

The Economist

Could AI transform the emerging world?

Saving coffee from climate change

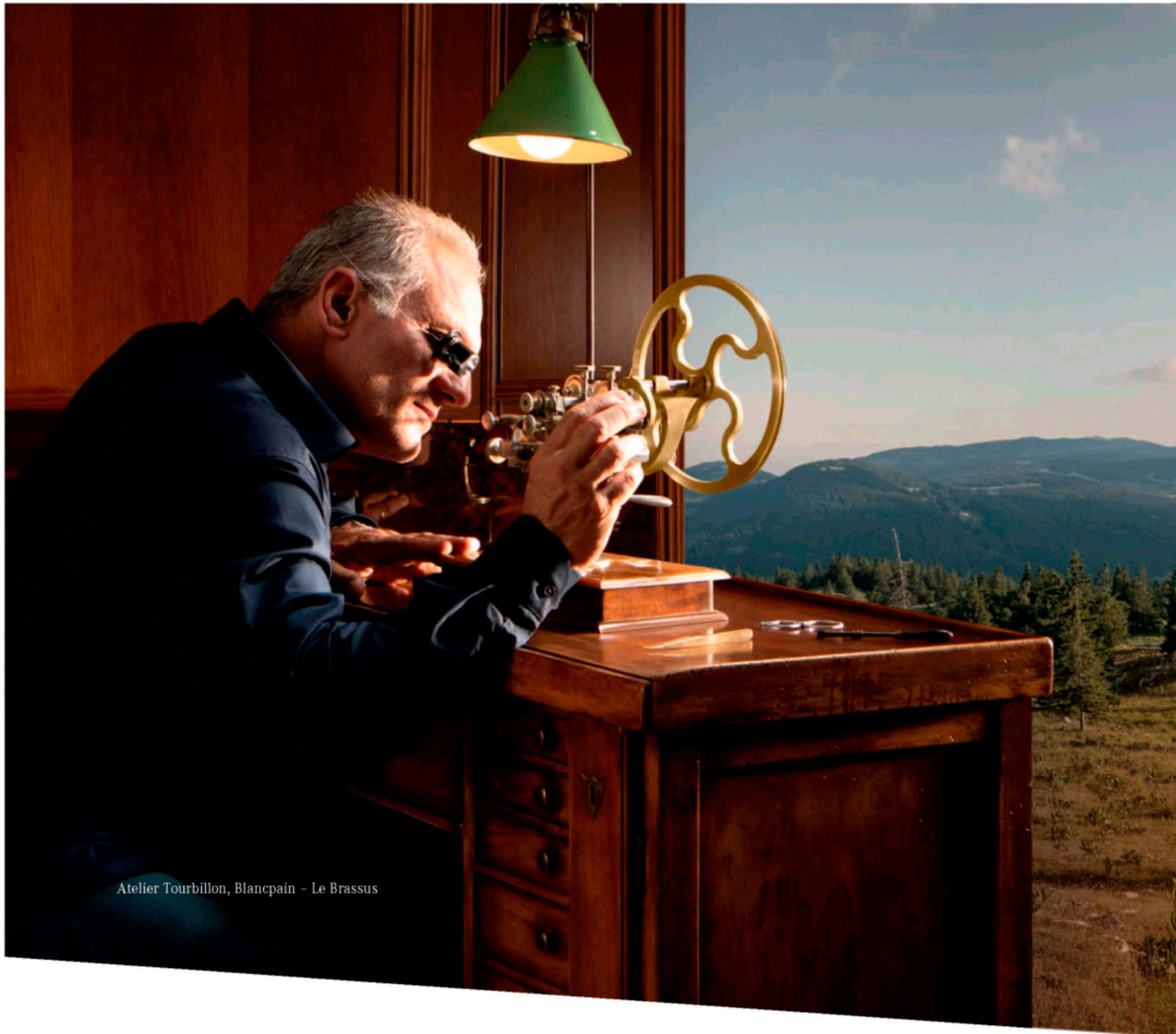
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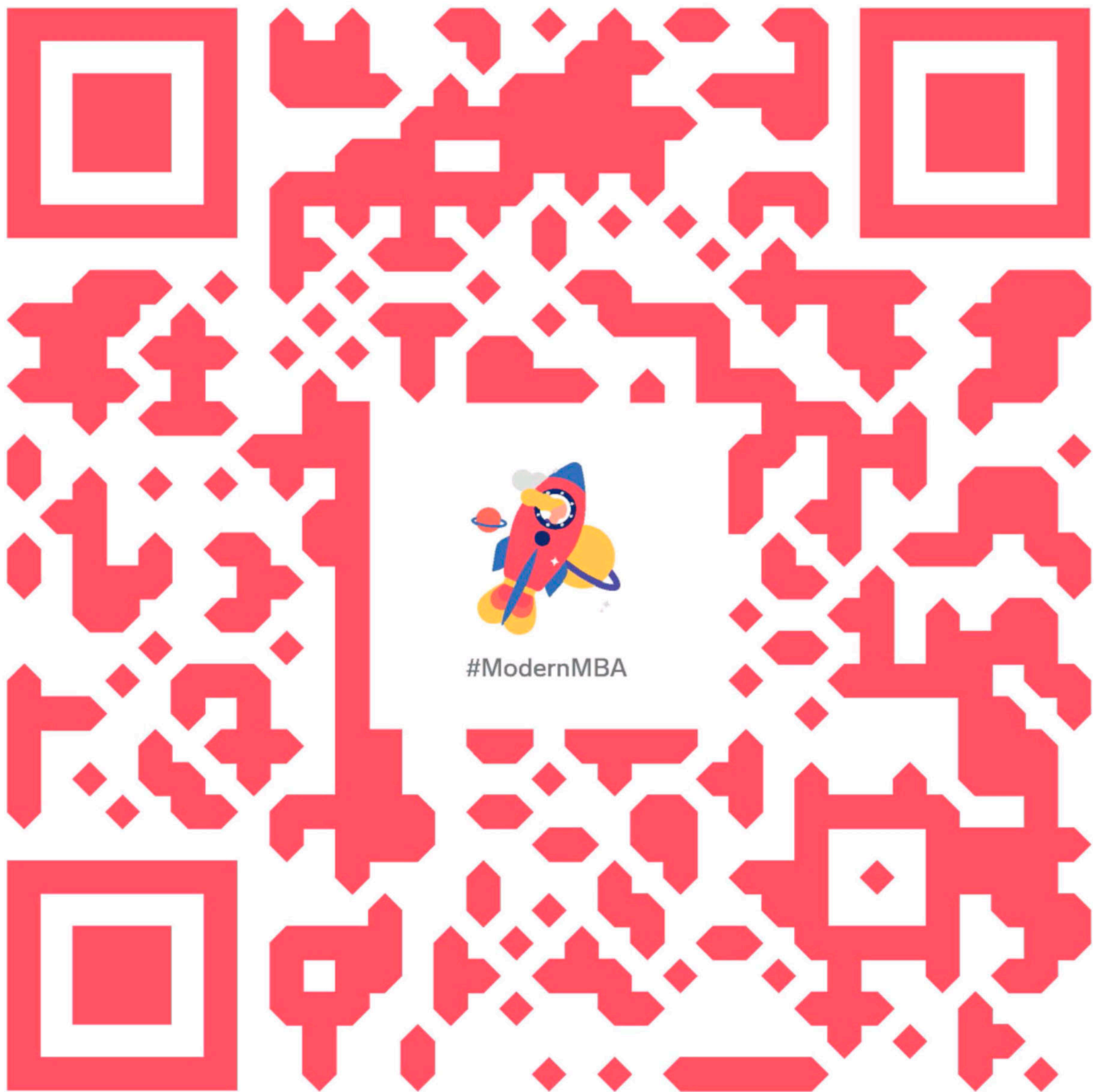
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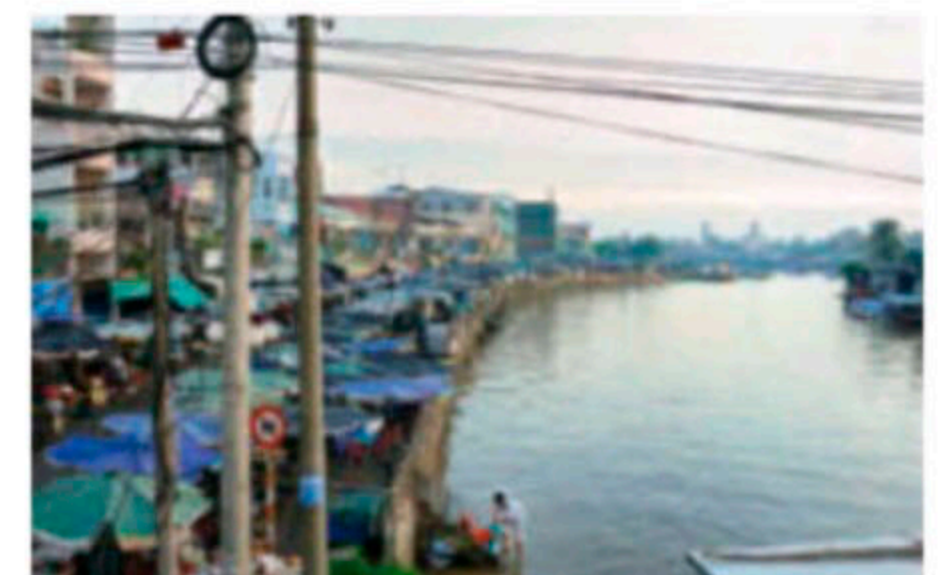
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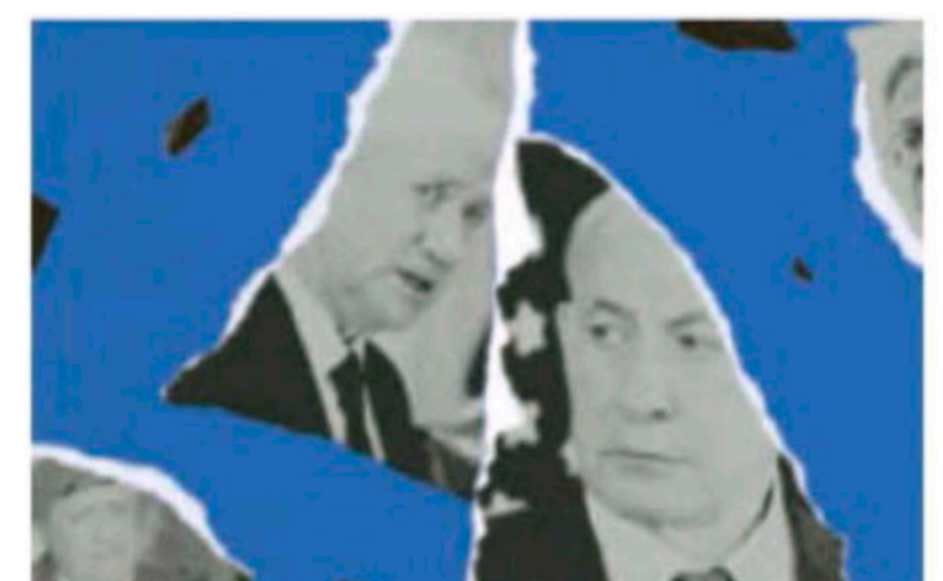
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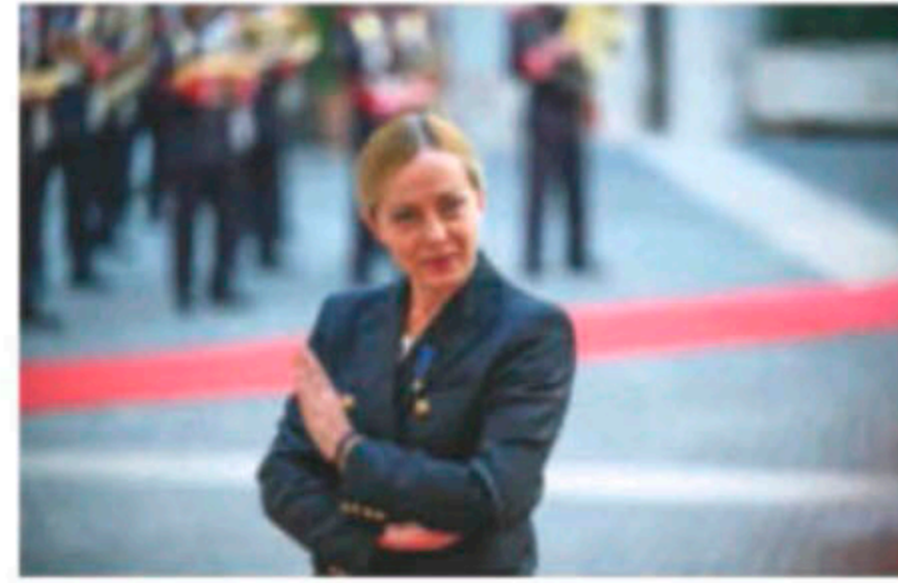
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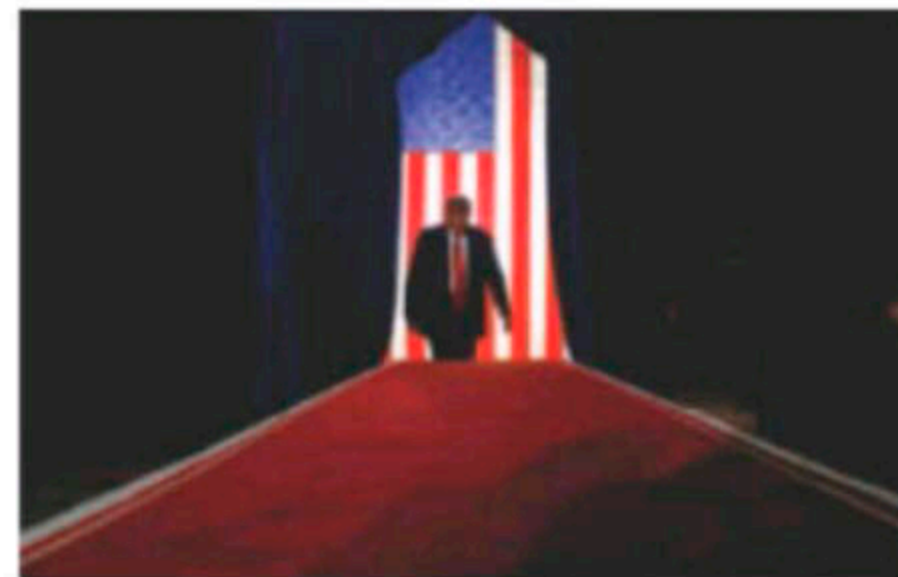
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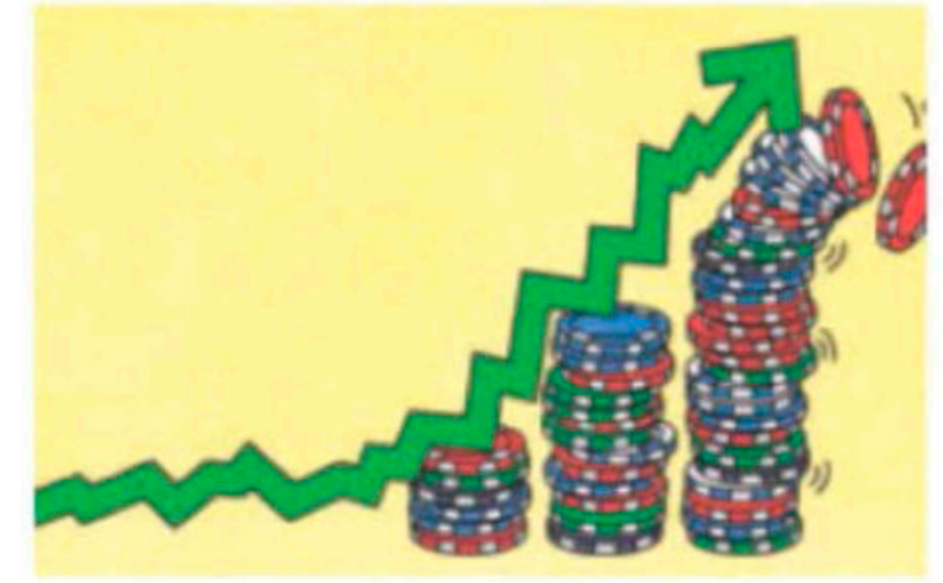
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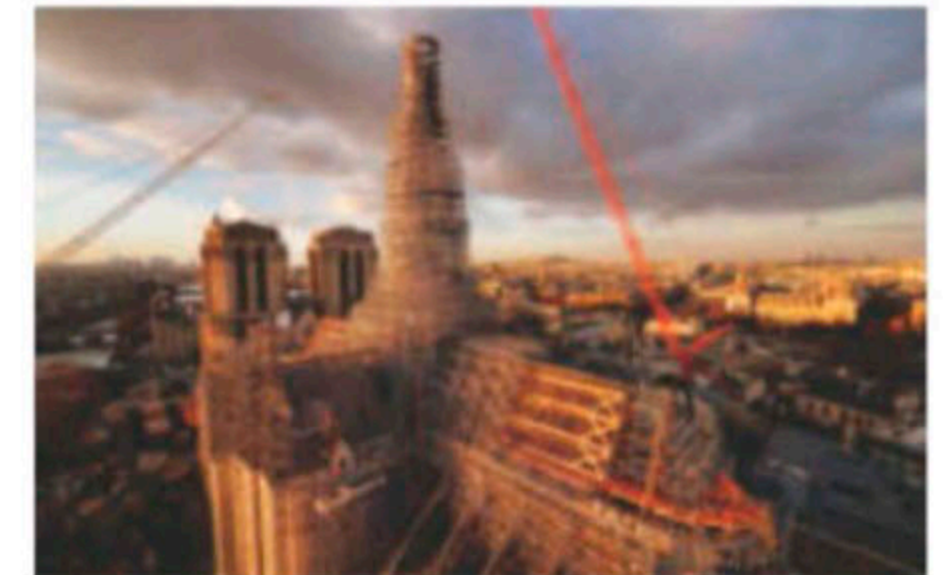
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Russia accused **Ukraine** of shooting down a Russian military transport plane near its border with Ukraine. The circumstances were murky, but Russia said the plane was carrying 65 Ukrainian prisoners of war who were heading for a prisoner exchange with Russian POWs, as well as nine crew. Ukraine said it had not been asked to ensure a safe passage for the aircraft. A few days earlier, Russia blamed Ukrainian forces for a strike on **Donetsk**, a city under Russian occupation in eastern Ukraine, in which 28 people were killed (a Ukrainian army group in the area said it had not been involved). Two days after that at least 18 people were killed in Russian strikes on other Ukrainian cities.

NATO approved a \$1.2bn contract that will replenish the artillery-shell stocks of the alliance's members, allowing them to provide more ammunition to Ukraine. In Washington a bill that would free \$11bn in **military aid** for Ukraine, Israel and other allies remains stuck in Congress. Republicans in the House of Representatives are refusing to back the bill until they get a deal on stricter immigration policies, though a compromise in the Senate is emerging.

Turkey's parliament at last approved **Sweden's** bid to join NATO. Turkey, which as a NATO member must bless another country's accession, had dragged its heels over the bid, claiming that Sweden harboured Kurdish militants. The only holdout now is **Hungary**. Its prime minister, Viktor Orban, said he would "continue to urge" parliament to ratify Sweden's membership soon.

Germany's Constitutional Court banned state funding for a far-right extremist party, Die Heimat, finding that it had shown disdain for democracy. The ruling has fired the debate about taking legal steps to stop the rise of the Alternative for Germany (AfD), a party on the radical right. Around 1.4m people demonstrated against the AfD in cities including Berlin, Cologne and Munich over three days recently.

Like a freight train

Donald Trump chalked up another big win in the Republicans' presidential nomination race, taking 54% of the vote in the **New Hampshire primary**. Nikki Haley took 43%. Ron DeSantis dropped out of the race ahead of the vote. Ms Haley vowed to carry on. She may make her last stand in the primary in South Carolina, her home state, where Mr Trump currently holds a huge lead in the polls.

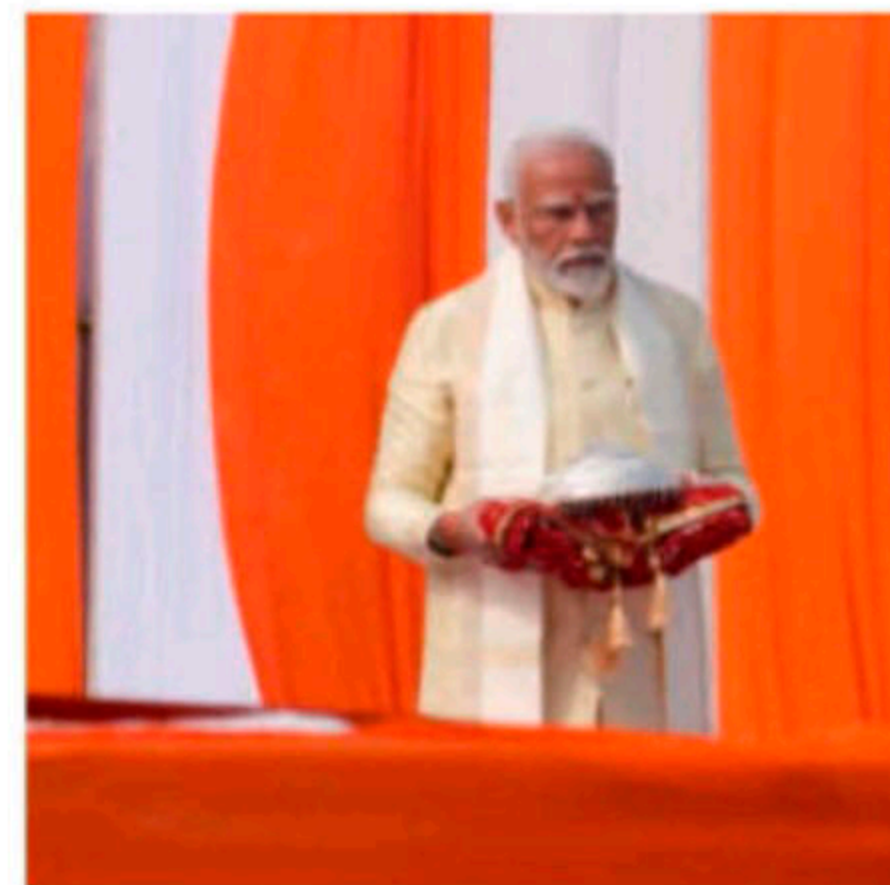
Police in **Ecuador** arrested 68 gang members who were trying to take over a hospital in a town close to the city of Guayaquil, the centre of a flare-up in violence that has swept the country. The arrested men were apparently trying to protect one of their members, who was in the hospital, from being attacked by rivals.

Venezuela's attorney-general issued 14 arrest warrants for people he claimed were involved in various conspiracies against the country's autocratic president, Nicolás Maduro. One of the warrants is for Tamara Sujú, a human-rights lawyer who lives abroad.

In **Canada** a federal judge ruled that Justin Trudeau's use of emergency powers in February 2022 to end protests by truckers had been "unreasonable" and violated the Charter, Canada's bill of rights. The prime minister invoked the powers when the Freedom Convoy, which for weeks protested against covid-vaccine mandates and other pandemic measures, brought traffic to a

standstill with demonstrations. The government will appeal against the ruling.

A court in **Thailand** decided that Pita Limjaroenrat, who led the Move Forward reformist party to an election victory last year, had not violated election laws and could remain in parliament. Although Move Forward won the election it was blocked from taking power by Thailand's royalist and military elite. The same court is expected to make a decision soon in a separate case on whether Move Forward broke the country's lèse-majesté laws.



India's prime minister, Narendra Modi, led the ceremonies at the consecration of a controversial Hindu temple in Ayodhya. For decades Hindu nationalists had pledged to build the temple on the site of a 16th-century mosque that was destroyed by a mob in 1992. Hindus venerate the site as the birthplace of Ram. The spectacular ceremony was part political rally for Mr Modi, who faces an election this year.

Singapore's transport minister resigned in a corruption scandal that has engulfed the normally squeaky-clean government. S. Iswaran has been charged with 27 offences, which he denies.

Fears are growing about the widening war in the Middle East. **Iranian proxies** in Iraq and Syria launched their most serious rocket attack on American troops since the start of the Gaza war. A volley of ballistic missiles and rockets was fired at the Al Asad air base in Iraq. Most were intercepted. Meanwhile in **Yemen** America

and Britain continued to bomb the Houthis, another Iranian-backed group.

Israel encircled Khan Younis, the city in southern **Gaza** where it believes Hamas leaders including Yahya Sinwar are hiding. Some 24 Israeli soldiers were killed in the deadliest day for the Israel Defence Forces since the start of the war. The Palestinian death toll passed 25,000, the majority of them civilians. Egyptian and Qatari negotiators continued to push for a deal between Israel and Hamas that would see a ceasefire and the release of the hostages still being held.

Saudi Arabia will start selling alcohol, but only to foreign diplomats (alcohol was banned in 1952 after a drunken Saudi prince shot dead a British envoy). Muhammad bin Salman, the crown prince and de facto ruler, is continuing his efforts to modernise the kingdom.

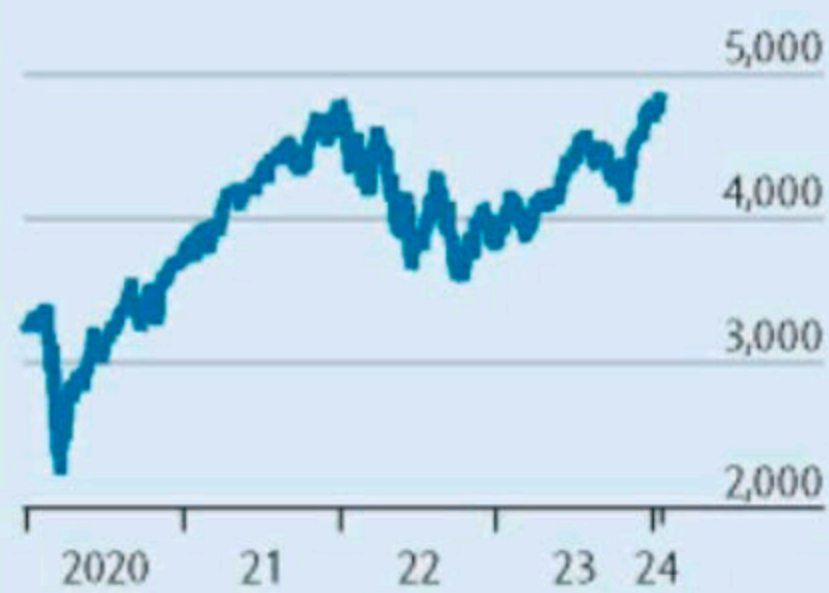
Better to stay with the USA

Antony Blinken, America's secretary of state, visited several African countries including **Angola** and **Nigeria**, in a bid to counter Russia's growing influence in the region. Mr Blinken offered American security assistance to countries battling jihadists, saying it was a better partner than Russia's Wagner mercenary group.

Tensions continued to rise over a deal by **Somaliland**, a breakaway region of **Somalia**, to lease part of its coastline to Ethiopia, which wants to build a port and naval base. Egypt's president, Abdel Fattah al-Sisi, said he would back Somalia's federal government, which opposes the deal, and would "not allow anyone to threaten Somalia".

Japan became the fifth country to land a spacecraft on **the Moon**. Japan's space agency said it was able to communicate with the probe, though its power cells were not working.

S&P 500
1941-43=10



Source: LSEG Workspace

The **S&P 500** reached new record highs this week. The previous record had been set in early January 2022, before Russia's war in Ukraine and the rout in tech shares that year. The Dow Jones Industrial Average also hit a record in recent days and the **NASDAQ Composite** was closing in on an all-time high. Like the S&P 500 the **NASDAQ** is being propelled by the turnaround in tech stocks; Meta, Microsoft and Nvidia are all trading at new highs. In Japan the **Nikkei 225** is also scaling new peaks.

By contrast the rout in **Chinese stockmarkets** continued apace, with the **CSI 300** dropping to a five-year low and Hong Kong's **Hang Seng** trading near its lowest close since 2009. The **NASDAQ Golden Dragon China Index** of Chinese-company shares listed in America has also dropped since the start of the year. China's prime minister, Li Qiang, ordered the authorities to take "forceful" steps. Speculation mounted that the government would intervene with a state-backed stabilisation fund to buy up shares.

The **Bank of Japan's** first monetary-policy meeting of the year kept interest rates at -0.1% and made no changes to its yield-curve control strategy. Japanese government-bond yields rose sharply after the central bank's governor, Ueda Kazuo, said the chances were increasing of it hitting its inflation target, fuelling market expectations of a rate rise in the first half of this year.

America's Federal Aviation Administration cleared the path for **Boeing's** 737 Max 9 planes to fly again, once air-

lines complete their safety inspections. The aircraft were grounded when a panel fell off a flight just after take-off.

ExxonMobil asked a court to block a shareholder motion brought by two activist-investor groups that want the oil giant to expand cuts to its emissions. Exxon says the motion does not comply with the Securities and Exchange Commission's rules on shareholder proposals and that the activists are motivated by an extreme agenda. Similar motions were defeated at Exxon's annual general meeting in the past two years. Shell also faces problems with an activist-shareholder motion on emissions this year.

The last kingdom

The number of net new subscribers to **Netflix** surged by 13.1m in the last three months of 2023, a figure exceeded only by the 15.8m people it signed up in early 2020, the start of the pandemic. It now has 260m users in total, pushing it further ahead of rival streaming services. The company said the growth in its customer base reflected "the benefits of paid sharing", in other words, its crackdown on users sharing passwords. Its subscription

plan including ads is also popular, growing by 70% on the quarter. And **Netflix** is expanding into live broadcasting, striking a \$5bn deal to stream **World Wrestling Entertainment** shows.

ASML reported a 30% jump in annual net sales. The Dutch company is the dominant maker of the equipment needed to produce top-end semiconductors. Orders for its kit tripled in the fourth quarter compared with the previous three months, boosted by the mania for artificial intelligence. ASML is now Europe's most valuable technology company.

Tesla's revenue grew by just 3% in the last quarter of 2023, year on year. The carmaker warned that sales growth this year would be "notably" lower, and unusually, did not provide a delivery target. Tesla said that it is "between two major growth waves", adding to concerns that demand for electric cars may be waning.

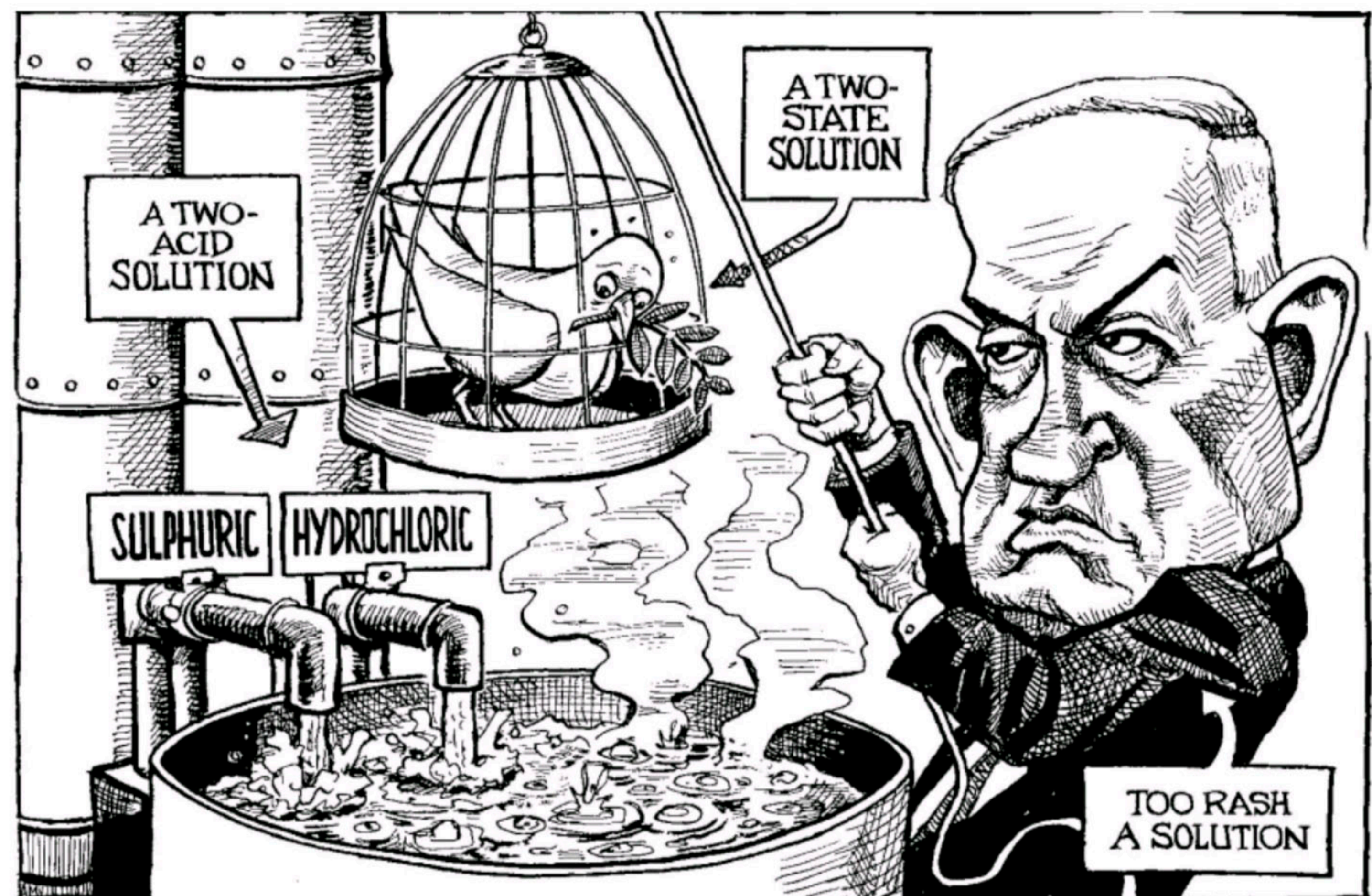
Toyota's chairman, Toyoda Akio, forecast that the sale of purely electric cars will top out at 30% of the global market, with the rest shared out between hybrid, hydrogen and petrol vehicles. Mr Toyoda has

long been less bullish than his peers on the prospects for EVs. Limiting people's choices isn't the answer, he opined; customers, not regulators, should decide what to drive. Toyota has lagged behind its rivals in the switch to EVs, though its sales of electrified vehicles in America last year, including hybrids, came to 29% of its total there.

Macy's rejected a \$5.8bn buy-out offer from a pair of investment firms that it received in December. The retailer is instead closing five stores and laying off 3.5% of its workers, or around 2,350 staff.

No sanctuary in the restroom

A privacy watchdog in France fined **Amazon** for its "excessively intrusive system" for monitoring workers. Amazon collects data from goods-scanners used by employees, who sometimes feel they have to justify taking a break, the watchdog said. Amazon may appeal against the fine. A survey last year by **UNI Global Union** found 57% of Amazon workers felt that the constant monitoring was having a negative impact on their mental health; workers with irritable-bowel syndrome were having a particularly hard time, it said.



The border, Biden and the election

Democrats should reconsider what they would trade on immigration to defeat Donald Trump

DONALD TRUMP'S mother came from Tong (population 500), a remote Scottish settlement that was once in Viking territory. His grandfather came from Kallstadt (population 1,200), a Bavarian village that produced the Heinz family. Joe Biden's ancestors came from Ireland and England. In America everyone is from somewhere else—even Native Americans, though they have been there much longer than anyone. Such is the country's appeal that 160m adults around the world say they would move there, too, if only they had the chance. That is many millions more than most Americans are willing to allow in.

This mismatch is at the heart of the issue that could cost President Biden the election. In 2016 Mr Trump rode "border chaos" all the way to the Republican nomination and then on to the presidency. At the time, he campaigned as if record numbers of migrants were coming across the border illegally. That was not true then, but it is now.

There were nearly 250,000 attempts to cross the southern border in November alone. Most of the newcomers will have sought asylum and been released into America to wait years for their claims to be adjudicated. Since Mr Biden became president, over 3.1m border-crossers have been admitted. That is more than the population of Chicago. At least a further 1.7m have come in undetected or overstayed their visas. Republican governors have paid for migrants to go to places run by Democrats, forcing the problems of the southern border northward. Their experience helps explain why voters trust Republicans to deal with border security by a margin of 30 points. It is the party's biggest lead on any issue.

This is not all Mr Biden's fault (see United States section). When America's labour market is tight the incentive for people to head there illegally increases. That is why the numbers went up under Mr Trump too, until covid-19 came along and fixed the problem for him. When travel became possible again in 2021, pent-up demand resulted in a surge of people across the southern border. More than half of border-crossers are from countries beyond Mexico and the northern bit of Central America. Venezuelans make up the biggest part of this group. But tens of thousands now fly into the Americas from Russia (43,000 in the year to September 2023), India (42,000) and China (24,000) and then attempt a crossing. Often it is impossible to return them. China will not take back its nationals if their applications are rejected.

However, some of the blame lies squarely at Mr Biden's door. Mr Trump's language about Mexico sending rapists across the border and his cruel separation of children from their parents as a deterrent, along with his plan to build the wall, radicalised some Democratic policymakers on immigration. They thought public opinion was on their side. Voters did indeed revolt against Trumpism and while he was in office support for immigration reached a new high. When the new Democratic administration took power its instinct was to do the opposite of whatever Mr Trump had. Work on the border wall stopped. Democrats ditched the remain-in-Mexico policy, which obliged asylum-seekers to stay south of the border until the authorities decided

on their applications. Predictably, illegal immigration surged.

Since the midterms in 2022, Mr Biden has quietly adopted some of Mr Trump's policies. He has agreed to fill gaps in the wall. Asylum-seekers who try to cross undetected will, with a few exceptions, automatically have their applications rejected. They must apply online before showing up. Yet Americans are unaware of these efforts, partly because Mr Biden is loth to draw attention to his triangulation, lest his own side turns on him.

The president's room to do one thing while saying another is running out. The House of Representatives has paired a stringent immigration bill with funding for Ukraine's war. The administration resents this, because support for Ukraine makes economic and strategic sense for America regardless of the country's policy on immigration. That is an error. Instead, in a system in which both parties use the leverage available to them, Mr Biden should see this as an opportunity.

Some of the Republican demands on immigration are sensible. Most migrants without visas who cross at the southern border do not crawl through the desert. They find a Border Patrol agent and present an asylum claim. They must then pass what is called a "credible fear" interview. Republicans want to raise the threshold for what counts as credible fear. That is a reasonable aim. Under Mr Biden's rules, a fear of gang violence counts as a ground for being let in. Contrast that with Spain, which rejects this test even though it has a socialist prime minister.

Once that first test is passed, immigrants are typically released awaiting a court date years in the future, because immigration courts are overstuffed with cases. The average wait for a hearing is over four years. Appeals can add to the delay. Democrats would like money to hire

more officers to process claims and more judges to speed through the backlog of cases. That is reasonable, too.

There ought to be a deal here. Yet each party mistrusts the other's motives. Republicans say they will not give more money to an administration they cannot trust to enforce immigration laws. Instead they are trying to impeach the secretary of homeland security. Democrats look at Republican demands, such as that families coming into the country can be detained indefinitely, and conclude that negotiations are being set up to fail and are therefore really a weapon against Mr Biden. The odds are that both parties will choose campaigning over dealmaking.

Don't forget the multitudes

That should worry Mr Biden. Our reporting from the Mexican side of the border suggests that, if people believe Mr Trump will win, many more will try to cross into America before he is inaugurated (see Americas section). Insecure borders weaken support for legal immigration and boost restrictionist parties. Immigration could bring Mr Trump back to the White House, from where he might pull America out of the refugee convention of 1951, causing it to collapse. Mr Biden should call the Republicans' bluff, roll up his sleeves and set out to fix the border. That would be the right thing to do. It would also help his prospects. ■



Technology

AI for all

Artificial intelligence holds a tantalising promise of prosperity for the emerging world

NEW TECHNOLOGY brings with it both the sweet hope of greater prosperity and the cruel fear of missing out. Satya Nadella, the boss of Microsoft, says he is haunted by the fact that the Industrial Revolution left behind India, his country of birth. (Indian manufacturers hardly enjoyed a level playing-field—Britain was then both their rival and their ruler.) Many technologies, such as online-education courses, have generated more hype than economic growth in the emerging world. Some people worry that generative artificial intelligence (AI), too, will disappoint the global south. The big winners so far seem to be a bunch of Western early adopters, as well as startups in San Francisco and America's "magnificent seven" tech firms, which include Microsoft and have together added an astonishing \$4.6trn to their market value since ChatGPT's launch in November 2022.

Yet AI stands to transform lives in the emerging world, too. As it spreads, the technology could raise productivity and shrink gaps in human capital faster than many before it. People in developing countries need not be passive recipients of AI, but can shape it to suit their own needs. Most exciting of all, it could help income levels catch up with those in the rich world.

The promise of AI in developing countries is tantalising. As in the West, it will be a useful all-purpose tool for consumers and workers, making it easier to obtain and interpret information. Some jobs will go, but new ones will be created. Because emerging countries have fewer white-collar workers, the disruption and the gain to existing firms may be smaller than in the West. The IMF says that a fifth to a quarter of workers there are most exposed to replacement, compared with a third in rich countries.

But a potentially transformative benefit may come from better and more accessible public services. Developing economies have long been held back by a lack of educated, healthy workers. Primary-school teachers in India have twice as many pupils as their American counterparts, but are ill-equipped for the struggle. Doctors in Africa are scarce; properly trained ones are scarcer. Whole generations of children grow up badly schooled, in poor health and unable to fulfil their potential in an increasingly global labour market.

As our briefing this week sets out, policymakers and entrepreneurs around the world are exploring ways that AI can help. India is combining large language models with speech-recognition software to enable illiterate farmers to ask a bot how to apply for government loans. Pupils in Kenya will soon be asking a chatbot questions about their homework, and the chatbot will be tweaking and improving its lessons in response. Researchers in Brazil are testing a medical AI that helps undertrained primary-care workers treat patients. Medical data collected worldwide and fed into AIs could help improve diagnosis. If AI can make people in poorer countries healthier and better educated, it should in time also help them catch up with the rich world.

Pleasingly, these benefits could spread faster than earlier waves of technology. New technologies invented in the early 20th century took more than 50 years to reach most countries. By contrast, AI will spread through the gadget that many people

across the emerging world already have, and many more soon will: the phone in their pockets. In time, chatbots will become much cheaper to provide and acquire.

Moreover, the technology can be tailored to local needs. So far there is little sign that AI is ruled by the winner-takes-all effects that benefited America's social-media and internet-search firms. That means a variety of approaches could prosper. Some developers in India are already taking Western models and fine-tuning them with local data to provide a whizzy language-translation service, avoiding the heavy capital costs of model-building (see Science & technology section).

Another idea that is also taking off in the West is to build smaller, cheaper models of your own. A narrower set of capabilities, rather than the ability to get every bit of information under the sun, can suit specific needs just fine. A medical AI is unlikely to need to generate amusing limericks in the style of William Shakespeare, as ChatGPT does so successfully. This still requires computing power and bespoke data sets. But it could help adapt AI in more varied and useful ways.

Some countries are already harnessing AI. China's prowess is second only to America's, thanks to its tech know-how and the deep pockets of its internet giants. India's outsourcing industry could be disrupted, as some back-office tasks are taken on by generative AI. But it is home to a vibrant startup scene, as well as millions of tech developers and a government that is keen to use AI to improve its digital infrastructure. These leave it well-placed to innovate and adapt. Countries in the Gulf, such as the United Arab Emirates and Saudi Arabia, are determined to build an AI industry as they shift from oil. They already have the capital and are importing the talent.

Each country will shape the technology in its own way. Chinese chatbots have been trained to keep off the subject of Xi Jinping; India's developers are focused on lowering language barriers; the Gulf is building an Arabic large language model. Though the global south will not dislodge America's crown, it could benefit widely from all this expertise.

Teaching Aid

Plenty could yet go wrong, obviously. The technology is still evolving. Computing power could become too expensive; local data will need to be gathered and stored. Some practitioners may lack the ability to take advantage of the knowledge at their fingertips, or the incentive to try new things. Although countries in sub-Saharan Africa stand to gain the most from improvements to human capital and government services, the technology will spread more slowly there than elsewhere without better connectivity, governance and regulation.

The good news is that investments to speed AI's diffusion will be richly rewarded. Much about the AI revolution is still uncertain, but there is no doubt that the technology will have many uses and that it will only get better. Emerging countries have suffered disappointments before. This time they have a wonderful opportunity—and the power to seize it. ■



Vietnam's succession

Unchaining a tiger

Nguyen Phu Trong, Vietnam's ailing paramount leader, should yield to a pragmatic successor

MOST ASIAN countries look on growing competition between America and China with trepidation. Vietnam sees opportunity. The country of 100m is friendly with both superpowers. And, because of its strategic location on China's southern border and its 3,000km coastline, both are courting it (see Asia section). Last year it was the only country to receive both Xi Jinping and Joe Biden on state visits. It marked this by upgrading its ties with America, which has supplied Vietnam with coast-guard vessels, to the same status it affords China and Russia.

This is an adroit balancing act, from which the country stands to gain both politically and economically. America's effort to decouple its economy from China's is leading foreign investors in China to move some of their operations elsewhere. And Vietnam is benefiting more from this form of de-risking (known as "China +1") than any other Asian country.

Its hunger for foreign investment and its low labour costs make it seem like China 20 years ago—only with less bullying and less pilfering of intellectual property. Yet its strong ties with China make the shift look less like a challenge to the Asian giant than a regional win-win, partly because manufacturers based in Vietnam rely heavily on Chinese components. In the first three quarters of 2023, Vietnam attracted twice as much foreign direct investment, as a share of GDP, as Indonesia, the Philippines or Thailand.

They should learn from Vietnam's example, which builds on 40 years of opening. When its Leninist ruling party ditched collectivism in the mid-1980s the Vietnamese people were starving. Their annual income per person has since grown six-fold, to \$3,700, as trade and investment have soared. Even before Sino-American relations soured, Vietnam was attracting investors put off by China's rising labour costs. More recent arrivals, in-

cluding big brands such as Apple and Samsung, are helping it climb the value chain. Its biggest exports to America are no longer textiles but high-tech products such as iPhones. The country's ruling party, now communist only in name and opacity, plausibly aspires to make Vietnam a rich country by 2045.

That leaves little room for missteps, however. And there are big risks to Vietnam's tigerish emergence. Its geopolitical sweet spot may not last—especially if Donald Trump returns to power and takes exception to the size of America's bilateral trade deficit with it. Its coastline and southern delta region are vulnerable to climate change. The beneficial demography underlying its growth is weakening; in a little over a decade its working-age population is predicted to start declining. And, for all its rulers' pragmatism, their resistance to political reform is a growing handicap.

That was highlighted earlier this month when the party's 79-year-old general secretary and paramount leader, Nguyen Phu Trong, disappeared from public view. Social media lit up with rumours that he was dead and with speculation about his successor. Mr Trong has reappeared yet uncertainty over his health and succession will continue. Investors were already complaining of a slowdown in project approvals owing to the effects of an anti-corruption drive, which last year led to the sacking of the country's president, who was number three in the hierarchy. As senior apparatchiks fret over a post-Trong future, decision-making could grind to a halt.

Mr Trong, whose position is not up for review until 2026, should end the uncertainty. The party would ideally introduce internal democracy, as a step towards the real thing. That may be too much to ask. Yet the general secretary should recognise the risk he has become to Vietnam's prospects. He should step aside and allow the party to select a pragmatic successor. ■



The new frontier of finance

Private assets, public interest

Private equity's insurance binge brings new risks to the global financial system

A DECADE OR SO ago private equity was a niche corner of finance; today it is a vast enterprise in its own right. Having grabbed business and prestige from banks, private-equity firms manage \$12trn of assets globally, are worth more than \$500bn on America's stockmarket and have their pick of Wall Street's top talent. Whereas America's listed banks are worth little more than they were before the pandemic, its listed private-equity firms are worth about twice as much. The biggest, Blackstone, is more valuable than either Goldman Sachs or Morgan Stanley—and has the confidence of a winner. "It's the alternatives era," proclaimed the company's ebullient Taylor Swift-themed festive video in December. "We buy assets then we make 'em better."

This is not, though, the business that has recently boomed

for them. Traditional private equity—using lots of debt to buy companies, improving them, and selling or listing them—has been lifeless. High interest rates have cast doubt on the value of privately held companies and reduced investors' willingness to provide new funds. It does not seem to matter. Core private-equity activity is now just one part of the industry's terrain, which includes infrastructure, property and loans made directly to companies, all under the broad label of "private assets". Here the empire-building continues. Most recently, as we report this week (see Finance & economics section), the industry is swallowing up life insurers.

All of the three kings of private equity—Apollo, Blackstone and KKR—have bought insurers or taken minority stakes in ►►

▶ them in exchange for managing their assets. Smaller firms are following suit. The insurers are not portfolio investments, destined to be sold for a profit. Instead they are prized for their vast balance-sheets, which are a new source of funding.

Judged by the fundamentals, the strategy makes sense. Insurance firms invest over long periods to fund payouts, including annuities sold to pensioners. They have traditionally bought lots of government and corporate bonds that are traded on public markets. Firms like Apollo can instead knowledgeably move their portfolios into the higher-yielding private investments in which they specialise. A higher rate of return should mean a better deal for customers (see Schumpeter). And because insurers' liabilities stretch years into the future, the finance they provide is patient. In banking, long-term loans are funded with lots of instantly accessible deposits; with private assets and insurance, the duration of the assets matches the duration of the liabilities.

Yet the strategy brings risks—and not just to the firms. Pension promises matter to society. Implicitly or explicitly, the taxpayer backstops insurance to some degree, and regulators enforce minimum capital requirements so that insurers can with-

stand losses. Yet judging the safety-buffers of a firm stuffed with illiquid private assets is hard, because its losses are not apparent from movements in financial markets. And in a crisis insurance policyholders may sometimes flee as they seek to get out some of their money even if that entails a financial penalty. Last year an Italian insurer suffered just such a bank-run-like meltdown.

Making things harder is the complexity of the tie-ups, which involve labyrinthine interlinkages between different bits of firms' balance-sheets. Much reinsurance activity takes place in Bermuda, an offshore hub where there is more than a whiff of regulatory arbitrage. Yet compared with the zealots who police the global banking system, insurance regulators are docile.

As private assets become more important, that must change. Regulators should co-operate internationally to ensure that the safety-buffers are adequate. High standards of transparency and capital need to be enforced by suitably heavyweight bodies. The goal should not be to crush a new business model, but to make it safer. Financial innovation often brings new benefits even as it creates new ways to blow up the system. Regulators would be making a mistake to ignore either edge of the sword. ■

Running Italy

Mainstream Meloni

Italy's prime minister shows that populists need not be as scary as their opponents claim

PEOPLE LIKE labels, and it has always been easy to attach them to Giorgia Meloni, prime minister of Italy since October 2022. She has routinely been dubbed a neo-fascist by her political enemies in Italy and by alarmed liberals across Europe. It doesn't help that her party, the Brothers of Italy, descends in part from a post-war neo-fascist group, or that its party symbol includes a tricolour flame with questionable antecedents. In the run-up to the election she won, the spread between Italian and German government debt widened, owing to fears that she would pick fights with Brussels and maybe even destabilise the euro itself. She might, critics feared, team up with Hungary's strongman, Viktor Orban, the nationalist right in Poland and Marine Le Pen in France to cause all sorts of trouble. But 15 months in, Ms Meloni seems to be conventional rather than a wrecker.

Consider, first, all the things that have not happened. Social policy has remained unaltered, despite the Brothers' hostility to abortion and gay civil unions. It is true that there has been no progress towards gay marriage or same-sex adoption; but neither has there been any backsliding, despite this being Italy's most right-wing government since the second world war. Italy's first female prime minister does not profess to be a feminist, but she is a tough single mother who unceremoniously dumped her partner for positioning his female colleagues.

Nor has Ms Meloni been a thorn in the flesh of her fellow European leaders or the legions of bureaucrats in Brussels whose job it is to worry about the stability of the euro and indeed the European Union itself. *Lo spread* has shrunk back to around 1.5 percentage points, and the markets show no sign of jitters, despite Italy's feeble growth. She has not teamed up with Mr Orban or other populists to block EU decision-making, nor attract-

ed the censure of the EU's rule-of-law watchdogs. On Ukraine she has been admirable, sending money and arms despite Italy's traditional ties to Russia. Fears that Italy would take a nasty turn towards xenophobia have proved unfounded, despite a sharp rise in the number of asylum-seekers arriving by boat.

Could Ms Meloni be a sign that the populist right is not always so bad once in office? True, Mr Orban has never changed his autocratic spots, and neither did Poland's Law and Justice party, which voters kicked out in October. It would also be rash to assume that a President Le Pen or, in the Netherlands, a Prime Minister Geert Wilders (a more imminent prospect) would cleave to the mainstream as Ms Meloni has. And yet the Sweden Democrats, an anti-immigrant party, have not done anything terrible since lending support to the ruling bloc in Stockholm. All in all, Ms Meloni makes an encouraging data point: the so-called far right in Europe can turn out in office to behave like run-of-the-mill conservatives.

That does not mean everything is sunny in the land of *la dolce vita*. Ms Meloni has some bad ideas about constitutional changes that would bolster the power of the prime minister—though those are still for the future. There are also worrying signs that she is at heart no economic reformer, unlike her predecessor, Mario Draghi (see Europe section). Italy's growth problems are systemic. The new government has shown little interest in promoting competition, played with the idea of a big windfall tax on the banks before dropping it and is seeking to diminish the role of foreign investors on Italian boards. The deficit is ballooning, and the OECD this week warned that spending cuts and tax rises will be needed, a call that will fall on deaf ears. That is disappointing, but resistance to reform in Italy is long-standing. In this, too, Ms Meloni belongs to her country's mainstream. ■





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The problems with DEI

Your leader on diversity, equity and inclusion assumes that conservatives make a mistake by ignoring the “real benefits” of such programmes, and that businesses should want to hire the “most able people” (“Muddled thinking”, January 13th). You helpfully suggest that companies consider larger shortlists from overlooked groups that they feel might otherwise develop into better employees.

But surely if companies had overlooked the necessity of hiring the most able people then smarter competition would have closed them down. No one needs a head of diversity to tell them that.

TIM HILL
Singapore

As a psychologist and chief human-resources officer I struggled with DEI for decades. My concerns are not about the need, but about the methods. Much of what is being done in the name of DEI oversimplifies the problem of bias and lacks a fundamental understanding of human behaviour. This has led to unrealistic expectations about what it should or can accomplish.

Bias is hardwired into the human brain. Evolution has made us prefer what is similar, known and familiar (in other words safe) and to be cautious about what is different (or perhaps unsafe). Our bias for the familiar extends beyond people. Our brains automatically and unconsciously pull our attention towards perspectives, ideas, data, music, food, literature, and so on, that are similar and familiar, and away from the very same things when they are different and unfamiliar.

As practised today, DEI promotes a mistaken belief that setting noble expectations, creating awareness, making conscious behavioural decisions and rebuking those who don't change can flip a switch to produce unbiased brains. DEI thinks bias is a matter of will, which runs counter to the past 50 years of

social-science research. If changing our behaviour were that easy, people would exercise regularly, never experience marital conflict, retire with robust pensions and still be reading the only diet book ever published.

There are real issues to be addressed: companies do need more diversity of perspective and underrepresented groups do need more opportunities. But organisations must rethink their methods by drawing more on social science and less on social activism. No amount of social idealism will rewire millions of years of neural evolution.
SCOTT SIMMONS
Denver

It's not just about the car

The idea that the West should welcome a huge influx of Chinese electric vehicles is mind boggling (“China's EV onslaught”, January 13th). The opening of trade with China in the late 1980s was justified by the expectation that an emerging Chinese middle class would demand democracy and throw off the shackles of the Communist Party. Instead, Chinese affluence driven by Western investment and consumption has facilitated the Chinese government's efforts to centralise power, acquire the West's technologies, build more military capabilities, ruthlessly repress any opposition and build alliances with dictatorships. Far from becoming more democratic and open, China's leadership now represents one of the most severe long-term threats to world security, if not the future of Western civilisation.

Your argument seems to be that we should increase our trade with China, which would thereby encourage, if not accelerate, these dangerous trends. You identified only one risk to buying EVs from China—competition to Western carmakers—and even then characterised this risk as “overblown”.

If, or more likely when, China dominates the world militarily and politically a few

decades from now, financed by Western consumption, I wonder how astute this view will look. It would be better to ask how does the West stop funding China's march towards global hegemony without suffering politically unacceptable economic costs?

MICHAEL P. WELLS
Gullaug, Norway

Hats off

Lexington repeated the common assertion that John Kennedy did not wear a hat during his inauguration (December 23rd). Actually, Kennedy wore a top hat en route to his inauguration ceremony and to the evening balls. In a nod to tradition he reinstated the top hat after his predecessor, Dwight Eisenhower, wore a homburg to both of his inaugurations.

It is true that Kennedy took off his hat to take the oath of office and to make his inaugural address, but that was nothing new. Eisenhower doffed his homburg to do the same in 1953 and 1957, and Harry Truman shed his top hat for the oath of office and inaugural address in 1949.

TAYLOR HARTSTEIN
Edgewood, New Mexico

Holocaust stories

Charlemagne wrote about the Stolpersteine project, which commemorates the victims of Nazi atrocities by laying brass “stumbling stones” in the pavements in front of their homes (December 16th). As well as mainland Europe, one such stone is in London, dedicated to Ada van Dantzig, a Dutch restorer of paintings. She had returned to her family in Rotterdam after the outbreak of the war in 1939, was arrested in France in May 1943 and then murdered at Auschwitz. Her stone was laid in May 2022, and can be found at Golden Square, Soho. Other stumbling stones may well be laid in Britain to recognise victims of the Nazis like Ada van Dantzig.

GILLIAN MAWDSLEY
Glasgow

I hope that the Stolpersteine project will one day reflect the global reach of Nazi crimes. Some 350 American soldiers were subject to forced labour at Berga concentration camp, a subcamp of Buchenwald, and around 80 died before it was liberated. Somewhere in Egg Harbor, New Jersey, is the home of Morton Goldstein, a soldier who was captured at the Battle of the Bulge and murdered at Berga in March 1945. Perhaps it would be to the benefit of Americans to see these tiny bronze memorials in their own streets.

MATTHEW TAYLOR
Milton Keynes, Buckinghamshire

Norse adventures

I am perplexed at the notion that anybody who has read the “The Sagas of Icelanders” could find them boring (“How many books will you read before you die?”, December 22nd). You get heroes, scoundrels, resourceful women, spiteful women, war, sorcery, murder, torture, loyalty, betrayal, revenge and poetry. The sagas have a trademark terse style, such as when one of the heroes remarks on the rising popularity of short stabbing spears after he is fatally stabbed at the door of his house. Boring?

PETR DEJMEK
Malmö, Sweden

Rotten tomatoes

I found it interesting that before covid Americans on average were “going to the movies three and a half times a year” (“Hollywood reaches beyond the screen”, January 6th). Was that because they walked out halfway through a terrible film, or fell asleep during a dull one and slept through into the middle of the next one?

ANDREW KEAN
Rainham, Kent

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Chatbots for the bottom four billion

DAKAR, NAIROBI AND SÃO PAULO

Could AI transform life in developing countries?

TWENTY-FIVE years ago your correspondent hired a cellphone in Congo. Each day, it cost what a typical local made in several months. The handset was as heavy as a half-brick and only somewhat more useful. Practically no one else in Congo had one, bar cabinet ministers and tycoons, so there were not many people to call. In those days, mobile phones had made no detectable difference to most people's lives in the world's poorest countries.

Today, many farmers in Congo have phones: the number of connections has grown 5,000-fold as the population has doubled. Mobile devices have transformed lives throughout the developing world, especially as more and more of them are hooked up to the internet (see chart 1 on the next page). The 4bn people who live in low or lower-middle income countries have vastly more access to information, chat daily to far-off friends and use their phones like bank cards even when they don't have bank accounts.

Could artificial intelligence (AI) bring similarly dramatic changes? There are

three main reasons for optimism. First, the technology is improving fast. Second, it has the potential to spread fast, too. As usually happens with new technologies, rich countries will benefit first. But if the high cost of training AI models falls, the expense of providing the technology to the poor could be minimal. They will not need a new device, just the smartphones that many of them already own.

The third reason is that developing countries have gaping shortages of skilled workers: there are nowhere near enough teachers, doctors, engineers or managers. AI could ease this shortfall, not by replacing existing workers, but by helping them become more productive, argues Daniel Björkegren of Columbia University, which in turn could raise the general level of health and education. Although AI may also eliminate some jobs, the IMF predicts that labour markets in poorer countries will be less disrupted than those in rich ones. Another tantalising possibility is that AI could help provide fine-grained, up-to-date data about poor places, and so

assist in all manner of development work.

Start with education. A typical sub-Saharan pupil spends six years in school but retains only three years' worth of learning, Wolfgang Lutz of the Wittgenstein Centre in Vienna estimated in 2015. A typical Japanese student spends 14 years in classes and absorbs 16 years' worth of education. Using a different methodology, the World Bank also finds that education is spectacularly worse in poor countries than in rich ones (see chart 2 on the next page).

Tonee Ndungu, an entrepreneur in Kenya, thinks AI could help bridge this gap. He has developed two apps that he hopes to launch this year. One, called Somanasi ("Learn with me"), is for children. It allows pupils to ask a talking chatbot questions related to the Kenyan school curriculum. *The Economist* asked, "How do I work out a percentage from a fraction?" The chatbot offered a step-by-step worked example.

Machine learning

A chatbot can give undivided attention to each child, at any time of day, and never gets tired (so long as your phone is charged). It can also be adapted to local cultures. "I never saw an apple till I was 30," says Mr Ndungu. "So we say 'A is for animal.'" The service can be tailored to different learning styles, too. It might illustrate division by telling children to break a pencil in half and then again. Depending on how different pupils respond, the AI can figure out whether this approach works, ►►

▶ and fine-tune the way it interacts with them. Some kids want more numbers; some like stories. The chatbot adapts.

It cannot yet mark homework. But Mr Ndungu's firm, Kytabu, offers an app for teachers, too, called Hodari ("Brave"). It lightens their workload by crafting step-by-step lesson plans. It helps track what pupils understand, by getting each one to answer questions on a smartphone. (One phone per classroom is enough, he says.)

As far as *The Economist* could tell from playing with them in a café with good Wi-Fi, the two apps work well. But the proof will come—and bugs will be fixed—when more people use them in classrooms and homes. They will be given away to begin with; Mr Ndungu hopes eventually to charge for add-ons. The more children are enrolled, the cheaper it will be to provide the service. If half a million were to join, Mr Ndungu predicts the cost per child would fall from \$3.50 a month (not including the phone) to about 15 cents.

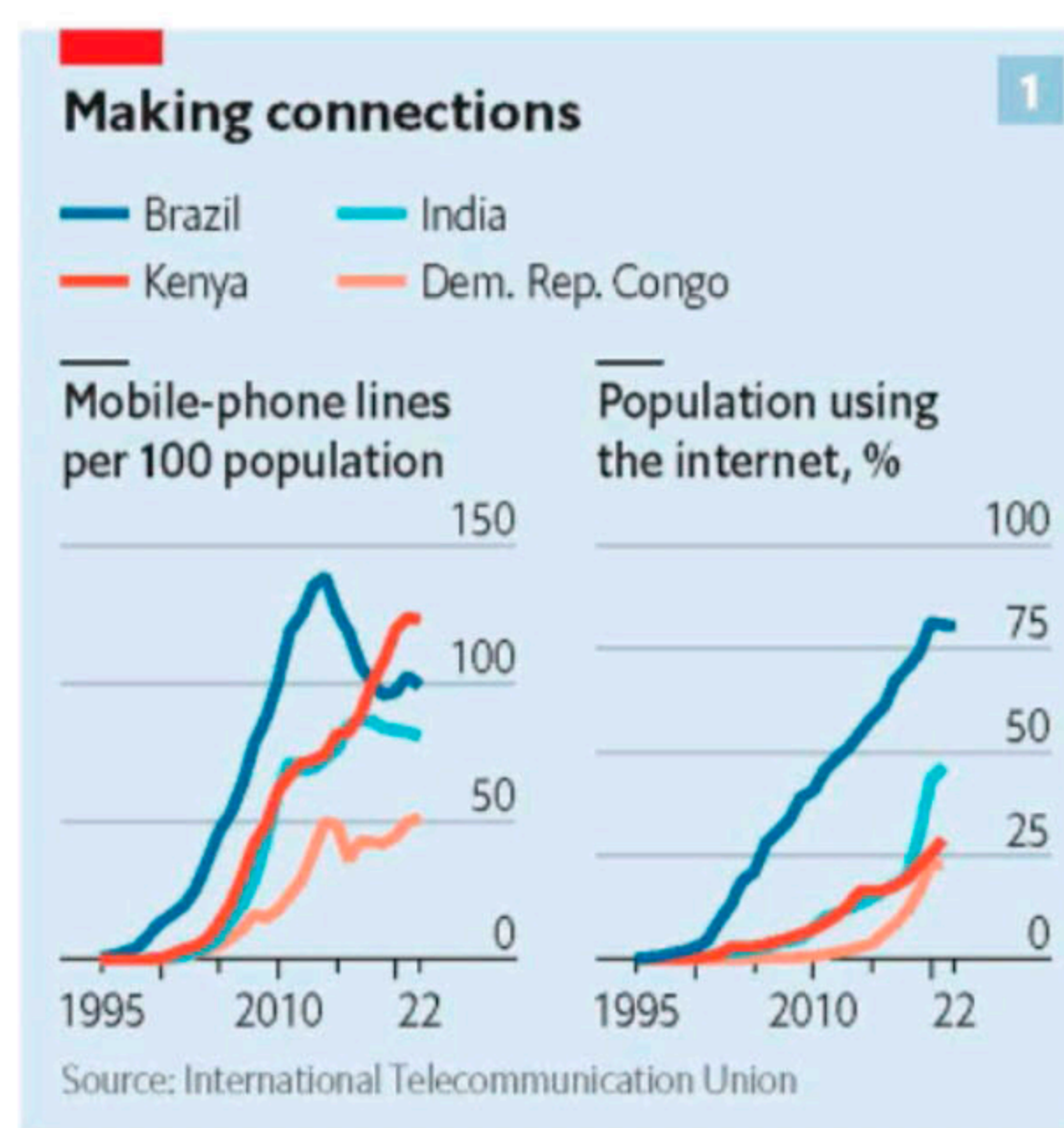
Chat GPA

Many entrepreneurs are pursuing similar projects, often using open-source models developed in rich countries, sometimes with help from charities like the Gates Foundation. The cost of getting AI to learn new languages appears low. It is already being used to write children's books in tongues previously too obscure for commercial publishers to bother with.

The need is glaring. Developing countries have too few teachers, many of whom have not mastered the curriculum. A study in 2015 (using data going back to 2007) found that four-fifths of grade six maths teachers in South Africa did not understand the concepts they were supposed to teach. Nearly 90% of ten-year-olds in sub-Saharan Africa cannot read a simple text.

Dr Björkegren points to recent studies suggesting that big gains are possible even with basic tech. One analysed an approach under which schools hire modestly qualified teachers and give them detailed "scripts" for lessons, delivered via tablet computers. Michael Kremer, a Nobel-prize-winning economist, and others studied 10,000 pupils taught this way in Kenya, at schools run by Bridge International Academies, a chain of cheap private schools. They found that after two years on average Bridge students had mastered nearly an extra year's worth of the curriculum, compared with pupils enrolled in normal schools. Another study in India found that personalised computerised instruction was especially helpful for pupils who were far behind.

Using AI in health care is riskier. If an educational chatbot misfires, a pupil might flunk a test; if a medical one hallucinates, a patient could die. Nonetheless, optimists see great potential. Some AI-po-



wered medical kit is already widely used in rich countries and is starting to be adopted in poorer ones. Examples include handheld ultrasound devices that can interpret scans, and a system for spotting tuberculosis on chest x-rays. Accurate AI translation could also make it easier for patients and health-care workers in the global south to tap into the world's medical knowledge.

Even imperfect AI tools may improve health-care systems in the developing world, whose failures cause more than 8m deaths a year, by one estimate. In a study of nine poor and middle-income countries by Todd Lewis of Harvard and others, 2,000 recently graduated primary health-care workers were observed dealing with visitors to clinics. They performed the correct, essential tasks required by clinical guidelines only about half the time.

For people in remote areas, even a sub-standard clinic may be too far away or too costly. Many rely on traditional medicine, much of which is useless or harmful. South African folk healers sometimes cut patients to rub in toxic powder suffused with mercury, for example. AI tools need not be infallible to be better than that.

A team at the University of São Paulo is training an AI to answer health-related questions. The aim is to give a tool to primary-health workers in Brazil, who some-

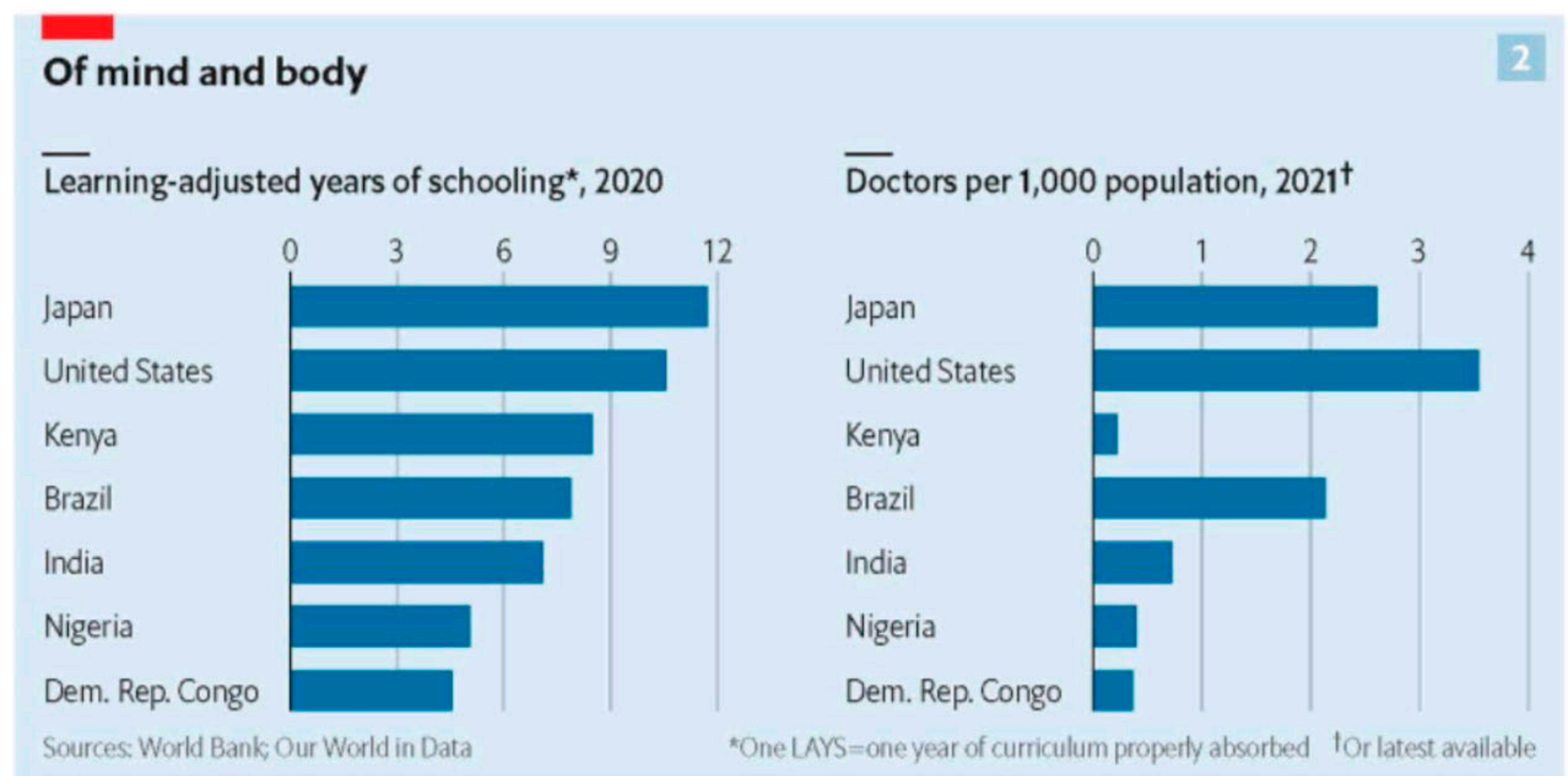
times have little training. They are using a database of clinical guidelines from Brazil's health ministry, rather than the whole internet, which is full of voodoo health tips. Before the AI can be widely deployed, it must be tested, tweaked and tested again. Currently, when you ask precise, technical questions, such as "Is Ivermectin effective in preventing covid-19?", its success rate is "so, so high", says Francisco Barbosa, one of the team. The trouble comes when you ask it something vague, as humans often do. If you say, "I've fallen in the street. How can I get to a pharmacy?", then the AI, which may not know where you are, might give terrible advice.

The AI will have to improve and its users will have to learn how to get the best out of it, says Mr Barbosa. He is confident that this will happen: "It's a cliché [to say it], but it's changing everything." Equipping a new hospital costs millions of dollars. Training a new doctor takes years. If AI helps cheap primary-care workers treat more patients successfully, so that they do not need to go to a hospital, Brazil can keep its population healthier without spending more.

Brazil has one doctor for every 467 people; Kenya has one for every 4,425. AI could help, says Daphne Ngunjiri of Access Afya, a Kenyan firm that runs mDaktari, a virtual health-care platform with 29,000 clients. For a small monthly fee, they can ask for advice when they feel unwell.

Bard to handle

For a test group of 380 users, mDaktari has added an AI-powered chatbot to the system. It records their queries, prompts them for more information and presents that information, along with a suggested response, to a clinician, often a nurse. The clinician reads it and, if the advice is sound, approves it and sends it back to the customer, perhaps referring her to a pharmacy or a clinic. Thus, a human is in the loop, to guard against errors, but the AI does the time-consuming gathering of information about symptoms, enabling the nurse to deal with more patients. If neces-▶▶



sary, the nurse can call the patient. For embarrassing ailments such as sexually transmitted diseases, some patients prefer talking to a chatbot. It never judges them.

Virginia, a client from a Nairobi slum whose family subsists on casual labour and backyard vegetables, says mDaktari is simple and helpful. One time she felt sick, consulted the app, and was steered to drugs that cleared up what turned out to be a urinary-tract infection. "I can even contact a [nurse] through my phone and get [an] answer," she says.

Several firms are testing AI-enhanced medical devices to see how well they work in poor areas. Philips, a Dutch firm, has a pilot programme in Kenya for a handheld ultrasound with an AI add-on that can interpret the images it spits out. This helps solve a common problem: lots of pregnant mothers and not enough people with the expertise to read scans.

Sadiki Jira is a midwife at a rural health facility in Kenya that serves nearly 30,000 people but has no doctor. He recalls a pregnant patient a couple of years ago whose baby had died in the womb. She had not realised for several weeks and had only sought help when she started haemorrhaging. Mr Jira referred her to a hospital, but it was too late: she died.

Mr Jira now uses an AI-powered scanner. Any midwife can, with minimal training, swipe a Philips device over a pregnant woman's stomach. The AI reveals such vital information as the fetus's gestational age, whether it is in the breech position and whether there is adequate amniotic fluid. "It's easy to use," says Mr Jira.

Philips is planning to offer the device and AI together for \$1 or \$2 a day in poor countries. The biggest obstacles to its roll-out are regulatory, says Matthijs Groot Wassink of Philips. Will governments allow midwives to handle a process that previously required someone more qualified? What will happen in places like India, where regulations are especially tight for fear that people will use ultrasound to identify and abort baby girls?

Poorer places collect poorer data. Forty-nine countries have gone more than 15 years since their most recent agricultural census; 13 have not conducted a population census in that period. Official numbers, when they exist, tend to flatter the government. For example, a study compared official estimates of how much maize was being grown on small farms in Ethiopia, Malawi and Nigeria with the results of painstaking (but rare) household surveys. The official numbers were much rosier.

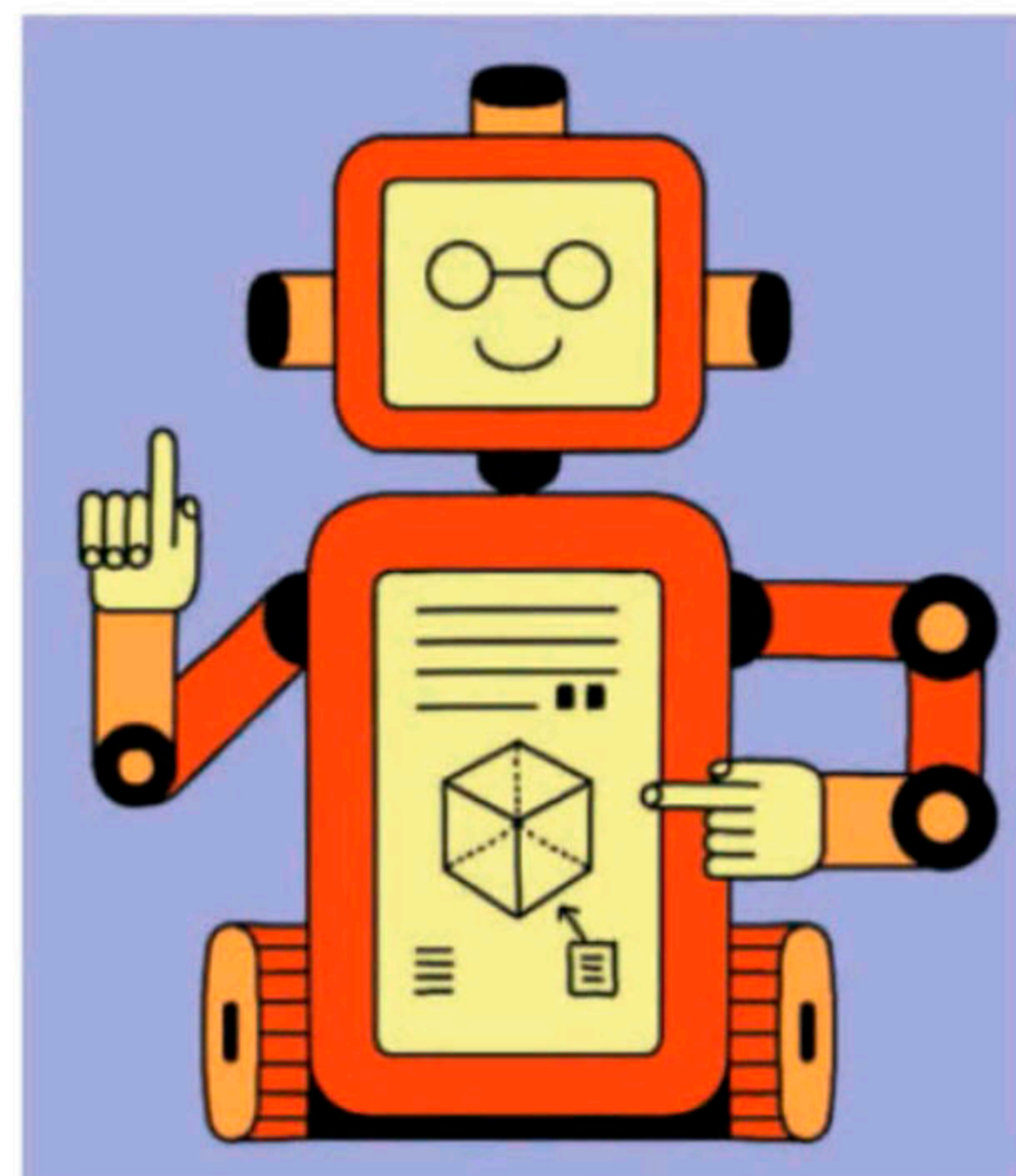
Satellite imagery and machine-learning could improve the quality and timeliness of data in developing countries, argue Marshall Burke of Stanford University and his co-authors in a recent paper in *Science*. Roughly 2.5bn people live in households

that depend on tiny plots of land. Until recently the output of such farms was hard to measure: satellite pictures were not sharp enough and data drawn from them were too hard to interpret. But by setting AI to work on new high-resolution images of vegetation, Dr Burke and David Lobell, also of Stanford, were able to measure crop yields as accurately as surveys do, but faster and more cheaply. This could allow frequent, detailed analysis of farming practices. How much fertiliser is needed on this hillside? Which seeds work best in that valley? Such knowledge could transform rural livelihoods, the authors predict.

So could better weather forecasts. Atmo, an American firm, says its AI-powered weather forecasts are as much as 100 times more detailed and twice as accurate as a conventional meteorological bulletin, because the AI processes data so much faster. It is also cheap. "A dirty secret of meteorology...is that there are vast inequalities," says Alex Levy, Atmo's boss. Forecasts are less detailed or reliable in poor countries. "The places [with] the most extreme weather also have the worst forecasts, [so] they are most likely to be surprised and unable to prepare adequately." Atmo's service is being used in Uganda and may soon be deployed in the Philippines.

Population counts in poor countries are rare, because they are costly, and prone to manipulation. In Nigeria the money each state gets from the central government is tied to its population. This gives states an incentive to fiddle. In 1991, on a census form with space for up to nine members per household, some states reported exactly nine members in every one. When the results of the census of 2006 were published, Bola Tinubu, the governor of Lagos, angrily claimed that its population was double the official tally. Nigeria has not held another census since. A new president—Mr Tinubu, as it happens—promises one in 2024.

AI can generate more frequent, detailed



estimates of how many people live where—and how well-off they are. Lights at night are often used as a proxy for economic buzz. Neal Jean of Stanford and others took day and night images of slums in Africa and trained a convolutional neural network (a form of machine learning) to predict from daytime images how much light there would be at night. In other words, AI learnt to recognise the kinds of buildings, infrastructure and other markers that tend to go with economic activity. It was able to predict 55-75% of the variation in assets between households.

Such information could help governments and charities assess better the effects of efforts to help the needy; it could also help companies understand markets. Researchers are avidly trying out such techniques, but governments have been slow to adopt them, laments Dr Burke. He attributes this in part to "the potential benefits to some policymakers of not having certain outcomes be measured".

AI could also help people deal with the red tape that throttles productivity in so many poor countries. Registering a property takes 200 times longer in Haiti than in wealthy Qatar, according to the World Bank. Suppose an AI, which is immune to boredom, were able to fill in the forms accurately enough to spare humans the chore? In September India launched a chatbot that lets illiterate farmers pose oral queries about applications for financial aid. Some 500,000 tried it on the first day.

Deep minefield

AI poses risks to poor countries, too. They are generally less democratic than rich ones, so many governments will adopt AI surveillance tools, pioneered by China, to monitor and control their people. They are less stable, so incendiary deepfakes may be more likely to warp politics or spark violence. Underfunded and inexperienced regulators may struggle to impose proper guardrails against potential abuses.

And there are big obstacles to deploying AI in the developing world. Access to the internet will have to improve. Some countries will benefit faster than others. India has 790m mobile broadband users, plus a universal digital identity system and a super-cheap, real-time payments system, note Nandan Nilekani and Tanuj Bhojwani, two tech bosses, in *Finance & Development*. This, they argue, "puts it in a favourable position to be the world's most extensive user of AI by the end of this decade".

Enormous uncertainty remains about how powerful the technology will eventually prove. But the potential upside is big enough to warrant a tremor of excitement. In the best-case scenario, AI could help make whole populations healthier, better educated and better informed. In time, that could make them a lot less poor. ■



Broken border

How America's immigration policies failed

LOS ANGELES AND NEW YORK

Surging migration in the south-west may cost Joe Biden the election. Will Congress intervene?

SO YOU WANT to come to America. Venezuela, your home country, is suffering under Nicolás Maduro's violent kleptocracy. What to do? Good luck getting a green card: employers won't bother sponsoring a low-skilled worker like you, and you have no immediate family in America to vouch for you. Your WhatsApp is filled with news of friends who have crossed America's southern border. You decide to follow them and, after a hellish trip, make it to the Rio Grande. You could try to slip across undetected—about 600,000 "gotaways" managed it last year. Or you can tell the border agents who intercept you that you want asylum. Odds are that they will release you with a court date scheduled in several months' time, kickstarting a process that may take years. Welcome to America.

In November 2023 nearly 250,000 migrants crossed the southern border. The surge—and the perception that America's borders are open—is a giant political liability for President Joe Biden. Just 27% of Americans tell pollsters that they approve

of his handling of the border. More than twice as many trust Donald Trump on the issue. The fact that surging migration over the southern border could cost Mr Biden the election in November has made the problem trickier to solve. Wrangling over a deal to fund Ukraine in exchange for tighter border security and asylum limits has dragged on for months. Although Senate leaders say an agreement is close, some Republicans—reportedly including Mr Trump—seem to want the border chaos to fester, to better beat Mr Biden over the head

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with it during the election campaign.

Several factors explain the surge: violence and instability around the globe; plentiful job openings in America; the accurate perception that Mr Biden is more welcoming than his predecessor; and cumbersome, limited pathways to come legally. An overwhelmed border apparatus also invites more crossings, notes David Bier of the Cato Institute, a think-tank. When people hear that they are unlikely to be detained and deported, more try their luck.

Decades of neglect and partisan rancour have crippled America's immigration system and created a situation where immigrants view asylum-seeking as the surest way to get into the country, rather than a long-shot attempt. Congress last made meaningful reform to immigration law in 1990. Comprehensive, bipartisan reform has seemed close several times since, only to fall apart in the end. In 2006, 2007 and 2013 bipartisan Senate bills included a path to citizenship for undocumented immigrants, more visas for workers and stricter enforcement at the border. In recent years Democrats have largely been animated by the desire to protect DACA recipients, immigrants who were brought to America as children, from deportation.

Mr Trump's candidacy upended the politics of immigration. When he launched his campaign in 2015, the number of migrants apprehended nationwide was at its lowest level since 1971. That fact did not, of

course, stop Mr Trump from declaring that migrants threatened the American way of life. (“They’re bringing drugs. They’re bringing crime. They’re rapists. And some, I assume, are good people.”) In 2019 irregular entries at the southern border jumped. Mr Trump saw detention as a means of deterrence and made some migrants with pending asylum claims wait in Mexico. At one time during his presidency nearly 57,000 people were detained. The surge was so great that even Mr Trump released a quarter of migrants into the country immediately with a notice to appear (NTA) in immigration court.

Borderline, personalities, disorder

Mr Biden reduced detentions—the number in custody today is around 38,000—and scrapped the requirement to remain in Mexico. He has tried less effective deterrents. His administration wants to steer migrants towards ports of entry where they arrive for appointments made via a smartphone app. Most are admitted with permission to stay for a year or two. By contrast people caught crossing illegally are presumed ineligible for asylum, with a few narrow exceptions, and quickly deported.

At least that is how it is supposed to work. In reality most migrants who cross illegally are still being released into the country, and irregular arrivals far exceed those at official crossings. Once on American soil a migrant can request asylum, which involves a screening with an asylum officer. Because of Mr Biden’s reluctance to pursue detention and an insufficient number of asylum officers, in November seven in ten were handed an NTA and sent on their way.

Last year the Biden administration also began granting parole to up to 30,000 Cubans, Haitians, Nicaraguans and Venezuelans each month, if applicants identified a financial sponsor in America. Again the goal was to make flows more orderly and decrease illegal arrivals. Permission to stay lasts two years but can be revoked at any time. Illegal crossings by Haitians,

Nicaraguans and Cubans plummeted. But Venezuelans, who are less likely to have social ties to America, continue to enter illegally. “Most of the Venezuelans arriving now don’t have family, friends, relatives,” says Theresa Cardinal Brown, who served in the Department for Homeland Security in the Bush and Obama administrations.

Once across the border, migrants head to cities. Shelter systems in New York City, Chicago and Denver are overwhelmed and their mayors want Mr Biden’s help. This is partly the doing of Greg Abbott, the Republican governor of Texas (see next story), who is busing migrants to Democratic-run cities. But big cities are also natural magnets for migrants.

With an NTA in hand, new arrivals enter the court system, where the backlog is growing faster than judges can keep up. Cases in immigration court surpassed 3m in November. It takes more than four years on average just to get an initial asylum hearing. Doubling the number of judges would clear the backlog—but only by 2032, according to an estimate from the Congressional Research Service.

Half of asylum cases are denied, and decisions are inconsistent. One judge in Houston denied 95% of her asylum cases last year; another in San Francisco denied just 1% of hers. But the immense wait, low chance of detention and the prospect of work in America encourage migrants with a weak claim to cross the border. Prioritising the most recent arrivals’ cases would reduce this incentive, notes Stephen Yale-Loehr of Cornell Law School. A long journey seems less worth it if the reward is deportation rather than an NTA.

The looming election, Mr Trump’s perceived strength on border issues and Mr Biden’s desire to arm Ukraine mean that the president wants to make a deal. His openness to tougher border enforcement is also no doubt fuelled by Americans’ rightward turn on immigration. Polling from YouGov suggests that more Americans favour building a southern border wall than don’t. Even 32% of Democrats now say they sup-

port the idea, up from 20% in 2022.

Whether the House and the Senate can agree on reform is questionable. A deal may include funding for more Border Patrol agents, the ability to shut down migrant intake if encounters reach a certain level, a higher bar for migrants to pass their interview—so that they are not released into the country unless they are likely to actually receive asylum—and limits on parole. Any changes to asylum rules will almost certainly be challenged in the courts.

But House Republicans have waffled, often insisting that they would accept nothing other than HR2, a hardline immigration bill passed along party lines last year that would be dead on arrival in the Senate. On the left, progressives do not want to tighten access to asylum. Both groups should beware. A new poll from *The Economist* and YouGov suggests that a plurality of Americans want Congress to pass a bill that both funds Ukraine and restricts asylum. The politicians should not ignore their voters. ■

Immigration politics

Texas hold'em

EAGLE PASS

A constitutional clash’s human toll

HUGO AND MAGALI URBINA used to consider Greg Abbott, Texas’s governor, a kindred spirit. At the start of the summer the conservative Christian retirees could be found fishing on the banks of the Rio Grande in Eagle Pass, where their pecan orchard abuts Texas’s border with Mexico. Migrants would wade through the water onto their land, where federal border agents usually picked the intruders up without much drama.

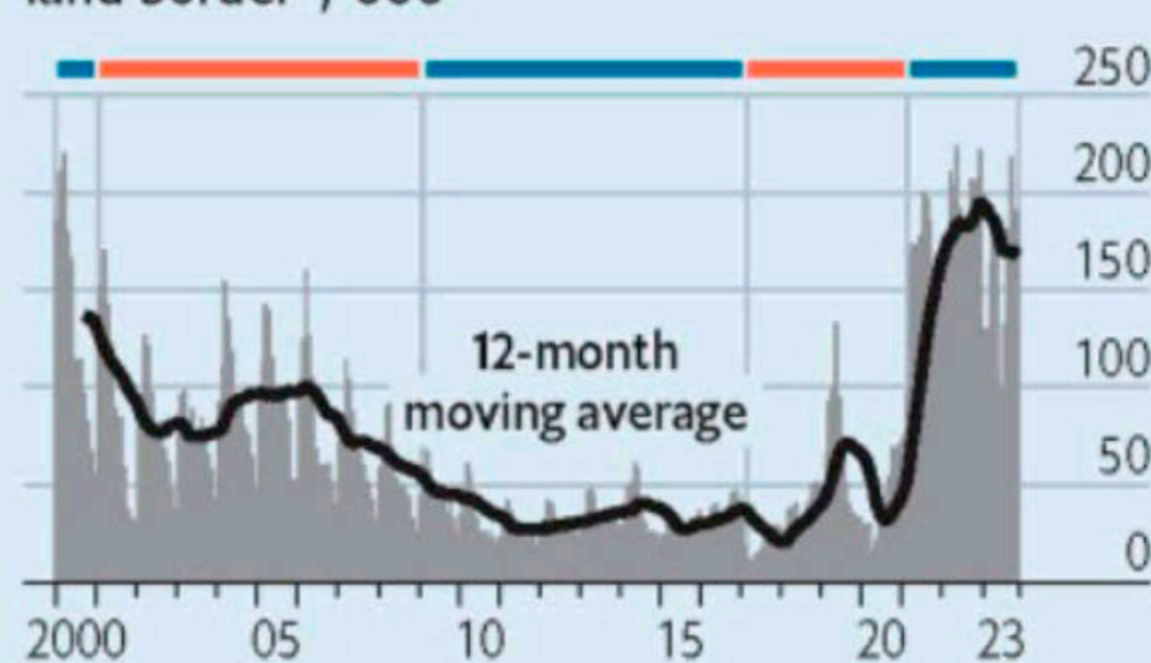
In July everything changed. Texas seized the strip of land along the river against the Urbinas’ will. State troopers laid down razor-wire and migrants bleeding from cuts began to climb ashore. Unlike the federal agents, state police were directed not to help the new arrivals and, by some accounts, were told to push them back into the river. By Christmas the couple had grown accustomed to finding little girls wandering alone in their orchard and seeing dead bodies beneath the trees. They blame Mr Abbott.

Three years ago, shortly after Joe Biden’s inauguration, the Texas governor launched “Operation Lone Star”. As migrant arrivals at the border surged, Mr Abbott reckoned it was up to Texas to use state power to stanch the crisis. He declared a “disaster” in dozens of Texas counties and

Overwhelmed

United States, irregular migrants

Encounters at the south-west land border*, '000



Sources: US Customs and Border Protection; TRAC Immigration, Syracuse University; Department of Justice

Presidency ■ Republican ■ Democratic

Immigration courts



*Only encounters between ports of entry. Since March 2020 monthly totals include apprehensions and expulsions. Prior totals include apprehensions only

► deployed the Texas National Guard as well as state police officers. They had no power to enforce federal laws, but they arrested thousands of people for criminal trespass.

As a partisan gambit, the plan worked brilliantly. Texas Republicans have ignited a constitutional battle with Washington over whether their state has the right to police its own international border and even displace federal border agents. Mr Abbott meanwhile bused asylum-seekers to cities run by Democrats, contributing to a surge of arrivals that overwhelmed shelters and drained social-service budgets.

Democrats dismissed the busing as a stunt, which it unarguably was. Yet it compelled big-city mayors to confront the realities of skyrocketing migration and to lobby the Biden administration for help. In December Mr Abbott signed SB4, a law which allows Texas to arrest and deport people who have entered the state illegally. Most recently, state police blocked federal officers from entering Shelby Park, a busy stretch of the border near the Urbinas' property in Eagle Pass.

Mr Abbott sometimes talks like an Old West marshal who must stand up for Texas citizens because Democrats in Washington won't. "The only thing that we're not doing is we're not shooting people who come across the border because, of course, the Biden administration would charge us with murder," the governor said on a talk-show in early January.

Texas's actions are begging for constitutional review. In 2012 the Supreme Court struck down much of Arizona's SB1070, a law that made illegal immigration a state crime and allowed cops to ask people to prove citizenship on demand. The recent policing in Texas constitutes a far more aggressive interpretation of state power, says Denise Gilman of the University of Texas at Austin. On January 22nd, in one of several cases challenging Operation Lone Star, the Supreme Court issued an emergency 5-4 ruling against Texas and for the Biden administration, holding that federal border agents had the right to cut razor-wire installed by Texas police.

More such litigation awaits, and the narrow margin in the razor-wire matter suggests the court's expanded conservative majority may be unsettled about how far to go. In this instance, Justices John Roberts and Amy Coney Barrett were the only conservatives to join the court's liberal minority in backing federal power. "This is not over," Mr Abbott posted after the decision. Troopers could be seen installing more razor-wire in Shelby Park the next morning. A federal lawsuit challenging buoys erected by Texas in the Rio Grande is before the Fifth Circuit and another on SB4 sits with a district judge in Austin.

Mr Abbott's political instincts may be sound, but state police have done no better

than the feds at deterring migration. Last month, a record 10,000 people crossed into America from Mexico each day and around 40% came through Eagle Pass. There, a string of buoys takes up less than a fifth of a mile in a 1,200-mile-long river border. "It's like putting a postage stamp in the middle of a football field and saying, hey, stop this running back that's coming at you," says Henry Cuellar, a Democratic border congressman. Shelby Park, where federal agents were expelled, is about the size of a small golf course. Though fewer migrants arrived in January, experts attribute the slowdown to seasonal ebbs and flows and to Mexico detaining more migrants across the river in Piedras Negras.

Texas has so far expended more than \$4bn on its plan, but under prevailing rules, border counties can apply for grants only for law enforcement, jail operations, court administrations, lawyers for indigent defendants and human-remains processing. That has left many social and humanitarian needs unmet. The hospitals in

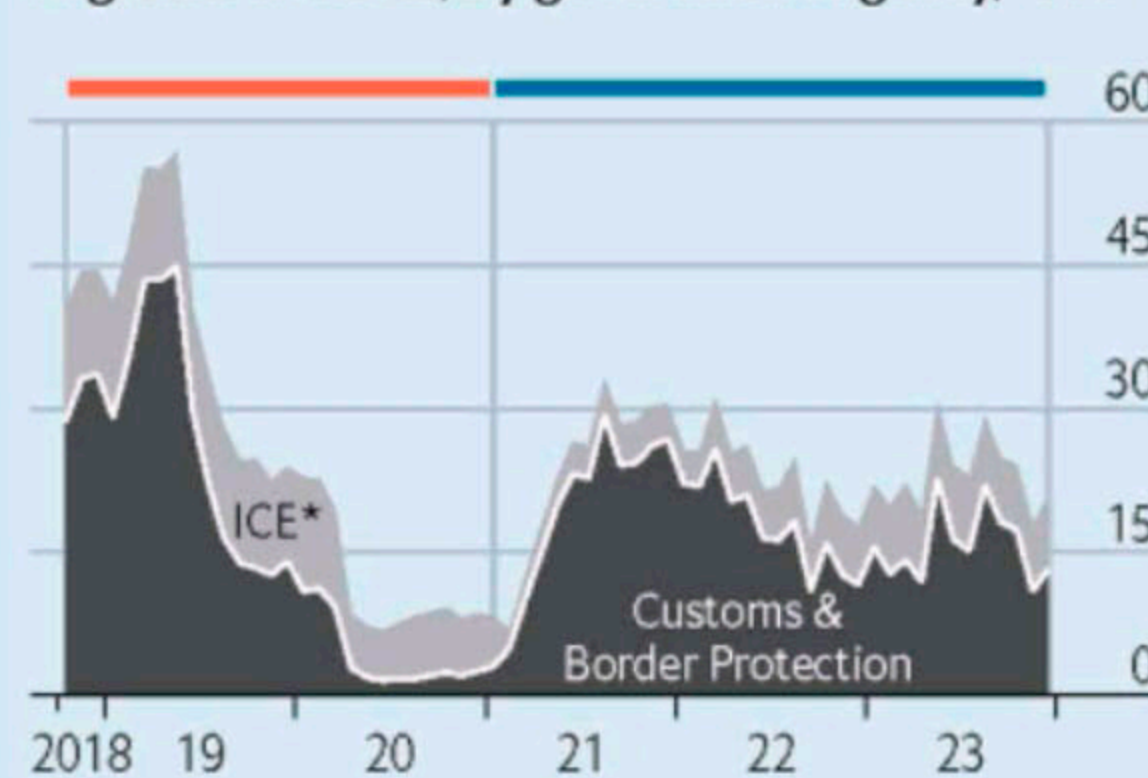
Eagle Pass and El Paso are staggering under the burden of caring for wounded migrants. Eddie Morales, a Democrat who represents a border district, wants to pause asylum-processing to discourage arrivals until the frenzy calms. Texas officials defend their barriers as necessary deterrents to prevent crossings of a "dangerous river where many have lost their lives", Christopher Olivarez, a spokesperson for the Texas Department of Public Safety, wrote on X (formerly known as Twitter) recently.

These days the banks of the Rio Grande are strewn with enough clothing and shoes to fill a shopping mall. Haribo wrappers and stray baby-socks are a reminder of the children coming through. On warmer days Mexicans wade into the water to collect items that they can sell back home, calling out to American soldiers to throw more garments over the razor-wire. The detritus is evidence of the ongoing toll of failed public policies. And politicians at every level of American government bear some responsibility. ■

Changing attitudes

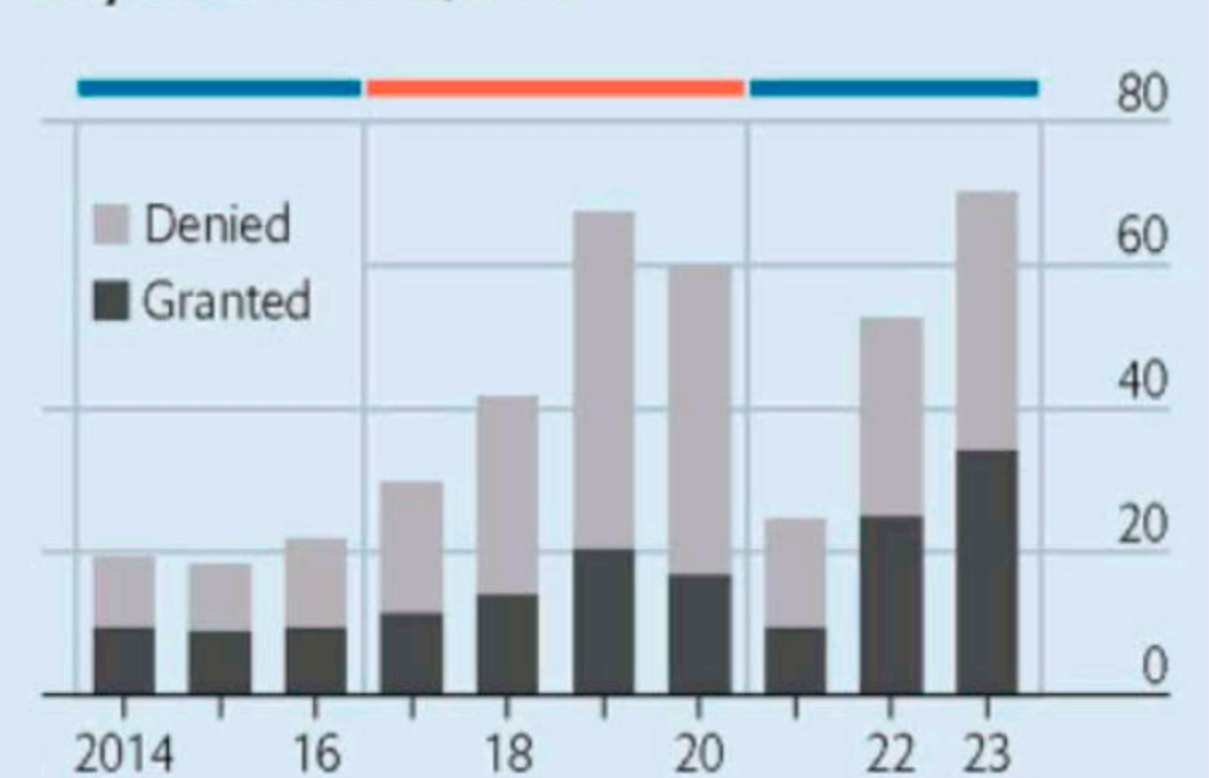
United States

Migrants arrested, by government agency, '000

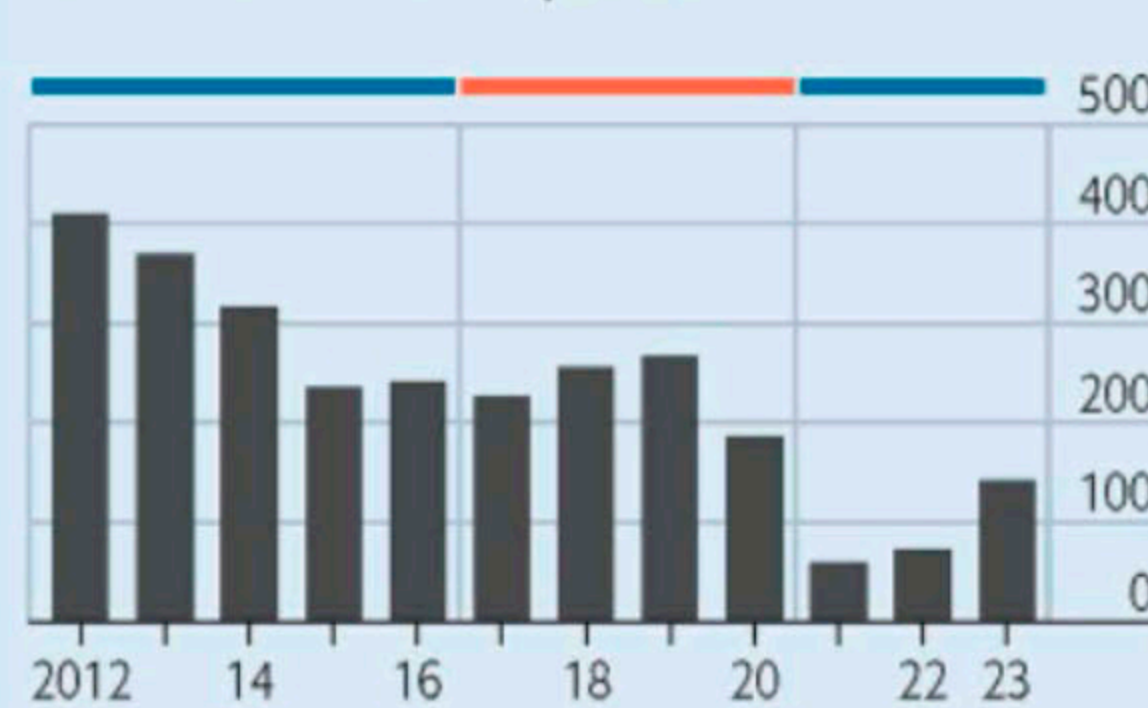


Presidency Republican Democratic

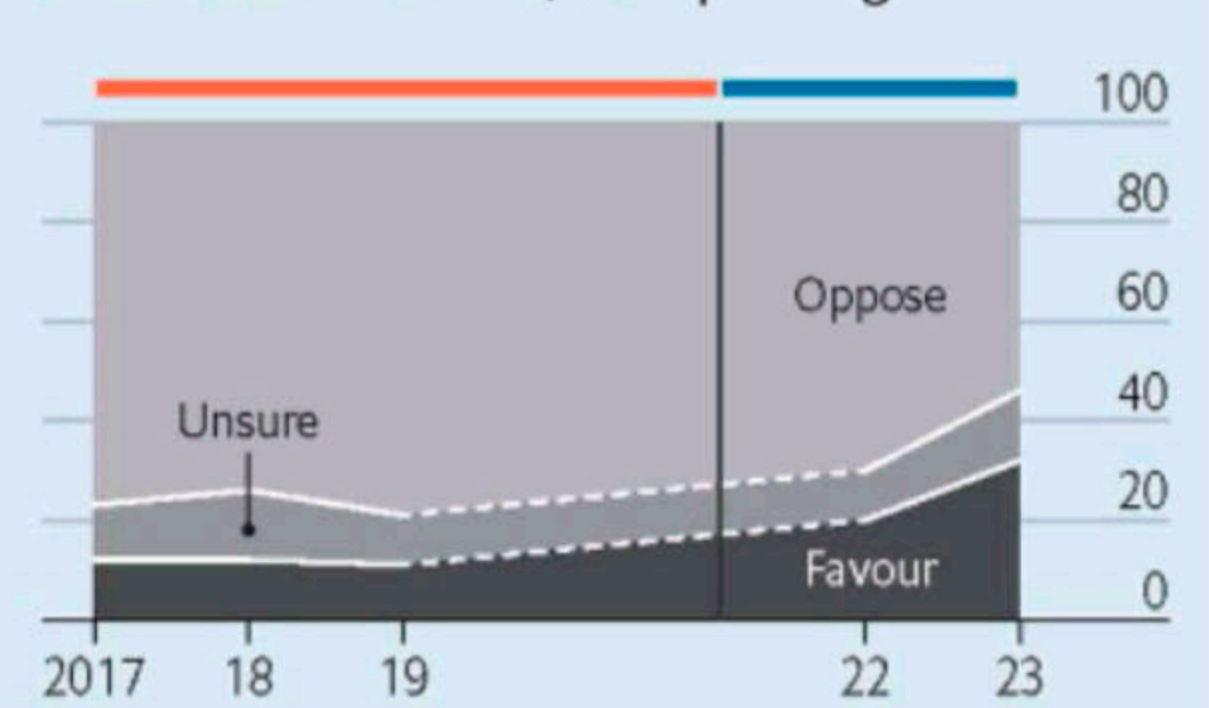
Asylum decisions, '000



Deportations by Immigration and Customs Enforcement, '000†



Democrats' views on building a wall along the US-Mexico border, % responding‡



*Immigration and Customs Enforcement †Fiscal years ending September 30th ‡No data for 2020-21 Sources: TRAC Immigration, Syracuse University; Immigration and Customs Enforcement; YouGov/The Economist

The border in charts

Barack Obama was dubbed the "deporter-in-chief". Indeed he arrested and removed more undocumented immigrants than Donald Trump. Joe Biden is detaining and deporting fewer than either of his predecessors, despite the fact that border-crossings are so high. Support for immigration ebbs and flows. In response to Mr Trump's xenophobia, Americans started to feel warmer about immigration. During his last year in office just 28% told Gallup that they wanted less of it. But American public opinion reacts against whoever is in the White House: in June 41% said immigration should decrease. And backing for a border wall is growing even among Democrats.

The Republican primary contest

MAGA mania

NASHUA, NEW HAMPSHIRE

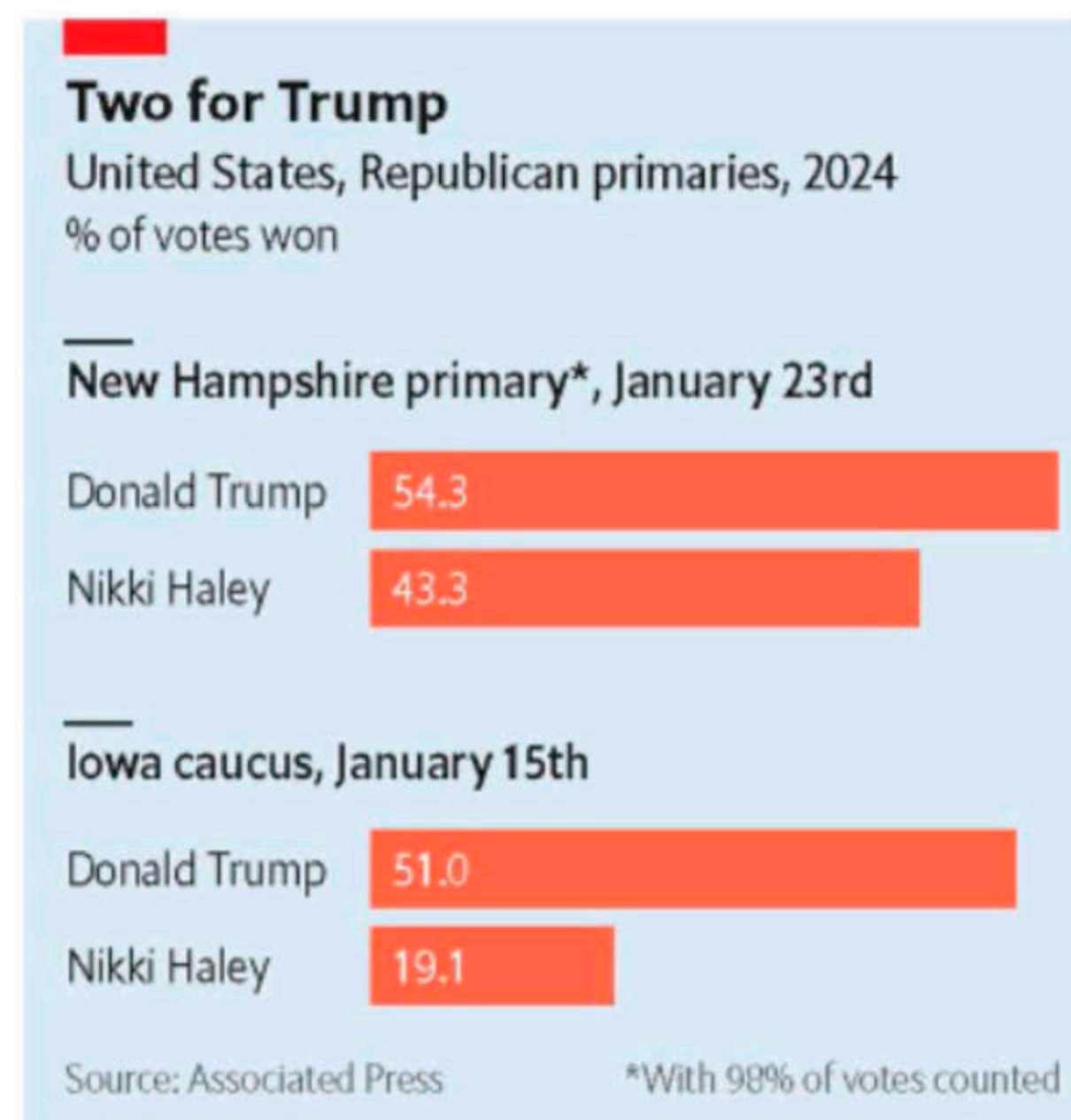
After winning New Hampshire, Donald Trump is cruising to the nomination

MOST THINGS become banal after a near-decade of cultural dominance. But not Donald Trump. Republican voters are still enthralled by him, undaunted by all the turmoil and scandal of his time in the White House and his post-presidential life. His rallies retain their feeling of secular religious revival. His fresh-faced rivals, by contrast, have looked unoriginal and uninspiring. By the time Republicans had voted in just one state, Iowa, only one serious challenger remained. All the rest had dropped out; most had endorsed him. The last woman standing, Nikki Haley, a former governor of South Carolina who served as America's ambassador to the United Nations while Mr Trump was in office, mounted her resistance in New Hampshire, the second state to cast ballots. Like all the rest, she was overrun.

Mr Trump got 54.3% of the vote to Ms Haley's 43.3%, and quickly pointed out that no one had ever won both Iowa and New Hampshire and failed to secure the nomination. An unbowed Ms Haley vowed to fight on. "You've all heard the chatter among the political class, they're falling all over themselves saying this race is over," she said at a speech in Concord, New Hampshire, conceding victory to Mr Trump. "This race is far from over. There are dozens of states left to go. And the next one is my sweet state of South Carolina." Mr Trump was not pleased. "Who the hell was the impostor that went up on the stage before and, like, claimed a victory?" he sniped at his victory speech.

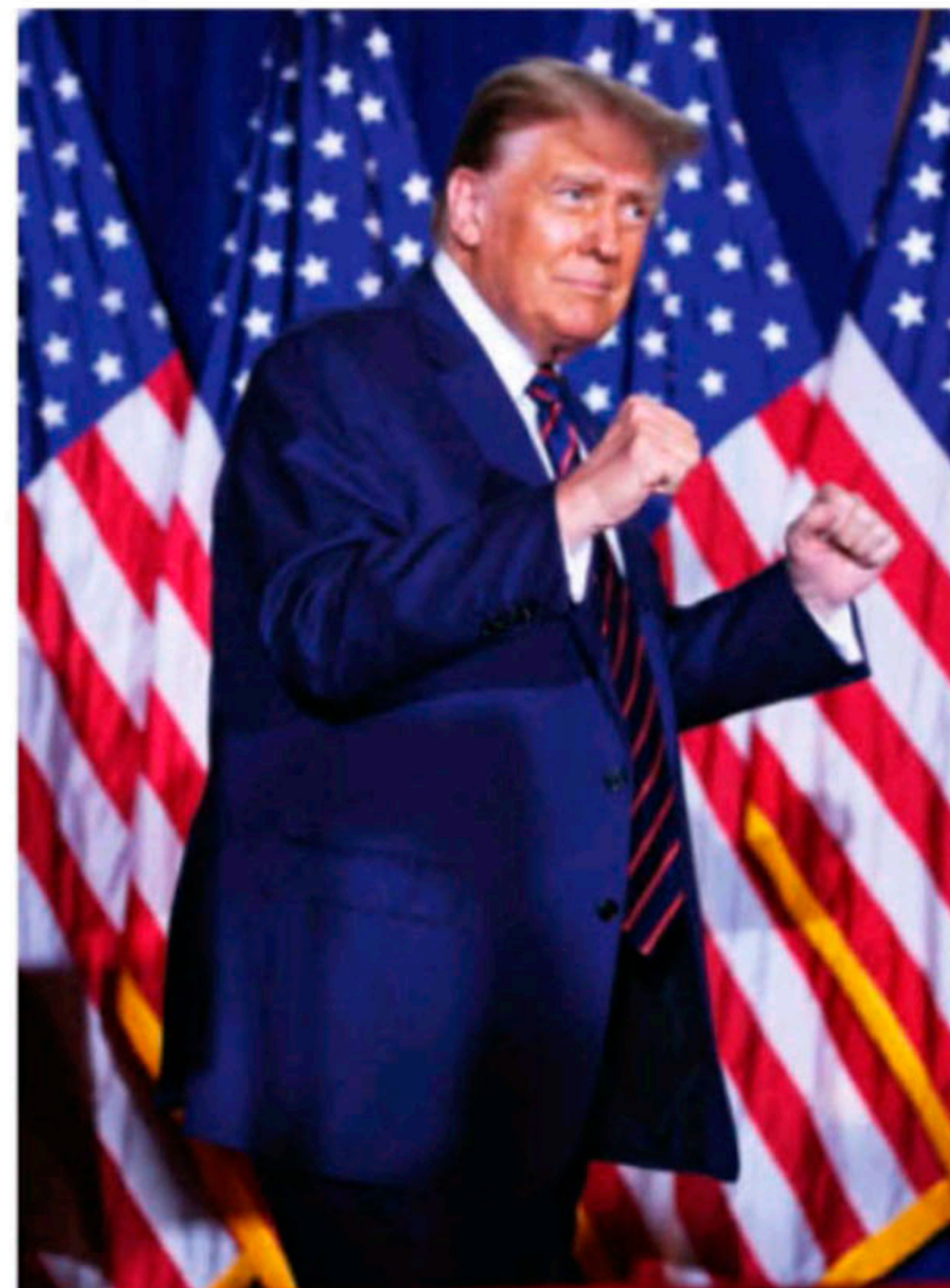
The problem for Ms Haley is that, if she cannot win in New Hampshire, she cannot expect to win anywhere. Entrance polls conducted during the Iowa caucuses, held on January 15th, show Ms Haley overperforming among Republicans with college degrees, who labelled themselves as political moderates, who didn't identify as evangelical Christians and especially well among those who believe that President Joe Biden legitimately won the election of 2020. Those kinds of voters are over-represented in New Hampshire.

It was not just a demographic dividend that Ms Haley had hoped to cash in. She won the endorsement of Chris Sununu, New Hampshire's popular Republican governor, who barnstormed the state with her. She and her allies heavily outspent Mr Trump, splashing out \$31m versus his \$15.7m. She spent months traipsing around



the state's breweries and diners, while Mr Trump eschewed such drudgery. Anti-Trump Republicans had said the only way to beat the former president was to consolidate support into a single opponent—which has now happened. And even after all that she lost by 11 points.

Subsequent states in the primary calendar are more hostile terrain for Ms Haley. Republicans in her home state of South Carolina, which holds its primary on February 24th, look much more like those in Iowa—where Ms Haley came 32 points behind Mr Trump—than New Hampshire. An average of recent polls there shows Ms Haley trailing by a crushing 37 points. Mr



Reprise

Trump has secured the endorsements of the top South Carolina Republicans with whom Ms Haley once worked as governor.

In trying to explain away this uncomfortable reality at an election-eve rally in Salem, New Hampshire, Ms Haley branded herself as somehow more of a populist insurgent than Mr Trump. One candidate "has got the entire political elite all around him. It's all of Congress. It's all these legislative people. He's got the media all around him. But you know what? I've never wanted them." Only the most credulous supporters in the crowd would believe Ms Haley's line that her former colleagues were abandoning her because she had been so zealous in pursuing ethics reforms while governor. One especially bored reporter (not this one) began timing their Rubik's-cube-solving abilities midway through the speech.

In a memo released on the day of the New Hampshire vote, Ms Haley's campaign argued that she had a viable path to the nomination, urging a "deep breath" until "Super Tuesday" on March 5th, when many states hold their primaries. Her team's argument is that many of the states that will vote in the next six weeks are "open primaries", in which independent voters who are not registered Republicans can take part. This factor will indeed help Ms Haley. But in order to be the Republican presidential nominee, one unfortunately needs to be able to command a majority of the party.

The bigger battle ahead

The meek and muddled anti-Trump resistance looks close to its last gasp. Only late in her campaign did Ms Haley take to attacking Mr Trump by name. Her criticisms of the man are usually meticulously crafted to avoid moral judgment. "Rightly or wrongly, chaos follows him," is a favourite line of hers, as if the chaos had been a curse of some vindictive god rather than intrinsic to the man himself.

Ms Haley's demise would commit the Republican Party to Trumpism, with its blend of isolationism, illiberalism and protectionism, and away from the internationalism of which Ms Haley sometimes seems the sole influential ambassador on the Republican side. In America, voters get what they want. And it seems that nothing—not a dozen vanquished Republican candidates, not the one remaining woman, not the 91 criminal indictments facing Mr Trump—can get in their way.

Mr Trump can't wait to swat away Ms Haley so that he can focus on the coming contest with Mr Biden. Mr Biden won 56% of the votes in the Democratic primary in New Hampshire on Tuesday, even though (because he disputed New Hampshire's cherished right to hold the first primary) his name was not on the ballot. He, too, is cruising to the nomination. Brace yourself for a Biden-Trump rematch. ■



Chinese land purchases

Here be dragons

CHICAGO

Why politicians are obsessed with mythical Chinese land grabs

THERE WAS a time when Kim Reynolds, the governor of Iowa, had no problem with Chinese investment. In 2012, when she was the state's lieutenant governor, she met Xi Jinping, then China's vice-premier, on a visit to Beijing. In 2017, as governor, she visited again, this time posing with Vice-Premier Wang Yang. No longer. In her Condition of the State address to Iowa's legislature on January 9th, Ms Reynolds claimed that "China continues to grow more aggressive, and buying American land has been one of the many ways they have waged this new battle." Later this year she intends to introduce a new law that would toughen land-ownership reporting rules in Iowa. "American farmland should stay in American hands," she says.

Ms Reynolds joins a chorus of state and federal politicians who worry about Chinese land grabs. On January 2nd Missouri's governor, Mike Parson, issued an executive order banning "foreign adversaries" from buying land within ten miles of a military facility. Last October Arkansas ordered a Chinese-owned agricultural firm to sell 160 acres of land. Laws to restrict Chinese ownership of land have spread to Florida and Texas. In recent years the number of states with restrictions on foreign ownership has grown from 14 to 24, according to Micah Brown, of the National Agricultural Law Centre in Arkansas. Federal politicians are getting in on the act, too. Jon Tester, the Democratic senator from Montana, is

among those to have proposed tighter federal laws on foreign land ownership.

Yet there is little reason to think that Chinese firms are really buying much American land—whether near military bases or otherwise. If official data are to be believed, Chinese landholdings are both tiny and shrinking. Chinese investment into America has collapsed in the past few years. Is it all a storm about nothing?

Since 1978 foreign owners of agricultural land have been required to declare it to the US Department of Agriculture (USDA). The agency's data show that, at the end of 2022, around 3% of privately held land nationwide was declared foreign-owned. The biggest holders were firms and individuals from Canada, followed by the Netherlands and Britain. Declared Chinese entities held less than 1% of all foreign-owned land, or 0.03% of the total. People in Luxembourg own more. Foreign land ownership has grown by 40% since 2016, but China is not evidently the driver. From 2021 to 2022 the total amount of land owned in full or in part by Chinese firms shrank from 384,000 acres to 347,000. In Iowa, Chinese holdings totalled just 281 acres—an area smaller than the state fairgrounds in Des Moines.

So why the panic? Mr Brown says that the surge of lawmaking is driven by a change in the political climate, caused by two relatively high-profile incidents of Chinese land purchases near military bases. One was for a grain-milling plant in

North Dakota, a few miles away from Grand Forks Air Force Base. The other was land purchased to build a wind farm in southern Texas, near Laughlin Air Force base. Those, combined with the shooting down of a Chinese spy balloon last year, meant that: "Nobody wanted to stand up against restricting [Chinese] purchases of land," says Mr Brown. Politicians of various stripes have suggested that the Chinese either want to spy, or to control America's food supply, or both.

The patchiness of official data does not help. That 281 acres in Iowa is owned by Syngenta, an agricultural-science firm. The firm was purchased outright by ChemChina, a state-owned chemicals firm, in 2017. But until 2021 the land was listed as Swiss-owned in the USDA records—as were several other Syngenta sites. Late last year, tax records revealed that Chen Tianqiao, a Chinese billionaire with past links to the Communist Party, who lives in the San Francisco Bay Area, owns almost 200,000 acres of forestry land in Oregon, which was not declared as foreign-owned. (Mr Chen's firm now says that, following media questions, it has submitted the relevant USDA filings.) A review by the Government Accountability Office published on January 18th found that the Treasury and Defence departments need timelier and more accurate data to judge security risks.

Still, it is unlikely that data gaps hide a surge of secret Chinese purchases. Overall Chinese investment into America peaked in 2016, and has fallen off a cliff since the pandemic, says Derek Scissors, who maintains a database of Chinese foreign investment for the American Enterprise Institute, a think-tank. What investment is continuing is generally confined to the supply chain for electric vehicles. The flood of Chinese land purchases that began a decade or so ago was more to do with wealthy Chinese people trying to get their money out of China than about spying, according to Mr Scissors. The new laws are a bit like ones "preventing snow emergencies in Florida", he says. That is to say, pointless.

From California to the New York island

Some politicians are frustrated with the endless focus on land. Raja Krishnamoorthi, a Democratic congressman who is the ranking member of the House select committee on China, admits that enforcement of filing requirements for USDA's database is "pretty lax". But some laws intended to stop any Chinese-origin individuals buying any land at all, such as one passed in Florida last year that restricted even residential-property purchases, drift into "outright racism and xenophobia", he complains. He wishes politicians would focus more on improving American competitiveness in general. Sadly that is harder than blustering about farmland. ■

Breaking news

Pocket Cronkites

NEW YORK

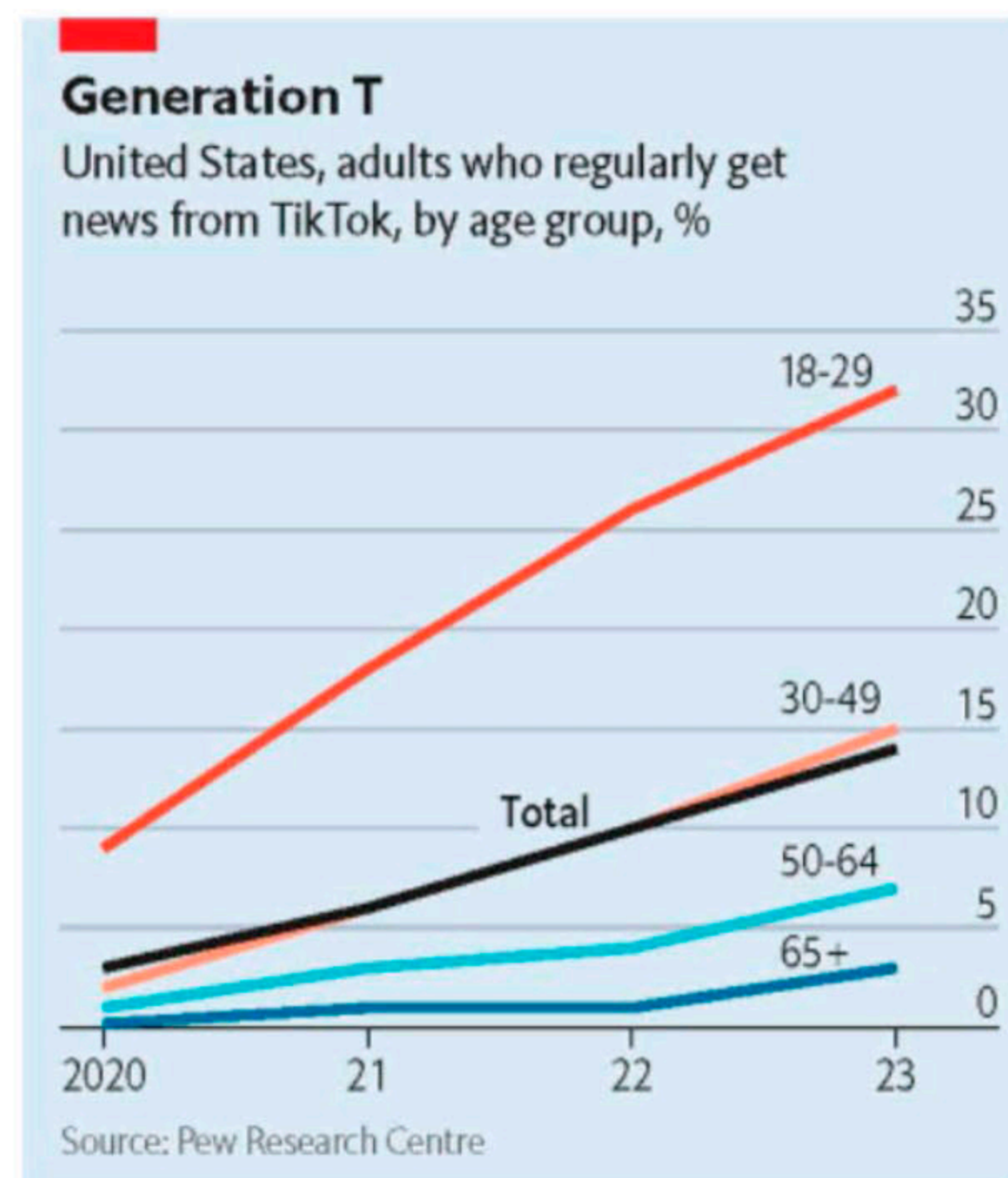
The rise of the TikTok news anchor

BREAKING NEWS: it looks like there is some weird stuff going on in America." Welcome to the news on TikTok. Before we dwell on how and when it is appropriate to start a sentence with "breaking news", let's cross now to our correspondent, who is a cartoon fish, with a story about a "Potential Diabetes Cure!" (3.4m views). Next, "News Daddy" (a boy called Dylan) will read out details of a hotel explosion in Texas to some of his 10.3m followers, thankfully from the safety of his home studio in Britain; "Nah 2024 needs to chill...i need some sleep," the description reads. In our final segment, a college student is primed to run through the pages of the *New York Times* (the Iowa caucus is "just tea, it's gossip").

Each of these videos comes from a cohort of amateur anchors who take the business of delivering the news extremely seriously. They are the presenters, researchers and producers rolled into one. Their uploads on everything from product recalls to the war in Gaza caricature traditional news reports, aggregate them—and compete with them. News Daddy's follower count exceeds that of the flagship TikTok accounts of the *New York Times*, the *Washington Post* and the *Daily Mail* combined. The handful of influencers your corre-



Getting hooked...



spondent (who is not a cartoon fish) met have over half a billion likes on all of their videos between them.

"I'm more interested in watching someone who's fun to watch than a stuffy monotone news reporter," says Alex Kellerman, who dresses up as a bedraggled anchor every day to film a roundup of the "f*ckin' news" ("I give you news...but always do your own research and fact-checking!"). He says the format found overnight success after he "accidentally" uploaded a test video in September about lethal flooding in Libya, using details from mainstream outlets covering the disaster on other parts of the internet. Mr Kellerman doesn't describe himself as a journalist, but he claims to have been "one of the first people to report [the story] on TikTok".

And that's what matters, because in 2020, 9% of Americans aged between 18 and 29 told a Pew poll that they regularly got their news on the platform; by 2023 that number had risen to 32% (see chart). Capturing this generation's attention is a delicate balance: "It has to be short, it has to be fast," says Jessica Burbank, a creator and freelance journalist who has grown a loyal Gen Z audience through "translating" the biggest stories of the week to them by "taking away all of the nonsense".

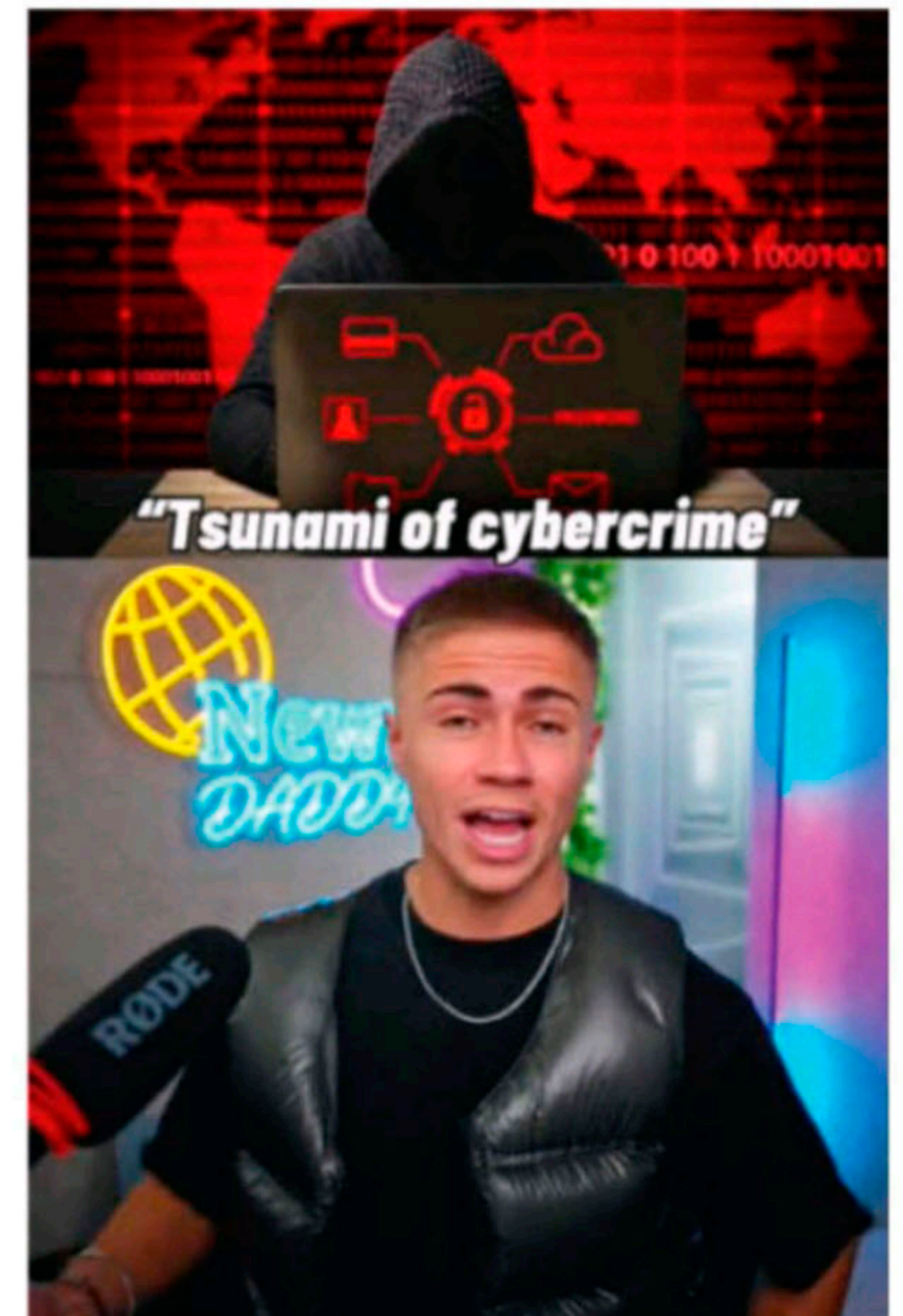
Large follower counts are giving creators the chance to build upon existing stories. "People almost have this false sense of respect for you or something. It's odd," notes Julie Urquhart, who says the popularity of her crime and celebrity-news account has helped her land interviews with

people linked to the stories she makes her videos about. "I think because you're on social media, not, you know, like a news person who's going to twist things maybe."

Free from the constraints of editorial processes and executive boards, news creators believe their appeal lies in a quality that mainstream outlets lack: authenticity. "Most traditional news is devoid of emotion," reckons Josh Helfgott, who has earned the attention of millions of followers making clips about LGBT news stories. "I believe that what catches my audience's attention is when they see my passion behind the story." Publishers around the world are all too aware of this shift; over half of those recently surveyed by the Reuters Institute for the Study of Journalism said that they plan to devote more effort into putting stories on TikTok this year.

Before everyone starts workshopping ways to deliver the news in a chill and relatable lilt, take a moment for some optimism. As Gallup reports the lowest amount of trust in American mass media since 2016, it seems that creators have merely figured out how to tune people back in to news stories that outlets have been reporting on the whole time, just in ways that feel more relevant and real to young internet users. That can be a good thing. So long as you choose not to think too much about comments that read, "I get my news from him, and the fish".

With a busy election year ahead, TikTok newscasters will have much to work with. Expect to see many more of them co-opting the headlines to increase their followings, be the first to post about it, entertain people, ask why no one is talking about a thing, go viral—and spread the news. ■



...on no-nonsense news

Lexington | Partied out

Why America's political parties are bad at picking candidates



EVERY FOUR years the American presidential primaries roll around to remind Americans how weak, clumsy and negative their major political parties have become. The news media's red-and-blue maps, the repetitive partisan standoffs in Congress and the drama created by the polarisation of the parties create the impression that they hold tremendous sway, that Americans are devoted to either the Democrats or Republicans and obsessed with their prospects. The reality is more muddled and dispiriting.

The largest, and growing, share of Americans choose not to identify with either party. According to a Gallup poll released this month, 43% call themselves independent, tying a record set in 2014. In Gallup's poll, the proportion of eligible voters identifying as Democrat has fallen to a record low, 27%, the same percentage that call themselves Republican. Another Gallup poll, also this month, found that only 28% of adults, also a new low, were satisfied with "the way democracy is working in this country".

Yet the parties are not reacting by making themselves more appealing. Something is interfering with the signals the electorate sends to the organisations that supply candidates and ideas, never more so than this cycle, when most Americans have consistently turned their noses up at the products most likely to be on offer, President Joe Biden and former President Donald Trump.

"The first party to retire its 80-year-old candidate is going to be the party that wins this election," declared Nikki Haley, a former governor of South Carolina, as she conceded the New Hampshire primary to Mr Trump on January 23rd. She may be right in theory. But she is wrong in practice that there is some coherent entity called a "party" capable of such a rational calculation. As Mr Trump demonstrated in 2016, and Barack Obama did before him, political parties do not plot or strategise anymore to anoint a candidate, at least not with much effect; they have instead become vehicles idling by the curbs of American life until the primaries approach, waiting for successful candidates to commandeer them.

For most of American history, party leaders picked presidential nominees. That system collapsed after the fractious Democratic convention of 1968, in which party elders ignored the candidate of the anti-Vietnam-war left and instead bestowed the nomination on Vice-President Hubert Humphrey, who had not competed in a

single primary. Reformers successfully argued that nominating delegates should be picked by voters in primaries instead, and Republicans eventually followed the Democrats' lead. This approach opened up the system to candidates, such as Jimmy Carter in 1976 and Ronald Reagan in 1980, who might never have been chosen in a smoke-filled room.

But in taking power from the party establishment, reformers unintentionally handed it to activists, who tend to be more extreme than other partisans, let alone the rest of the country. This is particularly true of the Republican Party. Now, relatively small numbers of impassioned voters can end up choosing nominees.

After Mr Trump won 51% of the vote in the Iowa caucuses this month, he was credited in the news media with a "landslide" win and a "blowout victory". But it was a frigid night, and fewer than one in six registered Republicans turned out. They were probably among the most motivated of voters, quite unlike most Americans. Mr Trump won about 56,000 of these Republicans, or about 7% of the potential pool of 752,000 Iowa Republicans.

In New Hampshire on January 23rd Mr Trump won most Republicans who turned out, while Ms Haley won most "undeclared", or independent voters who did so. Political analysts rightly saw this as a weakness of Ms Haley, because in many states independent voters cannot cast ballots in partisan primaries. And it might seem reasonable that the Republicans would want to nominate whoever wins the most Republicans. The flaw in this approach is that, definitionally, that candidate has demonstrated only that they can win if the electorate is Republican. A party capable of organising itself to win a general election with a big majority would place more value on reaching beyond the base.

A party's nominee may not win the majority even of its primary voters, let alone of its eligible primary voters. The primaries tend to exaggerate the popularity of the eventual nominee because many states award all their delegates to the winner, rather than dividing them proportionately among the candidates. In 2016 Mr Trump won fewer than 45% of primary voters in all—that is, he won the Trumpy minority of the activist minority that turned out.

This is a fragile basis on which to stake a claim to nationwide electability. Nominees overcome that handicap by relying on what political scientists call "negative partisanship". Though the plurality of Americans call themselves independent, they tend to lean to one party or another. Encouraging these voters, as well as less politically active party members, to see the opposing party as demonic is a reliable means of getting them to vote your way.

Third parties are hard

All this helps explain the longing of certain idealists and opportunists for a third party. That yen is particularly sharp in this cycle. History suggests it could be fulfilled quite suddenly, says Bernard Tamas, a political scientist at Valdosta State University and the author of "The Demise and Rebirth of American Third Parties". "It's often at times like this when the two major parties are polarised, because it opens a door for a third party to attack," he says. "You don't know if it's going to happen until it happens."

But the group No Labels, which is considering a third-party bid, appears to be off to a poor start. Successful third parties have tended to run candidates not just for president but down the ballot, too, and to have specific, galvanising issues. Had Donald Trump been capable of organising such an effort, he might have been a powerful third-party candidate. But why bother, when an existing party was just sitting there waiting to be commandeered? ■



Migrants, fentanyl and trade

The northern neighbour

LOS ANGELES AND MEXICO CITY

The prospect of a second Trump presidency looms over Mexico's elections

EVERY 12 YEARS the electoral cycles of Mexico (six-year presidential terms) and the United States (four-year terms) align. The last time, in 2012, few took notice; neither Barack Obama nor his running-mate Joe Biden mentioned Mexico during their televised debates.

Things will be different this year. Donald Trump, the likely Republican nominee, is a relentless Mexico-basher. The Mexican frontrunner, Claudia Sheinbaum of the ruling Morena party, is a protégée of the populist incumbent, Andrés Manuel López Obrador. Mexico figures prominently in its northern neighbour's most divisive debates. Border crossings are at record levels, placing Mr Biden under pressure (see United States section). The volume of fentanyl, a deadly synthetic opioid, seized at the United States border is rising fast. On a less contentious matter, the United States is looking to Mexico to host supply chains which used to pass through China.

Political observers expect election-year rhetoric to be hotter than usual. There is little love lost between Mexicans and the Republicans. Rather than a mere "political piñata", Mexico is sometimes seen as "the enemy and a real threat to US national security", says Rafael Fernández de Castro of the University of California at San Diego's Centre for US-Mexican studies. Research by YouGov, a pollster, bears this out. Almost half of Republicans now see Mexico as an enemy, rather than an ally.

Mr Biden's presidency has improved Mexican views of the United States. Almost two-thirds of Mexicans now have a favourable opinion of their neighbour, says the Pew Research Centre, a think-tank. At the

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nadir of Mr Trump's presidency, just 30% of Mexicans felt that way.

The debate in the United States on immigration policy may revive those tensions. Mr Trump has promised the "largest domestic deportation operation in American history". That would upend the lives of many members of the Mexican diaspora by returning them to a country in which they have not set foot in years.

Mexican officials fret that Mr Trump as president would reinstate the "Remain in Mexico" policy, which requires asylum-seekers hoping to enter the United States to wait in Mexico. He may also push Mexico to accept status as a safe country to which asylum-seekers may be returned, something it has resisted. Mexico would then be more heavily burdened by in-limbo migrants than it is today.

The drugs trade breeds its own cross-border controversy. At least 80,000 people in the United States died of an opioid overdose in the 12 months to August 2023. Most of them had ingested fentanyl, much of it smuggled into the country across its southern border. When Mr Trump first mulled firing missiles into Mexico to disrupt the drugs trade in 2020, it seemed an isolated madcap notion. Now the idea of using force is widespread. Candidates for the Republican nomination, as well as members of Congress, have advocated

▶ sending special-operations troops into Mexico to go after the drug gangs.

Bilateral trade has not yet become a campaign issue. Louise Blais, a Canadian former ambassador, says she expects the United States-Mexico-Canada Agreement (USMCA) which replaced NAFTA to be extended when it comes up for discussion in 2026. "It's a no-brainer," she says. The United States needs Mexico as it seeks regional investment to bring supply chains closer. Mexico recently overtook China to become the United States' top source of imports.

Ms Blais's confidence is well placed, if Mr Biden wins. But the growth of imports from Mexico has exacerbated the kind of trade imbalance that Mr Trump abhors. The latest government data suggest that the United States imported goods from Mexico worth about \$150bn more than those it exported to the country in 2023.

Just because Mr Trump signed the USMCA doesn't mean he won't rip it up or change it, warns one Mexican official. As president Mr Trump did not hesitate to use trade threats to press Mexico to do his bidding on migration. He talks of a 10% import tariff on all goods from all countries. That would breach USMCA or require it to be scrapped. Mr Trump's victory would herald a return to a transactional relationship, says Andrew Rudman of the Wilson Centre, a think-tank in Washington.

The presidential race in the United States casts a long shadow, but the outcome of the Mexican election matters too. The winner will take office on October 1st, a few months before her American counterpart. It is almost certain to be Ms Sheinbaum. Her closest rival, Xóchitl Gálvez, a former senator who leads a coalition of established parties, is behind in the polls.

Both talk sensibly about bringing more supply chains to Mexico. Mr López Obrador has failed to make the most of the opportunity, in part because his state-first, fossil-fuel-powered energy policy has inhibited investment. Both candidates say they will pursue a transition to clean power. Mexico's co-operation on migration is likely to

continue under either leader, though the political costs are rising in step with the number of migrants. Neither has yet said much about how they might go about curbing fentanyl production.

Still, it is the prospect of Mr Trump's return that animates Arturo Sarukhán, a former Mexican ambassador to Washington.

Corruption in Colombia

The cost of scandal

BOGOTÁ

A criminal case against his son is undermining President Gustavo Petro

BACKPACKS FULL of cash, Caribbean condominiums and 1.1bn unexplained pesos (\$281,000): these sound like details in a John le Carré novel, not the stuff of court papers. And yet all three appear in the evidence in a criminal case against Nicolás Petro, son of Gustavo Petro, Colombia's first avowedly left-wing president. On January 11th Colombian prosecutors charged Mr Petro junior with illicit enrichment and money laundering. The court rejected his lawyer's request to scrap the proceedings, and set a trial date for the end of April.

His son's predicament is part of a constellation of scandals encumbering Mr Petro who, nearly 18 months into office, is facing an uphill battle to win support for his ambitious programme of reforms. As for Colombians, optimism about their leader's "government of hope" is fading.

Sins of the son

The case against his son goes like this: according to prosecutors, Mr Petro junior, a former regional deputy, took bribes from notorious figures—including a former drug trafficker and the son of a businessman alleged to have links to paramilitary groups—in return for political favours. The crux of the issue is whether the dirty money helped propel his father to power in 2022. Mr Petro junior admitted he had accepted the funds, but says he kept them for himself. The elder Mr Petro has repeatedly denied any knowledge, which his son corroborates. The trial is likely to drag on.

All this has sparked a probe into the government's campaign finances, entangling Mr Petro's brother and Ricardo Roa, his former campaign manager. Both deny any impropriety. Meanwhile Laura Sarabia, the president's former chief of staff, was hauled before prosecutors last week in an offbeat case befitting a *telenovela*. It involves a lie detector, the alleged wiretapping of a nanny, and another bag of cash. Ms Sarabia also maintains her innocence. To top things off, Congress launched im-

peachment proceedings against Mr Petro in December, to which his son was recently called to testify. The Supreme Court also wants to hear from him, on yet another case about illicit enrichment.

The scandals cast a "looming shadow" over the rest of Mr Petro's term, says Sergio Guzmán of Colombia Risk Analysis, a consultancy in Bogotá, the capital. Mr Petro's approval rating hit 33% in December, according to the consultancy's aggregated polling data. He now lacks the political clout needed to push through reforms. These include expanding the state's role in health care, pensions and education.

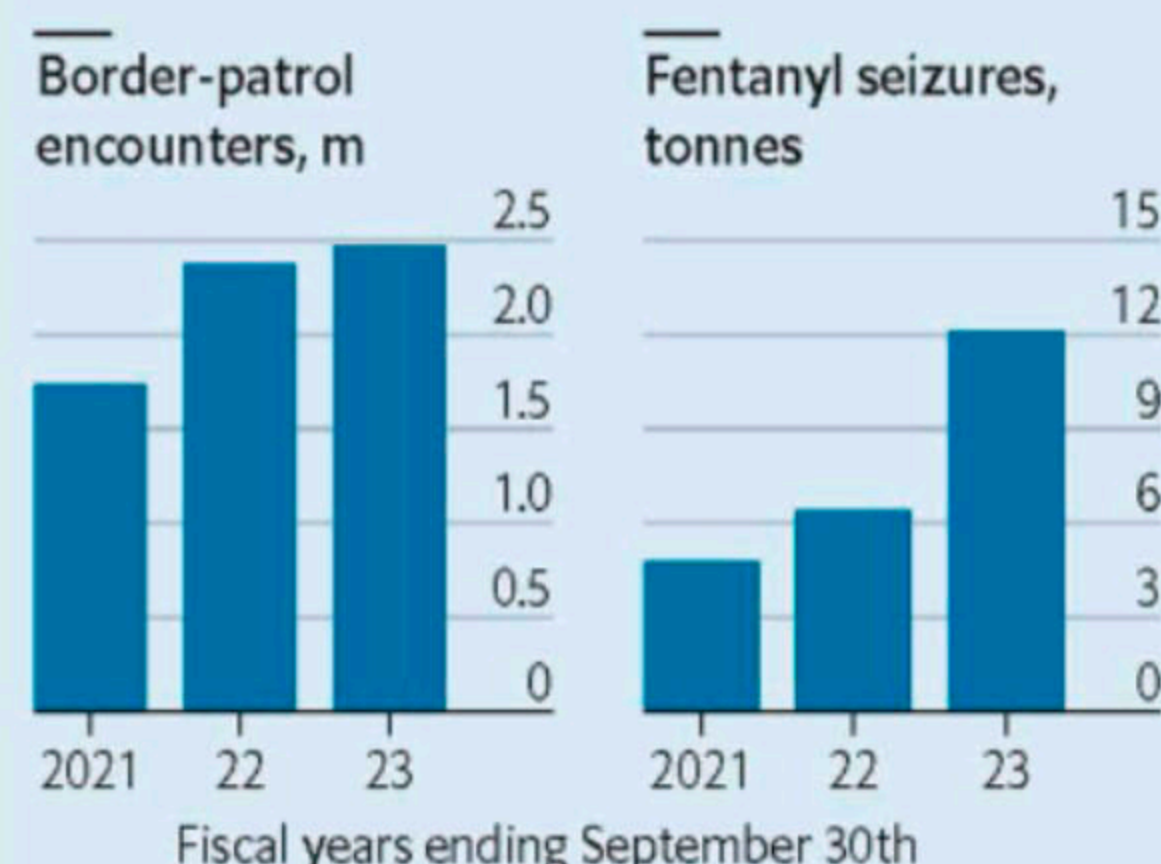
What happens next depends on what evidence the prosecution presents at his son's trial. Much also turns on who replaces the outgoing attorney-general, Francisco Barbosa, whose term ends next month. Mr Petro has presented a shortlist of three well-respected women to the Supreme Court. The appointee will oversee the case against Mr Petro junior, as well as others. Legal scrutiny may have compelled the president to offer up a set of nominees pure enough to put him beyond any suspicion of stacking the court in his favour.

Mr Petro's troubles are not a patch on those of past presidents, however. Prosecutors are still going after former president Álvaro Uribe, for alleged links to paramilitary groups and witness tampering. He maintains his innocence. As long as most of the world continues to criminalise cocaine, the politics of producer countries such as Colombia will remain dirty.

Still, the saga dents the credibility of a leader who in the past has vociferously criticised the ties between politicians and organised crime. Colombians elected him to put an end to the grubby dealings of the country's political elite. A whiff of narcocash in his campaign—proven or not—appears at odds with that goal, and weakens the president. Unless Mr Petro turns things around, his "Pacto Histórico" coalition will become just that: consigned to history. ■

Problematic perimeter

United States, south-west land border



Source: US Customs and Border Protection

Jailing Ecuador's gangsters

Fighting metastasis

Ecuador is struggling to free itself from the grasp of drug lords

NOT SINCE Pablo Escobar's tyrannical reign from Medellín has a South American country found itself so tightly in the grip of drug gangs. Ecuador is in a state of emergency. Its murder rate is the highest in Latin America. The army is on the streets after gangsters rioted in early January, setting off car-bombs and murdering prison guards. Over 2,500 people have been arrested in response. Laura Richardson, who commands the United States armed forces' activities in Latin America, arrived on January 22nd in Quito, the capital, as part of a delegation offering assistance.

Ecuador has been sliding into mayhem since 2019. Diana Salazar, the attorney-general, is attempting to halt that slide by uncovering links between drug gangs and the police, judges and politicians. The success of the operation she leads, Caso Metástasis, is part of what prompted the outburst of violence that captured the world's attention earlier this month. Ecuador's gangsters are worried. But that is making the work of bringing them to justice more dangerous. Most people interviewed about this by *The Economist* asked not to be named, for fear of retribution.

Ms Salazar's investigation began in 2022, after a drug financier, Leandro Norero, was convicted of money laundering in May that year. Dozens of gold bars and over \$6m in cash were found at his house. He was killed five months later in a prison battle between rival gangs. Prosecutors seized his 16 mobile phones, and began trawling through the vast trove of evidence.

The messages show police officers being offered cash and "women of good company" in exchange for evidence tampering, and laundered money being used to buy favourable rulings from judges. They also suggest that Mr Norero and his inner circle paid a judge \$250,000 to set free Jorge Glas, a former vice-president who was in prison for corruption. They hoped this "little favour" would be repaid if Mr Glas became president (he is currently thought to be staying in the Mexican embassy in Quito). The chats also show that Mr Norero was watching Fernando Villavicencio, the anti-corruption journalist who was assassinated while running for president last August. Mr Norero had asked his lawyer to find Mr Villavicencio's address so that he could "send the *muchachos* [the lads]".

This information led to a spectacular operation on December 14th, when offi-

cial carried out 75 raids and arrested 31 people. The detainees included Wilman Terán, president of the judiciary council, the body that selects, promotes and punishes judges, and Pablo Ramírez, a former director of the prisons agency.

Ms Salazar warned that gang violence would escalate in response to the operation. She was correct. On January 17th César Suárez, a prosecutor who was investigating the family of drug lord Adolfo Macías, was assassinated. He was at least the eighth prosecutor to be murdered since 2022. Many have taken to social media to demand more protection. Mr Suárez lacked a permanent police escort. Protection requests for judiciary staff soared from 55 in 2022 to 700 in 2023.

The government cannot afford all that extra security. One person told *The Economist* that prosecutors have had to pay for food and travel costs for their security escorts. Another said some prosecutors prefer to have no police protection in case an officer is turned against them. On January 12th Ecuador's president, Daniel Noboa, announced a plan to increase VAT from 12% to 15% to pay for security.

There are various ways Ms Salazar could protect her team. They may run trials by video conference, or conduct them abroad in Ecuadorean embassies. Another option is to conceal judges' identities, telling them apart in court only by using numbers

instead of names, or putting them behind screens to make them "faceless".

Security will be crucial if Caso Metástasis is to continue. Ms Salazar's team is just getting started. They have to go through the rest of Mr Norero's phones, as well as 624 new devices seized after the January riots. They have other problems, too. Ms Salazar issued 38 arrest warrants in December's operation, but seven people managed initially to evade capture. There seems to have been a leak. On December 13th Rafael Correa, Ecuador's president between 2007 and 2017 (and Mr Glas's former boss), wrote on X, formerly Twitter, of "a major national raid" hours before the operation began. When agents arrived at the judiciary council's building to arrest Mr Terán, they found that the lifts had been switched off.

The enemy within

This sabotage suggests long-standing links between gangs and the state. In the 2000s, when the drug trade was controlled by the FARC, a Colombian guerrilla group, high-ranking FARC members claimed to have financed Mr Correa's presidential campaign. Mr Correa, who has lived in Belgium since 2017, and in 2020 was sentenced to eight years in prison for corruption by an Ecuadorean court, denies this. He claims that Ms Salazar is "a puppet", and that Caso Metástasis is politically motivated. He points out that several drug bosses were inexplicably released from jail after he left office.

Whoever is responsible, the corruption clearly runs deep. Another former president, Guillermo Lasso, resigned in 2023 after his brother-in-law was investigated for alleged ties to the Albanian mafia, which ships cocaine to Europe via Ecuadorean ports. The biggest obstacle to Ms Salazar and her team may not be the criminals on the street, but the crooks in the state. ■



Crushing trouble on the inside



Asian development

Vietnam's golden moment

HANOI

Few countries are better able to profit from superpower rivalry—but political paralysis is hampering Vietnam

A BRIEF BUT revealing panic struck Vietnam this month. On January 12th the country's 79-year-old leader, Nguyen Phu Trong, failed to meet the visiting president of Indonesia. Mr Trong's name was removed from the official schedule without explanation. Rumours spread that he was dead. For three days noodle shops raged with speculation about who his successor might be. Would it be someone corrupt? Or more pro-China? The ruling Communist Party, a secretive bunch, revealed nothing.

Then, on January 15th, official media showed a frail Mr Trong attending a humdrum session of the legislature in Hanoi, as if to holler "I'm not dead!" like a Monty Python plague victim. The public may never know whether it was sickness or something else that made the party chief disappear from view. But it was unsurprising that his absence should scupper a meeting with a global leader. Everyone wants to be Vietnam's friend these days.

This is partly for geopolitical reasons. Vietnam, a country of 100m, has posi-

tioned itself halfway between China and America, prompting both superpowers to woo it. In 2023 it was the only country that received both Joe Biden and Xi Jinping on state visits. In September it upgraded its relations with America to a "comprehensive strategic partnership", putting it on the same level as Russia and China.

Although Vietnam's ruling party has much in common with China's, ordinary Vietnamese are deeply suspicious of their giant, bullying neighbour. China unlawfully claims parts of the South China Sea that belong to Vietnam; its ships harass Vietnamese fishermen and oil-exploration vessels. An Asian Barometer poll found that only 25% of Vietnamese have a posi-

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tive view of China, whereas 85% have a positive view of America. The Biden administration, eager to deter Chinese expansion, has supplied Vietnam with coast-guard ships to protect its waters. America would love to offer more help, but Vietnam rules out a formal alliance.

The country's growing geopolitical relevance is based on its strong economic performance, as well as geography. When Vietnam started opening up in the mid-1980s, annual income per head was half of Kenya's. On the back of pragmatic and increasingly pro-business policies, it has since grown six-fold to \$3,700. The government's ambition to turn Vietnam into a rich country by 2045 is plausible. Economically it has probably never faced a more benign global environment.

Geopolitics is driving investment towards it, as America seeks to decouple from China and private firms of all nationalities sense which way the wind is blowing. Most manufacturers cannot simply pull out of China. But to lessen the cost of trade barriers, they can hedge their bets by making things elsewhere as well (a strategy known as "China + 1"). Many also hope to reduce their exposure to arbitrary policies in China—memories of its painful zero-covid lockdowns remain fresh. "The pandemic...showed us we were too concentrated in China," notes a foreign manufacturer in Ho Chi Minh City.

Firms that export to the West are shift-▶▶

ing production to Vietnam. Brands such as Samsung and Apple are making gadgets there. Suppliers, including Chinese ones, are clustering around them. "Our customers insisted we move to Vietnam" for geopolitical reasons, says an electronics firm's boss. "We were already thinking about it, since labour costs in China were rising and young Chinese no longer want to work in factories." In the first three quarters of 2023 foreign direct investment in Vietnam as a share of GDP was twice as large as in Indonesia, the Philippines or Thailand, reckons CLSA, a bank (see chart).

If the world keeps fragmenting into rival trading blocs, the global economy could be seriously damaged, reckons the IMF. Given the high share of Chinese components in many products labelled "Made in Vietnam", it is unclear how much America is really reducing its dependence on China by moving supply chains there. But so far the shift has been good for Vietnam.

GDP growth has been bumpy: it slumped during the pandemic, bounced back to 8% in 2022, fell to 4.7% in 2023 amid a credit crisis, and is expected to recover to 5.8% this year. Still, Vietnam is well placed to keep attracting investment, argues Tony Nafté of CLSA. It is more open to commerce than its South-East Asian peers. Trade in 2022 was equivalent to an eye-popping 186% of its GDP, versus 45% in Indonesia, 72% in the Philippines and 134% in Thailand.

Vietnam's plentiful, young manufacturing workers are diligent, reasonably well educated and half as expensive as those in Chinese coastal areas. Vietnam, unlike Indonesia and the Philippines at times, has had no Islamist terrorism, notes a factory boss. It offers fat incentives to foreign investors, both explicit (tax breaks, cheap land) and de facto (high-tech workers were among the first to get covid vaccines). And although it is a one-party state like China, it is friendlier. Expatriates in Beijing complain of a climate of fear; those in Vietnam seem relaxed.

Yet the country has a big political problem: its government is paralysed by indecision. Mr Trong must step down by 2026. As the panic over his rumoured demise reminded everyone, his succession is unclear. Not knowing whom to please in a couple of years, officials are reluctant to make major decisions.

A "blazing furnace" crackdown on corruption, lit by Mr Trong, has made them even jumpier. Hundreds have been arrested; last year the president (number three in the hierarchy) had to resign. Lesser officials have been loth to approve big projects in case they turn out to be tainted. In the coming reshuffle, any whiff of scandal could wreck careers, or worse. The safest thing, many conclude, is to do nothing.

Consider energy. Vietnam has done a



Why the Trong face?

fine job of connecting homes to the grid (nearly 100% of rural ones have electricity, up from 14% in 1993). But as industry grows, so does demand for power. The supply can be unreliable: power cuts last year were "terrible", says a manufacturing boss.

And foreign investors increasingly want to tell customers and shareholders that they use clean energy. Here, Vietnam is struggling. It depends heavily on coal, which makes the air in Hanoi worse than Shanghai's. A push to install more solar panels has helped a bit, but a promise to hit net-zero carbon emissions by 2050 looks fanciful unless the country harvests the wind off its blustery, 3,000km-long coast.

That may happen, but it is taking ages. The process for granting approvals to survey the seabed for suitable spots is "extremely slow", complains a wind-power executive, adding that officials are "cautious on making any decisions now". Little of the legal framework for erecting turbines or selling power to the grid is clear, he sighs. The relevant ministries barely

talk to each other, and everything must go through the state-owned power supplier, EVN, which is as nimble as Jabba the Hutt. Environmentalists gripe that vested interests (ie, bigwigs who have invested in coal) are blocking the country's energy transition. Some of those environmentalists have been jailed, typically for "tax fraud".

Some in the ruling party, such as the prime minister, Pham Minh Chinh, understand how gravely Vietnam is imperilled by global warming. The delta of the Mekong river, which covers much of southwestern Vietnam, is sinking even as sea levels rise, meaning the sea could ultimately swallow it.

Pragmatic officials argue that if Vietnam wants to be an industrial powerhouse it should bet on the clean technologies of the future, not the dirty ones that much of the world is trying to scrap. Hence the government's implicit backing of VinFast, the ambitious but loss-making electric-vehicle arm of its biggest private conglomerate. But faster reform is needed if Vietnam is to meet its climate pledges or prepare for a warmer world.

Vietnam is heavily dependent on trade, and the global business environment is changing fast, so policymakers need to keep up. Sometimes, they do not. Vietnam's policy of giving tax breaks to foreign investors, for example, has become less of an inducement since the OECD, a club of rich countries, agreed to apply a global minimum corporate-tax rate of 15%. Multinationals that pay little or nothing in Vietnam may be hit with higher charges elsewhere, warns the manager of a foreign manufacturer in Ho Chi Minh City.

Rather than offer tax breaks the government should simplify the rules, he says. "The opportunities are enormous but red tape is the biggest problem," agrees Bruno Jaspaert, the head of Deep C, an industrial zone in the city of Haiphong. Rules are often contradictory; some projects need the approval of a dozen ministries. More infrastructure would help. Public transport is still poor, so traffic in big cities is slow.

Despite the crackdown, corruption still hurts business. One foreign entrepreneur grumbles about having to play by two sets of rules: the formal ones, such as paying taxes and ensuring his warehouse doesn't catch fire, and the informal ones, such as paying off local officials so they don't throttle him with inspections.

Vietnam has risen from dire poverty to modest prosperity in a single generation. But it needs to keep on reforming. Geopolitical winds can change. Rivals can grow more competitive. Vietnam is greying fast: its working-age population will shrink after 2038, by one estimate. And its citizens may tire of their ruling party if living standards do not keep rising rapidly. Regimes, like leaders, do not last for ever. ■

Wham, bam, Vietnam

Inflows of foreign direct investment, % of GDP



Source: World Bank

Japan in space

SLIM shady

TOKYO

A big step for Japan's space programme

JANUARY 20TH was a big day for Japan's space programme. At 00:20 Japan time, Smart Lander for Investigating Moon (SLIM), a spacecraft owned by JAXA, the Japanese space agency, made its first Moon landing. Japan is the fifth country—following the landing in August by India's Chandrayaan-3—to have achieved that feat.

Enthusiasm at JAXA was somewhat tempered. Owing to problems with its solar panels, the spacecraft soon lost its ability to generate electricity. JAXA officials duly announced that they had shut down the space probe's power after its battery level dropped to 12%. Even so, the landing showed the strength of Japan's space programme, which has long made scientific contributions through specialisms such as robotics. The lunar landing also underlines the strategic role of Japan, an ally of America, in the new space race.

SLIM, also known as Moon Sniper, could transform space exploration. Whereas conventional landers touch down within a range of tens of kilometres, SLIM can land within 100 metres of a target. Such advances are in demand, because decades after the Apollo landings, countries are tilting at the Moon again.

Exploring its south pole is especially important. That region is likely to contain water ice, from which fuel and oxygen could be produced in order to propel further space explorations. To study the Moon's resources, precision-landing technology will be necessary, says Sakai Shin-ichiro, SLIM's project manager at JAXA.

Rivalry between America and China is one reason for the renewed interest in space. Under its Artemis programme, America plans to send astronauts to the lunar south pole by 2026, and eventually build a habitable base there.

JAXA is building part of a lunar-orbiting station for Artemis, known as Gateway, which is intended to be a transit point to the Moon and Mars. China also aims to land astronauts on the Moon by 2030, and to build a lunar base. Bill Nelson, NASA's chief, has warned that China might try to dominate the Moon's resources, perhaps turning the lunar south pole into "another South China Sea".

Given such geopolitical pressures, Japan's long-standing programme has become more associated with defence. A law adopted in 1969 limited the country to using space only for peaceful purposes. That

constraint was eased in 2008 with the passage of the Basic Space Law. In June 2023 the government established its first space-security policy, a ten-year road map for expanding information-gathering for missile defence and securing a safe environment for satellites.

Japan's strengths are better suited to non-military ventures, however. Last year the government said it would establish a ¥1trn (\$6.8bn) space fund. That is modest compared with spending by America and China. Still, Japan has made decent contributions by "carving out niche strengths", including unmanned missions, says Tokaji Ayumu, a former JAXA engineer. In 2010 Japan's *Hayabusa* spacecraft became the first to take samples from an asteroid and bring them to Earth.

The SLIM project draws on JAXA's previous lunar-orbiting mission, by the spacecraft *Kaguya*. It created "the most detailed" topographical model of the Moon to date, according to NASA. SLIM uses machine-learning to analyse high-resolution maps of the Moon's craters produced by *Kaguya*, to identify potential landing-spots. JAXA decided to send SLIM to the Shioli crater on the near side of the Moon, because rocks in the area might contain minerals from the Moon's mantle. Studying them could help explain the Moon's origins.

Despite the power-generation problems, SLIM successfully deployed two rovers, which managed to take a picture from the Moon and send it back to Earth. After an initial investigation, JAXA's engineers have concluded that the spacecraft was not crippled, but has tilted westwards, away from the Sun. That holds open a possibility that the craft could yet start generating power. The engineers say they are now "preparing for recovery". ■



An emissary from Tokyo

India online

May be prescribed

MUMBAI

New data laws could stifle free speech

JUST HALF a decade ago India was still an analogue country. Only a fifth of its people used the internet, mobile phones were mainly used for making calls, and television and cinema halls were where people went to be entertained. But a combination of ambitious policy, private players and pandemic lockdowns has brought huge change. Today one in two Indians is online, mostly via their phones. The audience for streaming video was 481m last year, up a third from 2021. Facebook, WhatsApp, Instagram and YouTube each have more users in India than anywhere else.

In a belated effort to keep pace with this transformation, lawmakers have produced a flurry of initiatives. Last August India's parliament passed a data-protection act and in December it nodded through a telecommunications bill, which replaces the Indian Telegraph Act of 1885. A draft of a new broadcasting bill has been released, which when passed will replace a 1995 law regulating cable television. Also in the works is a "Digital India" act intended to regulate platforms and minimise harm to users, which will take the place of the 24-year-old Information and Technology Act.

The initiatives can be seen as a package intended to overhaul the legal basis on which India's internet operates. Supporters argue that it is past time India updated its laws to reflect advances in technology. Critics fret that the new laws amount to an all-out assault on free speech in India. The two views are not mutually exclusive.

One way of looking at the laws is to imagine them as layers, says Rahul Matthan, a technology-focused lawyer whose recent book, "The Third Way", explains India's approach to data governance. At the base is the telecoms act regulating the hard infrastructure of mobile and internet providers, which supply the pipes through which data flow. For instance, it vastly simplifies rules around the licensing of spectrum. Above that sits data protection, which is intended to safeguard individuals whose data are rushing through the pipes. At the top is the forthcoming Digital India law, which will regulate content of that data and assign responsibility for it. In an age of streaming, the broadcasting bill's job is to extend regulation that covers traditional media to new ways of delivering content.

The government is not always as systematic in its thinking. Vagueness and overreach are common features of all the

▶ new initiatives. In addition to dealing with the nitty-gritty of infrastructure, the telecoms act allows the government to demand that mobile operators and internet providers intercept or block messages without judicial authorisation. It also requires that the intercepted messages are provided in an “intelligible format”, laying the legal groundwork for demands to undermine the encryption that protects messages in apps such as WhatsApp. The conditions under which these powers can be used are left to future rule-making. The phrase “as may be prescribed” appears 31

times in the 26-page act.

Similarly, “the discretionary rule-making powers” the data-protection act affords the government could “undermine the protections provided in the law”, writes Anirudh Burman of Carnegie India, a think-tank in Delhi. The draft broadcasting bill’s language is also vague, expansive and reliant on future rule-making. According to the Internet Freedom Foundation, an Indian digital-rights group, these flaws render it “open for misuse through subjective and selective application”.

India has long had a tricky relationship

with free speech. Its police regularly arrest people for posts on social media under existing laws. In a large survey last year by CSDS-Lokniti, a pollster, 65% of respondents said they were very or somewhat scared of posting their political or social opinions online for fear of legal action. Website blocking orders have ballooned from 2,799 in 2018 to 6,775 in 2022. “It’s not like there was a time when digital media was completely free,” says Abhinandan Sekhri, a co-founder of NewsLaundry, a media-watching website. “But it has become alarmingly horrible.” ■

Banyan Hit the North



South Korea’s imprisonment of a poet looks rather North Korean

MAKING SOMEONE do porridge (or “eat rice and beans”, to use the Korean expression) for expressing their political views is expected of despotic North Korea. It is not generally associated with its prosperous, democratic southern neighbour. Yet Lee Yoon-seop, a South Korean poet, is currently languishing in prison for just this. The 68-year-old was sentenced to 14 months in November for threatening South Korea’s “existence and security”. His crime? Writing a poem in praise of the North.

The law used to prosecute Mr Lee, the National Security Act (NSA), is designed to protect South Korea from spies and traitors. But it also bans South Koreans from visiting or making contact with the North, reading or watching North Korean media or saying anything good about Kim Jong Un’s tyrannical regime. Though South Korea replaced its former military dictatorship with a democracy in 1987, such restrictions on free speech show that some of the generals’ autocratic tendencies endure.

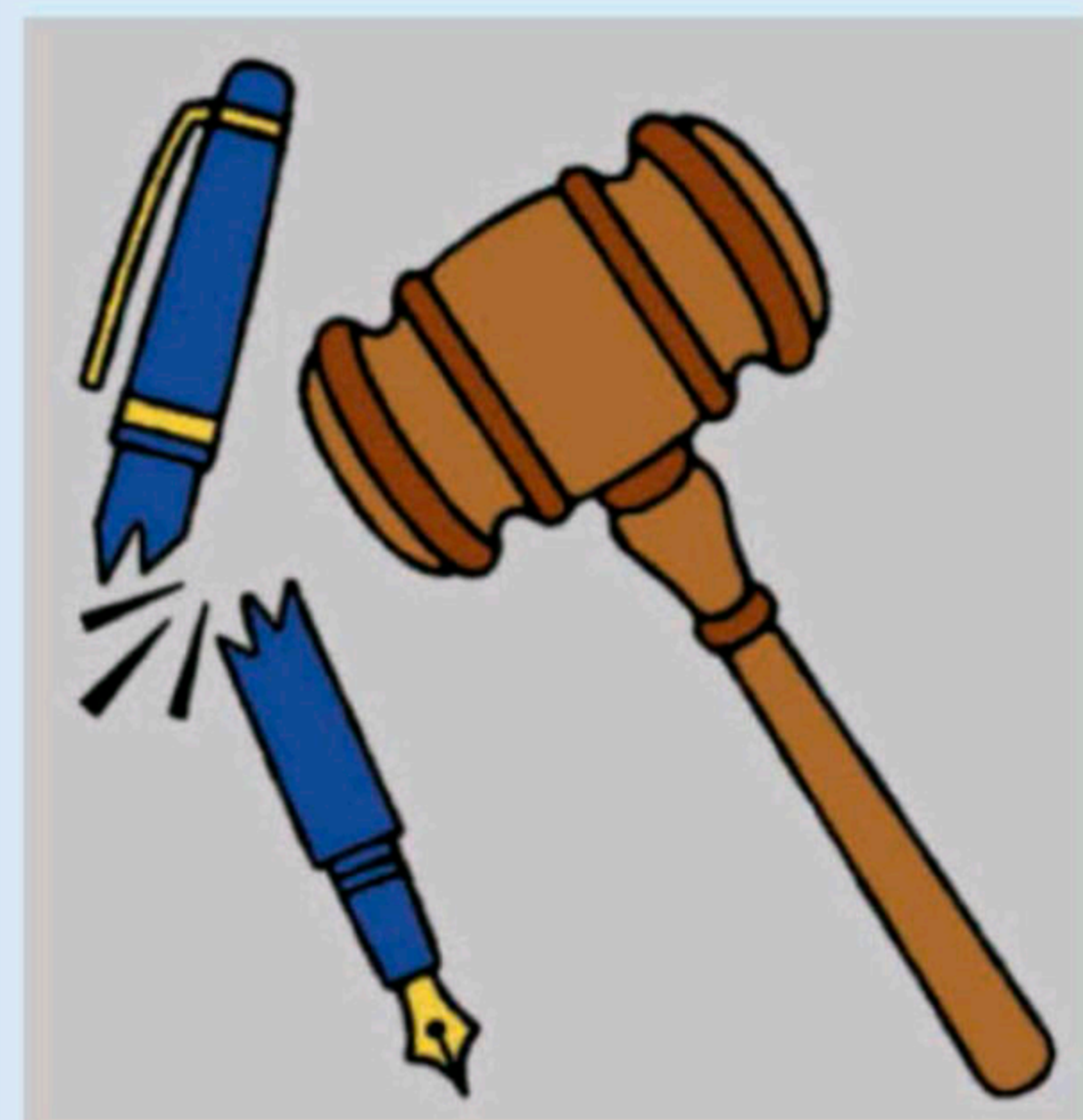
Every country has counter-espionage laws. And if South Korea’s are rather strict, no wonder. Its capital city is in missile range of a nuclear-armed despot who calls it the “principal enemy”. The NSA was modelled on a law designed to quash pro-independence activities during Japan’s occupation of Korea from 1910 to 1945. Since 2003 there have on average been more than 60 NSA prosecutions a year, often for pretty clear espionage cases. A businessman and an army officer were arrested for allegedly selling military secrets to North Korea. Soldiers in the South have been prosecuted under the act for endangering morale by distributing pro-North propaganda.

But the NSA is too often used to prosecute satirists and raid the homes and

offices of leftists. Some cases have been ridiculous. Kim Myeong-soo, a PhD student, received six months in prison and a two-year suspended sentence for selling books on North Korea that were widely available in public libraries. A South Korean woman was given a two-year sentence, suspended for four years, for owning recordings of 14 North Korean songs.

This is not Mr Lee’s first offence. But the claim that the sexagenarian posed a threat to South Korea is absurd. His ode was published on a North Korean website. Access to such sites is banned by the NSA and forbidden from a South Korean IP address. More important, it is hard to imagine Mr Lee’s childish verse persuading anyone of the glories of North Korea’s leader. It consists of a list of South Korean problems that Mr Kim, in the poet’s view, would instantly solve given the chance.

Mr Lee’s real offence appears to have been believing his own nonsense. By contrast, police decided not to investigate a man under the draconian law for selling shirts with a smiling Mr Kim and the slogan “Walk a flowery path, comrade”.



That was OK, officials said, because he was selling them to make a buck.

Worse, the issue points to a broader authoritarian tendency in the South. Its president, Yoon Suk-yeol, often demonises his political opponents by calling them “anti-state forces”, a phrase inspired by the NSA. Unfavourable press coverage is routinely labelled “fake news” and the offices of offending outlets have been raided. The administration and its allies have sued more press outfits for defamation—which in South Korea can be a crime even when the offending words are manifestly true—in Mr Yoon’s first 18 months in office than any of its three predecessors did during their entire five-year terms.

Yet even a more liberal government would be unlikely to remove the NSA’s illiberal clauses. No administration has made a serious attempt to reconsider it in 20 years. There is very little political support for scrapping the law, point out Steven Denney and Christopher Green of Leiden University. The current administration at least flirted with allowing South Koreans access to North Korean media, but it recently abandoned the idea. The opposing Democratic Party is no more liberal; it previously tried to pass a similar law criminalising praise of Japanese colonial rule.

Mr Yoon talks often about South Korea’s democratic values. They are at the heart of his pitch for the country to be a strategic link between East and West, developed and developing countries. For that reason alone he should take them more seriously. South Korea is undoubtedly a democracy, but not a terribly liberal one so long as it locks up old men for their dotty opinions. Reforming the NSA would be a better rebuttal to the sentiment Mr Lee expressed than banning it.



China and Taiwan

One China, many meanings

PRAGUE AND TAIPEI

A new diplomatic struggle is unfolding over Taiwan. It could give China better legal cover for an invasion

THE NEW year has brought no respite from tensions over Taiwan. On January 13th its people elected an independence-minded candidate, William Lai Ching-te, as their next president, infuriating China. Two days later it was China's turn, with its officials announcing that little Nauru was cutting ties with Taiwan in favour of China. On January 24th the US navy sent a warship through the Taiwan Strait, which China described as a "provocative act". Amid this drama a new diplomatic battle is intensifying that risks setting the stage for war.

For over 70 years the government in Beijing led by the Communist Party has fought for official recognition from the world. Lately it has opened up a novel front in this campaign. The party wants not only to be the sole representative of China, it also wants countries to adopt its view that Taiwan is an alienable part of it. Victory in this struggle would give China's leaders a big diplomatic cudgel—as well as a legal basis for invading the island.

When Nauru made the jump it became the 183rd country to recognise China. That

compares with around 160 two decades ago and between 80 and 90 three decades before that (when there were fewer countries). Most big states switched a while back. Britain and many other Western countries established ties with China in the early 1970s. America, a laggard, did so in 1979. When it comes to recognition, then, China is winning and has been for a while. Only 11 countries (and the Vatican) continue to formally recognise Taiwan.

The new front is more complicated. Those 183 countries view Taiwan in very different ways. At one end of the spectrum are states that treat the island as a de facto independent country, even if they don't recognise it. At the other end are those that

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35 A skipping-rope scandal

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endorse China's claim. *The Economist* has analysed Chinese foreign-ministry statements from 2023, all in Mandarin. We assess that at least 28 countries have affirmed China's view of things. For example in October Pakistan said it "firmly supports" China's push for reunification (there is no mention of it being peaceful); a statement by Syria in September uses similar language. Pushing that number higher is now a preoccupation of Chinese officials. In their eyes, such support helps China make the case that unification is justified, by force if necessary.

Most Western countries sit at the pro-Taiwan end of the spectrum—and are moving further in that direction even as they formally maintain a policy of non-recognition. America has loosened restrictions on interactions between its officials and those on the island. A trip there by Nancy Pelosi, then speaker of the House of Representatives, sparked a crisis in 2022. America has increased military aid to Taiwan. President Joe Biden has even said that America would defend it from invasion, though his aides often walk back such statements in order to maintain "strategic ambiguity".

Perhaps most frustrating to Chinese officials is that America is pulling its allies along with it. The Biden administration has encouraged countries to "expand engagement with Taiwan". A steady stream of Western parliamentary delegations has visited the island. Australia, Britain, Canada and France have sent warships through

▶ the Taiwan Strait (which China calls its territorial waters). The EU and G7 have made a point of calling for stability in the area.

The Czech Republic has been active in this regard. It has its own history of resisting an authoritarian power. Now it is embracing Taiwan. Czech parliamentary leaders have visited the island with large delegations in tow. Petr Pavel, the Czech president, spoke on the phone with his Taiwanese counterpart, Tsai Ing-wen, last year. Mr Pavel was also the first European head of state to congratulate Taiwan on its elections this month. Czech officials say that none of this implies formal recognition and that their actions are consistent with the country's one-China policy. But in China there is a growing sense of crisis, as democratic countries hollow out the meaning of "one China", says Fukuda Madoke of Hosei University in Japan.

China has therefore focused its efforts (and economic pressure) on the developing world. Most of the countries that have affirmed its stance on Taiwan are poor. China has woven its views into declarations with various groupings of African, Arab, Central Asian and Pacific countries. It has also promoted them in new forums, such as the "Group of Friends in Defence of the Charter of the United Nations", which includes Iran, Russia and North Korea. At a recent group meeting, China styled itself a "defender of the international order".

Recently China has claimed that the UN itself endorses its view of Taiwan. China points to Resolution 2758, passed in 1971, which recognised the government in Beijing as the only lawful representative of China at the UN. The measure expelled the representatives of Chiang Kai-shek, then leader of Taiwan. But it did not mention Taiwan by name. American officials argue that it leaves the island's status up in the air. China, though, has successfully pressed countries such as Nauru to cite the resolution when talking about Taiwan. It scored another victory in January when Dennis Francis, a Trinidadian diplomat who is serving as president of the UN General Assembly, suggested that the body's work would adhere to China's view of things and be guided by Resolution 2758.

So on this front, too, China can claim some success. It has also convinced many countries to adopt its jargon on things like human rights and development (see next story). With Taiwan, the struggle risks going beyond language. In recent years China has increased its aggressive activity in the Taiwan Strait, flying planes close to the island. China is changing the status quo militarily and on the diplomatic stage, says Lai I-Chung of Taiwan Thinktank, a policy outfit. That bodes ill for the future. As China sees it, the more countries that adopt its view of Taiwan, the more cover it has to turn words into action. ■



China's human-rights record

Easy questions only

At a UN review, China basks in the flattery of friendly countries

ONCE EVERY five years or so, each UN member state has to have its human-rights record examined under a so-called Universal Periodic Review (UPR) overseen by the body's Human Rights Council. Every country in the UN may pose questions and recommendations to the state under review. This week China had its turn. The event merely illustrated its success in creating a split between most countries in the global south, which tended to flatter China with friendly questions, and Western democracies, which castigated it.

Rights campaigners had hoped the UPR would offer scrutiny of China's many abuses since its last review in 2018. It would be the first discussion of China's human rights within the UN since the body published a report in 2022 alleging possible crimes against humanity in the region of Xinjiang, home to the Uyghurs and other ethnic minorities. China has since blocked attempts to discuss the report.

This latest review was largely farcical. More than 160 countries had asked to make speeches; thus each got just 45 seconds. China had reportedly lobbied non-Western countries beforehand to fill up the time with praise and talking points. Most of them lauded China for alleviating poverty. Most effusive were those in heavy debt or in tight geopolitical alignment, such as Iran, Laos and Russia. Few Muslim countries mentioned China's brutal treatment of the mostly Muslim Uyghurs. Many

countries echoed Chinese terms such as "people-oriented philosophy of human rights" and "whole-process democracy". These are jargon for the idea that security, stability and rising living standards should take priority over individual freedoms.

Western countries and some democracies elsewhere spoke up against China's abuses, with an emphasis on Hong Kong, Tibet and Xinjiang. At least 50 states made recommendations such as ending arbitrary detention and forced disappearances. Six states said China should stop "residential surveillance at a designated location", a form of extralegal pre-trial detention used by China's ministry of state security. Twenty states touched on Tibet, more than double the number who raised it in 2018. Several called for China to abolish a boarding-school system that separates Tibetan children from their families to assimilate them into majority-Han Chinese culture.

Some developing countries also made criticisms, albeit couched in soft language. Thirteen states, including several Latin American democracies, urged China to allow unfettered visits by UN experts. This shows that some countries in the global south do want China to stop flouting UN rules, says Raphael Viana David of the International Service for Human Rights, a campaigning group. But the UPR has no enforcement teeth. So China still happily uses it to promote the notion of the bullying West versus the righteous rest. ■

Hong Kong

Westerners out,
Chinese in

HONG KONG

An international city becomes
more provincial

VEGAN RESTAURANTS do not usually serve beef. But 2024, a plant-based joint in Hong Kong's New Territories, hopes doing so will help it attract more customers this year. "All the expats are gone," says Naz Farah, the owner. "Now a lot of mainland Chinese are coming and they don't like vegan food." Across the road a once-popular Western takeaway has already closed. A bustling Chinese restaurant stands in its stead.

The demography of Hong Kong (with a population of 7.5m) is changing as the city tries to reverse a brain drain that has seen around 200,000 workers leave in recent years. In 2023 the government lifted strict pandemic controls and announced a slew of new visa schemes. But this "trawl for talent", as the city's chief executive, John Lee, calls it, has netted a rather homogenous catch. The city granted just 8,000 visas to Westerners between January and November 2023. Ten times as many went to people from mainland China.

Westerners appear less interested in Hong Kong as a place to live. Many left because of covid-19. But they also complained of China's tightening grip on the territory. Those who still desire to move there for work have struggled to find jobs owing to the city's slow economic recovery and changing language requirements. "Every job I applied for required Mandarin, especially in law," says a woman who trained as a lawyer in Britain, but moved to the city to work as a financial analyst. "Now all the business and corporate work is Beijing-focused. Singapore is really the hub for international work in Asia."

People from the mainland see things differently. To them Hong Kong offers more freedoms and still has an international feel. When his wife became pregnant, Barry He, a trader in Beijing, successfully applied for a Top Talent Pass visa, which aims to entice high earners and graduates of the world's best universities. "I think this scheme will give me an opportunity to see the international job market," he says, adding that he hopes his child will also benefit from a better education. Of the 60,000 Top Talent visas approved between January and November last year, 95% went to people from the mainland.

Previous waves of Chinese immigrants to Hong Kong came mostly from the southern part of the country. They often spoke Cantonese and integrated quickly. But the

latest influx comes from all over the mainland, says Eric Fong of the University of Hong Kong. "Integration, if it occurs, may take longer than in the past." Hong Kongers, protective of their distinct identity, are not always the most welcoming bunch. When a group of mainland children was spotted squatting on a train platform last year (as is customary in parts of China), locals poked fun at them on social media.

But the environment is changing. Mandarin is increasingly the language of choice in boardrooms and in the street. Yew Chung Yew Wah Education Network, a leading international-school chain, plans to offer the mainland curriculum by 2026. And in more troubling ways Hong Kong is

looking more Chinese. A national-security law imposed on the city by the government in Beijing has dismantled local democratic institutions. Some residents think that the authorities are actively trying to replace more liberal residents with mainlanders.

Some of these changes cut at the heart of what makes Hong Kong attractive not just to foreigners, but to mainland Chinese. The territory's appeal is that it is not just another Chinese city. But as the government in Beijing draws it closer, that image is fading. For expats like Ms Farah, it may already be too late. "There's no connection, no community left," she says. "I always used to say I would never leave Hong Kong. But now I'm losing hope." ■

Education

Skip, skip, scandal

BEIJING

A new reason for parents to be angry with the education system

SKIPPING ROPE is a big deal in China. Children must be good at it to become eligible for scholarships. Most provinces include skipping tests (measuring skips per minute) in their versions of the high-school entrance exam, known as the *zhongkao*. In the south-western province of Yunnan, for example, elite skippers can score 11 points on the exam, where the maximum total is 700.

That may not sound like much, but the difference of a single point on the *zhongkao* can decide whether or not a child goes to a good school, setting them up for university. So on weekends parents often bring their children to parks for drills. An app that lets pupils compare skipping scores has over 10m users.

Officials want children to be more physically active. They like skipping in particular because anyone can do it. No fancy equipment is needed. State media claim that skipping lessons in rural schools have produced more fit and well-rounded students. Indeed, such schools have produced skipping champions such as Cen Xiaolin, who at the age of 12 broke a world record by skipping over 200 times in 30 seconds in 2016.

But some schools seem more interested in fleecing parents. An investigation by Xinhua, the official news agency, found that schools in several cities were demanding that children buy specially branded ropes to use for the *zhongkao*. These typically cost many times more than a basic model, which sells for less than 20 yuan (\$3). Some suspect that school officials were colluding with the companies that sell ropes.

The amount of money involved in the scandal is relatively small, but that is

largely beside the point. China's education system is fiercely competitive. Parents shell out for things like after-school classes just so their children can keep up. Expensive skipping ropes have made them hopping mad. "It's a real scam," said a commenter on WeChat, a social-media platform.

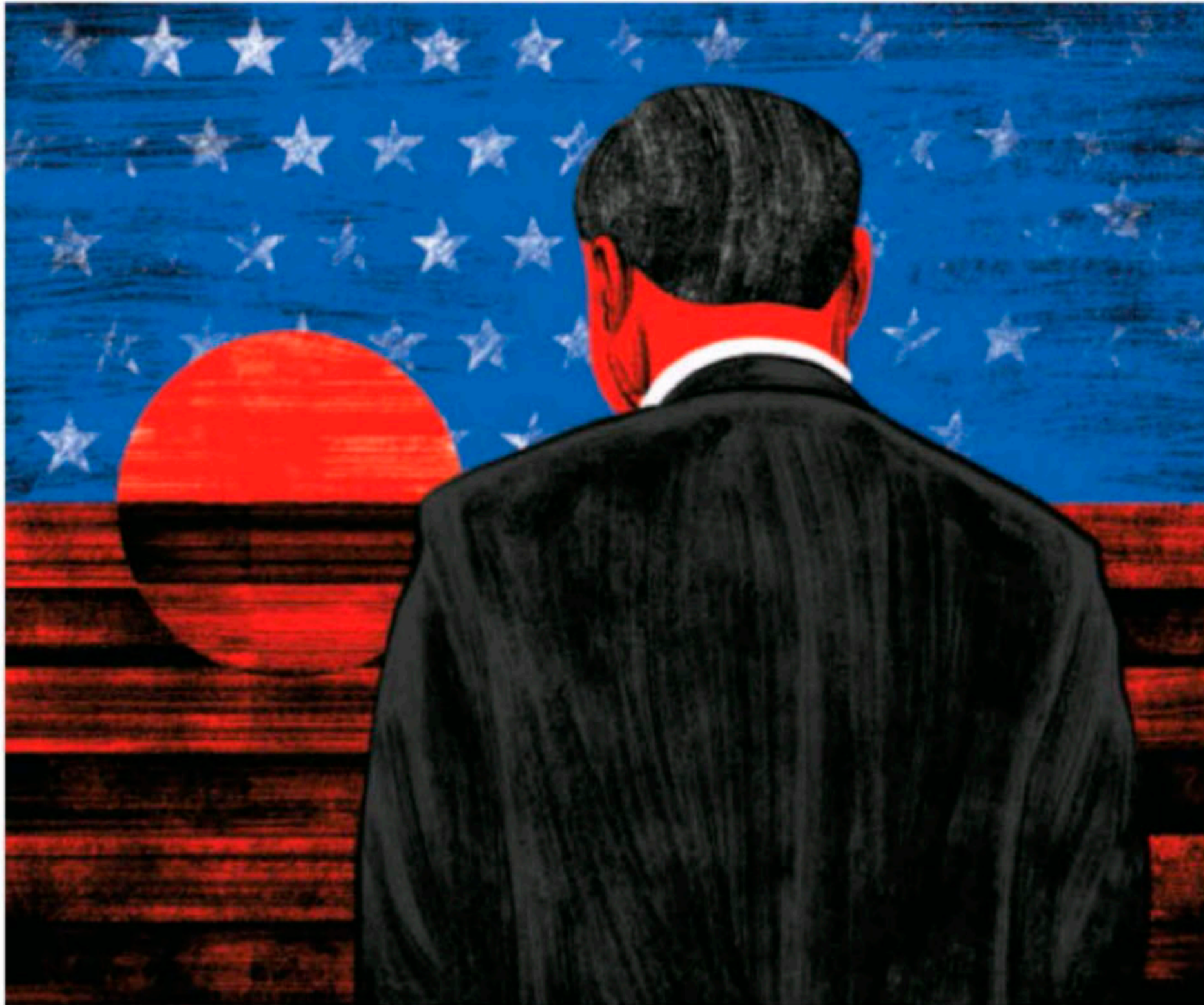
The government has long tried to level the playing field for education. In 2021 it cracked down on private tutoring. Now rope sellers are the target. In Hangzhou officials have fined those selling the expensive variety. Other cities may follow suit. But a bigger problem still is professional skipping coaches, whom some parents employ for hundreds of yuan per hour. They keep children from wealthy families one jump ahead.



Jump fast, your future depends on it

Chaguan | Xi Jinping seeks confidence abroad

The West's wobbles have China feeling vindicated



WHEN XI JINPING looks out at the world, he seems to see history's arc bending his way. As war in Ukraine slides towards a frozen stalemate, and intensifying horrors stalk the Middle East, Communist Party leaders sound confident that they know how to solve such crises, and that most of the world agrees with them. China puts its trust in interests coldly weighed and balanced, and in economic development. It declines to judge even the most blood-soaked tyrants and denies that universal values exist, calling them a ploy to stigmatise non-Western civilisations.

In the telling of Mr Xi's chief diplomats, events are now vindicating that chilly realism. Pragmatic, predictable China, they assert, understands what is needed to bring peace and enjoys growing respect in the developing world. They draw a contrast with Western governments that bluster about upholding moral principles, then leave poor countries to pay the price as conflicts drive millions from their homes or as sanctions cause food and fuel prices to spike. Seen from Beijing, liberal democracies are being torn apart by political arguments. America, China's still-fearsome rival, seems ever more tempted by isolationism, starting in Ukraine. Moreover, Western unity is being sorely tested by the American government's support for Israel in its war with Hamas, and would be shattered by Donald Trump's return to the White House.

Lately, China's geopolitical swagger has been on display. In December Mr Xi addressed an agenda-setting party conference on foreign affairs. As explained this month by the party's top diplomat, Wang Yi, the speech showed how Mr Xi, using "head-of-state diplomacy", is charting the right course for a "profoundly changing" world. In Mr Wang's words, Mr Xi is guided by his "extraordinary political wisdom" and his ability, as the leader of a Marxist party, to spot deep historical forces at work. As often with the party, bland-sounding slogans conceal some large ambitions. Mr Wang talks of China promoting "universal security". That is code for opposing American-led defence alliances such as NATO (because in China's view, alliances leave members more secure than non-members, destabilising the world). "True multilateralism" is jargon for China's preferred world order, in which the five permanent members of the UN Security Council, namely America, Britain, China, France and Russia, must consent to all interven-

tions by the international community. It also involves developing countries, led by China, having more say generally.

A large majority of countries welcome Mr Xi's calls for "an equal and orderly multipolar world and a universally beneficial and inclusive economic globalisation," says Mr Wang. As an astute, Beijing-based diplomat notes, that chewy mouthful is actually a pre-emptive attack on a second Trump administration. Ahead of the American presidential election in November, China is presenting itself to the world as a champion of equality and order, in opposition to America First selfishness and chaos. It is also casting itself as an advocate of free-flowing commerce, determined to battle Trumpian trade barriers and export controls (never mind that China jealously guards access to its own markets).

In recent summit meetings with foreign leaders, diplomatic eyewitnesses report, Mr Xi has conveyed, or sought to convey, the confidence of a man who believes that destiny is on his side. Barely glancing at his prepared talking points, a serene-sounding Mr Xi has offered history lessons to visitors. In one meeting, he recalled the crisis in the 1960s when Soviet experts left Mao-era China, taking their know-how (including nuclear expertise) with them. That turned out to be an "opportunity", Mr Xi averred. It obliged China to build its own industries. American export curbs will be an opportunity for the same reason, he predicted.

Since Russia first invaded Ukraine in 2022, Chinese officials have scoffed that Western unity over the war would not last. Now, with American aid in the balance, a well-connected scholar contrasts China's cool-headed analysis of the conflict with the "emotional" approach of European politicians. China is not motivated by deep trust in Mr Putin, says the scholar. Instead, it has all along been seeking to "lay down a marker" that the West cannot pursue its own interests without limit, for example by enlarging NATO, and expect a great power such as Russia to accommodate it.

As for the Middle East, party leaders call China a "reliable mediator" in that region, thanks to its emphasis on trade and security, and its non-judgmental way of letting each government seek its own independent path to prosperity. Mr Wang contrasts this "Chinese way" with selfish actors (he means America) who believe in "force being omnipotent".

Swagger's harder without swag

There are principled reasons to fear the illiberal, interests-based order that Mr Xi seeks. It would offer aggressors like Mr Putin impunity and a veto over his neighbours' security. China, for that matter, has its own destabilising regional ambitions. But a slowing economy might impose its own constraints. At his first foreign-affairs work conference as party chief, in 2014, Mr Xi explicitly linked diplomatic success abroad with ambitious targets for China's GDP growth and rising incomes at home. Reports of the latest conclave on foreign affairs mention no economic promises.

A painful question looms. In 2020, during the covid-19 pandemic, Mr Xi reportedly urged officials to grasp the trend that "the East is rising while the West is declining", contrasting China's orderly virus controls with chaos abroad. The phrase is still in use. The *People's Daily*, the party's official mouthpiece, cited it on January 18th. Just now China is cocky about the second half, involving Western decline. But the first half about a rising East should induce anxiety. China faces economic headwinds. To date the party's response is policy drift. Will Mr Xi be able to bestride the world, taking advantage of American introspection, if his economy stalls at home? As Marxists should know, history's arc can bend back. ■



A region on fire

Will the violence spread out of control?

DUBAI AND JERUSALEM

Ten countries have now been dragged into the fighting

IF YOU drew a diagram of who is shooting at whom in the Middle East, it would look increasingly like a bowl of spaghetti. What began in October as a war between Israel and Hamas has now drawn in militants from four other Arab states. In addition Iran, Israel and Jordan all bombed Syria this month. Iran also unexpectedly bombed Pakistan, which must have wondered how it got dragged into this mess.

Now nearing its fifth month, the war in Gaza seems far from an end—despite a growing sense in Israel that the fighting has got bogged down. The Israeli army has yet to find the top leaders of Hamas, or most of the Israeli hostages that the group is still holding. Israeli security officials worry that bargaining will undermine the military gains they have made.

Since October 7th the Middle East's three strongest powers have all had to reassess their security doctrines. Israel's military primacy was shaken. Iran's proxies have become a liability for their patron. And America has been dragged back to a region it wanted to leave. None is sure how to proceed. As the Gaza war drags on, a messi-

er regional conflict keeps expanding.

On January 20th Iranian-backed militias in Iraq fired a big volley of rockets and ballistic missiles at America's al-Asad air base in western Iraq. Most were intercepted by Patriot air-defence batteries, but some hit the base and wounded Americans and Iraqis. The barrage followed days of Iranian attacks across the region: at alleged terrorists in Syria and Pakistan, and at a supposed Israeli spy base in Iraqi Kurdistan (killing a Kurdish businessman at home with his family). The strike on Pakistan invited a retaliatory attack on Iran, though both sides now seem keen to avoid further fighting.

These incidents signal deep unease within the Iranian regime. Israel is waging a not-so-secret war against it, assassinat-

ing members of its Islamic Revolutionary Guard Corps in Syria and commanders of Hezbollah, an Iranian-backed Shia militia, in Lebanon. At home, meanwhile, a series of terrorist attacks has rattled Iran's government, among them a double suicide-bombing claimed by the jihadists of Islamic State that killed around 100 people.

For decades Iran has cultivated a network of proxy militias to project power across the region. Yet now it is struggling to deploy them while simultaneously keeping itself out of the conflict. It has tacitly accepted the battering of Hamas, which seems to have carried out its massacre in Israel without alerting its Iranian patrons. Iran has been loth to unleash Hezbollah, its most effective proxy, lest America or Israel hit Iran directly. Attacks on commercial shipping by Yemen's Houthis have brought an American-led military coalition to the Red Sea. Iran would like to force Israel into a ceasefire in Gaza and drive American troops out of the region. Its proxies have so far achieved the opposite.

Yet America is also trying to find a balance. President Joe Biden has been cautious: he does not want to be drawn into another war in the Middle East, certainly not in an election year. In Iraq and Syria, American forces respond far less often than they are attacked. The American campaign against the Houthis began only after repeated warnings and a UN Security Council resolution condemning the group's attacks on shipping. Mr Biden admits that strikes have not deterred the

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▶ Houthis—but also says they will continue.

His best hope is that Israel will soon wind down its war in Gaza, which many of his allies have been demanding for months. Yisrael Katz, Israel's foreign minister, met his European counterparts on January 22nd to discuss what happens after the war. Diplomats in Brussels said the two sides talked past each other. The Europeans wanted to talk about who would govern and rebuild Gaza, and how they might pursue a two-state solution between Israelis and Palestinians.

Mr Katz, however, touted a pet project to build an artificial island off Gaza's coast that would serve as a seaport, something he promoted during a stint as transport minister in 2017. His interlocutors were stunned: "This didn't have much to do with what we were discussing," said Josep Borrell, the EU's top diplomat.

Arab states, meanwhile, are quietly promoting their own plan to end the war. Saudi Arabia would agree to normalise relations with Israel in exchange for a commitment to create a Palestinian state. Gulf states are wary of being saddled with responsibility for a ruined Gaza but are willing to support the Palestinian Authority, which governs parts of the West Bank, if it resumes control in Gaza (see next article).

The plan is a long shot—not least because Binyamin Netanyahu, the Israeli prime minister, is a longtime opponent of Palestinian statehood. After Mr Biden spoke with him earlier this month, the president suggested Mr Netanyahu might be amenable to creating a demilitarised Palestine: "I think we'll be able to work something out," he said. Mr Netanyahu rushed to rebuff him, insisting that Israel would have to control everything west of the Jordan river, asserting that such a position was "contrary to a Palestinian state".

Israel has withdrawn many of its troops

from northern Gaza, leaving one division to search for tunnels and prevent Hamas from regaining a foothold there. A second division is holding the line between northern and southern Gaza, while a third has encircled Khan Younis, in southern Gaza, the site of heavy fighting in recent days. The Palestinian death toll has passed 25,000, the majority civilians, with probably thousands more yet to be counted. The UN says one-fifth of children under five have diarrhoea.

But Mr Netanyahu's battle for political survival is still dictating Israel's strategy—and the fate of the hostages in Gaza. The first hostage deal between Israel and Hamas, which freed 110 Israeli and foreign captives at the end of November, was brokered by Qatar; Egypt played a supporting role. There are still 136 hostages, though Israel presumes at least 29 are dead. Now Egypt is leading the push to free them, largely out of economic self-interest.

The chaos in the Red Sea has caused only modest economic damage to Israel. Most of its sea trade goes through Mediterranean ports. Egypt has paid a bigger price: it has seen a 40% reduction in revenue from the Suez canal, a vital source of hard currency. That has added to fears of a possible default in a country struggling with dollar shortages and buried under a pile of government debt (93% of GDP). The Egyptian pound has dropped to around 60 to the dollar on the black market, down from 50 last month and 50% below the official rate.

Egypt does not think that American-led strikes on the Houthis will deter the group from its attacks on ships. For Abdel-Fattah al-Sisi, the country's president, the only way to get his canal working again is a ceasefire in Gaza. To that end Egypt has taken the lead in indirect talks between Israel and Hamas, though the Qatari channel is still open as well.

The deal Egypt is promoting would come in two stages. First would be a "humanitarian" release of civilian hostages in return for a truce that could last several weeks, perhaps even a month or two. Israel would also free hundreds of Palestinian prisoners. The second stage would free captive Israeli soldiers in exchange for a full ceasefire, an Israeli withdrawal from Gaza and the release of even more Palestinians, probably thousands of them.

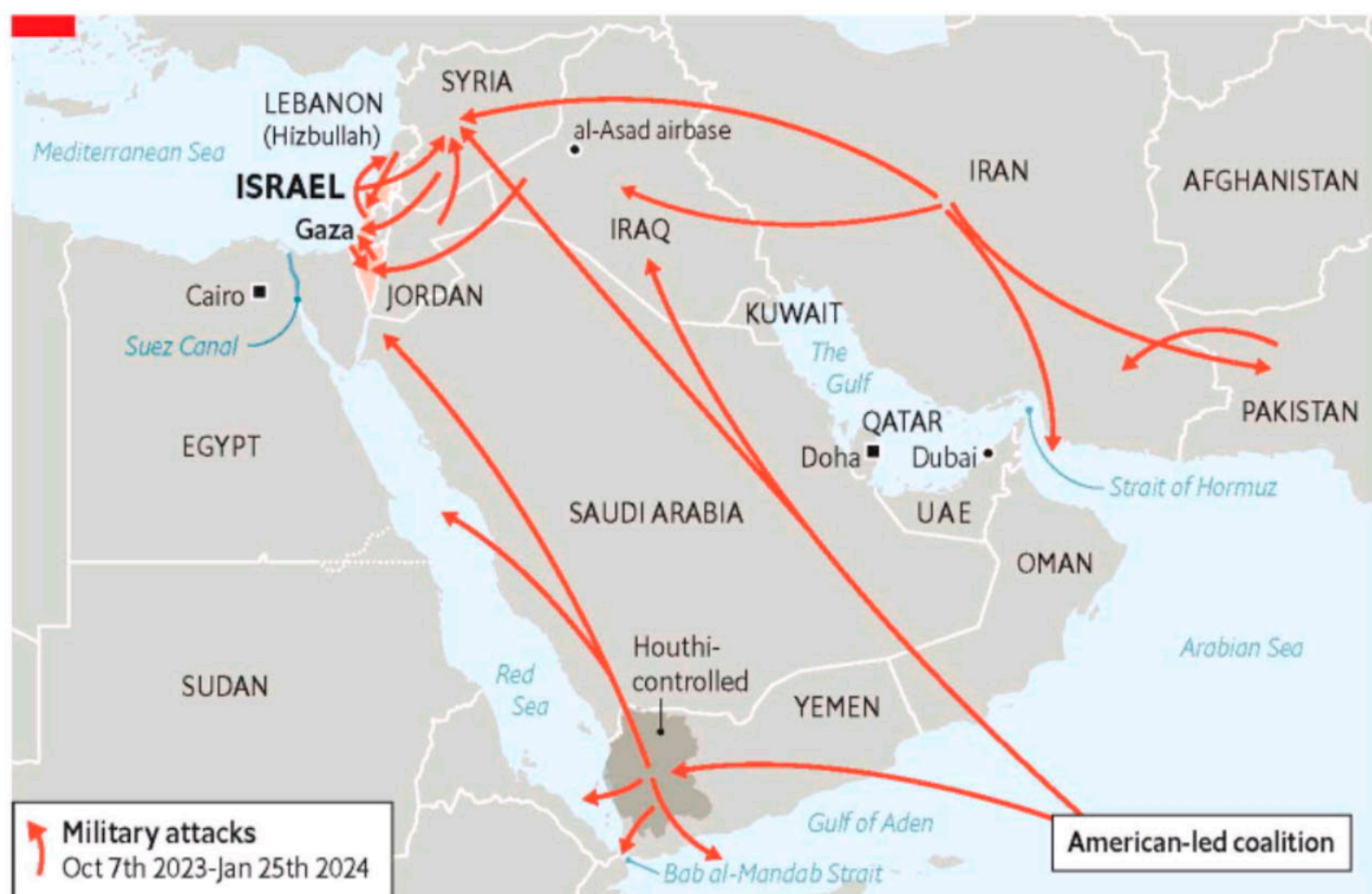
These conditions are dividing the Israeli government. Its more pragmatic wing, led by Benny Gantz, a former defence minister who joined the war cabinet in October, supports a lengthy truce to free the hostages. This group wants to pair that with negotiations for a new government in Gaza: leaving Hamas in power would be anathema to most Israelis. But Mr Netanyahu's right-wing coalition partners adamantly oppose any ceasefire. Bezalel Smotrich, the finance minister, said on January 24th: "We cannot agree to stopping the war at this stage for such a long period."

Twisting and turning

Mr Netanyahu, as usual, is prevaricating while he tries to keep both parts of his government on board. In public he promises to "continue until total victory". In private, he has allowed Israel's representatives to continue negotiating. But he is unlikely to do anything that would drive away the far right, without whom he would not have returned to office in December 2022.

Hamas is also divided over the deal. Its political leaders, shuttling between Doha and Cairo for talks, are in favour of accepting the first stage of the agreement: they are aware that holding civilian hostages continues to damage their cause. But the leaders in Gaza want an Israeli withdrawal before another release of hostages. Their demand that Israel free Hamas terrorists who took part in the October massacre is another potential deal-breaker, since Israel is highly unlikely to accept that condition.

Mr Netanyahu may have to make a decision soon, though. In an interview broadcast on January 18th Gadi Eisenkot, a war-cabinet member and former army chief, hinted at a push for early elections. "We need, in the time range of months, to go back to the Israeli voter and renew trust," he said. It is now a matter of time before the emergency war cabinet is dissolved. Protests in Israeli cities are growing. Many are led by the families of hostages calling for a ceasefire—and for Mr Netanyahu's resignation. His centrist partners are likely to leave the coalition if they do not soon get an answer on a hostage deal and Israel's post-war strategy. "Until then, it's deadlock," says an Israeli security man. "The political leadership won't make a decision, and if they don't, a lot of the gains we achieved at great cost will be eroded." ■



The Palestinian Authority

Can it be beefed up?

RAMALLAH

Can the Palestinian Authority ever really run a state?

THE TWO parts of the Palestinian territories that Israel has occupied since 1967 are just 40km apart at their closest point. Yet the devastation of Gaza can feel farther from the West Bank than it does from many capitals in Europe. The West Bank, the bigger chunk of the Palestinians' hoped-for independent state, has witnessed few big protests. Whereas people have boycotted American goods elsewhere in the Arab world, Palestinian officials serve Coca-Cola. Few people in cafés watch the continuous coverage of the Gaza war on Al Jazeera, the Qatari channel. Couples laugh over cards and backgammon. "They come here to lose themselves," says a Hamas fighter-turned-barista in a rooftop café in Nablus, one of the West Bank's biggest cities.

Overseeing this calm—if not responsible for it—is the Palestinian Authority (PA). Persistent conflict with Israel has taught West Bankers the cost of violence. Gaza under Hamas, the Palestinian Islamist movement, has seen six wars with Israel since 2007; the West Bank has largely shied away from large-scale confrontations. For decades Mahmoud Abbas, the PA's president, has favoured negotiations to liberate Palestine, rejecting violent resistance. Western and Arab governments now pin their hopes for Gaza's future on him and the PA.

Yet the Palestinian government has rarely looked weaker. It faces three major threats. Jewish extremists have moved

from Israel's political fringe into the heart of Binyamin Netanyahu's government, bent on ending the PA's rule in the West Bank and annexing the land for Israel. Second, Hamas poses a growing challenge. The Islamists' success in puncturing Israel's defences on October 7th has reinvigorated Palestinians' belief in the armed struggle. Third, battles within the PA over who will succeed Mr Abbas, who is 88, along with its inefficiency and corruption, have further undermined it. The gulf between the authority's capabilities and what the world hopes for it is vast.

Successive Israeli governments have sought to erode the PA. But some of the Israeli prime minister's allies want to get rid of it altogether. Even before October 7th, the Israeli government had almost doubled the number of Israeli army battalions in the West Bank to 25, leaving just four on the border with Gaza. Since then, the far-right national-security minister, Itamar Ben-Gvir, has created and armed community security squads, in effect Jewish settler militias. Violence by settlers has reached unprecedented levels, diplomats say, with attacks up from an average of one a day in 2021 to four a day last year.

Meanwhile Israeli forces are tightening the noose around areas supposed to be run by the PA. New checkpoints choke Palestinian cities. Thousands have been arrested and held for months without charge.

Some have been filmed being stripped naked and urinated on. Israeli soldiers and settlers have killed around 350 Palestinians in the West Bank since Hamas's attack—the bloodiest period for decades.

Mr Netanyahu's government is throttling the PA financially, too. The PA relies on Israel to collect import taxes on its behalf, which represents 64% of the authority's total revenue. Since October Bezalal Smotrich, the far-right finance minister, has withheld much of this cash; after calls from President Joe Biden, he agreed to transfer some into an escrow account in Norway. Without it, the PA cannot pay its workers. Israel has banned Palestinian labourers from entering Israel. Shops are shut. Banks say they may go bust. Predictions of the PA's collapse are old. But never have proponents of Israel's territorial expansion had such a grip on Israeli policy.

Beset on all sides

Hamas poses the second big threat to the PA. For years the Islamists have sought to undermine it. Hamas's preachers have denounced the PA's co-operation with Israeli security forces. It has egged on new militias in the West Bank, such as the Lions' Den, and older ones like Islamic Jihad. A recent study led by Khalil Shikaki of the Palestinian Centre for Policy and Survey Research suggested that 82% of people in the West Bank backed Hamas's decision to attack Israel. Worryingly, only 5% of West Bankers recognised that it had committed atrocities against civilians on October 7th. "For years we watched Abu Mazen [as Mr Abbas is known] begging Israel to stop confiscating land and negotiate, but no one listened to him," says Qassem Barghouti, a son of an imprisoned leader of Fatah, Mr Abbas's nationalist party. "The world only notices when Israel is also in pain."

The PA's inefficiency has boosted such criticism. Even in Gaza Mr Abbas's ministries are responsible for much of the health and education systems. The PA still pays 19,000 security people there. But its masters in Ramallah, its West Bank headquarters, show little appetite for alleviating Gaza's woes. Some of them even seem to see an upside in Israel's efforts to eradicate their rivals in Hamas.

The rot starts at the top. Polls show around 90% of Palestinians in the West Bank want Mr Abbas gone. He rarely tours his realm. When he made an appearance in Jenin last year, he was heckled. "Hamas may be underground," says Muhammad Daraghmeh, a Palestinian journalist, "but it's the PA which feels like it's in hiding." The ailing president dissolved parliament in 2007; 19 years into a four-year term, he has repeatedly cancelled elections. He refuses to appoint a deputy.

Mr Abbas's courtiers are almost as ancient and self-serving as he is. His advisers ►►



On the road to renewal?

are keen to grab his crown yet share his determination to keep challengers at bay. Outside Ramallah the PA has largely ceded power to the Tanzim, a new generation of activists in Fatah, the party headed by Mr Abbas. At night younger hotheads make tempting recruits for Hamas.

When the dust of the Gaza war settles, could the PA step back in? Despite its miseries, the West Bank under the PA has been far less horrible than Gaza. Ramallah, once a sleepy town, has fancy residential districts, restaurants, museums and a techno park for budding entrepreneurs.

Some Western and Arab governments once again want to beef up the PA into a government that could pave the way to a Palestinian state, finally ending the conflict with Israel. Almost 70% of West Bankers want to reform the PA, not dissolve it,

according to a poll last month by the Institute for Social and Economic Progress, a think-tank in Ramallah. Over half still want to negotiate a two-state solution rather than have a single state with equal rights for Jews and Arabs together.

Such attitudes suggest that West Bankers feel the PA may be worth saving. Most seem wise to the risks of violence. "Don't give the Jews the opportunity to destroy what we've built," an ex-Tanzim fighter who now runs a cultural centre tells young men in Nablus. Even West Bankers who cheer Hamas have mostly ignored Gazan pleas to join their war. In 1998, when an earlier round of talks was faltering, Mr Shikaki wrote: "Peace now or Hamas later." Despite its flaws, the PA still looks like the most plausible basis for a Palestinian state that might coexist peacefully with Israel. ■

(which was later increased to 15 months) for a similar charge, which he has said was trumped up for political reasons.

Sexual-abuse charges are a powerful alternative, perhaps because journalists, diplomats and NGOs are rightly wary of simply dismissing them as fabricated because of the harm this can cause victims. Christopher Kayumba, a former journalist, launched a new political party in Rwanda in 2021. Shortly afterwards he was accused of rape and later arrested and convicted. In Niger Hama Amadou, a long-serving opposition leader, was convicted of child trafficking in 2017. This blocked him from running in presidential elections in 2020.

Electoral lawfare can sometimes seem blatant. In Senegal Mr Sonko was convicted of defamation as a result a case brought by the tourism minister, Mame Mbaye Niang, after Mr Sonko had repeated previously reported claims that Mr Niang had embezzled money. Mr Niang says that he sued to clear his name, yet after he won, which ought to have served this purpose, he appealed to the court to impose a tougher sentence on Mr Sonko. Perhaps it was entirely coincidental that the initial two-month sentence (suspended) was not harsh enough to disqualify Mr Sonko from running—or that after the sentence was increased to six months after an appeal, Mr Niang's lawyer gloated: "If this decision is final, Ousmane Sonko is definitively excluded from the race."

Elsewhere, perhaps because convictions risk sparking protests, governments use the courts to harass candidates and hamper their campaigns. Uganda's leading opposition figure, Robert Kyagulanyi, known as Bobi Wine, was charged with treason in 2018 in a case that has dragged on for years. In Egypt the authorities arrested backers and relatives of Ahmed al-Tantawy, an opposition leader, ahead of the presidential poll last year.

Such intimidation can sometimes extend abroad. Succès Masra, long Chad's leading opposition politician, was pursued in exile by an international arrest warrant accusing him of insurrection. The pressure told: late last year Mr Masra was allowed to return to Chad but was fully co-opted into the regime as prime minister under President Mahamat Idriss Déby.

If it is hard to build a case involving serious crimes, governments sometimes turn to more mundane legal matters. Questions over residency were enough to rule out the candidacy of Saviour Kasukuwere, a challenger in Zimbabwe's presidential elections last year. Where dual citizenship disqualifies candidates, governments sometimes claim that opposition candidates have not renounced their second nationality in time. In Senegal the Constitutional Council barred another major presidential candidate, Karim Wade, on

Democracy in Africa

Putting the rule in rule of law

DAKAR

To nobble a political rival in Africa, use the courts

"THE MOST dangerous precedent in the political history of Senegal," was how El Malick Ndiaye, a spokesman for Senegal's main opposition party, described the decision. If that sounds like hyperbole, it should not. On January 20th Senegal's Constitutional Council ruled that Ousmane Sonko, an opposition leader, could not stand in the presidential election in February because of a conviction for defamation.

Mr Sonko, who is now in jail and whose party has been dissolved, has also been convicted of "corruption of youth", which is defined as immoral behaviour with someone under the age of 21. He says these and fresh charges, including fomenting insurrection, are politically motivated. The government disagrees.

The disqualification of Mr Sonko (pictured) and other serious contenders is a grim sign for Senegalese democracy, which was once seen as a bright light in a troubled region. It is also part of a wider trend in which a number of ruling parties in Africa appear to be using the courts to restrict political competition to cling to power, often by bringing criminal charges against opposition candidates. This is eroding faith in democracy and in the courts.

Politicians in Africa, like those elsewhere, tend to be a mix of saints, sinners and everything in between. Yet one could be forgiven for thinking opposition leaders are particularly dastardly, given how frequently they are accused of breaking the law. The charges brought against them



Out of the running

tend to be serious. Terrorism is a popular one. In Benin an opposition leader, Reckya Madougou, has been sentenced to 20 years in prison—by a special court for economic crime and terrorism established by the president—on charges of financing it. In Tanzania Freeman Mbowe, the main opposition leader, spent seven months in prison on terrorism charges, which were dropped in 2022. In Tunisia Rached Ghannouchi, the leader of the opposition, was sentenced in absentia to a year in prison

TELL THEM I MADE IT

If you met 16-year-old Gulafsa as she appears in this picture – wearing a dress she made herself – you would encounter a bubbly high school student with a dream to be a fashion designer or a doctor. But Gulafsa almost missed her chance to go to school. When she was just 11 years old, GoodWeave found her working in a carpet factory in India. GoodWeave helped transition Gulafsa back to school and is providing support to continue her education.

Gulafsa can now make her dreams come true. You can help other children make it in life too. Look for the GoodWeave® label on carpet and home textile products – your best assurance no child labor was used.



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Design: tabakdesign.com
Photo: The Studio_M – thestudiom.com

▶ this basis even though it did not dispute that he is no longer French. (He and another leading candidate were also prevented from running in the presidential election in 2019 because of other legal troubles.) Though Amadou Ba, the ruling-party candidate, will not be running unopposed, he stands a far better chance of winning now.

Although they are happy to wield the law against opponents, governments seem equally willing to ignore it when it does not serve their purposes. In Senegal, for instance, a court had previously ruled that Mr Sonko should be kept on the electoral roll, which entitled him to receive the forms needed to submit his candidacy to the Constitutional Council. But the agency for election logistics, under the interior ministry, still refused to give him the forms. "They were clearly in breach [of the law]," says Ousmane Diallo in the Senegal office of Amnesty International, a rights watchdog. When the electoral commission also said that Mr Sonko should be given the forms, the government suddenly replaced all the electoral commissioners.

Wrap them in red tape

Similarly, the treasury refused to provide a receipt for the 30M CFA francs (\$49,800) he deposited as part of his candidacy application, though, according to his lawyers, it cashed the cheque. The missing receipt was the initial reason given by the Constitutional Council for barring him. After Mr Sonko appealed this decision, it cited his defamation conviction instead.

Mr Sonko's deputy has been permitted to run, but he has been in jail since April for criticising officials. Human Rights Watch reckons that 1,000 opposition members and activists have been arrested, too, since March 2021. It says that state prosecutors and the courts misclassify offences so as to systematically deny bail and keep them in prolonged pre-trial detention.

Lawfare does not necessarily stop after the election. Last year in Zimbabwe the opposition Citizens Coalition for Change (CCC) won enough seats in parliament to deny the ruling Zanu-PF the two-thirds majority needed to change the constitution. Yet within months a hitherto unknown figure had emerged, claiming to be the party's interim general-secretary and declaring that some of its MPs were no longer party members and should be recalled. Nelson Chamisa, the leader of the CCC, said he was a fake, but the speaker of parliament threw out the MPs anyway, triggering by-elections. The courts have since barred the deposed MPs from standing in them.

Yet electoral lawfare is a dangerous game. Blocking the opposition encourages radicalisation. When the next coup strikes, many of the people rushing out to celebrate may well be supporters of a dubiously convicted opposition leader. ■

Holy split

Russia's plan to seduce Christians

KISII

The Ukraine war has split Africa's Orthodox church

ON A HILLSIDE in Kisii, western Kenya, the congregation of St Peter's church convened for a special mass on January 7th. "In the Russian calendar...today is Christmas Day," says Hezekiah Johnson Otara, the priest. To mark the occasion, Mr Otara picked four girls from the 70-odd worshippers and promised to pay their school fees for the coming year.

Mr Otara is one of scores of African priests who have switched to Russia's branch of Orthodox Christianity as the fallout from the Ukraine war has unexpected consequences across the world. He joined the Patriarchal Exarchate of Africa, which claims jurisdiction over more than 200 parishes in 25 African countries and plans to build schools, hospitals and cathedrals, including a huge "spiritual centre" opposite the presidential palace in Uganda.

One possible reason for the Russian church's African adventure is to do down the Patriarchate of Alexandria, a branch of the Greek Orthodox Church. The Russian Orthodox Church considers all Ukrainian Orthodox churches to be under its authority. But in 2019 the Greek Orthodox patriarchs of Constantinople and then Alexandria recognised the independence of the newly formed Orthodox Church of Ukraine. Patriarch Kirill, the Russian church's head, broke off relations with Alexandria and Constantinople, damning their support for Ukrainian "schismatics".



Geopolitical orthodoxy

In revenge the Russians are now muscling in on the Greek Orthodox Church, which claims exclusive jurisdiction over Africa and accuses the Russian church of trying to lure its priests away with money. "They want to humiliate us because of our connection with Ukraine," says Archbishop Makarios of Nairobi.

Most of the Russian church's priests in Africa, including Mr Otara, are Greek-trained clerics who have switched teams. In Kenya alone at least 90 have defected—nearly half the total number of African priests whose loyalty the Russian church now claims to command. Asked why he joined the Russians, Mr Otara cites the "schism" in Ukraine. He does not deny, however, that the move also brought some rather worldly benefits: they have doubled his salary, paid for his son to study nursing in Moscow and contributed money to the orphanage he also runs.

Russia may have more than ecclesiastical goals in mind. "Punishing the Alexandrian Patriarchate was just an excuse," says Cyril Hovorun, a Ukrainian theologian. He believes the Russian church waded into Africa to spread propaganda and stoke hostility towards the West. The idea is less risible than it may at first seem. The Russian church's favourite subject—"traditional values" and how the decadent West wants to pervert them—aligns with conservative religious views in Africa, where clerics tend to oppose homosexuality.

Yet the Russian foray seems half-hearted and poorly financed. Most of its churches are shacks like the one in Mr Otara's parish. It appears to have built no schools or hospitals. Even evidence of a well-organised propaganda campaign is thin on the ground. The Russians might pay more, but many priests are still too busy making ends meet to rail against the West. "I normally do some side-hustling," explains one of the church's priests in western Kenya, who runs a shop in his spare time. "It's for survival, and for my children."

Many of the Russian church's problems can be blamed on erratic leadership. Leonid Gorbachev, a former Bishop of Klin, was initially appointed to run the African outpost. Mr Hovorun, who knew him as a student in Athens during the early 2000s, says he was always more interested in "Russian [military] cannons than the canons of the church". Mr Gorbachev later became a vocal supporter of Yevgeny Prigozhin, the late leader of the Wagner mercenary group. He was sacked shortly after Prigozhin's failed mutiny last summer.

The defenestration has thrown Russia's African church into disarray. Its priests say they are facing funding cuts. Projects have been put on hold. Mr Hovorun believes the enterprise is winding down. Even if that is wishful thinking, Russia's holy adventure looks more quixotic than menacing. ■



Italy

So far, so good

ROME

Giorgia Meloni has had a good first 15 months in office. But problems are bubbling up

AT THE START of a year in which she will face her first real test of popular opinion at the European Parliament elections in June, Giorgia Meloni will be hoping for some cheer from growth figures out next week. She is unlikely to get any. The last reckoning showed the economy had grown by a bare 0.1% in the 12 months since Italy's hard-right prime minister took office in October 2022. Nicola Nobile of Oxford Economics, a forecasting group, says quarter-on-quarter growth in the last three months of 2023 may even have turned negative.

No blame has so far attached to Ms Meloni's stewardship. Nor should it yet. The economy was hit badly by the pandemic, and its recovery seemed sure to peter out. More recently it has faced new difficulties, notably from the energy crisis caused by Russia's invasion of Ukraine. But the lack of growth is one of two clouds in an otherwise largely clear sky. The second is a surge in the irregular immigration that Ms Meloni's right-wing coalition is bent on curbing. The number of arrivals from the Medi-

terranean rose to almost 160,000 last year, a 50% increase on 2022 and the highest figure since the peak year of 2016. The government is hoping to divert some boats to holding centres in Albania. But the plan has run into legal challenges there.

Otherwise Ms Meloni is "increasingly in command of the scene", says Lorenzo Castellani, who teaches politics at LUISS, a university in Rome. Her coalition has a comfortable majority and remains united, despite squabbles. Recent polls give the prime minister's Brothers of Italy (FdI) party almost 29%, compared with only 9% for

the Northern League led by Matteo Salvini and 7% for Forza Italia, bereft of its founder, Silvio Berlusconi, who died last June. Efforts by Mr Salvini to claw back support lost to the Brothers by adopting an increasingly hardline stance have not so far given the League better ratings. The opposition is split between the centre-left Democratic Party (PD) and the smaller and populist Five Star Movement. Polls suggest Elly Schlein of the PD is the least popular of Italy's main party leaders.

Relations with Italy's NATO allies are good. Italy has given enthusiastic backing, and arms, to Ukraine and rather more muted support to Israel. It has also kept Brussels happy enough for the European Commission to continue providing regular dollops of the €194bn (\$211bn) allocated to Italy from the EU's covid-19 recovery fund—by far the most to any member state. But banking cash is one thing, spending it another. Concern over Italy's ability to disburse its windfall is growing. An investigation by Openpolis, an NGO in Rome that promotes transparency, shows that only €2.5bn was actually spent in 2023.

The expected stimulus to the economy when the money does eventually hit its mark is a big reason why no Italian debt has been sold off, despite rising interest rates and a deficit that has ballooned since 2019. Another is that the European Central Bank (ECB) made clear in June 2022 that it would not tolerate a much wider spread be- ▶▶

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▶ between Italian interest rates and those of Germany, the bloc's benchmark. But the ECB, like the commission, expects continued structural reforms in exchange for its support. It is far from clear that Ms Meloni's government is keen to make them.

One of the biggest obstacles to enterprise—and to foreign direct investment—is the delay businesses encounter in resolving disputes and recovering debts. Marta Cartabia, justice minister in the previous administration of Mario Draghi, introduced procedural changes and a programme of digitisation, and hired some 8,500 junior lawyers as clerks. The time it takes to resolve a civil case has fallen by almost 20%. As a result, the backlog is down by more than a third.

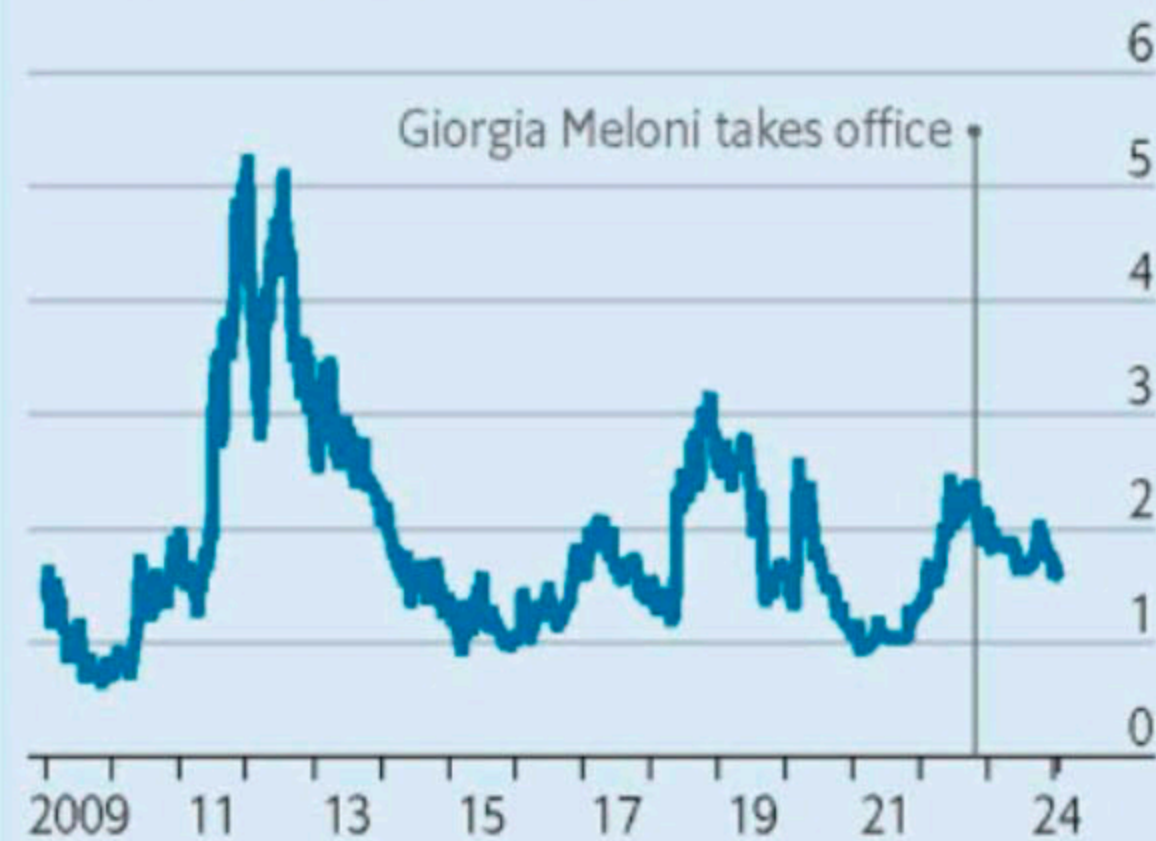
The current government has stuck to those changes, but its own contribution to speeding up not only the courts but also the use of the EU's largesse is controversial. A bill before parliament would abolish the crime of abuse of office. One of its aims is laudable: to do away with the reluctance of officials to sign off on projects because they fear inadvertently falling foul of the law by, say, awarding a contract to a firm that later turns out to be a mafia front. But in a country permeated by the influence of organised crime, the bill has prompted squeals of protest from lawyers and NGOs. It has drawn criticism from Brussels, too.

Liberalisation of the economy is also problematic. That is nothing new. Every conservative Italian government for the past 30 years has balked at defying the vested interests that would suffer from deregulation. The League in particular has fought tooth and nail to shelter Italy's small, often family-run, businesses from competition. But in the case of Ms Meloni's government, there is a new element: her own party is inspired by an economic philosophy that is protectionist, corporatist, statist and critical of free markets.

Ministers have repeatedly intervened, or tried to intervene, in the operation of markets. They have tried to limit surge pricing on some air routes and to slap a windfall tax on the banks' extra profits from inflation. They also plan to skew corporate governance in a way that would diminish the influence of foreign direct investors. No privatisations are in the offing, though Ms Meloni insisted on January 22nd that the treasury could raise €20bn within three years through part-privatisations that did not endanger state control. Nor has there been any serious move towards realising the state's vast real-estate assets. All of which poses the question of how the government, which passed an expansionary budget for 2024, intends to reduce—or at least contain—its gross debt stock of around 140% of GDP. This week the OECD warned that Italy would need to cut spending, raise taxes, or both.

Keeping it down

Italy, ten-year government-bond spreads over German bunds, percentage points



Source: LSEG Workspace

Of all the countries in Europe, Italy is for once among those prompting least concern. But its government's biggest challenges mostly lie in the future. It has to find a way to curb unauthorised immigration if it is to appease its voters, and spend the recovery money faster if it is to satisfy Brussels. Above all, it needs a strategy for growth that goes beyond just throwing EU cash at the economy. "If we cannot lift the growth rate," warns Francesco Giavazzi, who was Mr Draghi's economic adviser, "we are in trouble." ■

German nationality

Fresh Bürger

BERLIN

Huge protests against xenophobia follow a new citizenship law

GERMANY'S DEBATE over migration sometimes seems divorced from reality. The country's low birth rate and shrinking workforce imply a pressing need to import manpower. Yet much political talk is concerned with how to keep immigrants out. The anti-immigration right is surging in opinion polls. Even otherwise liberal folk are increasingly prone to say that "certain kinds" of immigrants are alien to the *Leitkultur*, a fuzzy concept of Germanness.

Yet the past week has seen a turn. Earlier this month German media exposed the proceedings of a recent private conclave of hard-right politicians at a posh hotel near Berlin, where participants discussed expelling millions of aliens. That scandal woke up the left, which has organised a series of big "anti-fascist" demonstrations across the country, numbering over a million people during a weekend of protests in scores of towns on January 20th-21st.

Meanwhile, the governing centre-left coalition has injected some sense into the immigration debate, passing two immigra-

tion bills in the Bundestag. The first, pleasing to conservatives, will make it easier to expel asylum-seekers with dubious cases, whose numbers have soared since the end of the pandemic. The second, more significant law will make it easier for legitimate immigrants to gain German nationality.

An extraordinary 13.4m of Germany's 84m residents do not hold citizenship. More than 5m of these have lived in the country longer than ten years. In some cities the proportion is far higher: 45% of the population of Offenbach, a big satellite of Frankfurt, are foreigners, as well as a third of Munich's and a quarter of Berlin's. This number has shot up in the past decade, partly because Germany has failed to naturalise those already there.

Germany's "naturalisation rate"—the percentage of resident foreigners granted nationality every year—was just 1.2% in 2021, well behind the European average of 2.2%. Sweden did far better at 10%. The number Germany naturalised rose from 130,000 in 2021 to 168,000 in 2022, the highest in two decades. But the backlog still grew, because of a range of obstacles: restrictions on dual nationality, long residency requirements, tough tests to prove language skills and gainful employment, and a clogged bureaucracy.

On average, Turkish immigrants who acquire German citizenship have already been in the country for 24 years. Yet nearly half of Germany's 3m people of Turkish background—easily the largest immigrant group—remain non-citizens. Among the hundreds of thousands of Turkish *Gastarbeiter* (guest workers) who arrived in the 1960s and 1970s, many assumed they would return to Turkey, so did not apply to become German.

The new law should help tackle the backlog. It shortens the residency requirement for most applicants from eight to five years. In special cases the wait can now be as short as three. Children who are born in Germany with at least one parent who has lived in Germany for five years will automatically become citizens. Dual citizenship is now generally allowed. New citizens will have to promise to uphold democratic freedoms and accept Germany's "special historical responsibility" for Nazism and the need to protect Jewish life.

Some 5m resident non-Germans are EU citizens who already enjoy nearly all the rights of natives, so may not see the need to add another nationality. Of the remaining 8m foreigners, including around 1m Ukrainian refugees, it is unclear how many will rush for a German passport.

Some estimates suggest that 2m or more Germans could be added to electoral rolls in the next few years. The far-right Alternative for Germany party attacked the new law as a "coup d'état through a forced restructuring of voter demography". ■

The Netherlands

Constitutional horse-trading

AMSTERDAM

Will Geert Wilders respect the rule of law if he becomes prime minister?

FOR MOST European parties, forgoing an effort to ban the Koran would not count as a big concession. But Geert Wilders, whose Party for Freedom (PVV) came first in the Netherlands' election last November with 24% of the vote, wants it to be seen that way. Mr Wilders, a veteran among Europe's rising hard-right populists, has a history of bashing Islam, the EU and the courts. He is negotiating to form a coalition with three other parties, who worry about his commitment to the constitution. Mr Wilders now says he wants to be a prime minister "for all Dutch" regardless of religion. To prove it the PVV on January 8th withdrew three longstanding proposals for unconstitutional laws, including a ban on Muslim religious expression.

It was an empty gesture: the laws had no chance of passing. But there are signs that the coalition talks, held in secrecy, are progressing. Mr Wilders is negotiating with the centre-right Liberals (VVD), who have led the country for the past 13 years, and with two upstart parties on the right: the New Social Contract (NSC) and the smaller Farmer-Citizen Movement. The VVD's leader, Dilan Yesilgoz, has said her party will not join a PVV-led government but could back one in a confidence-and-supply deal. Pieter Omtzigt, who founded the NSC last summer, is a self-proclaimed stickler for the rule of law.

The first phase of the negotiations is supposed to establish guarantees that Mr Wilders will respect the constitution. The Netherlands is unlikely to go the way of Hungary or Poland, where hard-right populists took over the courts and crippled democracy. The Dutch judiciary and civil service are strong and independent. With at least four parties needed for a majority, the PVV would surely struggle to make any earth-shaking changes.

But the country has vulnerabilities. Its courts cannot strike down laws for conflicting with the constitution (curiously, the constitution bars them from doing so). The Council of Europe has called this out, and Mr Omtzigt wants to change it. A big scandal under the previous government over false accusations of child-benefits fraud showed that Dutch bureaucracies can ride roughshod over citizens' rights, which in populist hands could be scary. Dutch should be wary of "leaning back and arguing that the Netherlands will be different," says Ronald Tinnevelt, a law profes-

UNA ISOLA FELICE, a happy island, is how Pope Paul VI called Austria in 1971 during a visit of the country's then president to the Vatican. In later years the pope's dictum became *Die Insel der Seligen*, the island of the blessed, to describe the picturesque Alpine republic that is garlanded with a generous welfare state, the Habsburg empire's rich cultural heritage, *Kaiserschmarrn* and other scrumptious foods, and some of the finest classical music in the world.

The inexorable rise of Austria's far-right Freedom Party which, the polls say, is now the country's strongest party by a long chalk, suggests that a sizeable chunk of Austrians fear that their way of life, prosperity and safety are under threat. Yet Austrians remain the most smugly satisfied with life in the Euro-



Sehr gemütlich

sor at the Radboud University in Nijmegen.

One common desire among the four parties is limiting immigration. But this week the VVD split over how to handle refugees. Against Ms Yesilgoz's wishes, the party's senators helped to pass a law that forces all municipalities to share the unpopular burden of housing asylum-seekers. The Netherlands' only reception centre for them is overflowing; getting conservative towns to accept any has proved so hard that it brought down the previous government. The issue pits the VVD's anti-immigrant wing, which is eager to govern with the PVV, against its centrists, who are not. All of the PVV's potential allies face such ten-

Happy Austrians, glum Germans

The Viennese are still waltzing

BERLIN

But they fret that the music may soon be stopping

pean Union (EU), whereas their big German neighbours are the second-saddest, according to a newly published survey by Eurostat, the EU's statistics agency. Austrians rated their satisfaction with life in 2022 on average at 7.9 on a scale of one to ten, compared with just 6.5 for their big German neighbours and 5.6 for Bulgarians, the gloomiest of the lot. Poles, Romanians and Finns, with a score of 7.7, are joint second-jolliest after Austria.

Austrians and Germans face the same big challenges, including the cost-of-living crisis, an ageing population, illegal immigration and increasing social polarisation. Yet Austria is doing better on several counts that lift the national mood. Its national railways are efficient and affordable compared with the overcrowded, chronically unpunctual disaster that is Deutsche Bahn. Big chunks of Austria's public administration, including its health service, have been digitised, while Germany is far behind. Austria's economy is forecast to grow this year, whereas Germany's is forecast to remain in recession. And in November Austria beat Germany at football.

Vienna is a symbol of the country's post-war rebirth as a prosperous, welcoming place, whereas Berlin is edgier and dirtier than the rest of Germany. In an annual index by the Economist Intelligence Unit, a sister company of *The Economist*, Vienna retained its crown in 2023 as the world's most liveable city. Ranking 173 of them in a range of categories, including health care, culture, environment, education and infrastructure, the index gave Vienna nearly full marks, with 98.4 out of 100. No German city made the top ten. Berlin shared 17th place with Frankfurt.

sions between populism and pragmatism.

Meanwhile, the country has a caretaker government under Mark Rutte, the outgoing prime minister. Ministers who get better job offers are leaving one by one. On January 24th Mr Wilders posted on X, formerly Twitter, denouncing the VVD for the "horrible law" on asylum housing—not a promising sign of collegiality or respect for the rule of law. Dutch Muslims, too, have their doubts. "You can't say one thing for 20 years and then suddenly claim to want something else," says Mustafa Hamurcu, chairman of the Dutch branch of Milli Gorus, a Turkish Islamic organisation. "The Muslim community doesn't believe it." ■

Tech wars

Learning from Japan

Europe is discovering how difficult it is to improve its economic security

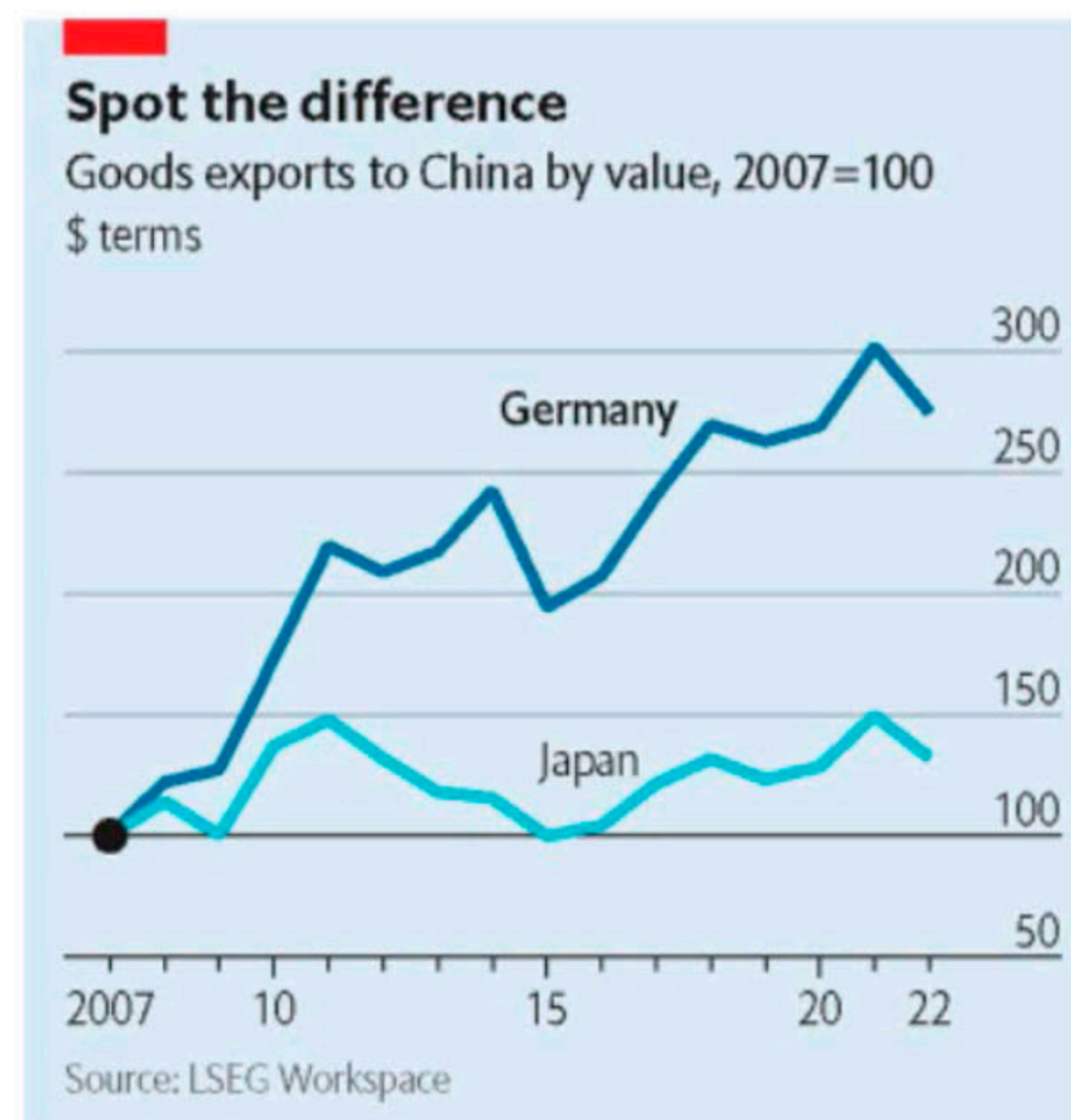
AS THE CHINESE proverb almost says, a journey of a thousand miles begins with a single white paper. That, at least, is how a lot of EU policy is made. On January 24th the European Commission published a series of such papers and proposals on how to monitor and restrict exports of sensitive technology and investment in these sectors abroad (read: China). It also presented legislation on screening investment by foreign firms in Europe.

Those hoping for sweeping change will be disappointed. The package is a lot less ambitious than an outline strategy published last June had suggested. And it hardly matches America's punchiness or a joint statement by President Joe Biden and Ursula von der Leyen, the commission president, in March 2023, which envisaged the EU and America working hand-in-hand. That is perhaps because doing things bluntly and expensively, American-style, may be the wrong yardstick for the EU. It might be more realistic for it to emulate Japan's carefully thought-through approach.

The EU was set up as a rules-based bloc to foster open trade and investment to overcome the distortions of internal politics. Now it is asked to play a global role through restricting trade and investment, in the name of continental security, which is not its remit. In short, the EU is ill set up to do this well. It also, much like Japan, wants to keep the global trade order intact.

The first step is to understand where Europe's true strategic interests lie. For a while the EU was simply dragged into American efforts to counter China. The Netherlands had the most forceful such experience, after America leaned heavily on it to ban exports of advanced lithography machines by ASML, a Dutch tech company. Each EU country is now reviewing its own vulnerabilities. That is a start.

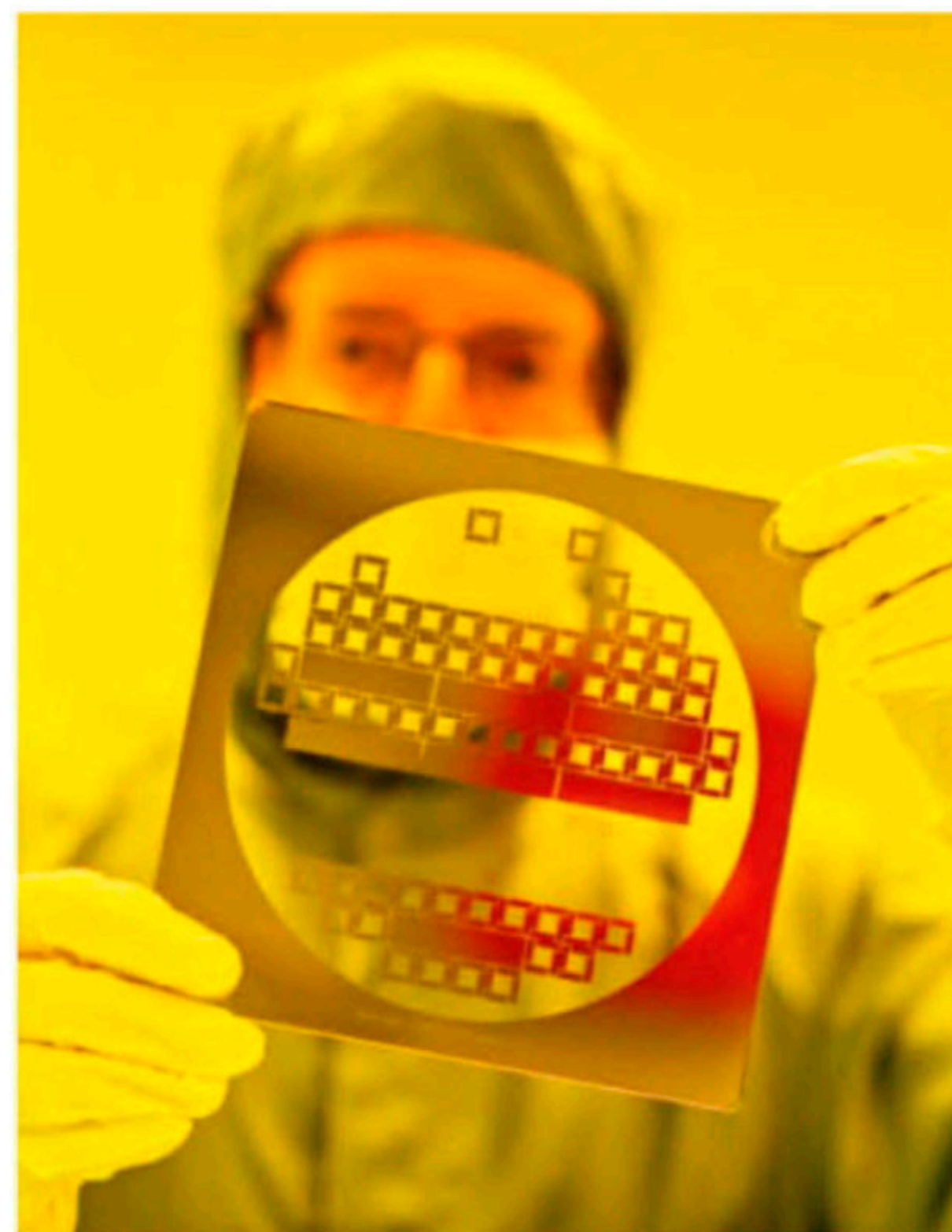
But EU countries have quickly discovered how hard that is. Many member states are simply too small to have the analytical capabilities to do it thoroughly. "On Russian sanctions, we voted with the Germans in the hope that they had done the analysis," says the representative of one midsized member state. The various risk assessments that the commission in October recommended that member states conduct are still going on. In February the commission plans to report on security risks for the most critical four tech industries: advanced semiconductors, AI, quan-



tum computing and biotech. Reports on other risks—the resilience of supply chains, the safety of critical infrastructure, and exposure to economic coercion—and more sectors, such as energy technologies and advanced materials, will follow.

Once those are all done, the next step is to find common ground among 27 countries with very different views. Autocratic Hungary is increasingly siding with Russia and China inside the bloc. Large member states have little trust in the commission itself. In contrast, Japan's strength in economic security lies in unity of purpose, argues Mathieu Duchâtel of the Institut Montaigne, a Paris think-tank.

To find more Japan-style unity, the



The battlefield

commission wants the question of economic security to be moved to a higher political level. Take its new white paper on export controls. The commission wants to set up a high-level political co-ordination group to agree on the next steps. In 2021 Japan went a step further, raising export controls to a ministerial level by creating a cabinet minister for economic security. "What we really need in Europe is a Barnier of economic security," says Tobias Gehrke of the European Council on Foreign Relations, a Brussels think-tank. That refers to Michel Barnier, the French politician who negotiated Brexit on behalf of the EU member states. But so far, the members are unwilling to pool that much sovereignty.

In part, that is because such work requires a ton of sensitive economic data that countries are unwilling to share. The EU institutions hold little of it, and national business ministries are as used to competing against one another as they are to co-operating, say insiders. In Japan, by contrast, information flows between companies and the government are a constant feature, both formally and informally. At METI, Japan's ministry of trade and industry, staff really understand the companies they are working with, say observers.

How far the intermingling between state and firms will go in Europe is uncertain. Japan is actively taking stakes in strategically important firms and delisting them from stock markets; an example is JSR, a materials firm that supplies semiconductor producers. Such an approach would remain a last resort in the EU.

A farsighted example

Japan has also identified goods that are essential to the survival of its people, such as medical supplies, and pays firms that are willing to diversify their imports. A key part of its strategy, so far underdeveloped in Europe, is to make itself indispensable to the world, which requires limited industrial policy aimed at a few key high-tech sectors, analysts argue.

Europe also needs to make faster progress on diversification through trade agreements. Japan is party to a multitude of recent free-trade agreements, which cover more than 80% of its trade. The country's exports to China have not grown as much as, say, Germany's (see chart). The EU has made some progress on trade talks, but its agreement with Mercosur in South America is still not ratified, and big deals with India and Indonesia are stuck.

Maybe the comparison with Japan is unfair. "We have had early experience with economic coercion and understand the difficulties," says Kazuto Suzuki from the Institute of Geoeconomics in Tokyo. "Japan did economic security before it became a buzzword." Europe has to catch up, one white paper at a time. ■

Charlemagne | The hour of Europe chimes again

The EU's help to Ukraine is a far cry from its rhetoric



AS YUGOSLAVIA THREATENED to descend into bloodshed in 1991, its neighbours flew in to offer help. “This is the hour of Europe,” declared Jacques Poos, the Luxembourgish foreign minister dispatched to Belgrade by the European institutions in Brussels to stop all-out war from erupting. It was not. Savage fighting ensued, ultimately brought to an end mostly by America, proving Mr Poos wrong. Three decades on, the hour of Europe has come again. On February 1st, at a summit of the EU’s 27 national leaders in Brussels, politicians will emerge bleary-eyed from into-the-night talks to announce—if all goes well—a package of €50bn (\$55bn) in support of Ukraine. Amid the self-congratulation and soaring press-conference guff about standing shoulder-to-shoulder with an embattled neighbour, it will be considered impolite to note the package is to be spread out over four years and amounts to around 0.08% of the GDP of the union in that period.

As in the time of the hapless Mr Poos, a gap exists between how Europe describes the situation and the means it is putting up to tackle it. Listen to politicians and things sound dire enough. French officials describe Europe as needing to shift to a “war economy”, fully mobilised to thwart the Kremlin’s imperial ambitions. Central Europeans say Russian victory in Ukraine would lead to further wars of conquest, and justifiably worry they might be next. Such anxious tones will be familiar to veterans of other crises that have befallen the continent, whether it be covid-19, an imploding euro or the prospect of climate change. To face up to those challenges, finding money was no object. Taboos were broken to fight the pandemic, including a €750bn jointly borrowed recovery fund. Keeping up the green transition will cost over €1trn a year. And a decade ago the European Central Bank promised to do “whatever it takes” to save the single currency. When it comes to Ukraine, Europeans are content to commit a sum of money that represents a mere rounding error in their national accounts.

Is the prospect of a revanchist Russia not worse than a pandemic, even? It is not that the EU has done nothing for Ukraine: refugees have been welcomed, sanctions imposed, and Ukraine offered the prospect of joining the club. Contrast that with America, which started off by providing lots of military kit but has for now ended shipments as its own \$61bn assistance package is

caught in partisan gridlock. Nor is the €50bn to be agreed next week the only help EU members are proffering. Some countries, notably Germany, are still sending lots of military and financial aid bilaterally. Non-EU Europeans, whether from Britain or Norway, have pledged large amounts of weapons and cash too.

But the multi-year package has all but replaced fresh offers of short-term aid: this is what Ukraine will have to make do with for the moment, according to diplomats from EU countries. Europe’s purse-strings have been kept tight by three factors. One is that some politicians, notably in western Europe, may have silently been fine with Ukraine getting a trickle of money—enough for it not to lose but not to win too comprehensively either, lest that humiliate Russia. That may have been the case in the war’s early stages, but feels out of date now. Still, keeping the authorities in Kyiv on a short leash has its advantages, for example if Ukraine one day needs to be pushed towards the negotiating table.

The second is that assistance to Ukraine often comes not in the form of cash, but of military equipment. There is not much left in national armouries to send east, so shells and cannons need to be made instead. Some countries, notably France, want to ensure the weapons are manufactured in Europe (ie France, often). The aim is not for local firms to profit, though that doesn’t hurt, but for arms-making capacity to be built up as part of plans for Europe to bolster its “strategic autonomy”. Alas combining the aim of helping Ukraine with that of industrial policy has not worked well. Last spring the EU promised that it would send 1m shells to Ukraine within a year; yet by late December only 300,000 had been delivered, and few think the target realistic. Meanwhile, North Korea alone (GDP: 1/500th of the EU) has managed to send Russia over 1m shells, say South Korean spooks. Russia is closer to becoming a “war economy”, pushing defence spending to over 6% of GDP.

The third reason for Europe’s stinginess is that Ukraine has been caught in the EU’s internal wrangling. The mooted €50bn has been sourced through the bloc’s institutions in Brussels, whose annual budget is itself tiny, at just 1% or so of the 27 members’ GDP. Because the aid to Ukraine is tied to a review of overall EU spending, it has taken seven months to unblock the amount. Changes to the union budget need to be agreed unanimously, which gave undue leverage to Viktor Orban, Hungary’s prime minister and chum to the Kremlin. An expert blackmailer, he blocked the €50bn deal at a summit in December, forcing his fellow leaders back to Brussels. He may do so again, though he now has a new source of blackmail: after Turkey’s parliament signed off on Sweden’s accession to NATO on January 23rd, Hungary is the only hold-out.

Show me the money

Amid the haggling and the summitteering, some simple facts seem to have been overlooked. Europe is a rich place. It would be far worse off if Ukraine lost the war. Proper funding would help Ukraine, which faces a budget shortfall just this year of over \$40bn. A far more generous offer would be in Europe’s interest. Kaja Kallas, the Estonian prime minister, has suggested Ukraine’s allies should pony up 0.25% of their GDP per year. That is about one-third of what countries are meant to spend on development aid, and one-eighth of NATO defence-spending targets. Such an allowance, roughly triple what is on offer now, would allow the government in Kyiv to plan for victory, and for Russian defeat. Either Europeans are spewing nonsense about how tied their fates are to Ukraine’s, or they are being short-sighted. Either way, they are not putting their money where their mouths are. ■



Nuclear energy

Fission mission

The government has yet another plan for a British nuclear renaissance

BRITISH POLITICIANS like talking about nuclear power. Earlier this month the energy secretary, Claire Coutinho, trumpeted plans for “the biggest expansion of nuclear capacity in 70 years”. Ms Coutinho’s “roadmap” is the latest in a long line of such plans: one in 2022, from the then prime minister, Boris Johnson, for a “nuclear renaissance” with a reactor built each year; one in 2015 from George Osborne, a chancellor keen to woo Chinese investment; and one promoted in 2008 by Gordon Brown, another prime minister, to have eight new reactors running by 2023.

What seems to be harder is actually getting any plants built. Not one of Mr Brown’s reactors has yet materialised. In 2016 EDF, a French company, and CGN, a Chinese firm, started work on Hinkley Point C, a 3.2-gigawatt (GW)-capacity plant. The planned completion date was 2025 and the budget was £24bn (\$30.6bn) in current prices. On January 23rd EDF admitted that the plant may not be ready until 2031, and could cost up to £46bn.

When it eventually opens it will be the first new plant in Britain in more than

three decades and the second-most expensive in the world. Yet Britain needs it. As it moves towards the goal of net-zero greenhouse-gas emissions by 2050, cheap wind and solar will increasingly dominate electricity supply. But some “firm power” will be needed to ensure that demand can be met on still, and cloudy, days.

The latest strategy grapples with problems that have bedevilled nuclear policy for decades. But questions remain, particularly over finance. Britain’s nuclear capacity peaked almost 30 years ago at around 13GW—enough to supply a quarter of the country’s electricity. It has since fall-

en by half. The other reactors are ageing fast: five of the six plants in operation were due for retirement by the end of the decade (they may now be forced to keep splitting atoms a little longer).

Ms Coutinho is the latest to try to reverse this decline. Her aim is to quadruple Britain’s nuclear capacity to 24GW by 2050, with a combination of “giga-scale” reactors like Hinkley Point C and Small Modular Reactors (SMRs), a newer class which can be a sixth of the size of the big reactors, and proponents imagine them being built from components constructed off-site.

The target is sensible enough. Even with electricity demand set to increase as electric vehicles and heat pumps proliferate, meeting it might get Britain back to producing around a quarter of its power in nuclear plants by 2050. If other technologies turn out to be better at balancing the grid, less nuclear power may be needed. Or nuclear plants may be used to supply heavy industry when it is windy and supply the grid when it isn’t. Much remains uncertain—apart from the need for abundant clean power. Planning for different eventualities is wise.

The core challenge is to bring the cost of nuclear power down. That is something policymakers and the industry have focused on less than they have for wind and solar, says Guy Newey of Energy Systems Catapult, a think-tank. Long and risky construction processes mean that the cost of financing nuclear projects starts high—▶▶

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▶ and spirals when things go wrong. Nevertheless British projects are among the costliest in the world (see chart).

Some countries' safety rules are less stringent. But the biggest lesson from international experience is how beneficial repetition can be. South Korea has two designs; for each it builds 8-12 reactors in a row, says Sam Dumitriu of Britain Remade, another think-tank, enabling it to apply learning and benefit from economies of scale. France used a similar approach to build its fleet of reactors in the 1970s; its government is planning as many as 14 new ones. The United Arab Emirates is close to completing four plants that will supply a quarter of its electricity.

Britain has failed to do this. A 20-year hiatus before Hinkley Point c meant that workforce skills and supply chains had to be rebuilt. A second new-generation plant, Sizewell c in Suffolk, was planned as a replica of the first. Yet it has been hit by delays even before construction has begun. Eight years after approving the investment at Hinkley, the government has still not reached a decision on a second site. That has left firms in the supply chain sitting on their hands, says an industry insider.

Central to Britain's woes has been what Greg Clark, a former business secretary, calls its "intermittent nuclear policy". Some energy ministers have been enthusiastic; others indifferent. Politicians have also been loth to deal with the costs, whether they show up on the government's balance-sheet or in electricity bills. Mr Newey says the state's role should be to intervene to help bring overall construction costs down, and then step away.

Ms Coutinho's plan offered some grounds for optimism that costs can be reduced. It proposed a range of ways to finance future projects, including one in which costs are partly recouped during construction from electricity bills, lowering financing costs. Options for a third big

plant will be explored. SMRs will continue to be developed. All of that has cross-party support: indeed Labour claims it would go faster. That gives the industry some hope for the next parliament.

The roadmap also promises to reduce overly burdensome regulation. The French reactor design for Hinkley Point c had been used in Finland and China. To get approval in Britain EDF still had to make more than 7,000 design changes. Making better use of assessments carried out by trusted regulators in America and the EU could free up Britain's regulator to spend more time on approving novel SMR designs.

A third constraint is how slow it is to get approval for new sites, or for work on existing sites. In some cases, like Sizewell c, there is also well-organised local opposition. Big reactors have to be near the sea, but the government may reform planning to allow SMRs to be sited more flexibly. Polling for *The Economist* suggests local communities may not be as opposed to hosting a reactor as some might think.

So, once again, talk of a British nuclear renaissance does not seem entirely fanciful. But the industry has been through too many false starts to give way to unguarded optimism this time. ■

Aviation

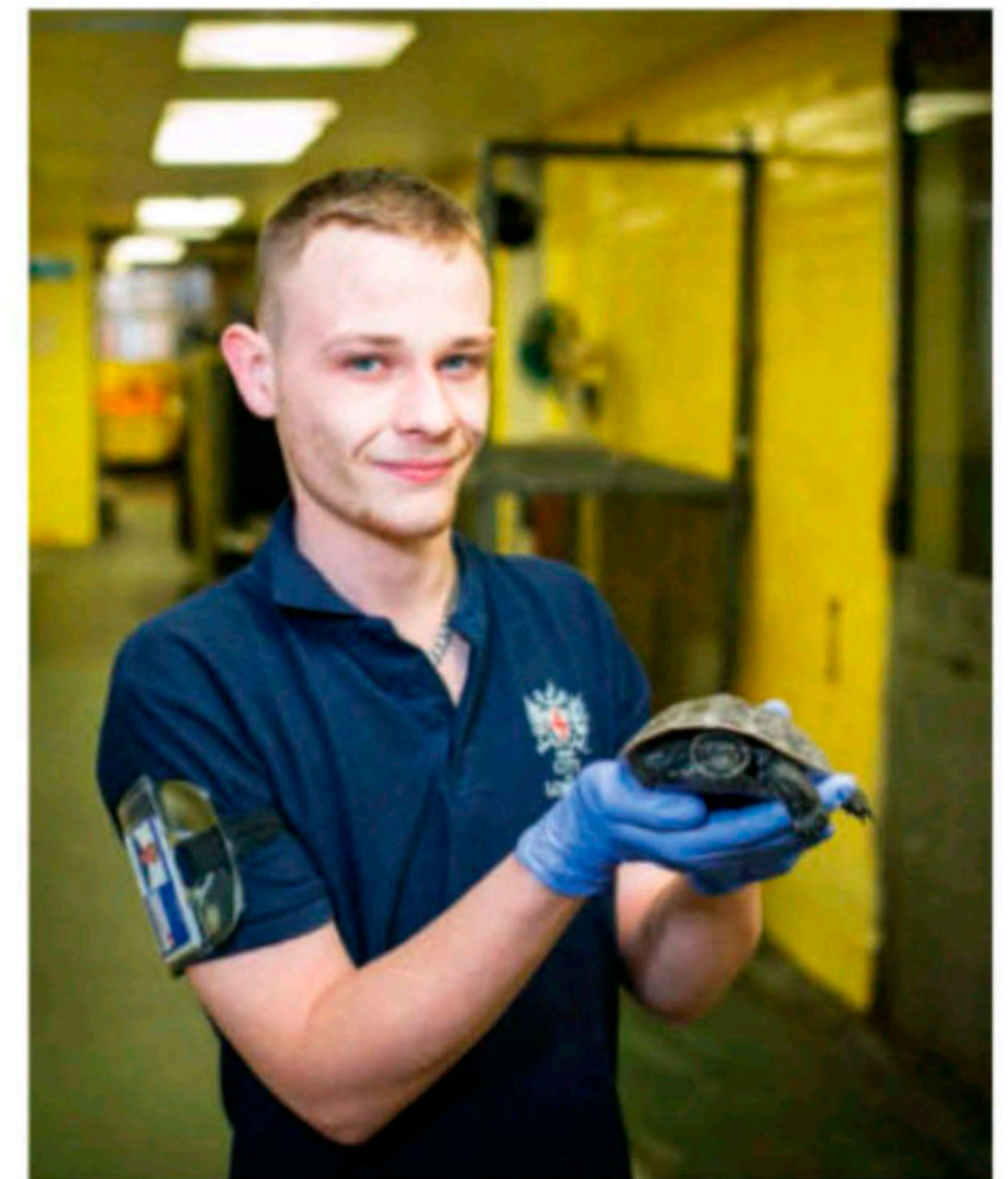
Snakes (and rhinos) on a plane

HEATHROW

Lots of humans go through Heathrow. Far more animals do

TRANSPORTING TORTOISES is tricky. You need the right crate (they like space to stretch their necks), with the right ventilation (ample), and the right base (emphatically non-slip). However, as the International Air Transport Association's animal handbook makes clear, transporting tortoises is far easier than transporting camels (they bite), zebras (they panic) or rhinos (it's essential to bolt the box). But above all, as the guide explains, the most important thing is that "This Way Up" labels are affixed to each and every crate. Because no one wants an inverted tortoise, let alone an upside-down elephant.

Heathrow is one of the world's busiest airports: in a normal year, around 80m people go through it. That is piffling, however, compared with how many animals do. In 2023, 6.5bn animals passed through, including 30m-odd butterfly pupae, 20m fish, 143,000 reptiles and amphibians, two mongooses, one panda and a gibbon. Just as with the human passengers, such animals must have their papers checked (horse passports are very particular) and,



A slow queue at immigration

where appropriate, be inspected for contraband (mules can be drugs mules too). This is done by x-ray if the animals fit through; or visual inspection if not. As one Heathrow official explains, "You don't pat down a lion."

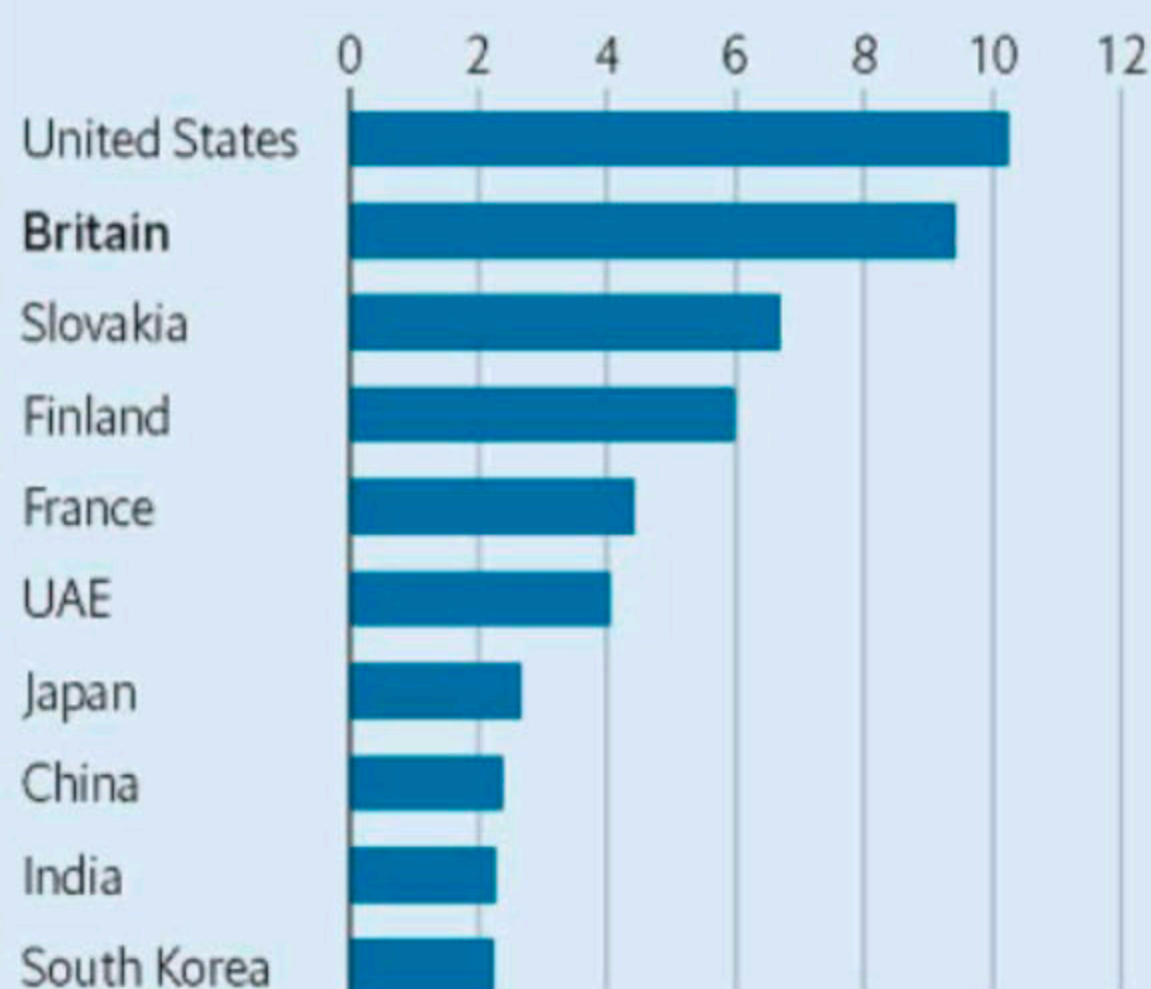
On a quiet Wednesday in January, the Heathrow Animal Reception Centre is calm. Inside the office of its director there is an alligator skull, a stuffed owl, a live python and a purposeful atmosphere. The centre is there not just to make it easier for animals to travel (dogs can stretch their legs) but harder for diseases: it was built in the mid-1970s, mainly to ensure that rabies didn't enter the country by air. The centre also helps deal with animal smuggling: if illegally transported animals are found and seized, they can, if needed, be kept here. Today, the centre is holding some fleshy tarantulas. Until recently, a crocodile had lived at Heathrow for two years. Though they tend not to talk about it: Heathrow is a bit cagey about its crocodile.

Most animals move through more snappily. Today, 500 tiny tortoises from Tashkent have arrived (they have already been slid, like boxes of scaly pebbles, through the x-ray machine). The centre offers hints that other arrivals can be more demanding: on one wall signs read "APES-DOGS-LARGE CATS"; in another room, there are cages.

Heathrow often has little warning of what will arrive, so cupboards are kept well-stocked. In one fridge, containers bear such labels as "Macaw Nuts", "Leaf Eater Primate Pellet" and "Parrot Mix" (for, rather than of). In a nearby freezer, rats and mice lie in zippered bags, tails curled under, feet frozen (the categories of "customer" and "dinner" can occasionally overlap uncomfortably). Keeping these supplies ready is, however, necessary since, if an alligator arrives unexpectedly, "you can't nip to Tesco's and buy your frozen rats." ■

Costing the splits

Nuclear power stations*, construction cost per MW, 2000-23, £m, 2023 prices
Selected countries



Source: Britain Remade

*Plants with reliable data

Bagehot | The growth voter

A young electoral coalition brings opportunities to fix a sclerotic economy



BRITISH POLITICS is on the cusp of a generational shift. To feel it, head to Milton Keynes, a city just north of London. Chris Curtis, the Labour candidate for Milton Keynes North, is relatively young at 29. So are the locals, with an average age of 37. The city as a whole is a sprightly 57. Founded by Harold Wilson's Labour government, it was dubbed a "Los Angeles in Buckinghamshire" for its grid-patterned roads and optimistic spirit. Sitting by the watersports lake where his parents met, Mr Curtis is evangelistic about the opportunities that post-war "new towns" granted working-class families like his. Britain, he says, should build more of them.

The Labour Party's electoral coalition is also young, to an extent remarkable in history. Britons once voted by class, but a decade ago they polarised around age. A skew to the young that started when Ed Miliband led the party (2010-15) has persisted, even as Sir Keir Starmer lifts the party's fortunes across the board. If today's polls were replicated at a general election, Labour would form a government with the support of 57% of voters under 24, a bigger share than any winning party since at least 1987, and possibly ever. But it would have only 30% of the over-64s, the lowest over the same period. The median Labour voter is aged 43, against 57 for the Tories, who now lag in every cohort below 65. Sir Keir boasts that Labour is the "party of working people". In age, true enough.

For a party that wants to fix Britain's sclerotic economic growth this is an opportunity. An expanding body of research suggests that older people's voting behaviour can contribute to economic stagnation, a phenomenon that Tim Vlandas of St Anthony's College, Oxford, terms "gerontonomia". Britain has an acute case: Boris Johnson's government was elected with the support of 64% of pensioners. It delivered a growth-stunting Brexit and gummed up the planning system. Out of the labour market and reliant on assets, the argument runs, older voters place less weight on growth, reward policies which keep inflation down and house prices up, and are less prone to punish economic mismanagement. On spending they favour health care and pensions over education.

Labour, by contrast, has the chance to "create a stable pro-growth electoral coalition", says Dr Vlandas. It is chasing the highest productivity gains in the G7, driven by planning reforms which will see laboratories, factories and a new electricity grid sprout at

speed. Housebuilding will be jiggled up with existing ministerial powers to reimpose building targets, intervene with recalcitrant local authorities and dismiss appeals. A new generation of new towns is promised, and a return to national planning over piecemeal development. The goal is to replace a narrow debate about spoiled views with a soaring story of reversing national decline.

Conservative ministers have toyed with these ideas for years. The difference would be Labour's freedom to execute them. Its electoral coalition will include more voters who will tolerate building, and fewer who will punish it. Labour voters are more likely than Tories to agree that they have a housing crisis in their area by a net of 29 points, and more supportive of large-scale house-building by a net of 16, according to polling for the Adam Smith Institute, a think-tank. They are also much more supportive of wind turbines, solar farms and pylons within sight of their homes, according to research by Public First, a consultancy. Mortgage-free homeowners, who lean Tory, tend to be more hostile than renters and mortgage-holders, who skew to Labour.

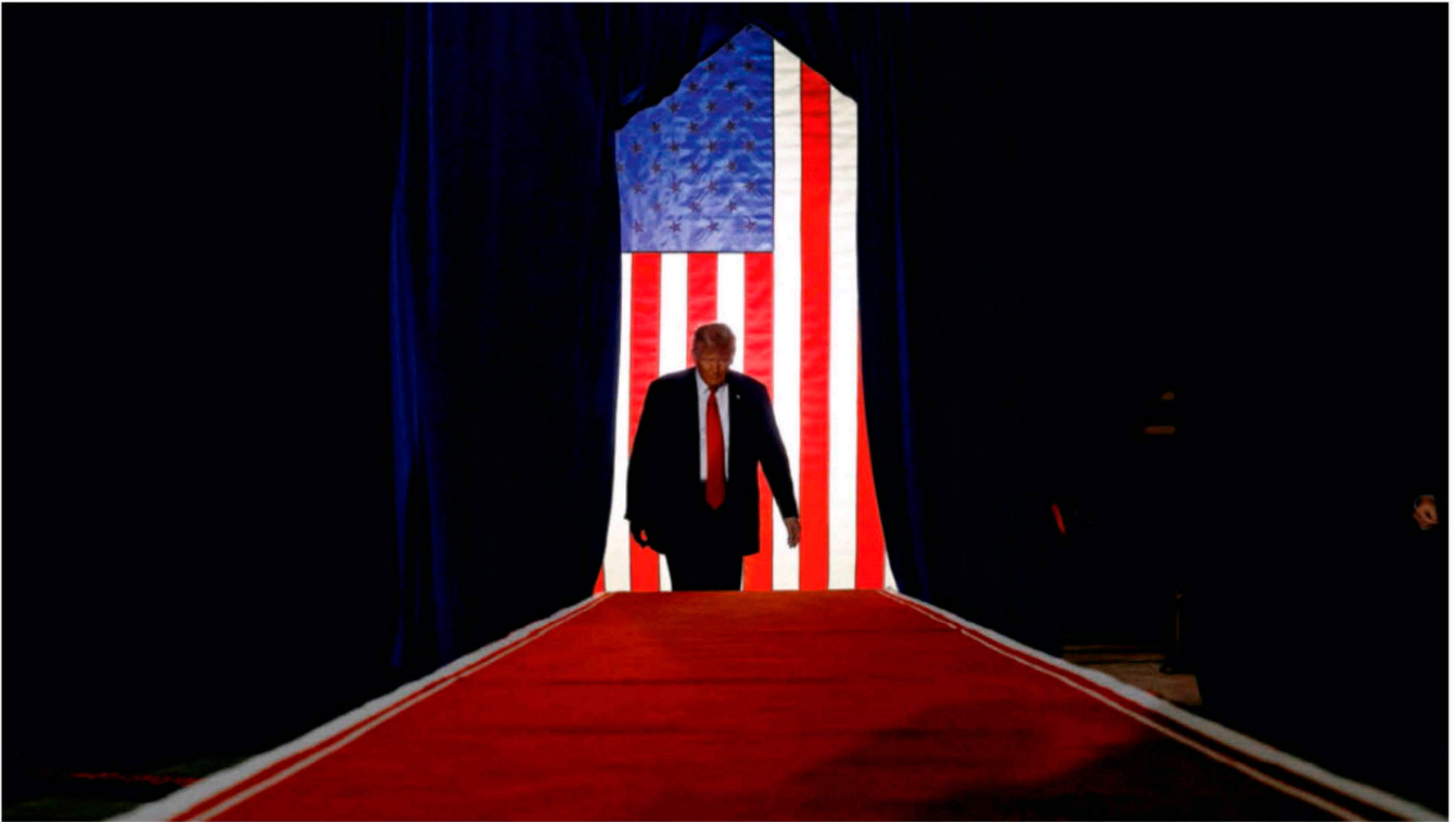
Geography helps. Rachel Reeves, Labour's shadow chancellor of the exchequer, can be gung-ho about a proposed new nationwide network of electricity pylons, because only one of 36 constituencies affected is Labour-held and only three are prime targets. The party wants to redesignate some green-belt land for housing, which will bite hardest in rock-solid Tory shires where NIMBYism is fierce. (Of 30 constituencies that are more than three-quarters green belt, Labour holds two.) Some Labour figures think housebuilding has weakened the Tory dominance in areas such as Bicester in Oxfordshire and Worthing in Sussex. With a young coalition, new houses means new voters.

Party discipline will also help. Rishi Sunak weakened housebuilding targets after a rebellion by Tory MPs. Labour's prospective intake are young, vetted for loyalty and will be bound by a pro-development manifesto. "There is an entire generation that has been screwed by the Tories' failure to build new homes, and we are hopefully about to see that generation elected to parliament," says Mr Curtis. A Labour government would also be liberated by its electorate in other ways. Tory voters cite immigration as their highest priority; for Labour voters, it comes joint fifth, according to YouGov, a pollster. Sir Keir would have room to do business with the European Union, since his voters, overwhelmingly, favour closer ties. Education is a higher priority. This will be a bewildering new world for Westminster-dwellers who project the priorities and red lines of the Tory electorate onto Britons at large.

Dance with the one that brung you

Too little disruption is a greater risk than too much. Labour worries about how fast builders can scale up work. Critics are disappointed that more radical reforms to liberalise land supply have been spurned. How many new towns will be built, and how large, is to be decided, and Sir Keir is earning a reputation for U-turns. He risks a dangerous middle path of building enough to annoy some of his coalition, but too little for the rest.

Yet Milton Keynes is a symbol of how fast fashion can change. Once a byword for mundane suburbia, it is again a mecca for architecture wonks, and the population is growing fast. Likewise, in 1967, it was possible to conjure a sprawling new town on rolling farmland by the stroke of a minister's pen. Today, it is unthinkable. And tomorrow? The window of political possibility can widen overnight. A young electoral coalition contains opportunities for a party with the will to grasp them. ■



America and the world

Donald Trump's looming approach

DAVOS

He could split countries into three groups: users, bruisers and losers

AFTER DONALD TRUMP cruised to victory in Iowa and New Hampshire, his odds of returning to the White House look shorter. That prospect directed much of the chatter at this year's gathering of the World Economic Forum. One American lawmaker engaged in background diplomacy to calm allies fretted that foreign governments "are freaked out by what they see on social media about American democracy".

The presidential election is ten months away and the world is starting to prepare for the consequences of a second Trump presidency. As best one can tell, they include tariffs, the possible abandonment of Ukraine and Taiwan, a transactional approach to other allies, bartering with enemies and a further decay of global rules.

All American administration changes create discontinuities in foreign policy. Yet a shift from a Biden administration to a Trump one would be especially large because of the gulf between their policy positions and the chaotic global circumstances in which a switch would take place. The number of state-based conflicts, at over 50, is near its highest level since 1946, accord-

ing to the Peace Research Institute Oslo.

The Biden administration has tried to reinvent America's role for the 2020s and beyond. It envisioned a superpower that is still globally engaged and close to its allies. At the same time, it is more selfish on trade, more cautious on economic security and more selective about deploying military force. Its achievements include a regaling of alliances in Asia and the coalition to support Ukraine. Even so, global disorder has grown.

As the clock ticks down to a tight election, the effectiveness of the Biden doctrine may decline. It will become hard to make commitments extending beyond 2024, including on a two-state solution in Israel-Palestine. So governments around the world are developing alternative plans for a Trump-run America. A second Trump presidency would differ from the first both because the world is messier and because Mr Trump is less likely to tolerate official obstruction of his agenda. An across-the-board 10% tariff is said to be likely, as is a suspension of "permanent normal trade relations" with China, meaning higher lev-

ies for the country than exist today.

For some politicians and countries, with whom Mr Trump is ideologically aligned, his presidency would be good news. In Israel Binyamin Netanyahu, if he can cling on to power until 2025, could expect fulsome support and the dismissal of Palestinian aspirations for their own state. Soulmates such as Viktor Orban in Hungary can expect a warm reception in the Oval Office. Mr Trump also has a soft spot for Saudi Arabia. Narendra Modi, India's prime minister, has strong relations with Mr Trump and so India expects continuity in policy and less criticism on civil liberties. Even some liberal democratic Western allies seem relaxed. "There's nothing to be troubled about there," insists Scott Morrison, Australia's conservative former prime minister, who says that Mr Trump helped the world "wake up" to the threat from China. "When Australia stood up to China, they were immensely supportive. And that mattered a hell of a lot."

With friends like these

Beyond this Mr Trump's chaotic style and unstable personality make predictions difficult. Nonetheless it is possible, and probably essential, to try to sketch out what the approach of this most transactional of presidents might be to those he may deem "users" (supposedly ungrateful allies), "bruisers" (nasty adversaries) and "losers" (countries he doesn't care about).

Most allies will be seen as users by Mr Trump. They can expect unsentimental ►►

► treatment: an assessment of the extent to which they “freeload” off America, for example by running a trade imbalance with it or spending paltry amounts on their armed forces. The scrutiny could get uncomfortable (see chart). We calculate that of 38 American allies in the North Atlantic Treaty Organisation (NATO) or Asia, America had trade deficits with 26 in 2023, and 26 spent less than 2% of GDP on defence in the last year for which figures exist, thus scoring badly on two key Trumpian yardsticks.

Some countries are already trying to boost their appeal on these measures. A German government official describes the provisional pitch it will make to any Trump administration: Germany’s defence spending is set to soar following the creation of a \$109bn special military fund; it is now spending \$14bn on American F-35 jets; and the country has switched from piped Russian gas to importing liquefied natural gas, much of it from American suppliers.

Users that are unable to make a case on these grounds may find themselves under pressure. They are more likely to be subject to threats on tariffs or have security commitments withdrawn. Mexico might be one such. Since the Trump administration replaced the North American Free Trade Agreement with its own deal, in force since 2020, the trade deficit has actually gone up.

In response some users are considering unorthodox diplomacy to win favour instead. One Western leader explains that, based on the experience of Mr Trump’s first term, the easiest way to sway him is by showering him with attention from a country’s royal family and sports stars. France wowed Mr Trump with a military parade on Bastille Day; Britain offered up a state visit hosted by the late Queen.

A pair of allies are especially vulnerable to the way Mr Trump thinks about suspected freeloaders. Taiwan, for its size, runs a large trade surplus with America, amounting to \$45bn between January and November 2023. Although it has raised defence spending to 2.5% of GDP it still relies on a vast American military presence in Asia to deter a possible invasion by China. It has just elected a president who defies China, William Lai Ching-te, but Mr Trump may question whether Americans should bankroll its defence or die for that cause. Last year he complained that Taiwan “took our business away”.

The other vulnerable ally is Ukraine. Objectively American support to Ukraine is a superb deal: with cumulative American aid for the war standing at below 10% of the annual US defence budget and no American casualties, America ties down Russia’s army and impairs its economy. Most of the money spent on weapons for Ukraine remains in America. Still, Mr Trump may see the war as a drain on valuable American resources and so try to push Ukraine into

striking a peace deal with Russia.

Abandoning Taiwan and Ukraine would have profound consequences for America’s alliances. A failure to defend Taiwan would set a precedent for other Asian allies such as Japan and South Korea and, because it forms part of an “island chain” around China, frustrate regional defence plans. Betraying Ukraine would leave both Russia and its leader, Vladimir Putin, in strengthened positions. A top official in the European Union recently claimed that in 2020 Mr Trump told Ursula von der Leyen, the head of the EU Commission, that America would not come to Europe’s aid if the continent came under attack, adding: “By the way, NATO is dead, and we will leave, we will quit NATO.”

What about those Mr Trump may perceive as bruisers? America’s enemies and adversaries probably expect threats in order to win concessions and also periodic openness to striking transformative “deals”. Think of Mr Trump in 2019 stepping across the border into North Korea—which he had earlier threatened to incinerate. Among the bruisers, Russia can look forward to the friendliest treatment given Mr Trump’s admiration for Mr Putin. China will have lower expectations as previous

negotiations with Mr Trump disappointed and because mutual hostility is now baked into both countries’ polities.

During the first Trump administration Iran faced “maximum pressure” sanctions and America’s killing of Qassem Suleimani, a key commander. Yet Mr Trump failed to respond when Iran attacked Saudi Arabian oil installations. The most likely outcome now, given the mayhem Iran is causing in the Middle East, is aggressive sanctions on the regime, which may be tempted to keep up its proxy wars across the region.

Best frenemies

Mr Trump’s approach to bruisers is disruptive, which creates opportunities: it is conceivable, for example, that he might try to draw Iran and its proxies into a regional peace deal—after all his administration managed to broker the Abraham Accords between Israel and several Arab states in 2020, defying accepted wisdom. Yet that same disruptive quality increases the chance of miscalculations in negotiations. There is a risk that Mr Trump is outmanoeuvred. “My biggest fear is that Putin and Xi are way smarter than Trump,” says a European official.

The third group of countries is the biggest: places that are neither close American allies nor adversaries. Mr Trump could write them off as losers. The Biden administration has encountered more aggressive behaviours from America’s foes in Europe and the Middle East but remained selective in its use of American power. Its withdrawal from Afghanistan illustrated as much. And conflicts in places America has little interest in have flared up wildly. Consider the civil war in Sudan; a new “coup belt” across sub-Saharan Africa; and a new Armenia-Azerbaijan war. The same anarchic quality has created opportunities, too: think of the rewiring of the global energy system and the boom in the illicit oil trade.

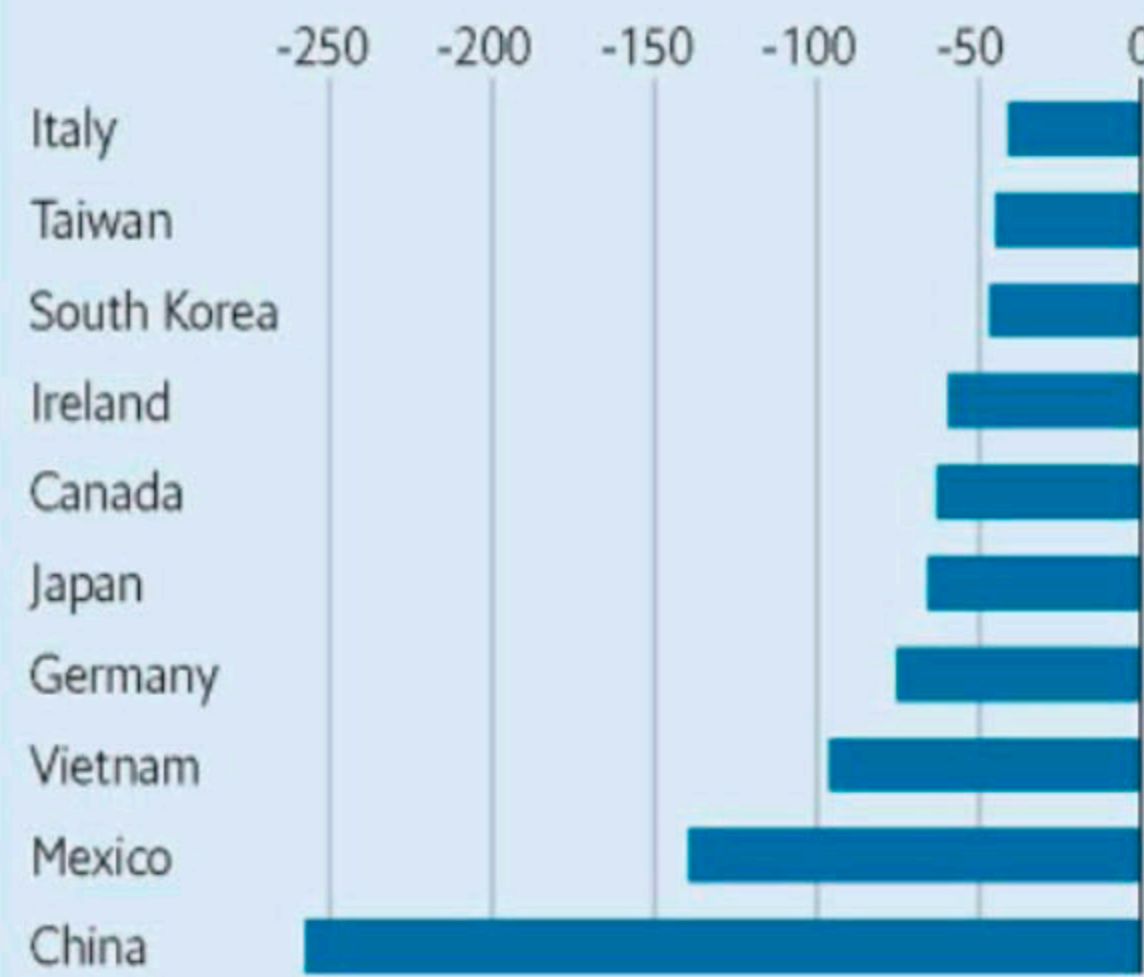
A Trump presidency is likely to see a further erosion of global rules on everything from trade to human rights, worsening matters. For the poorest countries with weak domestic institutions, that may mean a higher prospect of conflict. Global organisations could hardly bridge the gap.

If Mr Trump were to win the 2024 race he would be inaugurated almost exactly a year from now. The period until then is much too short for the Biden administration easily to make binding commitments, meaning its credibility and agency over global events may fade during this year. The situation is vastly worsened by Republican intransigence, as demonstrated in the senseless obstruction of aid to Ukraine. At the very least Mr Trump could create a vacuum as America withdraws from its responsibilities. Around the world it is dawning on countries that 12 months do not provide enough time to fill it. ■

Trump’s watchlist

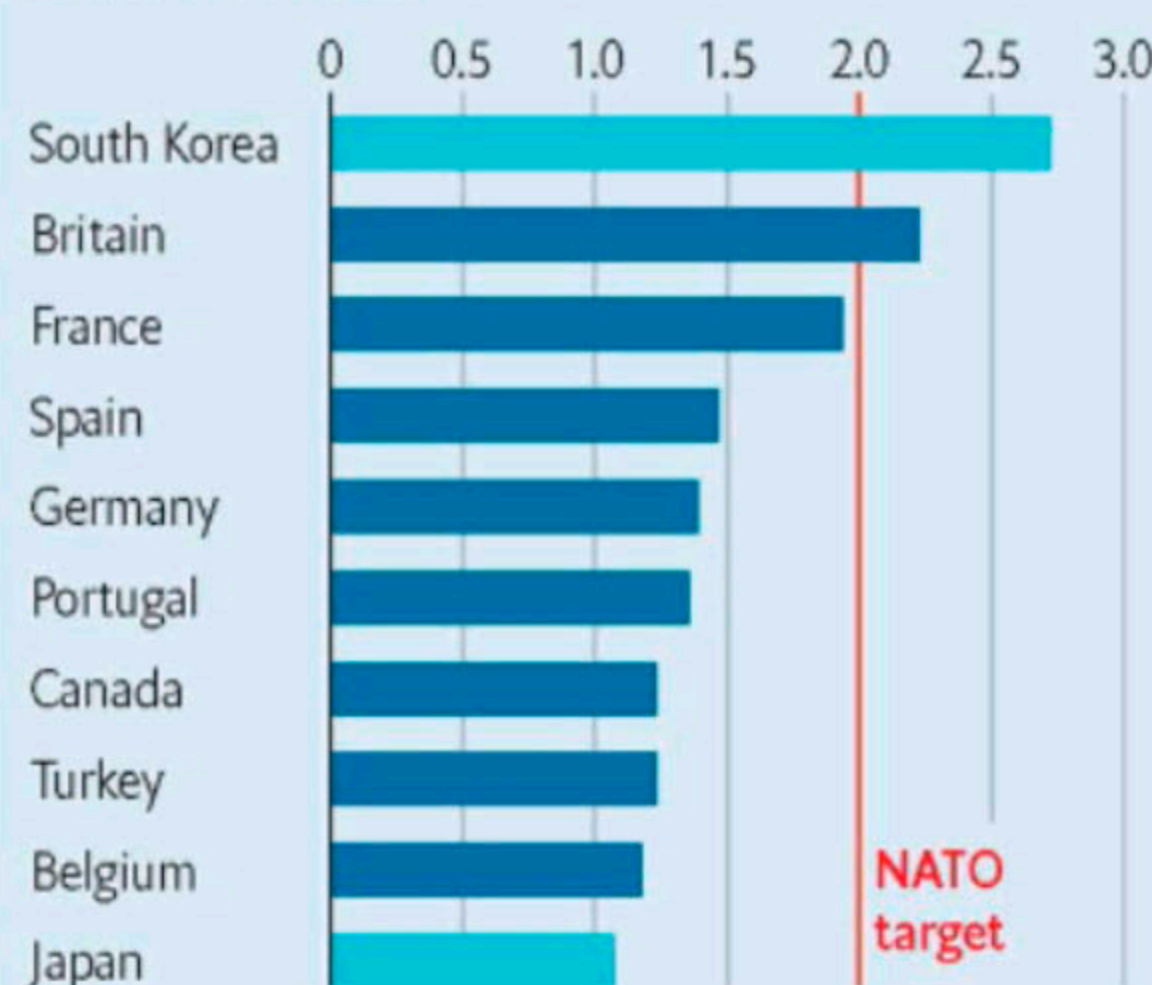
Selected countries

United States, goods trade deficit, 2023*, \$bn



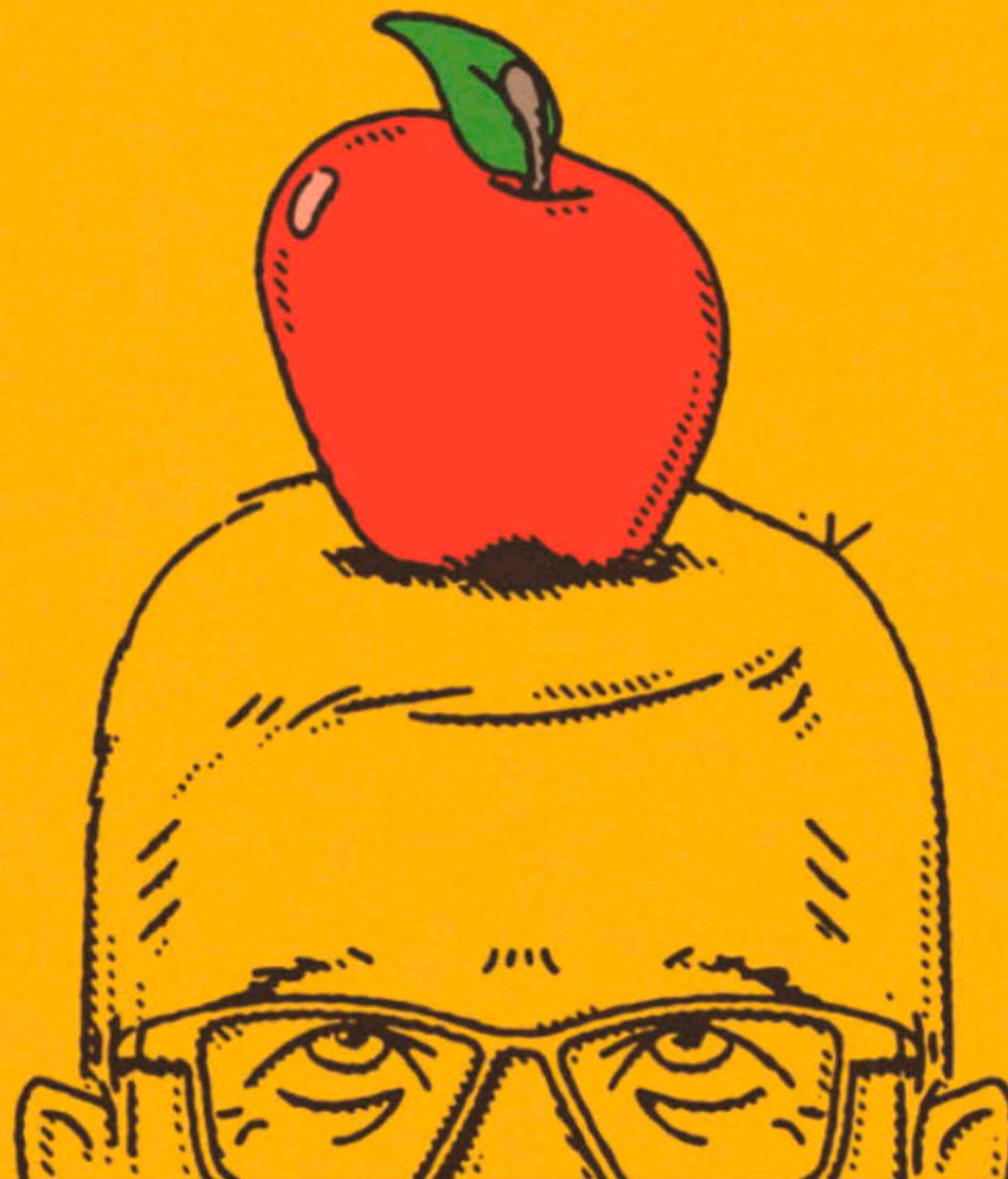
Military spending, 2022, % of GDP

■ NATO members



Sources: Census Bureau; SIPRI

*January-November



Technology

Upsetting the Apple cart

CUPERTINO

What could bring down the iPhone-maker?

TIM COOK, boss of Apple, is having a rough start to 2024. In the past month his company has faced an unusual barrage of unpleasantness. A patent dispute forced it to remove features from two of its smartwatches. It found out that America's Department of Justice (DOJ) would be suing it over antitrust transgressions. And it reported that it was losing market share in China, its second-biggest smartphone market. Adding insult to injury, a few Wall Street analysts said something unthinkable until recently—that Apple's shares were overvalued. On January 11th Microsoft, a rival tech titan, duly dethroned the iPhone-maker, temporarily, as the world's most valuable company.

The run of bad news may continue on February 1st, when Apple reports its latest quarterly earnings. Equity researchers estimate that its revenues barely grew in the last quarter of 2023, if at all. Then, on February 2nd, Apple will be tested once again. It will start shipping the Vision Pro, an augmented-reality (AR) headset that it has

been working on—and talking up—for a few years. The high-end gadget, which will sell for \$3,499, represents a big bet on a new technology “platform” that, Apple may be hoping, could one day replace the smartphone as the core of consumers' digital experience—and the iPhone as the source of its maker's riches. Early indications hint that Apple should worry about the device's prospects. Netflix, Spotify and YouTube have announced that they will not make their popular streaming apps work on the headset. None said why. But it could be because they all compete with Apple's own streaming services, and developing an AR app is likely to be costly.

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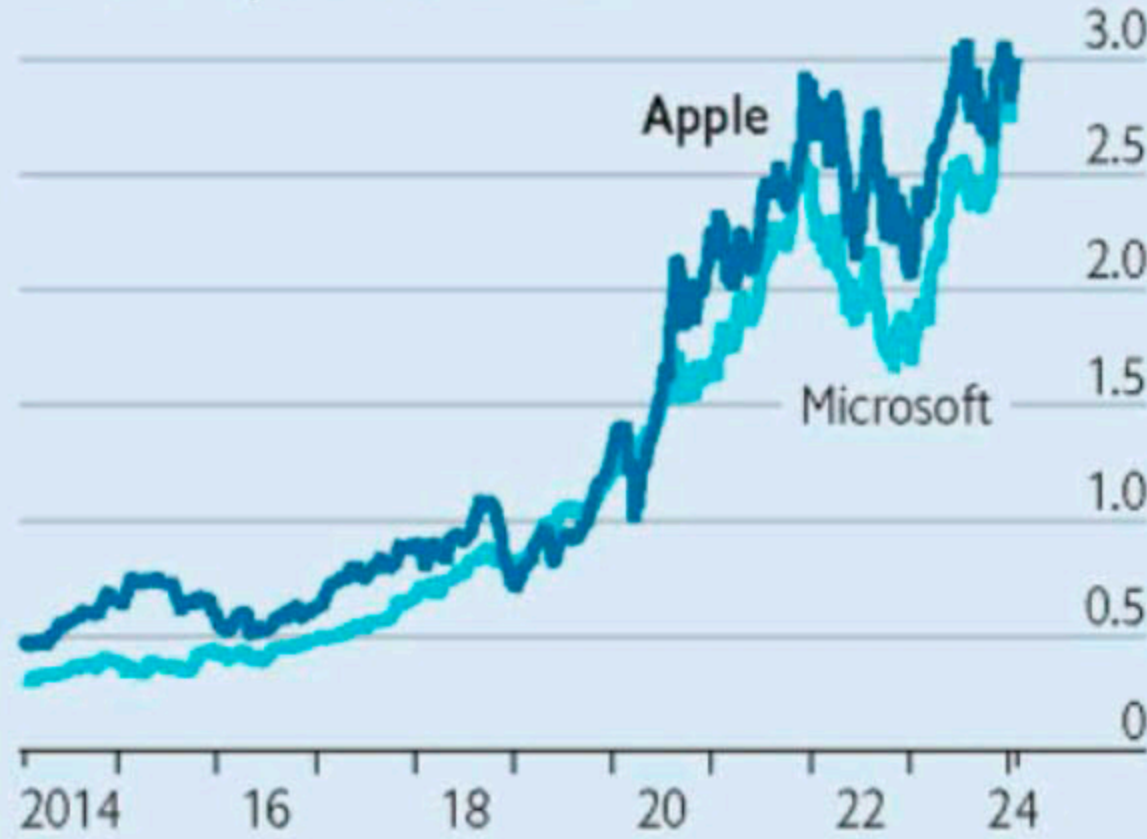
Mr Cook can brush off some of these worries. Despite everything, Apple's share price has not moved meaningfully in January. A few days after being overtaken by Microsoft, it reclaimed its heavyweight stock-market title—and its \$3trn valuation. And if the Vision Pro's launch is a flop, the short-term effect on Apple's revenues will be nugatory, given the headset's limited initial production.

Nevertheless, Apple's boss would be unwise to dismiss the new year's niggles. For they point to larger challenges for the company. These fall into three broad categories: antitrust and legal issues; slowing iPhone sales; and growing geopolitical tensions. None of these is existential right now. But each carries with it a risk of causing a big upset. Could they cost Apple its position as the world's most valuable company for longer than a week or so?

Though Apple's market value has been among the world's top ten since 2010, until a few years ago it traded at a low valuation relative to profits. It was thought of as a maker of hardware, a business that is more difficult to scale than software. For much of the 2010s its price-to-earnings (p/e) ratio, which captures investors' expectations of future profits, was below 20, comparable to that of HPE or Lenovo, boring computer-makers with low growth and tight margins. It was also below the average for big American companies in the S&P 500 index (see chart 1 on next page). ▶▶

Fruit inflation

Market capitalisation, \$trn



Source: Bloomberg

Price-to-earnings ratio*



*Trailing 12 months

▶ This started to change around 2019, notes Toni Sacconaghi of Bernstein, a broker. Revenue from Apple’s “services” business, which provides software to its devices’ 1bn or so users, began to grow. The two biggest parts of this category are an advertising business, which Bernstein puts at \$24bn a year (including around \$20bn a year from Google for making the search engine the default option on Apple’s devices), and the App Store (another \$24bn). Services also include Apple Music and Apple TV, its streaming offerings, as well as a fast-growing payments business. All told, revenues from services amount to \$85bn a year, or a fifth of total sales. In 2016 they contributed just \$24bn, or a tenth of overall revenues (see chart 2).

This helped convince investors that Apple was no longer a stodgy hardware provider. It was a software platform, where new paying users could be added at little extra cost. That meant higher profits—the gross-profit margin for Apple’s services arm is 71%, compared with 37% for devices—and more recurring revenue. As services became a bigger part of the business, Apple’s overall profitability swelled, too, from 38% in 2018 to 44% last year. That was also aided by the fact it was selling more high-end, high-margin iPhone models. All of this helped lift Apple’s p/e ratio to around 30, comfortably above the S&P 500 average and higher than that of Alphabet (Google’s parent company), though still below Microsoft’s (38) and Amazon’s (72).

One set of risks that could undo Apple’s p/e progress has to do with its legal headaches. Some, such as the patent problem, look like minor threats. In October the International Trade Commission, a federal agency, ruled that Apple infringed patents related to an oxygen-measuring sensor that were owned by Masimo, a medical-device maker. Apple stopped selling the models which contained the offending technology. But on January 18th it started to sell them again, minus the disputed sensor.

Apple’s bigger legal problems have to do with its services business. In March new

rules will come into effect in the EU, a huge market, that force Apple to allow apps to be installed on its devices without going through its App Store. That makes it harder for it to charge the 30% fee it levies on most in-app purchases (Apple has filed a lawsuit against the rules).

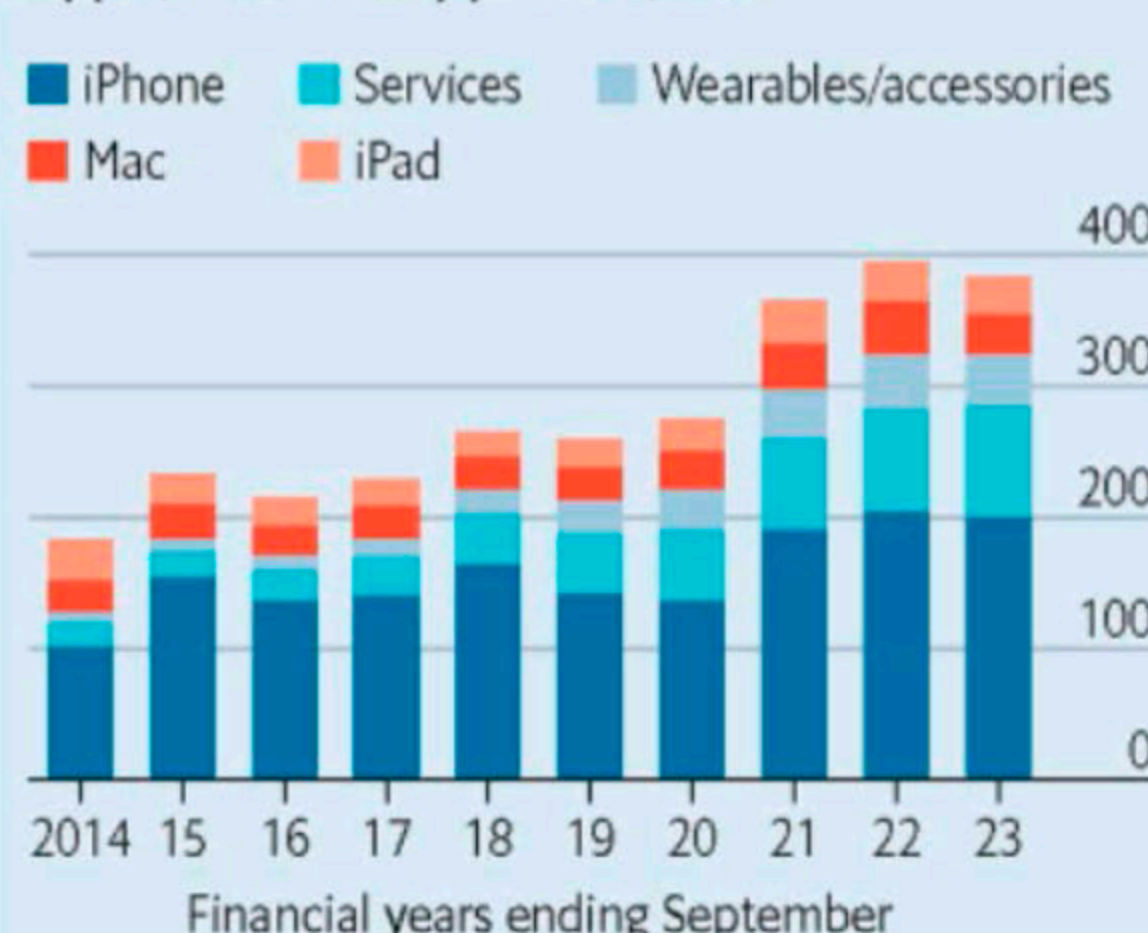
In America, the DOJ is reportedly looking into whether Apple’s smartwatch works better with the iPhone than with other smartphones and why its messaging service is unavailable on rival devices. If, in a separate case against Google, the courts agree with the DOJ that its default-search deals with device-makers are anticompetitive, Apple could be deprived of roughly \$20bn a year in virtually free money. As a result of a lawsuit filed in 2021 by Epic Games, a video-game developer, Apple has already had to change the way the App Store charges developers to sell apps there.

The orb is in your court

Apple is not defenceless in the legal battles. It quickly found a workaround to the Epic-induced changes to its App Store policy that lets it keep collecting hefty fees. A final ruling in the DOJ’s case against Google is probably years away. The same is true of its expected case against Apple. As with many antitrust cases against big tech, investors seem nonplussed.

iServe, iPhone, I conquer

Apple, revenues by product, \$bn



Source: Bloomberg

The company is more vulnerable to the second area of concern—its slowing core business. According to a poll of analysts, Apple sold about 220m iPhones last year, barely more than the 217m it shifted in 2017. In 2024 the number might not be much higher. For a while, Apple could offset the slowing volumes with higher prices. But annual revenue growth has slipped to 2% in the past two years, down from an average of 10% between 2012 and 2021.

Some rivals are trying to eat into Apple’s market share in high-end devices by exploiting consumers’ appetite for ChatGPT-like “generative” artificial intelligence (AI). Samsung, a South Korean tech titan, said that it would launch a new range of AI-powered phones by the end of January. Flashy features will include real-time voice translation and turbocharged photo- and video-editing. The devices may be on sale eight months before Apple’s next iPhones. Apple, by contrast, has said little about its plans for the hottest thing in tech since, well, the iPhone. “We’re investing quite a bit,” Mr Cook noted cryptically on the company’s most recent earnings call.

Apple is also being given a run for its money in China, the source of 17% of its overall revenues. According to Jefferies, an investment bank, Apple’s share of smartphones in the country declined last year. Meanwhile that of Huawei, a domestic tech champion, grew by around six percentage points. In August Huawei stunned industry-watchers—and America’s government, which has for years barred sales of American technology to the firm on national-security grounds—by launching the first 5G device containing advanced chips that were Chinese-made rather than imported. Patriotic shoppers in China snapped up the phone and, for good measure, other Huawei devices.

When it comes to AI, worries about Apple’s progress may be overstated. Erik Woodring of Morgan Stanley, an investment bank, points to signs that the company is indeed investing quite a bit. In October the firm’s boffins and researchers at Columbia University jointly released an open-source AI model called Ferret. Two months later Apple published a paper about how such models could run on smartphones, which are much less powerful than the data centres typically used for the purpose. In January a South Korean tech blogger reported that an update to Apple’s operating system possibly as early as June would include AI enhancements for Siri, its robot assistant. Rumours swirl that Apple is planning to use generative AI in its own search engine.

China, however, represents a bigger threat—and not just because of a revitalised Huawei. Apple’s plans for future growth depend in large part on success in emerging markets, including the biggest ▶▶

one of all. Mr Cook kicked off Apple's past three earnings calls by talking about the company's sales outside the rich world. China was doubtless on his mind.

Apple is also exposed to China risk through its supply chain. Despite much-publicised efforts to move some production to India, around 90% of iPhones are still manufactured in Chinese factories. So are most Mac computers and iPads. Mr Sacconaghi of Bernstein says that Apple will be hugely exposed to a serious geopolitical escalation, such as a conflict over Taiwan, for at least the next five years.

Events short of a Chinese invasion of Taiwan could also hurt the company. The return of Donald Trump to the White House, a serious possibility now that he has all but wrapped up the Republican nomination, would almost certainly raise barriers to trade and heighten Sino-American tensions. Even if Joe Biden defeats Mr Trump in the presidential election in November, he is hardly a China dove (see next article). The Chinese government is beginning to hit back against American sanctions. It has already banned products made by Micron, a chipmaker from Idaho, from

some infrastructure projects. In September reports surfaced of a ban on Apple products among government officials. Although the authorities later denied the claims, the episode put investors on edge.

Any Chinese action that hurts Apple in China would hurt China, too. Apple says 3m people work in its supply chain. Many of those workers are Chinese. One analyst likens Apple's position vis-à-vis China's government to "mutually assured destruction". The same could be said of the commercial balance between America and China. Try explaining that to Mr Trump. ■

Bartleby Why you should never retire

Pleasure cruises, golf and tracing the family tree are not that fulfilling

IN AN EPISODE of "The Sopranos", a popular television series which started airing in the 1990s, a gangster tells Tony, from the titular family, that he wants to retire. "What are you, a hockey player?" Tony snaps back. Non-fictional non-criminals who are considering an end to their working lives need not worry about broken fingers or other bodily harm. But they must still contend with other potentially painful losses: of income, purpose or, most poignantly, relevance.

Some simply won't quit. Giorgio Armani refuses to relinquish his role as chief executive of his fashion house at the age of 89. Being Italy's second-richest man has not dampened his work ethic. Charlie Munger, Warren Buffett's sidekick at Berkshire Hathaway, worked for the investment powerhouse until he died late last year at the age of 99. Mr Buffett himself is going strong at 93.

People like Messrs Armani, Buffett or Munger are exceptional. But in remaining professionally active into what would historically be considered dotage, they are not unique. One poll this year found that almost one in three Americans say they may never retire. The majority of the nevers said they could not afford to give up a full-time job, especially when inflation was eating into an already measly Social Security cheque. But suppose you are one of the lucky ones who can choose to step aside. Should you do it?

The arc of corporate life used to be predictable. You made your way up the career ladder, acquiring more prestige and bigger salaries at every step. Then, in your early 60s, there was a Friday-afternoon retirement party, maybe a gold watch, and that was that. The next day the world of meetings, objectives, tasks and other busyness faded. If you were

moderately restless, you could play bridge or help out with the grandchildren. If you weren't, there were crossword puzzles, TV and a blanket.

Although intellectual stimulation tends to keep depression and cognitive impairment at bay, many professionals in the technology sector retire at the earliest recommended date to make space for the younger generation, conceding it would be unrealistic to maintain their edge in the field. Still, to step down means to leave centre stage—leisure gives you all the time in the world but tends to marginalise you as you are no longer in the game.

Things have changed. Lifespans are getting longer. It is true that although the post-retirement, twilight years are stretching, they do not have to lead to boredom or to a life devoid of meaning. Once you retire after 32 years as a lawyer at the World Bank, you can begin to split your time between photography and scrounging flea markets for a collection of Americana. You don't have to miss your job or suffer from a lack of purpose. If you are no longer head of the hospital, you can



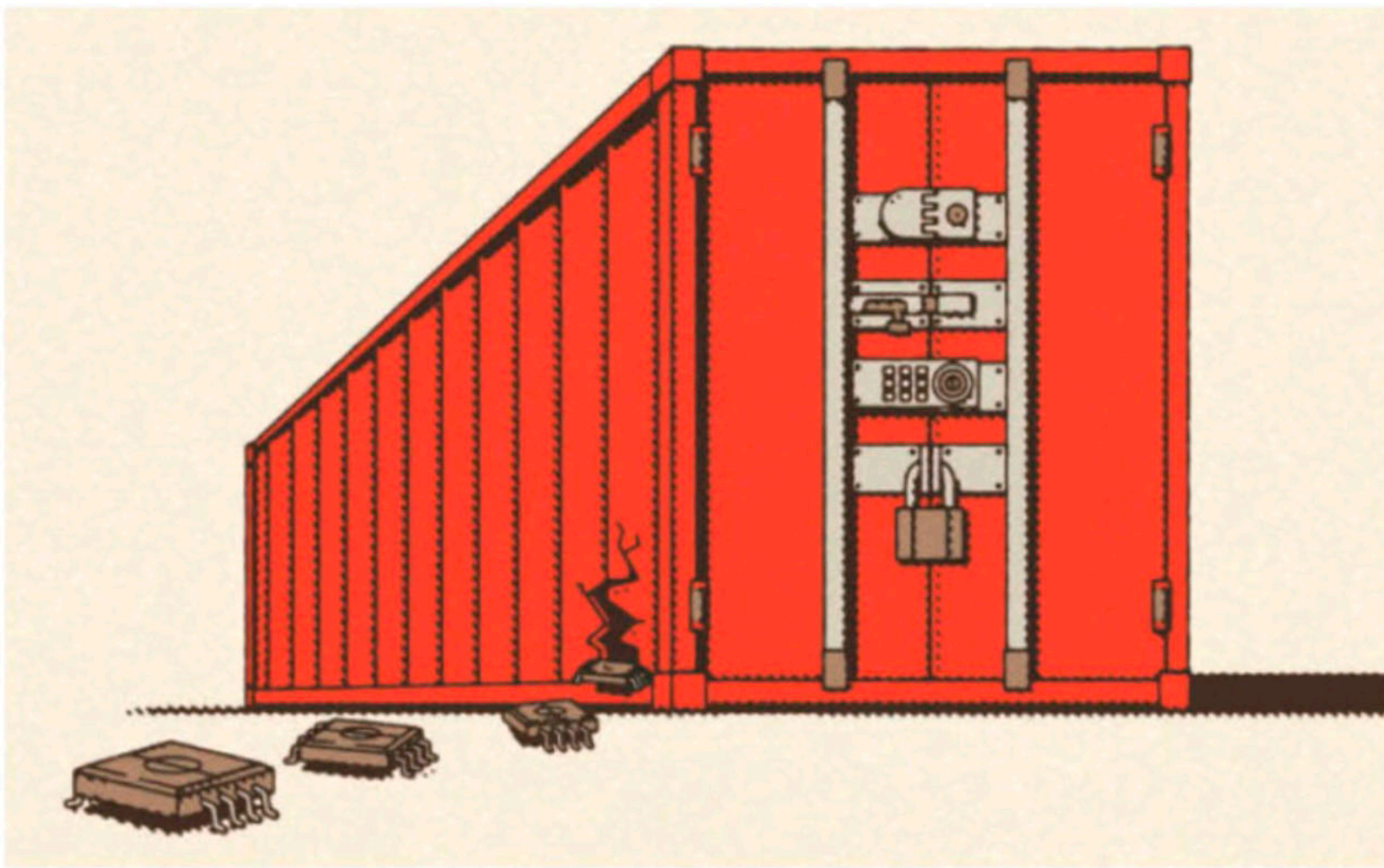
join Médecins Sans Frontières for occasional stints, teach or help out at your local clinic. Self-worth and personal growth can derive from many places, including non-profit work or mentoring others on how to set up a business.

But can anything truly replace the framework and buzz of being part of the action? You can have a packed diary devoid of deadlines, meetings and spreadsheets and flourish as a consumer of theatre matinees, art exhibitions and badminton lessons. Hobbies are all well and good for many. But for the extremely driven, they can feel pointless and even slightly embarrassing.

That is because there is depth in being useful. And excitement, even in significantly lower doses than are typical earlier in a career, can act as an anti-ageing serum. Whenever Mr Armani is told to retire and enjoy the fruits of his labour, he replies "absolutely not". Instead he is clearly energised by being involved in the running of the business day to day, signing off on every design, document and figure.

In "Seinfeld", another television show of the 1990s, Jerry goes to visit his parents, middle-class Americans who moved to Florida when they retired, having dinner in the afternoon. "I'm not force-feeding myself a steak at 4.30 just to save a couple of bucks!" Jerry protests. When this guest Bartleby entered the job market, she assumed that when the day came she too would be a pensioner in a pastel-coloured shirt opting for the "early-bird special". A quarter of a century on, your 48-year-old columnist hopes to be writing for *The Economist* decades from now, even if she trundles to her interviews supported by a Zimmer frame; Mr Seinfeld is still going strong at 69, after all. But ask her again in 21 years.





Technology and trade

Picking losers

Can America's controls on sales of AI tech to China be made less leaky?

GINA RAIMONDO seemed frustrated when she took the stage at the Reagan National Defence Forum in California in December. The Department of Commerce, which she leads, had just tightened restrictions on the sale of American semiconductors to China. But Nvidia, the world's most valuable chipmaker, had immediately started developing a new, slightly less powerful artificial-intelligence (AI) chip for the Chinese market, to which the restrictions would not apply. "If you redesign a chip...that enables [China] to do AI, I'm going to control it the very next day," Ms Raimondo warned.

That was bombastic, given that it had taken her department a full year to rework the restrictions to cut off Nvidia's previous workaround. Nevertheless, America's five-year campaign against Chinese technology is intensifying. Earlier this month it was reported that Jensen Huang, Nvidia's chief executive, and two fellow chip bosses had been summoned to testify in Congress about their Chinese business. On January 19th ABB, a Swiss industrial group, revealed that American lawmakers were investigating its links with China. ABB said it was cooperating with the investigation; Nvidia has said that it is working closely with the government to ensure compliance with the export controls.

Neither Democrats nor Republicans are likely to relent. In a presidential-election year Joe Biden, the unpopular Democratic president, cannot afford to look weak on

China. His Republican predecessor and main rival, Donald Trump, has long been America's China-basher-in-chief. China hawks in Washington want to stymie Chinese efforts both to get around the rules and to recreate the necessary technological capabilities at home. Yet the mixed record of export controls so far shows why harsher measures will be difficult to design—and not necessarily more successful.

China has found ways to work around the existing controls. To Ms Raimondo's chagrin, for instance, it is possible to train AI models using semiconductors that are not necessarily at the cutting edge, so long as you have enough of them. If the sale of any chip which can "do AI" is to be banned, as she implies, America must restrict the flow of a much broader array of microprocessors to China.

The China shock

It is hard to know just how much broader. Trade statistics do not break out the graphics processing units (GPUs) used to train and run AI models from the larger flow of integrated circuits. But a sense of the scale of such a ban can be gleaned by examining the financial statements of Nvidia, which sells a range of GPUs. It has earned between 21% and 26% of its revenues from China over the past few years. In the nine months to October the company took in \$8.4bn from the Chinese market. Almost all of Nvidia's products can be used to "do AI". Mr Huang has said that his company has no

"contingency" for being cut off from China. This month he paid his first visit to the country in four years.

Another difficulty for America stems from enforcement. The Department of Commerce is empowered to punish any transgressions it discovers. Last year it fined Seagate, a hard-drive manufacturer, \$300m for allegedly breaching export controls by sending components to Huawei, a blacklisted Chinese tech champion. But it is the chip firms themselves that are largely responsible for enforcement. That includes ensuring that their customers are not, in fact, a front for Chinese entities with which trade is prohibited. Good luck with that. "You have coin-sized devices and technologies that are widely commercially available, and indistinguishable from the controlled technologies, distributed around the planet," says Kevin Wolf, an American lawyer and former official.

The result is a situation ripe for smuggling, which experts say is impossible to quantify but doubtless rife. It also encourages transshipment. Firms in countries that have not signed on to the American export-control regime, like Singapore, can buy chips and send them on to Chinese entities without the knowledge of the American firms or the Department of Commerce. Nvidia's most recent quarterly earnings from 2023 show that its sales to Singapore grew by a factor of five over the same period in 2022, faster than anywhere else.

Of all customers in China, the one best placed to use such workarounds to get the chips it needs is the People's Liberation Army. If one of America's main aims is to deny China access to advanced technology for developing military AI, it is probably failing. Instead the controls are raising the costs to Chinese buyers of acquiring American AI chips. That in turn is aligning China's tech sector with its government's policy of indigenous technological development. Chinese tech giants used to prefer buying higher-quality American technology to investing in research and development. Their incentives have changed.

The clearest evidence that this is happening comes from Huawei. The company, whose core business is making telecoms gear, was first targeted by America in 2019 for allegedly breaching sanctions on Iran. A measure called the "foreign direct product rule" (FDPR) cut Huawei off from any chips that had been produced using American technology (which is to say virtually all sophisticated ones). In 2022 the FDPR was deployed against the entire Chinese AI industry, and broadened in October to encompass a wider range of AI chips and chipmaking tools, and to require licences to ship products to countries such as the United Arab Emirates (albeit not Singapore) that are thought to serve as middlemen for Chinese buyers. ▶▶

Before it was blacklisted, Huawei had its microprocessors manufactured by TSMC, a giant Taiwanese contract chip-maker. It spent \$5.4bn on TSMC-made chips in 2020, before America's export controls were extended to the Taiwanese firm. Now it is doing more business with SMIC, China's biggest chip manufacturer. SMIC's capabilities were thought to be many years behind those of TSMC. But last year it came to light that the company was making a Huawei-designed AI chip, the Ascend (and a smartphone chip, the Kirin, which raised many Western eyebrows after Huawei unexpectedly launched a handset containing it in September).

With their access to foreign semiconductors curtailed, Chinese AI companies are now turning to Huawei and SMIC for chips. China's government is encouraging them, and continuing to shower the industry with subsidies in the hope of creating an industry to rival Nvidia and other American companies. Export controls have, in effect, forced China to embrace import substitution.

The designers of America's controls foresaw some of this. That is why, from the start, they also targeted China's ability to recreate advanced technology at home. The controls restrict trade not just in chips themselves but also in tools used to make them. That has involved bringing on board allies such as the Netherlands and Japan, home to many of the toolmakers. As with chips, the tool controls place limits on the sophistication of the equipment that can be sold to Chinese buyers. And as with chips, just how sophisticated a tool has to be to fall under the controls has been the subject of intense debate.

Heavy investment in light

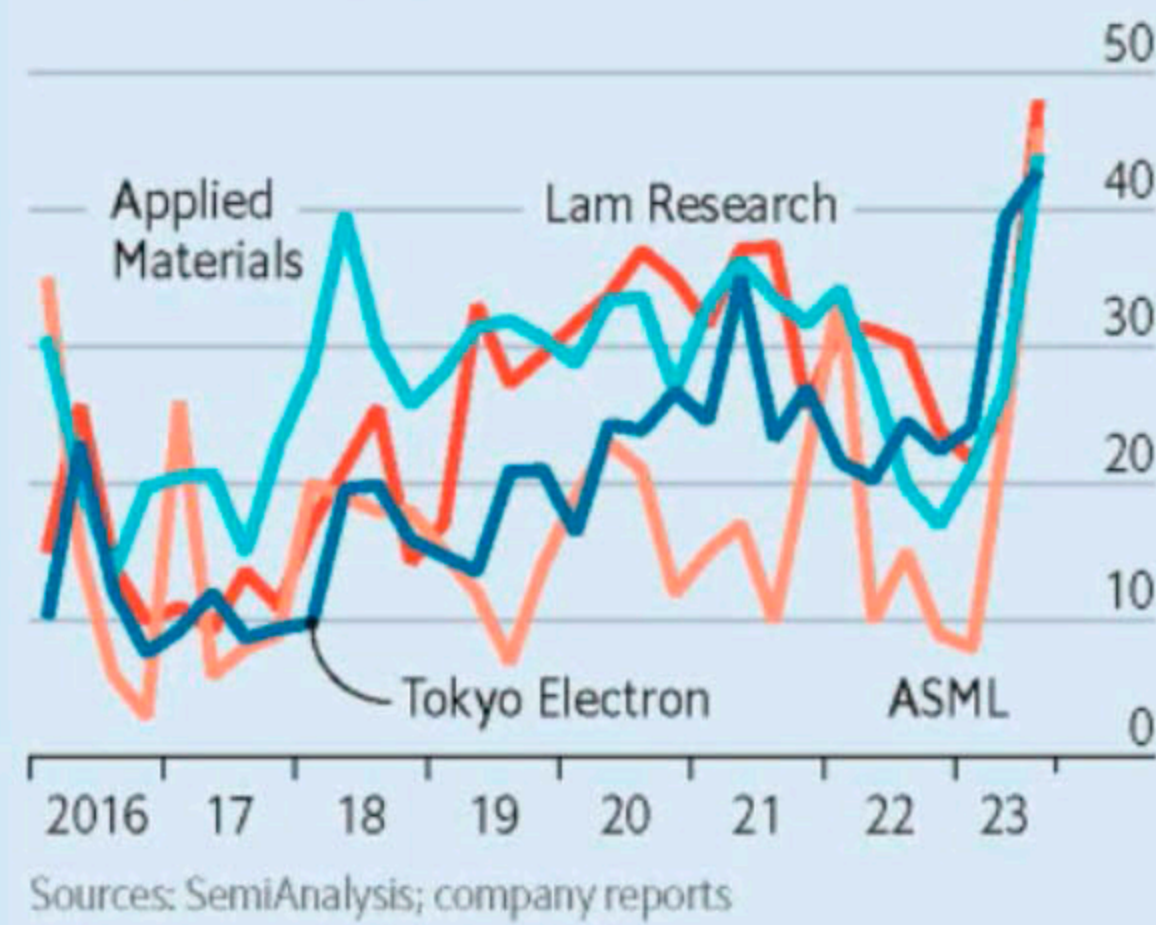
The critical machines are those used to etch transistors onto silicon wafers. The most cutting-edge equipment of this sort is manufactured and sold exclusively by ASML, a Dutch company, and has been blocked from China for years. But older generations of such lithography tools can still be sold to Chinese buyers. ASML's sales to China have grown dramatically over the past year, as have those of companies that produce other chipmaking tools. In the most recent quarter Chinese sales made up almost half of ASML's total revenue. Other toolmakers also sell lots of their wares to China (see chart).

But, as with chips, export controls are giving Chinese toolmakers a strong incentive to invest in catching up technologically with foreign rivals. Already domestic toolmakers' sales are growing apace. On January 15th one of them, NAURA, which manufactures other etching tools, said it expected its revenue to have risen by almost 50% in 2023.

America's campaign against Chinese

Chips fall while they may

Semiconductor companies, % of revenues from China



technology may, then, be both ineffective and counterproductive. Ineffective, because China is proving itself adept at exploiting loopholes. And counterproductive, because it is leading to the creation of a more sophisticated Chinese industry. It may also be predicated on a wrong assumption: that the future economic and military balance of power depends on AI, and that AI depends on computing power. "Both of these are guesses," points out Chris Miller, a historian of technology at Tufts University in Boston. It is far from clear that AI will have strategic importance. And even if it does, computing power may not be the overriding factor in its development. As Mr Miller points out, oomph is expensive, so AI developers will try to use it as sparingly as possible.

Despite all this, America seems likely to toughen up its export controls on AI chips, as Ms Raimondo all but promised in December. And Republican lawmakers are eyeing more expansive controls still. Some of them see a new threat coming from the other end of the sophistication spectrum, which is less about China's techno-military might and more about its economic power. Chips are required in growing volumes as components in everything from electric vehicles and heat pumps to electricity grids. By 2027 China could be making almost 40% of such semiconductors, reckons TrendForce, a research firm. The current export controls do nothing to curb China's dominance of this business, which uses a lot of older American technology.

Three congressional Republicans, Mike Gallagher, Elise Stefanik and Michael McCaul, are thus working on a bill which will force the commerce department to cut China off from all American chip technology, not just the most advanced stuff. Gaining support from allies for such an extreme policy will be hard. Japanese and Dutch businesses—and their governments—rankle even at the porous controls that are in place today. But if Mr Trump, an alliance sceptic, returns to power, the lack of support is unlikely to matter one bit. ■

Indian business and politics

The Modi paradox

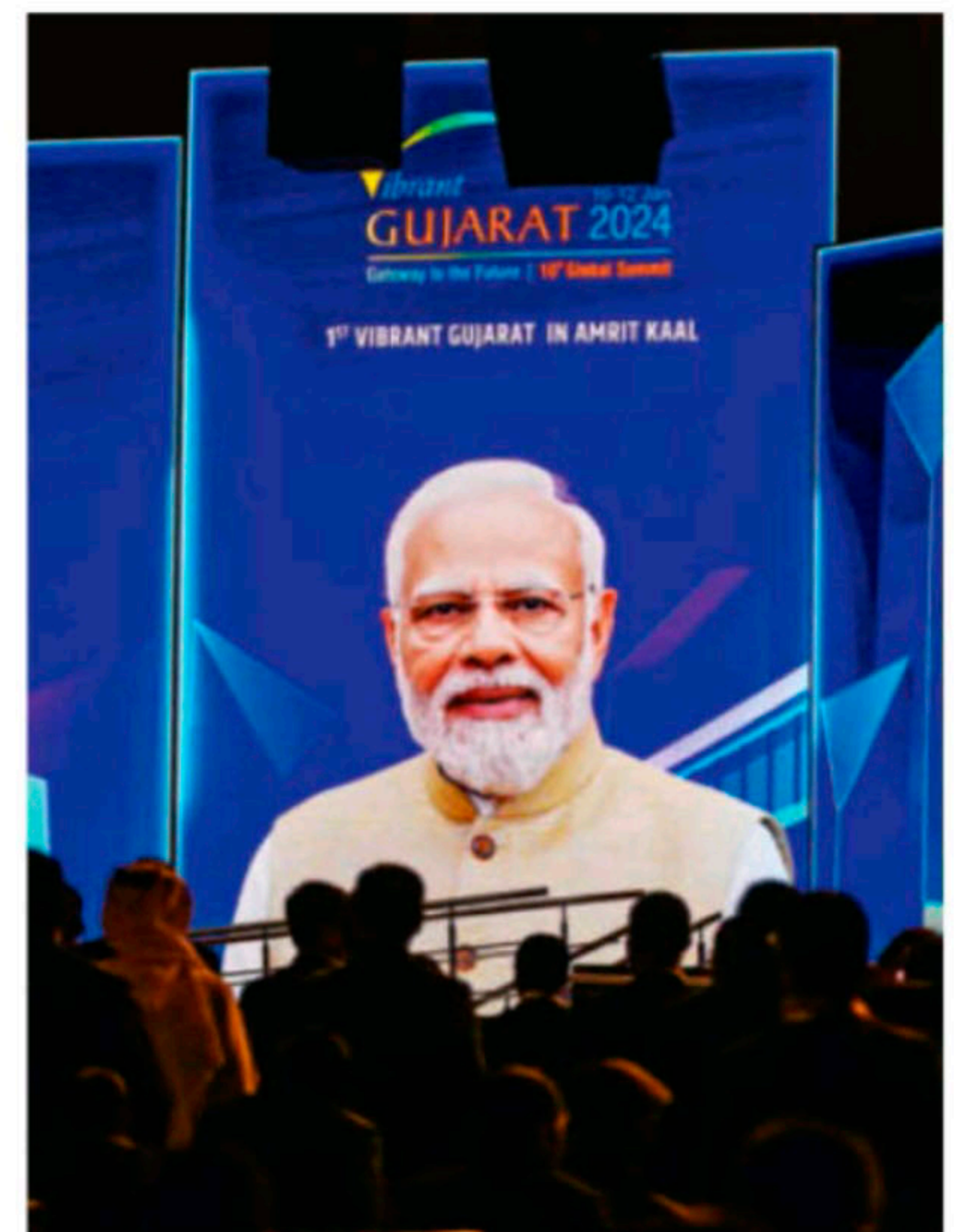
MUMBAI AND SINGAPORE

Corporate India likes the prime minister. It also fears him

THE CONSECRATION of a Hindu temple in Ayodhya, the mythical birthplace of the god Ram, on January 22nd was a huge religious event in India. It carried political significance, too. It was presided over by the prime minister, Narendra Modi, and signalled the unofficial start to the campaign of his Bharatiya Janata Party (BJP) ahead of a general election in April and May. It also turned into a business jamboree. Attendees included a "Who's Who" of India Inc, from the heads of the country's mightiest conglomerates to founders of its sexiest startups. All came to pay tribute to Ram—but mostly to Mr Modi.

Some corporate guests came because of genuine appreciation for his stewardship of the economy. Others showed up out of fear that if they didn't, they and their businesses might find themselves fending off tax inspectors or struggling to secure business permits from a government that critics accuse of creeping authoritarianism. This odd mix of sentiment reflects the business world's attitude towards India's enigmatic strongman.

Businesses certainly have a lot to be grateful for. During Mr Modi's decade-long tenure GDP has grown faster than it has in most big countries. In the third quarter of 2023 it roared ahead by 7.6%, year on year. Foreign direct investment went from \$24bn in the year before Mr Modi's election in 2014 to more than double that on aver- ▶▶



Mystery man

age in the past three fiscal years (see chart 1). On January 22nd India's stockmarket overtook Hong Kong's as the world's fourth-biggest by market value.

Not all of this is Mr Modi's doing. India has, for example, benefited from Western firms' efforts to diversify supply chains away from China. But bosses also credit his policies. The roll-out of a national digital-ID scheme has fuelled a boom in digital payments and e-commerce. A national goods-and-services tax (GST) has replaced a baffling patchwork of state levies. The financial sector went from crippled to sturdy in ten years and the government has turned talk of privatisation into (some) action, notably selling Air India, the long-suffering flag carrier.

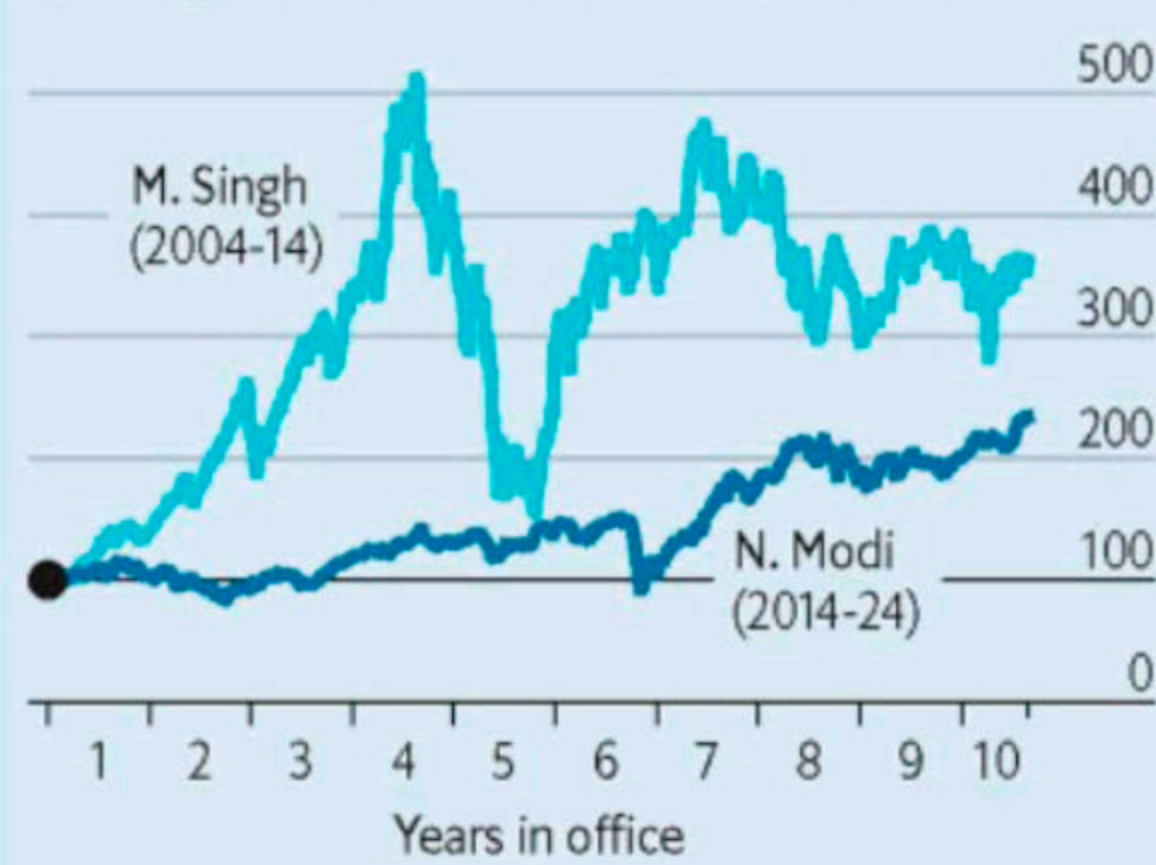
Economists debate the wisdom of protectionist bungs such as higher tariffs and "production-linked incentives" (PLIS) to promote manufacturing, on which the state is spending \$26bn over five years—but businesses love them. Christopher Wood of Jefferies, an investment bank, forecasts that if the BJP lost the election, the stockmarket would drop by 30%.

Industrialists are not shy about expressing their adulation. Two weeks before making the pilgrimage to Ayodhya, the heads of India's three biggest conglomerates fawned on Mr Modi at a jamboree in his home state of Gujarat. Mukesh Ambani of Reliance Industries called Mr Modi "the most successful prime minister in India's history". Natarajan Chandrasekaran of Tata Sons spoke of Mr Modi's "visionary leadership". Gautam Adani of the Adani Group lauded him for setting "a benchmark for a more inclusive world order". Lesser business figures zealously echo such sentiments, ideally within earshot of government officials.

In private, the praise is more guarded. Corporate leaders value Mr Modi's willingness to hear them out. He often turns up in person at business shindigs, which have mushroomed on his watch. Behind closed doors he meets not just big bosses but also lowlier executives. Regional and Indian

Singh and his praises

India, BSE Sensex index, total returns
Start of prime minister's tenure=100, \$ terms



Source: LSEG Workspace

heads of multinationals report that during such audiences he listens to them intently, asks clever questions and never comes across as distracted or bored. They feel free to give him their unadulterated opinions about policy, which he takes in even if he then feels free not to act on them.

He is also perceived as personally incorruptible—a welcome exception to India's venal politics. Some businesspeople grumble that the government makes life easier for national champions, such as Reliance and Adani Group. But they concede that these groups are putting money into areas such as telecoms, energy and infrastructure, all of which India needs, and that their relatively meagre financial returns do not scream cronyism. When prominent companies stumble because of mismanagement, Mr Modi does not intervene to save them from insolvency. That includes firms run by people seen to be close to him, such as Mr Ambani's brother, Anil, who headed a rival conglomerate, and the Ruia family, owners of Essar Steel.

Mr Modi has also, bosses acknowledge, opened doors for them abroad. He used his recent stint chairing the G20 club of big economies to promote himself—but also to promote his country. He has established stronger ties with America, Israel, Saudi Arabia and the United Arab Emirates. Indian financiers and executives say they can now get meetings with American, Arab and European bankers who a decade ago would have ignored their calls.

Criticisms come in more hushed tones. India's GDP per person grew briskly under Mr Modi by emerging-world standards but had risen half as fast again under his predecessor, Manmohan Singh of the Congress party, who also ruled for ten years. Stockmarket returns, too, have been lower in the past decade than in the one before (see chart 2). India may be resurgent, but the official measure of business investment as share of GDP is not (see chart 3).

Many of Mr Modi's most successful policies, such as the digital ID and the GST, were first put forward by Mr Singh's gov-

ernment. Some taxes are lower but, with the exception of the GST, no less Byzantine. The 73-year-old prime minister has no obvious successor. Although he remains sprightly, his eventual departure could therefore lead to political instability of the sort that businesses prefer to avoid.

Such concerns come up again and again in conversations with prominent business figures. None wants to be quoted. One reason for the public silence is as old as the Indian state: a rapport with the government can help businesses cut through impenetrable red tape; a lack of one can leave them at the mercy of bureaucrats. Another reason is new, specific to Mr Modi's BJP, and uttered underbreath. Criticism, businesspeople whisper, can invite retribution. This may come in the form of a probe by the Department of Revenue, the Serious Fraud Investigation Office or the Central Bureau of Investigation. It may concern matters dating back years, which makes defending yourself harder and costlier. To many luminaries of India Inc, staying in the government's good graces has gone from advisable to existential.

Fear of no favour

A tycoon last aired such concerns openly four years ago. Rahul Bajaj of the Bajaj Group, another conglomerate, told Amit Shah, Mr Modi's home-affairs minister, "You are doing good work, but despite that we don't have the confidence that you will appreciate it when we criticise you openly. Intolerance is in the air." Under Mr Singh, by contrast, the government was fair game. Mr Shah responded that "there is no need for anybody to fear...we have done nothing to be concerned about [with respect to] any criticism". "If anyone does criticise," he added, "we will look at the merit...and make efforts to improve ourselves."

Bajaj died in 2022, aged 83. No other corporate grandee has publicly echoed him since. In the eyes of his fellow industrialists, Mr Modi and his government are still doing good work. But intolerance is still in the air, too. ■

Incredible India

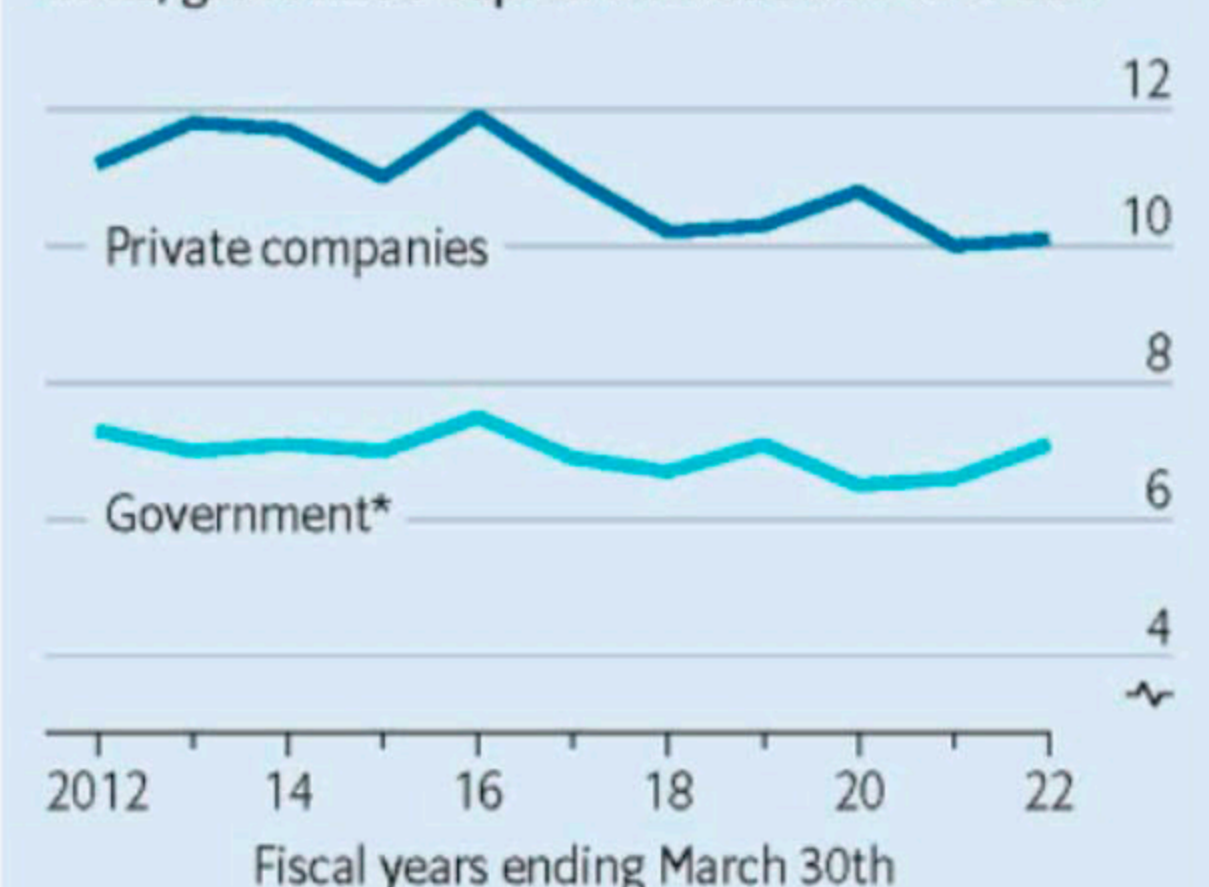
India, inflows of foreign direct investment
By origin, \$bn



Source: Ministry of Commerce and Industry

Ram and animal spirits

India, gross fixed-capital formation as % of GDP



Source: Centre for Monitoring Indian Economy

*Including state-controlled companies

Schumpeter | I spy with MSCI

How the secretive world of private assets may come out of the shadows



HENRY FERNANDEZ was once a counter-revolutionary. The man who over three decades has built MSCI, a provider of stock-market indices, into a standard bearer of financial globalisation, started his career as a Nicaraguan diplomat in the government of Anastasio Somoza, a right-wing dictator. While some of his friends flocked to the left-wing Sandinistas ahead of the revolution that toppled Somoza in 1979, he took a look at socialism in eastern Europe and decided it was doomed to fail. Instead, he embraced free-market capitalism and moved to Wall Street.

There he encountered a different revolutionary movement that he has championed ever since: the forward march of capital markets. Starting in the Reagan era, he has played a role in several of the upheavals that have swept the world of finance, from securitisation in the 1980s and the growth of emerging-market investing in the 1990s, to the rise of index tracking and exchange-traded funds (ETFs) this century. He retains an idealistic streak. While many former advocates of environmental, social and governance investing have shied away from the climate-related fad of the past half-decade, he remains a true ESG believer.

He is now betting that MSCI's indices can penetrate the opaque world of private finance—the \$12trn-plus of assets held in private equity, credit, venture capital, real estate and infrastructure. These are some of the hottest segments of the capital markets. But they are restricted to institutions and well-heeled investors. In these secretive markets asset managers are loth to encourage more transparency and liquidity lest their fees suffer as a result. Yet technology may be moving in Mr Fernandez's favour.

MSCI, which was spun off by Morgan Stanley, an investment bank, in 2007 and has a market capitalisation of \$45bn, has two main lines of business. The first is benchmarking. It has more than 280,000 equity indices around the world that tell investors what is going on in the public markets, and provide a measuring stick against which to judge fund managers' performance. If a fund puts all its money into small-cap Japanese stocks, for instance, and MSCI's medium- and large-cap Japanese equity indices do better, it underperforms. Almost \$15trn of assets are benchmarked in such a way globally.

The second line of business is enabling investment managers

to sell low-cost portfolios, such as ETFs, based on its indices. Almost \$1.5trn of ETF assets are linked to MSCI's indices, a nearly five-fold increase in a decade. BlackRock, the world's largest asset manager, is the biggest client. Its boss, Larry Fink, and Mr Fernandez have been kindred spirits for decades.

MSCI's first foray into the private realm is via benchmark indices. Since 2021 it has spent almost \$2bn buying two data-gathering firms that create indices for private assets, from real estate and infrastructure to private debt. As Mr Fernandez explains, such indices enable a property investor to decide the relative merits of putting money into, for example, offices (which crashed during the pandemic) versus data centres (which soared). Gathering such information is tricky because many of the transactions are not publicly disclosed. MSCI creates indices by sourcing data from investors in private funds, who in turn receive records of those funds' quarterly performance, including valuations of the underlying assets, from the asset managers. Its most recent acquisition, for instance, gives it data from about 13,000 private funds, representing \$15trn in cumulative investments.

Could these benchmarks eventually form the basis for indices used by ETFs to bring private markets to the masses? It seems hard to imagine. Private assets do not trade with anything like the frequency of listed assets. They also lack the liquidity necessary for passive funds whose investors may want to redeem their money at short notice.

And yet Mr Fernandez believes that some parts of this opaque hinterland, such as private loans, are more liquid than others. "My bet is that over time there will be the development of a secondary market for private credit," he says. To explain why, he goes back to his days as a young trader at Morgan Stanley during the "Liar's Poker" era of the 1980s. The market for mortgage loans was fledgling and illiquid until the thrifts that made home loans came under pressure to sell them. Wall Street firms like Salomon Brothers and First Boston (where Mr Fink headed the mortgage desk) scooped them up, turned them into mortgage-backed securities and sold them to investors, creating a highly liquid secondary market. Similarly, banks that underwrite loans today face regulatory pressure to limit the size of their balance-sheets, so they sell some of the loans to firms with private-credit arms, such as Apollo and Blackstone. Mr Fernandez thinks that, as with the mortgage market, this trade could lead to a secondary market that would, eventually, have enough liquidity for index funds.

A big breakthrough will require advances in technology. For that, Mr Fernandez has his eye on his veteran comrade-in-arms, Mr Fink. This month BlackRock launched its first bitcoin ETF, and Mr Fink, who seldom keeps his cards close to his chest, hinted that this may be the start of a prolonged foray into the cryptoverse that could eventually encompass private assets. "If we could ETF a bitcoin, imagine what we could do with all financial instruments," he told Bloomberg TV. "Everything is going to be ETFed."

ETFs or WTF?

Mr Fernandez notes that Mr Fink has become an advocate of "tokenisation"—the idea that financial assets and their owners can be registered on a blockchain-like ledger, which could make it easier to trade property and other private assets. It is an idea in its infancy. Some people think it is barmy. The MSCI boss confesses that for the time being he himself does not fully understand it. But in contrast to the Sandinistas, who have betrayed everything they once fought for, his revolutionary zeal remains as strong as ever. ■



Private markets

In for a trillion

Wall Street titans are betting big on insurers. What could go wrong?

BLACKSTONE LISTED on the New York Stock Exchange during the summer of 2007. Doing so just before the global financial crisis was hardly auspicious, and come early 2009 the firm's shares had lost almost 90% of their value. By the time the two other members of America's private-markets troika rang the bell, Wall Street had been battered. KKR listed on July 15th 2010, the same day Congress passed the Dodd-Frank Act, overhauling bank regulation. Apollo followed eight months later. Each firm told investors a similar story: private equity, the business of buying companies with debt, was their speciality.

Yet as the economy recovered, private-markets firms flourished—emerging as the new kings of Wall Street. The biggest put more and more money into credit, infrastructure and property. By 2022 total assets under management had reached \$12trn. Those at Apollo, Blackstone and KKR have risen from \$420bn to \$2.2trn over the past decade. Thanks to the firms' diversification, their shares rose by 67% on average during 2023, even as higher interest rates caused buy-outs to grind to a halt. Private

equity has plenty of critics, but the model of raising and investing funds—whether to buy companies or lend to them—seldom worries regulators. If things go wrong, losses are shouldered by a fund's institutional investors and humiliated fund managers struggle to raise money again. There is little threat to financial stability.

The latest development in the industry is upending this dynamic. Private-markets giants are buying and partnering with insurers on an unprecedented scale, which is transforming their business models, as they expand their lending operations and sometimes their balance-sheets. America's

\$1.1trn market for fixed annuities, a type of retirement-savings product offered by life insurers, has been the focus so far. But Morgan Stanley, a bank, reckons that asset managers could eventually pursue insurance assets worth \$30trn worldwide. Regulators worry that this is making the insurance industry riskier, exposing policymakers and perhaps even the wider financial system. Is the expansion by private-markets giants a land-grab by fast-and-loose investors in an important corner of finance? Or is it the intended consequence of a more tightly policed banking system?

Apollo, which has a well-deserved reputation for financial acrobatics, is leading the way. In 2009 it invested in Athene, a newly formed reinsurance business based in Bermuda. By 2022, when Apollo merged with Athene, the operation had grown to sell more fixed annuities than any other insurer in America. Today Apollo manages more than \$300bn on behalf of its insurance business. During the first three quarters of 2023, the firm's "spread-related earnings", the money it earned investing policyholders' premiums, came to \$2.4bn, or nearly two-thirds of total earnings.

Imitation can be a profitable form of flattery. KKR's tie-up with Global Atlantic, an insurer it finished buying this month, resembles Apollo's bet. Blackstone, meanwhile, prefers to take minority stakes. It now manages \$178bn of insurance assets, collecting handsome fees. Brookfield and Carlyle have backed large Bermuda-based reinsurance outfits. TPG is discussing part-▶▶

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nerships. Smaller investment firms are also involved. All told, life insurers owned by investment firms have amassed assets of nearly \$800bn. And the traffic has not been entirely one-way. In November Manulife, a Canadian insurer, announced a deal to buy CQS, a private-credit investor.

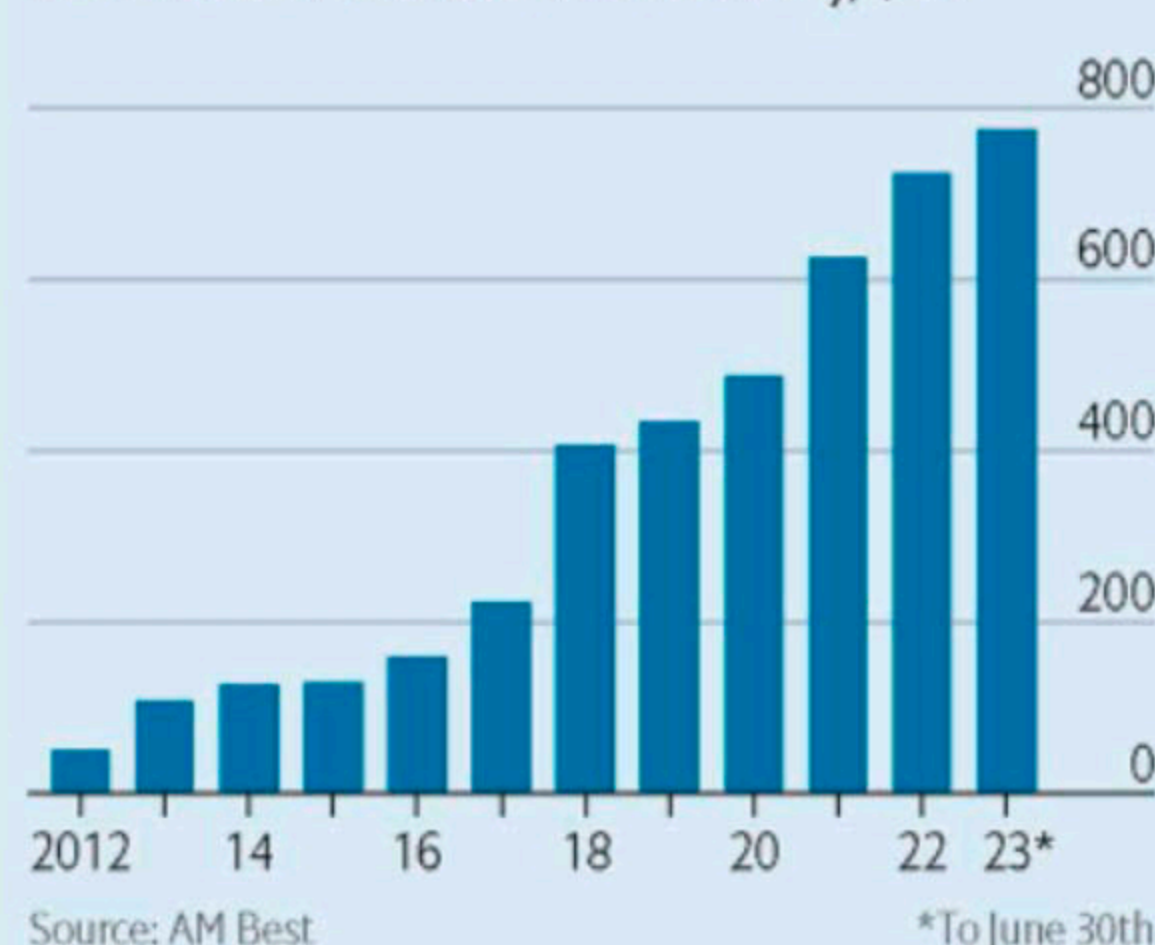
Some see such tie-ups as a win-win. In the rich world, a retirement crisis is looming. Defined-benefit pensions, where firms guarantee incomes for retirees, have been in decline for decades. Annuities allow individuals to plan for the future. It is a business that life insurers are happy to hand off to a throng of private-markets buyers. Sales and reinsurance deals free life insurers' balance-sheets for share buy-backs or other, less capital-intensive insurance activities that are better regarded by their investors. At the same time, private-markets firms acquire boatloads of assets and stable fees for managing them.

But there could be risks to both policyholders and financial stability. The American insurance industry is mainly regulated by individual states, which lack the speed and smarts of the private-markets giants. Important standards, such as the capital that insurers must hold, are set by the National Association of Insurance Commissioners (NAIC), a body of state regulators. In 2022 the NAIC adopted a plan to investigate 13 regulatory considerations about private-equity-owned life insurers, including their investments in private debt and taste for offshore reinsurance deals.

Others have joined the chorus of concern. In December the IMF urged lawmakers to remove opportunities for regulatory arbitrage by adopting consistent rules on capital standards, and to monitor systemic risks in the industry. Researchers at the Federal Reserve have argued that life insurers' tie-ups with asset managers have made the industry more vulnerable to a shock. The researchers even compared insurers' lending activities to banking before the financial crisis. Bankers, who frequently complain that they are over-regulated by comparison, might be inclined to agree.

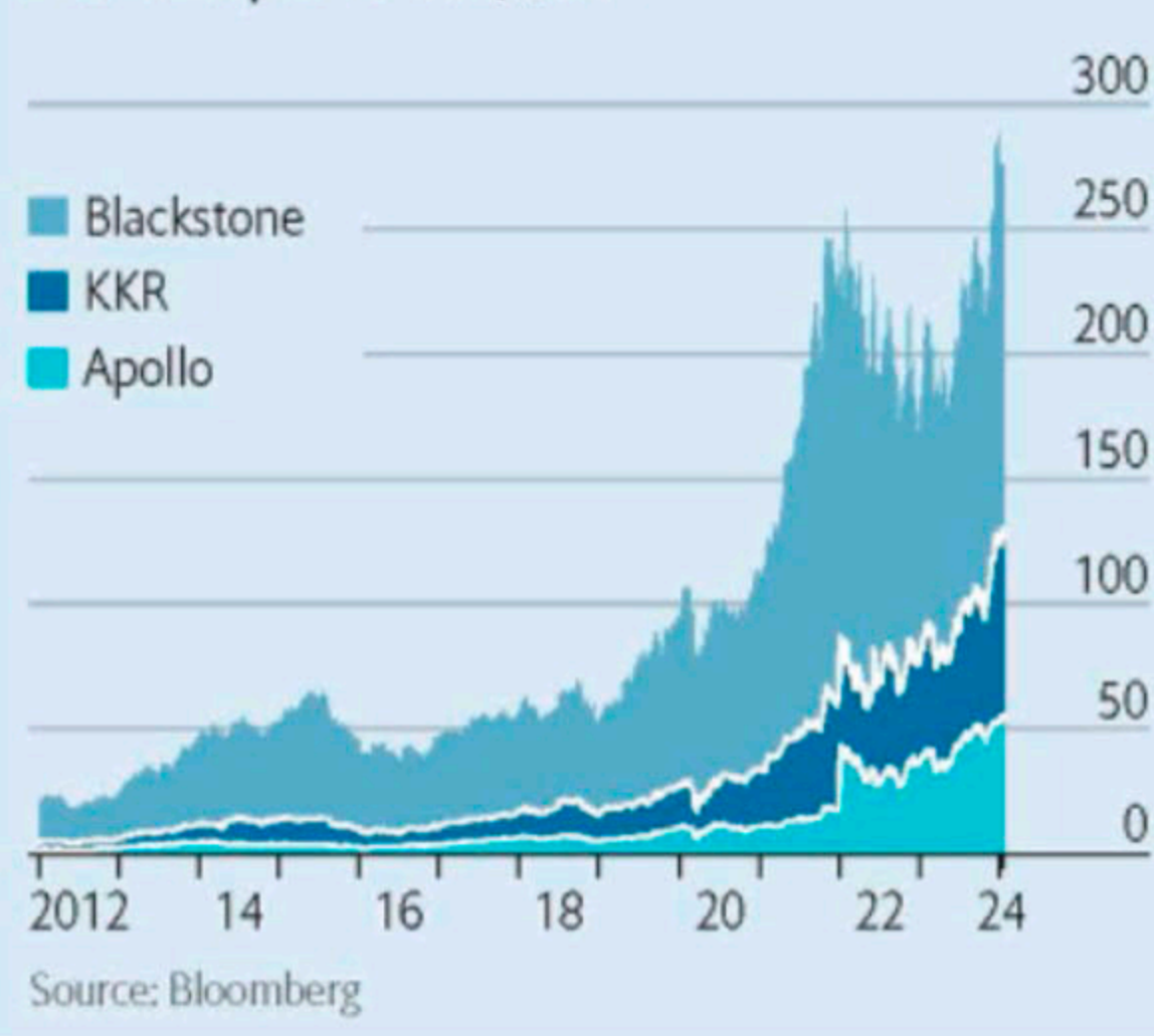
Golden handshake

United States, private equity, assets in life-insurance and annuities industry, \$bn



Increasingly regal

Market capitalisation, \$bn



Unlike bank deposits, annuities cannot be withdrawn quickly or cheaply by policyholders. Surrender fees payable for early withdrawals make a "run" on a life insurer unlikely, but not impossible. Private-markets bosses reckon that this makes insurers ideal buyers of less liquid assets with higher yields. As such, they are shifting insurers' portfolios away from freely traded government and corporate bonds, which make up most of America's debt market, and towards "structured" credit, so-called because it is backed by pools of loans.

Excluding government-backed property debt, America's structured-credit market totals \$3trn in paper promises, backed in roughly equal proportions by real-estate borrowing and other assets, including corporate loans bundled together to form collateralised-loan obligations (CLOs). The logic of this securitisation is simple: the lower the expected correlation of defaults between risky loans, the more investment-grade credit can be created for investors.

According to the NAIC, at the end of 2022 some 29% of bonds on the balance-sheets of private-equity-owned insurers were structured securities, against the industry average of 11%. These assets would not just be harder to sell in a panic; they are harder to value, too. Fitch, a rating agency, analysed the share of assets valued using "level 3" accounting, which is employed for assets without clear market values. The average share for ten insurers owned by investment firms was 19%, around four times higher than the broader sector.

And the biggest asset managers do not just buy private debt, they create it. Some have greatly expanded their lending activities to fill their affiliated insurers' balance-sheets. Nearly half of Athene's invested assets were originated by Apollo, which has scooped up 16 firms, ranging from an industrial lender based in Blackburn, in north-west England, to an aircraft-finance operation formerly owned by General Electric, an American conglomerate. KKR's tie-up with Global Atlantic has driven a seven-fold rise in the size of its structured-credit

operation since 2020. The role of private-markets firms in securitisation could grow if new banking rules, known as the "Basel III endgame", increase capital requirements that banks face for these activities.

One worry is about how this debt would perform during a prolonged period of financial distress. Ratings downgrades would mean increased capital charges. High-profile defaults could lead to policyholder withdrawals. Although the market expects interest-rate cuts in 2024, many floating-rate borrowers, not least those in commercial property, are still reeling from the effects of higher payments.

The market for structured credit is simpler than before the financial crisis (structured securities backed by other structured securities are, for instance, a thing of the past). Insurers also typically buy investment-grade tranches created by a securitisation, meaning losses would first be felt by those further down the "waterfall" of cash flows. But not everyone is reassured. Craig Siegenthaler of Bank of America says that investors cannot come to a firm conclusion on these approaches until they have endured a proper stress test. Sceptics also note that regulation struggles to adjust to financial innovation. Under current rules, the amount of capital insurers must hold after buying every tranche of a CLO can be less than if they had bought the underlying risky loans, which encourages investments in complex, illiquid products.

The special one

Some firms' investments look astonishingly illiquid. Consider Security Benefit, an American life insurer established in Kansas in 1892. In 2017 it was acquired by Eldridge, an investment firm run by Todd Boehly, whose other properties include Chelsea Football Club. In September nearly 60% of the \$46bn of financial assets held on Security Benefit's balance-sheet were valued at "level 3". According to data from S&P Global, the firm's \$26bn bond portfolio contains just \$11m of Treasuries.

Like other insurers, Security Benefit has bought bonds from an affiliated asset manager. Its holdings include several CLOs created by Panagram, an asset manager owned by Eldridge. Security Benefit's largest such holding is a CLO backed by \$916m of risky loans. After securitisation, this pot yielded over \$800m of investment-grade debt for the insurer's balance-sheet. (The firm says its "long-dated liabilities include built-in features such as surrender charges, market-value adjustments and lifetime withdrawal benefits that significantly protect against material adverse cash outflows relative to expectations", and that it has several billions of dollars of liquidity available via institutional sources.)

Across the insurance industry as a whole, assessing the risks posed by invest- ▶▶

ments is made harder by the proliferation of offshore reinsurance. According to Moody's, another rating agency, by the end of 2022 almost \$800bn in offshore reinsurance deals had been struck. These involve an insurer transferring risk to another based abroad (sometimes to a "captive" insurer that it owns). Bermuda, which offers looser capital requirements, is by far the most popular location for such deals, which disproportionately involve insurers affiliated with private-equity firms.

Last year saw a number of blockbuster reinsurance deals, where life insurers partnered with private-equity-backed reinsurers. In May Lincoln National announced a \$28bn deal with Fortitude Re, a Carlyle-backed Bermuda outfit. The same month MetLife, another big insurer, announced a \$19bn deal with KKR's Global Atlantic. Such is the demand for offshore reinsurance that in September Warburg Pincus, another big private-equity firm, announced that it would launch its own operation on the island backed by Prudential, an insurer.

In a letter to the NAIC, Northwestern Mutual, a large life insurer, warned that offshore reinsurance transactions could decrease transparency and diminish the capital strength of the industry. Regulators seem to agree, and Bermuda has faced international pressure to tighten its rules. In November British officials proposed new rules that could limit offshore reinsurance. The month after, Marc Rowan, boss of Apollo, admitted that some of the industry's offshoring was a concern. With Bermuda tightening its restrictions, he worried that some firms would simply move to the Cayman Islands in order to preserve the opportunity for regulatory arbitrage.

Yet it is Italy, not Bermuda, which has furnished regulators with their most worrying case study. Beginning in 2015 Cinven, a British private-equity firm, acquired and merged a number of Italian life insurers. Cinven's Italian super-group, called Eurovita, had assets of €20bn (\$23bn) by the end of 2021. Rising interest rates then caused the value of its bond portfolio to fall and customers to surrender their policies in search of higher-yielding investments. A capital shortfall meant that in March 2023 Eurovita was placed into special administration by Italian regulators before some of its policies were transferred to a new firm.

Eurovita's woes stemmed from poor asset-liability management rather than investments in private debt. It had especially weak protections to stop policyholders withdrawing money, and Cinven's investment was made through a classic private-equity fund, not the partnerships, reinsurance transactions or balance-sheet deals undertaken by the biggest asset managers. Nevertheless, according to Andrew Crean of Autonomous, a research firm, there has been a palpable chilling of European regu-

lators' attitudes to private equity in the insurance industry after the debacle.

Should more blow-ups be expected? The speed of the life-insurance industry's marriage with private capital makes them hard to rule out. Competition for assets may tempt some private-markets firms to move beyond annuities to liabilities less suited to their strategies. Should an insurer collapse, the reverberations could be felt throughout financial markets. Although private markets have reinvigorated the insurance industry, regulators have reason to worry they are also making it less safe. ■

Emerging markets

Escaping the dragon

SINGAPORE

Investors search for China alternatives

SOME FOREIGN investors in China are most worried by the country's souring relations with the West. Others fret about the unprecedented slump in its property market. Many are simply tired of losing money. Rumours that officials are considering steps to stabilise the country's markets may have brought respite in recent days, but over the past year the CSI 300 index of Chinese shares has fallen by 22% and Hong Kong's Hang Seng index by 30%.

As such, optimism about China Inc is an increasingly distant memory. Just five years ago, though, investors clamoured for exposure to the country's growth miracle and sought diversification from rich-world markets, which often move in sync. Providers of the world's big stock indices were making adjustments accordingly. Between 2018 and 2020 Chinese stocks listed onshore, known as A-shares, were added to the benchmark emerging-markets index.

At their peak in 2020 Chinese firms made up more than 40% of the MSCI emerging-market index by value. In 2022 foreigners owned \$1.2trn-worth of stocks, or 5-10% of the total, in mainland China and Hong Kong. One financier describes the challenge of investing in emerging markets while avoiding China as like investing in developed markets while avoiding America. But that is not stopping investors from assessing their options.

Some financial firms are eager to help. Jupiter Asset Management, Putnam Investments and Vontobel all launched actively managed "ex-China" funds in 2023. An emerging-market, ex-China, exchange-traded fund (ETF) issued by BlackRock is now the fifth-largest emerging-market equity ETF, with \$8.7bn in assets under management, up from \$5.7bn in July.

A handful of emerging stockmarkets are benefiting. Money has poured into India, South Korea and Taiwan, whose shares together make up over 60% of ex-China emerging-market stocks. These markets received \$16bn from foreign investors in the final three months of 2023. Squint and the countries together look a little like China: a fast-growing middle-income country with potential for huge consumption growth (India) and two that are home to advanced industry (Taiwan and South Korea).

Western investors looking for exposure to China's industrial stocks are also turning to Japan, encouraged by its corporate-governance reforms. Last year foreign investors ploughed ¥3trn (\$20bn) into Japanese equity funds, the most in a decade. For those with broad mandates, different asset classes are an option. Asia-focused funds investing in real assets, including infrastructure, have grown in popularity.

Yet these various alternatives have flaws of their own. Unlike China's offerings, Indian stocks are expensive. They have higher price-to-earnings ratios than those in other big emerging markets. Although Japan's stocks look relatively

In need of a miracle

Market capitalisation

Large and medium-sized firms, Jan 6th 2020=100



Sources: MSCI; World Federation of Exchanges

Stock exchanges, November 2023, \$trn



cheap, they make an odd choice for investors seeking rapid income growth. Likewise, Taiwanese and South Korean stocks are included among emerging markets because of the relative illiquidity and inaccessibility of their exchanges, but both economies are mature high-income ones.

Size is a problem, too. Many places benefiting as supply chains move away from China are home to puny public markets. Even after fast growth, India's total market capitalisation is just \$4trn—not even a third of Hong Kong, Shanghai and Shenzhen combined. When MSCI released its

emerging-market index in 1988, Malaysia accounted for a third of its stocks by value. It now represents less than 2%. Brazil, Chile and Mexico together made up another third; today they make up less than 10%.

And whereas returns on Chinese investments tend to follow their own logic, smaller economies are more exposed to the vagaries of the dollar and American interest rates. According to research by UBS Asset Management, Chinese stocks had a correlation of 0.56 with those in the rich world between December 2008 and July 2023 (a score of one suggests the stocks rise

and fall in tandem; zero suggests no correlation). By contrast, stocks from emerging markets excluding China had a correlation of 0.84 with rich-world equities.

The emergence and growth of funds that pledge to cut out China will make life easier for investors who wish to avoid the world's second-largest stockmarket. Without a turnaround in the country's economic fortunes, or a sustained cooling of tensions between Beijing and Washington, interest in such strategies will grow. They will not, however, evoke the sort of enthusiasm investors once felt about China. ■

Buttonwood Monetary mistakes

Investors may be getting the Federal Reserve wrong, again

THE INTEREST-RATE market has a dirty secret, which practitioners call “the hairy chart”. Its main body is the Federal Reserve's policy rate, plotted as a thick line against time on the x-axis. Branching out from this trunk are hairs: fainter lines showing the future path for interest rates that the market, in aggregate, expects at each moment in time. The chart leaves you with two thoughts. The first is that someone has asked a mathematician to draw a sea monster. The second is that the collective wisdom of some of the world's most sophisticated investors and traders is absolutely dreadful at predicting where interest rates will go.

Since inflation began to surge in 2021, these predictions have mostly been wrong in the same direction. They have either underestimated the Fed's willingness to raise rates or overestimated how quickly it will start cutting them. So what to make of the fact that, once again, the interest-rate market is pricing in a rapid loosening of monetary policy?

This time is different, and in an important way. A year ago investors betting that rates would soon be cut were fighting the Fed, whose rate-setters envisaged no such thing. Then, in December, the central bank pivoted. Rate cuts were now being discussed, announced Jerome Powell, its chairman, while officials forecast three of them (or 0.75 percentage points' worth) in 2024. The market has gone further, pricing in five or six before the year is out. It is, though, now moving with the Fed, rather than against it. Mr Powell, in turn, is free to make doveish noises because inflation has fallen a lot. Consumer prices rose by just 3.4% in the year to December, compared with 6.5% in the month before that.

Yet the past few years have shown how eager investors are to believe that

cuts are coming, and how frequently they have been wrong. And so it is worth considering whether they are making the same mistake all over again. As it turns out, a world in which rates stay higher for longer is still all too easy to imagine.

Begin with the causes of disinflation to date. There is little doubt that rapidly rising interest rates played a role, but the fading of the supply shocks that pushed up prices in the first place was probably more important. Snarled supply chains were untangled, locked-down workers rejoined the labour force and soaring energy prices fell back to earth. In other words, negative supply shocks gave way to positive ones, cooling inflation even as economic growth rebounded.

Yet these positive shocks are now themselves fading. Supply chains, once untangled, cannot become any more so. America's participation rate—the proportion of people in its labour force—increased from 60% in April 2020 to 63% last August, but has since stopped rising. Meanwhile, energy prices stopped falling early last year. And escalating violence in

the Middle East, where America and Israel risk being drawn ever further into conflict with proxies and allies of oil-producing Iran, could yet cause prices to start rising again. All of this leaves monetary policy with more work to do if inflation is to keep falling.

At the same time as America's participation rate has stopped rising, wages have continued to climb. According to the Atlanta Fed, in the fourth quarter of 2023 median hourly earnings were 5.2% higher than a year before. After adjusting for inflation, this is well above the long-run annual growth rate for workers' productivity, which has been a little over 1% since the global financial crisis of 2007-09. A gap between wage and productivity growth will, all else equal, continue to force up prices. For the Fed, this makes rate cuts harder to justify.

The case that rates may stay high is therefore plausible even if you ignore the political backdrop. In an election year, that is a luxury which central bankers do not have. The danger of easing monetary policy too early and allowing inflation to come back, as happened in the 1970s, already looms over the Fed. During a presidential campaign featuring Donald Trump, cutting rates too quickly could have even graver consequences. The cry would inevitably go up that officials had abandoned their mandate in an attempt to juice the economy, please voters and keep Mr Trump out of office.

And Mr Trump may well win, in which case he will probably pursue deficit-funded tax cuts, driving inflationary pressure yet higher and forcing the Fed to raise rates. Such a scenario is still, just about, speculative fiction. It is certainly not what investors expect. But when you look at their predictive record, that is hardly a comfort.



Valuing currencies

Milkshake and lies

Donald Trump might want to pay attention to our burger calculations

LITTLE IS MORE symbolic of globalisation than a McDonald's hamburger. The American fast-food chain opened its first Chinese branch in 1990. The outlet was in Shenzhen, a small town just across the border from Hong Kong, which was home to the country's original "Special Economic Zone"—an area where the Chinese government could try market liberalisation before rolling it out to the rest of the country. The Big Mac was a little piece of American capitalism in a communist country.

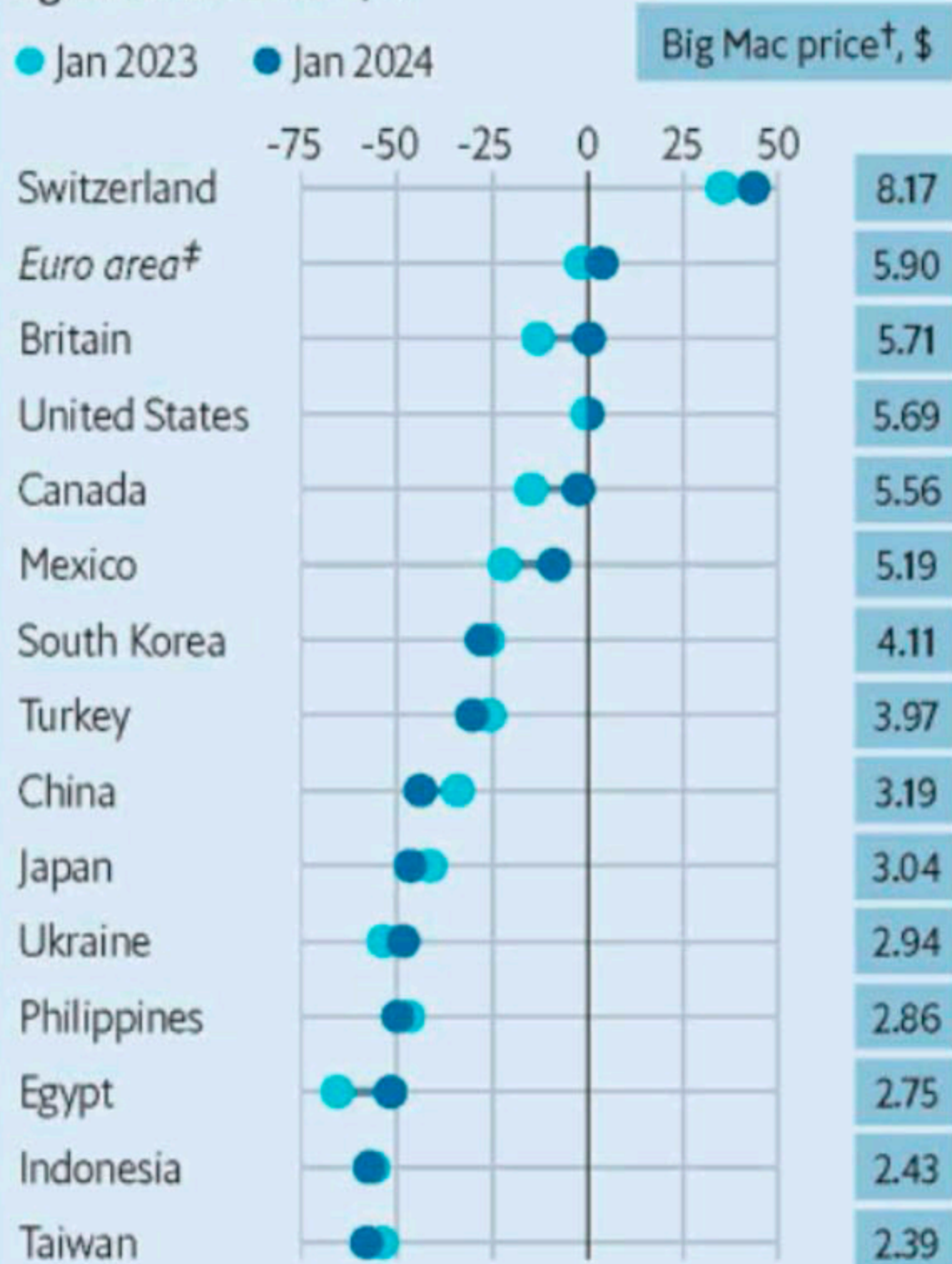
We started publishing our Big Mac Index—a tongue-in-cheek way to value currencies—a few years earlier, in 1986. Our latest update shows that the Chinese yuan is the most undervalued it has been against the dollar since shortly after the global financial crisis of 2007-09. Back then American politicians argued that China's leaders were deliberately undervaluing their currency in order to get an unfair advantage, and boost exports. Do they have reason to be suspicious this time around?

The index demonstrates the concept of purchasing power parity (PPP), which maintains that the real value of a currency is the amount of goods and services that you can buy with it, rather than the number on a trader's terminal. Over a long enough time frame, however, the two values should converge: the relative cost of buying the same bundle of goods and services in two different countries should roughly equal the nominal exchange rate. Otherwise savvy traders could consistently make a risk-free profit by selling goods across borders. Admittedly, the theory works better for some products than others. Shipping a burger from Shenzhen to Seattle might be inadvisable.

Yet PPP conversion factors, which aim to show the gap in relative prices between two countries, and are produced by international bodies such as the World Bank, have to contend with something difficult. People buy different goods in different countries. Chinese branches of McDonald's sell things such as boba tea and congee, for instance, and these delicacies are unavailable to American consumers. Fortunately, though, the Big Mac is a standardised product. Consumers in China enjoy the same meat patties as those in America. Comparing the price of the burger in different countries with their exchange rates gives a rough idea of whether their currencies are undervalued or overvalued.

The Big Mac index

Local currency under(-)/over(+) valuation against the dollar*, %



*Selected countries †At market exchange rates (Jan 22nd 2024)
‡Weighted average of member countries
Sources: McDonald's; The Economist

A Chinese Big Mac cost 23 yuan in December 2023, whereas the American version came to \$5.69. Divide one by the other and the Big Mac index gives a dollar-to-yuan exchange rate of 4.04. That compares with a nominal exchange rate of 7.20 yuan per dollar. It therefore suggests that the yuan is undervalued by 44%. And the price of a Big Mac in China has fallen since we last updated our index in June. Deflation has come to the McDonald's menu as well as the rest of the economy.

Perhaps the Big Mac index will provoke Donald Trump. During his successful presidential campaign, Mr Trump promised to label China a "currency manipulator" on his first day in office. At the time, the country's currency was just 37% undervalued according to our burger index. America did belatedly label China a currency manipulator in 2019, despite Chinese leaders intervening to support the yuan, only to then reverse the decision in 2020.

Mr Trump would be well-advised to hold off this time, however. China is an outlier in seeing deburgerflation, but the undervaluation of its currency is not unusual. Although the dollar has weakened against the currencies of some richer economies, such as Britain and Canada, it has strengthened against all but a few poorer ones. Moreover, low inflation in Asia, compared with America and Europe, has led to relatively cheaper Big Macs: Japan, South Korea and Taiwan have also seen their currencies become more undervalued. If the appearance of burgers indicates the arrival of globalisation, their staying power (and good value) is testament to American capitalism's continued success. ■

Gourmet commodities

Sugar high

Why sweet treats are so expensive

WHEN RUSSIA invaded Ukraine in 2022, the arrival of war in one of the world's breadbaskets sent the price of foodstuffs soaring—with one exception, sugar. But last year was worse for folk with a sweet tooth. As grain prices fell, sugar prices jumped (see chart on next page).

Although they have fallen more recently, they remain high. So do prices of a varied class of non-essential agricultural materials we dub "gourmet commodities". The price of cocoa, up by 82% in 12 months, is at a 46-year high. The wholesale price of olive oil, at €9,000 (\$9,800) a tonne, has reached an all-time record (the previous peak was \$6,200 in 2006). In New York "OJ" contracts, for future deliveries of frozen concentrated orange juice, are being traded at \$3.07 a pound, some 50% higher than in January last year. The coffee market is sleepier, but prices for Arabica beans—the finer kind—are still up by 44% since 2021.

The reason for surging prices is not that consumers have a sudden taste for Coca-Cola and KitKats, but a litany of problems in regions where gourmet commodities are produced. El Niño, a climate pattern, has caused droughts in Australia, India and Thailand, three of the four biggest exporters of sugar. Torrential rain in Brazil, the largest, has complicated shipping.

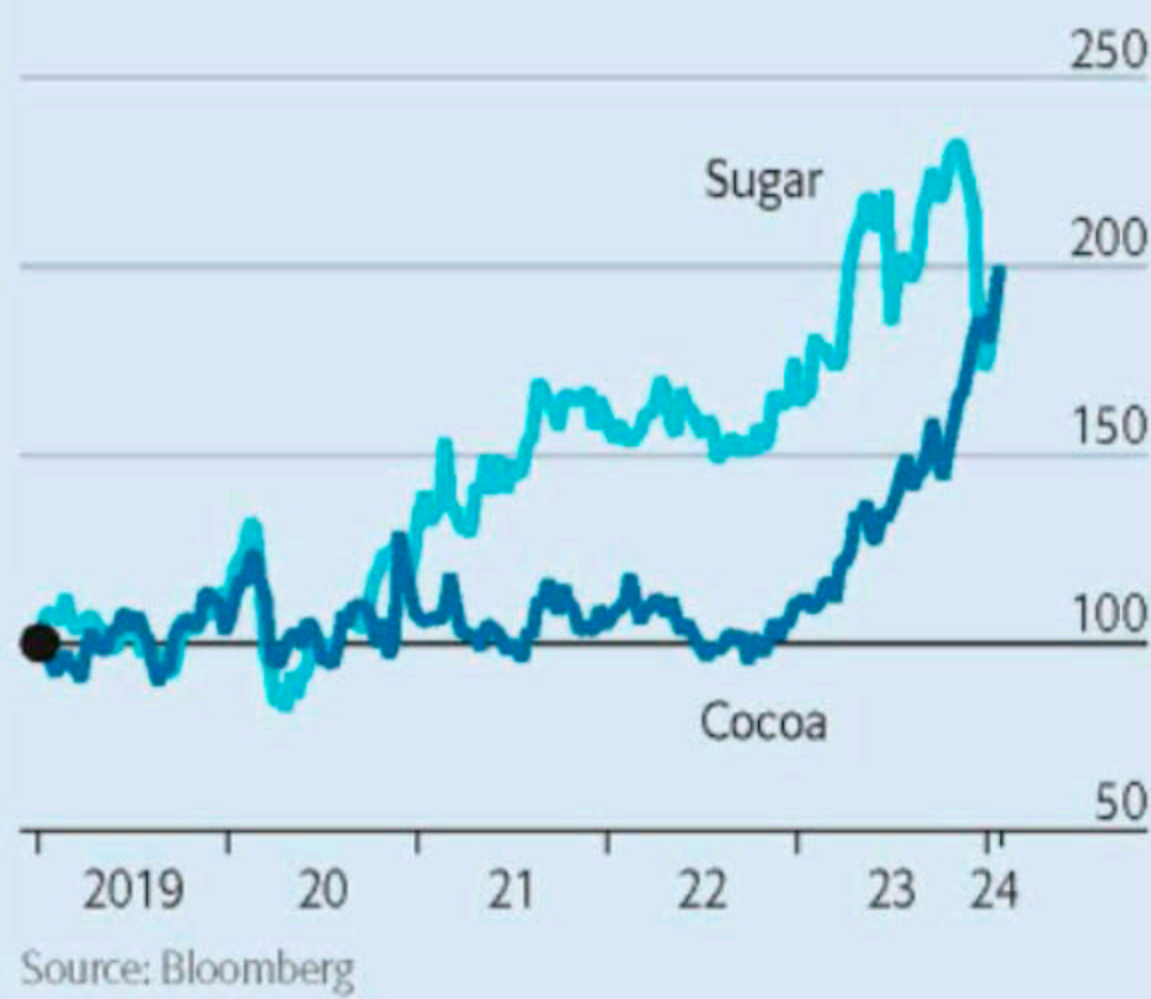
A heatwave in Spain, which produces half of the world's olive crop, has kept last year's harvest on a par with the one in 2022, which was the worst in a decade. Hurri-▶▶



Ripe for profit

Takes the cake

Commodity prices, January 4th 2019=100



► canes have wiped out about 10% of orange trees in Florida, where nine in ten American oranges are grown. Heavy rain through the summer months allowed the dreaded black-pod disease and swollen-shoot virus to spread in Ghana and Ivory Coast, the world's two largest cocoa producers.

Elevated prices for gourmet commodities are already feeding through into those of finished goods. The cost of sugar and sweets rose by almost 9% in America in 2023, and several confectionery giants have warned that such goods are likely to become still more expensive over the coming year. In theory, this should depress demand. Yet there is little sign of higher prices denting consumer appetite so far.

Cake fans have little choice but to hope that prices will fall when El Niño fades, as is expected in June, and that farmers will start to plant more in response to existing prices. Any respite will probably prove short-lived, however. The EU's "Deforestation-free Regulation"—tough new rules for exports into the bloc, which cover cocoa, coffee and palm oil—will come into force at the end of 2024. Increased compliance costs and uncertainty regarding enforcement may prompt European importers to stockpile before the deadline. Since Europe typically accounts for a third of global cocoa and coffee imports, such a rush for supply would give global markets a jolt.

More worrying still are longer-lasting phenomena. In Ghana and Ivory Coast the prices at which farmers sell to wholesalers, which are fixed by the state, remain too low; something Paul Joule of Rabobank, a Dutch lender, says discourages new planting despite sky-high global prices. He does not expect policies to change soon. And as climate change makes extreme weather more frequent, the risk that several crucial production regions suffer at the same time—and that the world's biggest producers curb exports in response—only rises.

Thus consumers will have to pay up. Farmers will keep missing out. And the middlemen who feed on price swings will grab an ever greater slice of the pie. ■

Jock taxes

Ballpark figures

WASHINGTON, DC

States fight for the right to squeeze athletes (and remote workers)

SPORTS ARE big business in America. The country's four largest professional leagues generate about \$45bn in revenues a year, more than half of the total produced by leagues worldwide. That makes for plenty of richly paid stars—and income-generating opportunities for governments. Enter the "jock tax", an attempt by states and cities to stake a claim to the earnings of visiting athletes.

Jock taxes gained attention in 1991 when Michael Jordan's Chicago Bulls defeated the Los Angeles Lakers in the finals of the National Basketball Association—and California taxed them for their efforts. Illinois followed up with "Michael Jordan's revenge" tax. Other states soon got in on the act, too. The public was pleased: not only were states taxing the rich, they were hitting the despised rivals of much-loved home teams.

But a recent ruling in Pennsylvania may mark the end of the most egregious jock taxes. The city of Pittsburgh had charged non-resident athletes a 3% fee for using its baseball, football and ice-hockey facilities. Resident athletes, by contrast, pay only a 1% income tax to the city. On January 10th a court struck down the levy, finding that it violated the state's constitution, which calls for uniform taxes. Similar taxes have been revoked in Ohio and Tennessee, among others. Stephen Kidder of Hemenway & Barnes, a law firm, has represented players in such cases and says Pittsburgh was the last true outlier in slapping discriminatory taxes on athletes.

The ruling does not, however, mean the end of jock taxes more generally. State income taxes apply to any income earned in-state, including by non-residents. In practice, authorities rarely keep tabs on people when they move around for a few days of work here and there. Not so for athletes, whose schedules are publicised. California, for instance, is estimated to bring in more than \$200m a year from taxes on non-resident athletes. "Athletes definitely get singled out in a way that is unfair," says Mr Kidder.

Taxation based on location of work rather than residence does not constitute an extra levy, but a more complex filing process. So long as athletes come from a state with an income tax, they would have had to pay these taxes anyway—the question is to which government. Professional baseball players may need to file two dozen separate tax returns.

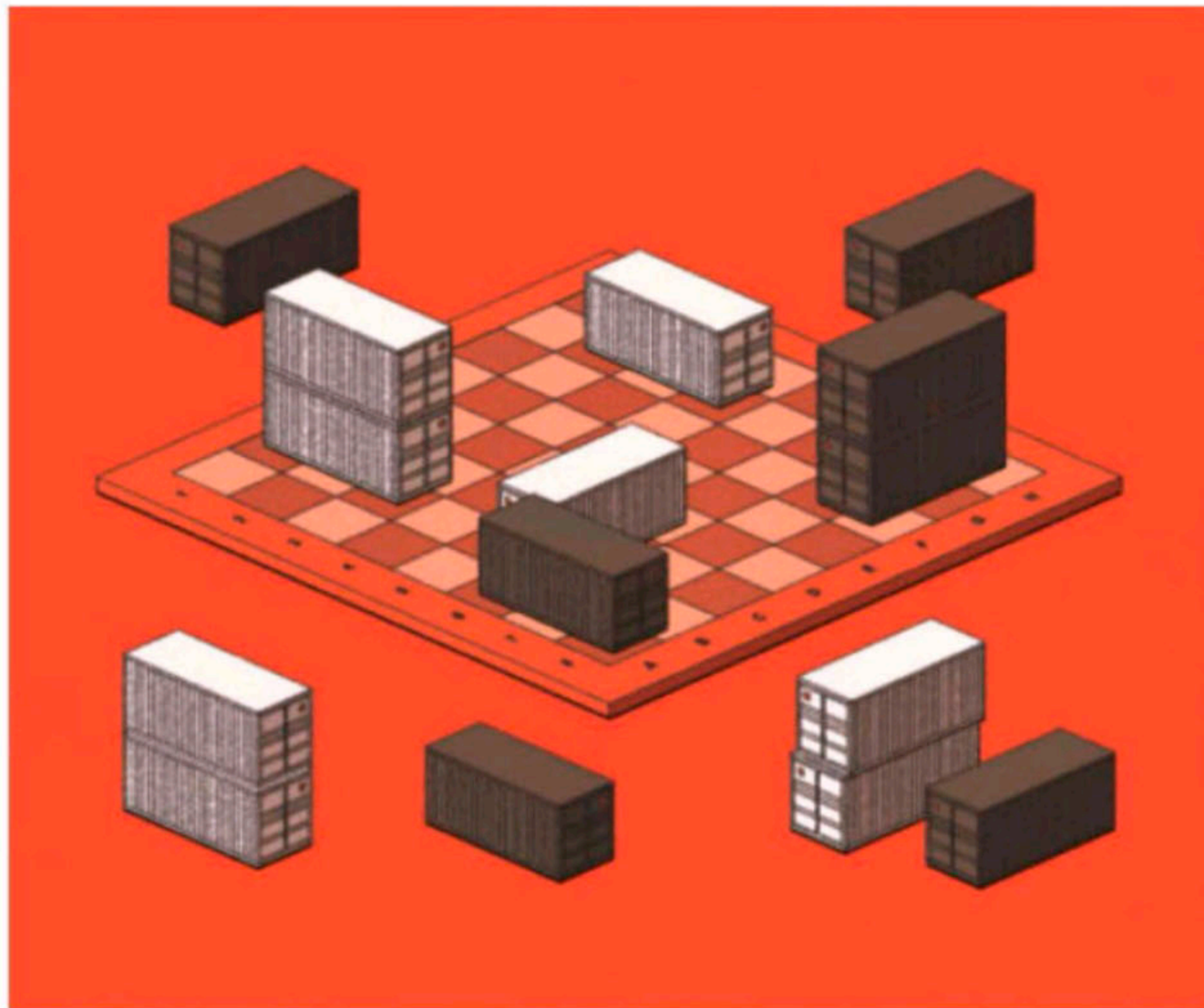
In an era of remote work, the plight of athletes is becoming more familiar. Workers who straddle locations should file multiple tax returns, even if many do not. "The burden for athletes is a magnified version of what many taxpayers face now," says Jared Walczak of the Tax Foundation, a think-tank. To simplify things, some states have introduced tax-filing thresholds. For instance, Montana exempts non-residents if they work there for less than 30 days. But it still charges athletes and entertainers for a single day of work within its borders. As Mr Walczak notes: "It doesn't seem likely that pro athletes will get a break anytime soon."



Next up: a tax return

Free exchange | Opening gambit

Countries are trading less with their geopolitical rivals. But “friendshoring” has its limits



EACH YEAR the 193 member states of the United Nations General Assembly vote on dozens of resolutions, earnestly setting the world to rights. Last month, for example, they voted in favour of reducing space threats, eradicating rural poverty and combating dust storms, among other things. The votes count for little. The assembly’s resolutions are not legally binding. Its budgetary powers are small. And it has as many military divisions as the pope.

But for scholars of international relations, these votes have long provided a handy, quantitative measure of the geopolitical alignments between countries. More recently, economists have also turned to them. Owing to the trade war between America and China, Russia’s invasion of Ukraine, the conflict in Gaza and recent blockades in the Red Sea, geopolitics has become impossible for dismal scientists to ignore. Although their models of trade and investment typically give pride of place to the economic size of countries and the geographic distance between them, they are now considering “geopolitical distance” as well.

The latest such study was published this month by the McKinsey Global Institute, a think-tank attached to the consultancy of the same name. By analysing countries’ votes on 201 of the higher-profile resolutions between 2005 and 2022, McKinsey was able to plot countries’ geopolitical stances on a scale from zero to ten. America stands at one end of the spectrum, labelled zero. At the other end is Iran at ten. In between are countries like Britain at 0.3, Brazil at 5 and China at 9.6.

The authors use this measure to provide a new perspective on each country’s trade. As well as measuring the average geographical distance that a country’s trade must travel, they also calculate the geopolitical distance it must traverse. In a hypothetical world in which half of Iran’s trade was with America and half with Brazil, its trade would cover a geopolitical distance of 7.5.

Their results are illuminating. European countries trade mostly with one another. As a consequence, their trade for the most part flows to their friends and neighbours. Things are rather less comfortable for Australia, however. It must trade with countries that are both geopolitically and geographically remote.

America is somewhere in between. Thanks in part to its continental size, it has few prosperous neighbours. Less than 5% of glo-

bal GDP is generated by countries within 5,000km of America, as McKinsey points out. Its trade travels almost 7,200km on average, compared with 6,600km for China’s trade and a global average of less than 5,200km. Yet in the diplomatic realm, the world is not so far away. The geopolitical distance America’s trade must cover is only a little above the global average. It is far shorter than the diplomatic distances bridged by China. Indeed, China’s trade covers a greater geopolitical gap than that of any of the other 150 countries in McKinsey’s data, bar Nicaragua, which resents America, but is doomed to do business with it.

The study finds some early evidence of “friendshoring”. Since 2017, America has managed to shorten the geopolitical distance covered by its trade by 10%, on McKinsey’s scale. It has, for example, sharply curtailed imports from China, although some of the goods it now buys from other countries, such as Vietnam, are full of Chinese parts and components. China has also reduced the geopolitical distance of its trade by 4%, although that has required it to trade with countries farther afield geographically.

Yet the report identifies several limits to this trend. Much of the trade countries carry out with ideological rivals is trade of necessity: alternative suppliers are not easy to find. McKinsey looks at what it calls “concentrated” products, where three or fewer countries account for the lion’s share of global exports. This kind of product accounts for a disproportionate share of the trade that spans long geopolitical distances. Australia, for example, dominates exports of iron ore to China. Likewise China dominates exports of batteries made from neodymium, a “rare-earth” metal.

The attempt to reduce geopolitical dangers may also increase other supply-chain risks. Friendshoring will give countries a narrower range of trading partners, obliging them to put their eggs in fewer baskets. McKinsey calculates that if tariffs and other barriers cut the geopolitical distance of global trade by about a quarter, the concentration of imports would increase by 13% on average.

For countries in the middle of the geopolitical spectrum, friendshoring has little appeal. They cannot afford to limit their trade to other fence-sitters, because their combined economic clout is still too small. Countries that score between 2.5 and 7.5 on McKinsey’s scale—a list that includes rising economies such as Brazil, India and Mexico—account for just one-fifth of global trade. To avoid falling between two stools, they must seek to trade across the geopolitical spectrum, just as they do now.

Friendshoring has limits for China as well. There are simply not enough big economies in its geopolitical orbit to compensate for reduced trade with unfriendly Western trading partners. For China, then, friendshoring is more about replacing rivals and antagonists with more neutral parties among the non-aligned world, such as in Central Asia and the Middle East.

Check mate

In studying how trade might contort itself along geopolitical lines, the McKinsey study assumes that the lines themselves remain fixed. But as the report freely admits, that might not be the case. The invasion of Ukraine and the conflict between Israel and Gaza is already causing new divisions and allegiances. It is conceivable that non-aligned countries might move closer to China politically, as China embraces them economically. Certainly, by spurning Chinese trade and investment, the West would give China added incentive to ingratiate itself with the rest of the world. After all, there are two ways to shorten the geopolitical distance of trade: trade more with friends or make more friends to trade with. ■



Drugs and the climate

A warming planet threatens the world's favourite drug

Half the world's coffee-growing land is at risk from climate change. Can science save the bean?

CAFFEINE IS ONE of the world's most popular drugs, and coffee one of its best-loved delivery mechanisms. It is grown in more than 70 countries; more than 2bn cups are drunk each day. It helps support the livelihoods of an estimated 125m people. It indirectly supports many more, including your Californian correspondent (though not his tea-drinking British editor), by supplying them with a jump-start every morning.

But global warming threatens the world's coffee supply. Temperatures are rising and rainfall patterns shifting across South America, central Africa and South-East Asia, where most of the world's coffee is grown. By the end of the century between 35% and 75% of the coffee-growing land in Brazil, the world's biggest producer, could be unusable, according to a recent paper published in *Science of the Total Environment* by Cássia Gabriele Dias, an agricultural engineer at the Federal University of Itajubá, in Brazil.

Another paper, published in 2015, concluded that by 2050 between 43% and 58%

of the world's coffee-growing land would be rendered unsuitable, depending on how high greenhouse-gas levels rise (see map on next page). Some of that loss will be offset as other bits of land, presently too cold for coffee, warm up. New plantations might take root in southern China, for instance, or on the northern coast of the Gulf of Mexico. But they are unlikely to make up for the shortfall.

The problem is that coffee is a fussy plant—and *Coffea arabica*, the beans of which account for 70% of the world's production, is especially so. Its best yields come when temperatures remain between 18°C and 23°C throughout the year. Many of the places in which it is grown are already near the top of that range. It is susceptible

to diseases such as coffee rust (a fungal infection) and the depredations of berry-borer beetles, which lay eggs inside growing beans. Both are expected to spread more readily in a warmer world.

Farmers growing Robusta (*Coffea canephora*), Arabica's tough, bitter cousin, have a bit less to worry about. Robusta prefers warmer temperatures. But coffee snobs dislike the taste. Robusta beans fetch a lower price than Arabica ones, and are mostly used in instant coffee. For coffee-lovers, therefore, the solution is not to shift to Robusta but to save Arabica.

Onwards and upwards

One option is simply to move uphill. Other things being equal, temperatures fall by about 0.7°C for every 100 metres above sea level. Tanzania, for example, has significant areas of land 150 to 200 metres above where Arabica is currently grown that ought to work well for coffee-farming as temperatures rise. In Ethiopia, some farmers have already moved their plantations as much as 600 metres higher.

But higher altitude usually means steeper slopes and shallower soils, which increase the rate at which nutrients are washed out by rain. Replacing them with artificial fertiliser is expensive. Higher slopes are also often covered in dense, species-rich forests. Cutting them down to make room for coffee plants might not be compatible with a country's climate pledges. And moving cannot be done overnight. ▶▶

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70 A new kind of magnetism



► New plantations require five years or more to produce a good harvest. For many smallholders, such delays are not an option.

Another option is to change the way in which existing plantations are managed. Coffee plants are relatively short, and evolved to live in the shade beneath a forest canopy. Indeed, that is how they were originally cultivated. But as demand grew in the 20th century, farmers removed the taller trees in order to fit more coffee plants on their land. Now some are giving these old techniques a second look.

Last year Nicholas Girkin, an environmental scientist at the University of Nottingham, published a paper that reviewed these historic "agroforestry" techniques. Dr Girkin and his colleagues note that the shade provided by taller trees helps prevent coffee plants from getting scorched in hot weather. Reinhold Muschler, an ecologist at the Centre for Investigation of Tropical Agronomy, in Costa Rica, has evidence suggesting that shade slows the ripening process, improving the size and flavour of coffee beans.

Dr Girkin also cites evidence that trees provide homes for useful predators and pollinators. A study in Kenya concluded that tree-shaded plantations with pollinators present produced 10.8% more coffee berries per branch than unshaded plantations. Predatory bats, birds and insects that make their homes in the trees will happily feast on pests like the berry-borer beetle.

Trees can attract monkeys that eat coffee fruits. But Dr Girkin notes that the evidence suggests that these losses are more than compensated for by trees' positive effects. As for the fact that trees extract water and nutrients from the same soil as the coffee plants, whether that causes problems is a matter for debate. The shade and humidity they provide cuts the amount of water that coffee plants lose to evaporation, which might compensate.

And then there is the opportunity cost of the trees themselves. Adding them leaves less room for coffee plants, which was the reason farmers cut them down in the first place. However, several tree spe-

cies that grow well on coffee plantations produce crops of their own, such as bananas or avocados, that farmers can sell alongside their beans. And more trees means more leaf litter, which can help keep nutrients locked into the soil.

However the balance of costs and benefits shakes out, agroforestry can only go so far. In many parts of the world, climate models suggest that temperatures will eventually simply get too hot for the sensitive Arabica to cope. That means that, if coffee cultivation is to continue, the bean itself will have to change.

Arabica and Robusta are not the only coffee species. Around 130 are known, but most have been ignored or forgotten thanks to unpalatable flavours, poor yields or small beans. One man who has not forgotten them is Aaron Davis, a botanist at the Royal Botanic Gardens, Kew, in Britain. Aware of the danger faced by mainstream coffee crops, Dr Davis has been learning everything he can about these lost species.

Historic records show that many have flourished in environments warmer or drier than those in which Arabica and Robusta grow now. One report written in 1834 by George Don, a Scottish botanist, described a coffee species known as *Coffea stenophylla* that he found growing wild in Sierra Leone. A cup brewed from the plant's berries, he wrote, was even better than one brewed from Arabica.

Lost and found

Intrigued, Dr Davis went searching. He and his colleagues found the species still growing in Sierra Leone. They also managed to track down another lost coffee species. Known as *Coffea affinis*, it too was noted (this time in 1925) for its pleasant flavour. Both species come from Sierra Leone's hot and seasonally dry lowland hills, hinting that they can probably cope with warmer climates than either Arabica or Robusta. It was fortunate that Dr Davis found the plants when he did, for habitat loss means both are threatened with extinction.

In 2021 Dr Davis published a paper revealing that, compared with Brazilian Ara-

bica, *C. stenophylla* was fruitier, had a better acidity and a more complex flavour profile—though slightly fewer of these characteristics than Ethiopian Arabica. In a blind taste test, judges given *C. stenophylla* thought they were drinking Arabica 81% of the time. Dr Davis says that *C. affinis* has demonstrated similar flavours.

Heat tolerance and a nice taste are not the only important traits. *Coffea dewevrei*, known as Excelsa, is easy to grow, high-yielding and has a good flavour. Its biggest advantage might be its resistance to the coffee-rust fungus. It was discovered in 1902, in what is now the Democratic Republic of Congo. *C. dewevrei* quickly became the dominant coffee crop in parts of central Africa. But in 1933 disaster struck. A new disease called coffee wilt emerged, devastating crops and leaving farmers destitute. They gave up on Excelsa and focused on Arabica and Robusta instead.

Now, with climate change making rust a more serious issue, researchers like Dr Davis are giving Excelsa another look. While the limits of its heat resistance are not yet known, it is clear that it can tolerate higher temperatures than both Arabica and Robusta. It also seems to be more drought-tolerant than Robusta.

Still, it takes 11-12 months to go from flowering to fruiting, compared with just nine months for Arabica. Its berries are more firmly attached to its branches, meaning they require more effort to harvest—a problem compounded by the fact that it is taller than many other coffee species, obliging farmers to use ladders. And wilt remains poorly understood—although a paper published in June suggests that higher temperatures might make that particular disease less of a problem.

No single species, in other words, has been found that could serve as a drop-in replacement for Arabica. Instead, the hope is that a mix of genetic engineering and old-fashioned cross-breeding could allow traits from these rediscovered species to be transferred into Arabica—or help transplant Arabica's traits into a new species. Dr Davis is undertaking two research projects that aim to do exactly that, though he is reluctant to give details. A paper containing the most comprehensive Arabica genome yet published, which appeared in *Nature Communications* on January 23rd, should move things along.

But it will be a while before such work bears beans. Dr Dias, at the University of Itajubá, says a decade or more could pass between proposing a new coffee cultivar and its approval for commercial use. She argues that Brazil needs to take more immediate measures, shifting some farms uphill while others adopt agroforestry. That could buy time for scientists to come up with a coffee plant that can thrive in a warmer world. ■

AI and language

Sending AI to language school

ABU DHABI AND CHENNAI

How to make language models fluent in more than just English

CHATGPT, A CHATBOT developed by OpenAI, an American firm, can give passable answers to questions on everything from nuclear engineering to Stoic philosophy. Or at least, it can in English. The latest version, ChatGPT-4, scored 85% on a common question-and-answer test. In other languages it is less impressive. When taking the test in Telugu, an Indian language spoken by nearly 100m people, for instance, it scored just 62%.

OpenAI has not revealed much about how ChatGPT-4 was built. But a look at its predecessor, ChatGPT-3, is suggestive. Large language models (LLMs) are trained on text scraped from the internet, on which English is the *lingua franca*. Around 93% of ChatGPT-3's training data was in English. In Common Crawl, just one of the datasets on which the model was trained, English makes up 47% of the corpus, with other (mostly related) European languages accounting for 38% more. Chinese and Japanese combined, by contrast, made up just 9%. Telugu was not even a rounding error.

An evaluation by Nathaniel Robinson, a researcher at Johns Hopkins University, and his colleagues finds that is not a problem limited to ChatGPT. All LLMs fare better with "high-resource" languages, for which training data are plentiful, than for "low-resource" ones for which they are scarce. That is a problem for those hoping to export AI to poor countries, in the hope it might improve everything from schools

to health care (see Briefing). Researchers around the world are therefore working to make AI more multilingual.

India's government is particularly keen. Many of its public services are already digitised, and it is keen to fortify them with AI. In September, for instance, it launched a chatbot to help farmers get information about state benefits.

The bot works by welding two sorts of language model together, says Shankar Maruwada of the EkStep Foundation, a non-profit that helped build it. Users can submit queries in their native tongues. (Eight are supported so far; five more are coming soon.) These are passed to a piece of machine-translation software developed at IIT Madras, an Indian academic in-

stitution, which translates them into English. The English version of the question is then fed to the LLM, and its response translated back into the user's mother tongue.

The system seems to work. But translating queries into an LLM's preferred language is a rather clumsy workaround. After all, language is a vehicle for worldviews and culture as well as just meaning, notes the boss of one Indian AI firm. A paper by Rebecca Johnson, a researcher at the University of Sydney, published in 2022, found that ChatGPT-3 gave replies on topics such as gun control and refugee policy that aligned most with the values displayed by Americans in the World Values Survey, a global questionnaire of public opinion.

Many researchers are therefore trying ▶▶

Applied ecology

How ants persuaded lions to eat buffalo

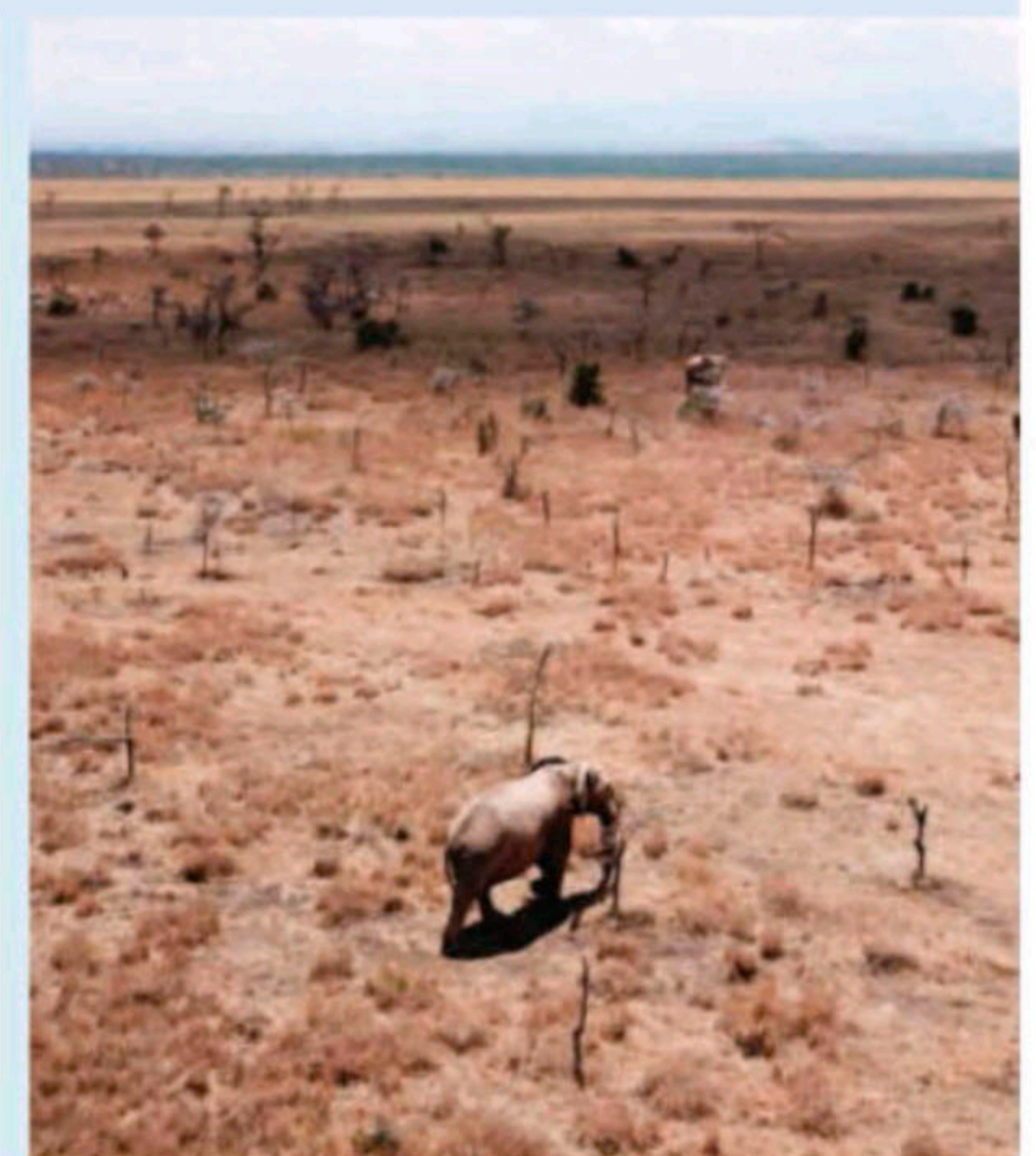
A tale of elephants, thorn trees and the sensitivity of ecosystems

"THE ANT AND THE ZEBRA" SOUNDS like the title of one of Aesop's fables. Like all good fables, this one has a moral, which is that tinkering with nature has unpredictable consequences. Unlike the Greek originals, though, which were allegories, this fable is real.

The story plays out in Laikipia county, Kenya, not far from the mountain which gave that country its name. The characters include big-headed ants (an invasive species of obscure origin), the native acacia ants these interlopers have gradually been replacing, the whistling-thorn trees in which both sorts of ants live, a cast of elephants, lions, zebras and buffalo, and Douglas Kamaru, a Kenyan biologist who currently has a berth at the University of Wyoming. As Mr Kamaru and his colleagues report this week in *Science*, the ant invasion has triggered a convoluted chain of consequences which has helped zebras at the expense of buffalo—thus neatly illustrating a phenomenon called "trophic cascade".

It works like this. Whistling-thorns have co-evolved with the local ants. The trees provide the ants with shelter and food, in the form of large, hollow thorns into which they secrete nutritious nectar from special glands. The ants, meanwhile, protect the trees by seeing off the chief threat to them, the local elephants, which are not keen to browse trees crawling with biting insects.

Acacia ant strongholds are thickly carpeted with whistling-thorns. Big-headed ants, however, are not so good at keeping the elephants at bay. The pachyderms move in and munch the trees, removing much of the area's cover. That



For want of ants, the trees were lost

discombobulates the local lions, which often use this cover to hide when hunting zebra. To compensate, the lions switch to hunting buffalo, which are more dangerous, but less fleet of foot.

Mr Kamaru has put numbers to the process, too. In invaded areas, elephants browse and break trees five to seven times as often as in uninvaded ones. And in those uninvaded places, zebra kills are almost three times as frequent as in the invaded ones. Indeed, between 2003 and 2020, as the big-headed ants have spread, the proportion of local lion kills where the victim was a zebra fell from 67% to 42%. Conversely, over the same period, the proportion of kills that were buffalo rose from zero to 42%. Whether the buffalo blame the ants for their misfortune, no one knows.



▶ to make LLMs themselves more fluent in less widely spoken languages. One approach is to modify the tokeniser, the part of an LLM that chops words into smaller chunks for the rest of the model to manipulate. Text in Devanagari, a script used with Hindi, needs three to four times more tokens, when tokenised the standard way, than the same text in English. An Indian startup called Sarvam AI has written a tokeniser optimised for Hindi, which cuts that number substantially. Fewer tokens means fewer computations. Sarvam reckons that OpenHathi, its Devanagari-optimised LLM, can cut the cost of answering questions by around three-quarters.

Another is to improve the datasets on which LLMs are trained. Often this means digitising reams of pen-and-paper texts. In November a team of researchers at Mohamed bin Zayed University, in Abu Dhabi, released the latest version of an Arabic-speaking model called “Jais”. It has one-sixth as many parameters (one measure of a model’s size) as ChatGPT-3, but performs on par with it in Arabic. Timothy Baldwin, the university’s provost, notes that, because his team could only digitise so much Arabic text, the model also included some English. Some concepts, after all, are similar across all languages, and can be learned in any tongue. Data in a specific language are more important for teaching the model specific cultural ideas and quirks.

The third approach is to tweak models after they have been trained. Both Jais and OpenHathi have had some question-and-answer pairs hand crafted by humans. The same happens with Western chatbots, to stop them spreading what their makers see as disinformation. Ernie Bot, an LLM from Baidu, a big Chinese tech company, has been tweaked to try to stop it saying things to which the government might object. Models can also learn from human feedback, in which users rate an LLM’s answers. But that is hard to do for many poor-world languages, says Dr Baldwin, since it requires recruiting people literate enough to criticise the machine’s writing.

How well all this will work remains to be seen. A quarter of India’s adults are illiterate, something that no amount of LLM tweaking will solve. Many Indians prefer using voice messages to communicate rather than text ones. AI can also turn speech into words, as India’s chatbot for farmers does. But that adds another step at which errors can creep in.

And it is possible that builders of local LLMs may eventually be put out of business by the efforts of the Silicon Valley big boys. Although it is far from perfect, ChatGPT-4 is much better than ChatGPT-3 at answering questions in non-English languages. However it is done, teaching AI to speak more of the world’s 7,000-odd languages can only be a good thing. ■

Physics

The altermagnetic alternative

A new kind of magnetic material has been hiding in plain sight for 90 years

“MAGNETS, HOW do they work?” asked Insane Clown Posse, a hip-hop duo, in their 2009 song “Miracles”. A flurry of recent papers suggests physicists did not quite have the full picture either. A new type of magnetic material may, it seems, have been hiding under their noses.

Most people are familiar with ferromagnets. These have a strong, permanent magnetic field. They are used in everything from fridge magnets and compasses to the motors in electric cars.

A ferromagnet’s magnetic field arises from the electrons within its atoms. Just as electrons carry electric charge, a quantum-mechanical property called spin means each is also a tiny magnet. In most substances, the spins of the electrons in an individual atom cancel each other, such that the atom—and, by extension, the material built from those atoms—displays no overall magnetic field.

Sometimes, though, as in the iron from which bar magnets are made, the maths works out differently. If these atomic-scale magnetic fields are strong enough, and if the atoms are closely packed, electrons can force their neighbours to align their fields in the same direction. Combining zillions of tiny fields produces one strong enough to stick the shopping list to the fridge.

In 1932 Louis Néel, a French physicist, discovered another way to organise things, in what he called “antiferromagnetic” materials. Like ferromagnets, atoms in such

materials have fields of their own. And like ferromagnets, such materials display a rigid internal order—albeit one that produces no overall magnetic field at all. This is because the fields of atoms in an antiferromagnet material point in opposite directions to those of their neighbours, cancelling each other out perfectly (see diagram).

And that, for a long time, was thought to be that—until Libor Smejkal, a physicist at the University of Mainz, got involved. Dr Smejkal was investigating something called the quantum Hall effect, and began by undertaking a methodical rethink of all possible magnetic states, working from first principles. By 2018, this had led him to a surprising conclusion.

Magnetic fields within a material could, he argued, align in another way. Neighbouring atoms could end up with spins pointing in opposite directions if the atoms themselves were rotated by 90 degrees compared with their neighbours. (Although atoms are often represented as spheres, and thus indifferent to rotation, things are, in reality, slightly more complicated than that.) The result would be something similar to antiferromagnetism, but distinct enough to deserve a new name. Dr Smejkal has gone with “altermagnetism”.

Since August 2023, at least six papers have been published claiming to have observed altermagnetism in the lab. One, by Lee Suyoung of Seoul National University and her colleagues, and crediting Dr Smejkal as a co-author, was published last week in *Physical Review Letters*. They say they have observed altermagnetism in films of manganese telluride, a semiconductor long thought to be antiferromagnetic. Dr Smejkal expects to have more corroboration published in *Nature* next month. He also suspects that more than 200 other materials are altermagnets in disguise, based on data available in the literature. “I think it’s widely accepted in the community that this is a real phenomenon,” says Christopher Marrows, a condensed-matter physicist at the University of Leeds.

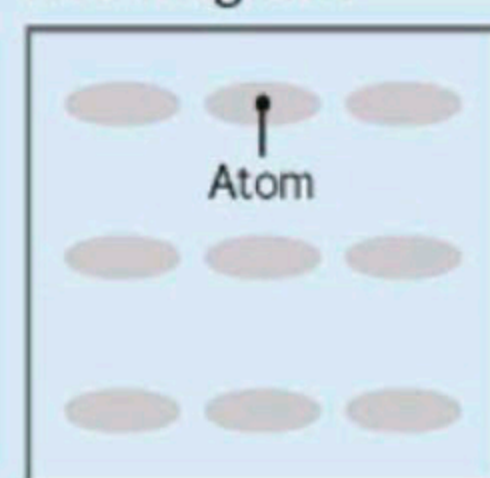
Applications may come in spintronics, which aims to represent data not as electrical charges, as most existing computers do, but as patterns of spin. The electrons within an altermagnet can be controlled from the outside, as they can in a ferromagnet. Those with one type of spin could be made to move in a different direction from those with another. But ferromagnets are awkward to use, since their magnetic fields interfere with those of their neighbours if they are packed too closely together. Altermagnets, without such a field, can be stacked more densely.

And this might not be the end of the story, says Dr Smejkal, who thinks yet more novel forms of magnetism may be lurking out there. As the Posse said: straight-up magic is what this is. ■

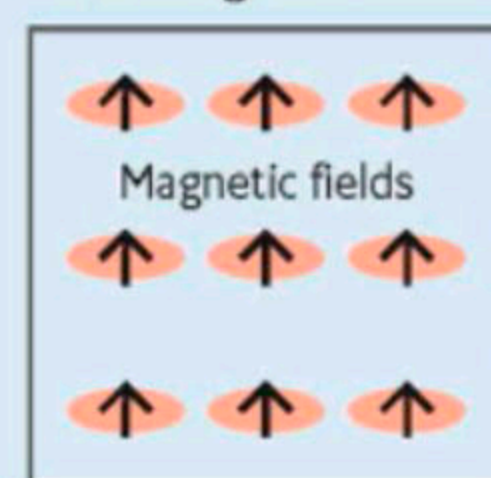
This is how they work

Types of material

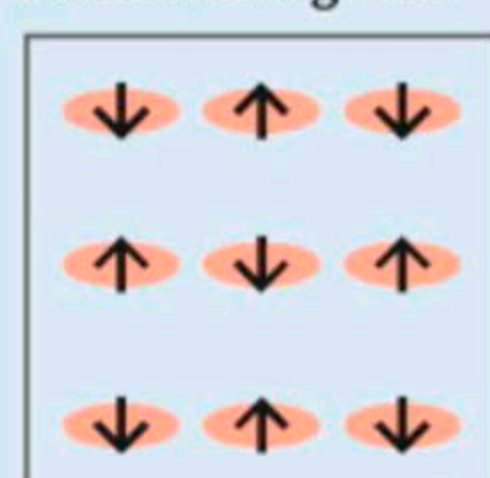
Non-magnetic



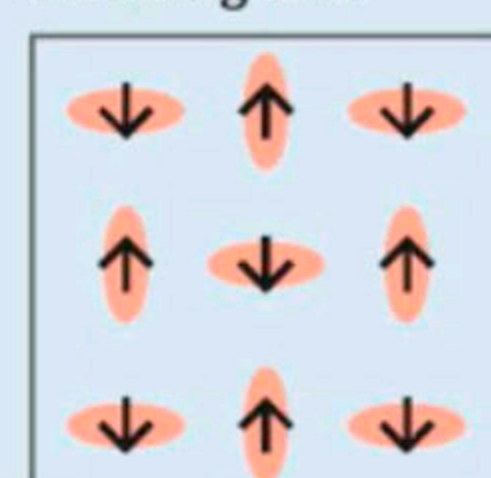
Ferromagnetic



Antiferromagnetic



Altermagnetic



Source: The Economist



After the fire

The comeback of Notre Dame

PARIS

The rebuilding of France's best-known cathedral has prompted a debate about how to balance modernity and tradition

ON AN ICY January morning, perched at a dizzying height of nearly 100 metres above the ground, specialist roofers are covering the rebuilt oak spire of Notre Dame cathedral with layers of lead sheeting. Working on platforms reached by a perilous flight of narrow steps that cling to the soaring spire, they are putting the final touches on a 1,000-piece, solid-oak structure that will soon restore the cathedral's familiar silhouette.

Designed in 1859 by Eugène Viollet-le-Duc, an architect, and felled by the devastating fire of 2019, the new *flèche* remains hidden behind dense scaffolding. But five years after the world watched aghast as the gothic cathedral roof was devoured by flames, the project to rebuild Notre Dame is, astonishingly, on schedule. The cathedral doors are due to reopen in December. (Visitors for the Olympics, which Paris will host starting in late July, must wait to glimpse inside.)

The rebuilding of Notre Dame is one of the most complex and ambitious reconstruction projects that France has ever un-

dertaken on a historic monument. Fire engulfed the entire wooden latticework that made up the medieval roof, before melting its lead casing and toppling the spire. The cathedral's nave, choir and transepts were mostly untouched by flames, thanks to the craftsmanship of the 12th- and 13th-century stonemasons. So were the 8,000-tube great organ and stained-glass windows.

However, molten lead and charred oak beams crashed through the roof, spreading embers and lead particles. Religious artefacts, paintings and sculptures had to be rescued and cleaned; the organ and 39 stained-glass windows were dismantled

and washed. It took two years to stabilise the cathedral's stone structure.

When a grave-looking President Emmanuel Macron stood outside Notre Dame on the night of the fire, he described it as "the epicentre of our lives". The cathedral would be rebuilt, he vowed, within five years. That promise may have sounded "a bit mad", concedes Philippe Jost, who runs the public body in charge of the reconstruction project. But, he adds, it gave everyone a clear objective.

That the project is on track is also partly due to the commanding style of General Jean-Louis Georgelin, who ran it like a military operation until his death last August. A light management team, freed from bureaucratic excess has helped, too. Gifts from rich French industrialists—the Arnault, Bettencourt and Pinault families—as well as 340,000 smaller individual donations from around the world amounted to €846m (\$921m). Unlike the usual French *grands projets*, this one is costing the public purse almost nothing.

Today the cramped site on the Île de la Cité, an island in the River Seine, is a veritable construction village, complete with a canteen, shower block, offices and sculpture-restoration workshop. Last summer the first eight triangular oak trusses, crafted for the new transept roof, arrived by river. Passers-by watched in awe as, one by one, each seven-tonne truss was hoisted by crane from a barge and lowered into place.

The craftsmen working on the project ▶▶

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are specialist artisans, drawn from dozens of small firms from around France. Rather than contract the rebuilding to one company, over 140 separate tenders were put out, in order to support traditional craftsmanship. The demands were unusually high: a decision was taken to restore the cathedral to its former splendour while remaining faithful both to its original designs and the construction techniques of the time.

For the roof above the medieval nave and choir, 1,200 oak logs were individually selected from forestry plantations in France and hewn by hand into square timber beams. Craftsmen used hand-forged axes, based on late 12th- and early 13th-century models. On the curved apse roof, finished on January 12th, wooden dowel pegs hold the trusses together without a single industrial metal piece. "The idea was to work with tools that are as close as possible to those used in the Middle Ages in order to give the wood the aspect of the time," says Valentin Pontarollo, a carpenter from Ateliers Perrault, a firm in western France. One of the joys this brought was that there was often "no machinery noise, just the sound of the axe", he says.

Inside the on-site restoration workshop, sculptors and stonemasons are also working by hand, with chisels and brushes. On the floor stand some of the near-finished new stone chimeras, the grotesque and menacing beasts installed in the 19th century that look down from the cathedral façade and towers. More than a dozen gargoyles, 80 fleurons, 70 small chimeras and more than 750 crockets (decorative stone hooks) are being entirely rebuilt, as are three cathedral gables. At 96 metres above ground level, a new gilt-covered copper rooster tops the needle of the spire, hoisted into place by a crane in December. It replaces the one that miraculously survived the fire, falling to the ground beneath one of the flying buttresses. (The original is on display at a museum.)

Inevitably some modernists decry the project's conservatism. After the fire, various architects lobbied for an audacious contemporary flourish: a plate-glass spire or roof planted with vegetation. Notre Dame, after all, is an architectural hybrid, the product of different centuries, ransacked during the wars of religion and looted during the revolution. Viollet-le-Duc's spire was added only in the 19th century, not long after Victor Hugo's novel, "The Hunchback of Notre Dame", revived respect for what was then an unloved gothic masterpiece.

Today a public debate pits those who contest the authenticity of reconstruction against those who argue that authenticity is guaranteed by respect for the original, with its irregularities as well as its durability. "This is not a monument like any other, and deserves not being distorted," says Mr

Jost: "We are restoring a cathedral that is 860 years old so that it can last for at least another 860 years."

Notre Dame's overseers are trying to strike a balance. The pristine, newly cleaned cathedral may take some visitors by surprise. Inside the nave, where much of the scaffolding has come down, the freshly blond stone of the pillars and vaults, as it would have appeared in medieval times, is breathtaking—and a startling contrast to their previous darkened, partly pitted form.

But the cathedral has not rejected modernity altogether. The Archbishop of Paris has chosen two contemporary French designers for the furniture. Guillaume Bardet is making the liturgical furnishings, including the altar, with dark bronze, and Ionna Vautrin the new 1,500 solid-oak con-

gregation seats, which will have slatted backs to suggest openness and light.

The rebuilding of Notre Dame is both a test and a showcase for France: of its ability to meet an ambitious deadline, to satisfy the demanding global gaze of both secularists and spiritualists and to flaunt French craftsmanship. Finishing in time is a matter of "French pride", says Mr Jost.

For the artisans, completion will be poignant. Emile-Armand Benoit, an ornamental roofer on the cathedral's highest point, says that they are working as quickly as possible so that the scaffolding can come down and the city "can once again see the spire reaching into the sky". Half-way down, the carpenters contemplate the newly finished roof. "It's a bit heartbreaking to leave," says Mr Pontarollo, "We'll never have a project like this again." ■

Musicals' next act

Sing it again

The rise of the film-turned-musical-turned-remake

"MEAN GIRLS" became a hit film in 2004 by showing how hard it is to be popular. But the remake of the film, now out in cinemas, is itself part of the in-crowd: it is one of a spate of films that became a stage musical and is now a musical film.

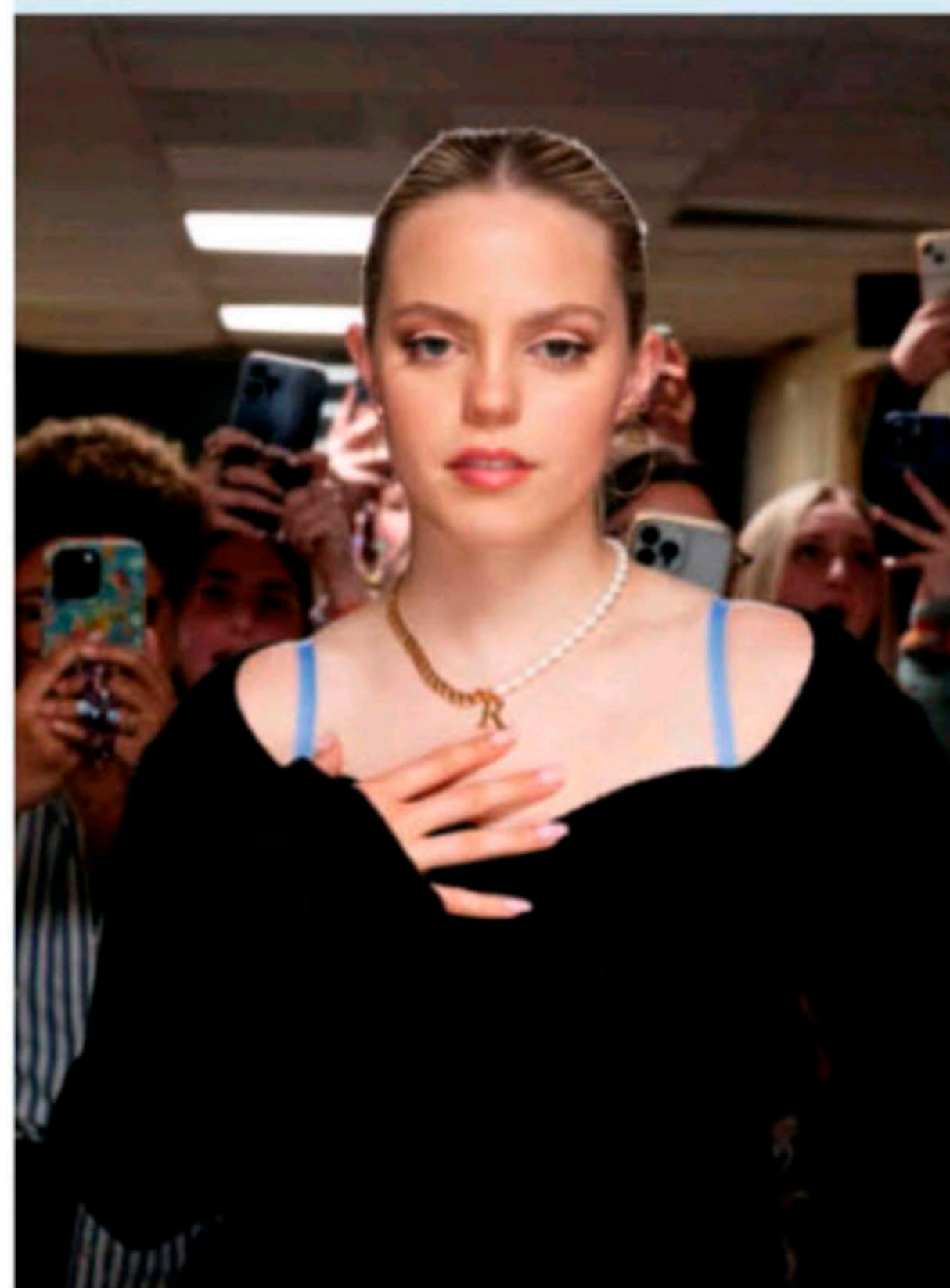
"The Color Purple", based on Alice Walker's Pulitzer-prizewinning novel, is also out in cinemas. The book was adapted into a film in 1985 and became a stage musical in 2004. "Wicked", a musical that follows two witches from "The Wizard of Oz" (1939), has been seen by more than 65m theatregoers. The first

instalment in a two-part film adaptation will be released in November.

Tina Fey, an actress who wrote both scripts for "Mean Girls", is following Mel Brooks's lead. He turned "The Producers" (1967)—his Oscar-winning satirical film about the world of musicals, aptly enough—into an acclaimed stage show in 2001, then into a middling film in 2005. Roald Dahl's "Matilda" also jumped from screen (1996) to stage (2010) to screen again (2022), with the most recent instance accompanied by music and uplifting choreography.

These films are a reflection of Hollywood's interest in safe bets. Something like "Mean Girls" offered assurance to financial backers, who could count on attracting new viewers as well as people who had seen the original film and musical. But there is more to the trend than financial calculation. As with Disney's live-action remakes of 20th-century cartoons, retellings offer an opportunity to update a story according to the mores of the moment. When "Mean Girls" was first released in 2004, thefacebook.com was just three months old; gossip spread by word of mouth back then, not direct message. In her new version, Ms Fey grapples with Instagram and TikTok.

Whether the trend continues depends, of course, on how the current clutch performs at the box office. If the films succeed, there are lots of musical hopefuls waiting in the wings. It may not be long before "Groundhog Day", "Pretty Woman" and "Some Like It Hot" make their cinematic encores.



Queen bees and high Cs

Design

Chrome is where the heart is

There is something more to chrome's comeback than meets the eye

AFTER YEARS in the doldrums, brightly reflective chrome finishes are back, gleaming in the spotlight. Pinterest, a pictorial social-media network, noted an appetite for "cool silver tones and bold chrome" in its annual trend report, "Pinterest Predicts". *Architectural Digest*, *House Beautiful* and Kaiyo, an online second-hand furniture marketplace, all foresee a renewed interest in chrome in interiors.

In popular culture, shiny metallic finishes are key to the punkish retro-futurist aesthetics of the "Mad Max" film series and "Fallout", a popular, post-apocalyptic game series, both of which have adaptations coming out in 2024. ("Furiosa: A Mad Max Saga", arrives in cinemas in May; "Fallout", on Amazon Prime in April.) The revival is also under way in fashion. Beyoncé sported high-shine silver costumes and accessories by Boss, Lanvin and Mugler during her gold mine of a tour in 2023. Wide-brimmed chrome hats worn by the singer and her dancers during the performance of the song "Formation" were pivotal props, obscuring and illuminating body parts.

Chrome became popular in the 1920s, with the rise of the Modernist and Art Deco movements. On the one hand, its bright, reflective surface made it feel glamorous, futuristic and fresh in the wake of the heavy, dark interiors popular in the late 19th and early 20th centuries. It was used by Syrie Maugham, a British interior designer who was influential in the 1920s and 1930s. She popularised white rooms layered with reflective surfaces like chrome lamps and mirrored screens.

On the other hand, chrome has an industrial edge, particularly when applied to metal tubes. According to Deborah Sugg Ryan, professor of design history at the University of Portsmouth, this dovetailed perfectly with the idea of a house as a machine for living in, a philosophy espoused by Le Corbusier, an architect. Chrome was a natural choice for Bauhaus designers including Eileen Gray, Marcel Breuer and Mies van der Rohe, who lavished it on furniture, lighting and interior fixtures. As Ms Sugg Ryan points out, it was just as popular on the mass market, giving everything from cigarette lighters to picture frames a burst of Hollywood éclat.

From the 1950s, Harley Earl, head of design at General Motors, an automobile company, drove chrome to prominence once again. According to Earl's biographer,



Start of the chrome renaissance

Stephen Bayley, he believed the average American consumer wanted big, flashy cars that reflected confidence. He developed an entire language of design that not only applied to GM's Chevrolets, Oldsmobiles and Pontiacs but came to influence all kinds of unrelated consumer goods, from radios and cigarette cases to bar stools. An apprentice who worked with Earl in the 1950s recalls him advising GM's designers to "lay on chrome with a trowel". But consumers grew sick of surfeit. By the mid-1960s chrome lost its shine and became decidedly déclassé until a brief, spirited revival in the 1980s.

Trends in design tend to be cyclical, so chrome's re-emergence after years of brass, bronze and rose gold is perhaps no surprise. However, the world is rather different from what it was during the first "chrome rush" a century ago, when a glitzy taste for the colour reflected a booming economy in America and optimism about the future. Today there are wars in the Middle East, Sudan and Ukraine and unease about the climate, politics and inflation. The world's mood is sombre and grey.

The current taste for chrome could be due to pragmatic considerations. Both fashion and interiors are in the midst of a boom in upcycling and buying second-hand, which is more environmentally friendly. And while mid-century modern furniture has become highly sought after and more expensive, prices for furniture from the Art Deco period and 1980s remain more affordable. Chrome also reflects a lot of light, which is useful when living in smaller spaces.

Still, it is impossible to dismiss the idea that chrome's return in design is also about nostalgia, escapism and fantasy. Dreams of a brighter tomorrow, like chrome, never entirely lose their lustre. ■

The history of Mormonism

All-American prophet

American Zion. By Benjamin Park. Liveright; 512 pages; \$35. To be published in Britain in March; £27.99

JOSEPH SMITH, like so many Americans in the 19th century, looked west. Mormonism's founder and prophet led his followers through New York, Ohio, Missouri and Illinois. They sought Zion: a place where the faithful could be safe and sovereign. Their ultimate destination, Salt Lake City, became the promised land.

That may sound a little too star-spangled and modern to be properly biblical. But as Benjamin Park, the author of "American Zion", a new history of Mormonism, argues, that is the point. The Church of Jesus Christ of Latter-day Saints, as it is officially known, has long defined itself simultaneously as a product—and an opponent—of America.

Mr Park, a historian at Sam Houston State University in Texas and a Mormon himself, traces the faith from its roots in New York in the 1820s to 2022, when Tik-Tokers exposed racist and homophobic attitudes at Brigham Young University (BYU). He argues that Mormonism flourished in the mid-19th century at a time of "religious disruption". The young country's individualistic ideals made space for believers, such as Smith, to cultivate their own spiritual visions and seek salvation outside established institutions.

Yet Mormonism's take on Christianity proved too "weird", even at a moment of religious innovation. The Book of Mormon "sacralised American soil", writes Mr Park, "by making it a Christian land long before European colonisation". To many this belief, and Smith's personal revelations, were heretical. But no part of Mormonism was as controversial as polygamy, which was seen as central to eternal salvation.

By the mid-19th century Mormons had come to believe that America's promise of religious liberty was a false one. After a mob murdered Smith in Illinois, Mormons sought a new home beyond the reaches of the American government. When Brigham Young succeeded Smith as prophet and decided to build Zion in the Salt Lake Valley, Utah was not yet an American territory. Largely because of the persistence of polygamy, the state would not join the union for nearly 50 years.

The history of Mormonism, much like America's, is one of tepid progress followed by retrenchment. When Mormon-▶

ism was new, and its members were outcasts, some black believers found a home in the church and women held positions of power in the Relief Society, a church charity. Later, as the church sought acceptance among other American Christians, women and blacks were marginalised.

But church leaders may find it hard to change tack, even if they wanted to. Mr Park argues that the church's conservatism helped it achieve wider acceptance. Mormons' devotion to family values aligned them with the religious right. In 2012 they even had one of their own as a Republican standard-bearer: Mitt Romney, the former governor of Massachusetts and presidential candidate. Christians today see Mormons not as outsiders but as allies in the culture war against liberals and atheists. Not even Donald Trump, a thrice-married reality-TV star, could shake Mormons' commitment to the Republican Party. In 2020 white Mormons were about as likely to support Mr Trump as white evangelicals.

Still, Mr Park argues, Mormons' subsumption into the religious right belies fissures within the faith. Challenges to its white, male hierarchy sprang up during the civil-rights movement, second-wave feminism and protests at BYU in 2022. Gay saints struggle for acceptance within the church. The nation is reckoning with similar questions as the country diversifies. America, and the religion it inspired, remain ever intertwined. ■

Hannah Arendt and freedom of thought

The antidote to totalitarianism

We Are Free to Change the World. By Lyndsey Stonebridge. Hogarth; 368 pages; \$32. Jonathan Cape; £22

IN 1975 A young senator named Joe Biden heard of a lecture that Hannah Arendt had recently given at Faneuil Hall in Boston, on America's need for a reckoning after the Vietnam war, now that the "big lie" about the extent of the country's powers had been exposed by a humiliating defeat. He wrote to her saying that, as a member of the Senate Foreign Relations Committee, he would be most keen to receive a copy of her paper. Such interest says something about the future president's curiosity—and a lot about the then 68-year-old Arendt's formidable reputation as a public intellectual.

Arendt was said to be someone you could actually see thinking. Lyndsey Stonebridge, in an absorbing new biography,



Arendt, who never blew smoke

conjures up the image of Arendt forming her body "into a single question-mark incarnate". And the questions she asked were big ones: why did the great evil of the 20th century come about; how could totalitarianism have happened; how can freedom and plurality be protected?

They are also relevant today, as politics too often threatens to descend again into post-truth madness, even in the democratic West. Might totalitarianism's horrors return? Exploring the mind of one of the past century's great thinkers on these matters has, sadly, become a topical enterprise.

Ms Stonebridge, a professor of humanities and human rights at Birmingham University, does an admirable job. She has been reading Arendt for over 30 years, she says, but her approach is not merely bookish. She imagines her way into Arendt's life, in places literally retracing her subject's footsteps, sensing the climate and smelling the (typically smoke-filled) air in an effort of understanding.

She follows Arendt to Hanover, where she was born. She pictures the young Hannah crossing the bridges of Königsberg (now Kaliningrad) and proudly responding to the boys calling her "Jewess!". She wanders through the university town of Marburg, where as a student Arendt began an affair with her philosophy teacher Martin Heidegger: the combination of Heidegger's "narcissism with his Nazism" would drive them apart, Ms Stonebridge writes, though their intellectual friendship resumed after the war.

The author visits the bleak camp in south-west France where Arendt was interned for several weeks (until she escaped); the narrow streets of Montauban, where Arendt ran into the familiar figure of Heinrich Blücher, who became her husband; and the "fantastic beauty" of Port-

bou, near the Spanish border, where Arendt tried to find the grave of her friend Walter Benjamin, a Jewish philosopher who had committed suicide, before she headed on to Lisbon and left the chaos of Europe for a new life in America.

The physical places illuminate the journey of the mind. At the National Archaeological Museum in Athens, for example, Ms Stonebridge marvels, as Arendt did, at its collection of ancient gravestones. The sculptures helped Arendt think the world anew, after being immersed in the gloom of her great work, "The Origins of Totalitarianism" (a survivor's narrative that Ms Stonebridge affectionately describes as "an act of love disguised as scholarship").

Arendt's most testing journey was to Jerusalem, as a dogged observer of the trial of Adolf Eichmann, one of the main architects of the Nazi genocide of the Jews. In "Eichmann in Jerusalem" she stressed "the banality of evil", which some interpreted as belittling it. The ensuing backlash (not least among Arendt's own milieu of New York Jewish intellectuals) was fierce.

To this day, observes Ms Stonebridge, "the Eichmann affair hangs like a brown cloud" over Arendt's writing and reputation. Ms Stonebridge is more sympathetic. She reserves her criticism for Arendt's failure to adequately take on board the racial violence of America's history.

The core and enduring message, however, is on thinking. In "The Human Condition" Arendt begins with a simple proposition: "it is nothing more than to think what we are doing." Thoughtlessness, she concluded towards the end of her life, creates the conditions for evil. "There are no dangerous thoughts," she famously wrote. "Thinking itself is dangerous." It is what makes people "free to change the world". And it is as true today as it ever was. ■

Artful collaborations

Oh, gods

MUMBAI

India's leading museum is showcasing the modern relevance of ancient sculptures

LOOK AROUND, and marvel at the heavenly matches. Flawless Dionysus, the Greek god of wine and general good-time chap (his nude marble body setting unrealistic beauty standards long before the invention of Instagram) stands next to a tall banner of Bodhisattva Maitreya, the future Buddha, his gaze serene, features sharp, body supple: a perfect man.

Across the rotunda is a diptych of vengeful leonine goddesses: there, in three-millennia-old mottled rock, is Sekhmet, the fierce lion-headed Egyptian goddess, eye of Ra, the sun god, and destroyer of his enemies. Hanging beside her is the lion-headed Narasimhi, ferocious consort of Vishnu, the Hindu god of preservation.

There are many similarities between the masterpieces on display at the Chhatrapati Shivaji Maharaj Vastu Sangrahalaya (CSMVS) museum in Mumbai, as well as important differences. Why, some onlookers have wondered, do Dionysus and other European gods look away from the worshipper when Indian deities stare directly at onlookers? And why are they all naked? Should Western gods not be draped in jewels and gold and the finest fabrics, like India's? How, visitors have asked the curators, can you even tell that this nude body over here is a god at all?

CSMVS has mounted "Ancient Sculptures: India, Egypt, Assyria, Greece, Rome" to draw attention to the echoes between great ancient civilisations—and to give rise to new ways of looking at them. The exhibition, which is a collaboration with the British Museum in London, Berlin State Museums and Getty Museum in Los Angeles (all of which provided works on long-term loan), will run until October.

The objective of the exhibition is twofold. The first is to bring to an Indian audience, and especially students, great works of antiquity from European museums that are otherwise inaccessible to the vast majority of locals due to borders, labyrinthine visa processes and pricey plane tickets. The second is to foster acceptance and respect for other cultures by emphasising the rich connections and cultural exchange that have existed since ancient times, says Sabyasachi Mukherjee, the director of CSMVS.

This is something that is even more noteworthy in an era of increasing fragmentation or "slowbalisation". A Greek poem from the fifth century BC imagined

Dionysus conquering India—a textual attempt to integrate the subcontinent with the Mediterranean world, perhaps. The sculpture of Buddha from the second century BC, crafted in what is now Pakistan, is probably a product of artistic influences shaped by the invasion of India by Alexander the Great two centuries earlier.

An unstated undercurrent of the exhibition is the unforgiving Hindu nationalism of the ruling Bharatiya Janata Party, which has spread to the country's cultural institutions. The party's propagandists are busy painting India as a "world teacher", with historical achievements that range from being the "mother of democracy" to inventing nuclear weapons in antiquity.

A regrettable, if integral, part of pumping up Hindu pride has been the degrading of all foreign cultures as inferior. An exhibition that reminds Indians that they are a part of the global community, in which India both influenced and was influenced by other cultures, is a powerful counter.

The museum in Mumbai, rare among Indian institutions for being autonomous and non-state-funded, and therefore less likely to produce propaganda, is ideally positioned to mount such a project. It is the first choice for collaborations in India, according to Western curators.

This is a chance to look afresh at much-analysed objects, too. The study of antiqui-

ty has long been dominated by Europeans and Americans, seen from the perspective of Greece and Rome—with India as an afterthought. But "if you start from the Indian end" it changes the way you might see Western sculpture, says Neil MacGregor, a former director of the British Museum who advised on the project. Many of the visitors' questions, including why ancient Greek and Roman gods were portrayed as naked, were so novel that they left the organisers flummoxed. According to Mr MacGregor, "A lot of the curators in London and Berlin weren't able to quickly answer [them]—or at all."

In gods we trust

The organisers also hope the global curation effort will provide a new model for the sharing of art across borders. CSMVS plans to follow up the exhibition with a second, more ambitious project: an "Ancient World Gallery" with more than 100 objects from around the world, opening in 2025 and running for three years.

For all the talk of novelty—new connections between sculptures and juxtapositions—there is one way in which the exhibition is a return to older traditions. As the West secularised, ancient gods transitioned from deities to artefacts: they became towering achievements of art, symbols of power and prosperity, but no longer figures of devotion. However, bring those objects to India and put them alongside gods still actively worshipped by a billion people—it is not uncommon for visitors to CSMVS's galleries to remove their footwear before sculptures of Hindu gods, or to touch their feet in ritual devotion—and suddenly Dionysus and Sekhmet and other gods of various pantheons are imbued with renewed spiritual power. ■



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4. Duration or deadline for the service: 6 (six) months.

5. The date of the opening of the offers will be on 15/02/2024; at 11:00 AM (time zone UTC+1)

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Economic data

	Gross domestic product			Consumer prices		Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units		
	% change on year ago			% change on year ago		%		% of GDP, 2023†		% of GDP, 2023†		10-yr gov't bonds latest,%	change on year ago, bp	per \$ Jan 24th	% change on year ago	
	latest	quarter*	2023†	latest	2023†											
United States	2.9	Q3	4.9	2.4	3.4	Dec	4.1	3.7	Dec	-2.8	-6.3	4.2	72.0	-		
China	5.2	Q4	4.1	5.5	-0.3	Dec	0.3	5.1	Dec [§]	2.3	-3.8	2.4	\$\$	-43.0	7.17	-5.4
Japan	1.5	Q3	-2.9	1.8	2.6	Dec	3.3	2.5	Nov	3.1	-5.1	0.7		29.0	147	-11.5
Britain	0.3	Q3	-0.5	0.2	4.0	Dec	6.8	4.3	Jun ^{††}	-2.9	-3.9	4.0		54.0	0.78	3.9
Canada	0.5	Q3	-1.1	1.0	3.4	Dec	3.8	5.8	Dec	-0.9	-1.5	3.5		64.0	1.35	-0.7
Euro area	nil	Q3	-0.5	0.6	2.9	Dec	5.4	6.4	Nov	2.4	-3.3	2.4		19.0	0.92	nil
Austria	-1.8	Q3	-2.1 [†]	-0.7	5.7	Dec	7.7	4.9	Nov	1.6	-2.2	2.9		14.0	0.92	nil
Belgium	1.4	Q3	1.5	1.3	0.5	Dec	2.3	5.6	Nov	-1.1	-4.3	2.9		11.0	0.92	nil
France	0.6	Q3	-0.5	0.8	4.1	Dec	5.7	7.3	Nov	-1.1	-4.9	2.8		17.0	0.92	nil
Germany	-0.3	Q4	-1.2	-0.1	3.8	Dec	6.0	3.1	Nov	5.6	-2.2	2.4		19.0	0.92	nil
Greece	1.8	Q3	0.1	2.2	3.7	Dec	4.2	9.4	Nov	-5.3	-2.1	3.4		-83.0	0.92	nil
Italy	0.1	Q3	0.4	0.7	0.5	Dec	5.9	7.5	Nov	0.5	-5.4	3.9		-2.0	0.92	nil
Netherlands	-0.8	Q3	-1.2	0.1	1.0	Dec	4.1	3.6	Dec	9.4	-2.1	2.6		18.0	0.92	nil
Spain	1.8	Q3	1.2	2.3	3.3	Dec	3.4	11.9	Nov	2.0	-4.0	3.2		15.0	0.92	nil
Czech Republic	-1.0	Q3	-2.5	-0.5	6.9	Dec	10.7	2.6	Nov [†]	-1.3	-3.9	3.9		-48.0	22.8	-3.6
Denmark	-0.5	Q3	-2.6	1.5	0.7	Dec	3.8	2.9	Nov	11.1	1.5	2.5		12.0	6.84	nil
Norway	-1.9	Q3	-2.1	0.4	4.8	Dec	5.4	3.6	Oct ^{††}	17.2	10.6	3.6		72.0	10.4	-5.7
Poland	0.5	Q3	6.1	0.5	6.2	Dec	11.4	5.1	Dec [§]	1.7	-4.7	5.4		-59.0	4.02	8.0
Russia	5.5	Q3	na	2.8	7.4	Dec	6.2	2.9	Nov [§]	3.0	-2.8	11.7		116	88.8	-22.2
Sweden	-1.4	Q3	-1.2	-0.6	4.4	Dec	6.0	7.1	Nov [§]	4.6	-0.3	2.3		22.0	10.4	-1.8
Switzerland	0.3	Q3	1.1	0.8	1.7	Dec	2.2	2.2	Dec	7.2	-0.7	0.9		-32.0	0.86	7.0
Turkey	5.9	Q3	1.1	4.5	64.8	Dec	53.9	8.8	Nov [§]	-4.3	-5.0	24.7	1,487	30.2	30.2	-37.8
Australia	2.1	Q3	0.9	1.9	5.4	Q3	5.7	3.9	Dec	0.3	0.3	4.2		62.0	1.51	-6.0
Hong Kong	4.1	Q3	0.3	3.4	2.4	Dec	2.2	2.9	Dec ^{††}	6.3	-1.7	3.6		52.0	7.82	0.1
India	7.6	Q3	8.6	6.9	5.7	Dec	5.7	8.7	Dec	-0.5	-5.9	7.2		-17.0	83.1	-1.7
Indonesia	4.9	Q3	na	4.9	2.6	Dec	3.7	5.3	Q3 [§]	0.8	-2.5	6.6		nil	15,710	-5.2
Malaysia	3.4	Q4	na	4.0	1.5	Dec	2.5	3.3	Nov [§]	1.8	-5.1	3.8		7.0	4.73	-9.3
Pakistan	nil	2023 ^{**}	na	nil	29.7	Dec	30.8	6.3	2021	-0.8	-8.0	14.6	†††	30.0	280	-17.7
Philippines	5.9	Q3	13.9	5.4	3.9	Dec	6.0	4.2	Q4 [§]	-4.1	-7.2	6.2		26.0	56.3	-3.3
Singapore	2.8	Q4	7.0	1.2	3.7	Dec	4.8	2.0	Q3	18.8	-0.7	2.9		10.0	1.34	-1.5
South Korea	2.2	Q4	2.5	1.3	3.2	Dec	3.6	3.3	Dec [§]	2.1	-2.7	3.4		13.0	1,337	-7.6
Taiwan	2.3	Q3	7.8	1.4	2.7	Dec	2.5	3.4	Dec	12.9	-0.1	1.2		-2.0	31.3	-3.1
Thailand	1.5	Q3	3.1	2.5	-0.8	Dec	1.3	0.9	Oct [§]	0.8	-2.7	2.8		39.0	35.7	-8.0
Argentina	-0.8	Q3	11.3	-1.1	211	Dec	135.3	5.7	Q3 [§]	-3.4	-4.4	na	na	822	822	-77.5
Brazil	2.0	Q3	0.6	2.9	4.6	Dec	4.6	7.5	Nov ^{†††}	-1.2	-7.5	10.6		-254	4.92	4.9
Chile	0.6	Q3	1.3	nil	3.9	Dec	7.6	8.7	Nov ^{†††}	-3.5	-2.4	5.5		17.0	911	-12.1
Colombia	-0.3	Q3	1.0	1.1	9.3	Dec	11.7	9.0	Nov [§]	-3.4	-4.2	9.5		-257	3,939	15.4
Mexico	3.3	Q3	4.3	3.4	4.7	Dec	5.5	2.8	Nov	-1.4	-3.8	9.3		69.0	17.2	9.8
Peru	-1.0	Q3	-1.1	-0.5	3.2	Dec	6.3	5.8	Dec [§]	-1.0	-2.7	6.7		-137	3.76	3.2
Egypt	2.7	Q3	na	3.8	33.6	Dec	33.9	7.1	Q3 [§]	-1.5	-6.2	na	na	30.9	30.9	-3.3
Israel	3.4	Q3	2.7	1.2	3.0	Dec	4.2	3.1	Dec	5.9	-4.6	4.3		106	3.70	-9.2
Saudi Arabia	8.7	2022	na	-1.1	1.5	Dec	2.3	5.1	Q3	3.0	-2.0	na	na	3.75	3.75	nil
South Africa	-0.7	Q3	-1.0	0.6	5.2	Dec	5.9	31.9	Q3 [§]	-1.9	-5.2	9.8		-1.0	18.9	-8.8

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 Jan 24th	% change on:	
		one week	Dec 30th 2022
United States S&P 500	4,868.6	2.7	26.8
United States NASComp	15,481.9	4.2	47.9
China Shanghai Comp	2,820.8	-0.5	-8.7
China Shenzhen Comp	1,646.9	-3.1	-16.6
Japan Nikkei 225	36,226.5	2.1	38.8
Japan Topix	2,529.2	1.3	33.7
Britain FTSE 100	7,527.7	1.1	1.0
Canada S&P TSX	21,025.8	1.6	8.5
Euro area EURO STOXX 50	4,564.1	3.7	20.3
France CAC 40	7,455.6	1.9	15.2
Germany DAX*	16,889.9	2.8	21.3
Italy FTSE/MIB	30,338.4	0.8	28.0
Netherlands AEX	806.9	4.6	17.1
Spain IBEX 35	9,974.0	1.1	21.2
Poland WIG	75,351.3	2.4	31.1
Russia RTS, \$ terms	1,124.1	-0.5	15.8
Switzerland SMI	11,196.8	0.4	4.4
Turkey BIST	8,090.9	0.8	46.9
Australia All Ord.	7,748.1	1.6	7.3
Hong Kong Hang Seng	15,899.9	4.1	-19.6
India BSE	71,060.3	-0.6	16.8
Indonesia IDX	7,227.8	0.4	5.5
Malaysia KLSE	1,504.1	0.9	0.6

	Index Jan 24th	% change on:	
		one week	Dec 30th 2022
Pakistan KSE	64,822.4	2.0	60.4
Singapore STI	3,153.3	0.4	-3.0
South Korea KOSPI	2,469.7	1.4	10.4
Taiwan TWI	17,875.8	4.2	26.4
Thailand SET	1,381.2	nil	-17.2
Argentina MERV	1,251,660.0	11.3	519.4
Brazil BVSP*	127,815.7	-0.6	16.5
Mexico IPC	55,396.6	1.3	14.3
Egypt EGX 30	27,666.2	3.4	89.5
Israel TA-125	1,867.9	2.0	3.7
Saudi Arabia Tadawul	12,174.2	0.9	15.4
South Africa JSE AS	74,320.1	3.7	1.7
World, dev'd MSCI	3,203.6	2.7	23.1
Emerging markets MSCI	982.3	2.5	2.7

US corporate bonds, spread over Treasuries

	Basis points	
	latest	Dec 30th 2022
Investment grade	109	154
High-yield	391	502

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

Commodities

The Economist commodity-price index

2020=100	% change on			
	Jan 16th	Jan 23rd*	month year	
Dollar Index				
All items	123.7	124.7	-4.2	-8.3
Food	124.3	125.8	-4.6	-9.6
Industrials				
All	123.2	123.7	-3.8	-7.3
Non-food agriculturals	128.3	129.4	2.3	-4.9
Metals	121.9	122.3	-5.3	-7.9
Sterling Index				
All items	125.6	126.5	-3.9	-10.9
Euro Index				
All items	130.0	131.5	-2.4	-8.0
Gold				
\$ per oz	2,035.8	2,026.2	-1.5	4.7
Brent				
\$ per barrel	78.4	80.2	0.9	-7.0

Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Uner Barry; WSJ. *Provisional.

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The wrath of God

Zvi Zamir, who led a programme of Israeli assassinations after the Munich massacre, died on January 2nd, aged 98

HE WOULD NEVER forget what he saw at Munich. Zvi Zamir had always been a details man. Even when he was head of Mossad, his reports were meticulous. He noted everything, success and failure alike. But particularly failure: that he felt keenly. And the 1972 Olympics, when some of the Israeli team were taken hostage, offered such terrible details, and so much failure.

Such as the fact that the Germans had started their “rescue” shoot-out at night, with no lights. Useless. He could hardly believe that blunder. There were other memorable details, too. Such as the way the blood of the dead had pooled on the tarmac. And the way the screams of the captured Israelis could be heard, as the terrorists started shooting. And the way they had all, finally, fallen silent. Until the day he died, he would never forget Munich.

He hadn’t been intending to go to the games at all. Zamir was head of Mossad; he had other things to do. Besides, the games had hardly looked like a threat. The Munich Olympics were the biggest yet: 121 countries, 7,134 athletes, 80,000 spectators in the main stadium alone, all there to see humanity be faster, higher, stronger. But also, Germany hoped, better. It was now 30-odd years since the 1936 Berlin Olympics; these games would show the world how Germany had changed. The militarisation of the last games had gone: none of these guards carried guns; the perimeter fence didn’t even have barbed wire on it. These were “The Games of Peace and Joy”.

Though not everyone was joyful. Or peaceful. The Palestinian Liberation Organisation had sent a letter to the Olympic Committee asking for Palestinians to compete but no one had even replied. So they had decided to take part in their own way. During that long, hot July in the Libyan desert, the Palestinians had therefore also practised for the games: running, sprinting, jumping. Over fences. Off walls. Again and again. Faster, higher, stronger, until—athletes of assault—they too were ready for Munich. Until they were ready, above all, for the perimeter fence.

In the end, the fence wasn’t a problem at all. Later, Zamir would be caustic about the Germans. They were useless, he said, useless all the way—but it was Americans who had let the terrorists in first. A little after 4am, on the morning of September 5th, some drunk American athletes saw the Palestinians trying to climb the fence with their bags of guns, and had just helped them over.

The mood at Munich had been like that: open, friendly, “wonderful”, as one Israeli athlete said. The Israeli team had relished the atmosphere; they’d loved speaking to people from all countries. As another Israeli, Andre Spitzer, had joyfully told his wife: this was what the games were all about. Spitzer would be one of the last of the Israelis to be shot. Machine-gunned by the Palestinians as he had sat, with his hands tied, unable to move.

The first hostage was killed much more swiftly. A little after 4.10am, the Palestinians were in the Olympic camp. Shortly after 4.30am, they were in an Israeli apartment. By 5.30am, they had dumped the first Israeli body on the pavement outside. Then, fluttering down on pieces of paper from the window, they had announced their demands: the release of 234 prisoners in Israeli jails, or one hostage would be killed every hour.

By 5.30am, Golda Meir, the prime minister of Israel, was awake; by 11am she had refused the demands: this was “blackmail of the worst kind”. If she gave in, “no Israeli anywhere in the world will feel that his life is safe.” The Israelis offered instead to send a team to help rescue the hostages; the Germans refused: they had this. That was when Meir told him to go to Munich. Zamir must be there to watch the Germans, she said. To see “how they rescue our team”.

So he had gone. The Germans hadn’t been happy about it: his presence bothered them. They even tried to bar him from the Olympic village. But Zamir was not a man to be easily put off. He might be quiet, tight-lipped even, but he had been an elite military commander and he was now head of Mossad. And an effective one: it was he who would warn Israel that the Yom Kippur war was about to begin. He could handle Olympic officials.

Finally, the Germans let him in and he started to watch. He watched as they laid a complicated rescue plan and then prepared for it, badly. Their intention was to pretend to allow the Palestinians to fly out—then to ambush them on the plane. He watched as the Israeli hostages were taken away to lay the trap. That was the moment that he never, ever forgot. Standing on German soil, and watching Jews, shackled, being led away. It was an appalling sight.

And he kept watching, as first his belief in German efficiency died and then as all the hostages did. The so-called “plan” was a mess: the German snipers had no bulletproof vests, no helmets, no lights. Unbelievable: he would have had the field flooded with light. He watched, horrified, as it all went wrong: as the helicopter exploded, as the hostages were machine-gunned, as the blood pooled and, finally, silence fell. And he watched as, somehow, the wrong news was announced and news agencies reported that all the Israeli hostages had been freed. Then he telephoned a happy Golda Meir and said to her: “Golda...I have bad news.”

Munich changed everything. The time for watching was over. No longer, he said, would Israel sit idly by. Now the Israelis were “going to get the people who did this”. Meir echoed his determination: wherever a plot was being woven, wherever anyone was planning to murder Jews—that is where they must strike. “Operation Wrath of God”, as it would become known, had begun. Like the actual wrath of God, it was swift and it was terrible. There was a shooting in Rome, a bombing in Paris, another bomb in Cyprus. Meir was delighted.

Her critics were less pleased. Operation Wrath of God was, some said, as fierce and at times as inaccurate as its name implied. Though for others, such vengeance felt almost inevitable. As Meir herself said, if there was one thing that the “blood-drenched history” of the Jewish nation showed, it was that violence that began with the murder of Jews would spread “violence and danger to all people, in all nations”. There would, there could, be no escape. ■

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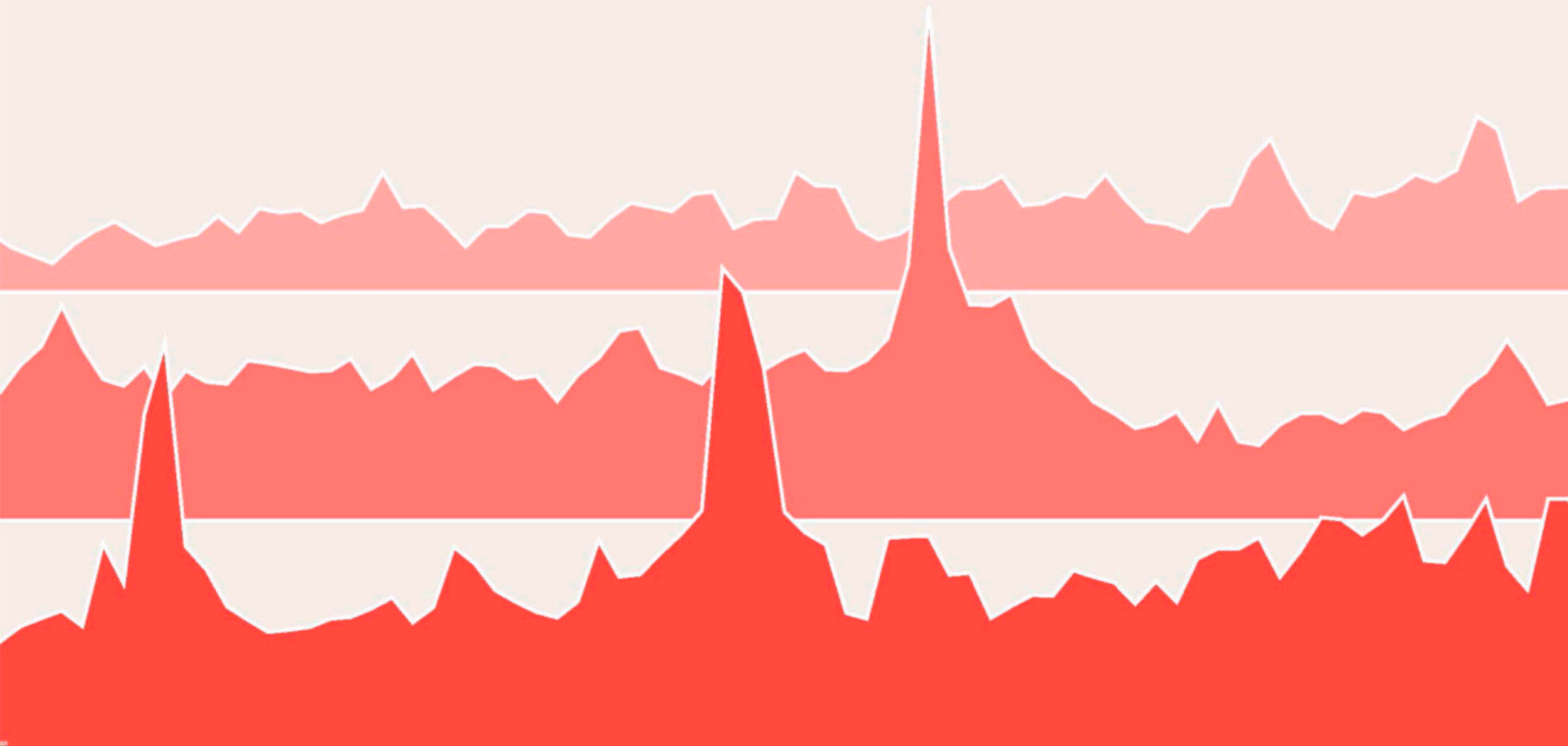
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