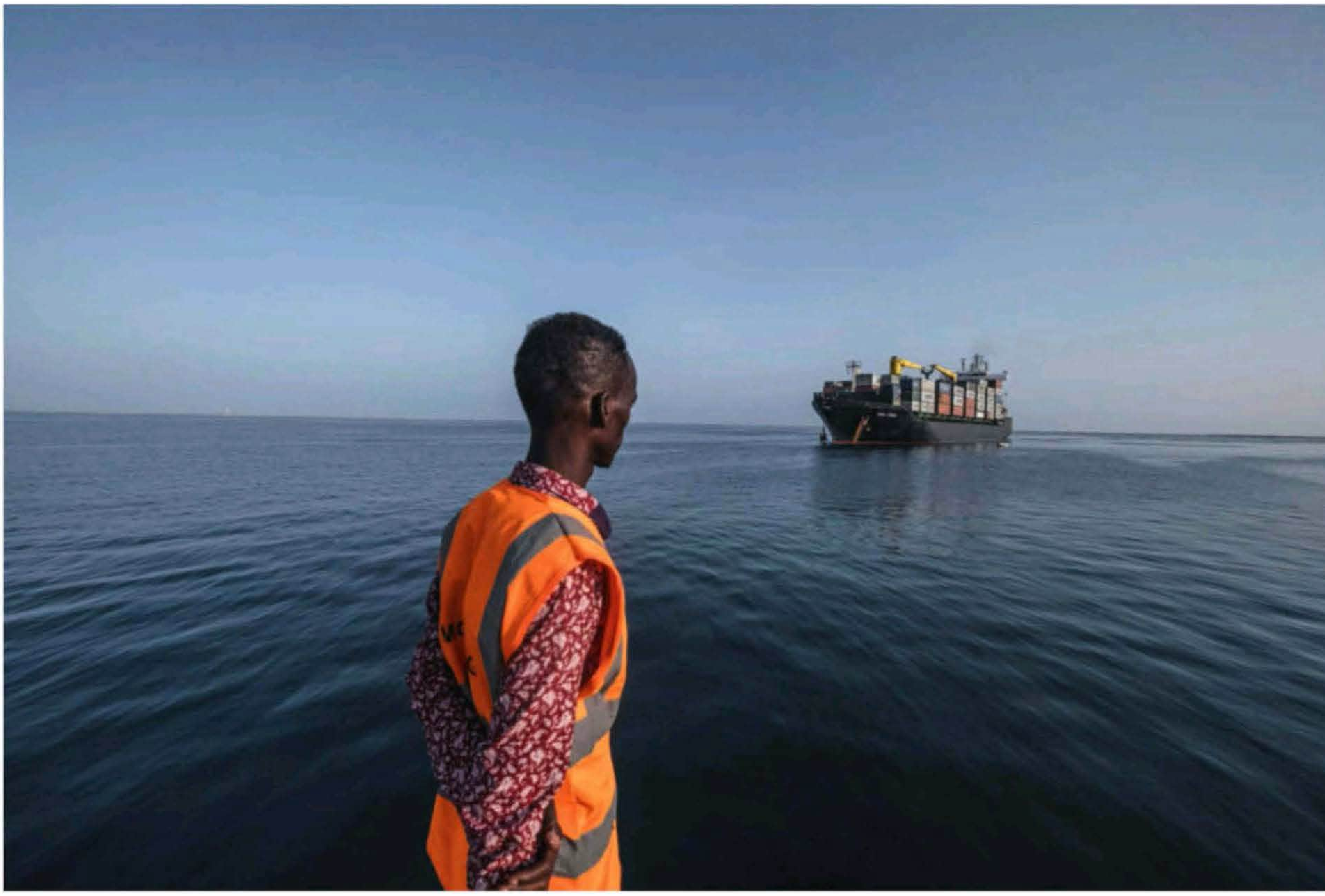
When Chinese firms produce too much stuff for the domestic market, they often export it. But selling Chinese dairy products overseas is tough. Because China has to import much of its cattle feed, the cost of production is high by international standards. Chinese dairy products have a poor reputation, too. Memories linger of a scandal in 2008 when Chinese companies were found to be adding melamine, a dangerous chemical, to their milk powder. Six babies died and hundreds of thousands fell ill.

All this leaves Chinese dairy farmers in a bind. Some are reportedly dumping milk. The state is trying to help by encouraging banks to extend more loans to farmers and to accept cattle as collateral. Officials have also called for raising public awareness of the health benefits of dairy products. But Li Shengli of the China Dairy Association thinks the problem is too many cows. In comments published by state media last month, he called for culling 300,000 of them.

Something to cry over

China, average raw milk price, yuan per kg

Sources: Ministry of Agriculture and Rural Affairs; Wind



The Horn of Africa

Looking for trouble

MOGADISHU

A worsening quarrel between Ethiopia and Somalia over port access is rocking a fragile region

FEW PARTS of the world are more turbulent than the Horn of Africa, the continent's north-eastern chunk that contains Somalia, Djibouti, Ethiopia and Eritrea. It has been racked by war between Ethiopia and Eritrea, by civil war in Ethiopia, and by war and state collapse due to a prolonged jihadist insurgency in Somalia. Outside powers, particularly those from across the water in the Gulf, vie for the Horn's loyalties and resources.

In recent months the situation has grown even more alarming than usual. A tense stand-off over port access has pitted Ethiopia against Somalia and Eritrea, and is drawing in regional powers, including Egypt, Turkey and the United Arab Emirates (UAE). With no sign of an early resolution, the dispute threatens further strife across the Horn by fuelling regional rivalries within Somalia and strengthening al-Shabab, the jihadist group terrorising much of the country and its neighbours.

The port dispute began in January, when Ethiopia signed a memorandum of understanding with Somaliland, a self-declared breakaway republic that is not recognised by the UN or any other country. Under the agreement Ethiopia, which lost its direct access to the sea in 1993, when Eritrea seceded, would lease a stretch of coast from Somaliland on which to build a naval base. In return, it would be the first country to recognise Somaliland since it declared independence more than three decades ago.

Somalia, which regards Somaliland as part of its own territory, was furious. Hassan Sheikh Mohamud, Somalia's president, lays the main blame on Abiy Ahmed, Ethiopia's prime minister. "Abiy is the bad guy in the region," Mr Mohamud told *The Economist* on September 30th in Mogadishu, Somalia's capital. "Today everyone is worrying about the unpredictable behaviour of the Ethiopian leadership."

Initially, much of the region was inclined to agree with him. Following the memorandum, both the African Union (AU) and the Intergovernmental Authority on Development, the east African regional bloc, put out statements in support of Somalia's "territorial integrity". So did America and the EU. Turkey, Somalia's sturdiest foreign investor, promised to send troops to help defend Somalia's maritime borders. Mr Mohamud "managed to put Abiy on the defensive", notes a veteran AU diplomat. Ethiopian officials began wavering over their commitment to recognise Somaliland, suggesting that Abiy had agreed to consider the matter only after the terms of the naval base had been settled.

This political victory for Somalia might have provided a way to avoid confrontation. Yet observers have recently been alarmed by Mr Mohamud's own escalatory manoeuvres. In June he threatened to expel thousands of Ethiopian peacekeepers stationed in Somalia as part of an AU mis- ▸▸

sion to fight al-Shabab, an al-Qaeda affiliate that controls swathes of the countryside outside Mogadishu. Then in August he visited Egypt to sign a military co-operation agreement with President Abdel-Fattah al-Sisi. Egypt pledged to send Somalia weapons and possibly, though Mr Mohamud would not confirm this, several thousand troops in a new AU peacekeeping mission which is due to begin next year. Two Egyptian arms shipments have since arrived in Mogadishu.

Playing with fire

Many foreign diplomats and analysts see the security pact as a dangerous escalation, given the hostile relations between Ethiopia and Egypt. Those two countries have been locked in a bitter dispute ever since Ethiopia began building its Grand Ethiopian Renaissance Dam, a giant hydroelectric project on the Blue Nile near its border with Sudan in 2011. Egypt, which relies on the Nile for almost all its water supply, views the dam as an existential threat and once threatened to bomb it. Last December it said talks to reach a compromise were "dead".

Ethiopia also worries about Somalia's increasingly cosy relationship with Eritrea. One motive for Abiy's deal with Somaliland was the collapse of a previous understanding with Eritrea that Ethiopia might gain access to the Red Sea via its northern neighbour's ports. Understood to be part of the peace deal between the two countries in 2018, for which Abiy was awarded the Nobel peace prize, the agreement appeared to disintegrate in the wake of Ethiopia's civil war in 2022. The deal between Ethiopia and the Tigrayan People's Liberation Front (TPLF) that ended their civil war angered Eritrea, which was also fighting against the TPLF.

Amid those disputes, Ethiopia's deal with Somaliland has prodded Mr Mohamud to find common cause with Issaias Afewerki, Eritrea's dictator since independence in 1993. This year Issaias has twice hosted the Somali president in Asmara, Eritrea's capital. Like Egypt, Eritrea has might send troops to take part in the AU's next peacekeeping mission in Somalia. Eritrea and Egypt are reportedly also discussing a military co-operation and intelligence-sharing agreement. If such talks result in a formal tripartite alliance, Ethiopia would be further isolated.

It would also entrench the division of the Horn into two geopolitical blocs. Egypt, Eritrea and Somalia are most closely aligned with Saudi Arabia and Turkey. They all back the regular Sudanese army in that country's civil war. On the other side are Ethiopia, Somaliland (plus some of Somalia's regional statelets) and the Rapid Support Forces, the paramilitary group battling the Sudanese army. They are under the tutelage of the UAE, which seeks to expand its influence around the Red Sea.

So far, Abiy has been characteristically defiant. On September 8th he proclaimed, rather ominously, that Ethiopians "usually embarrass and repel those who dare try to invade us". Ethiopia's army chief lambasted Egypt directly, describing it as a "historic enemy".

Mr Mohamud, by contrast, accuses Ethiopia of waging a campaign of sabotage against Somalia. He claims that Ethiopia is funnelling arms to clan-based Somali militias near the two countries' shared border in an effort to destabilise the government in Mogadishu. He says these weapons could fall into the hands of al-Shabab, boosting the jihadists. Ethiopia is also mobilising clan leaders and opposition politicians in Somalia against the potential deployment of Egyptian troops, he says. Whipping out his phone to show your correspondent photographs of river floods in Somalia, he claims they were caused by Ethiopia deliberately releasing water from reservoirs at dams upstream.

Some of these allegations are probably overblown. Omar Mahmood of the International Crisis Group (ICG), a think-tank in Brussels, notes that the trade in illegal arms across the Ethiopian border long predates the MOU between Ethiopia and Somaliland. Likewise, the government's fight against al-Shabab, which made some progress in the months after Mr Mohamud took office, had already started to lose momentum last year, as Somalia's ill-trained national army struggled to hold onto towns it had won back.

Still, it is plausible that Ethiopia might give succour to Somali regional leaders who are opposed to Mr Mohamud—if it has not done so already. Several of Somalia's statelets, in particular South West, close to the capital, are at odds with the president over his agreement with Egypt. Some might happily strengthen relations with Ethiopia as a hedge against his government, which they find overbearing.

Such conflict could further undermine Somalia's control of its own territory, hardly solid at the best of times. Mr Mohamud suggests that, if pushed, he could stir up disaffected ethnic Somalis living in Ethiopia. "It would be very easy [...] to scratch their grievances," he says.

The risk of direct war between either Ethiopia and Somalia or between Ethiopia and Egypt remains low. Somalia's army is too weak to confront Ethiopia head-on. Abiy is too busy fighting insurgents in Ethiopia's Amhara region to take on Egypt. More worrying is the prospect of a fresh conflict between Ethiopia and Eritrea. If a boxed-in Abiy should attack Eritrea to take control of its Red Sea ports, "the chance of war on that front cannot be ruled out," says an Ethiopian analyst.

But even without all-out war, the dispute over the ports could easily worsen stability throughout the region. Talks between Ethiopia and Somalia, mediated first by Kenya and more recently by Turkey, have made little progress. A new round that was originally planned to be held in September has been postponed indefinitely. "A naval base on Somalia's territorial waters is a red line we can never accept," insists Mr Mohamud.

Mind the jihadists

Abiy, for his part, has a record of dragging out negotiations while establishing "facts on the ground". He also appears to have the UAE's support. In private, Emirati officials have told their Western counterparts they have no interest in seeing an Ethiopian naval base, and would prefer Ethiopia to use an Emirati-owned port in Somaliland's coastal town of Berbera. But many observers (including, judging by heavy hints to *The Economist*, Mr Mohamud himself) reckon Ethiopia already has at least tacit support from the UAE. Few in the region expect Abiy to back down. "Maritime access is his calling," says another Ethiopian analyst.

Time is short. The new, slimmed-down peacekeeping force to keep fighting al-Shabab in Somalia is supposed to be ready by January 1st. Mr Mohamud says that if the MOU between Ethiopia and Somaliland is not scrapped by then, Ethiopian peacekeepers must leave. America, in particular, does not want untested and diplomatically contentious Egyptian or Eritrean forces to replace them.

That risks jeopardising the mission altogether. "There is a serious risk of a physical security vacuum opening on the ground which al-Shabab can fill," warns the ICG's Mr Mahmood. Even more reason for all the sides to get talking. ■

Correction: Last week we said that a game-hunting reserve in Tanzania is now known as Nyerere National Park. The reserve for hunting remains outside the national park, where hunting is banned. Sorry.

Europe

Spain

In office, but not wholly in power

MADRID

Pedro Sánchez clings on at a cost to his country's democracy

"WE WILL MOVE forward determinedly...with or without the help of the legislature," Pedro Sánchez, Spain's prime minister, told a meeting of his Socialist Party earlier last month. To his more excitable critics, this sounded like a declaration of dictatorship. In fact, it was a recognition of his embattled circumstances. In office since 2018, Mr Sánchez is the great survivor of European politics, a wily and ruthless tactician. But his minority coalition government rules at the pleasure of Catalan and Basque radical nationalists, and at a growing cost to the quality of Spain's democracy and its institutions.

After the left took a drubbing in local elections, Mr Sánchez called a snap national poll in July 2023. The mainstream conservative People's Party (PP) won, but even with the support of Vox, a hard-right outfit, fell six short of a majority of the 350 seats in parliament. Rejecting the broad coalition with the PP that many voters preferred, Mr Sánchez instead decided to carry on by stitching together the backing of eight assorted parties.

One of those was Junts, the party of Carles Puigdemont, a former Catalan regional president who has been a fugitive from justice since an illegal bid to break away from Spain in 2017. His price was an amnesty for all those involved in the independence bid. Mr Sánchez had always opposed this. But he complied, ramming it through parliament by five votes.

Now he is poised to offer another concession to Catalan nationalism. In return for securing the installation of Salvador Illa, a Socialist, as the regional president in Barcelona, Mr Sánchez promised Esquerra, another separatist party, what amounts to fiscal sovereignty for Catalonia, one of Spain's richest regions. As with the amnesty, this is a "constitutional reform through the back door", as a sceptical former Socialist minister puts it. Since it means less money for the common pot, it has aroused more grumbling than the amnesty.

The amnesty is the only important measure the government has got through parliament in its ten months in office. It failed to win approval for this year's budget and is unlikely to do so for next year. To make matters worse, Begoña Gómez, the prime minister's wife, is being investigated by a judge. She denies wrongdoing, and Mr Sánchez claims she is a victim of political persecution. But many question how she obtained university posts for which she is not obviously qualified. In a seemingly ill-advised step, she signed a letter of support for a friend bidding for a government contract. When this scandal broke, rather than apologise, Mr Sánchez blamed the "far right" and said he was considering whether political life was worth it. He subjected Spaniards to a five day "period of reflection", only to resume work.

None of this means he is in imminent danger. Unseating a Spanish prime minister requires assembling a parliamentary ▸▸

→ ALSO IN THIS SECTION

majority for an alternative, a harder challenge than just winning a no-confidence vote in parliament, as is the case in many other countries. Alberto Núñez Feijóo, the PP's leader, recently told *El Mundo*, a newspaper, that a censure motion was "as essential as it is impossible". Although some senior Socialists privately express disquiet with the concessions to separatists, only a couple do so in public. Mr Sánchez has an iron grip on his party which resembles a fan club, says one member.

The prime minister can point to achievements. Since 2018 he has boosted the minimum wage and cut the abuse of temporary contracts without hurting employment, which is growing fast. He has expanded vocational training. After suffering worse than its neighbours in the pandemic, the economy has grown at more than double the euro-zone average since 2023. Some of the growth comes from a post-pandemic boom in tourism, which shows signs of faltering, and some from the EU's covid-recovery fund, which runs out in 2026, and from an expansionary fiscal policy that cannot last. But Spain has strengths that point to resilience, as Ignacio de la Torre of Arcano, an asset manager, notes: it has a relatively high savings rate and a healthy current account surplus, boosted by growing exports of services, such as data management and engineering consultancy.

Mr Sánchez's biggest asset is an ineffective and divided opposition. Mr Feijóo, formerly a successful regional president in Galicia, has struggled on the national stage. Although Vox is slowly declining, the PP's potential dependence on its parliamentary votes means that other parties shun it. A new nativist outfit, propagated by social media and called The Party's Over grabbed 4.6% of the vote in June's election for the European Parliament.

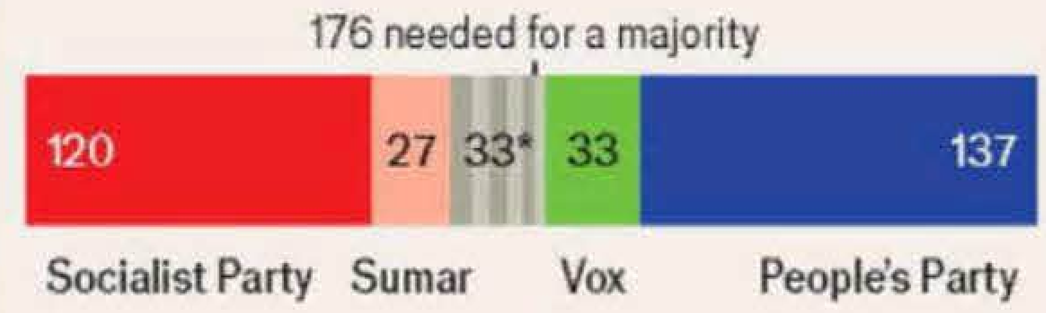
Many in Madrid think Mr Sánchez can last out a full term until 2027. But the lack of a budget may narrow his options. If the right remains split three ways and with the economy strong, he may be tempted to call an election next summer, thinks Cristina Monge, a political scientist.

His dependence on Catalan and Basque nationalists carries a cost. "Sánchez has broken an unwritten rule that you couldn't become prime minister with the votes of parties that don't believe in the stability and governability of the country," says Borja Sémper, the PP's spokesman. Mr Sánchez's abrupt U-turns on matters of state purely in order to remain in office have contributed to entrenched public cynicism about Spanish democracy.

He claims to have ended separatist agitation in Catalonia. Certainly, his pardoning in 2021 of nationalist leaders jailed for the breakaway bid was sensible. But he has gone further than many observers think

Fractured centre

Spain, parliament, October 2nd 2024
Seats in the lower house



*Esquerra Republicana (7); Junts (7); EH Bildu (6); Basque Nationalist Party (5); Podemos (4); others (4)
Source: Spanish Congress of Deputies

wise. He has weakened the penal code: in documents signed with Junts and Esquerra, his party endorsed the nationalist narrative of recent history. The sweeping nature of the amnesty (which applies to rioters as well as politicians) and its narrow approval without much public debate flew in the face of the recommendations of the Venice Commission, a European consultative body on the rule of law. It still faces various legal challenges.

Mr Sánchez has also placed political appointees in supposedly independent jobs, such as in the Constitutional Tribunal and the Bank of Spain. He has instructed the state lawyer to sue the judge investigating his wife. "Traditionally Spain has suffered from some weaknesses in checks and balances," says Elisa de la Nuez, a campaigner for the rule of law. "In recent years that has got much worse."

The prime minister did not invent the political fragmentation that makes the country so hard to govern. He could argue that he is adapting the political system to changed realities, especially in Catalonia. Others see a shift towards an ill-defined confederation, and tactical tinkering while the country drifts. ■

Austria's election

To the victor, no spoils

Other parties will gang up against the hard-right Herbert Kickl

USUALLY, COMING top in a general election would make you a popular person in your capital. But Vienna was different this week. Despite Herbert Kickl's win by a solid margin, with 29% of the votes on September 29th, no other political party wants to run the country with him and his hard-right Freedom Party (FPÖ). The governing centre-right People's Party (ÖVP) came second with 26%, and is trying to avoid exactly that.

Coalition talks will take weeks, if not months, but their likeliest outcome is a coalition of the ÖVP with the Social Democrats (SPÖ), who got 20% of the vote, and the liberal NEOS, with 9%. The two would together have just enough to form a "grand coalition", because around 6% of the votes went to parties such as the Beer Party and the Communist Party that did not reach the threshold of 4% needed to enter parliament. Yet a majority of just one vote in parliament is likely to be deemed too fragile by both Karl Nehammer, the ÖVP's incumbent chancellor, and Andreas Babler, the leader of the SPÖ.

"The ÖVP decides the next government," says Kathrin Stainer-Hämmerle of the Technical College in Kärnten. Other than forming a three-way coalition, it could indeed form a government with the FPÖ. But Mr Nehammer has vowed not to join any government with Mr Kickl in it (he has left open the option of forming a government with the FPÖ but without its leader). Moreover, Alexander van der Bellen, the Austrian president, strongly prefers a three-way coalition without the FPÖ, as do the employers' association and the unions. After the election Mr van der Bellen emphasised that the next Austrian government must protect human rights, support Austria's membership of the European Union and respect the media's independence. Critics of the FPÖ say the party falls short on all three counts.

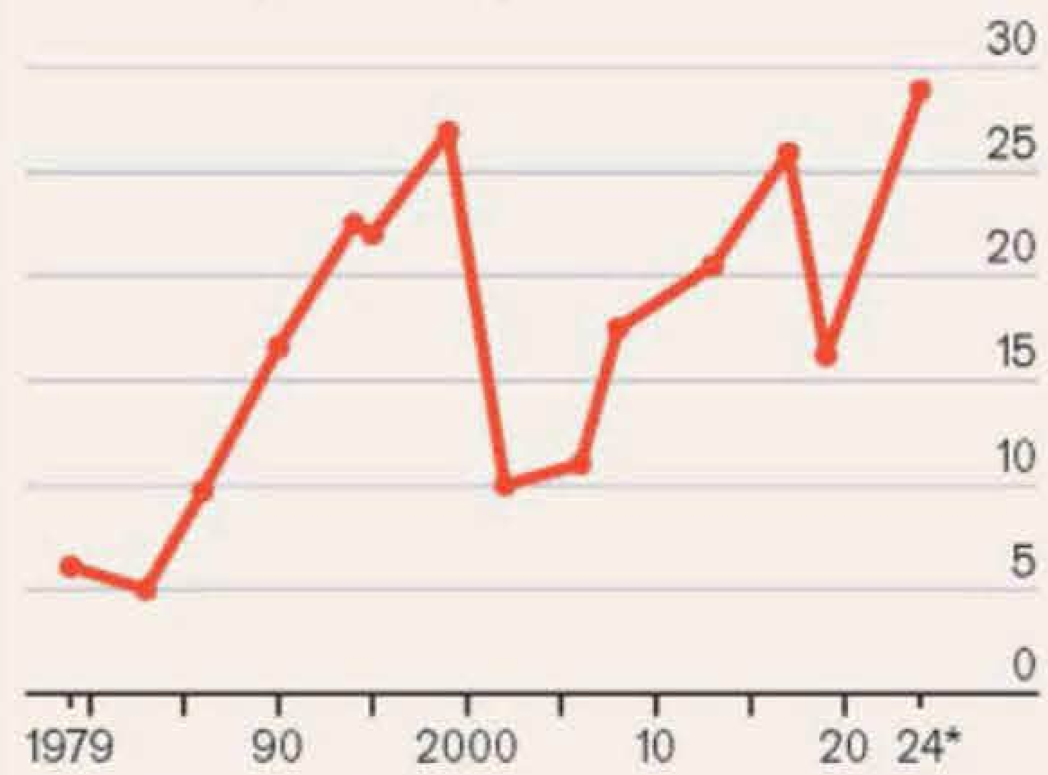
Unlike in neighbouring Germany, where the chancellor is elected by parliament, Austria's president names the country's chancellor. Although the president is not constitutionally obliged to nominate the leader of the party that got the most votes, that is usually the case. Mr van der Bellen, who hails from the Green Party, has a visceral dislike of Mr Kickl and has said in the past that he might indeed not nominate him if he won.

Mr Kickl has declared that his role model is Viktor Orban, the Hungarian leader who has turned his country into a quasi-autocracy since coming to power in 2010. Mr Kickl is likewise anti-immigration, anti-Islam and strongly Eurosceptic, and refuses to condemn Russia's invasion of Ukraine. His electoral programme, "Fortress Austria", calls for ending political asylum entirely, which would breach EU rules.

But the People's Party and the Social Democrats are also uneasy bedfellows. The former moved to the right under Sebastian Kurz, Mr Nehammer's predecessor, while the latter has moved to the left under Mr Babler, whom Mr Kickl has called "a lazy, unpalatable Marxist". (Mr Kickl has also called Mr van der Bellen "a little bit senile" and his political opponents a "swingers' club"). On economic policy, for example, the ÖVP is closer to the FPÖ than to the SPÖ. Some parts of the SPÖ's programme, such as the introduction of a 32-hour work week or an inheritance tax, are unacceptable to the ÖVP. If the SPÖ

Up and down but never gone

Freedom Party of Austria (FPÖ)
% of vote in parliamentary elections

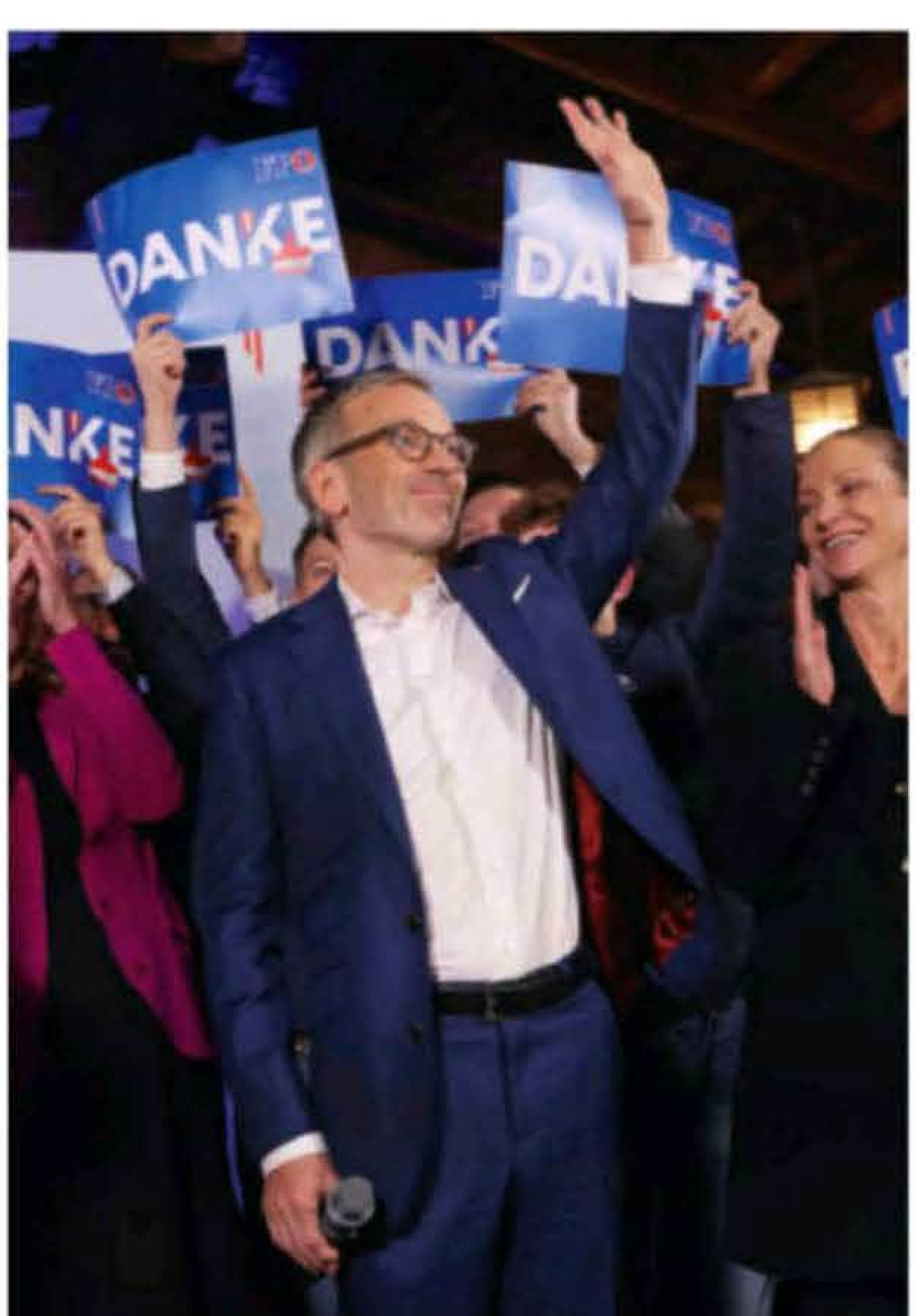


Source: Austrian Interior Ministry *Provisional

drops these demands, the ÖVP will need to agree to other SPÖ policies, such as reform of the education system.

Expect weeks of tortuous talks. Vorarlberg is holding a state election on October 13th and Styria votes on November 24th. The FPÖ might come first in both, which will further bolster its power in state parliaments. The party is already also part of the state governments of Upper Austria, Lower Austria and Salzburg.

A draft coalition agreement is expected by early December, followed by fine-tuning over the holidays. Mr van der Bellen will probably name the new chancellor at the start of the year. Mr Nehammer will run the country until then, and probably for longer at the head of a three-party coalition. But if that three-way team performs as poorly as the one in next-door Germany, it will play into Mr Kickl's hands. Although the wiry Carinthian is unlikely to be the next chancellor, that does not mean he will never get his dream job. ■



Herbert Kickl's moment

Ukraine's Roma

Hoping for better

UZHHOROD

Half of them may have fled

THE WAR in Ukraine has shattered its Roma community. At least half of its pre-war population has fled abroad. That is a vastly higher proportion of refugees than among Ukrainians at large. Eleonora Kulchar, the director of a Roma refugee shelter in Uzhhorod in the country's west, says that many have gone "for a new and better life, because they were discriminated against here and poor". Few expect them ever to return. Many of them lack passports or identity cards, so may never be able to, because they cannot prove they are Ukrainian citizens.

On an unpaved street in Uzhhorod's Radvanka district children laugh and play, a rare sight in Ukraine, where it is unusual for couples to have more than one child. But Ukraine's Roma still tend to have large families. Some of the children are barefoot. Houses in the Roma area are ramshackle. Many are not connected to mains electricity and gas. Several are empty, their windows broken, their owners long gone.

Myroslav Horvat, a Roma member of Uzhhorod's local council and a community leader, says that before Russia's full-scale invasion in February 2022 there were about 3,000 Roma in the area. Today he estimates there are only about 1,500, including refugees from elsewhere in Ukraine.

No reliable data exist on Roma numbers. Unofficial estimates before the invasion varied from 200,000 to 400,000. Activists and academics reckon that at least half have since fled. Roma have always lived all over the country, but the province of Transcarpathia, of which Uzhhorod is the capital, has traditionally been home to a large community.

Ms Kulchar's shelter is hosting 64 people, many of whom sleep crammed in a room that used to be a restaurant. She opened it five days after the Russian attack, when Roma refugees arriving in Uzhhorod were turned away from shelters opened for the rest of the population. Since then, she says, some 3,000 have passed through her doors. Most have since left the country.

A horse trots by, drawing a cart carrying the skeleton of a washing-machine. Roma scavenge through Uzhhorod's rubbish bins, taking food and anything that can be recycled. Roma are discriminated against elsewhere and find it hard to get jobs, but Uzhhorod's municipal rubbish company has long been an exception. Yet now, says Mr Horvat, many Roma don't want to work for it because they fear military press-gangs which, he said, had even "taken people from the garbage trucks".

Many Roma have fought and died to defend Ukraine. A recent report by the Roma Foundation for Europe, a lobby backed by the EU and George Soros's Open Society Foundations, found that a quarter of families surveyed had family members serving. The war has upturned the lives of millions but Roma, overwhelmingly poor and ill-educated, have been among the hardest hit. Many lack proper documents to deal with officialdom and get access to welfare. The report found that a third of the respondents said their family's finances were in crisis.

Dima, who sells bric-a-brac in Uzhhorod's flea market, says he has seven children, so he should have had a dispensation from the army which exempts men from service who have three or more children. However, when the war began, he and his wife were not married, and he could not prove that their children were his. The army has now agreed that he should be exempt, but its database has not been updated, so if he were to be picked up, he could be sent off to war.

In the first weeks of the conflict Ukrainian border guards let Roma men flee when other men could not. Now the army is desperate for more men and will grab the likes of Dima, who says: "They don't care how many children you have!"

Mykola Palinchak, who teaches at Uzhhorod university, says low levels of education mean that many Roma have in the past been in thrall to community "barons" to whom they would turn for help to get official papers and to find work. This opened the door to exploitation, he says. In recent years, though, the power of the "barons" has been declining thanks to the spread of American-backed evangelical churches which have brought aid to people whom Ukraine's mainstream churches have mostly ignored.

In 2021 the Ukrainian government adopted a plan to help its Roma people combat discrimination. But in the wake of the war it is unlikely to have enough money to spend on it. Meanwhile, anti-Roma attitudes and prejudices die hard. Ukrainian parents still warn their children that if they are naughty "they will be given to the Gypsies in Uzhhorod." ■

Dutch politics

In the Wildersness

AMSTERDAM

The Dutch elected the hard right and got a mess

THE *MS GALAXY 1* once ferried passengers between Finland and Sweden. Since 2022, the massive ship has been moored in Amsterdam, where the city leases it as accommodation for 1,500 asylum applicants, 500 of them already approved. The boat is not bad, says Haymar Nyein, a Myanmar opposition activist who came on a UN study tour of The Hague and requested asylum in July after images of her protesting in Yangon made it risky to go back.

She may be on the ship for a while. For years the Dutch government has declined to build enough asylum centres, forcing municipalities to find housing. A painstakingly negotiated deal was supposed to start spreading applicants around the country next year. But the hard-right government that came to power in June plans to scrap that deal. On September 13th it announced a governing programme promising "the toughest asylum policy ever".

Dick Schoof, the new prime minister, faces a series of baffling policy conundrums. He is a non-partisan former civil servant picked as a compromise: the anti-Muslim Party for Freedom (PVV) came first in the election, but two centre-right coalition partners, the Liberals and New Social Contract (NSC), ruled out the PVV's leader, Geert Wilders, as prime minister. The PVV got the immigration ministry, and has demanded a complete halt to asylum procedures. That would violate immigration law, so it wants to declare an asylum emergency and set the law aside for now.

That proposal caused a firestorm in parliament on September 19th. The government claimed that civil servants had approved its legality, but when the opposition forced it to hand over the assessments, most were withering. The constitution allows states of emergency only for urgent crises such as a dyke break, says Lisanne Groen, a law professor at Amsterdam's Free University; asylum could be handled under normal legislation. The NSC, a year-old party that detests government overreach, will not back an unconstitutional plan. But Mr Wilders suggests that in that case he might bring down the government.

Another set of problems involves agriculture. In 2019 a court ruled that Dutch farmers' nitrogen emissions (chiefly from the country's vast numbers of livestock) violated EU nature-protection laws. Plans by previous governments to solve this with buy-outs were fiercely opposed by many farmers. Their political champion, the Farmer Citizen Movement (BBB), is the new coalition's smallest partner. The BBB agriculture minister, a former contestant on the reality-television show "Farmer Seeks Wife", has ditched the old plans, but she has yet to come up with any new ones.

Then there is manure. A derogation granted by the EU in 2006 lets Dutch farmers spread more of it on their fields than normally allowed; but it expires in 2025. The cost of shipping cow, pig and chicken dung to disposal sites would put many farmers out of business. The agriculture minister is lobbying the European Commission for an extension. Should that fail, "we're heading for an implosion of the sector," says Harm Holman, an NSC MP.

There is little reason to think that the EU will grant exceptions. The Netherlands faces no migration crisis: its asylum numbers are about average for the EU. The coalition's plans on housing and climate are mostly skimpy or counterproductive. Many Dutch wonder whether it will make it to Christmas. But Mr Wilders's PVV is at 27% in the polls, higher than at the election. He might not mind another one. ■

Rape in France

Consent on trial

PARIS

Courage and horror in a French courtroom

FOR FIVE weeks a harrowing rape trial taking place in a courtroom in the southern town of Avignon has shaken France. Dominique Pelicot, a retired 71-year-old, stands accused of drugging his then wife, Gisèle, raping her, inviting dozens of other men recruited online to rape her too while she was unconscious, and of filming them, all over a period of nine years. The trial, due to run until December, has opened French eyes to the horror of chemical submission and to what appears to be a disturbing misunderstanding of what constitutes rape, as well as to the remarkable courage and dignity of a woman who decided to make her ordeal public. French law on rape may now be changed as a result.

Mr Pelicot has pleaded guilty, telling the court "I am a rapist" and asking his former wife for forgiveness. Some of his 50 co-defendants, aged between 26 and 74, with varied backgrounds and professions, seem less clear. According to a count by *Le Monde*, a newspaper, 35 of the accused have contested the charges, arguing that they were not aware that they were committing rape. "Did you ask yourself whether she had agreed?" asked the presiding judge of one of the accused. "I never asked myself that question," he replied.

Mrs Pelicot's courage in deciding to waive her right to anonymity has been widely applauded. Each day she enters the court house, supporters clap. Gifts and messages of support have been sent from around the world. "Shame has to switch sides," her lawyer's words as the trial began, is now a campaign slogan. Only 6% of victims of rape, attempted rape or sexual assault in France file a police report, according to a survey by the interior ministry in 2022.

The case has put the crucial #MeToo question of consent at the centre of debate. French law defines rape as any sexual act committed "by violence, coercion, threat or surprise". It includes no explicit reference to the need to obtain consent. On September 27th Didier Migaud, the new justice minister, said that he is open to writing consent into French law.

Consent-based rape law already exists in Germany, Britain and other European countries. After Sweden introduced it in 2018, accompanied by a campaign to stress that "Sex is always voluntary; if not, it's a crime," reported cases of rape surged, as did convictions. After a stomach-churning French trial, reform of the law would be a vindication.

CHARLEMAGNE
Crying wolf

How the wolf went from folktale villain to culture-war scapegoat

For centuries an ancestral fear has haunted the bedtime stories and the ensuing dreams of Europe's children: the wolf. A devourer of youngsters wandering in folktale forests, the stealthy carnivore once loomed large in the public imagination. Modernity put paid to the dread peddled by the Brothers Grimm. By the early 20th century wolves had all but disappeared from Europe, driven to extinction by poaching and loss of habitat. But in recent decades a remarkable resurgence has been lauded by green campaigners as a form of ecological atonement: the first step to reversing centuries of man-made environmental carnage. Rural types, more likely to hear lupine howls in the dead of night and to find mutilated livestock and pets come morning, are less enthused. The wolf is now dividing Europeans, rather than eating them, as they argue over whether humans should once again share their cramped peninsula with a rival predator.

Humans still rule the European roost. But the return of the wolf has been startling. From a few isolated packs at the start of this century, there are now an estimated 20,000 wolves at large, from Spain to Poland. The number has roughly doubled in the past decade alone; wolf packs can now be found prowling and howling in every country in mainland Europe. Unlike America, which deliberately reintroduced wolves to some regions, the increase has been natural. In large part that is down to strict wildlife protections enacted in the late 1970s at European level. But wolves benefited from the retreat of humans in other ways. When borders fell—notably the iron curtain that once divided Europe—wolves migrated from east to west. The shift of population from the countryside to cities left more forests for wolves and their prey. As humans left, in other words, wolves took their place.

For environmentalists the lupine return is welcome not just because it marks the return of a native species. As "apex predators", wolves play a cascading role in fostering biodiversity. Their presence helps regulate the population of the deer and boars they naturally feed on. This culls the weakest members of their prey, checking disease that might one day affect humans. By keeping such grazers on the move, wolves also give a chance to trees and plants that would otherwise get devoured, resulting in a more varied landscape. Leftovers of their feasts provide food for scavengers. With wolves around, ecological systems once regulated by man—for example by issuing more hunting permits if deer populations get out of hand—are now the purview of nature instead.

The trouble is, wolves are unfussy about their diet, and are as likely to eat farm animals or pets if that is what is at paw. They attack an estimated 65,000 sheep, goats, cows and horses every year. Though that is a tiny fraction of the continent's livestock—well below 0.1% in the case of sheep—it has produced lots of local angst. Farmers are already convinced they live in polities misruled by urban types with little clue about what happens beyond the suburbs (they also have a knack for protesting and plenty of manure on hand to make their point). That the issue is dealt with at European Union level scarcely reassures them: being forced by some distant Eurocrat to cohabit with wolves is to add insult to neglect. City slickers who will happily vote for culls of pigeons lest one poop on their cargo-bike now cheer the reintroduction of wolves that terrorise rural folk and prey on their livelihoods.

The rural-urban culture war has, predictably, been fanned by politicians on the hard right. Alternative for Germany, a party that usually focuses its outrage on migrants, has demanded "rapid action" to control wolves. What was once a fringe debate in EU circles became a *cause célèbre* in September 2022 when a wolf was found to have killed Dolly, the 30-year-old prized family pony of Ursula von der Leyen, president of the European Commission, at her home near Hanover. In what has turned out to be the unwisest PR move since preying on Little Red Riding Hood, wolves soon came into the political cross-hairs. Mrs von der Leyen is said to have a picture of Dolly in her office, and pushed the cause of wolf-culling up the political agenda.

She now seems likely to get her way. On September 25th a majority of the EU's 27 national governments agreed with the commission that the protection accorded to wolves should be downgraded, from "strictly protected" to merely "protected". It is not quite open season on wolves: further haggling will now be needed to formally revise the relevant wildlife-conservation act. But campaigners are delighted by this rare victory for the countryside. Hunters, who resent wolves chasing the same game as them, have lauded the prospect of new "coexistence tools" with wolves—a polite way of saying they look forward to shooting lots more of them.

Not by the hair on my chinny-chin-chin

Ecologists decry a decision they say reflects bad politics and worse science. In much of Europe wolf populations are fragile—and would crash without the protection that is now being partly withdrawn. The threat posed by wolves is overdone: there is no evidence of one seriously harming a human since they made their comeback. Yes, the prowlers kill the odd farm animal, but guard dogs and fencing do a reasonably good job of keeping them out (and are subsidised, on top of compensation for mauled herds).

Ultimately the battle is one over the role not just of wolves, but of humans. Rural people identify with ancestral efforts to tame the land, to transform the frontier into settled pastures fit for unmolested human occupation. Giving a once-defeated foe a chance to reassert itself is inexplicable, they think, like inviting a convicted burglar back into your house. Why volunteer for that? Yet there may be sense in the seeming madness: it is something about keeping us humans on our toes, a reminder that we are part of the environment we live in, not its undisputed master. ■

Britain

The opposition

Tory Benn

BIRMINGHAM

The cult of the member grips the Conservative Party

TONY BENN died in 2014 as a socialist hero to the left. But he is remembered by his opponents within the Labour Party for a singularly bad idea: the cause of "party democracy". Labour, Benn reckoned, was "riddled with the same aristocratic ideas as deface our national democracy". From the 1970s on, he battled to make its MPs beholden to the wishes of its card-carrying members. To his critics, that inverted the party, placing the whims of its activists above those of the wider electorate it was bound to serve.

The Conservative Party appears to be in the grip of a similar disorder. Four candidates—Kemi Badenoch, James Cleverly, Robert Jenrick and Tom Tugendhat—paraded their wares at its annual party conference in Birmingham this week. This quartet will soon be reduced by MPs to two, with the winner to be selected in November by the Tory membership. The influence of that party selectorate helps explain why the Tories are now afflicted by the habits that characterised the old Labour left—a veneration of the membership and deep ideological stubbornness. Call it Tory Bennism.

The conference thus echoed with the grovelling of Conservative MPs, not to the British people for 14 years of patchy governance, but to the membership for its worst defeat (in seats and vote share) since 1832. "I am profoundly sorry to you, the members of the Conservative Party," said Richard Fuller, the chairman, opening proceedings on September 29th. "It wasn't this party that failed, it wasn't the ideas that failed, it was the centre that failed. They all let you down," echoed Mr Tugendhat. A sorrowful Mr Jenrick vowed he would "return the party to the service of the membership".

At Mr Fuller's instigation, members debated with shadow ministers from the conference floor, restoring a tradition abolished in 1999. "At last the party is putting free speech into action!" trilled Sir Jacob Rees-Mogg, a former minister. The candidates lined up to take potshots at the much-resented spotty graduates who run Conservative Campaign Headquarters (CCHQ). Local associations, all candidates promised, would be able to pick their own candidates for Parliament and end what Mr Jenrick called "parachuting in of the favoured sons and daughters of the leader, the special advisers, the press officers from Number 10".

Mr Tugendhat said that the chairman of the National Convention, a gathering of voluntary party bigwigs, should attend the shadow cabinet "so we can hear from him directly what members think". Ms Badenoch said that members should see the minutes of the party's board. Such minutiae once obsessed only the Labour left.

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The scenes in Birmingham were a partial replay of the response to the party's previous defeat in 1997, says Tim Bale, a historian of the party, when party high-ups sought to assuage grassroots members who were angry at defeat and irritated by CCHQ. William Hague, the then leader, responded by granting Tory members a vote on the leadership, a choice that had previously been the preserve of MPs. Lord Hague now regrets this, since it did not create the mass membership he had hoped to encourage.

Instead the ranks of the Tory faithful have become thinner—the data are opaque but membership was 172,000 at the last leadership vote in 2022—and more radical. For Bennites, the right to kick out Labour MPs was essential as a way of forcing them to obey conference resolutions. Some on the Tory fringes have similar ambitions.

Claire Bullivant of the Conservative Democratic Organisation, a group born of members' anger at the ousting by MPs of Boris Johnson in 2022, told delegates of plans for an app that would exploit the party rule book; this would trigger special branch meetings or constitutional conventions if enough members registered their disagreement "on every policy, every decision, daily". It would, she said, "ensure that our MPs who we send to Westminster aren't Lib Dems wearing blue rosettes".

This is another Bennite trait: the pursuit of purity over power. In 1983 Benn notoriously declared that Labour's crushing defeat in the general election that year was in fact a "remarkable development", since "a political party with an openly socialist policy has received the support of over 8.5m people". At this week's conference Ms Badenoch declared she was excited by opposition and reckoned that insufficient conservatism was the problem, for "when we went after Labour votes, we lost our own". In Mr Jenrick's analysis, the Tory party needs more "religion"; it must have candidates "who are actually Conservatives to their core".

That is a recipe for ossification. Mr Jenrick, widely seen as the front-runner in the leadership contest, announced at the conference that he would create a "New Conservative Party" but the platform is wearily familiar. He promises to leave the European Convention on Human Rights, an idea that he says will "finish what Brexit started" but which has divided the party for over a decade. He proposes legislating for a cap on migration at tens of thousands a year, iron-cladding a target that David Cameron tried and failed to meet.

He proposes a more sceptical position on net zero, to reboot the Rwanda deportation scheme and to get tough on woke institutions—all positions that were at the heart of the 2024 manifesto. If there is any deep new thinking among the Tories about Britain's chronically low productivity and overstretched public services, it wasn't in evidence at the hustings.

This inward turn is a cause for quiet satisfaction in Labour circles. Sir Keir Starmer buttered up Labour Party members in his own leadership campaign in 2020. But his project for power has since rested on ridding Labour of Bennite thought (promulgated most recently by Jeremy Corbyn, Sir Keir's predecessor as leader) and downgrading the fetishes of activists with the mantra "country first, party second".

So far, there is not a glimmer of so ruthless a turn against the membership among the Tories. "Where is the change candidate? Where's the person writing the articles saying they need to change from top to bottom?" mused Pat McFadden, Sir Keir's right-hand man, last month. Bennism condemned Labour to years in opposition. It's not obvious why it would work any better for the Tories. ■

Politics

Party time

BIRMINGHAM, BRIGHTON AND LIVERPOOL

Britain's party conferences are very odd and very male

THERE ARE bow ties and waistcoats, blazers and cigars. The men have pink faces, smooth cheeks and the air of people who would get bread rolls thrown at them in an Evelyn Waugh adaptation. Almost everyone looks as though they were bullied at school, or at the very least should have been. Absolutely everyone seems drunk. It is evening at the Tory party conference.

Tribal gathering

Party conferences are an annual ritual of British politics. The shtick is simple. Each autumn London's political class decamps, en masse and in turn, to regional cities like Birmingham, where they are joined by party members, as well as assorted lobbyists and journalists. Having found themselves somewhere so alarmingly provincial, they promptly hide from the locals behind high fences and police cordons; drink warm white wine; attend talks with titles like "Getting our railways back on track: Will public ownership deliver the change we need?"; and worry that other people are having more fun than they are. Which—given that they are in a seminar on rail ownership in Birmingham—is a reasonable concern.

Such behaviour is striking enough to have attracted anthropological attention. A French study from 2005 of British party conferences approached them with the curiosity of a Victorian naturalist and heavy use of words such as "liminal". It found that British conferences are indeed unusual. They stand out for their size (the Tories' was said to be the largest in Europe); their frequency (most countries don't do this annually); and the attention paid to them by the media (which has admittedly dwindled; in the 1970s the BBC offered live TV coverage from 9.30am).

History helps explain them. The first party conference was held in 1867 by the Tories. The Second Reform Act was about to give the vote to 1m or so more people and Tory MPs felt it might be a good idea to meet some of them. Not, note, to listen to them. If other people despise Tory activists, that is nothing to how the Tory politicians have historically tended to feel about them. Arthur Balfour, who was prime minister in 1902-05, said he'd "rather take advice from my valet than from the Conservative Party Conference". Tories only really had to listen to members after 1998, when they got the power to pick their leaders.

There are two ways to think about this exodus from Westminster, which pauses parliamentary business for three weeks. The first is that conference season is a sober meeting of political minds. Here, policy can be debated, leaders chosen and reputations made—or broken. Sir Tony Blair, a former Labour leader and prime minister, said that giving his conference speech filled him every year for 13 years with "agony, consternation [and] madness".

Conference season is also a serious opportunity to raise large amounts of money through ticket sales and sponsorships. In 2023 the Tories raised almost £7m ($9.2m) from their various conferences (smaller bashes are held throughout the year). A business-day pass to the Tory event this year cost £3,500; to reserve an exhibition stand at the Labour shindig cost up to £15,000. Some stands are worthy; some are ►►

weird. Some are both. In Liverpool Labour delegates could visit one named "Crustacean Compassion" to hear about the welfare of decapods.

The second way to look at these events is more as political cosplay. Like a Star Trek convention for people who happen to like Conservatives rather than Captain Kirk, the get-together in Birmingham offers somewhere that Tory party members can go, wear blazers and say things like "Hear hear" without fear of mockery—a safe space for people who hate safe spaces.

It's not just the Tories. Florence Faucher, the author of the 2005 study and a professor of political science at Sciences Po, was shocked to realise that you can tell which political conference is which simply "by their...ways of dressing". Tory conference was, she says, the first time she had "seen so many pinstriped suits". Labour offers bright young men in sharp blue suits who like to talk about house building.

Reform UK offers older men in straining jackets. There is a strong smell of aftershave and a faint whiff of menace. There is little political discussion but there is a disco: the men circle the dance floor awkwardly, like a wedding to which only the bad uncles have been invited. As for the Lib Dem conference, everyone is so elderly that it feels less like a conference than a care home with added lanyards. In its halls, people with raincoats and earnest expressions vote on things like "Motion F32", calling for "an immediate bilateral ceasefire" in Gaza. Doubtless Gaza will be grateful.

What there is not much of, anywhere, is women. Tories are fond of putting the question "What is a woman?" to the candidates in their leadership race. Visit their conference and it starts to seem that this might be less a culture-wars question than one of pure curiosity: there are almost none to be seen there. This year's Tory conference is "just men, men, men", says Isabel Hardman, author of "Why We Get the Wrong Politicians". She thinks this is due less to sexism than sensibility: women are "more economical" with their spare time and tend not to think that spending Sunday in an "airless hall in Birmingham" is a good use of it.

Those in the conference halls may be mildly preposterous. But they are also, in their way, laudable: democracies would work less well if there were not activists who were ready to leaflet, canvass and run raffles. They are also surprisingly powerful. Members of the Labour Party chose Sir Keir Starmer, now the prime minister, as their leader in 2020. In the past decade, two prime ministers were appointed not by the public but by the Tory faithful; in November they will elect the leader of the opposition. Britain's annual party-conference season is idiosyncratic, odd and deserving of mockery. It also matters. ■

Ukrainians

Settling in

WELWYN GARDEN CITY

The people who fled Russia's war are growing comfortable

PICKING-UP TIME at the Ukrainian Saturday school in Welwyn Garden City is much like picking-up time after any weekend activity, anywhere in Britain. Parents mill about, wondering why their little darlings are taking so long. Young children rush out and offer hugs; older ones amble. But the parents who gather in Welwyn Garden City, north of London, are a little unusual. The great majority are women. One of the few men has a prosthetic leg, having lost his own doing military service.

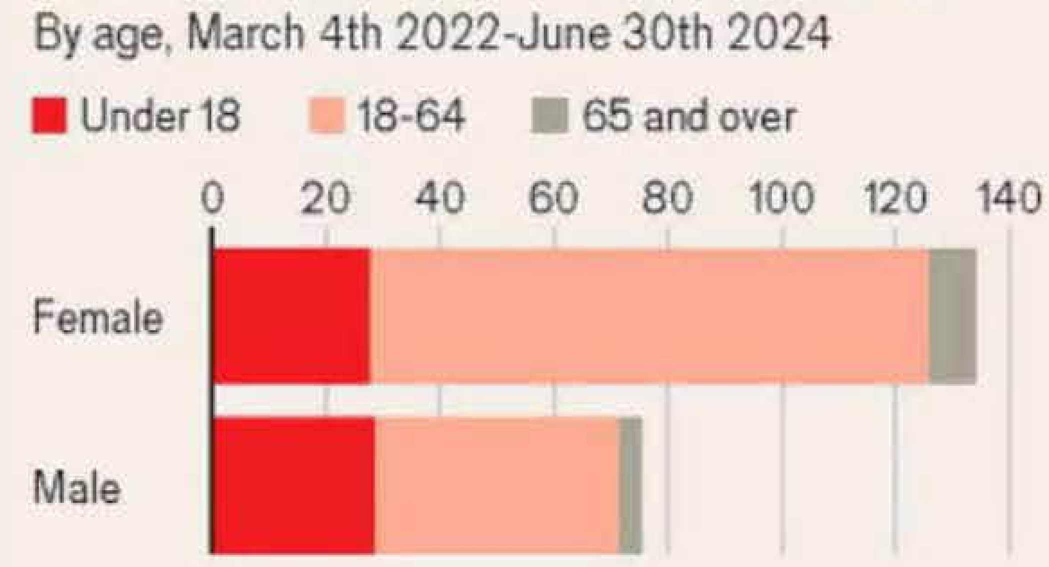
Britain is home to about 160,000 people who were born in Ukraine, up from 40,000 before the full-scale Russian invasion in 2022, according to the Migration Observatory at Oxford University. The Ukrainians are settling in quickly. They have created many institutions like the school in Welwyn, which teaches Ukraine's language, history and culture. Their growing sense of comfort is a tribute to them, and to Britain's talent for absorbing newcomers. It is also a problem for the government.

Anastasiya Sachkova, a video producer, fled Ukraine with her daughter when the war began. A British couple hosted them: unlike asylum-seekers, who are usually put up in hotels, the government allowed Ukrainians into the country if natives offered to provide accommodation for six months. Ms Sachkova gets on well with her hosts, and has continued doing her old job remotely. For a while she expected to return to Ukraine: "Everyone thought it was going to be temporary." With every passing day, it feels less so.

Two-thirds of Ukrainian adults who arrived after the war started are women (see chart); men are usually allowed to leave Ukraine only if they are old, medically unfit or have at least three children. A survey by the Office for National Statistics (ONS) found that 80% of the migrants have degrees. They tend to live in wealthy parts of Britain, where homes are large and the natives are well-disposed to refugees. Just over 1,000 Ukrainians who arrived under the government's sponsorship scheme live in the London borough of Richmond upon Thames—more than in the entire city of Leeds, which is four times as populous.

Women and children first

Britain, arrivals on Ukraine visa schemes, '000
By age, March 4th 2022-June 30th 2024



Source: Home Office

They are allowed to work, and most do. One-fifth are like Ms Sachkova, labouring remotely in their old industries. Many of the others are underemployed, often severely. One teacher at the Saturday school in Welwyn Garden City, a highly experienced pedagogue with a PhD, washes dishes for a living. But Ukrainians seem to be climbing the occupational ladder as their English improves. New Ukrainian organisations such as Kryla, in the West Midlands, run networking events and advise migrants on how to set up businesses.

Increasingly, they feel settled in Britain. The ONS survey asked Ukrainians where they would prefer to live if they believed that Ukraine was safe. In April 68% said Britain—up from 52% a year earlier. Almost half of the migrants have not visited Ukraine since they left. "We are integrated. Our children are in school. We have jobs. Some of us have boyfriends," says Olesya Romanychenko of Kryla.

Children are adapting to British life even more quickly. After the second world war Ukrainian émigrés set up a Saturday school in west London known as St Mary's (it is now planting offshoots all over Britain). For years it mostly taught British-born children about the ancestral homeland. When the new Ukrainians arrived in 2022, their fluency in the language was so superior that the school held separate classes. But the youngest migrants are already slipping. "They think in English," says Inna Hryhorovych, the executive head.

In some ways the British government has treated Ukrainians generously, allowing them to work and receive benefits including medical care. But in one sense it has been unusually stingy. Ukrainians are treated as temporary visitors, not refugees. Many were initially allowed to stay for three years, although they will soon be able to extend their visas by 18 months. After five years in Britain, most foreign workers and refugees can apply for permanent settlement, as can Hong Kongers, who entered under a special visa scheme. But Ukrainians' days in the country do not count.

These regulations were created by the last Tory government. They leave a dilemma for the new Labour one, particularly if the war drags on. Is Britain really going to tell a highly educated group of people who are rapidly settling in, whose children are forgetting how to read and write Ukrainian, and who tend to live in parts of the country where immigration is not too controversial, that they must get out? ■

BAGEHOT
The Nigerian moment

How British-Nigerians quietly made their way to the top of British society

AT AKOKO, AN upscale restaurant in central London, Nigerian staples such as moi-moi, a stodgy bean pudding, and mosa, a savoury doughnut made from overripe plantain, become fine dining. Staff shuttle steaming bowls of jollof rice across the restaurant to clients paying £120 ($160) for a tasting menu, plus another £95 for a wine pairing. (A shorter £55 lunch menu exists for the time-pressed, the tightwads and those husbanding expense accounts.) This year Akoko won its first Michelin star. It was joined by Chishuru, another Nigerian joint. Its owner, Adejoké Bakare, has gone from being a have-a-go chef working out of a temporary spot in Brixton Market in south London to a Michelin-star-winning West End mainstay in barely four years.

What is happening in food is happening elsewhere. From politics to YouTube to sport to music, members of Britain's Nigerian diaspora have established themselves in the country's elite. "That beaming West African mothers are now such a regular fixture on award-show red carpets and stages tells its own story," points out Jimi Famurewa in "Settlers", a recent memoir-cum-history of black African London. A Nigerian moment has begun.

British-Nigerians are curiously overlooked in the folk tales Britain tells itself about immigration. There is no iconic episode to match the arrival of *HMT Empire Windrush*, the boat that brought a few hundred people from the West Indies in 1948, points out David Olusoga, a historian (himself a British-Nigerian). They lack the numbers of, say, British-Indians or the geographic spread of Poles. Instead, theirs is a prosaic story of modern migration. Airplanes bearing the parents of future chefs, footballers, politicians and musicians arrived in steady numbers throughout the 1980s and 1990s. The results, however, are extraordinary.

Michelin stars are just the start of it. British-Nigerians have put their stamp on the country's music scene. Grime, probably the most influential British genre in the past few decades, was shaped by British-Nigerians. Or as Skepta, who won the Mercury Prize, a prestigious award, in 2016, put it: "I'm a badboy from Nigeria/Not St Lucia/Joseph Junior Adenuga/Big lips, African hooter." Skepta's brother, JME, is another well-known MC; their sister, Julie, is a prominent DJ. It is not just a family affair. Four of the eight Mercury Prize winners since Skepta have had Nigerian heritage.

Much of their success can be traced to geography. All the recent British-Nigerian Mercury winners were raised in London, which is the heart of the country's Nigerian population. A home in the British capital is often vital to making it into Britain's creative elite, whether that is in wealthy Hammersmith or, as in the case of the Adenugas, on a council estate in Tottenham. What is big in London becomes big in Britain. A niche genre like grime can spread from pirate radio to critical acclaim in a few years.

Bukayo Saka, a British-Nigerian who plays football for England and Arsenal, is another London boy made good. Mr Saka is the golden child of a golden generation of England players. No profile is complete without a mention of the fact that Mr Saka achieved four A*s and three As in his GCSE exams. Homework was done during the 90-minute drive from West Ealing to Arsenal's academy ground in Hale End.

That application is a typical British-Nigerian story. For a demonstration, head to any train station in south-east London during term time, says Mr Famurewa. While commuters head into central London, British-Nigerian children in oversize blazers travel often absurd distances in the other direction to outer London boroughs and Kent, which still have selective grammar schools. Not everyone can play for England but anyone can hop on the 7.30am train to Gravesend (providing they have the grades).

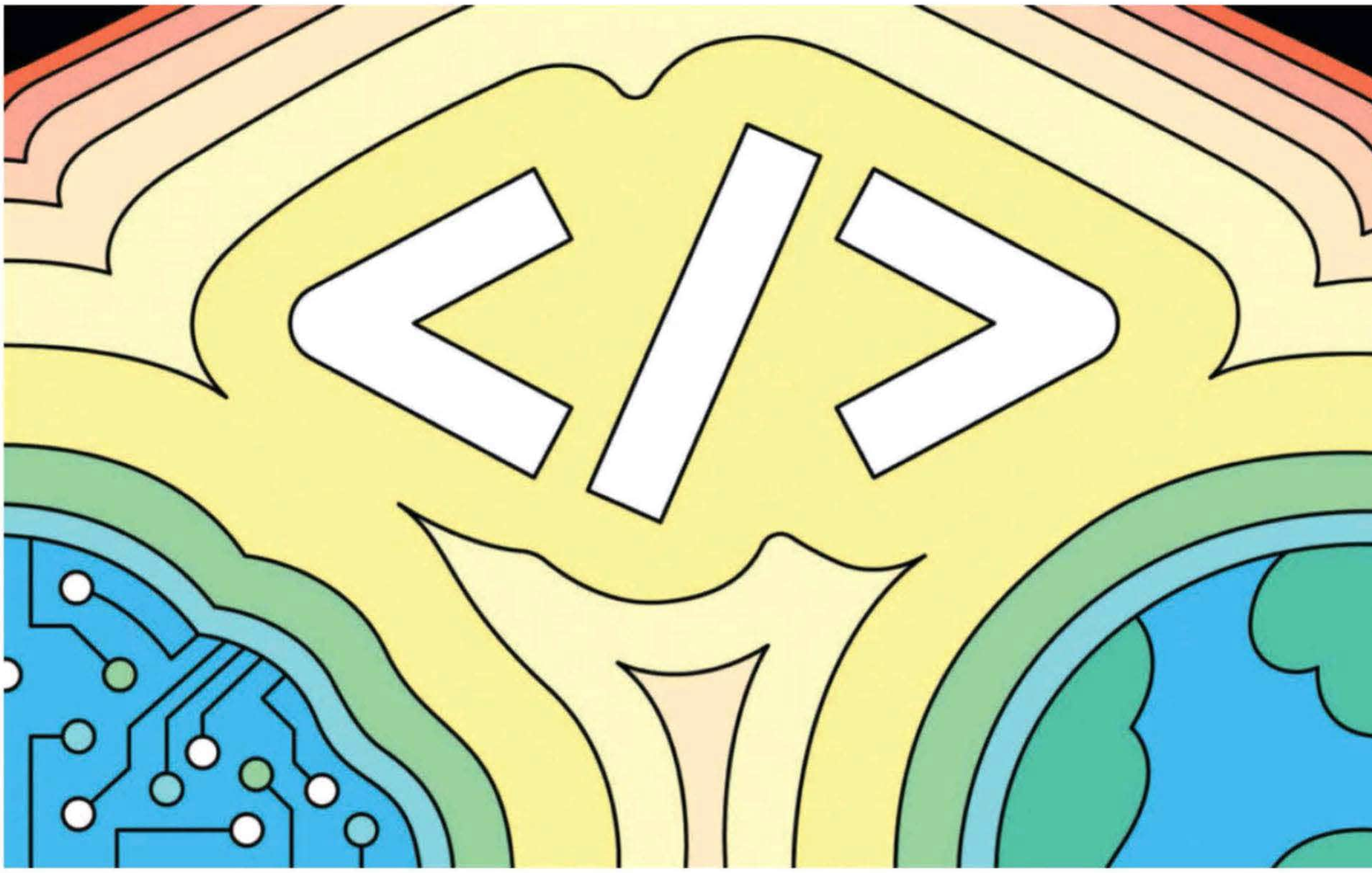
An emphasis on education as a path to prosperity is hardly uncommon. What made the Nigerian influx different was that many arrivals were pretty middle-class to begin with. Kemi Badenoch, one of four remaining challengers for the Conservative Party leadership, is a case in point. Her father was a doctor, her mother a professor. In one sense, Ms Badenoch's rise to the cabinet in the previous government is extraordinary. In another, it is becoming normal: another middle-class British-Nigerian was determined to enter Britain's elite and succeeded.

Britain's Nigerian elite proves an often overlooked rule. Ethnic minorities who make it into "Who's Who", a guide to the powerful in Britain, are slightly more likely to come from middle-class families (rather than a working-class background) than their white peers, according to "Born to Rule: The Making and Remaking of the British Elite", a new book. It is those with plenty of privilege who tend to make it to the top. KSI, or Olajide Olatunji to his mother, is Britain's most influential YouTuber; he boasts 24m subscribers and an empire that ranges from boxing matches to Prime, a sickly drink. KSI started life as a YouTuber as a private-school boy from Watford. When asked once if he felt Nigerian, KSI replied: "If I'm getting my extended family asking for money, I feel pretty Nigerian; when I'm going to a private school, I feel pretty British." Skim the biography of a prominent British-Nigerian and you will often find the name of a prominent public school.

From Lagos to Latymer Upper

Judging a group by the cream of its crop has its limits, just as Michelin-starred restaurants reveal only so much about the dietary habits of a country at large. Last year alone about 141,000 Nigerians arrived in Britain, predominantly to do low-paid jobs in areas such as social care. Their tale will be different. But the story of the British-Nigerian elite is a simple one. They are generally middle-class, always well-educated (often privately) and predominantly from London. Why are there so many British-Nigerians in the British elite? Because, often, they look just like the rest of it. ■

Business



Technology

Changing the program

AI and globalisation are transforming computer coding

TWO BIG shifts are under way in the world of software development. Since the launch of ChatGPT in 2022, bosses have been falling over themselves to try to find ways to use generative artificial intelligence (AI). Most efforts have yielded little, but one exception is programming. Surveys suggest that developers around the world find generative AI so useful that already about two-fifths of them use it.

The profession is changing in another way, too. A growing share of the world's engineers come from emerging markets. There is no standard definition of a developer, but one way to assess this is to look at the number of users of Github, a popular platform for storing and sharing code. In 2020 the number of users living in poorer countries surpassed those from the rich world. On the same measure, in the next few years India is expected to overtake America as the world's biggest pool of programming talent (see chart 1 on next page).

These shifts matter because software talent is greatly treasured. Salaries are high (see chart 2). The median wage of a developer in America sits in the top 5% of all occupations, meaning that coders can earn more than nuclear engineers. Technology giants need them to make their platforms more attractive; non-tech company bosses want ever more coders to aid the digitisation efforts that, they hope, will improve productivity and increase the appeal of their products to consumers. The future looks to be one with more, and more productive, coders—and cheaper software.

New technologies have often aided developers; the internet, for instance, ended the time-consuming task of answering questions using textbooks. Generative AI looks like a bigger leap forward still. One reason why it can be especially useful for developers is the availability of data. Online forums, such as Stack Overflow, hold enormous archives of questions asked and answered by coders. The answers are often rated, which helps AI models learn what is helpful and what is not. Coding is also full of feedback loops and tests that check if software works properly, notes Nathan Benaich, of Air Street Capital, a venture-capital (VC) firm. AI models can use this feedback to learn and improve.

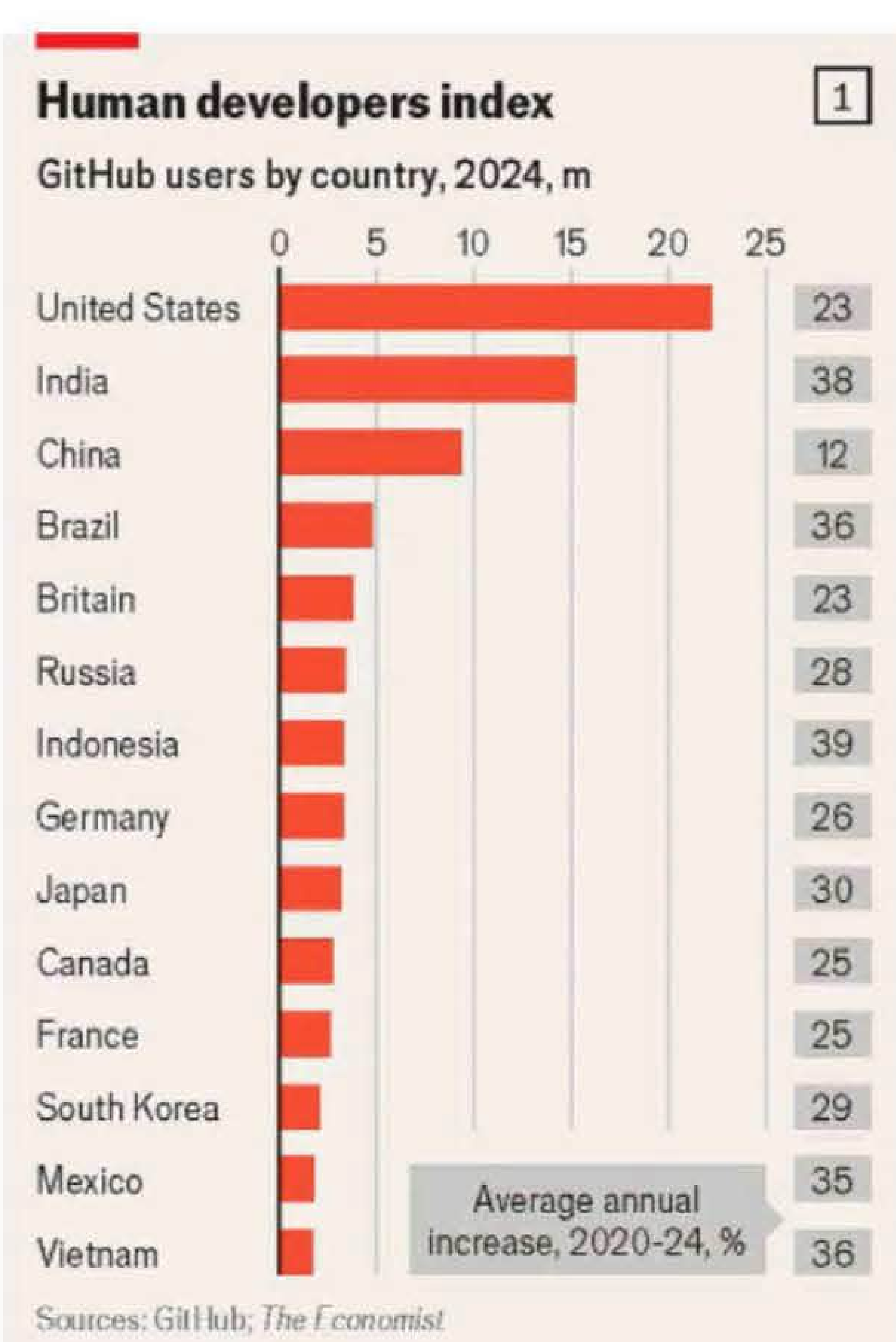
The consequence has been an explosion of new tools to help programmers. PitchBook, a data provider, tracks some 250 startups making them. Big tech is leading the charge. In June 2022 GitHub, which is owned by Microsoft, launched Copilot. Like many tools it can, when prompted, spit out lines of code. Around 2m people pay for a subscription, including employees at 90% of Fortune 100 firms. In 2023 Al- ▸▸

phabet (Google's parent company) and Meta (Facebook's parent) released rivals. This year Amazon and Apple followed suit. Many firms have built AI coding tools for internal use, too.

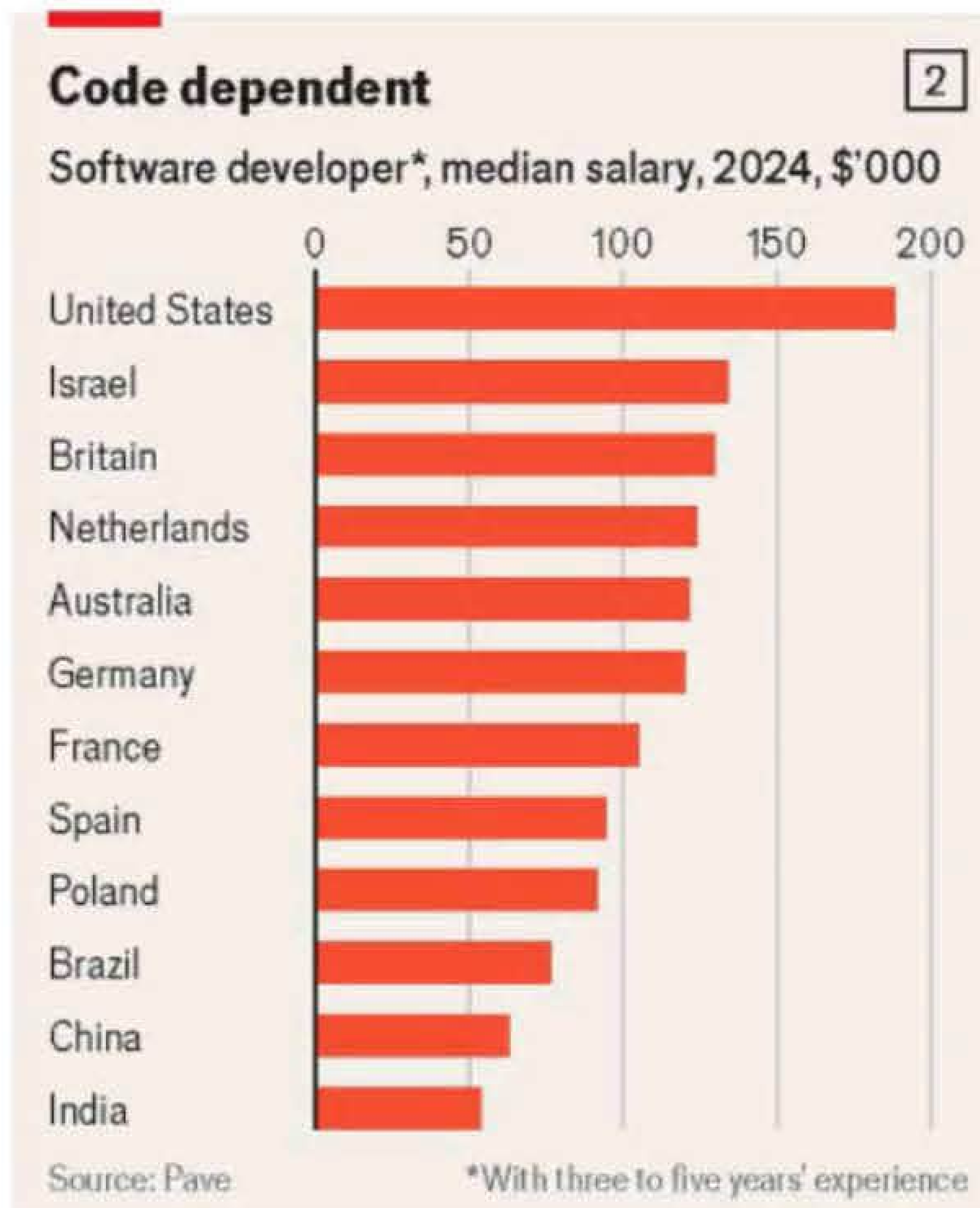
AI's helpfulness is still somewhat limited, however. When Evans Data, a research firm, asked coders how much time the technology tends to save them, the most popular answer, given by 35% of respondents, was between 10% and 20%. Some of this is from churning out simple "boilerplate" code, but the tools are not perfect. One study from GitClear, a software firm, found that over the past year or so the quality of code has declined. It suspects the use of AI models is to blame. A survey by Synk, a cybersecurity firm, found that more than half of organisations said they had discovered security issues with poor AI-generated code. And AI still can't tackle the thornier programming problems.

The next generation of tools should be better. In June Anthropic, an AI startup, released its newest model, Claude 3.5 Sonnet, which is better than predecessors at, among other things, coding. On September 12th OpenAI, the maker of ChatGPT, launched a version of its latest model, o1, claiming that it "excels at accurately generating and debugging complex code".

AI tools can increasingly help with other mundane tasks ("toil" in coder-speak), such as writing notes about what the code does or designing tests to make sure code won't malfunction. Writing code is only a part of the job of a software engineer, accounting for about 40% of their time, according to Bain, a consultancy. The tools might also help programmers become more flexible by switching between coding languages faster, allowing them to apply their skills to different situations more easily. Euro Beinat of Prosus, an investment firm, says that he has seen engineers move from one language to another in a week rather than three months. Amazon recently said that it saved $260m when it converted thousands of applications from one type of code to another using AI.



Human developers index [1]



Code dependent [2]

The new-found flexibility extends to different types of programming. A small app may previously have required a team of six working on different parts of the program, such as the user interface or the software's plumbing. Jennifer Li, of Andreessen Horowitz, a big VC firm, says she is seeing more startups with fewer people, as programmers can more easily take on many different tasks. Plenty of IT managers say that training newly hired developers on the idiosyncrasies of their firm's software is getting faster, too.

Much of this seems to give inexperienced engineers a leg up (see chart 3). They will be able to do more complex tasks more quickly and some of the work they used to do may be picked up by laymen. A rising trend towards "low-code-no-code" platforms, which allow anyone to write software, will also be boosted by AI. Banco do Brasil, a lender in Brazil, has been using such a system to allow employees to develop hundreds of apps, such as ones that make it easier to help customers seeking insurance products.

Another result of the coding upheaval is that junior developers in rich countries will face more acute competition from abroad. According to Evans Data, between 2023 and 2029 the number of computer programmers in the Asia-Pacific region and Latin America is expected to rise by 21% and 17% respectively, compared with 13% in North America and 9% in Europe. The imbalance means a boom in offshoring and outsourcing is likely to continue. Everest, a consultancy, reckons that about half of all IT spending is outsourced, including lots of software development. Other firms that have kept IT services in house have instead set up their own outposts abroad, to take advantage of lower wage costs. India is the world's powerhouse. In 2023 exports of software and related services amounted to $193bn, with half going to America.

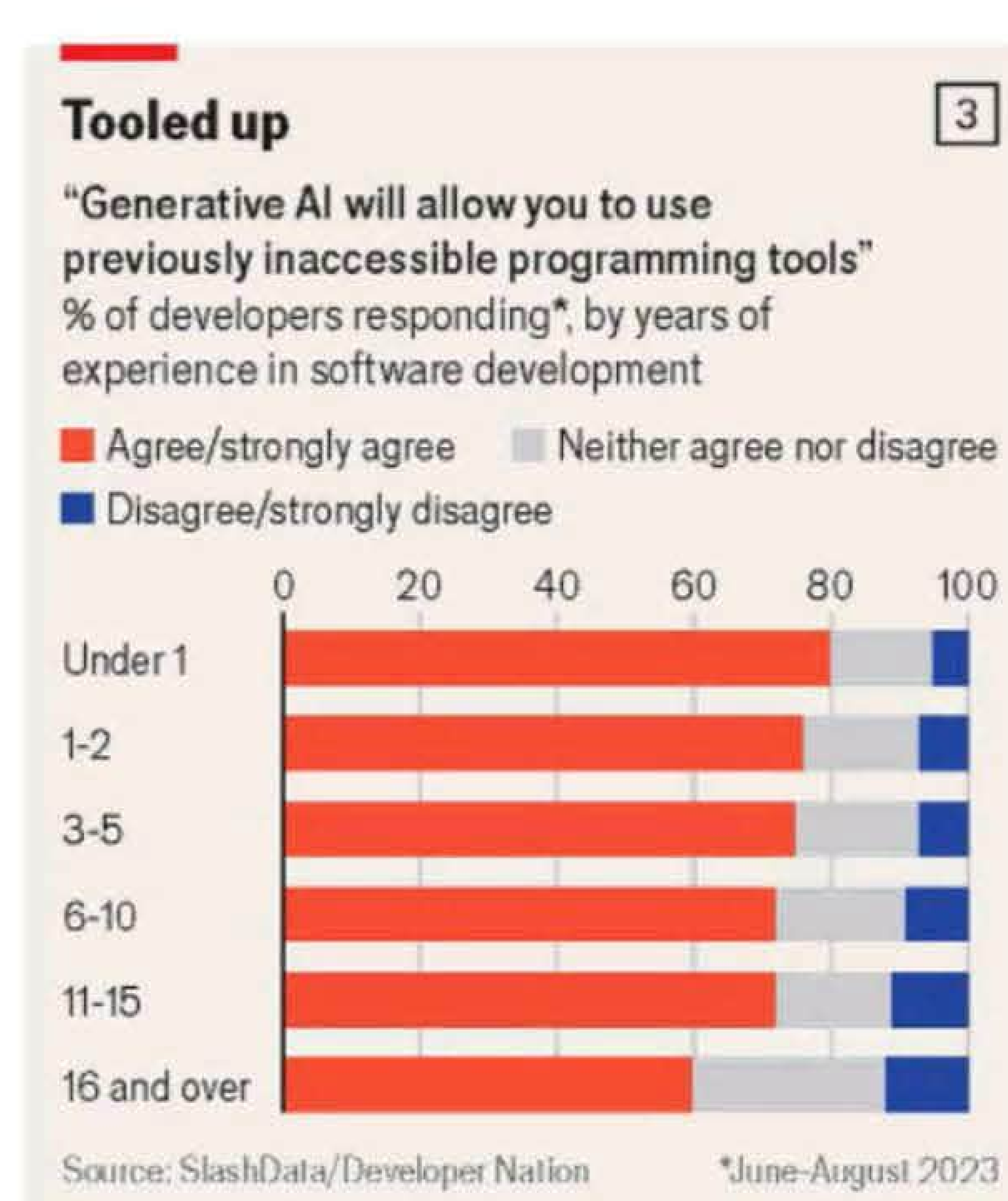
This helps companies control costs. "It is a very good way of scaling out...without blowing up budgets," says Shashi Menon, who is in charge of the digital efforts for Schlumberger, an oil-and-gas services firm. About half of his engineering team are based in Beijing and Pune in India.

Offshore capabilities have been growing more sophisticated. Some foreign outposts now provide basic software as well as high-end fare. Sanjeev Jain of Wipro, an Indian firm, says his engineers helped build Teams, Microsoft's video-streaming service, as well as designing chips and software for "connected cars", which speak to other services and devices. AI could help offshore firms produce snazzier software; AI nous itself is also something they can sell. Infosys, another Indian firm, recently said that it had won a $2bn five-year contract to supply AI and automation services to an unnamed client.

Cracking the code

What all this means for developers is still unclear. One vision is of AI and offshoring taking Western software developers' jobs en masse. That seems far-fetched. Huge amounts of technical know-how are still required to string pieces of code together and check that it works.

A more optimistic view is one in which the most boring parts of making software are done by computers while a developer's time is spent on more complex and valuable problems. This may be closer to the truth. For customers, meanwhile, the trends are welcome. IT managers have long said that their bosses want ever more digitisation with ever tighter budgets. Thanks to AI and offshoring, that may no longer be too much to ask. ■



Tooled up [3]

Antitrust

Pound of flesh

SAN FRANCISCO

Will America's government try to break up Google?

FOR YEARS shareholders have paid little heed to the thunderbolts hurled at America's west-coast technology giants by the trustbusting deities of Washington, DC. No longer. Despite expectations of solidly rising profits, the share price of Alphabet, Google's parent company, is wobbling (see chart).

The reasons seem paradoxical. On the one hand, an American judge ruled in August that Google's search business, source of about 90% of its operating income, was an illegal monopoly. On the other, investors fear that it could suffer unprecedented competition because of generative artificial intelligence (AI). On October 8th the Department of Justice (DOJ) is expected to file proposed remedies that aim to redress the sins of the past and prevent future abuse in generative AI.

The DOJ appears eager to make an example of Google. Jonathan Kanter, the agency's trustbuster-in-chief, has said the verdict belongs on the "Mount Rushmore" of antitrust cases. Leaks to the media have suggested he could go as far as asking the court to break up Google by separating its search engine from its Chrome browser and Android operating system. That would be America's biggest anti-monopolistic act since an unsuccessful attempt to carve up Microsoft almost 25 years ago.

Amit Mehta, the judge handling the case, is likely to have other considerations. A breakup may be too draconian for him. The nub of his ruling was that Google benefited from a monopoly on search and text-based advertisements that it furthered through "exclusionary" distribution deals with companies like Apple; Google's size alone was not the issue. Moreover, his verdict against Google was based largely around precedents set in the Microsoft trial. The fact that the decision to break up Microsoft was quashed on appeal has been a deterrent to far-reaching "structural" remedies ever since.

Like Mr Kanter, Mr Mehta appears keen to address not just Google's market distortions of the past but also to consider how they will play out in the generative-AI era. For that, targeted remedies may be more likely. An obvious one would be to ban the payments that Google makes for its place as a default search engine on many devices and carriers, which in 2021 came to $26bn. But that would penalise the recipients of Google's cash more than Google, even though they were not in the dock.

More likely, Google may be required to continue the payments but without the exclusions. This, says Mark Shmulik of Bernstein, a broker, could help spur competition, especially when it comes to generative AI. It would, for instance, give Apple latitude to direct more searches through OpenAI's ChatGPT, with which it is shortly due to start an AI partnership called Apple Intelligence. Further helping rivals, Google could be forced to share some data it relies on to make its search business so powerful, including its huge volume of search queries. Google considers such data troves its secret sauce; it will argue that making them publicly available raises privacy and security concerns. But such obligations could be a fillip for firms trying to launch generative-AI capabilities to compete with Google, such as Perplexity.

Alphabet has vowed to appeal the verdict and the process may drag on for years. In the meantime, the going will be tough. In addition to illegal use of the default payments, the judge found Google guilty of using its monopoly power to push up the price of text advertisements, which could spur a wave of potentially costly lawsuits from advertisers and rivals.

All this is occurring while the business model of search is changing profoundly. Generative AI is eroding the power of selling ads based on clicking links. So far, Google's ad business has withstood the hit. But this is a bad time to be distracted by lengthy legal wrangling. Perhaps better to try to settle fast and move on. ■

Gyms

If the face is fit...

Facial workouts are the latest trend in the search for eternal youth

THE FACEGYM studio in central London looks more like a hair salon than a fitness studio. Customers recline on chairs while staff pummel their faces with squishy balls. They use their knuckles to "warm up" skin and muscles; give it a "cardio" session to improve circulation; and then a deep-tissue massage. Customers, who spend at least £100 ($133), say they leave with less puffy cheeks and more defined jaw lines.

The booming market for facial workouts offers the hope of looking younger and more chiselled. A third of Britons who had a non-invasive facial treatment in 2023 had or were interested in having a face workout, says Mintel, a research firm. Their growing popularity may be a result of customers frowning at conventional facials, which involve lathering with lotions and invasive cosmetic procedures. Inge Theron, Facegym's founder, got into facial workouts after a having "thread lift", which uses temporary sutures, that went wrong.

Facial workouts could be lucrative if they grab even a sliver of a market for injectable procedures, such as botox and fillers, that will be worth over $5bn in North America in 2025, according to McKinsey, a consultancy. It will help that the clientele is not limited to the usual spa-goer. At Face Flex in Dubai 45% of customers are male, says Nikisha Singh, a co-founder of the firm, attracted by the idea that this is a form of exercise.

Faces can be worked out at home, too. Apps such as Luvly provide personalised instructions for the stretching and contortions of face yoga. Tools are also a big business. Social media is filled with videos of dewy-skinned women scraping at their faces with rollers made of jade or rose quartz. These can cost from $3 to over $100. Facegym sells a wand, which sends small electric pulses into the skin, for £633.

What of sceptics who raise a quizzical eyebrow? Dermatologists warn that touching your face too much can give you acne and stretching the skin could create wrinkles. There isn't enough rigorous research into the effects of face workouts but, as Suzanne Olbricht, a dermatologist at Harvard Medical School, puts it, they probably can't hurt.

Ford

In Transit

DUNTON AND INNSBRUCK

Vans are the key to the carmaker's future

IT IS HARD to imagine a place where Jim Farley, boss of Ford, might feel more comfortable discussing his company's future than at the wheel of one of his firm's vehicles. Mr Farley, pictured below, whose driving skills have been honed racing Ford Mustangs in his spare time, fields questions with the same assurance that he pilots a Transit van down a winding Austrian mountain road. The three-day road trip in late August, from Ford's European headquarters in Germany to Italy, in a convoy of four Transits, was arranged by Mr Farley to assess in detail one of the firm's best-selling vehicles as well as to meet dealers and customers along the way.

As well he might. Ford Pro, the commercial-vehicle division, is the most successful part of the company. Selling Transits and commercial versions of Ford's pickups brought an operating profit of $5.5bn in the first half of 2024, nearly three times that of Ford Blue, the part of the firm making passenger vehicles powered by internal combustion, despite selling around half as many vehicles. Operating margins of 15.9% are far fatter than Blue's 4.3%, and on a level with what Porsche makes selling pricey sports cars.

Yet Mr Farley insists that Ford Pro's contribution is about far more than profits. The "super users" who purchase commercial vehicles are "the most important customers that signal the future capability of the company". Commercial vehicles are a vital signpost both for electrification and the software that will increasingly matter to car buyers.

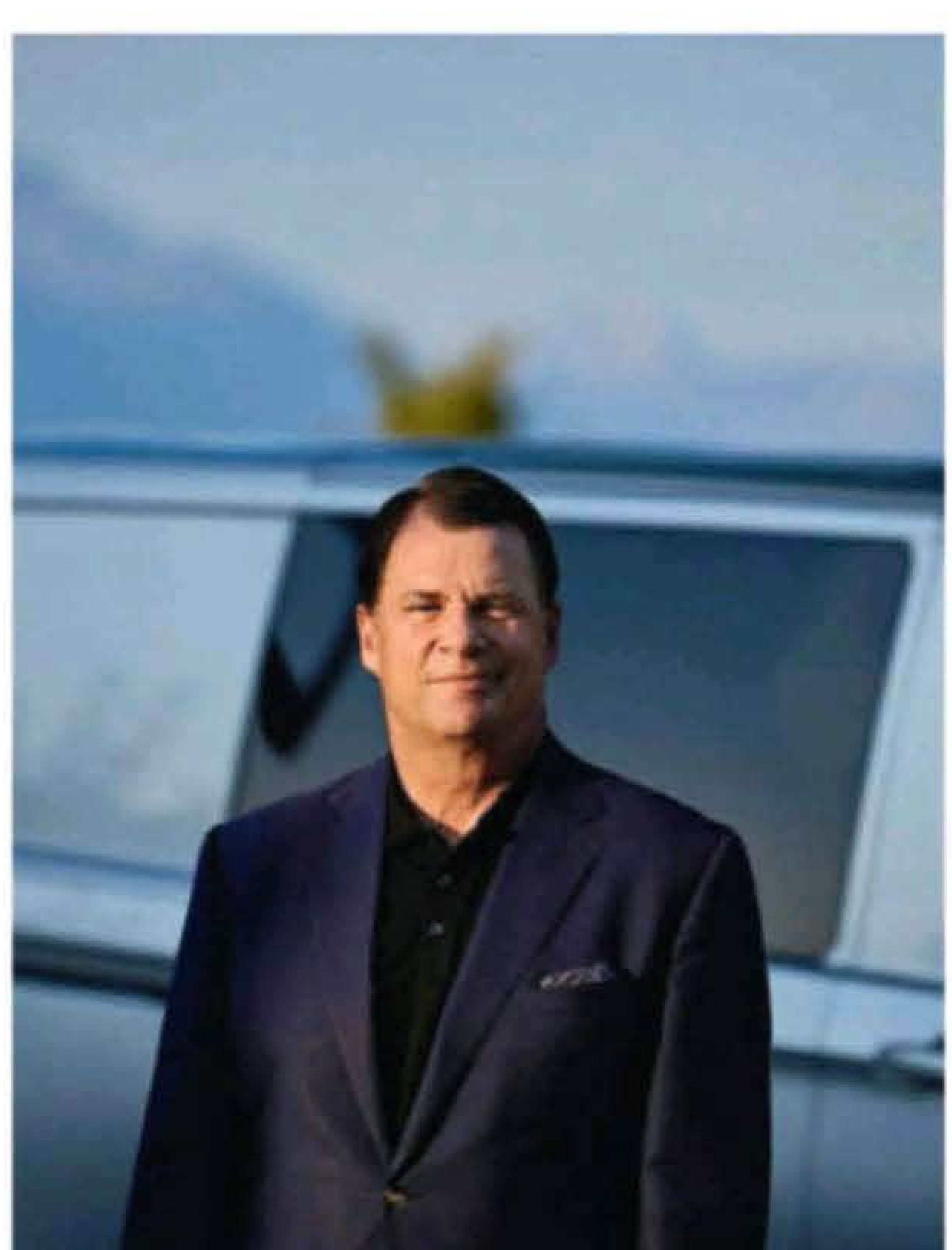
Commercial buyers, who care most about "dollars and cents", currently have a far greater appetite for software than retail customers. Digital tools that can process real-time data from the vehicles ensure that drivers using battery power plug in at the right times, or predict when maintenance is needed. Because the buyer and user of the vehicle are often different, monitoring drivers and coaching those who are too hard on brakes or accelerate too quickly can save companies money.

Remote monitoring also helps with "uptime". In a darkened room at Ford's Technical Centre, the global home of research and development for the Transit located in Dunton, around 30 miles (50km) from London, a wall-mounted screen measuring nine metres by two resembles what might be required for a military strike or a space mission. It is alive with real-time data monitoring vehicle health to ensure that the right maintenance is done speedily by dealers, so vehicles are out of service for the shortest time possible. There are now four more such operations rooms located across Europe.

The benefits are clear. Services enabled by software now make up 15% of profits at Pro, and should rise to 20% by 2026. Mr Farley claims Ford is five years ahead of rivals in this respect and that it is also a useful test bed for similar services for retail customers in the future. He notes that dedicated telematics companies, which do similar monitoring jobs, cannot directly control speeding because they do not own the vehicles. He can, and this is a service that worried parents might purchase to tame young drivers.

Electrification is also speeding ahead for Ford's commercial customers who are "not scared to pay a little more upfront" for pricier EVs. Usage data also allows Ford to advise customers on which parts of their fleet might be better served with full electric or hybrid vehicles. A one-stop shop for busy smaller fleet owners gives an all-in cost including charging and servicing. But Mr Farley is also prepared to learn about other reasons for going electric. An Austrian baker encountered en route noted that he was turning his fleet of Fords to battery power because the mountain roads around Innsbruck eat through brakes on his fossil-fuel powered Transits, but do far better with the regenerative system on EVs.

Ford's commercial arm may be speeding ahead, but the company still needs to make smaller and cheaper EVs to attract mainstream drivers and turn a profit. Its EV division is set to lose up to $5.5bn this year. Ford is betting on "commercial and small" says Mr Farley. Rather than follow competitors which have struck deals with Chinese carmakers for software and EV know-how, Ford is relying on a "skunkworks" to make affordable vehicles that are "fully competitive" with the likes of China's BYD, a maker of low-cost EVs, by designing more efficient electric components in-house and using cheaper battery chemistry.



A man and his van

The next generation of software-stuffed electric vehicles emerging from the skunkworks will start with a smaller electric pickup, followed by a van and large pickup trucks over the next two or three years. This is where Ford has a competitive advantage. More to the point, Mr Farley thinks that in ten years' time all car buyers will want the same sort of vehicles, software and services as the baker and other customers he met on his trip. And all roads, he hopes, will lead to Ford. ■

Indian retailing

Instantaneous consumption

MUMBAI

A giant population is changing how it buys

THE GRIDLOCKED streets of India's big cities are not blocked to everything. Tiny scooters laden with packages slip past cars, jump traffic lights and bounce over what pavements exist. Goods range from a tub of ice cream or a handful of pomegranate seeds to a coffee pot or even an iPhone. Such two-wheeled delivery services have taken off over the past four years, often promising to bring items in ten minutes in cities where it can take that time to cross a busy street.

Three companies dominate this business: Zomato, Zepto and Swiggy, which on September 26th announced an initial public offering that may value the firm at $15bn. Although that outshines the $12bn valuation accorded to Zomato when it listed in 2021, Swiggy has some catching up to do. Zomato is valued at $28bn today, and is now earning money, having made a net profit of $73m over the past four quarters. Swiggy lost $285m in the fiscal year to March, but that is at least an improvement on losses of $520m in the previous year.

Investors may be seduced by Swiggy's growth to date. In three years revenues have nearly doubled to $1.4bn, as the number of users has swollen from 35m to 47m. The number of riders, paid a mere 69 cents per order, has almost doubled since 2022 to 457,000. Each delivers on average 463 packages a month. Since 2022 four warehouses have expanded to 50 and Swiggy has built nearly 540 "dark stores", which exist only to fulfil online orders, are packed with com- ▸▸

mon items and are positioned to ensure fast deliveries.

The convenience of a doorstep service is not limited to the many Indians living in tiny homes, where rapid deliveries save devoting space to storage. Rather than reaching into a cupboard, people can now swipe on an app. But the number of restaurants whose orders are delivered through Swiggy has also jumped, from 129,000 in 2022 to 224,000 by the end of June. The opportunity to satisfy the rapidly growing taste for fast delivery has drawn in competitors beyond Swiggy and its rivals. Restaurants would rather skip Swiggy's cut of up to 18% of the value of meals. Amazon and Flipkart excel at logistics and can deliver almost anything, albeit not quite as fast.

Competition is not Swiggy's only concern. As its prospectus notes, fast delivery depends on the hygiene and quality of the companies whose deliveries it carries, but over which it has little control. Swiggy also faces a mountain of legal claims, ranging from lacking a proper business licence and non-payment of a goods-and-service tax to not making proper pension contributions and experiencing delays in processing refunds. It even faces an investigation by the competition authorities. But such obstacles in India are as common as the potholes Swiggy's riders have to skirt, and none seems to worry investors. More important is that Indians evidently, and increasingly, prefer a trip to the front door over a trip to the shops. ■

BARTLEBY

Spot the boss

What makes someone a good choice to be a manager?

THE IG NOBEL awards, an annual ceremony for laugh-out-loud scientific papers, celebrate the joyfully improbable nature of much academic research. One of this year's Ig Nobel winners, "Factors involved in the ejection of milk", was published in 1941 and tests whether fear causes cows to involuntarily drain their udders. Its authors drew their conclusions by placing a cat on a cow's back and repeatedly exploding paper bags beside it. "Genetic determinism and hemispheric influence in hair whorl formation", another winner, asks whether hair tends to swirl in the same direction depending on which hemisphere you live in.

Sometimes you come across an academic paper that asks a deeply practical question in a refreshingly plain way. "How do you find a good manager?", a new study by Ben Weidmann of the Harvard Kennedy School and his co-authors, sits in this category. Answering that question well is important. Other research, to say nothing of the experience of everybody everywhere, shows that variations in the quality of management help explain differences in performance between companies and even between countries.

Yet a survey conducted last year by the Chartered Management Institute in Britain found that four in every five people entering management had received no formal training. And loads of bosses accrue managerial responsibilities for reasons unrelated to their ability to discharge them. Another paper, by Alan Benson of the Carlson School of Management and his co-authors, looked at the career paths of thousands of sales workers in over 200 American firms. They found that better sales performance increased the likelihood of people being promoted but was also associated with worse performance among their new subordinates. The "Peter Principle", the idea that people rise up the ladder if they do their current job well until they reach a job at which they are incompetent, appears to be alive and well.

How then should managers be selected? The study by Mr Weidmann et al sought to answer that question by running a series of repeated experiments in which participants were randomly assigned to three-person teams of one manager and two subordinates. Each member of the team, including the manager, had to complete a number of problem-solving tasks. The manager's job was to assign people to the task they were most suited to; monitor their performance and reassign them as needed; and keep them motivated. In the real world bosses do more things, but this captures a big part of their role.

The researchers found that a competent manager had about twice as much impact on the team's performance as a competent worker. More usefully, they also found out which traits were associated with good and bad managerial performance. Teams run by people who said they really, really wanted to be managers performed worse than those who were assigned to lead them by chance. Self-promoting types tended to be overconfident about their own abilities; in a huge shock, they also tended to be men.

If appointing a manager just because he sticks his hand up and says he can read people is not a great selection strategy, what would be better? The researchers found that good managerial outcomes were associated with certain skills. One in particular stood out: people who did well on a test of economic IQ developed by researchers at Harvard called the "assignment game", in which you have to quickly spot patterns in the performance data of fictional workers and match them to the tasks they are best at. (Anyone can play the game online: you end up with a percentile score and a mild headache.)

Since the assignment game is similar to the experiment in the study, you would expect people who were good at one to shine in the other. But for David Deming, also of the Harvard Kennedy School and another of the paper's authors, that is precisely the point. Management tasks can be identified, codified and incorporated into selection processes: that is a better way of choosing bosses than drawing only on those who thrust themselves forward or looking at how people perform in other jobs.

There are echoes here of a paper by Alessandro Pluchino of the University of Catania and his co-authors, who found that it was better to promote people at random than based on how well they did their current role. That won an Ig Nobel in 2010. Just because something is funny doesn't mean it should be dismissed.

SCHUMPETER
A tale of three glasses

What drinks say about the future of China's consumer economy

To WESTERN PALATES *baijiu* is an acquired taste—and most never acquire it. China's national fire water, at first whiff redolent of cheap potato vodka with a *soupçon* of fish sauce, is just too pungently unfamiliar. But whatever foreign investors plied with the stuff by their Chinese business partners make of the flavour, they appear to be lapping up shares in its makers.

Since China's government announced a cocktail of policies to stimulate domestic consumption in late September, *baijiu* stocks have gone on a bender. Over the course of a week the biggest, Kweichow Moutai, gained nearly $90bn in market value—equivalent to a whole Diageo, the West's top distiller, washed down with a Kirin. It is worth a cool $313bn, more than Coca-Cola. Throw in its six main rivals, also up by 40% or so, and the market capitalisation of big *baijiu* exceeds half a trillion dollars.

It is not just the distillers who are benefiting from the week-long rally. The share prices of large Chinese brewers look just as frothy. That of Nongfu Spring, China's biggest water-bottler, has increased by a third. This compares with a rise of 25% for the CSI 300 index of mainland blue chips as a whole. In China, the way to an investor's heart suddenly appears to be through the throat. Will it all end in a nasty hangover?

Not necessarily. There is a lot to admire about the Chinese beverage industry—most of all, its eye-watering profitability. Consider China's most valuable producers of *baijiu*, water and beer, respectively. Last year 92% of Kweichow Moutai's nearly 150bn yuan ($21bn) in sales was pure gross profit. For Diageo the figure was 60%. In terms of operating margin, Nongfu (at 33%) bests digital titans like Alphabet, Google's parent company (31%), and Tencent, China's most valuable firm (30%), let alone rival water-pedlars such as Danone, owner of Evian (13%). Bud APAC, the listed Asian subsidiary of the world's mightiest brewer, AB InBev, offers a better return on capital than its Belgian-American parent.

All three firms are placing an interesting wager. When hundreds of millions of Chinese shoppers first came into some disposable income a couple of decades ago, they were happy to try any product in any category. Many customers are now becoming more discerning, not least because of a slowdown in the property market and a hit to sentiment. The stimulus at least offers hope of lifting the gloom. Some Chinese are still willing to part with their money, notes Euan McLeish of Bernstein, a broker. But the three are also hoping to make themselves especially indispensable to customers, by standing out on quality.

This task is simplest for the *baijiu* company. It controls 94% of the market for the very finest hooch, which sells for 1,200 yuan or more per half-litre bottle. It is distilled in Guizhou province and matured in ancient cellars. Virtually no other company has such facilities—or, given that the most coveted sort dates back to the Ming dynasty, which ended in 1644, any chance of getting their hands on one for another few centuries. Kweichow Moutai also enjoys a decades-old reputation as the go-to tipple at the top table of the Politburo or the People's Liberation Army; its trademark white, red and gold bottle was a rare concession to branding even when Maoism was at its greyest. As a result, the company can spend less on marketing than its rivals, reckons Morningstar, a research firm. Kweichow Moutai's mastery lies in maintaining scarcity and a nationwide distribution network, recently bolstered by a digital platform that enables it to respond to demand from retailers and other buyers in real time.

Nongfu, by contrast, has built a brand from scratch. Since its founding in 1996 it has marketed its core product as natural spring water from idyllic sources. This sets it apart from the distilled variety sold by many competitors—and enables it to charge a premium. The company is diversifying into other ready-to-drink beverages such as sugar-free tea and juices, which today account for around half of revenues, up from 40% in 2019. As with its spring water, these appeal to health nuts—a cohort that, unlike China's population as a whole, keeps multiplying.

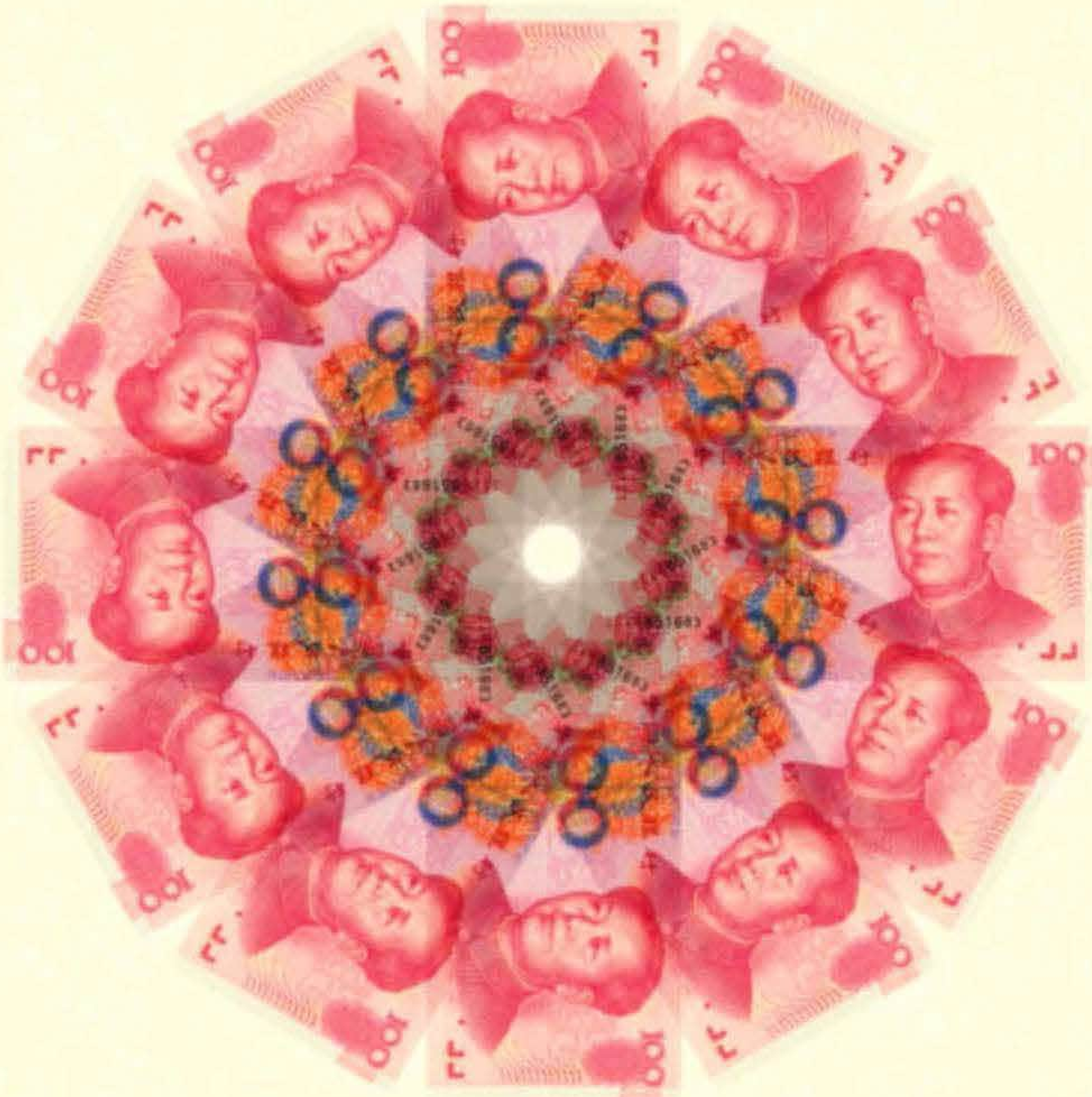
The health benefits of Budweiser are less clear-cut. Still, it and its fancier sister brands, such as Corona, Hoegaarden and Goose Island, make up for it by offering Chinese drinkers a dose of exclusivity. In contrast to budget beers, sales of which have been declining for several years, the thirst for fancier pints persists. Bud APAC's closest rival in this category is CR Beer, which distributes Heineken in the country. But most of CR Beer's products have been engineered to be cheaper than water, as Mr McLeish puts it. Another competitor, Tsingtao, tried to lift its flagship brand to premium status with the help of new packaging and celebrity singers. When their fame proved fleeting, so did the strategy.

Bottle shock

Kweichow Moutai, Nongfu and Bud APAC are banking on two developments. The first is the continued proliferation of high-earners. This looks like a safe bet. The ranks of Chinese bringing home on average $95,000 a year increased by 7% annually between 2017 and 2022, to 93m people, according to Bernstein. By 2027 they could number more than 120m. Another 200m entry-level premium shoppers may make $26,000, up from 170m two years ago. Together that would be nearly the current population of America.

The drinks trio's second assumption is that those high-earners will open their wallets as readily as Americans do. Their recent reluctance to spend has worsened China's deflation and spooked investors fearful of its dampening effect on earnings; the three firms' share prices remain below their highs of four or five years ago despite the latest surge. But as long as Chinese incomes grow, consumers will fancy a tipple. Those still holding their nose rather than investing could soon instead be taking a snifter. ■

Finance & economics



Chinese stocks

Xi's good-vibes rally

SHANGHAI

Belated stimulus has reset the mood among investors. Can the buying frenzy last?

IF CHINESE RETAIL investors had their way they would forgo the seven-day National Day holiday that ends on October 7th. An aggressive stimulus package, announced in Beijing on September 24th, has unleashed the biggest weekly stockmarket rally the country has witnessed in more than 15 years. Major indices have soared more than 25%; the Shanghai stock exchange has suffered glitches under the volume of buying activity. The prospect of halting for a full week has made netizens anxious: "We must keep trading; we must cancel National Day," one young investor screamed into a video widely shared on WeChat, a social-media platform.

The package, unveiled by top regulators, included a policy-rate cut, mortgage-rate cuts and 800bn yuan ($114bn) in support of the stockmarket. Two days later a meeting of the Politburo, a group of China's 24 most senior leaders, drove the point home by using phrases such as "action comes first", rather than the passive verbiage repeated in recent years. At another high-level meeting on September 29th Li Qiang, China's premier, pledged to speed up the implementation of easing measures.

Some 2trn yuan in fiscal spending for consumer handouts and local-government refinancing, as well as 1trn yuan to recapitalise banks, have been reported but not announced formally. Debate over the effectiveness and scale of this long-awaited bail-out has raged. But local and foreign investors agree on one point: Xi Jinping, China's supreme leader, has finally woken up to the severe problems ailing China's economy and changed his approach to fix them.

The effect has been to instantly lift the gloom that has hung over the country after hopes of a strong post-pandemic recovery faded in mid-2023. One article circulating on September 30th told how a young retail trader made 520,000 yuan that very morning. Stock-picking tips have flooded social media even though most stocks listed in China and Hong Kong have surged. All the while investors have ignored gloomy economic news, such as data released on September 27th that showed industrial profits tumbling by almost 17%, year on year, in August. Even as ChiNext, the Shenzhen stock exchange's main index, surged by 15% on September 30th, a survey of purchasing managers suggested that manufacturing activity continued to contract.

Few companies have performed poorly enough to be left out of the rally. Although China's securities brokers have been slammed by probes and restrictions for several years, the share price of Citic Securities, one of China's biggest brokers, has doubled since the stimulus was announced. Shimao Group, one major developer that faced liquidation earlier this year, has more than quadrupled. Listed education firms have jumped. Tech analysts even ▸▸

→ ALSO IN THIS SECTION

make out a reset for China's biggest internet firms, such as Alibaba and Tencent, the share prices of which have more than halved since 2021. This revaluation of China writ large is bound to continue when trading resumes on October 8th. Just days ago the world was short on everything China-related, says Stephen Jen of Eurizon SLJ Capital, an asset manager. "Could the bingeing on Chinese equities be complete in one week?" he asks. "I doubt it."

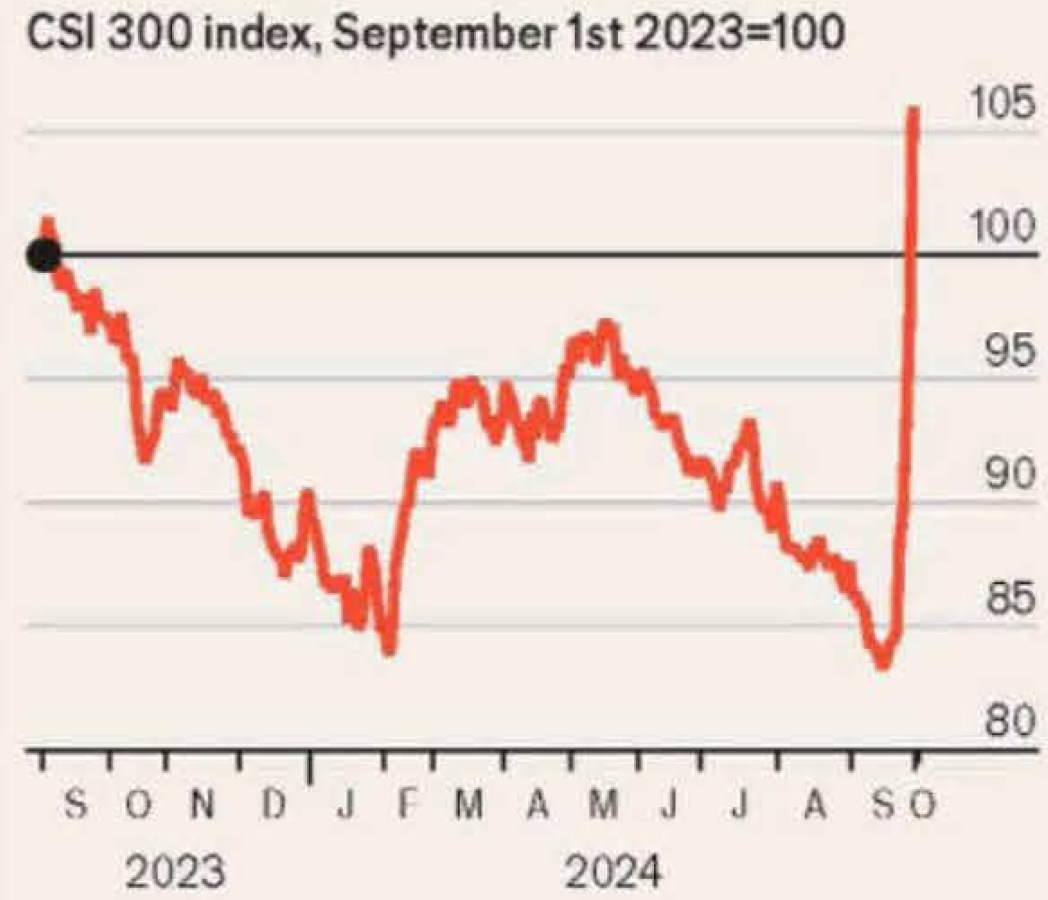
The shift has given foreign investors whiplash. Just four days before unleashing the stimulus, the People's Bank of China (PBoC), the central bank, declined to cut rates, causing many investors to sell down more of their Chinese holdings. And yet with indices such as the CSI 300, a key local benchmark, soaring by 25% in the five trading days after the package was announced, China's weighting in the MSCI Emerging Markets index has risen by 3.7 percentage points, points out Christopher Wood of Jefferies, an investment bank. Many foreign investors who track the index will be pushed back into Chinese stocks.

The plan to prop up China's markets comprises two novel tools. Institutional investors will be allowed to pledge stocks, exchange-traded funds (ETFs) and bonds as collateral to the central bank in exchange for up to 500bn yuan-worth of government bonds and central-bank bills. The proceeds from these must be used exclusively for buying stocks. The PBoC will also make available 300bn yuan in loans to corporations for repurchasing their own shares. Pan Gongsheng, its governor, has signalled that this could be just the first of three tranches of liquidity. Asked during a press conference whether authorities would employ a "market-stabilisation fund"—a state vehicle created solely for buying shares—Mr Pan replied that such an option was being studied.

A key question for the coming months is whether financial wonks have been given a greater role in this new policy-making cycle, and whether or not that matters. Mr Xi's time in power has witnessed the steady

A W-shaped recovery

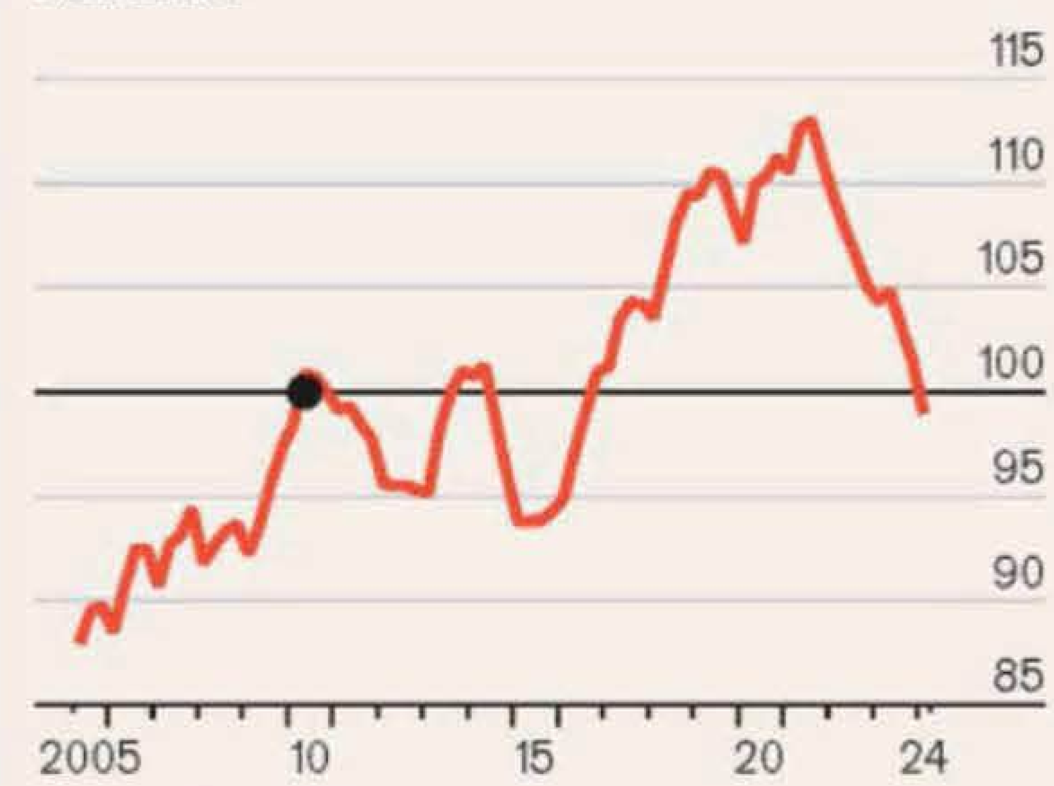
CSI 300 index, September 1st 2023=100



Source: Bloomberg

Still sinking

China, residential property prices, 2010=100
Real terms



Source: Federal Reserve

sidelining of reformers and a demotion of pragmatic, pro-growth policymaking in exchange for ideology and a national-security obsession. One source of market euphoria, notes a Shanghai-based portfolio manager, is that "more decision-making power could be handed back to the technocrats".

The man overseeing the rally is Wu Qing, who took over the top securities regulatory job after a market crash in January and February shredded his predecessor's career. Mr Wu has been labelled both a "firefighter" for his ability to handle disasters, and a "butcher" for harsh penalties imposed on bad actors. Many hedge-fund managers have come to view him as the latter. Regulators have often punished short sellers or anyone appearing to make money from market routs. Mr Wu has overseen increasingly stringent rules for high-frequency trading and demanded higher asset thresholds for funds to operate.

It is unclear if foreign investors should take comfort from the emboldening of a senior technocrat such as Mr Wu. Rather than promote a broader range of trading tools that support liquidity and help investors hedge their bets, his tenure has seen many small funds close and foreign investors drastically draw down their exposures to China. On his watch China's stock exchanges have stopped reporting daily cross-border investment flows.

The news and rumours of redoubled support were designed to make a big splash in markets. But the gloomy sentiment and sagging asset prices that once prevailed must be distinguished from the fundamentally poor economic indicators that continue to materialise. The authorities have bet that these factors are so tightly linked that, by breaking the downward spiral in sentiment, they will eventually prevent shares and house prices from falling, ultimately lifting the economy. By boosting asset prices they can also buoy sentiment, creating a virtuous cycle. Until September many Chinese people experienced a negative wealth effect as the value of their homes and other investments slid. Now that effect is starting to reverse, at least for stock investors.

Perhaps the biggest risk to this plan is its reliance on good vibes. It lacks solutions to China's pressing problems, such as its property woes. Sentiment might not be lifted for long were these to persist in the background, notes Larry Hu of Macquarie, a bank. If house prices and sales keep falling, stocks should follow.

The property market is far from being fixed. Figures from a private data provider released on October 1st showed that the value of new-home sales among the 100 largest developers fell by 38% in September, year on year, from 27% in August. The government's pitch to the people is that the downturn has bottomed out, notes Andrew Collier of GlobalSource Partners, a consultancy. This clashes with what is happening on the ground, he says. A fundamental shift in China's political economy is needed to solve its biggest problems.

In the coming weeks there is plenty of money to be made in Chinese stocks, says one investor in Singapore who has gone all in. But if bad economic data continues to trickle in over the course of the year, China risks yet another monumental market sell-off. That, the investor notes, could spoil sentiment well into 2025. It would also make further attempts at market rescues a harder sell. ■

Economic decoupling

Maple and pears

Why is Canada's economy diverging from America's?

THE ECONOMIES of Canada and America are joined at the hip. Some $2bn of trade and 400,000 people cross their 9,000km of shared border every day. Canadians on the west coast do more day trips to nearby Seattle than to distant Toronto. No wonder the two economies have largely moved in lockstep in recent decades: between 2009 and 2019 America's GDP grew by 27%; Canada's expanded by 25%.

Yet since the pandemic North America's two richest countries have diverged. By the end of 2024 America's economy is expected to be 11% bigger than five years before; Canada's will have grown by just 6%. The difference is starker once population growth is accounted for. The IMF forecasts that Canada's national income per head, equivalent to around 80% of America's in the decade before the pandemic, will be just 70% of its neighbour's in 2025, the lowest for decades. Were Canada's ten provinces and three territories an American state, they would have gone from being slightly richer than Montana, America's ninth-poorest state, to being a bit worse off than Alabama, the fourth-poorest.

The performance gap owes little to covid-19 itself. Canada did have a deeper recession than America after covid struck, partly because of stricter and longer lockdowns. Its GDP fell by 5% in 2020, compared with 2.2% in America. But Canada soon caught up. The country's national income grew by 4% between 2019 and 2022, nearly on par with America's, which expanded by 5% over the period.

Instead the divergence is more recent: since 2022 America's economy has motored ahead, leaving Canada's in the dust. The reason is not some bump on the road but what lies under the bonnet. Two drivers of Canadian growth have sputtered.

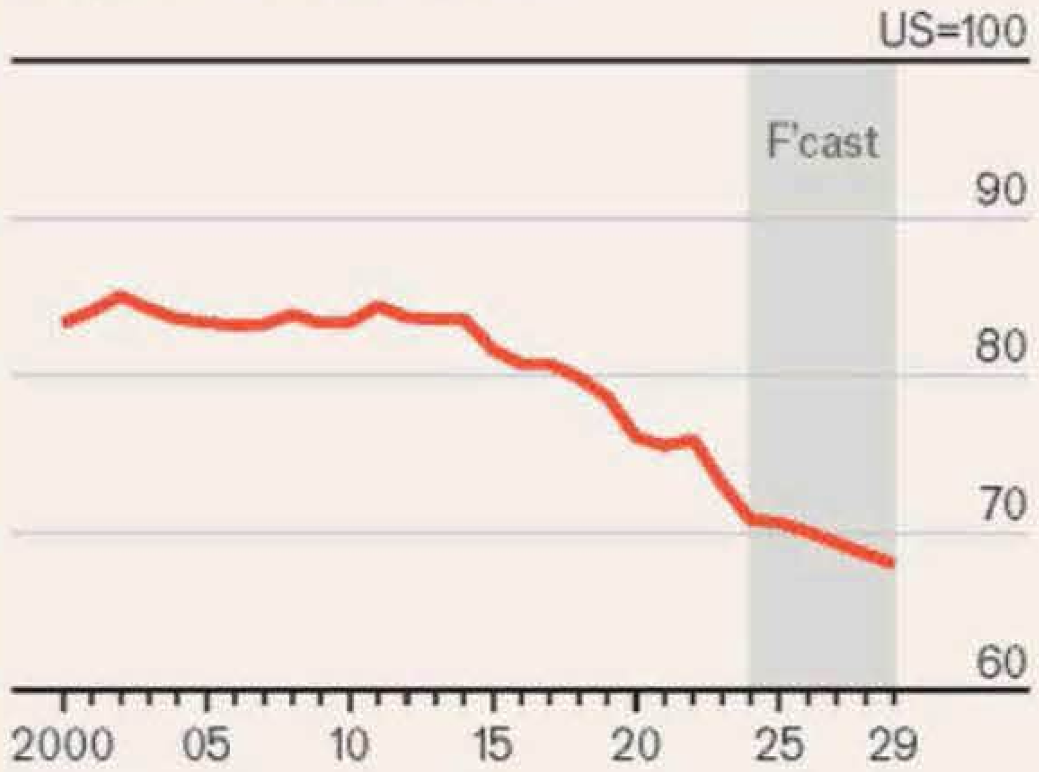
The first of these is the services industry, which makes up about 70% of Canada's GDP. In the aftermath of the pandemic Americans splurged on goods, which boosted manufacturers north of the border (American consumers gobble up around 40% of Canadian factories' output). But they have since switched back to spending on domestic services. "The composition of American growth hasn't been favourable to Canada," says Nathan Janzen of Royal Bank of Canada (RBC), a bank. The job of powering Canada's economy, therefore, falls even more to its own services sector, which relies on demand from Canadian households and the government.

Unfortunately, that demand has been throttled by higher interest rates. Monetary policy has had more "traction" in Canada than in America, says Tiff Macklem, the central-bank governor. In the latter, most mortgages are fixed for 30 years, whereas in Canada they are typically set for five. A greater share of Canadians than Americans have already seen their mortgage payments rise. This is all the more painful as Canadian households bear more debt, relative to income, than anywhere in the G7 club of large, rich countries. They now fork out an average 15% of their income to pay back debt, up one percentage point since 2019. And unlike Uncle Sam, Canada's government has not tried to soften the blow by loosening the purse strings. It ran a deficit of just 1.1% of GDP in 2023, compared with 6.3% in America.

Moose trap

Canada, GDP per person at PPP*

Relative to the United States



Source: IMF *Purchasing-power parity

The second faltering growth driver is Canada's petroleum industry, which accounts for 16% of exports. Canada under-invested in new production for years after 2014, when a collapse in oil prices hurt its fuel-dependent economy. In America, by contrast, oil-producing states suffered but consumers cheered. When prices spiked after Russia invaded Ukraine, investors did more to support American shalemen; the country's crude output has rocketed. It was one-quarter higher in the first seven months of 2024 than it was during the same period six years ago. Canada's has grown by only 11% over the same period.

Oil's decline penalises Canada's economy at large, because it is one of the country's most productive sectors. That adds to a long-standing productivity problem. Growth in output per hour worked across Canada has been sluggish for two decades. It increasingly resembles Europe rather than America, which has benefited from a tech boom that has largely eluded Canada. Its GDP per capita since the pandemic has risen more slowly than that of every other G7 country bar Germany.

What Canada lacked in productivity it could long make up by having more workers, thanks to high immigration. Between 2014 and 2019 its population grew twice as fast as America's. Canada has historically been good at integrating migrants into its economy, lifting its GDP and tax take. But integration takes time, especially when migrants come in record numbers. Recently immigration has sped up, and the newcomers seem less skilled than immigrants who came before. In 2024 Canada saw the strongest population growth since 1957. Many arrivals are classified as "temporary residents", including low-skilled workers and students. They are more likely to be unemployed or in low-earning jobs, dampening growth in income per person. Canada's unemployment rate rose to 6.6% in August, from 5.1% in April 2023.

Take all this together and it is clear that the seeds of the decoupling were sown much earlier than the pandemic, with sagging services the latest in a series of ailments. There are no quick fixes. Canada's central bank has cut interest rates three times so far this year, from 5% in May to 4.25% today. But many borrowers will still feel worse off because they have yet to renew their mortgages. Immigration restrictions have been introduced, including a cap on international students, but that won't solve Canada's chronic productivity problem. Catching up to Alabama may soon seem like a distant dream. ■

Public finances

Unaccountable accounts

A tonne of public debt is never made public

How much money has Senegal borrowed? More than previously thought, according to Ousmane Sonko, who became its prime minister in April. At a press conference on September 26th he said the previous government had "lied to the people" by hiding loans worth 10% of GDP, enough to push the country's public debt to 83% of national income. Since a full audit has not yet been published, it is hard to know what numbers to believe. The IMF, which has a $1.9bn bail-out programme with Senegal, is not pleased.

This sort of confusion is surprisingly common. Some governments struggle to keep track of everything they owe, such as the debts of state-owned firms, which often borrow with abandon. Others tap creditors in secret to avoid scrutiny. Since 1970 governments in the global south have accrued at least $1trn in external debt that was not reported to the World Bank when it was contracted, according to a new study by researchers at the World Bank, the University of Duisburg-Essen and the University of Notre Dame. That amounts to more than 12% of their foreign borrowing, in all currencies, over that period.

The researchers reach this figure by tracking revisions to the World Bank's external-debt statistics, which are based on reporting from debtor governments. About 70% of all debt-stock estimates are amended after initial publication. Most changes

Shadow finance

are small and presumably innocent. But upward revisions are larger than downward ones, suggesting systematic underreporting. By definition, hidden debts can be counted only when they are revealed, so their true value may be higher still.

There is little misreporting of World Bank loans, which are routinely disclosed, or of bonds, which are publicly traded. The largest revisions relate to other kinds of borrowing from private lenders, such as bank credit, or bilateral loans from governments. Hidden debts accumulate when economies are booming, and are more likely to be exposed when growth slows, as countries default or seek help from the IMF. In the last few years debt revelations have surged as countries grapple with the financial fallout from covid-19 (better reporting may also explain some of the rise). The 2022 edition of the World Bank's debt statistics made upward revisions of more than $200bn to past data, the largest increase in history (see chart on next page).

The worst cases of hidden debt are corruption rackets. In Mozambique, for example, state-backed firms secretly borrowed $1.2bn in a scheme engineered by Credit Suisse bankers, government officials and a Lebanese shipbuilding firm. When the debt was revealed in 2016 the economy crashed. Many of the perpetrators, who had taken kickbacks, are now behind bars. In August the finance minister who signed off the deals was convicted of fraud and money-laundering by a court in New York.

BUTTONWOOD

Orcel's horizon

Can Europe's star banker create a European champion?

THE CAREER of Andrea Orcel vividly encapsulates the recent history of European banking. At Merrill Lynch, now part of Bank of America, Mr Orcel advised on deals that formed part of the wave of mergers that crested in 2007, when a pan-European troika bought ABN AMRO, a Dutch lender. After the financial crisis of 2007-09, grand cross-border ambitions were ditched. Mr Orcel's next job was to run the investment-banking arm of UBS, a Swiss champion.

After an abortive move to Santander, a Spanish bank, Mr Orcel landed on his loafers in the top job at UniCredit in 2021, shortly before interest-rate rises bounced the sector back to profitability. He is justifiably credited with the Italian lender's resurgence; its share price has quadrupled since he was appointed. Now his designs on Commerzbank, a German lender, are testing the EU's appetite for the integrated financial system its leaders say it needs.

On September 11th UniCredit said it had bought a 4.5% stake in Commerzbank from the German government, adding to its pre-existing position of the same size. Speaking to your columnist in Prague, where Mr Orcel had travelled to address colleagues in the grounds of the Strahov Monastery, the banker says he was surprised by the explosive political reaction that followed his bank's investment. "We bought that stake transparently, with respect to our position and our intentions, in a process that was also transparent. We had every reason to assume that this was a welcome investment." Since then UniCredit, through derivatives trades, has increased its position in the bank to just above 21%. Olaf Scholz, Germany's chancellor, has fulminated against "unfriendly attacks" on the country's lenders. One member of

Commerzbank's board says he is nauseated by the prospect of Mr Orcel cutting costs at the bank.

UniCredit's German expedition is less surprising to analysts, who have long predicted consolidation in the country's banking industry. Bosses of both firms have, in the past, talked about combining Commerzbank with HypoVereinsbank, the German lender UniCredit bought in 2005, according to Mr Orcel. They are "almost a perfect match" for each other, he says, noting the lack of overlap in states such as Bavaria. Mr Orcel reckons a combined bank would have a 10% share servicing corporate clients, reaching perhaps the low teens in the *Mittelstand*, Germany's dense fabric of small firms. All to the good, he says: Europe's economic competitiveness remains blunted by the lack of strong, pan-European lenders.

It is a compelling pitch, and one Mr Orcel makes energetically. But if UniCredit's investment in Commerzbank becomes a takeover bid, investors are likely to pay less attention to potential revenue "synergies" than to reductions in the combined bank's costs. Should that involve firing many workers, expect politicians to shelve their calls for ambitious continental renewal. Few doubt that Commerzbank could be run more profitably. During the most recent quarter, UniCredit's cost-to-income ratio in Germany was 20 percentage points lower than that of Commerzbank as a whole. That's a cavernous gap—even considering Commerzbank's larger retail business. Mr Orcel says management staff at the corporate centre would bear the brunt of the cuts, implying few branch closures.

Mr Orcel says he has not hired investment bankers to prepare for a deal. If he does, how might Commerzbank prepare its defence? It would be unwise for it to rely on the European Central Bank limiting UniCredit's shareholding, or the German government using its remaining 12% stake to hinder a deal. And there are few signs of a white knight galloping up the autobahn to give it more cover. Last week Bettina Orlopp, Commerzbank's new boss, raised the bank's profit guidance and pledged more shareholder pay-outs. But investors are cagey. The bank has a history of making rosy forecasts which it then misses.

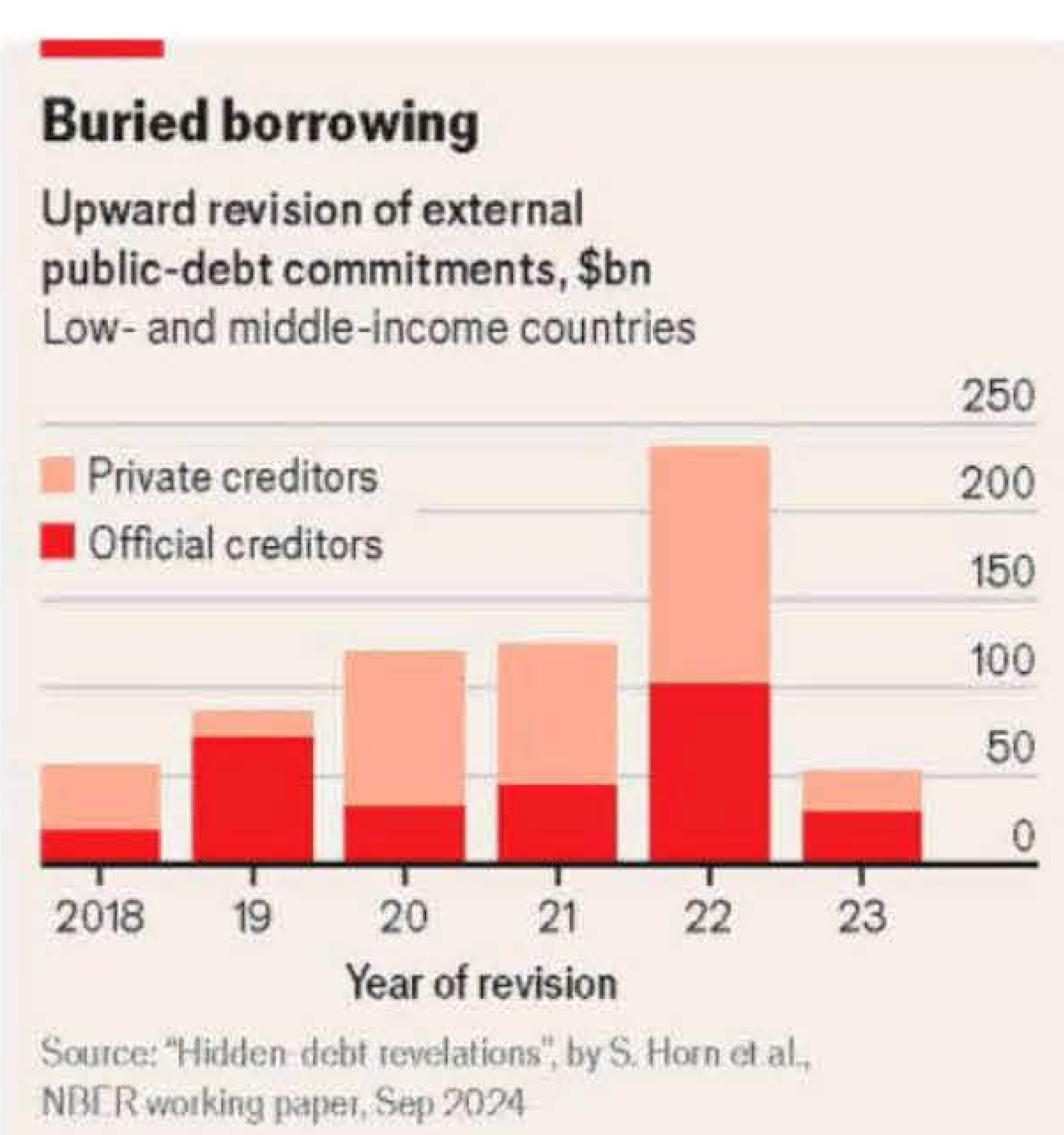
If Mr Orcel ends up creating a European champion, he will then have to run it. The lack of a complete banking union would be a headache. So might politics around a merged entity in Germany. Is there a scenario where UniBank becomes CommerzCredit? Mr Orcel rejects the idea of moving a combined bank's headquarters to Germany. The bank is "very, very proud" of its Italian roots, he says; moving north would be yielding to political pressure. Besides, Italians seem no more willing to give up their banking stars than their German friends.

Opaque borrowing also hinders debt restructuring. Sometimes it can take months for conflicting spreadsheets to be reconciled by hand. Confusion about the true level of Zambia's debt exacerbated distrust between its Western and Chinese creditors when it first sought restructuring in 2020, a process which dragged on until this year. The figure reported for its debt in 2021 has since been revised upwards by more than $3bn, or 14% of GDP. In general, the researchers find that countries spend a longer period in default when hidden debts are involved.

A straightforward way to increase transparency would be to require it by law. A recent IMF survey of 60 countries, from Albania to Zimbabwe, found that barely half have legislation obliging governments to submit debt-management reports to parliament, and hardly any require the publication of terms of sovereign loans. Another problem is the overuse of confidentiality clauses in many debt contracts, which go beyond what might be justified by commercial sensitivity.

Lenders also bear responsibility. In 2019 the Institute of International Finance, a club of financiers, developed a set of principles for private creditors to voluntarily disclose their lending to governments. But only two banks ever listed information about their loans on the public registry established for the purpose (one of them was Credit Suisse after the Mozambique affair, as it sought to clean up its reputation). The registry records no loans agreed this year. An investigation last year by Debt Justice, a British campaign group, estimated that at least $37bn of loans should have been published, compared with just $2.9bn that had been recorded at the time.

Campaigners suggest that sovereign-loan contracts should be unenforceable in court if they are not publicly disclosed within 30 days of signature. That could be achieved with legal tweaks in England and New York, where international debt cases are usually heard. It would not eliminate the problem, but it would be a start. ■



Global housing

Block party

SAN FRANCISCO

Why the house-price supercycle is just getting started

After the financial crisis of 2007-09, global house prices fell by 6% in real terms. But, before long, they picked up again, and sailed past their pre-crisis peak. When covid-19 struck, economists reckoned a property crash was on the way. In fact there was a boom, with mask-wearing house-hunters fighting over desirable nests. And then from 2021 onwards, as central banks raised interest rates to defeat inflation, fears mounted of a house-price horror show. In fact, real prices fell by just 5.6%—and now they are rising fast again. Housing seems to have a remarkable ability to keep appreciating, whatever the weather. It will probably defy gravity even more insolently in the coming years.

The history of housing involves a once-unremarkable asset class turning into the world's largest. Until about 1950, the rich world's house prices were steady in real terms (see chart 1 on next page). Builders put up houses where people wanted them, preventing prices from rising much in response to demand. The roll-out of infrastructure in the 19th and early 20th centuries also helped temper prices, argues a paper by David Miles, formerly of the Bank of England, and James Sefton of Imperial College London. By allowing people to live farther from their place of work, better transport increased the amount of economically useful land, reducing competition for space in urban centres.

Events that followed the second world war turned all these processes on their heads, creating the housing supercycle that we live with today. Governments got into the business of subsidising mortgages. People in their 20s and 30s were having many children, boosting the need for housing. Urbanisation raised demand for shelter in places that were already crowded.

The second half of the 20th century brought a slew of land-use regulations and anti-development philosophies. It became harder to build infrastructure, making cities less expandable. Metropolises that had once built housing with aplomb, from London to New York, applied the brakes. Across the rich world, construction of houses expressed as a share of the population peaked in the 1960s, then fell steadily to about half its level today. House prices began to move inexorably upwards.

The past few years have been less disruptive to housing markets than even optimistic forecasters were predicting three years ago. As central bankers have raised rates, many mortgage-holders have not felt a thing. Before and during the pandemic many had loaded up on fixed-rate mortgages, shielding them from higher rates. In America, where many people fix their mortgage-interest rate for 30 years, households' mortgage-interest payments, as a share of income, remain steady (see chart 2). New buyers are facing higher mortgage costs. But rapid earnings growth is helping counteract this effect. Wages across the ▸▸

G10 group of countries are 20% higher than they were in 2019.

Not everywhere has emerged unscathed. In Germany, New Zealand and Sweden real house prices have tumbled by more than 20% since pandemic peaks. Yet in other places, house prices only dropped a bit, and a boom of sorts is under way. American house prices reach new highs nearly every month, having risen by 5% in nominal terms in the past year. In Portugal prices are soaring. Other places with weak housing markets are turning them around. From 2011 to 2019 house prices in Rome fell by more than 30% in nominal terms, as Italy dealt with a sovereign-debt crisis. Now they are rising again.

In the short term house prices will probably keep rising. Falling interest rates help. In America the rate on a 30-year fixed mortgage has fallen by close to 1.5 percentage points from its recent peak. In Europe a wave of fixed-rate borrowers will soon be able to refinance at lower rates, as central banks cut their policy rates. But there are deeper forces at work, too. Three factors will ensure that, for decades to come, the housing supercycle endures.

The first relates to demography. We calculate that the rich world's foreign-born population is rising at an annual rate of 4%, the fastest growth on record. Immigrants need a place to live, which, research suggests, tends to lift both rents and house prices. A recent paper by Rosa Sanchis-Guarner of Barcelona University, looking at Spain, finds that a one-percentage-point rise in the immigration rate boosts average house prices by 3.3%.

In response to record arrivals, politicians from Canada to Germany are clamping down on immigration. But even under the strictest policies, rich countries will probably continue to receive more migrants than they used to. Their need to cater to an ageing population is likely to overwhelm a desire to tighten borders. Goldman Sachs, a bank, reckons that if Kamala Harris wins the American presidential election, net immigration will fall gently, to 1.5m per year from well over 2m in 2024. If Donald Trump wins with a split government, they expect it will fall only to 1.25m.

The second factor relates to cities. When covid-19 struck in 2020, many people thought that urban areas would lose their shine. The rise of remote work meant that, in theory, people could live anywhere and work from home, enabling them to buy roomier housing for less money.

It has not worked out that way. People work from home a lot more than they used to, but big cities retain their draw. In America 37% of businesses are located in large urban areas, the same share as in 2019. We calculate that the share of the rich world's overall employment taking place in capital cities has grown in recent years (see chart 3). In Japan, South Korea and Turkey, more jobs are created in capitals than elsewhere. They are also home to more fun: the share of Britain's bars and pubs located in London has risen a tad since before the pandemic. All this raises competition for living space in compact urban centres, where the supply of housing is already constrained.

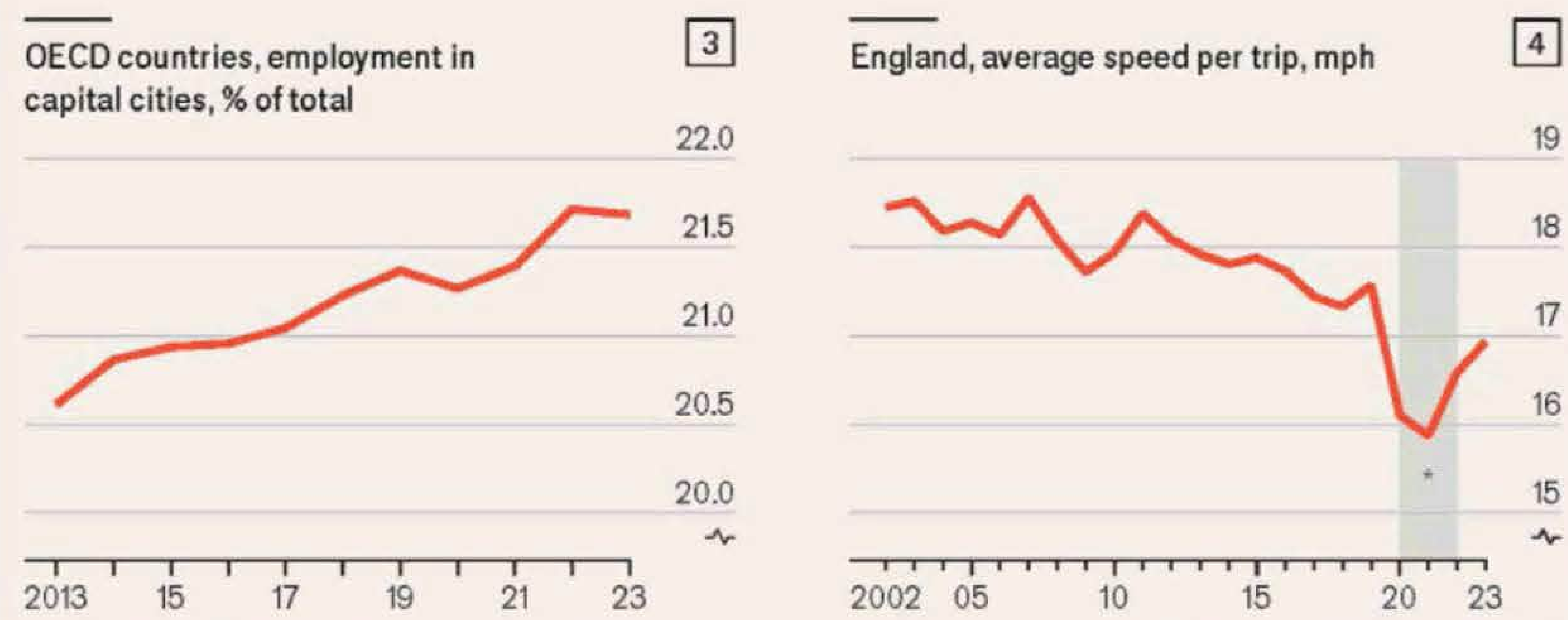
The city's triumph compounds the effects of the third factor: infrastructure. In many cities commuting has become more torturous, limiting how far people can live from their job. In Britain, average travel speeds have fallen by 5% in the past decade (see chart 4). In many American cities congestion is close to an all-time high, according to data from the Texas A&M Transportation Institute, a research group. Many governments find it nearly impossible to build new transport networks to lighten the load. California's high-speed rail, meant to link Los Angeles and San Francisco and much potential living space in between, will probably never be built.

Some economists hope that a YIMBYish turn is afoot. Those people who say "yes" to having new housing "in my backyard" have won the argument, and appear to have converted some politicians. A few places are following the YIMBY playbook of changing land-use rules to encourage building. In early 2022 housebuilding permissions in New Zealand hit an all-time high, helping deflate property prices.

Beyond New Zealand, however, the YIMBY influence remains marginal. A paper by Knut Are Aastveit, Bruno Albuquerque and André Anundsen, three economists, finds American housing "supply elasticities"—the extent to which construction responds to higher demand—have fallen since the 2000s. We find no evidence of a generalised uptick in construction since the pandemic. The supply problem remains most acute in cities, where regulations are strictest. In San Jose, America's priciest city, just 7,000 houses were authorised for construction last year, well down on the rate a decade ago. But even in Houston and Miami, which pride themselves on avoiding the mistakes made by other big cities, building is slow.

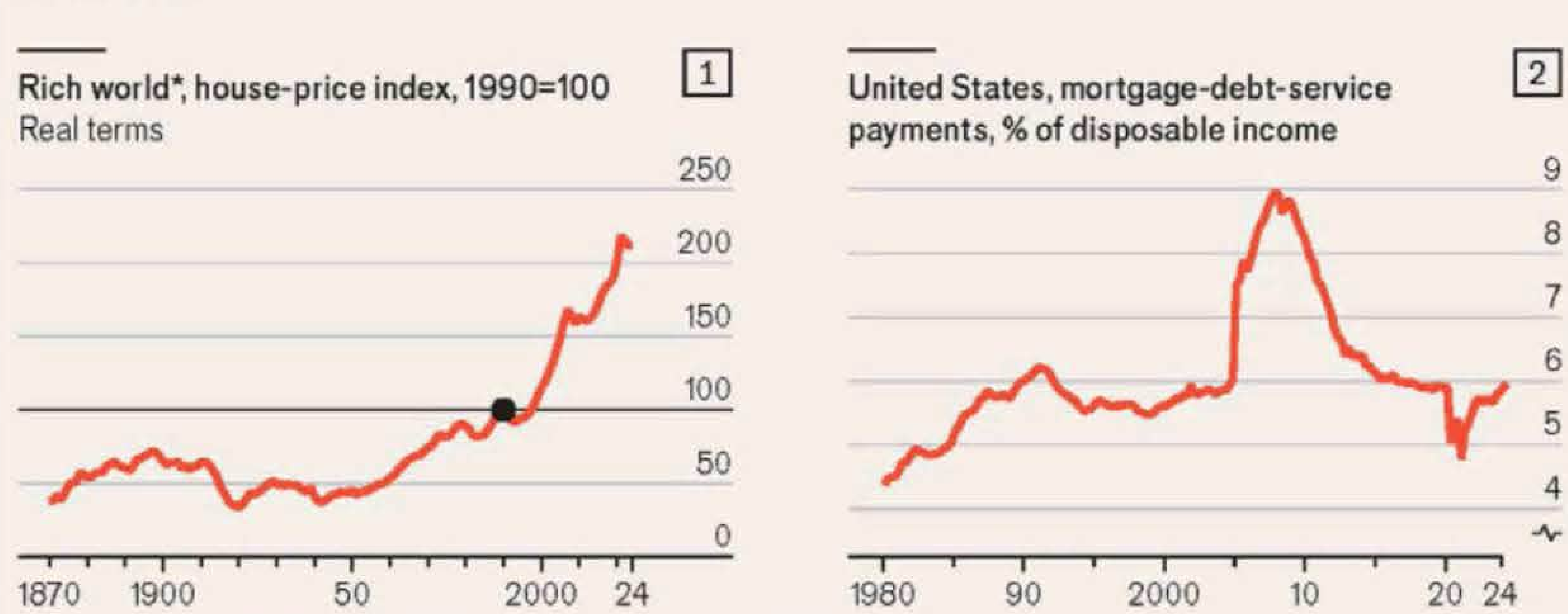
Over the coming years housing markets could face all sorts of slings and arrows, from swings in economic growth and interest rates to banking busts. But with the long-term effects of demography, urban economics and infrastructure aligning, consider a prediction made in 2017 by Messrs Miles and Sefton. It finds that "in many countries it is plausible that house prices could now persistently rise faster than incomes". The world's biggest asset class is likely to get ever bigger. ■

City-bound



Sources: OECD; Department for Transport; *The Economist* *Smaller sample size due to covid-19

Home run

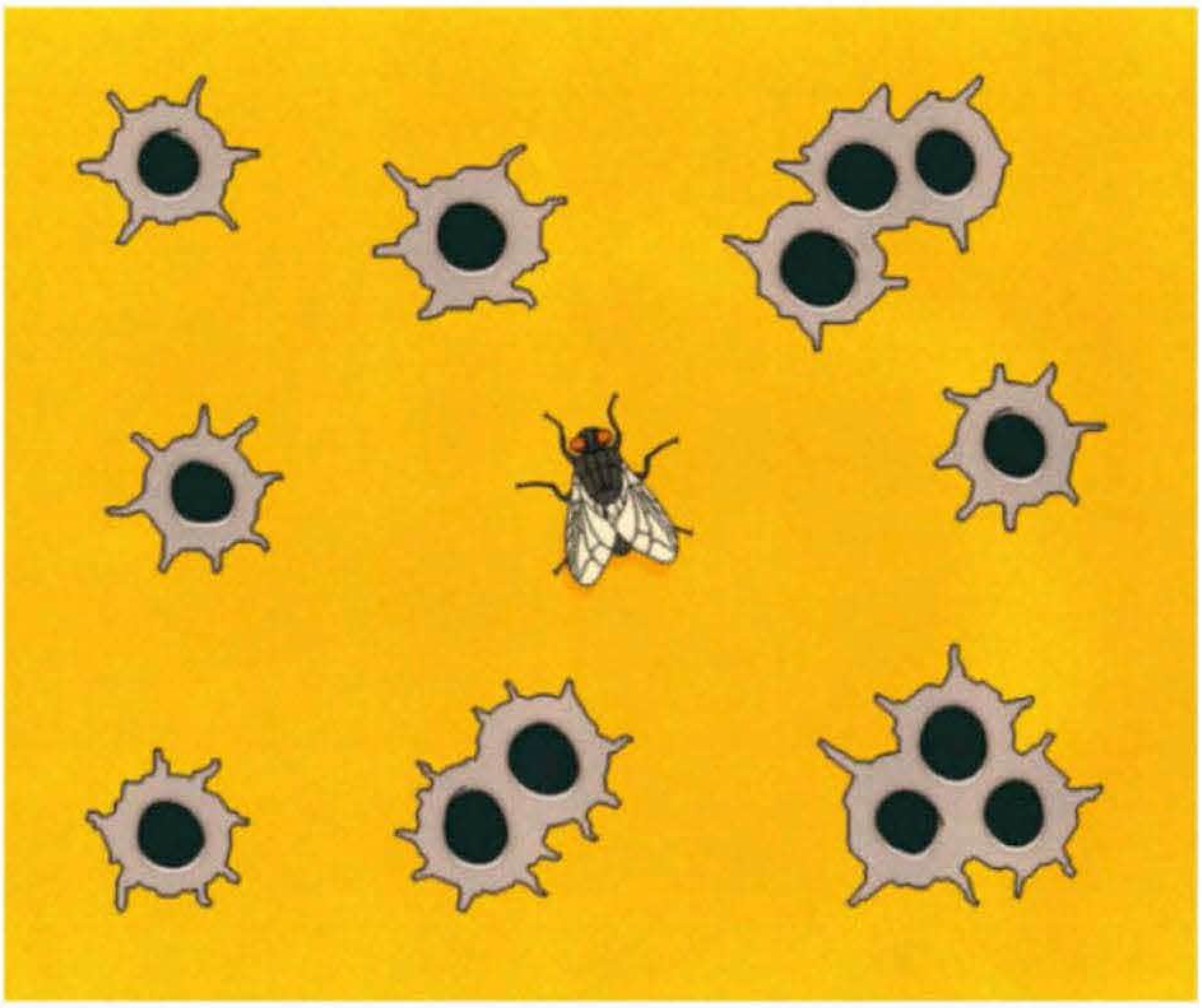


Sources: "No price like home: global house prices, 1870-2012", by K. Knoll, M. Schularick and I. Steger, *American Economic Review*, 2017; Federal Reserve Bank of Dallas; Federal Reserve; *The Economist* *14 countries to 2012, 26 countries from 2013-24

FREE EXCHANGE

The strategic-commodity fallacy

Why economic warfare nearly always misses its target



BETWEEN AUGUST and October 1943 American warplanes repeatedly bombed Schweinfurt, in southern Germany. The Bavarian town did not host army HQs or a major garrison. But it produced half of the Third Reich's supply of ball bearings, used to keep axles rotating in everything from aircraft and tank engines to automatic rifles. To Allied planners, who had spent months studying the input-output tables of German industry, the minuscule manufacturing part had the trappings of a strategic commodity. Knock away Germany's ability to make them, the thinking went, and its military-industrial complex would come crashing down.

The operation was costly for the Americans, with heavy losses of aircraft and crew. But it was effective: in just a few months Bavaria's ball-bearing prowess was reduced to rubble. Yet soon it became clear that, despite Schweinfurt's obliteration, German factories kept cranking out Messerschmitts and machine guns at just the same pace. America's Strategic Bombing Survey, carried out in the aftermath of the war, found "no evidence that the attacks...had any measurable effect on essential war production".

In the decades since, versions of this story have played out many times, most recently with America's sanctions against Russia and its measures against China. Adversaries in both cold and hot wars have tried to deprive each other of a strategic commodity, only to succeed in one sense (access to that commodity was reduced) and fail in another (the crunch did not bring about economic collapse or military capitulation). In a book to be published next year, Mark Harrison and Stephen Broadberry, two British scholars, use a theory first set out in the 1960s by Mancur Olson, an economist, to explain this paradox. The concept of a strategic commodity, they argue, is an illusion.

A good is often described as "strategic", "vital" or "critical" when it is thought to have few substitutes. America and China have strategic reserves of petroleum, because their leaders think oil cannot easily be replaced, at least in the short run. Some minerals are deemed critical because you cannot build a viable electric car without them. But Olson reckoned very few goods, if any, are truly strategic. Instead, there are only strategic needs: feeding a population, moving supplies, producing weapons. And no amount of pounding, literal or figurative, seems able to alter the target countries' ability to meet those needs, one way or another.

To understand why that is, return to the classic definition of what, supposedly, constitutes a strategic good. The starting premise is that a class of goods exists for which there are no substitutes. But substitutes nearly always exist; and if a good really cannot be replaced in the short term, in the longer run it almost always can be. Make a commodity scarce or dear enough, a microeconomist might infer, and the mix of inputs needed to produce output start shifting naturally.

The way Germany responded to its wartime ball-bearing crunch illustrates these mechanics. It was quickly discovered that, in many cases where manufacturers used to swear by ball bearings, simple bearings would suffice. For the uses that remained, extensive stockpiles could be drawn upon, which bought time to build replacement plants and, eventually, engineer ball bearings out of many military supplies.

The lesson Olson took from all this is that the cost imposed on those losing access to a resource, however key, is not the sudden collapse of every industry that depends on it but the more affordable cost of finding workarounds. Over time such costs usually accrue, slowing growth, but they are hardly ever enough to capsize an economy. This suggests that another commonly used economic concept—that of the "supply chain"—is too narrow at best. Modern economies look more like webs, where the severing of one link is rarely sufficient to compromise the entire structure.

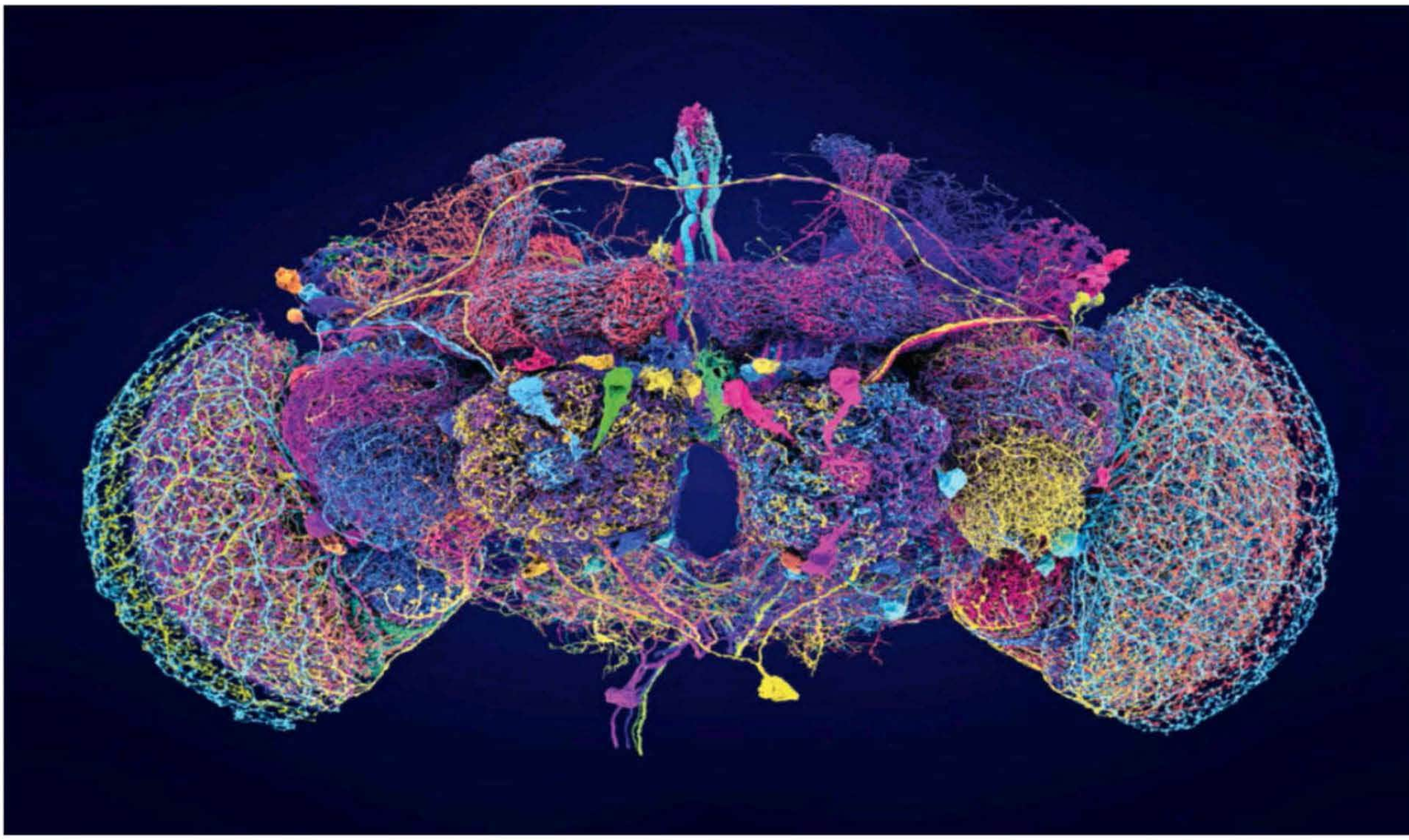
Olson could not have foreseen that economic warfare would develop into the sophisticated tit-for-tat of trade and financial sanctions that has been on full display since Russia's full-scale invasion of Ukraine in 2022. The commodities those target come in many forms, from credit and energy to "dual-use" goods and software. Their aim, not always explicit, is generally to change the behaviour of their targets and deter others from mimicking them. Export restrictions work directly, by blocking shipments of certain goods to the problematic party, while other sanctions seek to limit access to hard currency by making it harder for their targets to export lucrative goods. Often a combination is used.

Despite its growing complexity, however, this economic arsenal—largely controlled by America—has mostly misfired. Early attempts were already disappointing. A study in 2007 by researchers at the Peterson Institute for International Economics looked at 174 sanctions campaigns waged worldwide between 1915 and 2000, of which 162 took place after 1945. It found that such sanctions achieved their goals in part or in whole in only one-third of all cases. Success was more likely when goals were narrowly defined, the target state was already economically weak and there was no history of previous antagonism with the enforcing party.

The net effect

This explains why sanctions against Russia, a hostile state flush with cash, were never going to meet their broad goals. In 2022 excitable analysts predicted that Russia was on the brink of a 1998 moment (when it slid into financial chaos) or even a 1917-style revolution (when economic implosion caused the end of tsarism). The resilience of Russia's economy has confounded expectations. It has dodged sanctions partly by substituting goods it could no longer source. It also found new trading buddies—not least China—to replace those it had lost. In a webby world, the notion of "strategic partner" looks increasingly transient, too. ■

Science & technology



Neuroscience

On the fly

The first "connectome" of the brain of a complex adult animal has just been completed

FRUIT FLIES are smart. For a start—the clue is in the name—they can fly. They can also flirt; fight; form complex, long-term memories of their surroundings; and even warn one another about the presence of unseen dangers, such as parasitic wasps.

They do each of these things on the basis of sophisticated processing of sound, smell, touch and vision, organised and run by a brain composed of about 140,000 neurons—more than the 300 or so found in a nematode worm, but far fewer than the 86bn of a human brain, or even the 70m in a mouse. This tractable but non-trivial level of complexity has made fruit flies an attractive target for those who would like to build a "connectome" of an animal brain—a three-dimensional map of all its neurons and the connections between them. That attraction is enhanced by fruit flies already being among the most studied and best understood animals on Earth.

For many years the race to assemble an adult fly connectome seemed likely to be won by the FlyEM project at the Howard Hughes Medical Institute's Janelia Research Campus, in Virginia. In 2020 FlyEM's researchers, led by Gerry Rubin, a veteran fly biologist, published a connectome of an adult fruit-fly "hemibrain", a set of 27,000 neurons in the middle of the organ. This was followed in 2023 by a connectome of the 3,016 neurons of a first-instar fly larva—the tiny grub that emerges from an egg. But Janelia has been pipped at the post to create a connectome of a complete brain by a group called FlyWire, based at Princeton University. Ironically, Flywire has used data collected by Janelia but abandoned in 2018 for being too difficult to analyse with the artificial-intelligence (AI) software available at the time.

Mala Murthy and Sebastian Seung, FlyWire's creators, however, had different AI software. They started the project in 2018 with the backing of the BRAIN Initiative (an attempt by America's government to do for neuroscience what the Human Genome Project did for genetics) to analyse Janelia's now-abandoned data. The outcome, published this week in *Nature*, is a model which paints a detailed picture of a female fly's brain with 139,255 neurons, and locates some 54.5m synaptic connections between them.

Creating a connectome means taking things apart and putting them back together. The taking apart uses an electron microscope to record the brain as a series of slices. The putting back together uses AI software to trace the neurons' multiple projections across slices, recognising and recording connections as it does so.

Janelia's researchers had developed two ways of doing these things. The FlyEM team used a beam of gallium atoms to blast away nanometres of tissue from a brain sample and then record an image of each newly exposed surface with a scanning electron microscope (which fires a beam of electrons at a surface and detects any radiation subsequently emitted). Their own fruit-fly connectome, of a male, should be ready within a year. ▸▸

Janelia's second method involved shaving layers from a sample with a diamond knife and recording them using a transmission electron microscope (which sends its beam through the target rather than scanning its surface). This is the data used by FlyWire. With Janelia's library of 21m images made in this way, Dr Murthy and Dr Seung, ably assisted by 622 researchers from 146 laboratories around the world (as well as 15 enthusiastic "citizen scientist" video-gamers, who helped proofread and annotate the results), bet their software-writing credibility on being able to stitch the images together into a connectome. Which they did.

Besides the numbers of neurons and synapses in the fly brain, FlyWire's researchers have also counted the number of types of neurons (8,577) and calculated the combined length (149.2 metres) of the message-carrying axons that connect cells. More important still, they have enabled the elucidation not only of a neuron's links with its nearest neighbours, but also the links those neurons have with those farther afield. Neural circuitry can thus be studied in its entirety. The project's researchers have more than doubled the number of known cell types in the fly's all-important optic lobes, and shown how the new cell types connect in circuits that deal with different elements of vision, including motion, objects and colours.

This sort of thing is scientifically interesting. But to justify the dollars spent on them, projects such as FlyEM and FlyWire should also serve two practical goals. One is to improve the technology of connectome construction, so that it can be used on larger and larger targets—eventually, perhaps, including the brains of *Homo sapiens*. The other is to discover to what extent non-human brains can act as models for human ones (in particular, models that can be experimented on in ways that will be approved by ethics committees).

Here, evolutionary biology gets involved. Fruit flies and humans are on opposite sides of a 670m-year-old division splitting bilaterally symmetrical animals into two groups: protostomes and deuterostomes. This separation almost certainly predates the evolution of brains, meaning the brains of insects (which are protostomes) and those of vertebrates (deuterostomes) have separate origins. Drawing conclusions about the one from the other is thus a risky business.

This should not matter for long. Several groups are currently working on mouse connectomes, bits of which have already been put together. Though Janelia has no plans to go in this direction, Dr Rubin (who is, along with several other researchers from Janelia, a co-author of part of the package of nine *Nature* papers) reckons a complete mouse connectome could be created in a decade if someone were willing to stump up $1bn to pay for it. By analogy with the Human Genome Project, where the technology became steadily cheaper as things scaled up, this would also bring down the cost to a point where smaller connectomes, like those of flies, could be mass-produced.

The deuterostome-protostome division, together with more recent evolutionary shifts, also offers the possibility of a new science of comparative connectomology. In some cases it is already clear that giving natural selection multiple bites at the cherry has resulted in more than one solution to the same problem. The overarching organisation of the neurons in fly brains and vertebrate brains, for example, is completely different. In other instances, though, both brains seem to work in the same way, suggesting that might be the optimal way of doing things.

These natural experiments, the circuit-diagrams of which connectomes will make available, might even help human computer scientists. Brains are, after all, pretty successful information processors, so reproducing them in silicon could be a good idea. As it is AI models which have made connectomics possible, it would be poetic if connectomics could, in turn, help develop better AI models. ■

Climate science

So much hot air

Why it is so hard to tell which climate policies actually work

NATIONAL CLIMATE policies are a relatively recent invention. In 1997, according to the Grantham Institute, a think-tank at the London School of Economics, there were 60; by 2022 the number had risen to almost 3,000. Their effectiveness has proved almost impossible to measure. In August, an international research group published the first global evaluation of climate policies in *Science*, a journal. The study, which looked at around 1,500 policies implemented in 41 countries between 1998 and 2022, found that just 63 could be linked to sizeable reductions in emissions.

The successful policies shared some similarities. Taxation was generally effective; so was mixing different interventions. In Britain, for example, the researchers reckoned that a range of policies introduced in the 2010s—including a minimum carbon price for power producers, the phase-out of coal plants and stricter rules about air pollution—achieved a 40% cut in emissions from the electricity sector.

And systematically review the impact

Combined, researchers reckoned the 63 success stories reduced emissions by up to 1.8bn tonnes of carbon dioxide, more than the combined net total of Britain, France and Germany in 2023. That is commendable. But it is barely a sixth of what is needed to stop global temperatures from rising beyond 2°C above pre-industrial levels by the end of the century.

There is little evidence to suggest that the remaining 1,400 or so worked. That does not mean they were total failures. For one thing, the study in *Science* looked only at near-term effects; for another, the lack of available data meant significant sectors (such as agriculture) as well as vast regions (like most of Africa) were excluded. But their exact impact is unknown.

That ignorance is at odds with the speed and scale of the action required. It is partly the result of the field's traditional focus on modelling science, rather than policy, explains Jan Minx, who leads the Applied Sustainability Science working group at the Mercator Research Institute in Berlin. Predictions about climate are routinely collated and evaluated in the vast "assessment reports" published by the Intergovernmental Panel on Climate Change (IPCC). Several influential international institutions, such as the OECD and the World Bank, review countries' environmental efforts and make recommendations about how they might improve. But in general they do not analyse the actual impact specific interventions have on emissions. Nor do most government reports.

Things do not have to be this way. Academics in other fields regularly perform systematic policy reviews, in which a wide range of evidence is collected and analysed in a transparent and reproducible way. In clinical and public-health research this "has absolutely been the norm for the ▸▸

last 30 years," says Alan Dangour, the head of the climate and health team at Wellcome, a research-funding institute based in London. (By one reckoning, 80 systematic reviews relating to epidemiology were published per day in 2019 in English alone.)

Both Dr Minx and Dr Dangour are part of a growing effort to establish something similar in climate policy. The first step is persuading the right people. This June in Berlin, after more than two years of drumming up support, Dr Minx and his colleagues hosted What Works, the first international conference for evidence synthesis in climate policy. Among the 300-plus attendees were Jim Skea, the IPCC's chairman; Jennifer Morgan, Germany's climate envoy; plus representatives from Wellcome and the Bezos Earth Fund (a $10bn pot set up by Amazon's founder). More meetings are planned.

The next step involves teaching climate researchers how to synthesise evidence in meaningful, standardised ways. Techniques that work in epidemiology, for example, which often examine limited regions over timescales of days or weeks, need adapting for global climate analyses spanning decades or centuries. The conference in Berlin was followed by two days of this type of training for attendees, and Dr Minx says the aim is to offer similar sessions to ever more researchers.

But it is also necessary to speed up the entire process. Artificial-intelligence (AI) models, which excel at repetitive and lengthy tasks like identifying and digesting relevant papers, can help. The research group behind the *Science* paper themselves used a combination of machine learning and statistical analysis to link emissions cuts with potential policies. A separate project in 2021 used AI models to discover that there was almost no scientific literature on climate change and maternal and child health, nor on studies focusing on regions like Africa and South America. Wellcome is now funding projects explicitly aimed at plugging those gaps.

AI models can also help keep the existing evidence bank up-to-date. Because scientific understanding of the climate system is still evolving—just how much warming should be expected from each extra unit of carbon dioxide in the atmosphere is still a hotly debated topic, for example—that would help policymakers make the best decisions possible.

There was a concerted effort to create such "living" platforms during the covid-19 pandemic. Dr Minx and Dr Dangour both think a similar version is needed for climate policies; and quickly. "We have 30 years left to get emissions down to net zero," Dr Minx says. "We really need to be efficient, we need to be thrifty and we need to apply rigour—and that starts in science and ends in policy." ■

Genetic diseases

The gene-variant archipelago

Those living in insular communities have higher rates of genetic disease

ISLAND LIFE is famously idyllic, but it's long been known that islanders tend to experience disproportionately high rates of some rare genetically transmitted diseases. Faroe islanders, for example, who live on an archipelago in the North Atlantic Ocean, have a much higher-than-average incidence of carnitine transporter deficiency (CTD), a condition that prevents the body from using certain fats for energy. Inhabitants of Gran Canaria, meanwhile, an island off the north-western coast of Africa, are far more likely than average to have familial hypercholesterolaemia, a condition where the liver cannot process cholesterol effectively.

A new paper in *Nature Communications* provides one more such example. Jim Flett Wilson from the University of Edinburgh, who led the study, reports that people living on the Shetland Islands in northern Scotland have a one-in-41 chance of carrying the gene variant which causes Batten disease, a life-limiting neurodegenerative disease. The comparable rate elsewhere in Britain is one in 300, says Dr Wilson.

Such elevated risk is likely to be the consequence of genetic isolation. When members of a small population overwhelmingly reproduce with their fellows, the probability of children acquiring disease-causing mutations (known as variants) from their parents increases over time. This happens because of a process known as random genetic drift, says Dr Wilson, whereby some genetic variants become more common and others are lost. "This effect is magnified in small populations with little or no inward movement of new people to replenish the genetic pool," he says.

This susceptible isle

Such isolation need not only be the product of encircling water. Dr Wilson's new study also found "genetic islands" on the British mainland. In Lancashire, for example, the researchers found locals were more likely to have ten disease-causing variants—including one associated with Zellweger syndrome, a disease affecting the brain, liver and kidney which can be fatal in the first year of life. Those from the area were 73 times more likely to have the variant. In South Wales, one variant responsible for an inherited predisposition to develop kidney stones later in life was 44 times more common, whereas in Nottinghamshire a variant causing a severe blistering skin disorder was 65 times more common than elsewhere.

Such genetic islands can arise from geography and culture, says Dr Wilson, including a widely shared preference for individuals to pick spouses from the same community they grew up in. Some such islands are already monitored by health authorities. The NHS, for example, runs screening programmes for those of Ashkenazi Jewish descent, as around one in 40 Ashkenazi Jewish people carries harmful variants to the BRCA gene which make them more at risk of breast or ovarian cancer. This compares with around one in 260 people in the general British population.

The incidence of Batten-disease carriers among Shetland islanders is similar to that of the BRCA variant among Jews, says Dr Wilson, and yet no plans exist for a screening programme there. He says that the reliance on the "cascade" model, whereby people are offered testing only after a family member is diagnosed, is only half as reliable at picking up cases as universal testing on demand. Until such screening programmes are put in place, islanders risk being doubly isolated.

Psychiatry

Sound of mind

AI models trained on patients' speech can diagnose some mental-health conditions

TRADITIONAL METHODS of diagnosing mental-health conditions require patients to speak directly to a psychiatrist. Sensible in theory, such assessments can, in practice, take months to schedule and ultimately lead to subjective diagnoses.

That is why scientists are experimenting with ways to automate this process. Artificial-intelligence (AI) tools trained to listen to patients have proved capable of detecting a range of mental-health conditions, from anxiety to depression, with accuracy rates exceeding conventional diagnostic methods.

By analysing the acoustic properties of speech, these AI models can identify markers of depression or anxiety that a patient might not even be aware of, let alone able to articulate. Though individual features like pitch, tone and rhythm each play a role, the true power of these models lies in their ability to discern patterns imperceptible to a psychiatrist's ears.

AI has been used by mental-health professionals before. Large language models (LLMs), for example, can trawl transcribed interviews for patterns of speech and contextual cues symptomatic of psychological disorders. But text-based AI has limitations. Cultural nuances, language barriers, and different levels of fluency can skew results. LLMs have also been shown to reflect the linguistic biases prevalent in society: in one study, an LLM failed to diagnose depression in black patients compared with white counterparts.

Moreover, LLMs are known to "hallucinate"—which is to say they generate plausible-sounding but factually incorrect information. This shortcoming is particularly problematic in a field where accuracy can mean the difference between appropriate treatment and misdiagnosis.

That is why the new methods under development do not pay attention to individual words but rather to how those words are spoken. An AI model developed by researchers at South-Central Minzu University in China, for example, looks for subtle changes in a patient's voice. The researchers hypothesise that those with depression may have distinctive ways of speaking too subtle for the human ear to detect.

The system uses "pre-training"—a technique whereby the model is first exposed to huge amounts of general speech to help it recognise complex audio patterns. These patterns might include variations in rhythm, pitch variability and voice quality that are typically imperceptible to human ears. This pre-training acts as a linguistic tuning fork, allowing the system to pick up on intricate variations in speech that may signal depression, without needing to understand the words themselves. The researchers then adjusted, or "fine-tuned", this general-purpose system specifically for depression detection with the help of recordings of patients with depression.

This fine-tuned method showed remarkable accuracy. In results published in *Nature Scientific Reports* in June, the method was able to detect the presence of depression in a binary classification task 96% of the time, and was 95% accurate when asked to categorise its severity into four levels (no depression, mild, moderate and severe) based on one clinical rating scale.

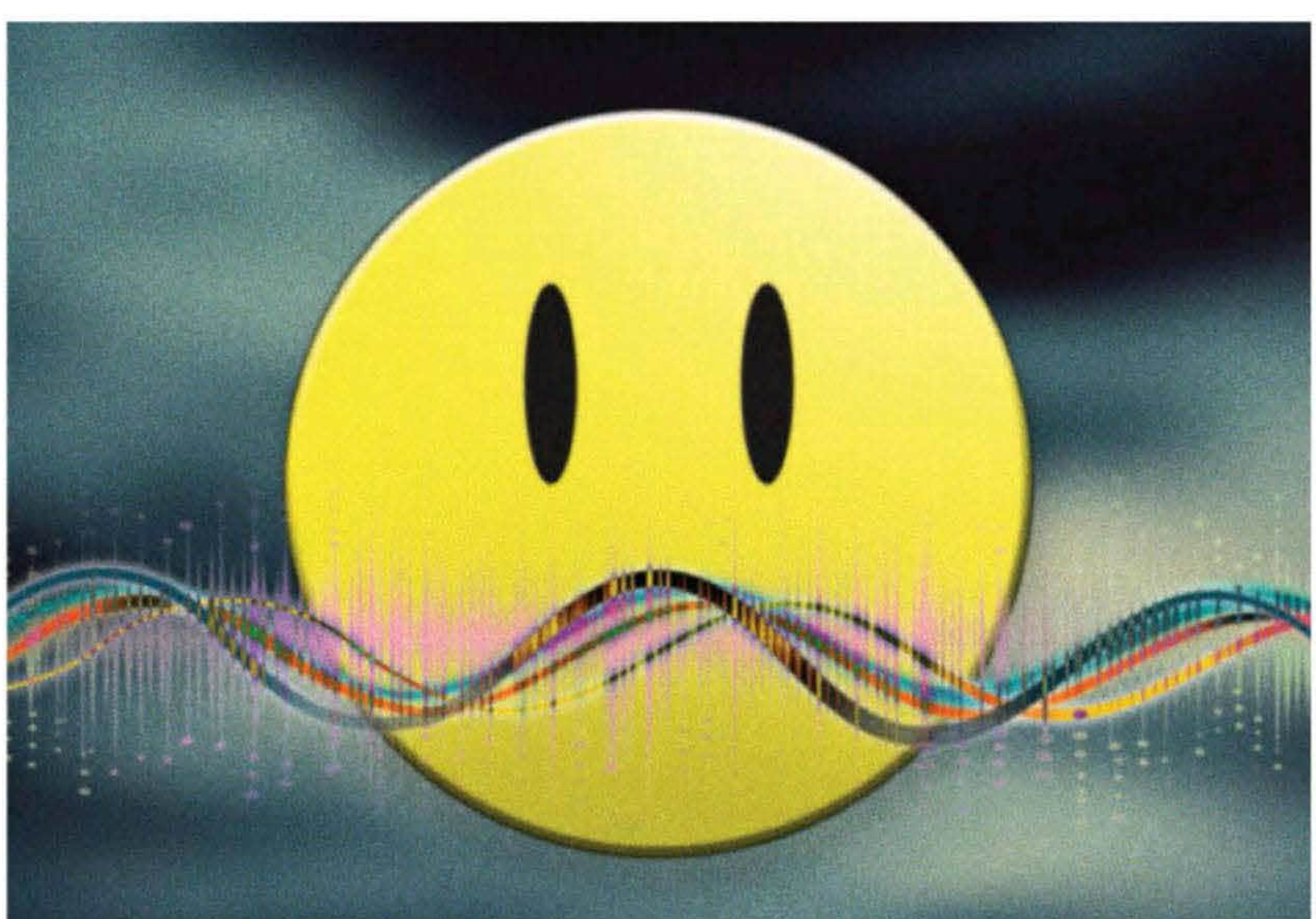
Other methods are also bearing fruit. Researchers from Sorbonne University in Paris have developed a method that analyses sound waves recorded via a smartphone app to detect various mental-health conditions. First, the sound waves are converted into visual maps called spectrograms that chart how a voice's frequency and volume vary over time. The model then examines each individual spectrogram for features indicative of various psychiatric disorders, including depression, anxiety, insomnia and fatigue.

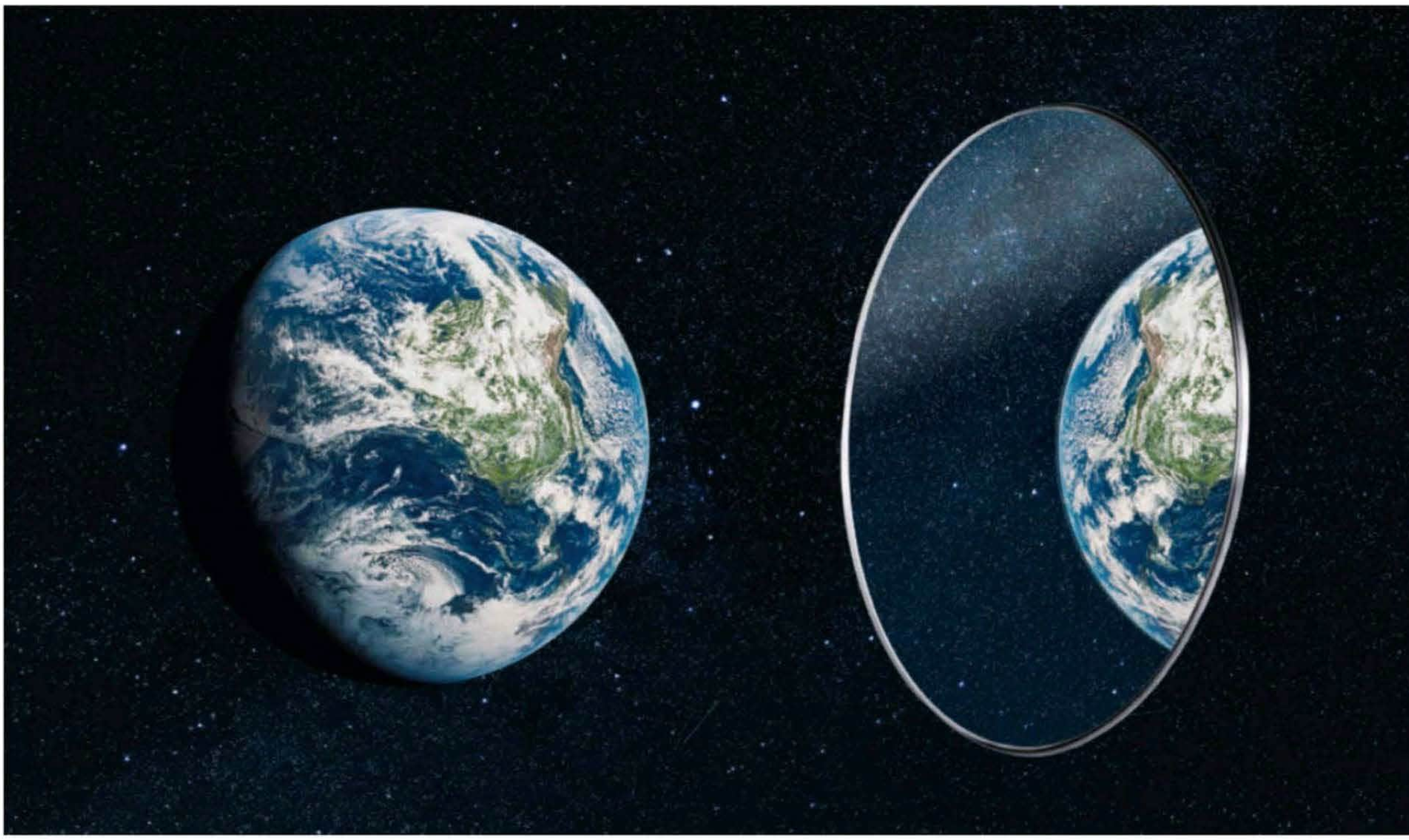
Once again, the AI model undergoes pre-training on a vast dataset of voice recordings, learning to recognise general speech patterns and characteristics. It then uses this knowledge to interpret the spectrograms from individuals in the study. This method employs deep learning techniques to automatically extract relevant features from the raw audio data, rather than relying on predefined acoustic characteristics. This means the exact cues the system uses are not easily interpretable by humans—a common, if sometimes contentious, aspect of many advanced AI systems. The results, published in an online preprint in March, are promising, but the research is still in its early stages.

I'm listening

The potential applications are vast. Soundwave analysis makes it easier for patients to be assessed even if they cannot accurately articulate their mental state, or are in distress. Because it works across languages, the method would also help a wider range of people and could offer valuable help in rural areas with few mental-health professionals. For overburdened clinicians, speech analysis could help triage patients and offer continuous monitoring for those requiring at-home treatments.

Diagnosis, though valuable, is only the first step. Different people with the same condition often require bespoke treatments for the symptoms they find most troubling. In depression, for example, "Some may have issues with memory, others with fatigue," says Gavin Tucker, a child psychiatrist at the Maudsley Hospital in London. The next step, then, for this promising technology seems clear—build AI models that can help doctors personalise the treatments they give to patients. ■





The stickiness factor

Malcolm Gladwell's appeal

How to be wildly successful while annoying critics

Revenge of the Tipping Point. By Malcolm Gladwell. *Little, Brown; 368 pages; $32. Abacus; £25*

YOU KNOW what you're getting when you open a book by Malcolm Gladwell. It will centre around a modestly counter-intuitive argument: being huge and strong is often a disadvantage, for instance, or talent and genius are overrated. Evidence for this thesis will be broken into around ten chapters, each containing a combination of briskly written reportage, historical anecdote and social science that draws out unexpected connections—between, for example, Lawrence of Arabia and a girls' basketball team, or a high-achieving school district and the wild-cheetah population. Readers will finish the book feeling better informed about how the world works.

Mr Gladwell's detractors say this feeling is an illusion. Social scientists who have reviewed his writing snarkily point out minor factual errors. Others consider him a "bullshitter" who cherry-picks data, oversimplifies complex questions and sprinkles social science over platitudes to make them seem profound. For his part, Mr Gladwell has argued that "People who read books in America seem to have no problem with my writing. But I am clearly a bee in the bonnet of some of the kinds of people who review books." On the one hand that sounds defiantly folksy. On the other it is a tacit admission that the people who read his work most closely find flaws.

Such criticism, however, has done little to dent Mr Gladwell's success. He has sold 23m books in North America alone. Six of his seven books have been international bestsellers. Three of them ("Outliers", "Talking to Strangers" and "The Tipping Point") spent, combined, around 18 years on the *New York Times* bestseller list. He hosts a popular podcast, "Revisionist History", now in its tenth season, and commands six-figure speaking fees.

Mr Gladwell revealed a market for idea-driven books that use social science to illuminate pop culture and render the world more comprehensible. In his wake, authors such as Daniel Kahneman ("Thinking, Fast and Slow") and Steven Levitt and Stephen Dubner ("Freakonomics") have found similar fame. Mr Gladwell's name has become an adjective: one veteran book editor says, "When people pitch me something they want to portray as a 'big idea' book, they always say, 'It's very Gladwellian.'"

His new book, "Revenge of the Tipping Point", provides an opportunity to assess his success and his critics' arguments. It returns to familiar ground: Mr Gladwell titled his first book, published 24 years ago, "The Tipping Point". In essence, it was an epidemiological metaphor strung across ten chapters, arguing that ideas, habits and practices can grow exponentially from a tiny starting-point, just as contagious diseases do, and that they have a "tipping ▸▸

point" when minor becomes major.

He posited three rules of epidemics: the "law of the few", which states that big social changes often stem from the actions of a small number of people; the "stickiness factor", which argues that "There are specific ways of making a contagious message memorable"; and the "power of context", which says that "Human beings are a lot more sensitive to their environment than they may seem."

Rule-making is a Gladwellian hallmark. In "David and Goliath" (2013) the rule is that "The powerful and strong are not always what they seem." In "Outliers" (2008) he proposes "the 10,000-hour rule", which posits—using Bill Gates, the Beatles, violinists and chess grandmasters as evidence—that is the minimal amount of practice time required to become great at something. Learning these rules makes readers feel smarter: stories are what happened, whereas rules have an implied predictive power about what will happen. They also deliver a hit of narrative satisfaction: a moral at the end of the parable.

Often, though, these rules are less profound than they appear. Large conventional armies (Goliaths) have long been vulnerable to nimble guerrilla Davids. Mr Gladwell called 10,000 hours "the magic number of greatness"; the research on which he bases this is much less conclusive.

Mr Gladwell at first appears to be heading down the same old path in his new book. After writing about the rash of bank robberies in Los Angeles in the 1980s-90s (attributable to enterprising gangsters and copycats) and low vaccination rates among students at Waldorf independent schools, Mr Gladwell wonders why these trends did not spread to other cities or schools: "There must be a set of rules, buried somewhere below the surface."

The heart of this book, however, is not rules, but a delightfully tricky question: if people understand where a tipping point lies, can they avoid it, and at what cost? Opioid prescriptions, for instance, are markedly lower in states with relatively onerous reporting requirements for doctors. Should a state try to engineer its way out of some future addiction crisis by imposing burdensome regulations?

Harvard, Mr Gladwell argues, engages in a more nefarious sort of social engineering: by easing admissions standards for athletes in obscure and sometimes expensive sports such as fencing and sailing, it favours white students. If older and heavier people spread viruses more widely than younger and thinner ones, as research cited by Mr Gladwell suggests they might, should others refuse to sit next to them on a plane during a pandemic? Around 10% of vehicles cause more than half of car-based air pollution; if a roadside test can target them more precisely than standard emissions tests can, should they be taken off the road, even if a large share of them belong to poor people who cannot afford a replacement?

Mr Gladwell, to his credit, declines to tip his hand, inviting readers to consider how they feel about social engineering. But these sorts of questions have a dark edge to them; whereas Mr Gladwell's first take on "The Tipping Point" was largely wide-eyed and optimistic, this book reflects a more techno-sceptical age.

Two things are near-certain about this book: it will wind up, probably soon, on bestseller lists. His detractors, also soon, will sneer at it. Steven Pinker, a psychologist at Harvard, said in a review in 2009 that "Readers have much to learn from Gladwell the journalist and essayist. But when it comes to Gladwell the social scientist, they should watch out."

This line of criticism misses the point. Mr Gladwell is not a social scientist, nor does he claim to be. He is a journalist who popularises ideas from social science using what he has called "intellectual adventure stories...Their conclusions," he concedes, "can seem simplified or idiosyncratic." But stories are also, to use a Gladwellian phrase, sticky. The 10,000-hour rule is memorable; "work hard" is the forgettable line that every coach, teacher and parent has said a million times over.

His work may be formulaic, but so are spy novels, romantic comedies and pop songs. The secret to his success lies less in what he says than in how he says it. Mr Gladwell is a great storyteller and writes with a contagious sense of curiosity, with each revelation seeming as exciting to him as it is to readers. He may be an entertainer, but there are worse ways of being entertained than being prodded to think differently about the world. ■

Cash, finance and economics

Money matters

The joy of good writing about the dismal science

Money. By David McWilliams. *Simon & Schuster; 416 pages; £25*
How Economics Explains the World. By Andrew Leigh. *Mariner Books; 240 pages; $26*

THERE IS NO shortage of books on the history of money, for the straightforward reason that publishing them reliably convinces readers to part with theirs. And no wonder. Money is a central part of everyday life, as well as being a route to power or ruin. It is strange, seductive and maddeningly difficult to understand, all of which makes it irresistible. Yet that allure rarely makes it to the page. Money is fascinating. But reading about money can be mind-numbingly dull.

That is certainly not a description that can be applied to "Money", a new book by David McWilliams. Do not be put off by the fact that the author is a former central banker—this is no dry tome on monetary theory. Instead, it is a whistle-stop tour through human history, with money and its engineers as the central characters. It opens with Adolf Hitler's plot to destabilise Britain by forging £133m (£5.2bn, or $6.9bn, in today's money) and ordering the German air force to scatter it over the country, hoping to set off hyperinflation. Hitler's reasoning is also Mr McWilliams's central theme: money and society are inextricably bound together.

A dizzying array of historical anecdotes follows. Readers are introduced to the Ishango bone, a baboon's femur from around 18,000BC that may have been used to tally credits and debits. They learn about interest rates in ancient Mesopotamia (about 33% a year for barley), the invention of coins by the Lydians in Anatolia and how Tiberius, a Roman emperor, triggered a credit crunch. Romping through Florence's creation of one of the world's first ▸▸

Penny for your thoughts

reserve currencies in the medieval era and the financing of the French and American revolutions, Mr McWilliams comes to the present, worrying that central bankers have lost control of money entirely.

It is an impressive journey that fizzes with facts. Yet between the author's love of a good yarn and fear that a book about money might become boring, it is a shame that some big financial ideas get lost. A chapter on Fibonacci, an Italian mathematician, for example, describes Messina's bustling port and King Roger II's architectural tastes over pages, but spends just a paragraph on his ideas about valuing future cashflows (essential for most modern finance) and his popularisation of double-entry book-keeping (the foundation of modern accounting).

Given the scale of the topic, such quibbling may seem harsh. How, after all, can a short book survey the full history of something so vast and remain readable? To find out, read "How Economics Explains the World", by Andrew Leigh, formerly an economics professor at the Australian National University and now a member of the Australian Parliament. In simple, clear language—and less than 200 pages—it does exactly what its title promises.

To Mr Leigh (and plenty of others) economics is the science of how people "maximise their well-being in the face of scarcity". He illuminates how people have become much better at this by charting the number of hours' work throughout history that it has taken to produce an hour's worth of light for a household. Our prehistoric ancestors would have had to spend 58 hours foraging for timber; in the late 1700s, it would have taken five hours to make an animal-fat candle that smelled awful. Today less than a second's work will earn a typical worker enough to flick the switch.

Mr Leigh then canters through the history of human progress, pausing briefly to explain the economic forces and ideas that drove it forward. Why did Europeans colonise Africa rather than the other way round? Because of a better climate for farming and more easily domesticated animals, leading to a bigger agricultural revolution and more wealth and military might. Why do Protestant countries have high incomes? Because 16th-century Lutherans learned to read, which fuelled economic development. Why did American cities grow more quickly than European ones starting in the 19th century? Because American cities were built on grids, making it easier to connect new homes to sewerage and transport.

Along the way, readers meet the big economic thinkers who sought to explain these forces. Both finance aficionados and mere novices will read, savour and return to these books, giving fresh meaning to the concept of "book-keeping". ■

Revisiting history

Was Abraham Lincoln gay?

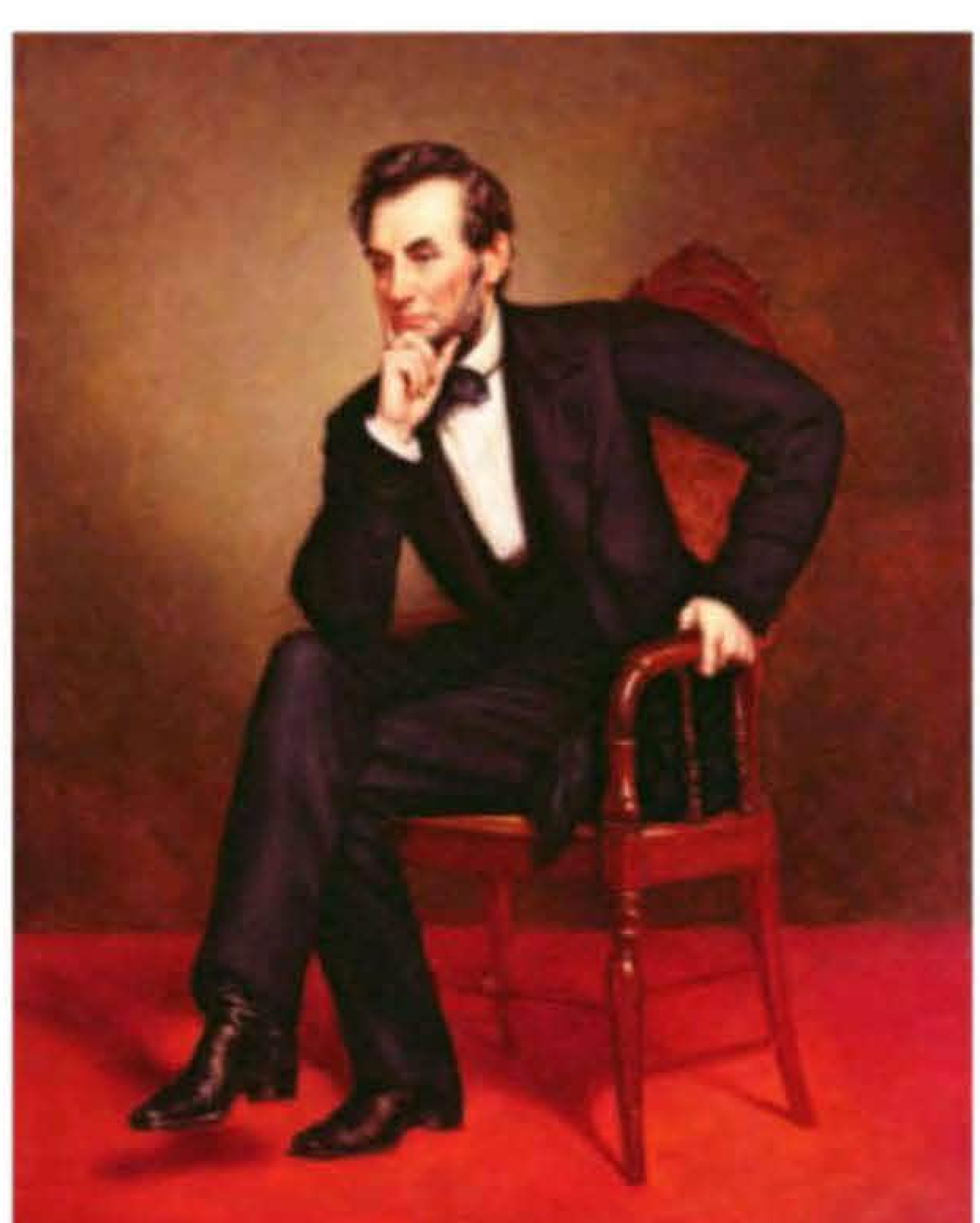
A documentary re-examines the president's relationships with men

During America's civil war, in 1862, Abraham Lincoln reportedly began sharing a bed with his bodyguard, a soldier named David Derickson. The tittle-tattle was recorded in the diary of Virginia Woodbury Fox, the wife of Lincoln's naval aide, who wrote about "a soldier here devoted to the president, drives with him, and when Mrs. L. is not home, sleeps with him". She added: "What stuff!"

Mere gossip, you might argue—or simply a sensible idea, given the target on Lincoln's back. But a new film, "Lover of Men", examines four of Lincoln's relationships, conducted from his 20s to his 50s, to claim that he had sex with men. A popular comedy play, "Oh, Mary!", presents Lincoln's wife as his beard; its run on Broadway was recently extended until January.

In the early 1830s, while working at a general store in Illinois, Lincoln shared a cot with William Greene, his co-worker, for 18 months. The bed was cosy: in a suggestive letter, Greene remarked that Lincoln's "thighs were as perfect as a human being could be". In 1837 Lincoln moved to Springfield to practise law and met Joshua Speed. They shared a bed for four years. "No two men were ever more intimate," is how Speed summarised their relationship.

Just how intimate is a touchy subject among scholars. "Such sleeping arrangements were not uncommon on the Illinois frontier," asserts Michael Burlingame, a historian at the University of Illinois, who does not see any "proof of a homosexual relationship" in Lincoln's bedsharing. Mattresses, after all, were expensive at the time. But once he was a lawyer Lincoln "could have afforded not only a bed but a house", Thomas Balcerski of Eastern Connecticut State University says in the film; Lincoln was offered housing elsewhere but chose to stay with Speed.



Looking at him from a different angle?

When Speed returned to Kentucky in 1841, Lincoln became depressed. He wrote: "I am now the most miserable man living. If what I feel were equally distributed to the whole human family, there would not be one cheerful face on the earth." The two men continued to exchange letters sharing their fears of marriage and women.

Lincoln's aversion to women was remarked on. He "never took much interest in the girls," Sarah Bush Lincoln, his stepmother, said. Marriage was helpful for public office, though, and Lincoln married Mary Todd in 1842. Lincoln had often signed his letters to Speed "yours forever", but never missives to his wife.

To some, speculation about Lincoln's sexuality is inevitable in an era obsessed with identity politics. But such surmising is not new. In a biography from 1926, Carl Sandburg, a Pulitzer-prizewinning biographer, wrote that the president had "a streak of lavender, and spots soft as May violets" (a euphemism for homosexuality). The passage was later removed.

It is only as same-sex relationships have gained legal and social acceptance that historians have reopened this line of inquiry. "Lover of Men" is part of a larger trend in revisionist history—the challenging of orthodox views and narratives. "Revisionism" can carry a pejorative connotation, and histories that dissent from conventional interpretation can be deemed heretical. Yet historians often update their understanding of the past. New methods of analysis and perspectives introduced by fresh generations of scholars alter received wisdom. For years scholars denied that Thomas Jefferson fathered children by his slave, Sally Hemings, as it was a proposition too unsavoury to stomach. Today most historians accept that he did.

Interpretations of Lincoln's relationships have "shifted considerably", says John Stauffer, a historian at Harvard University. Still, many scholars maintain that Lincoln's relationships with men were platonic. One reason, according to Mr Stauffer, is that they treat Lincoln "as an almost godlike figure" and do not want to contemplate hidden sexual tastes. "Lover of Men" is unlikely to precipitate a wholesale re-evaluation of Lincoln's legacy. Some Americans will continue to see the great patriot in much the same light as before; others will lambast the documentary's findings as woke nonsense. In the 21st century, America remains a house divided. ■

Fashion photography

Very in vogue

Once panned as too commercial, fashion photography now has gravitas

ELTON JOHN had just finished a stint in rehab. Without the fog induced by drink and drugs, he found he was able to look at the world with "clear eyes". So when David Fahey, a gallerist, showed him work by three fashion photographers—Horst P. Horst, Irving Penn and Herb Ritts—the musician was transfixed. It marked the start of what would become one of the world's largest private photography collections. More than 30 years later, Sir Elton has amassed more than 7,000 images.

Given his passion began with fashion photography, so does "Fragile Beauty", an exhibition of selections from Sir Elton's collection, on display at the Victoria and Albert Museum in London until January. A recent show at the Saatchi Gallery, "Beyond Fashion", showcased the artistry and experimentation of the genre in recent decades. Elsewhere museums have focused on the oeuvres of single artists: this year alone there have been shows dedicated to the work of Penn, who died in 2009, as well as several contemporary photographers. An exhibition looking at the pioneering aesthetic of Deborah Turbeville, a fashion editor who became a photographer, opens on October 9th at the Photographers' Gallery in London.

The art world is firmly fashion-forward. Exhibitions about designers have drawn hundreds of thousands of visitors. Artists including Tracey Emin, Damien Hirst and Yayoi Kusama have collaborated with fashion brands; the Louvre, the Met and Tate Modern have all hosted catwalk shows or industry events. More attention is being paid to the talent involved in making beautiful things, and so fashion photography—a form which was once disparaged as crass and commercial—is now being celebrated for its creativity.

The genre is appealing to collectors' as well as curators' tastes. "The market for fashion photography is thriving," says Emily Bierman, head of photography at Sotheby's, an auction house. "High art and high fashion absolutely meet and have become very coveted and collected."

Three living fashion photographers, Markus Klinko, Juergen Teller and Paolo Roversi, are among the top photographers seeing the most growth in interest on Artsy, an online art marketplace; year-on-year, inquiries about their work are up between two and three times. For a large print of one of Mr Klinko's pictures of David Bowie with a wolf, originally taken for *GQ*, you can expect to pay more than $300,000.

When loose ends are welcome

Often fashion photography deals in a kind of fantasy: few, after all, stand next to a wolf or get to pose with pachyderms in a Dior gown. "It is about creating a fictional world," Nathalie Herschdorfer, the curator of the Saatchi show, says, "where people can dream and escape." The impulse to gaze on something bewitchingly beautiful is an enduring one, but it is particularly acute in times of turbulence. Fashion photography jolts the viewer out of the grim and the quotidian.

Like other works of art, the images can transport you into the past. Clothes reflect the mood of the time, be it jazz-age ebullience or hippyish liberation. An image by William Klein, part of Sir Elton's collection, features clothing and accessories inspired by astronauts: it was taken in 1965, when the cold war was raging and fascination with space was nearly universal. Contemporary work offers similar insights. Mr Klinko, who has photographed the likes of Beyoncé and Kim Kardashian, says he thinks of himself as a "documentarian of pop culture". His work is often suffused with allusions to mythology as a way of exploring how "Society is worshipping celebrity almost like a religion."

In the current digital age, people are constantly bombarded with images; anyone with a smartphone can fancy themselves a photographer. Yet rather than dulling interest in fashion photography, social media have heightened it, as they underscore the inventiveness of artists. Few, for instance, could recreate Horst's dramatic compositions with corsets and skirts (pictured) or Melvin Sokolsky's "Bubble" series for *Harper's Bazaar,* which required a crane to hoist the model into the air. Fashions may come and go, but the greatest fashion photographs stand the test of time. ■

The next big thing

From K-pop to K-healing

A South Korean literary trend is taking the world by storm

THE COUNTRY that gave the world popular bands such as BTS and hits such as "Parasite" and "Squid Game" is now exporting something slower-paced. The publication of "Marigold Mind Laundry" in America and Britain this month brings attention to the latest South Korean trend: the healing novel.

These books about burnout can be judged by their covers, which ooze wholesome peacefulness. Most depict an attractive building in a soothing colour, with nature artfully arranged outside. In the stories characters leave behind stress in search of something more meaningful. A high-flier sets up a bookshop; a TV writer quits her job and starts pottery classes. A connection to a new place brings connections to new people on their own quests for well-being. From cats to kimchi, ice-cream to coffee, "cosy healing elements" abound, says Clare Richards, translator of "The Healing Season of Pottery", a popular novel in Korea that is set for international release this autumn.

South Korea has long had a market for comforting tales with themes of healing, as has Japan. But the current trend emerged during the pandemic, when the genre started to dominate South Korean bestseller charts. The depiction of communal spaces held strong appeal during a time of social constraints, says Joy Lee, a foreign-rights agent. Like many pastimes, healing fiction thrived online, attracting young female readers seeking recommendations from social media. (Several novels were published online first or through crowdfunding, rather than through conventional publishing routes.) Enthusiastic reviews from K-pop stars helped fuel the craze.

International publishers have taken note. Bloomsbury, Hachette and HarperCollins have all published or acquired K-healing bestsellers; Penguin Random House will bring out three titles in the next four months. Korean fiction was suddenly in fashion and "completely exploded", says Jane Lawson of Penguin Random House. The healing trend has become "utterly global"; many titles have contracts in between 15 and 20 territories.

This reflects a broader shift, with interest in translated fiction rising, especially among young readers. In 2022 sales of translated fiction rose by 22% in Britain; almost half of readers were under 35, according to the Booker Prize Foundation, ▸▸

which awards literary prizes. "We've always had very diverse genres in Korea, but now it feels like healing fiction equals Korean fiction" for international publishers, says Ms Lee, who notes that literary offerings within Korea are more diverse than what is being exported.

Why did South Korea spawn the healing novel? It is a function of its competitive culture, rife with burnout. Seven out of ten South Koreans report mental-health issues, such as depression; nap "cafés" are common in Seoul. The books' characters wrestle with work exhaustion or job-hunt unsuccessfully. "I'm good at studying...I work super hard. How dare society turn its back on me?" laments a forlorn graduate in Hwang Bo-reum's "Welcome to the Hyunam-Dong Bookshop" (2022), a bestseller about a woman who quits her job and opens a bookstore. Ms Hwang wants to comfort readers by "providing a pat on the shoulder for those who've lost the joy in life, having pushed themselves too hard to do well", her author's note explains.

The genre's success also indicates the appeal of escapism. Sometimes the novels' locations are marvellous as well as mindful: a laundry that washes away trauma; a shop where you can buy dreams. The books benefit from slow reading, says Shanna Tan, a translator of several healing novels. Readers come to book talks with their heavily annotated copies in tow, words of life advice underlined. It is literary therapy—by the book. ■

BACK STORY
Roald Dahl, genius and bigot

No magic potion or friendly giant can resolve the tension in the author's legacy

PERHAPS, IN THE squeamish spirit of the times, the Royal Court Theatre in London should have put on two versions of "Giant", a blistering new play about Roald Dahl—one that quoted his bigoted remarks about Jews, the other omitting them for propriety. As it is, the show is an unblinking study of a great author's prejudice and its bearing on his art. Unlike Dahl's zany children's stories, with their noble heroes and appalling villains, this one offers no easy morals.

Some of his best friends were Jewish. At least, some of his publishers were. Set in 1983, the play imagines a lunch hosted by Dahl (played by John Lithgow) for his actual British editor, Tom Maschler (Elliot Levey), and an invented American publishing executive (Romola Garai), both Jews. The playwright, Mark Rosenblatt, could not have known how eerily timely his premise would be.

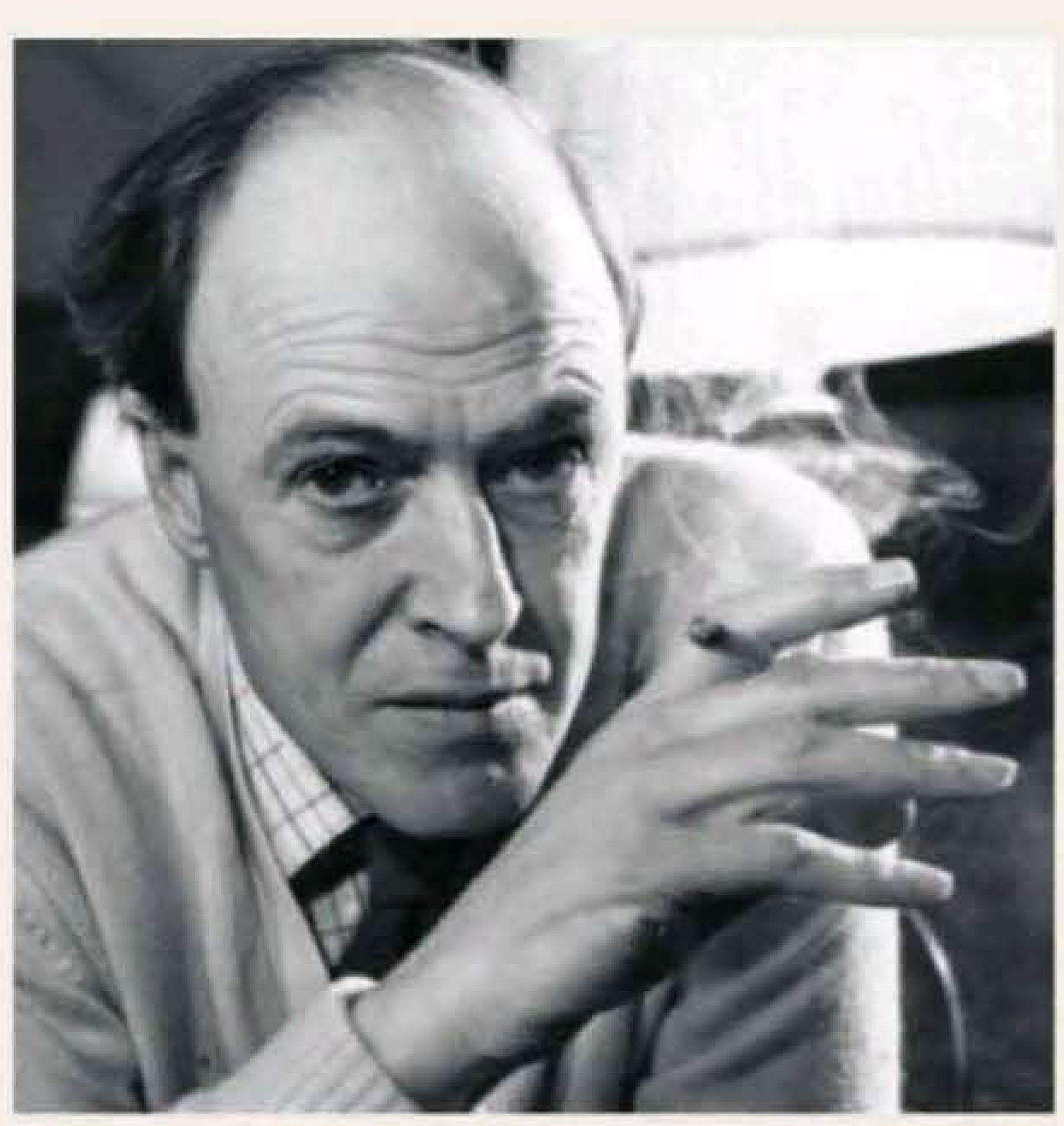
In 1982 Israel invaded Lebanon; in a real-life review of a book about the siege of Beirut, Dahl (pictured) vaulted the line between criticism of Israel and antisemitism. The Jews had revealed themselves as a race of "barbarous murderers", he wrote. "There is a trait in the Jewish character that does provoke animosity," he added in an interview, cited on stage. "Even a stinker like Hitler didn't just pick on them for no reason." The play shows Dahl's high-minded arguments about the Middle East degenerating into the crudest calumnies. The Jews, he alleged, controlled the media and the American government.

The plot hinges on whether Dahl—also portrayed as cranky, chippy, venal and vain—will make a mollifying statement to mend his image before the release of "The Witches". But implicitly it poses a wider question, faced by fans of every feted artist with disgraceful views or habits. Referring to a character's child, the stage Dahl asks: "Can you no longer read my books to dear Archie?"

A wrinkle, in his case, is that the artist cannot be neatly sequestered from his art. As is noted in the play, the "child-snatching, money-printing devils" in "The Witches" have been seen by some as a collage of antisemitic slurs. Dahl insulted other groups, too. The Oompa-Loompas in "Charlie and the Chocolate Factory" were originally pygmies from the "African jungle". Criticised by the NAACP and others, Dahl gave them white skin instead.

As audiences may recall, another furore blew up last year after his British publishers revised other bits of his books lest they cause offence. References to weight, appearance and sex were tweaked; words like "ugly" and "fat" were zapped. The row subsided on the news that the original texts would remain available. But the dappy initiative illuminated the clash at the heart of the play, between Dahl's talent as a writer and failings as a man.

Dahl grasped two things that the bowdlerisers of his books overlooked. The first was about children's stories. The best are more than a warm bath and a soft cuddle; they are a vicarious introduction to the world's risks and woes. His other intuition was about children themselves. Though they get more leeway than grown-ups to whack each other and eat with their hands, some adults insist on thinking of them as harmless and pure. Dahl never forgot that they can be grubby little blighters. "Some children", he says in the play, "are really quite odd."



These insights fed a nastiness in his writing that is essential to its appeal. Dahl gleefully indulged young readers' fascination with violence and bodily yuckiness. The roads to his happy endings are littered with squished and tortured baddies. As the Maschler character says, his stories let in the world's cruelty, "but take you out the other side".

Dahl died in 1990. The uncomfortable truth about him is not just that he was a glorious writer and reprehensible man. It is that these twin identities are not opposites but mirror images. The grotesqueries in his fiction are hilarious; but, dangerously, he reduced real people to caricatures too. The wordplay in his stories is delightful, but his devotion to verbal japes led to that glib reference to Hitler as a "stinker". "The gift of your work", a character tells him in "Giant", is "the curse of your life".

Even those parents who know and care about Dahl's racism are unlikely to renounce his books. That would anyway punish their children rather than Dahl, whose antic imagination and outlandish plots will always be enchanting. At the same time, as this bracing play affirms, his vices are unignorable. In one of his stories, a magic potion or friendly giant might clear up this awkward tension. In real life, it is everlasting.

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	Gross domestic product % change on year ago latest		quarter*	2024†	Consumer prices % change on year ago latest		2024†	Unemployment rate %		Current-account balance % of GDP, 2024†	Budget balance % of GDP, 2024†	Interest rates 10-yr gov't bonds latest, %	change on year ago, bp	Currency units per $ Oct 2nd	% change on year ago
United States	3.0	Q2	3.0	2.4	2.5	Aug	3.0	4.2	Aug	-3.3	-6.9	3.7	-85.0	-	
China	4.7	Q2	2.8	4.7	0.6	Aug	0.4	5.3	Aug‡§	1.2	-4.4	1.9 §§	-66.0	7.02	4.0
Japan	-1.0	Q2	2.9	0.6	3.0	Aug	2.5	2.5	Aug	3.8	-4.7	0.9	12.0	146	2.5
Britain	0.7	Q2	1.8	1.1	2.2	Aug	2.9	4.1	Jun††	-3.0	-4.1	4.0	-43.0	0.75	10.7
Canada	0.9	Q2	2.1	1.3	2.0	Aug	2.4	6.6	Aug	-1.2	-1.3	3.0	-108	1.35	1.5
Euro area	0.6	Q2	0.8	1.0	1.8	Sep	2.5	6.4	Aug	3.1	-3.1	2.0	-80.0	0.91	4.4
Austria	-0.6	Q2	-1.7‡	-0.3	1.8	Sep	2.9	5.3	Aug	2.4	-2.4	2.5	-91.0	0.91	4.4
Belgium	1.1	Q2	0.8	1.2	4.5	Sep	3.8	5.4	Aug	-0.6	-4.6	2.7	-83.0	0.91	4.4
France	1.0	Q2	0.7	1.2	1.5	Sep	2.6	7.5	Aug	-0.4	-5.2	3.3	45.0	0.91	4.4
Germany	nil	Q2	-0.3	0.2	1.8	Sep	2.6	3.5	Aug	6.2	-1.6	2.0	-80.0	0.91	4.4
Greece	2.7	Q2	4.4	2.4	3.2	Aug	2.6	9.5	Aug	-5.8	-1.3	3.1	-129	0.91	4.4
Italy	0.9	Q2	0.6	0.9	0.8	Sep	1.2	6.2	Aug	1.5	-5.2	3.4	-145	0.91	4.4
Netherlands	0.8	Q2	4.1	0.6	3.3	Sep	3.5	3.7	Aug	8.7	-1.4	2.3	-86.0	0.91	4.4
Spain	3.1	Q2	3.2	2.7	1.7	Sep	3.0	11.3	Aug	2.5	-3.2	2.9	-104	0.91	4.4
Czech Republic	0.9	Q2	1.5	1.1	2.2	Aug	2.0	2.7	Aug‡	0.2	-2.4	3.7	-107	23.0	1.3
Denmark	4.4	Q2	4.6	1.6	1.4	Aug	1.6	2.9	Aug	10.5	1.8	2.0	-115	6.76	5.0
Norway	4.2	Q2	5.7	1.0	2.6	Aug	2.2	4.0	Jul‡‡	17.0	12.3	3.2	-73.0	10.6	2.3
Poland	3.2	Q2	6.1	3.2	4.9	Sep	3.8	5.0	Aug§	1.0	-5.7	5.2	-69.0	3.89	12.8
Russia	4.1	Q2	na	3.6	9.0	Aug	7.5	2.4	Aug§	2.9	-1.2	16.0	405	94.8	4.6
Sweden	0.6	Q2	-1.0	0.6	1.9	Aug	2.0	7.9	Aug§	6.0	-0.9	1.9	-109	10.3	7.3
Switzerland	1.8	Q2	2.8	1.1	1.1	Aug	1.2	2.5	Aug	6.7	0.6	0.4	-71.0	0.85	8.2
Turkey	2.5	Q2	0.3	3.1	52.0	Aug	57.7	9.3	Jul§	-2.7	-5.2	27.2	175	34.2	-19.8
Australia	1.0	Q2	0.9	1.3	3.8	Q2	3.5	4.2	Aug	-0.6	-1.5	3.9	-39.0	1.45	8.3
Hong Kong	3.3	Q2	1.4	3.0	2.5	Aug	1.5	3.0	Aug††	11.9	-2.9	2.8	-140	7.76	0.9
India	6.7	Q2	4.5	6.9	3.7	Aug	4.7	7.8	Sep	-0.5	-4.9	6.7	-48.0	83.8	-0.9
Indonesia	5.0	Q2	na	5.1	1.8	Sep	2.6	4.8	Q1§	-0.1	-2.4	6.5	-42.0	15,265	1.7
Malaysia	5.9	Q2	na	5.1	1.9	Aug	2.0	3.3	Jul§	2.7	-4.5	3.8	-26.0	4.17	13.2
Pakistan	2.8	2024**	na	2.8	6.9	Sep	15.5	6.3	2021	-1.7	-7.4	11.9 †††	-436	278	3.2
Philippines	6.3	Q2	2.0	5.4	3.3	Aug	3.3	4.7	Q3§	-2.8	-5.9	5.7	-87.0	56.2	1.1
Singapore	2.9	Q2	1.6	2.7	2.2	Aug	2.6	2.0	Q2	19.8	0.1	2.6	-75.0	1.29	6.2
South Korea	2.3	Q2	-0.9	2.5	1.6	Sep	2.5	1.9	Aug§	3.4	-1.8	2.9	-107	1,319	2.3
Taiwan	5.1	Q2	1.2	4.2	2.4	Aug	2.1	3.4	Aug	13.9	0.5	1.5	22.0	31.9	1.2
Thailand	2.3	Q2	3.1	2.5	0.4	Aug	0.9	1.1	Aug§	2.7	-3.7	2.5	-67.0	32.8	12.7
Argentina	-1.7	Q2	-6.8	-3.1	237	Aug	221.0	7.6	Q2§	0.3	-0.5	na	na	971	-63.9
Brazil	3.3	Q2	5.9	3.0	4.2	Aug	4.2	6.6	Aug§‡‡	-1.6	-7.5	12.4	69.0	5.43	-6.6
Chile	1.6	Q2	-2.5	2.3	4.6	Aug	3.9	8.9	Aug§‡‡	-2.8	-2.4	5.2	-113	913	-1.0
Colombia	1.8	Q2	0.4	1.4	6.1	Aug	6.7	9.7	Aug§	-2.6	-5.7	9.8	-179	4,216	-1.5
Mexico	2.1	Q2	0.6	1.6	5.0	Aug	4.9	2.7	Jul	-0.3	-5.0	9.4	-54.0	19.4	-9.7
Peru	3.6	Q2	9.8	2.8	1.8	Sep	2.5	6.5	Aug§	0.2	-4.1	6.2	-121	3.72	2.1
Egypt	2.2	Q1	na	2.4	26.2	Aug	28.4	6.5	Q2§	-4.7	-5.2	na	na	48.4	-36.1
Israel	-2.1	Q2	0.7	0.3	3.6	Aug	3.3	2.6	Aug	5.3	-7.3	4.9	65.0	3.79	1.3
Saudi Arabia	-0.8	2023	na	1.5	1.6	Aug	1.8	3.3	Q2	-0.5	-2.2	na	na	3.75	nil
South Africa	0.3	Q2	1.8	1.1	4.4	Aug	4.8	33.5	Q2§	-2.0	-5.3	9.0	-184	17.4	10.3

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 Oct 2nd	% change on: one week	% change on: Dec 29th 2023
United States S&P 500	5,709.5	-0.2	19.7
United States NAS Comp	17,925.1	-0.9	19.4
China Shanghai Comp	3,336.5	15.2	12.2
China Shenzhen Comp	1,927.5	22.4	4.9
Japan Nikkei 225	37,808.8	-0.2	13.0
Japan Topix	2,652.0	0.1	12.1
Britain FTSE 100	8,290.9	0.3	7.2
Canada S&P TSX	24,001.6	0.4	14.5
Euro area EURO STOXX 50	4,963.3	0.9	9.8
France CAC 40	7,577.6	0.2	0.5
Germany DAX*	19,164.8	1.3	14.4
Italy FTSE/MIB	33,675.3	-0.5	11.0
Netherlands AEX	916.9	1.2	16.5
Spain IBEX 35	11,609.8	-1.6	14.9
Poland WIG	82,834.3	-1.1	5.6
Russia RTS, $ terms	1,137.5	nil	5.0
Switzerland SMI	12,122.1	-0.2	8.8
Turkey BIST	9,012.9	-8.9	20.7
Australia All Ord.	8,469.9	1.2	8.2
Hong Kong Hang Seng	22,443.7	17.3	31.7
India BSE	84,266.3	-1.1	16.6
Indonesia IDX	7,563.3	-2.3	4.0
Malaysia KLSE	1,639.3	-2.0	12.7

	Index Oct 2nd	% change on: one week	% change on: Dec 29th 2023
Pakistan KSE	81,967.0	-0.3	31.3
Singapore STI	3,584.7	nil	10.6
South Korea KOSPI	2,561.7	-1.3	-3.5
Taiwan TWI	22,390.4	-1.6	24.9
Thailand SET	1,451.4	-0.7	2.5
Argentina MERV	1,715,158.9	-1.7	84.5
Brazil BVSP*	133,514.9	1.5	-0.5
Mexico IPC	52,199.7	-1.9	-9.0
Egypt EGX 30	31,332.7	0.3	25.9
Israel TA-125	2,092.4	1.6	10.9
Saudi Arabia Tadawul	12,044.1	-2.4	0.6
South Africa JSE AS	87,115.3	1.3	13.3
World, dev'd MSCI	3,693.5	-0.1	16.5
Emerging markets MSCI	1,172.6	3.1	14.5

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 29th 2023
Investment grade	108	154
High-yield	356	502

Sources: LSEG Workspace; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

The Economist commodity-price index 2020=100	Sep 24th	Oct 1st*	% change on month	% change on year
Dollar Index				
All Items	129.1	133.7	7.5	9.7
Food	140.9	140.8	4.8	10.8
Industrials				
All	119.3	127.9	10.1	8.6
Non-food agriculturals	133.6	135.0	5.9	15.1
Metals	115.7	126.1	11.3	7.0
Sterling Index				
All items	123.9	129.3	5.9	-0.3
Euro Index				
All items	132.3	138.0	7.2	3.7
Gold				
$ per oz	2,645.5	2,660.6	7.3	45.7
Brent				
$ per barrel	75.0	74.6	0.7	-18.0

Sources: Bloomberg; CME Group; FT; LSEG Workspace; NZ Wool Services; S&P Global Commodity Insights; Thompson Lloyd & Ewart; USDA; WSJ. *Provisional.

For historical indicators data, visit economist.com/economic-and-financial-indicators

OBITUARY
Maggie Smith

The dowager countess of comic timing died on September 27th, aged 89

BY THE TIME she was in "Downton Abbey", the television series in which she played the waspish Dowager Countess of Grantham, Maggie Smith was 75 years old and had won every acting prize you could name. And yet, she told an interviewer, "I'd led a perfectly normal life...Nobody knew who the hell I was."

That was not quite true; her fellow Brits already deemed her a national treasure. But she could go unrecognised in public because she disappeared so completely into her roles, switching occupations, temperaments and social classes with apparent ease. Whereas other stars often played themselves, she was a chameleon, always subservient to her role. On stage or screen she was poised and precise; in her rare televised interviews, she seemed hesitant, searching and uncertain. It would be easy to mistake her, in passing on the street, for someone who looked a bit like Maggie Smith's slightly bewildered sister.

She was witty in life and devastatingly so with a script. Whether playing a humble piano teacher or a lofty aristocrat, her comic timing was deadly, her barbs slipping between the audience's ribs like unexpected daggers. In "Evil Under the Sun", her Daphne Castle says, of an old rival from the chorus line, "I could [never] compete. Even in those days, she could always throw her legs up in the air higher than any of us...and wider."

She came from Ilford, an unprepossessing patch of East London. Her parents were lower-middle class and aspirational. She was raised amid Britain's dreary post-war austerity, when petrol and bacon were rationed, and drew on this in 1984 in "A Private Function", a dark comedy that her biographer Michael Coveney called "nearly perfect". She played Joyce Chilvers, a social climber quivering with resentment and ambition. For Joyce, subsisting on spam is humiliating; she yearns for something fancier, and persuades her put-upon husband to steal a black-market pig. "It's not just steak, Gilbert, it's status!" When her plotting succeeds, she rewards him with the unforgettable line: "Right, Gilbert, I think sexual intercourse is in order."

She was a happy but reserved child. Her father said she had "a private world" that he and her mother "had no access to". She began acting in school, after her parents had moved her to Cowley, a suburb of Oxford. A peer recalled, "If there was a comic part, it would be played by Margaret Smith. She made us laugh, but we never saw her having a possible future on the professional stage."

When she was 29 Laurence Olivier, then Britain's most renowned stage actor and the director of the National Theatre, cast her opposite himself as Desdemona in "Othello". He was "secretly afraid" of her, by one account. During a performance Olivier, annoyed by an offstage argument, slapped her across the face with his hand instead of the usual paper. She was knocked out cold; when she came to backstage, she reportedly said, "That's the first time I've seen any fucking stars at the National." (Olivier's stage manager disputes this story.)

Her first Oscar was for playing an awful teacher in "The Prime of Miss Jean Brodie". Her performance was collected and commanding, a manipulative tyrant with a sugared exterior who treats others as pawns to be pushed about. Mr Coveney saw in this "subtle revenge on her Scottish puritanical mother and indeed on [her alma mater] Oxford High School".

Her second golden statuette was for Neil Simon's "California Suite", in which she played a British actress awaiting the Oscars ceremony in a luxurious hotel room with her bisexual husband, as her moods vacillate between brittle hope of winning and deep gloom. She was also nominated for playing a prim chaperone, an eccentric roustabout aunt and, in 2001, for the role that began her late flourishing. Her career followed the inverse of most actresses'; her fame grew in tandem with her age.

Unlike many actors, she was "totally unconcerned about playing a dislikeable character", and therefore liberated to play such parts with brio, gushed Julian Fellowes, the screenwriter of "Gosford Park" and "Downton Abbey". In each of those period dramas, she plays a posh widow who looks upon her small, refined world with protective disdain. "*Bought* marmalade," she sniffs in Gosford Park, when a maid brings her breakfast in bed. "I call that very feeble." On her deathbed in "Downton Abbey", she hushes her sobbing maid: "Stop that noise, I can't hear myself die."

In 1999 a very young Daniel Radcliffe played David Copperfield opposite Ms Smith's Betsey Trotwood. The director told the boy: "Whatever happens...you will never again play the title role in a famous novel with Maggie Smith." Two years later he was Harry Potter and she, appropriately, was Minerva McGonagall, a professor of magic who could transform herself into something completely different. (A tabby cat.)

Her first marriage fell apart. Her husband, Robert Stephens, a fellow actor, was desperate to be a megastar but never quite made it. She eclipsed him, though she was far less interested in fame, and he resented it. After putting up with his furniture-smashing and affairs for a while, she sensibly married a non-actor, Alan Beverley Cross, a playwright whom she had known since her late teens. It was a happy second act. He was "rock-like" and steady, which perfectly complemented her anxious obsessiveness. Her sons with Stephens, both thespians, one a Bond villain, called her "an extraordinary mother and grandmother".

Still, she could summon her sternness when it suited—even if, in real life, it had a great deal more gentleness behind it than either of her dowagers. On a British talk show, while discussing how her "Harry Potter" role had introduced her to a new generation of fans, she recalled a boy asking her, "Were you really a cat?" She paused for just the right amount of time. "I heard myself saying, 'Just pull yourself together.'" No doubt he did. ■