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A special relationship on the rocks

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Parable of the iPhone

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The new arms industry

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Our energy cliff-edge dashboard

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

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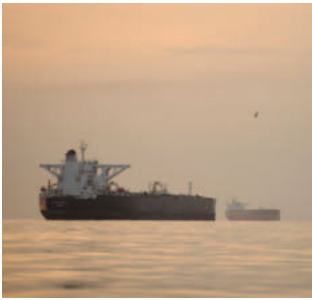


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## The world this week Politics



Donald Trump said he would extend America's ceasefire with **Iran** until peace talks are concluded. The talks didn't take place as expected in the early part of the week, but Pakistan was on stand-by to host another round of negotiations. American forces maintained a blockade of Iranian ports and ships, firing at the engine room of one vessel that was headed to a port in Iran. Iran continued to impede shipping in the Strait of Hormuz. At least three ships came under fire; one was reportedly heavily damaged by an Iranian gunboat. Iran's navy detained two boats for "endangering maritime security".

Mr Trump brokered a ten-day ceasefire in **Lebanon**. Nawaf Salam, Lebanon's prime minister, welcomed the truce. Binyamin Netanyahu, Israel's prime minister, agreed to it, but insisted that Israeli troops would remain in southern Lebanon. Hizbullah, Iran's proxy militia that has been the target of Israeli attacks in Lebanon, suggested the success of the truce depended on Israel halting all hostilities. Hawks within Israel criticised the ceasefire. Israel then accused Hizbullah of breaching it by firing rockets at its troops in Lebanon.

**Taiwan's** president cancelled a visit to **Eswatini** after Madagascar, Mauritius and the Seychelles refused to grant overflight rights to the presidential plane. Lai Ching-te, who had been due to attend celebrations for the 40th anniversary of King Mswati III's accession to the throne, said the countries had caved to

pressure from China. Eswatini is the only African country that recognises Taiwan.

### All at sea

Pete Hegseth, America's secretary of war, sacked John Phelan as secretary of the navy, a civilian job that has no direct involvement with deployments in the Iran war. Mr Phelan is the latest person to fall foul of the various feuds that have unsettled the **Pentagon**. The issue this time was Mr Phelan's handling of the navy's ship-building programme. Mr Hegseth fired the army chief of staff only recently.

The **Democrats'** chances of winning the House of Representatives in November's midterm elections got another boost when voters in Virginia approved a congressional district map that could give the party four extra seats. Meanwhile, a second Democrat mired in scandal resigned from Congress. Sheila Cherfilus-McCormick, who represented a district in Florida, is alleged to have embezzled \$5m in federal disaster aid for her campaign. Eric Swalwell resigned last week amid sexual harassment and rape allegations.

America's Justice Department charged the **Southern Poverty Law Centre**, a prominent civil-rights organisation, with financial fraud. The SPLC is best known for reporting hate crimes and bringing legal cases against white supremacists, but the government alleges that it covered up its use of paid informants inside extremist groups. The head of the SPLC said the claims were false, that it was being targeted for political reasons, and that it had paid people in the past to inform on the activities of extremists.

Lori Chavez-DeRemer resigned as America's **secretary of labour** amid complaints about her leadership. One member of staff reportedly complained about being asked to fetch wine for Ms Chavez-DeRemer during work trips.

The defeat of Viktor Orban in the recent Hungarian election has resolved a stalemate on the European Union's €90bn (\$105bn) **loan to Ukraine**. After Peter Magyar, the incoming Hungarian prime minister, suggested he would reverse Mr Orban's block on the payment, Ukraine allowed Russian oil to start flowing again through a pipeline to Hungary and Slovakia. EU ambassadors meeting in Brussels then promptly signed off on the loan. Volodymyr Zelensky urged the EU to send the money swiftly; much of it will be spent on defence.

A gunman in **Kyiv** killed seven people before he was shot dead by police. The man had quarrelled with a neighbour before his shooting rampage.

**Bulgaria's** general election was won by the Progressive Bulgaria coalition of left-wing nationalists and populists. The coalition is led by Rumen Radev, a Eurosceptic who stepped down as president in January to run in the election. The European Union and Russia both congratulated Mr Radev on his victory. Last December a centre-right government was forced out of office by mass anti-corruption protests.

### Not me gov'

**Sir Keir Starmer**, Britain's prime minister, faced more controversy about his decision to appoint Peter Mandelson as ambassador to America. Lord Mandelson had connections in China and Russia and was a friend of Jeffrey Epstein. Sir Oliver Robbins, who was sacked as the senior civil servant at the Foreign Office, told a parliamentary committee there was a "very, very strong expectation" from the prime minister's office to rush the process. Sir Keir blamed the Foreign Office for not telling him that Lord Mandelson had failed security clearance.

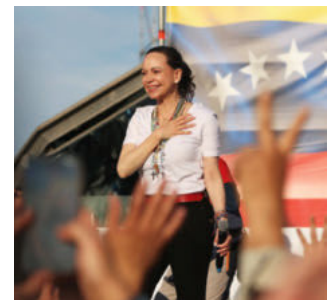
**Britain's** chief rabbi, Ephraim Mirvis, warned that "a sustained campaign of violence" against Jews was gathering

momentum. Nine people were arrested for planning an attack on an unknown Jewish target in one of the recent incidents.

In **Japan** the government said it would relax restrictions on weapon exports to open up the defence industry's trade with foreign countries. "No single country can now protect its own peace and security alone", said Takaichi Sanae, the prime minister, who sparked a row with China last year by suggesting Japan would respond if Taiwan is invaded. Beijing said it would resist Japan's "new form of militarism".

**China** was also angered by Japan's direct operational involvement in the annual military exercises held by America and the Philippines. In response Chinese warships traversed the Yokoate Waterway, close to Japan's Amami Oshima island, north of Okinawa. China said the drill complied "with international law and practice".

In **El Salvador** the mass trial began of 486 alleged members of the MS-13 gang. They are charged with 47,000 crimes, including murder, drug-trafficking and extortion.



The leader-in-exile of **Venezuela's** opposition, Maria Corina Machado, said she would return home by the end of the year and urged America to press the socialist regime to hold elections. Ms Machado was at a rally in Madrid. She met Spain's conservative leaders but criticised the country's left-wing government for not helping Venezuela's democratic movement.

## The world this week Business

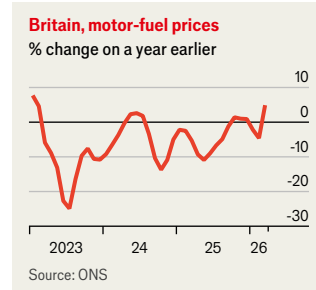
Apple announced that **Tim Cook** would step down as chief executive after 15 years in the job. Under Mr Cook's stewardship Apple's share price rose by almost 2,000%, propelling it to a \$4trn valuation on the stockmarket. Sales of the iPhone are booming with every new iteration of the device. Mr Cook also had to ensure China remained an important sales market amid its rocky trade relations with America. But Apple is lagging behind other tech titans in developing AI services, a worry for some investors. The new CEO from September will be John Ternus, the current head of the hardware division behind Apple's innovations in phones and computers. Mr Cook will become executive chairman.

### Let's talk about Kevin

The Senate Banking Committee grilled **Kevin Warsh** about his suitability to be the next chairman of the Federal Reserve. At the confirmation hearing Mr Warsh insisted that Donald Trump had not asked him to "predetermine" an interest-rate decision during their discussions about his nomination for the job, "nor would I ever agree to do so". The president hopes that Mr Warsh will be confirmed before Jerome Powell steps down on May 15th, but Thom Tillis, a Republican on the banking committee, is threatening to block the nomination until the Justice Department drops its investigation of Mr Powell.

United Airlines reported bumper demand for business and premium travel, but it reduced its forecast of annual profit because of the extra costs it expects to incur from higher **jet-fuel prices** as a result of the Iran war. Lufthansa cut 20,000 short-haul flights from its schedule in order to save 40,000 tonnes of fuel. Meanwhile, **TUI**, Europe's biggest travel company, lowered its profit outlook because of the "volatile geopolitical backdrop". Tourists were delaying their holiday plans, it said, and

demand was markedly lower for countries that abut the conflict zone, such as Egypt and Turkey.



**Britain's** annual inflation rate jumped from 3% in February to 3.3% in March, mostly because of the rising cost of motor fuels caused by higher oil prices. The price index for petrol and diesel increased by 4.9% in the 12 months to March; it had fallen by 4.6% in the 12 months to February. Markets are now betting that the Bank of England will raise interest rates at some point this year.

With the Pentagon replenishing its weaponry amid the Iran conflict, America's **defence industry** produced solid earnings. Northrop Grumman's revenue rose in the first quarter, helped by a 17% increase in sales at its aeronautics division,

year on year. RTX lifted its annual profit outlook amid high demand for its missile systems. Revenue at Boeing's defence, space and security business soared by 21%.

**Tesla's** net profit for the first quarter rose by 17% compared with a particularly weak quarter a year ago. At \$477m it is the carmaker's second-lowest profit in five years. The company boosted its forecast of capital expenditure this year, as it plans to spend more on AI, robotics and self-driving cars.

The share prices of companies that develop **psychedelic drugs** surged after Donald Trump issued an order to accelerate the approval of the drugs in order to treat mental illness. Mr Trump wants to allow the use of psychedelics such as a synthetic version of psilocybin, which is found in "magic" mushrooms, that studies suggest can help alleviate depression, PTSD and addiction.

### Litigation Day

America's customs agency began processing requests for refunds for Mr Trump's **tariffs** from importers that had to pay them. In February the Supreme Court ruled that duties

imposed under the International Emergency Economic Powers Act were illegal. Some companies, including Costco and FedEx, have pushed to ensure they get a payment, but it is not clear how many others will claim refunds. Some \$166bn was collected in the unlawful tariffs.

The Swiss government issued a regulatory demand for **UBS** to increase its capital by \$20bn as it is deemed too big to fail. The government argues that its proposal is "more moderate than planned", but the Swiss bank said it was "extreme, lacks international alignment" and would hurt the Swiss economy.

A week after reports that **Meta** is working on an animated AI of Mark Zuckerberg to interact with employees, it emerged that the company has created a tool to track workers' computer keyboard strokes and mouse movements in order to train its AI models. One member of staff was reported as saying Meta has become "obsessed" with AI. A former employee said the firm is "shoving AI down everyone's throat". Some staff think all the focus on AI is just a prelude to another round of swingeing job cuts.



# America prepares for the midterms

Too many Americans no longer believe their elections are fair

LARGELY BECAUSE Donald Trump is so unpopular, his party will be trounced in the midterm elections in November. That is what *The Economist's* new forecasting model currently says (see United States section). Democrats are almost certain to win the House of Representatives. They could even flip the Senate—a surprise for election nerds, because the map in this cycle strongly favours Republicans. Yet although the outlook for Democrats is good, for America's democracy it is alarming.

Each party has come to see the other lot as cheats. Repeated meddling in election machinery by the president and his party, and their false claim that victory was stolen from them in 2020, have undermined voters' belief that elections are fair. The degrading contest to gerrymander congressional seats, the most intense in memory, further tells Americans that their politicians want to rig outcomes rather than compete.

Some Democrats worry that Mr Trump will steal the midterms. That is unlikely. But you don't have to expect the worst to fear the trend. Elections are not just about voters picking a winner; they are also a device for persuading the losers to accept the legitimacy of their opponents' claim on office. Sooner or later, the losers' loss of faith will cause a crisis.

Midterm worriers can point to motive and opportunity. Losing the Senate as well as the House would sting Mr Trump. The closeness of the Senate contest gives him a chance to meddle again. The midterms could also be a dry run for an attempt to steal the presidential election in 2028. Mr Trump's constant efforts to weaponise the courts against his domestic enemies suggest he believes more than ever that rules are for losers.

The worriers can also point to the president's behaviour. He has issued executive orders to take bits of election administration away from the states and put the federal government in charge, supposedly to make the system more trustworthy. That is a familiar Trump move: first, identify a real flaw (a lack of trust he helped engender), then propose a plan that makes the problem worse (grabbing more power for himself). His scheme is unconstitutional and will probably fail. But it reveals his intent: if he could seize the running of elections, he surely would.

If Mr Trump cannot change the rules, he could still try to interfere on election day. In some places conspiracy theorists will be in charge of ballot boxes; some may believe the election in 2020 was stolen. Some MAGA loyalists have suggested he should dispatch ICE agents to polling stations to stop foreigners from voting illegally (which almost never happens). That would be illegal and the courts would swiftly say so (see Briefing). The administration has been ambiguous. But, should the temptation arise, it would not be hard to work out where to direct them: Democratic areas of Alaska, Maine or Ohio, where control of the Senate will be decided, and where scaring minorities into staying at home could help Republicans. Even if this did not change the result, it would sow distrust, which could provide a platform for post-electoral mischief.

After the votes are counted, the president's party could

once again file lawsuits, as it did the last time he lost. In 2020 judges threw them all out, a reminder that Americans can have confidence in their courts. But MAGA World is litigious and has plenty of money. Never conceding defeat has become its organising principle. The cases could drag on well past November 3rd. A loss in the courts is likely eventually, but the idea that someone, somewhere, has stolen the election may grow.

Given such a litany of risks, you can understand the predictions of imminent doom. So it is worth underlining that, although America's electoral system is untidy and frequently confusing, with rules that vary from place to place, it still works. The constitution says that elections will be administered by the states, not the federal government. That limits any president's ability to mess with them. Even within states, election administration is decentralised, relying on county officials who take their jobs seriously, and on the sort of doughty volunteers usually found at bake sales. Across the country, officials committed to the integrity of the vote are preparing to repel attempts to undermine it.

Instead, the damage is more likely to be further vandalism rather than outright theft. The world's democratic superpower, whose idealistic system of government was long admired elsewhere, is now also a cautionary tale about how fragile trust is.

Only 25% of voters say they are confident the midterms will not suffer interference. A majority in both parties think the other side is too extreme. Only 10% say both parties are honest and ethical. In a recent poll, more than half of Americans reckoned their fellow citizens were morally bad; only 17% of Britons and 7% of Canadians did so. That is a gloomy way for America to celebrate its 250th birthday this summer.

This mistrust is not all the president's doing. Polarisation predates him; changes in media and technology matter. But a lot of it is. Trust in elections dipped after the Supreme Court decided *Bush v Gore* after the vote in 2000. Then it recovered, until Mr Trump came along. He has relentlessly sought advantage by casting doubt on the good faith and honesty of anyone who opposes him, from whichever party. Politicians like to claim that the election they are competing in is the most important of their lifetime, but Mr Trump raises the stakes by framing each contest in existential if not apocalyptic terms.

## Daylight robbery

That may turn out to be this president's most enduring domestic legacy. Although he probably cannot steal the midterms, he may well further damage democracy. Dangerous ideas are taking root. If the other side are thieves and traitors, as he often suggests, partisans may once again feel that rising up after an election is their patriotic duty. If the result is close, they may reason that treachery is what got the other side over the line. If the other lot stole the election, to impose their policies on all Americans would be wrong. By taking away Americans' trust in each other, Mr Trump is making it easier for future would-be strongmen to exploit their loathing. ■



## The changing face of business

## Take the iPhone, garnish with globalisation

Apple under Tim Cook defined an era. Will his recipe keep working for his successor?

SOMETIMES A COMPANY encapsulates its times. Ford and its Model T captured the go-getting mood of the Roaring Twenties. IBM embodied the techno-optimism of the first computer era in the 1970s. General Electric epitomised the cut-throat capitalism of the 1990s. For much of this century the company of the moment has been Apple. The iPhone, a sleek gateway to the all-consuming app economy, has been as evocative of the zeitgeist as big hair was of the 1980s. So has Apple's embrace of globalisation and, especially, of China—as a place first to make gadgets, then to sell them.

For the past 15 years this icon of the digital era and free trade has been led by Tim Cook. It may have been Steve Jobs, his legendary predecessor, who dreamt up the iPhone, but it was Mr Cook who put one in 1.5bn pockets, making the Apple logo ubiquitous from San Francisco to Seoul. Apple's market value has grown 11-fold on Mr Cook's watch as, counting everything including dividends, he has stuffed some \$4.6trn into the pockets of Apple's shareholders. That is over \$850m for every day of his long tenure.

On April 20th Apple said that this tenure will end in September. Mr Cook's successor, John Ternus, must decide if this winning formula—smartphones + global supply chains = \$1trn in cumulative net profit over 15 years—needs updating for the age of artificial intelligence (AI) and geopolitical fracture. It is a tough call. And it matters beyond Apple.

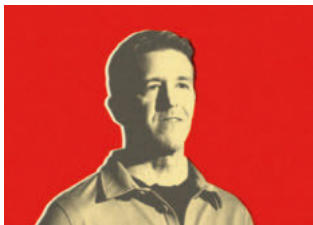
When Mr Cook took over, his strategy was a bet on the future: of technology and of the global economy. Technologically, Apple gambled that, as Jobs envisioned, the smartphone would be the principal interface between people and the digital world. That proved correct. As a result, Mr Cook did not himself oversee the launch of any product as transformative as

the iPhone. AirPods are popular and Apple sells more watches than Switzerland, but these are mere smartphone accessories. The ambitious idea of an iCar was quietly scrapped. Who remembers anything about the Vision Pro, apart from its \$3,500 price tag? But by continuously improving the iPhone, expanding the range of phones and selling them in more places, Mr Cook built an empire.

Apple's twin economic wager, on global supply chains and China, reflected the extent of globalisation. By the 2010s, most goods-trade barriers had gone. Each year countries were exchanging products and services worth nearly 60% of world GDP, up from around 40% in the 1990s. China went from 10% of the global economy in 2011 to 17%, from technological supplicant to a frequent leader (see Chaguan), and from four Apple stores to 50.

Mr Ternus, an Apple insider for many years, seems inclined to stick to the same approach (see Business section). The danger is that AI and trade wars make Apple a bet on the past. It will thrive if making AI models is less lucrative than selling AI applications and the hardware on which they run; if trade barriers reconfigure cross-border supply chains rather than destroy them; and if relations between China and the West are strained but not ruptured.

For now conservatism is paying off. iPhones can still be “Designed by Apple in California—Assembled in China” or, increasingly, “in India”. Apple must get its AI act together, but eschewing model-making has mostly kept it out of a \$3trn data-centre binge which may end in huge losses. Its market value is not far off an all-time high of \$4.2trn. It is easier than ever to see how all that could change. But many elements of the globalised, consumer-centric world Mr Cook's Apple helped create are worth preserving. With luck, they will endure. ■



## The defence neo-primes

## Move fast and militarise things

America's new defence-tech industry should be a model for Europe

THE WORLD is rearming fast. Military spending has increased in real terms every year for the past decade. The leap in 2024 was the largest, in inflation-adjusted terms, since the cold war. By the end of the decade, European members of NATO, their bare armouries exposed by Russia's invasion of Ukraine, will spend €300bn (\$350bn) more a year than in 2025. China's military spending grows each year by an amount equivalent to Taiwan's entire annual defence budget, even as the rest of Asia scrambles to keep up. But it is arms, not budgets, that deter. And producing those arms requires the right sort of defence industry, tailored to the wars of the future.

The wars in Ukraine and Iran appear to hold different lessons. Ukraine has pioneered the use of low-cost drones, whose

software is updated weekly, to stave off a much larger Russian army. Israel and America have used expensive F-35 jets, B-2 bombers, air-launched ballistic missiles and scores of refuelling tankers to attack Iran. In fact, they have much in common.

One message is that Western countries need more defence-manufacturing capacity. In just 40 days of war America used up half its stocks of high-end air-defence munitions. Another is that armed forces need to balance a few high-end systems and a much larger number of cheaper, more numerous and easily replaceable weapons. A third is that, regardless of whether a weapon is big or small, expensive or cheap, crewed or uncrewed, what increasingly matters is the software inside. The most effective weapons are those infused with the best algo- ▶▶

▶ rithms, trained on the best data and updated most frequently.

All this explains why America's defence industry is in the throes of dramatic change (see International section). Palantir, a data firm which builds the core of America's and NATO's command-and-control software, is now worth more than RTX (formerly Raytheon), the most valuable of the defence primes. Palantir, SpaceX and Anduril form a trio of "neo-primes".

They behave like software-first firms competing with arms-makers who came late to the software revolution. To make weapons, the neo-primes have drawn from modern manufacturing methods, including those of the car industry. Though their ability to scale up is unproven, they are hungrier than the incumbents, and spend heavily on in-house R&D.

The neo-primes have shaken up the defence industry for the better, even as the Pentagon has descended into chaos. Pete Hegseth, America's secretary of war as he styles himself, has carried out purges that have been the largest politically motivated mass sackings of top brass in modern American history. He appears to revel in war and violence rather than treating them with sobriety. Mercifully, though, he also has the right ideas about procurement, which should help America adapt to the new era of warfare.

In November last year, Mr Hegseth said the Pentagon would buy things faster, speeding up its byzantine processes. He gave front-line commands a greater say in what gets bought. And he promised to draw more on commercial, rather than bespoke, technology. The changes should create the con-



ditions in which upstarts can compete with the legacy firms to forge a more diverse and dynamic industry.

Alas, Europe is far behind. It has hardly any big new defence-tech companies. Small and innovative firms are stifled by a fragmented market, limited access to venture capital and low demand from governments. Nearly all of Germany's €100bn special defence fund has gone on traditional kit.

Last year Britain's defence review said 10% of equipment spending should go to "novel" technologies. Astonishingly, some insiders argued this should include the F-35, a jet which first left production lines 20 years ago. Skycutter, a British drone company, recently won a big Pentagon contract, but the firm may have to leave Britain for want of orders there.

It need not be this way. If Europe rebalances its spending and reforms procurement, its firms might compete with America's at a time when the NATO alliance is strained. The remarkable Ukrainian defence-tech ecosystem that has sprouted up since 2022 is a valuable asset. As America steps back from Ukraine, Europe should lean in.

Britain already works with Ukraine to develop interceptor drones. Germany also has a new drone agreement with it and this month Rheinmetall set up a joint venture with Destinus, a Dutch firm making long-range missiles at a fraction of the cost of other models. Ukraine has offered to share battlefield data to train artificial intelligence, vital for the next weapon systems. Much more of this is necessary if the arsenal of democracy is not to depend on a handful of American firms. ■

### Israel's way of conflict

## The price of forever wars

**Binyamin Netanyahu is quick to start conflicts, but shows no ability to end them**

NOT ALL wars are fought alike. One reason for the 78-year survival of Israel, a small democratic country in a mostly hostile region, is that its leaders long grasped that fact. They saw how big gains come from preventing wars but, when necessary, fighting them quickly, with clearly defined and realistic aims. Short conflicts, they believed, should be a prelude to something much more valuable: a flourishing civilian life. In times of peace a country may best grow, building up its economic and technological prowess. For these reasons, over decades, Israel's military doctrine wisely (if not always successfully) set out that wars should be limited and based on deterrence, early-warning and decisive action.

So it is dismaying to see how Israel's current leaders have abandoned that approach. As Israelis mark the anniversary of their independence this week, they are embroiled in too many conflicts, of various levels of intensity, that have been dragging on for two and a half years. The Israel Defence Forces are over-extended on four fronts. The army has seized "security zones" in the Gaza Strip, south Lebanon and Syria and is engaged in an increasingly pitiless occupation of the West Bank. Together with America, it has just carried out a campaign of air strikes on Iran, the second round in less than a year. For all their short-term operational successes, it is not clear what benefit prolonging these conflicts will bring; and the costs are mounting.

The way Israel fights its wars has become bloody and ineffective. Israel was fully justified in responding forcefully to the massacre of its people by Hamas on October 7th 2023 and the missile launches by Hizbullah the next day. But the tactics it has since used in the Gaza Strip and southern Lebanon have caused many thousands of unjustified deaths and continue to cause suffering for millions of civilians displaced from their homes. Despite those years of fighting, Israel has failed to eliminate the threats on its border. Both Hamas and Hizbullah, though weakened, retain a grip.

Compounding those humanitarian and military failures are strategic ones. Traumatized by October 7th, Israel has sought the unattainable goal of winning total victories to guarantee total security. As a result, it has shunned more limited objectives that were achievable and which could have re-established deterrence and begun to build a more lasting settlement.

It rejected proposals by the Biden administration to replace Hamas with the Palestinian Authority in Gaza. It has plunged Lebanon into another war, rather than help its government limit the power of Hizbullah. In Syria it is squandering an opportunity to reach a security agreement with the new government. And it is unclear that Israel has any influence over the on-off negotiations between America and Iran.

Israel's defenders argue rightly that the Middle East has no ▶▶

- ▶ simple diplomatic solutions and that the Jewish state has earned the right to be eternally vigilant. But Israel's overwhelming military superiority is not a solution in itself. One consequence is that people who once sympathised with Israel in democracies around the world, most notably in Europe and America, have grown increasingly hostile to it.

### Back to Ben-Gurion

This is in large part the doing of Binyamin Netanyahu, the prime minister. Like his predecessors, he used to be reluctant to fight. Today, perhaps anxious to avoid a reckoning for his failings before October 7th, he seems driven to repeatedly escalate conflicts in the hope of "changing the map of the Middle East". Israel's generals, who could once restrain over-ambitious prime ministers, have become hesitant to speak out.

Elections are to be held by the end of October. Could they

bring a new strategy? Campaigning will give Israelis a chance to debate whether it is wise to fight on so many fronts. Yet many feel unsafe after the massacre of 2023 and are unwilling to listen to moderate messages from their leaders.

Voters and political opponents are not scared of confronting Mr Netanyahu. They question him, often aggressively, over constitutional affairs, corruption and his coalition's subservience to ultra-religious interests. But few seem ready to ask if Israel needs to fight its many wars for so long or so cruelly. The main opposition figures offer no compelling alternative, preferring to limit their criticism to ways in which military operations are being carried out (see Middle East & Africa section).

Israel's politicians are letting their people down. Voters need to hear hard truths. Israel's founding generations grasped that wars must have limits. Israelis need to recognise that, even after the horrors of October 7th, those limits still exist. ■

### The special relationship

## It's complicated

Pageantry alone won't save Britain's alliance with America. A reset is needed

FOR PREFERENCE, he talks to plants. But next week King Charles III must stiffen his upper lip and get chummy with Donald Trump. The royal visit to Washington is an attempt by Britain's government to win back the president's favour by indulging his love of pomp and bling.

It comes as the special relationship looks worse than at any point since 1956, when America vetoed an Anglo-French attempt to seize the Suez Canal. Today, another war over a Middle Eastern waterway has led to another blazing row. "This is not Winston Churchill we are dealing with," grumbles Mr Trump of Sir Keir Starmer, Britain's beleaguered prime minister. Sir Keir has responded with the strongest words in British English: "I'm fed up."

Mr Trump is mostly to blame. He bullies and insults America's allies, started a war that hurts them and rages when they don't immediately back him (see Britain section). Fully 53% of them now believe that America is a negative force in the world, up 19 points since January. Given a choice, they are twice as likely to favour more co-operation with Europe than with America.

Most long-term relationships have ups and downs. When Churchill first spoke of a "special relationship", America, Britain and other allies had just defeated Nazism and were confronted by the Soviet "iron curtain" (which Churchill christened in the same speech). Over the next 80 years, they linked arms against communism, shared copious intelligence and shed blood together in Korea, Afghanistan and Iraq.

Often Britain has overestimated its importance. As Alex von Tunzelmann, a historian, said of Anthony Eden, the prime minister during Suez, "[He] had believed it might be possible for British brains to run the world with American muscle. He had not expected the Americans to develop ideas of their own." Always, a hefty share of Britons have been wary of following Uncle Sam's lead—many were calling Sir Tony Blair America's "poodle" long before the Iraq war became a fiasco.

But no British government has ever imagined that an American president might turn his back on the relationship. Until now.

The relationship may recover when Mr Trump has left office. But Britain should not take this for granted. Post-Brexit, it is adrift politically, geostrategically and economically. Its government is weak. It has lost its role linking Europe to America. And it is relatively poorer. In 2007 its income per person was 20% lower than America's; now it is over 30% lower.

Aggravating all this is an identity crisis. Britain's global ambitions are as confused as its messages on whether or not it welcomes migrants. Future, factually grounded American presidents will surely conclude that relations with Brussels or Delhi matter far more than those with dear old Blighty.

Yet Britain has real strengths, and indeed leverage. It is good at attracting global talent; it is located in an enviable spot and has military bases around the world; it has unique prowess in intelligence, special forces, maritime security, defence tech and AI safety; its soft power is huge for such a small country, which helps explain why MAGA types are so obsessed with London's supposed downfall while not giving a monkey's about Berlin or Paris.

The first step towards rediscovering Britain's mojo is to be honest about its shortcomings. As Mr Trump says, Britain needs to spend more on defence. In the past, it has assumed that any wars would be fought alongside the Americans, so gaps in equipment did not matter much. Now that it may have to act alone, or with Europeans, it looks naked.

Britain should accept nuclear dependence on America for now (though hedge for the future) and preserve intelligence co-operation. It should move closer to Europe. And it needs skilful leadership (see Bagehot). This week Sir Keir was further weakened by his attempts to explain how he appointed Peter Mandelson, a friend of Jeffrey Epstein, a dead American sex offender, as envoy to the court of Mr Trump. Alas, leadership is something Sir Keir is unlikely to provide. ■





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## Letters the closure of the Hormuz Strait, racial segregation, free-trade deals, music and the brain, Catholic saints

### Prepare for a food shock

You explained how the impending food shock caused by the Iran war is preventable (“A slow-motion tragedy”, April 18th). The parties to the conflict should of course allow fertiliser through the Strait of Hormuz. But preventing a food shock cannot rest alone on the diplomacy surrounding a single chokepoint. Somalia has proved this twice over. In 2011 famine killed a quarter of a million people despite months of warning. Our research with Oxfam, “Dangerous Delays”, documented the cost. In 2022, amid another drought, we repeated the study: better forecasts, same late response, one person dying of hunger roughly every 48 seconds.

The lesson is not that early warning of a food catastrophe fails. It’s that the financing and political systems around it fail. Where anticipatory action has been resourced—pre-positioning supplies, protecting livestock, scaling social protection before harvests fail—it works at a fraction of the emergency-response costs. But the international system still defaults to waiting for the body count from starvation before mobilising.

Disruptions from the Strait of Hormuz already threaten to push 45m more people into acute hunger. Every government and institution with the capacity to act should fund anticipatory measures now, not wait for the food shock to land and the cameras to arrive.

JANTI SOERIPTO  
President and CEO  
Save the Children US  
Fairfield, Connecticut

### A historical precedent

Chapter 3 of your America at 250 series (March 28th) mentioned the saga of Homer Plessy, a black shoemaker from New Orleans who was arrested in 1892 for refusing to “retire to

the coloured car” on a train. His case went to the Supreme Court; *Plessy v Ferguson* questioned whether racial-segregation laws at the time were constitutional (the court found that they were).

Sixty years earlier, in 1832, a little-known episode happened in Boston, when Emiliano Mundrucu, a Brazilian national, sued a boat captain for breach of contract for not allowing Mundrucu’s family to sit in a comfortable cabin because they were black, despite paying the highest fare. A jury in 1833 ordered the captain to pay \$125 in damages to Mundrucu, but the decision was reversed by the Massachusetts Supreme Court. Some scholars consider it to be the first lawsuit challenging racial segregation in America.

Mundrucu was one of the military leaders of the 1824 secession movement in Brazil called Confederation of the Equator, a republican uprising aimed at forming a federation of provinces in the north-east. It was inspired by the American revolution. The movement was defeated and Mundrucu

### Music soothes the mind

I want to offer a personal perspective on why playing music is good for the brain (Well Informed, March 28th). My father lives with dementia in Brazil, and I reside in Georgia. Despite the physical distance, music has become our daily meeting place. Each day, my mother sets up a video call. I place my phone next to the keyboard and play for him. What unfolds is remarkable. Music seems to reach parts of his memory that are otherwise inaccessible. On some days he cannot recall the names of songs, yet he engages emotionally, physically, and at times even sings along.

was sentenced to death, but he managed to escape and seek refuge in Boston.

CARLOS ANDRADE  
São Paulo

### Forging ahead with free trade

Your article on global trade post-Liberation Day noted that Britain signed its “most significant post-Brexit trade deal” with India (“Liberation Year”, April 4th). Although that is an important accomplishment, Britain joining the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) is arguably more significant. It is more wide-ranging than the India deal and its economic integration more extensive.

Moreover, as you mentioned, the European Union and the CPTPP are soon to start work on developing new global standards and Britain will now be part of that process. The expansion of the CPTPP to include Britain, the first of probably many enlargements, underscores the main point of your article. The world will continue to seek out potential gains from globalisation with or without America. I’d certainly prefer “with”, but who listens to academics these days?

MICHAEL PLUMMER  
Professor of international economics  
Johns Hopkins University,  
SAIS Europe  
Bologna, Italy

Music has become the essential bridge that preserves our connection, sustaining recognition, presence, and dignity despite both cognitive decline and our spatial separation.

GIOVANA BOSQUIROLI SLIVA  
Johs Creek, Georgia



### Saints preserve us

Not all Catholic saints have to be martyred or live a gruelling and miserable life to be deemed worthy of their sainthood (“A boom in the canon”, April 4th). Some managed to make it on good deeds and charm alone. Take Saint Nicholas, born in 270AD and the original role model for Santa Claus. He was famous during his lifetime for helping children, dropping coins into their shoes and stockings and rescuing them from distressing situations. He was apparently a very sociable man.

He did not undertake an annual circumnavigation of the globe on December 24th, but he became the patron saint of sailors, merchants and repentant thieves. Perhaps more relevant in today’s socially splintered age, he is the patron saint of unmarried people. And also the patron saint of brewers. Sounds like the kind of saint I would prefer to meet.

PAUL MOORE  
Antwerp

You identify St Fiacre as the patron saint of syphilis sufferers. He is also the patron saint of gardens and gardeners, as demonstrated by the botanical gardens bearing his name in Tully, Ireland, and his statue in my garden in Brooklyn.

ROBERT HARLEY  
New York

Some 1,500 people pass through in an hour to view the skeletal remains of St Francis of Assisi, which you compare to a passport queue. I would like to know which passport queue has ever passed so quickly? Passport queues do have a religious feel about them. They are a form of purgatory, except I rarely experience a sense of blessing or enlightenment at the end, merely relief.

STUART SMITH  
Maastricht

→ Letters should be addressed to the Editor at: The Economist, The Adelphi Building, 1-11 John Adam Street, London WC2N; Email: [letters@economist.com](mailto:letters@economist.com). More letters available at: [economist.com/letters](http://economist.com/letters)

## BY INVITATION

*Ali Amiri**Iran's insistence on controlling the Strait of Hormuz is penny smart, dollar foolish*

THE US-IRAN conflict has revealed something that many outside observers—and perhaps even some within—had underestimated: Iran's strategic doctrine of resilience is not just rhetorical. For years, terms such as the “resistance economy”, “distributed deterrence” and “self-reliance under pressure” were often dismissed, both abroad and domestically, as political language rather than strategic reality. Yet in the face of sustained confrontation with a vastly superior military and economic power, these ideas have proved coherent in practice. The Iranian state did not fragment. The war did not paralyse the economy.

This does not constitute victory in the conventional sense, nor does it negate the very real costs borne by the country and its people. But it shows Iran's ability to absorb shock and maintain agency under intense pressure. The conflict has also shown that Iran is not a geopolitical actor that can be coerced through force. Its geography alone—bridging Central Asia, the Persian Gulf and major trade corridors—makes it difficult to isolate. Its institutional depth, built over decades under sanctions, has created a system capable of adaptation.

The question now is whether the doctrines that enabled endurance are sufficient for what comes next. A temporary cessation of hostilities has opened a narrow window, kept ajar by a ceasefire extension—though recent developments show how quickly progress can stall or reverse, reinforcing the need for a framework that does not depend on momentum alone.

On one side, America has articulated a series of demands focused on nuclear restriction, missile constraints and regional de-escalation, tied to phased lifting of sanctions. On the other, Iran has set out its own framework: lifting of sanctions, security guarantees against further attack, and recognition of its sovereign rights, including its role in safeguarding regional waterways.

A workable framework is one that synchronises obligations. Instead of requiring Iran to act first and wait for relief, or America to concede in advance, steps are taken in parallel. For example, a freeze in uranium enrichment can coincide with the restoration of limited oil exports. And verification mechanisms can be introduced alongside phased access to the global financial system.

Not all issues need to be resolved immediately. The most sensitive—such as long-range missile parameters or the long-term structure of the nuclear programme—can be stabilised initially and negotiated in detail later. This is consistent with how complex agreements are reached elsewhere.

Another element is prioritising a return to normal economic relations. The ability for Iran to export oil at scale, reconnect to cross-border banking systems and attract investment into sectors such as petrochemicals and manufacturing would have immediate effects. These, in turn, would reinforce compliance. Economic normalisation, then, is not a concession; it is a stabilisation tool.

For capital to flow will, above all, require stability: confidence that trade routes will remain open, agreements will be honoured and geopolitical risk will remain contained.

Nowhere is this more visible than in the Strait of Hormuz. The waterway is not simply a lever of geopolitical influence—it is a critical artery of global energy supply. The temptation to use such a position for short-term extraction, through tolls or restrictions, is understandable. But it is ultimately self-defeating. Any attempt to monetise transit in this way would accelerate efforts by others to bypass the strait, eroding its long-term strategic value.

A posture that guarantees open and secure passage, by contrast, positions Iran as a steward of stability. It builds trust not only with neighbouring states but with global markets. It signals that Iran will exercise strength through reliability, not coercion.

The alternative is clear. If Iran is perceived as a powerful but unpredictable actor, its neighbours will seek protection and alignment elsewhere. If it is seen as stable and constructive, those same neighbours will be drawn towards economic integration. And that integration—through energy co-operation, transport networks, joint industrial projects and financial linkages—could boost economic growth across the region.

This is the point at which strategy must evolve. Iran has shown that it cannot be subdued through force. The next chapter is whether it can become a destination for capital, a hub for regional trade and a platform for industrial growth. These are not separate objectives. They are the modern foundations of power. The transition from deterrence to attraction is therefore not a concession, but can be made wisely as a strategic progression. It replaces short-term leverage with enduring influence. It positions Iran not only as a resilient state, but as an engine of regional development.

As they weigh their options, Iranian negotiators might also reflect that, financially, their country is in many ways singular, in a positive sense. Iran has no external debt; the story overseas is of assets, many of them frozen, not liabilities. And it has trillions of dollars-worth of oil to back any debt it may issue in the future. This underlines the point that digging in its heels over controlling the Strait of Hormuz is penny smart, dollar foolish. ■

*Ali Amiri is an Iranian industrialist and investor.*

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## Briefing Donald Trump and the November elections



### Midterm madness

WASHINGTON, DC

**Might Donald Trump try to meddle in November's congressional elections?**

“BASICALLY WE JUST sort of rack our brains,” says Joe Morelle. “What would happen if *this* happened? Usually the answer is, well, that’s never happened before—but this is what we would do.” Mr Morelle is the top-ranking Democrat on the House Committee on House Administration. In normal times his team oversees matters of great importance to Congress, such as who gets a parking permit in the House garage. This being an election year, he is preoccupied with an even more existential question. What if Donald Trump tries to steal the midterms?

Mr Morelle’s committee is in charge of adjudicating disputed elections in the House of Representatives. He has spent months doing tabletop exercises and dreaming up worst-case scenarios. His list of finagles that Mr Trump might attempt is 150 items long. His what-ifs include the president ordering immigration agents to the polls, declaring that postal votes are invalid and seizing ballot boxes. “I’m looking

at things that are high, medium and low probability and then asking what’s the impact” and what is the Democrats’ response, says Mr Morelle. It is a group effort: he has been conferring with lawyers across the country, state attorneys-general and secretaries of state (ie, the top election officials in each state). Come November, Mr Morelle and his colleagues will have been war-gaming for more than a year.

That would seem excessive but for Mr Trump’s attempts to steal the presidential election in 2020. It is unclear how much he cares about the midterms, given he is not on the ballot, but he seems to view them in personal terms. Losing the House, which *The Economist’s* election model deems a near-certainty (see United States section), would scupper his legislative agenda. Worse for Mr Trump, it would herald two years of investigations and hearings and could lead to a third impeachment.

Against this backdrop Mr Trump is resorting to a go-to tactic: dangling Demo-

crats’ supposed cheating as a pretence to intervene. “When you think of it, we shouldn’t even have an election,” he said in January. At his state-of-the-union speech he spent several minutes excoriating fraud by Democrats, before promising, “We’re gonna stop it.” He talks of his desire for Republicans to “nationalise the voting” and for the federal government to “get involved” in election administration, a responsibility of the states. “If [states] can’t count the votes legally and honestly, then somebody else should take over.” He says he wishes he had sent the National Guard to seize voting machines in the battleground states he lost in 2020.

#### Who cares?

Elsewhere Mr Trump has tried to lower expectations for the midterms, knowing full well that his approval rating is in the toilet and that the party in power tends to lose ground. Or as he put it, “There’s something down deep psychologically with the voters ▶▶

▶ that they want, maybe, a check or something?” Talk of him cancelling the vote is alarmism by the fake-news media, he says: “They always call me a dictator.” As so often with Mr Trump, it is impossible to know whether his critics are being paranoid or are preparing rationally. His interventions so far have amounted to nothing. He might believe that they are likely to fail, and so the point is to be seen trying something and to blame those who block him.

Mr Trump’s defeat in 2020 and his attempts to overturn it loom over everything. He relitigates his loss constantly while Democrats, fearing that past is prologue, expect him to try more chicanery this year. They worry about interventions on both the front-end and back-end—that is, during the vote-casting and during the vote-counting and tabulation.

The president has already tried to change the mechanics of voting, to no avail. He also engineered a mid-decade gerrymander in Republicans’ favour in several states. That seems to have backfired after Democrats countered with their own.

The most visible intervention that Democrats fear from the president is ordering Immigration and Customs Enforcement (ICE) to suppress turnout by black and brown voters. “You’re damn right we’re going to have ICE surround the polls,” said Steve Bannon, a MAGA rabble-rouser, on his podcast in February. Their presence at airports has been a “test run” for the midterms, he says. The Trump administration denies this and calls it “disinformation”. Still, what if ICE arrives in swing districts—whether at polling places or not—in the run-up to the vote with the aim of intimidating Democratic constituencies?

In the minds of many Republicans, deploying ICE around the polls follows logically from their oft-repeated claim that many foreigners vote (illegally) in American elections. In truth, such fraud is vanishingly rare. But that has not stopped the Trump administration from linking immigration enforcement to election integrity. In January, while thousands of ICE agents and Customs and Border Protection officers were flooding Minneapolis, Pam Bondi, the attorney-general at the time, wrote to Minnesota’s governor implying that a detente could be reached if the state handed over its voter rolls. “Out of control fraud” by Somali immigrants in Minnesota—the pretext for ICE’s presence—“also implicates election security”, she wrote.

Federal law prohibits sending “troops or armed men” to the polls. “That would be stopped by courts immediately,” says David Becker, a former voting-rights lawyer at the Department of Justice (DoJ), who adds, “The feds don’t even have the capacity to do that at scale.” America, after all, has roughly 100,000 polling places.

Yet it would not necessarily take hun-

dreds of thousands of agents to affect the outcome of an election and, even if courts quickly intervened, the damage might be hard to undo. In recent months big ICE operations in various cities seem to have prompted many Latinos to stay home as much as possible, even though they are citizens, for fear of being caught in the dragnet. Mounting a few such operations in states with swing districts around election time, or even simply threatening to, the Democrats’ fear runs, might suppress turnout in the Republicans’ favour.

This approach could well backfire, however. Much as the ICE surge in Minneapolis provoked an overwhelming public response, sending ICE to the polls could galvanise opposition and increase Democratic turnout. Everyone who is able to vote is a citizen, so in theory should have nothing to fear from ICE. In 2024 Mr Trump won over lots of Latino voters. Few things are likelier to turn them back into enthusiastic Democrats than images of ICE harassing law-abiding voters simply for having brown skin.

**Who’s counting?**

Meddling on the back end of the vote, with counting or certification, might be more effective. It would certainly be explosive. Much will depend on whether the results are close. If Democrats win the House by a dozen or so seats with wide margins across several states, there is not much to do but “throw a tantrum”, says Derek Muller, an expert in election law at the University of Notre Dame. Our model thinks there is a good chance this will be the case. It gives Democrats a 74% probability of winning at least 229 seats (218 makes a majority).

Things could get fraught, however, if control of the House or the Senate comes down to a handful of tight races. Narrow margins mean more counting and recounting. When protracted tallying of this sort delayed the declaration of a winner in the presidential race in 2020, Mr Trump demanded that the counting stop. His position had worsened as postal ballots—

which take more time to review—were processed. This “blue shift” in Democrats’ favour is not unusual. Republicans are less likely to vote by mail, largely because the leader of their party disparages it so much.

Mr Trump warmed to postal voting when he was on the ballot in 2024. Now he is back to denigrating it (while voting by mail himself last month, in a special election in Florida). His bid to limit postal voting is the crux of a top-to-bottom effort to make voting more difficult, Hoover up information held by states and fish for fraud. None of these gambits has worked so far. His latest, an executive order issued on March 31st, directs the US Postal Service not to send ballots to anyone not on a “state citizenship list” that his administration is supposedly compiling. A judge will almost certainly block it.

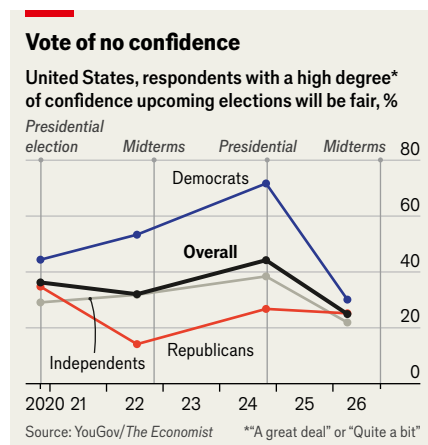
Meanwhile the DoJ has sued 30 mostly Democratic-run states to force them to hand over unredacted voter rolls with private information like Social Security and driving-licence numbers. It says it wants to ensure that states are pruning ineligible voters and duplicate registrations, and that non-citizens do not appear on the rolls.

Really, the administration wants to be able to “wave some files around” if and when Mr Trump cries fraud, says Justin Levitt, another former lawyer at the DoJ. Four courts have rejected these information grabs. Democrats worry that misuse of the data could deter people from registering. The prospect of improper disclosure is not far-fetched. Asked by a federal judge last month if ICE would get hold of it and use it to arrest people, a DoJ lawyer replied, “Good question, your honour, because the [DoJ] cannot promise what any other agency will or will not do.”

Mr Trump talks a big game about overhauling the midterms. He says states are “merely an ‘agent’ for the Federal Government” and “must do what the Federal Government, as represented by the President of the United States, tells them”. But the text of the constitution is clear: it gives the president no role in election administration. That power rests with the states in the first instance. Congress can override state procedures if it chooses.

Recently Congress chose to buck Mr Trump rather than impose new rules on the states. He had demanded that lawmakers pass the SAVE America Act, which would require proof of citizenship to register to vote, as well as photo identification for registered voters. It stalled in the Senate, where it lacks a filibuster-proof 60 votes.

Even some of Mr Trump’s most ardent supporters admit he has no power to change the rules unilaterally. Last year Clea Mitchell, an activist, conceded on a podcast, “The president’s authority is limited in his role with regard to elections.” Then came the kicker: “Except where there is a ▶▶



▶ threat to the national sovereignty of the United States—as I think that we can establish with the porous system that we have.” Some election deniers cite a made-up story about Chinese involvement in the 2020 election. They want Mr Trump to declare a national emergency and ban some voting machines on the theory that they may be susceptible to foreign hacking.

Like Mr Trump’s executive orders, any attempt to declare a national emergency would see a quick rebuke from the courts. “Trump can say whatever he wants. If he tries to assert control based on an emergency, that’s not a thing in our constitution,” says Rick Hasen of the University of California, Los Angeles. Asked by *The Economist* whether an emergency declaration is on the cards, Ms Mitchell dismisses such talk as “hysteria”, before adding, “I do think our elections are a national emergency. They’re a national disgrace.”

Ms Mitchell is the grande dame of election deniers. In 2021 she was on a notorious call during which Mr Trump urged Brad Raffensperger, Georgia’s secretary of state, to “find” enough votes to change the result in Mr Trump’s favour. Ever since she has been trying to get hold of election records in Fulton County, Georgia.

In January the FBI did exactly that, seizing 700 boxes of material from the 2020 election in Fulton County. The agency appears to have relied on long-debunked conspiracy theories about counterfeit ballots. The raid ignited fears that Mr Trump might try something similar while votes are being counted after November 3rd.

Interrupting a count in progress would be more nightmarish than digging out six-year-old material from a warehouse. It could disrupt the “chain of custody”, making it difficult or impossible to know whether ballots had been tampered with. It could even necessitate a redo of the affect-

ed race. For that reason the DOJ has long had a policy of non-interference in pending elections. This is articulated in the section of its manual entitled “Federal Role: Prosecution, Not Intervention”.

The manual notes that ballot seizures could deprive state authorities and judges of material needed to “resolve election disputes, conduct recounts and certify the ultimate winners”. It instructs prosecutors not to take any overt steps “until after the outcome of the election allegedly affected by the fraud is certified”. Sometime in the past year the DOJ pulled the latest manual from the webpage of its Election Crimes Branch. An older version is still buried elsewhere on the DOJ site.

Any ballot seizure would first require a judge to approve a warrant, for which the government would have to show probable cause that a crime had been committed. If that happens (a big if), local officials should be ready to go to court immediately to regain custody, says Alexandra Chandler of Protect Democracy, an advocacy group. She suggests they pre-draft filings so they are not scrambling in the heat of the moment. “Disruption can be mitigated if you are prepared.”

Yet another concern is that the president might engineer a fight in Congress in January 2027 about seating winners of disputed races. The constitution gives each chamber the right to determine its membership. Typically this process is mundane; they seat whomever states have certified. The last time Congress rejected a state’s certification and seated someone else was in 1984, when an extremely fraught House race was decided by four votes.

What if states or counties delay or withhold certification? Mr Morelle has been planning for this scenario, too. He says he would go to federal court and seek a “writ of mandamus” compelling election admin-

istrators to get on with it. Courts have ruled that certification is a “ministerial” act, not a discretionary one. In 2020 and 2022 Republican officials in some counties refused to accept Democratic victories; their stonewalling failed. In Arizona an election official is awaiting trial on felony charges. “If folks want to face those penalties and incur those problems, then we’ll enforce the law,” says Adrian Fontes, Arizona’s Democratic secretary of state.

The upshot is that subversion is unlikely to succeed. Republicans can delay and they can argue, says Mr Morelle. The president’s efforts in 2020 failed. Of the 62 lawsuits he and his allies filed, he lost all but one, and the exception had no bearing on the outcome of the race.

### Who believes in that anymore?

What the president has managed to do is delegitimise Democratic victories—a majority of Republicans think he beat Joe Biden in 2020—and sow distrust among large numbers of Americans about the credibility of their elections. In a YouGov/*Economist* poll before the vote in 2024, 44% said they had quite a bit or a great deal of confidence that the election would be fair. That has since dropped to 25%, after Mr Trump raised the spectre of cancelling the midterms (see chart on previous page). This suggests many take him seriously when he spouts outrageous stuff—or take Democrats seriously when they accuse Republicans of “trying to rig” the midterms.

Mr Trump has also undermined faith in election workers. Secretaries of state and county clerks once operated in obscurity. No longer. Years ago Mr Becker, one of the voting-rights lawyers, commissioned a poll asking Californians to name their chief election officer. Only 7% answered correctly. The most popular answer was the state board of elections, which doesn’t exist. Now election workers routinely face threats and harassment, sometimes from Mr Trump himself.

Some politicians are “scared of the verdict of the voter”, Mr Becker adds. “Those people might think that they can intimidate voters to such a degree that they self-suppress, that they choose not to participate because they think voting is unsafe or inconvenient or does not matter.”

Mr Becker worries that he and his colleagues at other pro-democracy organisations will contribute to that fear by talking up nightmare scenarios of election interference. In fact the opposite is even more likely: that turnout this November surpasses that of 2018, which itself was the highest rate for the midterms in more than a century. Judging by turnout and results in elections over the past year, Democratic voters are fired up. The more Mr Trump fulminates against elections, the keener they seem to punish him in this one. ■



# Britain



## Britain and America

# Special loathing

LONDON AND WASHINGTON, DC

## Britain rethinks its “special relationship” with America

**K**ING CHARLES III'S trip to America on April 27th-30th is ostensibly to commemorate the 250th anniversary of America's independence from Britain. It is turning into a mission to help salvage the countries' “special relationship”, as Winston Churchill called it in 1946. At stake is Britain's place in the world: should it keep hugging America, or embrace Europe?

The king faces fallout from the scandal around the late Jeffrey Epstein and the sex-trafficker's connections to the British elite, not least the monarch's brother, Andrew Mountbatten-Windsor, and a former ambassador to Washington, Peter Mandelson (see Bagehot). More pressing is whether the royal charm can bring respite from the bad blood between British and American leaders. Donald Trump has lost patience with Britain over Iran (“When we needed them, they weren't there”); Sir Keir Starmer has tired of flattering Mr Trump (“I'm not going to yield” to American pressure, he

told Parliament this month).

It is the worst rift between the allies since the Suez crisis of 1956, when Britain, France and Israel attacked Egypt to seize the Suez Canal and overthrow its nationalist leader, Gamal Abdel Nasser; American ire forced them to withdraw. Now America has allied with Israel in a war against Iran; European allies are aghast but powerless to stop the turmoil.

For a time Sir Keir got on with Mr

Trump. At their meeting in the White House in February 2025 he proffered an invitation for Mr Trump to make an unprecedented second state visit to Britain. In May they reached a deal to reduce Mr Trump's sharp tariffs. A NATO summit in June passed off well, too, as allies pledged to increase defence spending to 3.5% of GDP by 2035 plus a further 1.5% on defence-related infrastructure. Mr Trump cast himself as NATO's saviour. At Windsor Castle in September the president waxed lyrical: America and Britain were “like two notes in one chord, or two verses of the same poem”.

Alas, the poetry is gone. Mr Trump was irked by European resistance to his wooing of Russia at the expense of Ukraine, and to his renewed demand to annex Greenland, a Danish territory. The war in Iran brought matters to a head. Mr Trump denounced Europeans as “cowards” for restricting the use of their bases and refusing to help reopen the Strait of Hormuz. Britain is hardly the only target of his wrath, but his broadsides carry particular force because of the countries' historical closeness.

Always more special to Britain than to America, the relationship is being rent by many forces. Britain's role as a bridge between America and Europe, questionable at the best of times, has collapsed with Brexit. America has wanted to turn from Europe to constrain a rising China. To ex- ▶▶

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acerbate matters, Mr Trump has a contempt for rules and alliances that Britain holds dear. MAGA's online echo chamber, moreover, portrays Britain as a land of violent crime and rampant Islamism.

The American and British publics are growing disenchanted. Opinion polls suggest Americans and Britons still held each other in high regard at the turn of the century, with more than 80% of respondents in each country saying they had a favourable view of the other (see chart). Americans' approval of Britain has fallen from 91% to 76% in the past five years. Britons' opinions have deteriorated more gradually but farther: just 34% now express a positive view of America. Americans and Britons alike give higher ratings to other countries, such as Denmark, France and Japan.

Senior British figures say relations with America are, like the sea, "choppy on the surface but calm below". Mr Trump and Sir Keir may see political advantage in jabbing at each other, but their subordinates still work well together, not least in military and intelligence matters. One problem for Britain is that Republicans who normally defend allies also tend to be hawkish on Iran and irritated by Europeans' qualms.

### Unarmed to the teeth

A persistent criticism concerns the hollowing out of Britain's armed forces. Britain boasts a nuclear deterrent, albeit one dependent on extensive American help (see story on next page), along with two aircraft-carriers, F-35 stealth jets, nuclear-powered attack submarines, deployable land forces, top-notch special forces and more. But the reality is less impressive. Britain deployed an armoured division (about 26,000-28,000 troops) as the main formation fighting alongside Americans against Iraq in 1991 and 2003. These days, a senior officer admitted publicly, it would struggle to send even an armoured brigade (3,000-5,000 troops). Air-defence and artillery batteries are woefully short, too.

The aircraft-carriers have had problems with their propeller shafts and are both

tied up for maintenance (Mr Trump recently derided them as "toys" compared with America's). Britain ended its permanent naval presence in the Gulf earlier this year, and struggled to muster a destroyer to help protect Cyprus last month. Just two of seven frigates and one of five active attack submarines are thought to be deployed. The air force's F-35s lack long-range weapons, such as Storm Shadow cruise missiles used by older Typhoon jets.

Insiders admit that British forces "are naked" when not fighting together with American ones, whose might has hidden many of Britain's gaps. They note that equipment programmes are underfunded by £28bn (\$38bn), even before new requirements from last year's strategic defence review (SDR) are added. A ten-year defence-investment plan, promised last autumn, has yet to be published, prompting George Robertson, a former NATO secretary-general and co-author of the SDR, to denounce "corrosive complacency". These days the Trump administration refers to Israel, not Britain, as America's "model ally".

Co-operation in intelligence is more equal. In Ukraine, Britain has been willing to take more risk than America in sending officers to liaise with Ukrainian ones, gaining better insight on the fighting. Britain is part of the "Five Eyes" intelligence partnership (with America, Australia, Canada and New Zealand). But this, too, is being questioned. Britain stopped sharing intelligence on Latin American drug gangs when America started to sink alleged drug-running boats with missiles. Mark Dubowitz of the Foundation for Defence of Democracies, a hawkish American think-tank, provocatively suggested America should give up on Five Eyes in favour of a new pact with Israel, Poland, Ukraine, the United Arab Emirates, Japan and South Korea.

Britain is thus being forced to reconsider the lessons it drew from Suez. Whereas France decided an untrustworthy America must be kept at arm's length, Britain resolved not to be parted from America again. Britain long had the better of the argument. But now France looks vindicated and Britain dangerously exposed.

Peter Ricketts, a former British national security adviser, argues that Britain must "rebalance its relationship" with America by moving closer to fellow Europeans. Some officials still hope that, as happened after Suez, America will turn back to its British friend. Yet even a more sympathetic successor to Mr Trump will expect Europeans to do a lot more to defend the Atlantic as America turns to the Pacific.

Vladimir Putin ended Britain's long peacetime dividend. Mr Trump is scuppering notions of its special place in the world. He will courteously welcome the king, but has made it plain that he sees Britain as a much diminished power. ■

## Anglo-American diplomacy

# More weaselly said than done

## Divided by a common language

THE PROBLEM for the British soldiers was English understatement. And, admittedly, the thousands of Chinese soldiers attacking them. It was 1951, it was the Korean war and 29 Brigade had been asked to defend a hill. Soon they were low on men, ammunition and hope. Things, their brigadier told his American allies, were "a bit sticky". In British army-speak that meant "critical". The Americans heard: we're fine. And left him to it.

America and Britain are two nations divided by a common language. They are likely to be more divided than usual when Donald Trump—a man who gilds most parts of the Oval Office, wears \$5,000 suits and who, on social media, has called himself "THE KING"—meets Charles III, an actual king, who gilds little, wears old, patched suits and once called the prospect of kingship "ghastly". It seems highly likely something will be lost in translation.

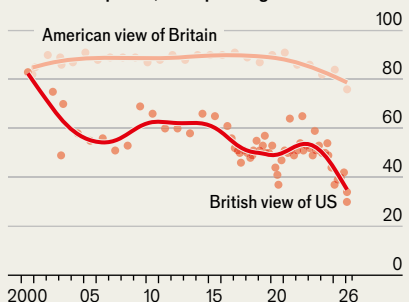
If only English speakers could agree on what phrases like "highly likely" actually mean. They are all, it turns out, divided by our common language, especially on words of "estimative probability". Say "highly likely" and it is highly likely, says Adam Kucharski, a mathematician who studied the matter, that different people will hear it differently, with listeners assigning the event it describes a probability of anywhere from 45% to 100%.

It is probable that other words are worse—like "probable" (for which a probability of 25% to 100% is assumed). Nationality matters. Americans, Professor Kucharski found, offer "more optimism". But it is a realistic possibility (0% to 100%) that some phrases are almost meaningless. Native speakers seem unqualified to use qualifiers.

Happily help is at hand. Such weasel words are so important in intelligence that organisations like NATO and the British government have calibrated them. Each now has a numerical value—and is used carefully. Thus when the king and THE KING meet there is only a remote chance (no more than 5%) that it will go wrong. It is almost certain (95%-plus) that, as long as they avoid tricky topics, like the joy of kingship, it will be fine. Probably.

### Specially bad relationship

Britain and United States, favourable opinion, % responding



Sources: Pew Research Centre; Gallup; YouGov

## Nuclear dependency

## The DIY options

**British nukes are utterly reliant on America. How long would it take for Britain to build its own?**

**T**USED TO joke, says a former Pentagon official, “that the only thing British about British nuclear weapons is the fissile material. Everything else is American.” That is an exaggeration. But not by much. There are few areas where America and Britain are entangled as deeply as in the nuclear domain. How long would it take Britain to produce a home-grown bomb?

Britain’s deterrent comprises Trident D5 missiles carried on four Vanguard-class (and soon Dreadnought-class) submarines. Contrary to popular belief, they can be fired “completely independently” of America, says a naval officer familiar with the system, with no reliance on GPS for navigation. But for everything up to that point, Britain is dependent on its ally.

The bedrock of Anglo-American nuclear co-operation is the Mutual Defence Agreement (MDA) of 1958 and the Polaris Sales Agreement of 1963. These get around America’s draconian laws on sharing nuclear technology. No other country enjoys remotely similar arrangements. The MDA was signed only after the Russian Sputnik shock and when Britain had demonstrated its ability to build an H-bomb.

It is sometimes hard to “disentangle what is purely a US piece of information from a UK one”, says John Walker, a former British arms-control official. Take warheads. In theory, Britain designs its own at the Atomic Weapons Establishment (AWE)

in Aldermaston. In practice, American and British warheads both have to fit into the same aeroshell, which shields them as they re-enter the atmosphere. Britain’s Holbrook warhead is derived from America’s W76; its next-generation Astraea A21 is closely linked to America’s new W93.

“To my best understanding the UK has never designed a modern thermonuclear weapon on its own,” says Jeffrey Lewis of the Centre for Nonproliferation Studies at the Middlebury Institute in Monterey. “The United States executes a design; that information is shared with the UK and they modify it.” A British official insists that the country could go it alone if needed. “We’ve got what we need out of them on Astraea,” he says. But even if AWE could produce an all-British design, it would still need America in other ways. “The non-fissile components are all basically produced in the United States,” says an insider.

Under the MDA, 955 non-nuclear parts of nuclear weapons were sent from America to Britain in 2020-23 alone, according to the Nuclear Information Service, a research group. That might have included so-called interstage materials, ultralight gels which transport radiation from the fission part of the bomb to the fusion part. “My understanding is those are only made in the United States,” says Mr Lewis, “and the United Kingdom does not have the capability to make them.” Britain also relies

on America for tritium, a hydrogen isotope that boosts the explosive yield.

As for the missiles, Trident D5s are stored and refurbished in Kings Bay in the American state of Georgia; Britain leases and picks up its missiles from that common pool. “If we had to create a similar facility over here, that would be an extraordinarily expensive thing to do,” says a former official. Missile testing is a joint endeavour; when a British test failed spectacularly in 2024, it was because of a problem with the American test kit.

That is not to say co-operation is all one-way traffic. America’s nuclear labs have long welcomed technical input from Britain, says Mr Walker, with AWE serving as a “neutral” voice among the sprawling and sometimes cacophonous American ecosystem. “If there were differences between Livermore and Los Alamos,” he says, referring to two of the largest labs, “then getting a kind of third valid opinion from the UK was always welcome.”

**Voulez-vous lancer avec moi?**

If America were to sever all co-operation, Britain could hang on to one boatload of missiles at sea and another waiting to relieve it. That could buy a few years. What would a crash nuclear programme look like? The most ambitious and expensive effort would require building new ballistic missiles that could fit with Astraea, as well as production facilities for components and material and a new testing range. Reproducing “all the infrastructure” without America would cost more than £100bn, claims Dominic Cummings, a former adviser in Number 10.

A slightly simpler option would be to develop a nuclear-tipped cruise missile, a capability that Britain gave up in the 1990s. It would probably be launched from the air. A Trident warhead could not simply be strapped to cruise missiles—they are too big and would experience very different sorts of stresses in flight. But a new warhead would need to be designed and validated without explosive testing. Even if Britain were willing to walk away from the Comprehensive Test Ban Treaty, it would still have nowhere to test.

A government review in 2013 found that it would take 17 years to field a new Trident warhead and 24 years for a cruise-missile warhead. Those numbers were contested—a crash programme could surely be quicker. But the lack of testing is what would slow things down.

That leaves a third option: ask for help. In 1990 France offered to share the design of a nuclear warhead that would fit a French air-launched missile, notes James Jinks, a historian, in a new paper for Policy Exchange, a think-tank. Britain demurred, though it contemplated the French option as “one we might revert to later”. ■



## Antisemitism

## Fire and cash

## A spate of attacks on Jewish targets reflects a new threat

ON MARCH 23RD four ambulances belonging to Hatzola, a Jewish charity, were set alight in north London. On April 15th two people dressed in dark clothing and balaclavas threw a brick and bottles that may have contained petrol at a synagogue. A few days later a fire was set next to the former offices of a Jewish educational charity. The day after that a bottle containing accelerant was flung through a synagogue window.

Saul Taylor, the president of the United Synagogue, lamented “an epidemic of anti-Jewish hate”. But the attacks in London are not just the latest examples of a centuries-long assault on British Jews, which has sometimes been more, sometimes less violent. They may also reflect changes in the activities of hostile states and the rise of vandalism for hire.

Britain is not the only country where antisemitic attacks have occurred. In March synagogues were bombed in Belgium and the Netherlands. An office block and a Jewish school were attacked in Amsterdam. The attacks on the continent, like those in London, have caused no deaths, which may reflect a lack of competence rather than deliberate restraint. Targeting has sometimes been sloppy; Molotov cocktails have failed to ignite.

Many of the attacks, in Britain and elsewhere, have been claimed by a new group called Harakat Ashab al-Yamin al-Islamia, which has circulated crude videos. British police are cagey about whether the group is linked to Iran, but the International Centre for Counter-Terrorism (ICCT), a Dutch think-tank, notes considerable overlap between the new group’s social-media activities and those of Iranian-aligned militias. On April 15th, amid the attacks on Jewish institutions, a firebomb was thrown at the London offices of an Iranian media group loathed by the regime.

Iran has a long history of violent international operations. In 2024 judges in Argentina ruled that it was behind an attack on a Jewish community centre in Buenos Aires three decades earlier, which killed 85 people (the alleged mastermind was recently appointed head of the Islamic Revolutionary Guard Corps). Last October Sir Ken McCallum, the director-general of MI5, revealed that his agency had tracked at least 20 potentially lethal Iran-backed plots over the past year.

Tactics seem to be changing, says Mat-

thew Levitt of the Washington Institute for Near East Policy, an American outfit, who maintains a database. Iran once relied on sympathisers and agents to carry out attacks, which led to recriminations and diplomatic retaliation when they were caught. In 2021 an Iranian diplomat was convicted of plotting to bomb a rally in France.

These days the country tends to recruit young local criminals through social media, offering money for surveillance or attacks. In February a Danish court convicted two Swedes, aged 18 and 21, for terrorism after they threw hand grenades at the Israeli embassy in Copenhagen in 2024. Russia uses a similar tactic. Last October Dylan Earl, a British drug dealer, was sentenced to 17 years in prison for arranging an arson attack on a warehouse containing goods bound for Ukraine.

Such operations often fail. The local criminals are inexpert, and they sometimes subcontract attacks to others. But even an unsuccessful operation is likely to create fear and confusion, and it might provide some content for social media. The costs in money are small, and the costs in prison time are not paid by Iran or Russia. “If it doesn’t work, it doesn’t really matter,” says Julian Lanchès, a researcher at the ICCT.

The rise of vandalism for hire is a dismal development, which could outlast the conflict with Iran. Richard Verber of the United Synagogue has watched British synagogues build fences and hire more guards. It makes no difference to worshippers if the people who threaten them are motivated more by foreign money than by ideology. There is, as he puts it, no such thing as a reassuring Molotov cocktail. ■

## Ukrainian eggs

## Cluck for victory

Britain is importing lots of eggs from Ukraine. Not everyone is delighted

BRITISH CHICKENS’ output has not kept up with soaring demand. Last year the average Briton ate 209 eggs, 45 more than in 2005. Some credit lockdown baking mania for the surge; others the rise of brunch.

Meanwhile, supply problems have deepened the deficit. First, bird flu struck, leading to culls that shrank England’s laying flock by 10% since 2021. Next, Russia’s invasion of Ukraine sent prices of chicken feed and electricity, needed to keep barns lit, flying. Eggs have become 36% dearer in real terms.

To help bridge the gap, Britain has turned to foreign hens. Since 2021 egg imports have doubled. About one in nine eggs on British shelves are now from abroad, compared with roughly one in 30 in 2022. Last year most of those imported eggs came from Ukraine.

After Russia’s invasion, Britain and the EU removed tariffs and quotas on Ukraine’s agricultural imports. This solidarity led to farmer protests and the EU reimposed barriers last year. Only Britain has kept egg trade tariff-free until 2028; a record 200m Ukrainian eggs arrived last year.

British farmers complain of fowl play. Many imported eggs are Class B—oddly shaped or with thin shells—and turned straight into biscuits and sauces, or used in restaurants. Farmers say they are being priced out by these cheap eggs.

Big egg claims consumers are being



Fowl play?

misled. Two of Ukraine’s largest producers use battery cages, a system banned in Britain in 2012. Seven in ten Britons would stop eating somewhere that served eggs by battery chickens, found YouGov, a pollster. But no law prevents restaurants from using these and for consumers there is no way of knowing the origin of their eggs Benedict.

As for embattled Ukraine, farm goods made up over half of the country’s exports in 2025. It is counting on hungry Britons to help it scramble to victory.

## Retailing

## Sound book-keeping

NEWPORT

**Waterstones shows there is still life in the British high street**

NEWPORT IN SOUTH WALES won an unfortunate title last summer when it topped a list of British towns for the share of its shop space lying vacant: nearly a fifth. The closures on Britain's high streets are often blamed on low footfall, because of culprits like online shopping. But on a drizzly Wednesday afternoon there is a short queue for the counter at Waterstones, a bookshop nestled between a boarded-up storefront and a branch of the British Heart Foundation, a charity shop.

Newport's plight is not unique. Britain's town centres, with their sprouting vape shops and graffiti-covered hoardings, are often viewed as a symbol of the country's malaise. But Waterstones is flourishing. The Newport store is one of around 300 branches in Britain. The firm reported a 7% year-on-year increase in revenue for 2025, to £565m (\$765m).

Things didn't always look so rosy. By 2011, three decades after opening its first store, Waterstones was making hefty losses. That year it brought in James Daunt, an independent bookseller, to turn the business round. At the time Waterstones was preoccupied with controlling costs, says Mr Daunt, and "not really giving a monkey's about how it presented its shops".

He began by closing nine stores and investing in those that remained (he also, sadly, removed the apostrophe from "Waterstone's"). The staff, chosen for their love of books, are able to offer shoppers thoughtful recommendations. Mr Daunt believes in giving the teams complete control over "everything they care about", including where titles are positioned around the shop. This can occasionally go wrong, but lends each branch a curated feel. "This is how retailing used to be and, quite frankly, should be," says Stephen Springham of Knight Frank, a property consultancy.

Local touches in Newport include a stand with "Enchanted Wales", a book about Welsh mythology. One woman sits on a sofa with a copy of "Queen James" (about the love life of James I), next to her dozing husband, who had apparently been overwhelmed by a copy of "The Epic of Gilgamesh", on his lap. She remembers an earlier generation of high-street bookshops, when if she pulled anything off the shelf for a read someone would soon snap, "Are you going to buy that?" Waterstones encourages browsing. Jonathan De Mello, a retail consultant, says the welcoming ap-

proach has enabled the chain to become a place for a "pit stop" on the high street, helping sustain footfall. Many of the larger shops have cafés.

Waterstones has been selling online since 2001. At first it did so through a partnership with Amazon, but five years later it took the operation in-house. Mr Daunt says that the website tries to offer a "light-hearted, decent alternative" to the e-commerce giant. Buyers are sent recommendations, based on their purchases. "We have a small central team who write emails and debate books," he says. Waterstones does not disclose the share of online revenue, but Mr Daunt says it is growing "much faster" than that from physical stores.

To see how retailing can be bungled, consider a former competitor. WHSmith, a bookseller and stationer, once dominated Britain's book trade (and owned Waterstones for most of the 1990s). But it developed a reputation for worn-out stores and unhelpful staff. A mischievous social-media account, @WHS\_Carpet, posted photos of decrepit flooring in its branches. Last year, fed up with worsening performance, it sold its high-street stores to a private-equity firm, which renamed them TGJones, removing the centuries-old "Smiths" brand from British streets.

Waterstones is also owned by a big investor, Elliott Management, an American hedge fund. But it was bought in very dif-

ferent circumstances, in 2018, after the turnaround under Mr Daunt had taken effect. A year later Elliott bought Barnes & Noble, an American bookshop chain that was struggling to keep stores open. It gave Mr Daunt the task of reviving that business too, using the same strategy and creating a similar energy. Elliott is said to be considering taking the transatlantic business public in either London or New York.

The survival of bookshops wasn't inevitable. Much of the industry seemed destined for pulping. Foyles and Blackwell's, two iconic chains, struggled with profitability before being bought by Waterstones under the dynamic Mr Daunt. The Booksellers Association, the industry's trade body, recorded a long decline in independent bookshops starting in 1995, which finally levelled off in 2016.

**A new chapter**

In the pandemic British book-buying, to the surprise of many, rebounded strongly. NielsenIQ BookData, a market-analytics company, said a record 213m copies were sold in Britain in 2021. Sales have since slipped back, to 191m in 2025. But despite the rise of e-books and persistent fears that people are ditching reading for social media, physical book sales have survived.

Pressure on high-street stores remains severe, from online competition, hefty property taxes and a sluggish economy. But Waterstones proves that sticking to what Mr Springham calls "the fundamentals of retailing" can go a long way. And it isn't unique to bookselling. He points to Next, a mid-market clothing chain, as another example of a firm that took care of its stores and reaped the benefits. British retailers in need of an upgrade might start with investing in inviting shops, friendly staff and well-kept carpets. ■

**Bricks, mortar and books**

## BAGEHOT

### The “ungovernable” myth

*Sir Keir Starmer cannot govern. He has only himself to blame*



BRITAIN IS UNGOVERNED. For the past week, the prime minister, his cabinet and practically every minister have been focused not on matters of state but on the decision to appoint Peter Mandelson as ambassador to America 18 months ago. Sir Keir Starmer, the prime minister, triggered the latest round by firing Sir Oliver Robbins, the head of the Foreign Office, for not informing him that Lord Mandelson had failed his security vetting. In the House of Commons, MPs cleared time to grill the prime minister; a select committee ran through in excruciating detail how Lord Mandelson was approved. (“You were not aware that this box had a tick in it, the red box saying clearance denied?” asked one MP.) More pressing concerns can wait.

An idea has taken root among Britain’s political classes that the country is ungovernable. Chief among them is the prime minister himself. “My experience now as prime minister is of frustration,” said Sir Keir, who commands a majority of 165 in the least constrained executive anywhere in the democratic world, during one self-pitying explanation. Levers are pulled and nothing happens, he griped. Labour advisers grumble that the state is not fit for purpose; their Tory counterparts mutter: “I told you so.”

All prime ministers see themselves as victims of circumstance. Harold Macmillan summed up the main problem facing statesmen: “Events, dear boy, events.” Stuff happens and politicians suffer the consequences. There is little Sir Keir could have done about Donald Trump’s attack on Iran; sometimes a Russia invades a Ukraine. Some things cannot be blamed on politicians. But plenty can. Sir Keir’s government offers a new twist on Macmillan’s warning: “Previous decisions, dear boy, previous decisions.”

What Sir Keir can control, Sir Keir has blundered. Consider the treatment of Sir Oliver. Some officials were tossed aside for being seen as too slow (such as Sir Chris Wormald, the staid former cabinet secretary, who was hired and then removed by Sir Keir in barely a year). Some (such as Sir Oliver) were booted for not being obstructive enough. Sir Oliver knew Downing Street wanted Lord Mandelson in Washington and he did his best to make it happen. Sir Keir yanked a lever and did not like the result.

No matter. Sir Keir needed someone to blame and Sir Oliver fit-

ted. In an odd way, in his treatment of civil servants Sir Keir has started to resemble Idi Amin, the Ugandan dictator, at the end of “The Last King Of Scotland”. “You should have told me not to throw the Asians out, in the first place.” “I did!” shrieked the adviser. “But you did not persuade me!” Perhaps Sir Oliver was lucky. He ended up in front of a select committee; in “The Last King Of Scotland”, the adviser ended up hanging from a meat hook.

Frustration in Downing Street is understandable. Labour promised change. But it did not give itself the means to achieve it. Sir Keir’s government ruled out increases to income taxes or VAT. Ignoring sensible tax rises meant having to choose more economically damaging ones. Sir Keir could do little to stop Mr Trump bombing Iran, but he could have stopped his own chancellor immediately hitting business with a tax on jobs.

The tragedy is that he had the parliamentary tools to be bolder. Sir Keir won the second-biggest majority of the post-war era and squandered it. Cack-handed welfare reforms last summer sparked a humiliating rebellion, leaving the government unable to guarantee whether it could pass even tepid legislation. It took Sir Tony Blair eight years to reach such a point; Sir Keir managed it in one. Many, if not most, Labour MPs think Sir Keir is a goner. Why try to win points with a prime minister who may not be there long?

The meme that the British state is beyond repair predates Sir Keir. It started life in the Brexit years, a painful period mainly because politicians could not decide how they wanted to depart Europe. Once they did, Britain left swiftly. It was an immense effort—all in the name of making Britain slightly poorer. Better to blame bad execution rather than a terrible idea.

All prime ministers grumble about the system they sit atop. At the bottom, the civil service is a soporific place, filled with demotivated, miserable staff. At the top, it can be a festival of arse-covering and obstinacy by senior civil servants who know their boss will, unlike them, be gone in a year. Sir Keir’s critique would carry more force if the government’s domestic woes were not almost all self-inflicted. The civil service is not a Rolls-Royce, but it is hardly a banger. Sir Keir resembles a driver kicking the wheel of a car he has just smashed into a wall.

#### In office but not in power

At times Sir Keir demands a world where ministers advise and officials decide; where a solid process negates the need for clear politics. But in an uncodified system, governing requires followers with faith. Boris Johnson was assumed to be some pagan deity, right up until his MPs and ministers offered him as a blood sacrifice to voters. Even Liz Truss had loyalists as she Thelma-and-Louised her government off a cliff. By contrast, all Sir Keir triggers is contempt. Those who owe their ministerial Range Rovers to the man offer the meekest support. Douglas Alexander, the secretary of state for Scotland, was asked whether Sir Keir would last until the next election. “I expect so,” he replied.

Political capital is the scarcest resource in any government and Sir Keir has run out of it. And so the government is not governing, even if it staggers on. An attempted relaunch after the May elections is inevitable; the cabinet may be refreshed. At the King’s Speech in May, the monarch will read out a programme of government even he knows Sir Keir has little chance of enacting. Only a lack of clear alternatives keeps Sir Keir in office. Sclerotic politics is just as damaging as a sclerotic state. Britain is not ungovernable. Even so, Sir Keir cannot govern. ■

## Europe



### Germany's defence splurge

## Can the Bundeswehr fight?

BERLIN

An interview with the chief of Germany's armed forces

ON A PLANE to Düsseldorf recently Carsten Breuer, the head of Germany's armed forces, met a passenger who wanted to thank him and his troops for their service. It is a scene he might once have imagined only in America, beams the general, demonstrating the new respect the Bundeswehr enjoys among Germans.

But the story is telling in a second way. Previous inspectors-general, as Germany's most senior soldier is officially known, would probably not have been recognised. But Mr Breuer's appearances on television and in newspapers have made him a familiar face. Germany is embarking on a once-in-a-generation rearmament, and the general has made a priority of convincing the public of the need to restore the armed forces. "It's absolutely the time to go public with what we are doing," he says.

General Breuer is speaking to *The Economist* to mark the publication of the first military strategy in the history of the feder-

al republic, along with a "capability profile" for the Bundeswehr. These are the latest staging-posts in the transformation of a fighting force that, as the then army chief said after Russia's invasion of Ukraine in 2022, was "more or less empty-handed". Friedrich Merz, the chancellor, vows the Bundeswehr will become "the strongest conventional army in Europe".

The strategy, much of which remains classified, describes the features of modern warfare that will guide the Bundeswehr's development: a "transparent" battlefield demanding data primacy; cheap, unmanned systems produced at scale; and

hybrid attacks below the threshold of open war. It lays out targets to give the Bundeswehr "technological superiority" by 2039, including in deep-precision strikes. Staggering sums will be borrowed for this expansion. By 2029 Germany pledges to meet NATO's spending target of 3.5% of GDP, and its defence budget could top €160bn (\$188bn). It will have left Britain and France in the dust (see chart on next page).

Most importantly, the strategy signals a pivot from a Germany that once ran down its military means, while muttering platitudes about European co-operation, to one boldly taking leadership among allies. "We are not doing this only for ourselves," says the general. "We are doing this for the sake of Europe." Eyebrows have been raised, notably in France, which worries about Europe's rearmament being shaped by a country still groping its way towards a strategic culture and which is still wary about deploying troops to fight. But most allies welcome Germany's conversion. "In all my conversations I've never heard anyone say, 'We are suspicious about what you're doing in Germany,'" the general says. Pentagon officials are said to be delighted.

Will the money be spent wisely? Critics, said to include Mr Merz, worry that too much will go on tanks, jets and other legacy systems, and not enough on the R&D or next-generation technology which has

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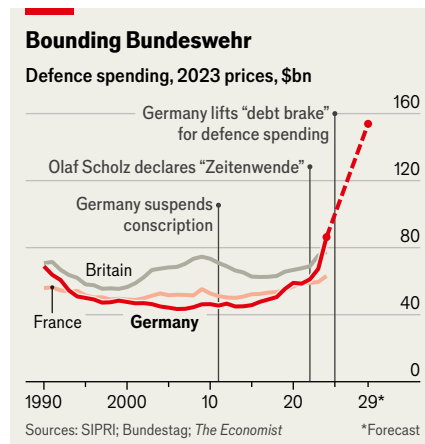
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proved its worth in Ukraine. Much has simply backfilled the neglect of previous years, acknowledges the general. But this is needed as a foundation on which more innovative weaponry can be built. As for Ukraine, the general calls the war “a teacher, not a blueprint”. His ambition is to import Ukraine’s rapid wartime innovation cycles to peaceful Germany.

One challenge is to improve a procurement system notorious for delays and legal requirements so onerous they lead to vast cost overruns. When General Breuer took over in 2023, he says, “We had procurement processes designed to procure almost nothing,” and a generation of officers better at closing barracks than replenishing weapons stocks. New rules have improved matters, he insists, citing a “lightning-speed” procurement of loitering munitions from March to December last year.

Another test is to find the 260,000 troops needed to meet Germany’s NATO obligations by 2035, up from today’s 185,000, as well as building a reserve of 200,000. A new law obliges men turning 18 to fill out a questionnaire assessing their readiness to enlist. But most think Germany will have to eventually consider reintroducing the draft, which was suspended in 2011. This could mark the first occasion for serious public resistance to rearmament. A survey by the Bundeswehr Centre of Military History and Social Sciences finds a small majority of Germans in favour of conscription for young adults—but not among young adults themselves.

“Russia is creating the conditions for a war against NATO,” warns the strategy. A less clearly expressed worry is over the role of America. (China is not mentioned.) General Breuer notes a “strategic dilemma” for European countries that know they must accept responsibility but aren’t yet



able to take over capabilities from America. “There has to be a roadmap,” he says. But as Donald Trump flirts with quitting NATO, critics fear a Bundeswehr conceived in 1955 as an alliance army will struggle to cope with a chaotic American withdrawal. That is not plan A, says the general. But “I would not be a military leader if I did not think through different scenarios, including the worst-case scenario.”

Even the strategy’s central scenarios require an independent German approach to deployments. Is Germany really *kriegstüchtig* (“war-ready”), as Boris Pistorius, the defence minister, puts it? Two recent European proposals—a “coalition of the willing” to police a notional Ukraine ceasefire, and a naval mission in the Strait of Hormuz—are driven by Britain and France, with Germany’s role uncertain. “We focus on collective defence, and on homeland defence. Crisis-response operations are secondary,” says the general. “That may be different from the UK, the US and probably France. But *Kriegstüchtigkeit* is about showing that deterrence works.” ■

## Ukraine and the Mideast

# The odd throughle

KYIV

## Ukraine is building bridges to Turkey and Syria

FEW FOREIGN missions in Kyiv appear as dreary as Syria’s embassy. It is squeezed into a squat apartment block in Lukyanivka, a neighbourhood repeatedly targeted by Russian attacks. The façade of the hotel next door has been torn open by a Russian drone. The embassy has been closed since 2018, when Ukraine ordered it shut in response to war crimes committed by the regime of Bashar al-Assad, Syria’s former dictator.

That will soon change. On April 5th Volodymyr Zelensky, Ukraine’s president, conducted a surprise visit to Damascus, and Syria said it would reopen the mission. Ukraine, for its part, says it will soon appoint an ambassador to Syria. The two countries restored diplomatic relations last September; Ukraine had severed them in 2022 after Mr Assad recognised Russia’s annexation of the occupied parts of the Donetsk and Luhansk regions.

The countries’ leaders make an unlikely pair. Mr Zelensky is a former comedian of Jewish descent. Ahmed al-Sharaa, Syria’s president, spent years commanding a branch of al-Qaeda. Yet they have found common ground, notably on trade. Syria has some of the world’s largest phosphate deposits, said to total roughly 2bn tonnes, which Ukraine hopes to use for agriculture. Ukraine has wheat, which Syria, impoverished by a more than a decade of civil war, badly needs. Mr Zelensky has suggested bartering one for the other.

Further down the line, Ukraine hopes for a security partnership. Syria needs help modernising its army, including its ageing Soviet-era weapons systems, and rebuilding its port and energy infrastructure. Ukraine’s engineers and military advisers worked in Syria during the cold war, and four years into Ukraine’s war with Russia it has become a defence-tech juggernaut. It would be keen to return, not least to taunt the Russians.

Russia was the main sponsor of the previous regime in Syria. It retains two military bases there, and has tried to preserve cordial relations with the new government. Vladimir Putin hosted Mr Sharaa in Moscow last year. But its influence has waned dramatically, and will continue to do so as long as it refuses to extradite Mr Assad. Having overseen the torture or killing of hundreds of thousands of Syrians, he absconded to Moscow when his government collapsed, and was granted asylum. Uk- ▶▶



The inspector-general inspects the troops

▶ raine spies an opening. “We want to step into Russia’s fading footprint wherever we can,” says Yevgeniya Gaber, a former Ukrainian diplomat now with the Atlantic Council in Washington.

Turkey, Syria’s new gatekeeper, is happy to facilitate. President Recep Tayyip Erdogan’s government avoids open confrontation with Russia. But it benefits from the Russians’ diminishing sway in the Caucasus, the Middle East and Central Asia. That has led it to edge closer to Ukraine. Baykar, a pioneering drone firm in Turkey, is building a factory in Kyiv. Other Turkish defence firms are rumoured to be considering joint ventures, too.

Russia remains one of Turkey’s biggest trading partners and the source of a large share of its oil and gas imports. But the days when Mr Erdogan flaunted his independence from NATO by purchasing Russian military kit, notably an S-400 air-defence system in 2017, are long gone.

Ukraine still counts mainly on America and Europe for its security. But its cultivation of Turkey, a regional heavyweight with the second-biggest army in NATO, shows how American unreliability is creating new arrangements between middle powers. Mr Zelensky made the link explicit in a televised address on April 20th, arguing that because of the risk of American withdrawal from NATO, the European Union needs a security architecture that includes Turkey and Ukraine, which now has Europe’s biggest army (Russia aside).

Mr Zelensky’s visit to Syria was set up by Mr Erdogan, whom he had met the day before in Istanbul. He flew to Damascus on a Turkish government plane, alongside Turkey’s foreign minister. Like businessmen trying to impress a connection, the Turks were showing their new friend the neighbourhood. ■

## Rural Russia

# Die another day

NIKOLSK

**As Russia slashes budgets, a thriving village fights to survive**

**A**MID THE ancient forests of the Archangel region, birthplace of Russia’s northern fairytales, is the village of Nikolsk. Its solid wooden houses, interspersed with new-build blocks of flats, point to relative prosperity. It has a kindergarten, a school, a clinic and a folklore museum. Dmitry Brovin, the stocky 44-year-old owner of the farm that is Nikolsk’s biggest employer, calls himself a “hereditary peasant”: his father and grandfather were farmhands. He now owns 600 cows and



**The village that would not be cowed**

thousands of hectares of land.

Mr Brovin returned to Nikolsk from St Petersburg in 2008, hoping to save his village from extinction. He took over the half-dead former collective farm where his grandfather had worked in Soviet times, secured loans and bought new equipment. His profits let him buy a bankrupt dairy plant, which now produces butter. The average age of his employees is a reasonably young 42. Unlike thousands of dying Russian villages, Nikolsk has grown from 613 residents in 2010 to about 700 today. Local employers are recruiting workers; on Nikolsk’s outskirts 50 plots have been set aside for construction. “We’ve lived here for more than 600 years, and we want to keep living here,” says Mr Brovin. “We believe in our future.”

Russia’s government, preoccupied with the “special military operation” in Ukraine, does not. Last year district officials, obeying the government in Moscow, said they intended to cut the upper forms at the school, often the first step towards closure. Mr Brovin says two employees who had planned to stay in Nikolsk and build houses are now considering leaving.

Nikolsk is trying to defy a trend. Since 2000 the number of rural schools in Russia has fallen from 45,000 to about 21,000. As schools have disappeared, so have the settlements they served. In the past these closures could be explained by depopulation and a shortage of teachers. But more recently authorities have blamed strains on the state budget, as the government cuts spending on rural development and redirects money from welfare to warfare.

“These are very difficult times,” said Olga Gomzyakova, the head of the district council, at a meeting of about 200 villagers in the school hall in Nikolsk to explain the decision to end top-form classes. “There is

a war. No matter what it is called—a ‘special military operation’—it is a war.” Eliminating the upper forms would save 5m roubles (\$67,000) per year. Students could travel 25km to school in the district’s main town. The villagers protested. “There’s money for the war, but not for us?” asked Alexander, a parent.

Until recently such decisions would have been made by the villagers themselves, but last year the Kremlin scrapped the system of local self-governance. Oksana Anikieva, the district chief, told the assembled villagers that since proposals to cut spending on rural schools come from Moscow, their opinion did not matter. “We will of course survey citizens, but I warn you: it will not form the basis for the decision,” she said. “So when you tick ‘against’, don’t expect to succeed.” A murmur rippled through the hall. “Why did you call us here then, if you’ve already decided everything?” shouted a man from the back.

Igor Kobelev, a timber entrepreneur with a son in a senior form, was angered by the lack of respect. “When they come and say everything has already been decided for us—that’s when resistance begins,” he said. Nikolsk has a tradition of dissent: in the 17th century the village provided refuge to Old Believers, religious schismatics fleeing persecution. “People here have always resisted,” explains Tatyana Regush, founder of the folklore museum, which attracts 5000 visitors a year—more than a municipal museum in the district centre—thanks to a summer folklore festival. At the meeting she called officials incompetent, and accused them of trying to make the successful villagers pay the price.

After the meeting villagers began organising. At a gathering they unanimously declared they wanted to keep the school in its current form. Letters and emails to authorities and media outlets eventually forced the district to take the proposal off the agenda, though villagers know this is a tactical retreat. “They can bring it back at any moment. We need to make sure they don’t even think of targeting Nikolsk again,” says Ms Regush.

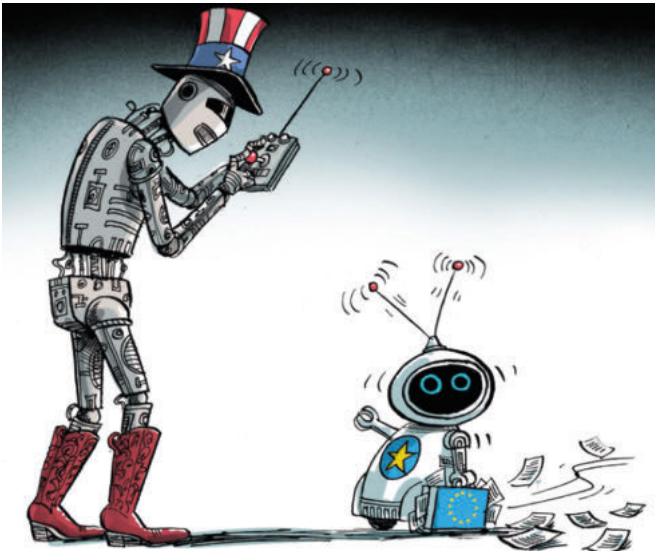
Villagers want to hold a referendum whose outcome would be binding on district officials, a possibility that exists under Russian law. But on February 25th the council refused to authorise one, claiming (without explanation) that it would be illegal. The villagers challenged that decision, and court hearings began on April 9th.

Residents say they are building their village’s future, developing businesses and not asking for help. “Our land is very rich. It’s shameful to stand with an outstretched hand,” says Valentina Shulgina, a former teacher. “We provide work for ourselves so we can live where we want and the way we want,” says Mr Brovin. “That’s why we will defend ourselves to the end.” ■

# CHARLEMAGNE

## *The road to economic serfdom*

*How Europe regulated itself into American vassalage*



IT WASN'T LONG after blue jeans, Hollywood blockbusters and Big Macs crossed the Atlantic last century that some worrywarts started fretting about Europe falling prey to American dominance. What was once a concern about cultural hegemony has of late morphed into panic over commercial dependency. With some justification: the commanding heights of the modern European economy have quietly been captured by American firms. Apple and Google power the mobile phones used from Dublin to Dubrovnik. Other Silicon Valley titans have spawned cloud computers storing Europeans' data, and from which American artificial-intelligence models are being deployed deep inside the continent's businesses. Visa and MasterCard, two American firms, are often required for Europeans to pay other Europeans. Increasingly the continent's lights are being kept on by American liquefied gas, replacing an erstwhile reliance on Russian energy.

This form of economic vassalage, which comes on top of dependency on security matters, is hardly new. "Why can't Europe build its own Google?" has long been a predictable lament at Brussels confabs. But in an age when such entanglements can be weaponised—not least by Donald Trump and his MAGA clan in America—it also raises geopolitical questions. If Mr Trump *really* wants Greenland, say, could he threaten to cut off Europeans' ability to pay in shops, or switch off their iPhones en masse? Could some perceived slight from the German chancellor result in the *Mittelstand* being shunted off cutting-edge AI models, hobbling their prospects? The possibilities seem, alas, endless.

Here is an uncomfortable truth for hand-wringing policymakers in Paris, Berlin and beyond: Europe's dependency on America Inc is in no small part Europe's own fault. Decades of over-regulating the old continent's economy left businesses there unable to compete with American firms, which went on to trounce European ones even in their own backyards. What Europeans could not build quickly for themselves, due to a thicket of regulations, they often imported just as quickly from abroad. That forcing businesses to jump through endless regulatory hoops would put a burden on Europeans was always understood: meeting ambitious green targets, protecting privacy, preventing bank meltdowns or

achieving other necessary goals was always going to carry a cost. But the extent to which it also left Europeans in hock to foreigners—for now mostly America, but also increasingly China—has only belatedly become clear.

Tech is where the dependency seems most acute. Europe has few firms at the forefront of AI, space or high-end computing (one notable exception is ASML, a Dutch firm globally vital to chipmaking). Even governments often have little choice but to use the likes of Microsoft or Amazon for cloud services, Palantir to sift through data or SpaceX to launch military satellites. Quixotic attempts to shake off big tech abound, for example by having civil servants ditch Windows for some clunky substitute. Too often the European alternatives are lacking anyway. It turns out that boasting about regulating AI before the public had made their first ChatGPT query—as the European Union did in 2021—is not conducive to home-growing AI champions.

Yes, EU rules often applied to American firms, insofar as they wanted to offer their wares in the bloc. But regulation in practice hit European firms harder. The costs of administering complex data-protection rules, say, could easily be absorbed by a Google or OpenAI, with their hordes of compliance staff. Not so their European rivals, which have usually lacked scale (if only because the EU's fragmented single market made it harder for them to grow beyond their home country). The EU thus generated barriers to entry that often ended up protecting American giants.

The sapping of European sovereignty is also evident in finance. European banks requiring dollar funding have long had to enforce Washington's edicts, for example applying American sanctions. But other dependencies are self-imposed. Several thousand European banks once jointly owned a pan-continental payments system (known as "Visa Europe"; its only American element was the name licensed from the global brand). But well-intended EU regulations that capped the sector's profits made that business unattractive for the banks, which ultimately sold the business in 2016—to the Americans at Visa. Thus a new dependency was born.

Even less whizzy bits of the economy have regulated themselves into subservience to foreigners. In the 1990s the EU imported just half the natural gas it used, thanks in part to domestic production in places like the Netherlands. A tangle of national and EU rules made it ever-harder to drill; many countries have given up. Today 85% of all gas used is imported, over a quarter from America. Other new industrial projects are often unfeasible to launch in Europe. The EU these days frets about access to critical raw minerals, for which it depends mainly on China. Europe has deposits, but getting the environmental and other permits in place to extract them can take up to 20 years, per the EU's auditors.

### **Brussels, we have a problem**

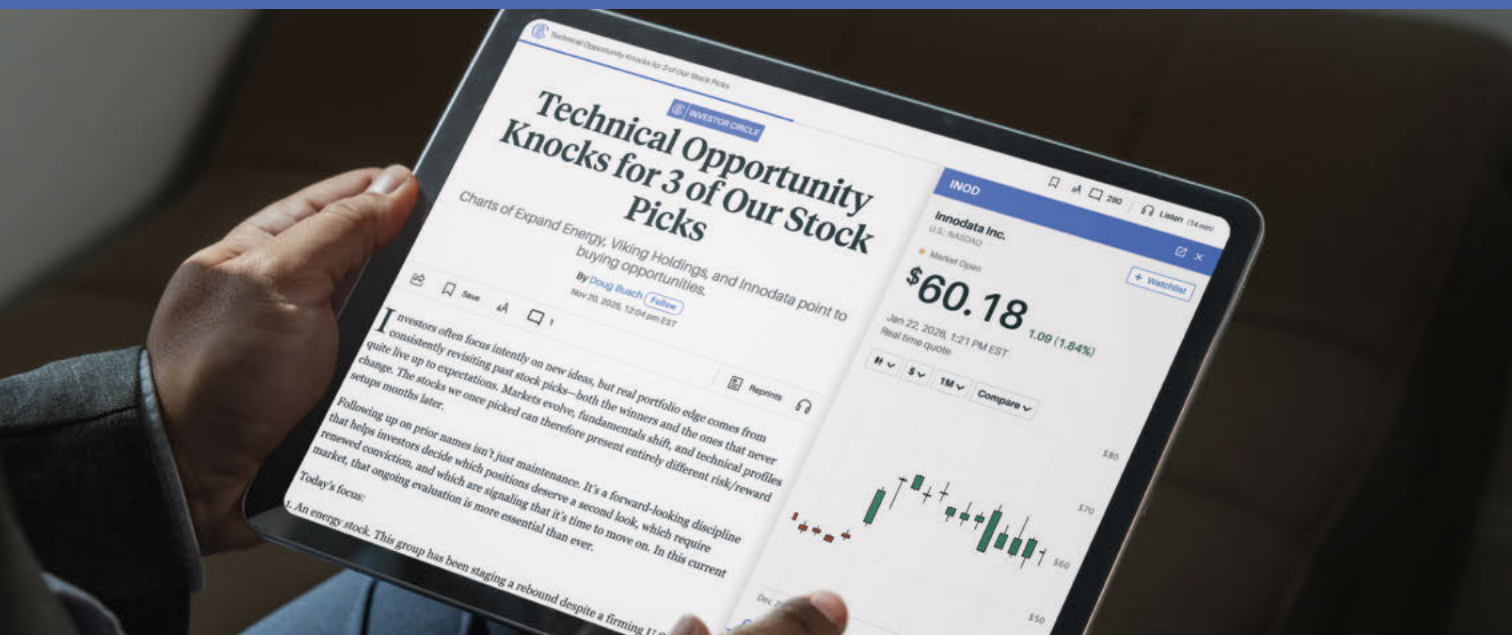
The annoying thing is that, taken individually, each piece of euro-regulation is laudable. Yes, Europe should aim for "net zero" carbon emissions by 2050. Of course regulating AI is sensible, lest the robots turn on us one day. Firm antitrust rules enforced by the EU have served consumers well, and so on. But taken together the effect has been a tangle of red tape that has left Europe awkwardly exposed. Efforts are afoot to get to grips with some of the more unappealing dependencies; next month the commission will unveil a "tech sovereignty package". But it remains to be seen whether Europe can escape its role as a superpower in rule-making, yet a supplicant in everything else that matters. ■

# The first watch for first movers.

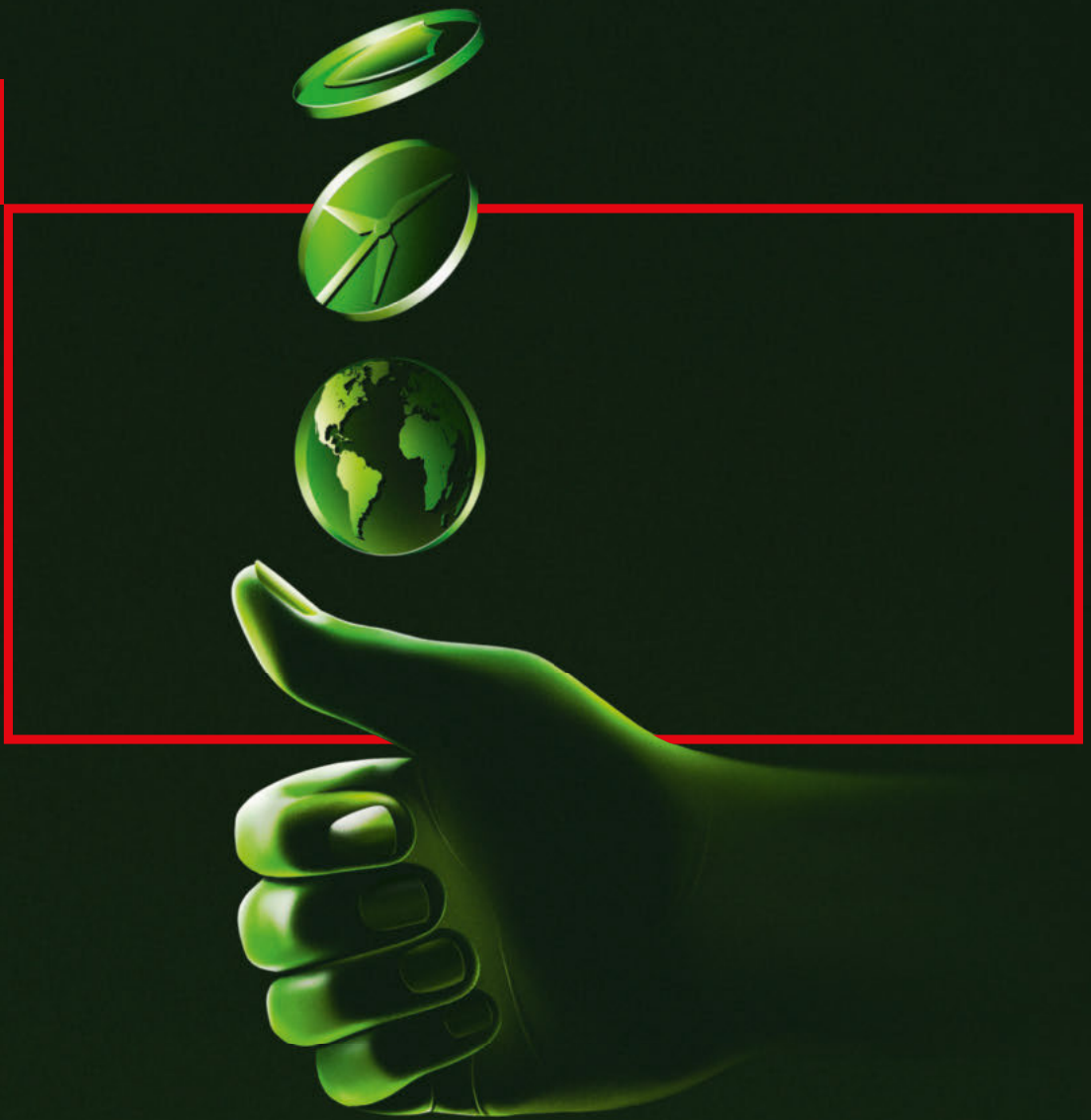


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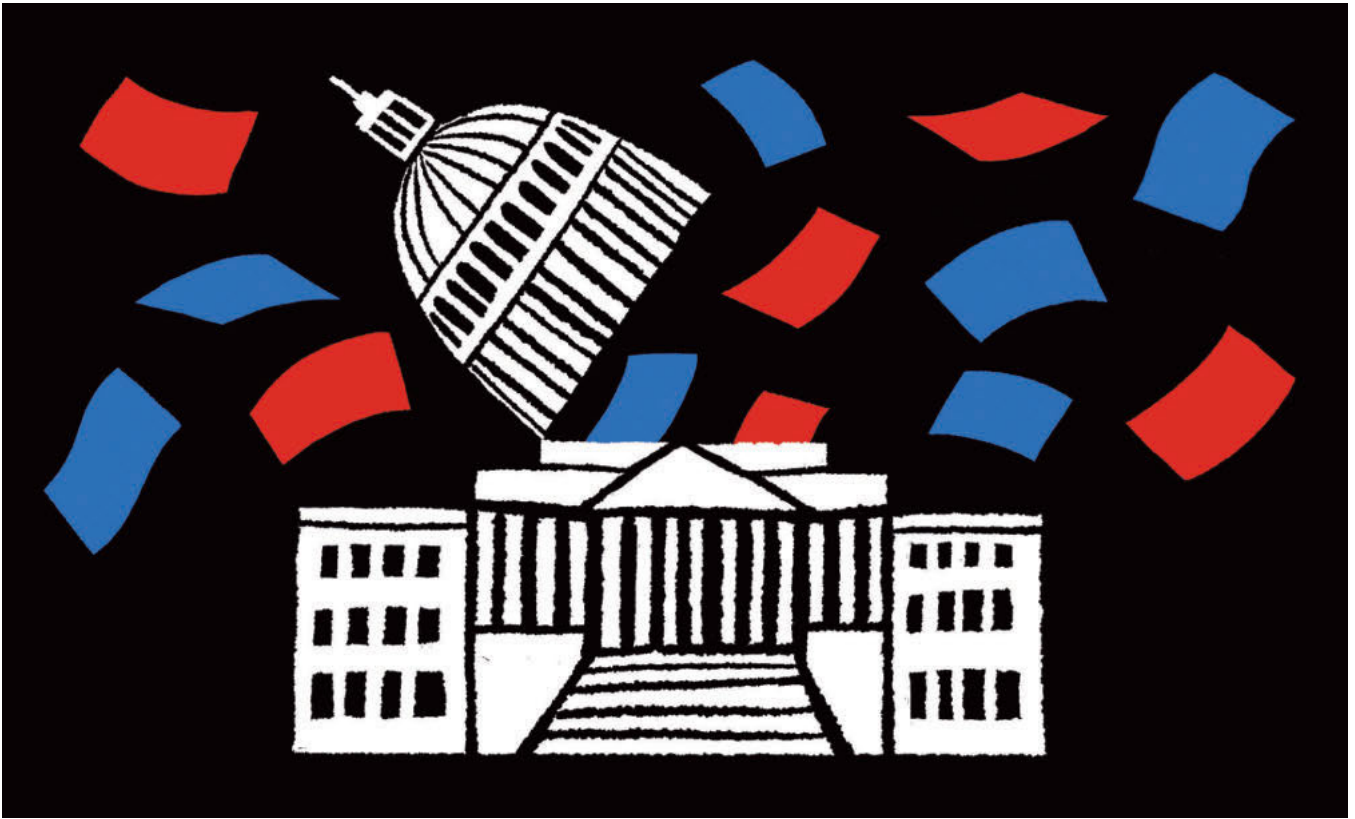
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# United States



## Our midterms model

# So you're saying there's a chance

## Virginia's redistricting may be the final nail in House Republicans' coffin

THE SUN rises in the east; the other queue always moves faster; and the president's party loses the House of Representatives in the midterms. Starting with the Democrats' blue wave in George W. Bush's second term, this pattern has held firm every four years. Even Republicans' weak performance in 2022, derided as a "red ripple", ended Joe Biden's trifecta.

And although Donald Trump prides himself on breaking rules, in this respect he looks embarrassingly conventional. *The Economist's* new statistical forecast of the 2026 Congressional elections gives Democrats a huge 98% chance of gaining at least the three seats needed to flip the 435-seat lower house—up from 94% before voters in Virginia approved a referendum on April 21st that gerrymanders 3-4 Republicans out of their seats. More surprisingly, despite a Senate map that looks nearly impregnable on paper, the model estimates that the party has a 48% probability of tak-

ing over the upper chamber as well.

Given the unpredictability of elections—as shown by Mr Trump's own victory in 2016—how can we be so certain? Although individual House races are thinly polled and frequently deliver upsets, district-specific surprises usually cancel out across hundreds of concurrent elections. If a party wins far more seats than expected, that is usually because it wins more votes than expected nationwide. And in modern times the national popular vote for the House has generally landed close to estimates based on "generic-ballot" surveys,

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which ask respondents which party they plan to support in Congress. Among decided voters, Democrats now lead these polls by around 53% to 47%.

Polling errors do still occur: in 2020 House Republicans' share of the major-party vote exceeded the generic-ballot average by 2.9 percentage points, which was worth nearly 20 seats. However, adding other types of data can partly reduce this risk. The results of special elections for vacant legislative seats, in which Democrats have excelled, have also been broadly accurate, particularly in midterms. And the president's approval rating, now 17 points under water, provides another glimpse of a blue wave building offshore.

There is plenty of time for these variables to change, and our forecast of the national popular vote for the House, trained on every Congressional election since 1942, leaves plenty of room for surprises. The range containing 95% of its simulations runs all the way from 50.7% for the Democrats—a near tie, similar to Republicans' underwhelming showing in 2022—to 55.9%, which would be the biggest House landslide since 1976.

However, the model sees the prospect of Republicans winning the popular vote as vanishingly unlikely. Generic-ballot polling in midterms tends to be stable, edging towards the party out of power over

time as less engaged voters start to pay attention. On top of this, the more poll respondents who have not made up their minds, the worse the president's party tends to do on election day. "Undecideds break for the challenger" is the rare political adage that data actually support.

Control of the House is in the end determined in individual races, not by a nationwide vote. However, unlike in past years when district lines strongly favoured one party, current maps are almost perfectly fair overall (though extremely unfair within individual states). After Republicans started an unprecedented mid-cycle redistricting war by gerrymandering Texas, Democrats retaliated with offsetting gerrymanders of California and now Virginia. Unless the state Supreme Court overturns Virginia's new districts, we estimate that even a tied national popular vote—a result at the very bottom of Democrats' plausible range—would give the party a 50/50 chance of a majority.

Our House forecast is much more confident in a Democratic victory than the 85% probability implied by prediction markets. We would not recommend betting on the Democrats solely based on our model, given that punters use many types of information that our forecast lacks. Above all, it assumes that current district lines are final. In fact Republican-controlled states may enact last-minute gerrymanders of their own. And if the Supreme Court rewrites the Voting Rights Act, these re-draws could be unusually brutal. We also assume that House incumbents awaiting primaries will be renominated, and do not incorporate race-specific polls or information about non-incumbent candidates until both major-party nominees are chosen.

A corollary of the House looking like a shoo-in for Democrats, rather than a dogfight, is that a dogfight is unfolding in the Senate. There, Democrats need to flip four of the 100 seats to gain control—a tall order given that all but two of their potential targets are in states that Mr Trump won by double digits in 2024. The party must defend a vulnerable open seat in Michigan, and is only clearly on track for one gain: Roy Cooper, the former governor of North Carolina, leads polls by around six points.

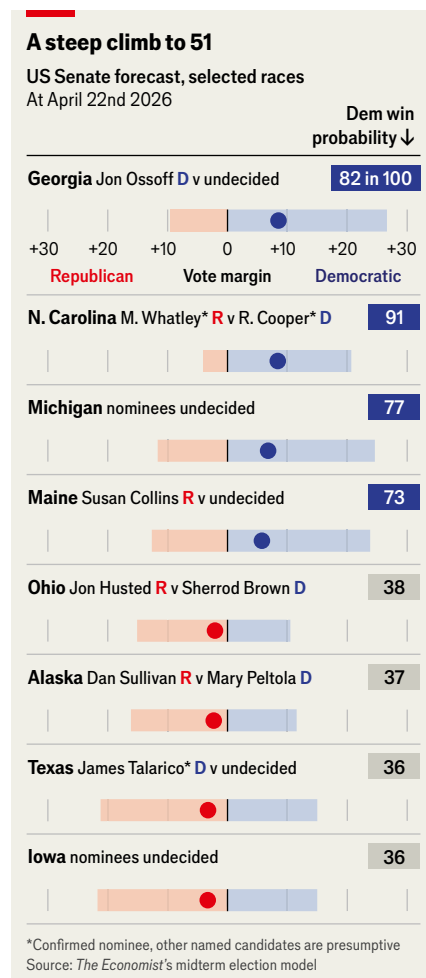
Although Maine is a light-blue state, Democratic primary voters appear poised to forsake Janet Mills, their 78-year-old sitting governor, in favour of Graham Platner, a 41-year-old oyster farmer with a long record of impolitic comments. Such liabilities would provide ample fodder for Susan Collins, the state's moderate incumbent, who is a proven electoral outperformer.

At the same time, Democrats have scored recruiting coups in two light-red states. Sherrod Brown, a longtime incumbent in Ohio, lost in 2024 but ran far ahead of Kamala Harris. He is now mounting a

comeback in a far friendlier political environment, and polls show him nearly tied. Similarly, Mary Peltola, who won a statewide race for Alaska's only House seat in 2022 but was narrowly defeated two years later, has led Dan Sullivan, the incumbent Republican, in all public polls this year.

Moreover, Republican primary voters in Texas could still oust John Cornyn, a mainstream incumbent, in favour of Ken Paxton, the state's attorney general, who faced securities-fraud charges for nearly a decade and was impeached by his fellow Republicans in the state legislature. That would open the door to making Democrats' long-held dream of "Blexas" more than something from which the party awakens every other November.

Our model sees Democrats as underdogs in all of these states, and in an open seat in light-red Iowa as well. However, any scenario in which they are doing well enough nationally to win even one of these states is probably also one in which they sweep the easier contests, putting them on the cusp of the decisive 51st seat. If anything, our forecast may be a bit conservative on Democrats' Senate chances. Prediction markets already make them a narrow favourite to flip both chambers. ■



New York

## Rich and restless

NEW YORK

**Wealthy New Yorkers grumble about a new tax set to nibble at fortunes**

WHAT IS THE proper etiquette for a Democratic Socialist at a ball? The answer is less pressing than it might otherwise have been. On May 4th the glitterati will assemble for the Met Gala, a glitzy fund-raiser for the Metropolitan Museum of Art's Costume Institute. The museum's steps will be filled with celebrities. Usually, some of the city's politicians are there, too. Five years ago Alexandria Ocasio-Cortez, a stylish congresswoman affiliated with the Democratic Socialists of America, showed up in a white gown emblazoned with "Tax the Rich" in bold red letters. Some, however, called her a hypocrite for attending the lavish affair. Zohran Mamdani, the city's new Democratic Socialist mayor, may be trying to avoid such criticism. He is skipping the event entirely.

Raising revenue from the rich, though, is very much on Mr Mamdani's agenda. He ran on a pledge to provide free buses, child care and publicly subsidised supermarkets in all five boroughs of the city. These were to be paid for with new taxes on the highest earners. A start was made on April 15th, when Kathy Hochul, the governor of New York state, proposed a pied-à-terre tax, backed by the mayor. This would apply to second homes in the city with assessed values of \$5m or more whose owners are not tax-residents (and do not rent them out). Mr Mamdani promoted the move in a video filmed outside the \$238m New York apartment of Ken Griffin, a Miami-based hedge-fund magnate.

The mayor would like to go further, raising corporate and income taxes, but he and Ms Hochul disagree on that. Still, she wants to help him address the city's sprawling budget deficit. Mr Mamdani says he expects the pied-à-terre tax to raise \$500m annually. The details are still being worked out, but rates are likely to be set on a sliding scale, with the aim of hitting that target. For the rich, this counts as gentle. "High-value residential real estate is typically under-taxed compared with other residential real estate," says Ana Champeny of the Citizens Budget Commission, a think-tank. The main effect will probably be to slightly reduce the prices of higher-end homes in the city and perhaps nudge some absentee owners to sell to New Yorkers who might make greater use of them.

Yet this is far from a comprehensive rationalisation of New York's tangled property-tax system. And the pied-à-terre tax ►►

► carries real risks—which the rich are quick to point out. Rates that are too high, or a scale with cliff edges, could do real harm. Bill Ackman, another billionaire hedge-fund boss, gripes that it may push Mr Griffin to move more of his employees to Miami. “We should be applauding Ken for spending \$238 million in NYC, not attacking him for doing so,” wrote Mr Ackman on X. Alex Witkoff, the property-developing son of Donald Trump’s go-to envoy, echoed those comments: “You don’t save a city by driving out capital. You destroy it...But perhaps that’s their goal?”

### Let them eat takeaway

For all their huffing and puffing, wealthy New Yorkers have so far not seen their worst Mamdani-era fears come to fruition. The mayor’s most ambitious (and expensive) ideas—such as universal free child care, large-scale social-housing projects and free, expanded public transport—are

being implemented incrementally or not at all. Taxes, so far, remain at a reasonable level. And another kind of disaster was averted on April 17th, when building owners reached a last-minute deal with the city’s doormen, avoiding a strike—and the horror of billionaires waiting in the lobby for food deliveries.

Moreover, they can still enjoy a good party. The dress code of this year’s Met Gala is “fashion is art”, suggesting the outfits will be especially ostentatious, even by the event’s standards. The sponsors and honorary chairs are Jeff Bezos, the billionaire founder of Amazon, and his wife, Lauren Sánchez Bezos. Posters have sprung up around the city decrying their involvement, saying the gala is “brought to you by worker exploitation”. As for Mr Mamdani, he told Hell Gate, a local news outlet, that he had other things to do, such as “making the most expensive city in the United States affordable”. ■

## Legislating

# Vote for Claude

WASHINGTON, DC

## Artificial intelligence is creeping into American lawmaking

KENT ROE is a busy man. In addition to his full-time job as a farmland appraiser, he sits on the board of a utility company and on the council of his local Lutheran church. If that wasn’t enough already, for up to 40 days a year he serves as one of 70 lawmakers in South Dakota’s House of Representatives. It is gruelling work, without much help. South Dakota has the smallest legislative staff in the country; roughly 60 staffers help lawmakers with research and drafting legislation.

These days Mr Roe relies increasingly on artificial intelligence (AI) to manage his workload. The representative says he uses AI chatbots for research, crafting arguments and mulling over talking points. “Honestly I love it,” he enthuses. “It’s a search engine on steroids.” He sometimes uses AI to help write bits of legislation, too. The lawmaker runs first drafts of bills through Grok, an AI tool developed by Elon Musk’s xAI, to refine his ideas or check which other states might have passed similar laws. He likes to prompt Grok to apply what he calls a “constitutional stress test” on proposed legislation. “It’s an accepted tool, same as a calculator is to do math, or a cell phone is to do phone calls,” he points out. “We’re not in the world of buggy whips anymore.”

Usage of AI is booming among state lawmakers and their staff. A survey by the

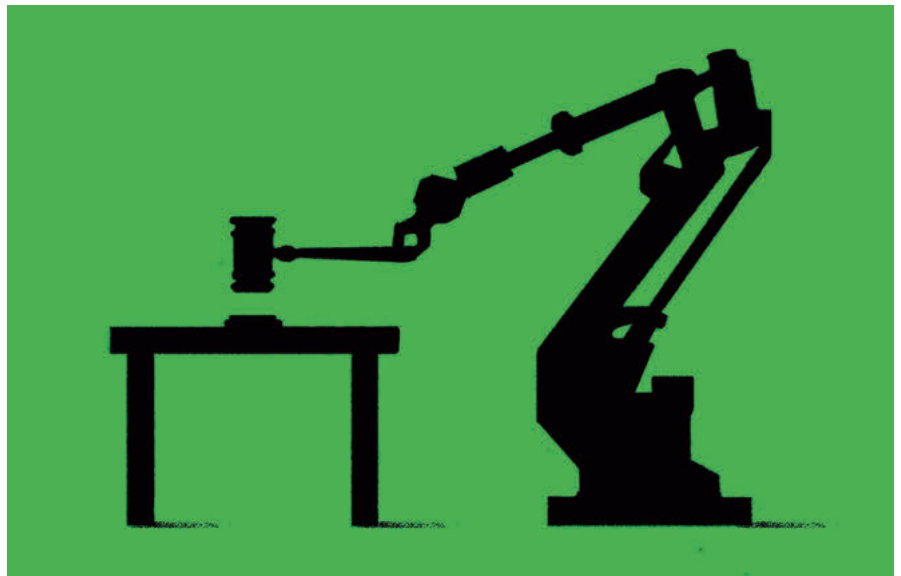
National Conference of State Legislatures, a non-partisan grouping of sitting lawmakers, found that 44% of state legislative staff used AI in their work last year, up from just 20% in 2024. Governors and state agencies are also adopting the technology, in part to prune back excessive and badly written regulations. Doomers warn of a deluge of AI-generated “slop laws” gumming up legislatures, to say nothing of representatives

merely regurgitating whatever Claude or ChatGPT tells them.

Most state legislators turn to AI out of need. “You have a lot of workload and no staff to help you out,” laments Nick Hoheisel, a Republican member of the Kansas House of Representatives. He says research that previously took him hours can now be done in a matter of minutes. AI can also help stretched legislators, who are expected to grasp a bewildering array of policy issues, push back against better-resourced lobbyists. Monique Priestley, a Democratic member of the Vermont House of Representatives, says she uses AI to fact-check lobbyists on the fly during committee hearings. “I’ve actually caught lobbyists in lies,” she says.

For lawmakers using general-purpose models, however, AI making stuff up is a big problem. Mr Roe says he occasionally runs an AI prompt “ten times or a hundred times over” to calibrate for the right answer. Mr Hoheisel, for his part, says AI models hallucinate the most when it comes to case law. In any case, bills drafted with the help of AI are still overseen by lawyers, editors and researchers, notes John McCullough, the head of South Dakota’s legislative research council. But lawyers on legislative councils deal with crushing workloads as it is; a wave of AI-slop laws might easily overwhelm them.

At a deeper level, there is growing unease that lawmakers too reliant on AI may find it harder to think critically on important issues. Thought processes like writing, problem-solving and reasoning are inherent to the job. Offloading that to an AI raises stark questions about what it means to be a legislator. “I do worry that chatbots take away independent thought,” admits Mr Hoheisel in Kansas. “Your constituents aren’t electing Claude or ChatGPT. They’re electing you.” ■



## Deportations

## Coming to America, going to Angola

CAPE TOWN AND WASHINGTON, DC

## What lies behind the Trump administration's deals with African countries

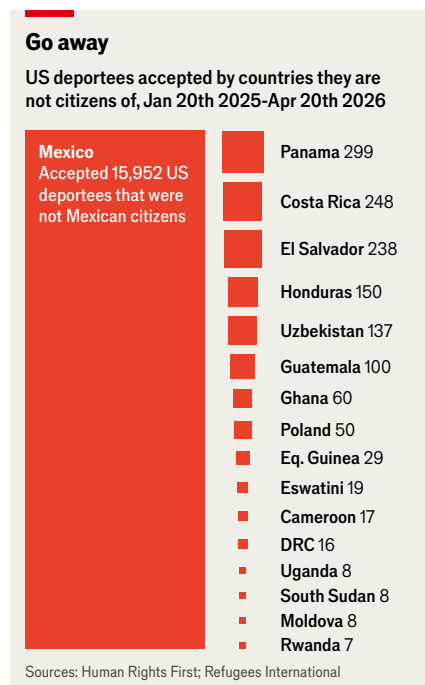
**T**EODORO (“TEDDY”) OBIANG JUNIOR was once on America’s naughty list. More than a decade ago prosecutors charged the son of the dictator of Equatorial Guinea, a small African petrostate, with extortion and embezzlement. They let him keep his ill-gotten Michael Jackson memorabilia (fedora, glove, “Thriller” jacket) but seized his Malibu mansion and Ferrari and restricted his ability to enter America. Until last year, when the Trump administration welcomed him back.

In September Mr Obiang moonwalked into a meeting with the deputy secretary of state, Chris Landau, in Washington. They discussed energy and security: salient topics, given Equatorial Guinea’s cosy relationship with China and Russia. They also talked about illegal immigration. This was curious. The tiny country is no real source of illegal migrants to America.

Clarity came in November when a plane carrying nine illegal immigrants left Louisiana and landed in Malabo, the former capital. Not one was from Equatorial Guinea; they were citizens of Angola, Eritrea, Georgia, Ghana and Mauritania. The men were locked in a hotel owned by one of the president’s brothers and pressed to go to their home countries, from which they had fled. After a month in detention Jonathan (not his real name) was frog-marched onto a plane home, where he had been tortured by gangs because he is gay. He is now in hiding.

Such are the innovations of Donald Trump’s mass deportation campaign. At least 16 countries, mostly in Africa and Latin America, have accepted deportees from America who are not their own citizens. Another 11 have inked such “third-country” removal deals. Their number is growing—last week a group of Colombians, Ecuadorians and Peruvians landed in the Democratic Republic of Congo. And the administration wants to send 1,000 Afghan refugees, who once helped America fight the Taliban, from a camp in Qatar, where they are currently housed, to Congo.

The agreements vary. Some countries are offering asylum to the arrivals (eg, Honduras and Uganda). Others are rehabilitating and integrating released criminals (Rwanda). Still others are acting as jailers before carrying out their own deportations (Equatorial Guinea and Ghana). Together they illustrate Mr Trump’s transactional diplomacy—the deportation im-



perative turns all countries, even autocratic ones, into valued partners. Two diplomatic sources say that early last year ambassadors were encouraged to tell foreign governments: help us on immigration and we’ll help you.

The sweeteners—or the arm-twisting—vary too. Equatorial Guinea and Rwanda each got \$7.5m. A \$30m grant to the UN High Commissioner for Refugees (UNHCR) in Cameroon was contingent on that country signing a deal. Ghana got some visa restrictions loosened. So did Liberia after it agreed to accept Kilmar Abrego Garcia, a Salvadoran man whom the Trump administration has tried unsuccessfully to deport. Mr Trump stopped talking about seizing the Panama Canal after Panama took 300 people from places as far-flung as Iran, Nepal and Somalia. Mexico’s decision to accept more third-country deportees than anywhere else comes against a backdrop of trade negotiations and Mr Trump’s threats to bomb drug gangs.

America is hardly the first Western country to try to dump unwanted immigrants abroad, though few have had much success. Courts blocked Britain’s deal with Rwanda; Italy’s with Albania has not yet amounted to much. Before Mr Trump no American president had tried sending im-

migrants to third countries on a large scale. The law allows it, and America has long had a deal with Canada. But his practice of it is legally dubious.

Under international law America must protect asylum-seekers from “refoulement”, deportation to countries where they fear persecution. Deportees are also meant to get the chance to challenge a removal in court. Now American immigration officials are dumping them in repressive countries and saying *sayonara*. Jonathan’s case is emblematic. An immigration judge ruled he could not be sent to his home country, but that did not preclude him from being sent elsewhere—and then refoiled.

Turning a blind eye is practically policy. Diplomats admit that they refrain from enquiring after the deportees’ welfare. Last year a federal judge asked if the Department of Homeland Security (DHS) thought it was acceptable to send someone to a third country without warning “as long as [it] doesn’t already know that there’s someone standing there waiting to shoot him”. “In short, yes,” came the government’s reply. The judge’s order requiring DHS to give notice to prospective deportees and hear challenges is on hold pending appeal.

Republicans argue, not unreasonably, that America’s asylum system is gameable. About 1.4m illegal immigrants have been ordered removed by judges but cannot be deported because their home countries will not accept them. In pre-Trump times they could expect to live freely in America, albeit without a path to citizenship. Mr Trump is using the threat of third-country removals to press unco-operative governments to accept their own citizens. Otherwise they might wind up in South Sudan, as happened to several men convicted of crimes in America whose home countries (Cuba and Vietnam, among others) would not take them back.

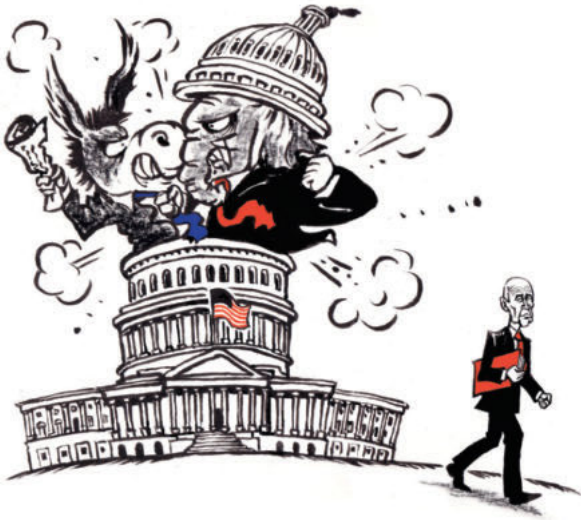
Yet for all the cash and diplomatic capital expended on these deals, only 17,000 people have actually been deported to third countries. By contrast, total removals numbered 234,000 over the past six months, the vast majority to people’s home countries. The truth is that no place wants to be America’s mega-processor. “No one was willing. There’s not much of a win-win you can articulate,” says an American former national security official.

If anything the aim is to get immigrants to “self-deport” and deter others from coming. The schemes are one more knock to the asylum system, to which the Trump administration has taken a sledgehammer. Denial rates have more than doubled; the president’s nominee to be deputy head of the UNHCR wants America to withdraw from the global refugee pact. Alma David, a lawyer, says the spectre of third-country removals is doing what it was intended to do: “scare the shit out of people”. ■

# LEXINGTON

## *Dumber and dumber*

*Short-sighted politics is depriving Congress of wily pragmatists like Thom Tillis*



WHAT IS IT about Thom Tillis of North Carolina that has turned him into a rare Republican legislator willing to defy President Donald Trump, and, maybe even more rare, a United States senator having some fun doing his job?

You might say he has courage, and there would be truth to that. Mr Tillis likes to note he grew up in a trailer park, and he learned to enjoy “a good scrap”. He is in a scrap with Mr Trump again now, blocking his nominee to run the Federal Reserve, Kevin Warsh, until the Department of Justice drops a spurious criminal investigation into the incumbent, Jerome Powell.

You might argue that Mr Tillis has principles, and you would have a point there, too. His many years as a management consultant before entering politics helped make him “a process guy”, as he calls himself. He is vigilant about the Senate’s institutional role, including as a check on the executive branch when it abuses its power by, say, trying to bully the Fed into cutting interest rates.

But courage and conviction alone are not satisfying explanations for Mr Tillis’s displays of independence. They do not account for the retreats and reversals he has made over the years, or for his continuing reluctance, to the great irritation of the left, to criticise Mr Trump. Even as he condemned the “bogus investigation” into Mr Powell during Mr Warsh’s confirmation hearing on April 21st, Mr Tillis blamed the probe on low-level aides, studiously ignoring Mr Trump’s advocacy of it. He also floated the idea of a congressional investigation of cost overruns in the renovation of the Fed’s headquarters, the flimsy predicate for Mr Trump’s vendetta. Mr Tillis is clearly trying to clear space for the president to climb down, with some dignity, from a perilous perch.

Rigid moral terms are poorly suited to describe the manoeuvres required to succeed in public life. The better explanation for Mr Tillis’s independent views is that he plays smart politics, but is trying to do so in an era when both parties insist instead on a stupid game, one that delights their activists but dismays everyone else. In fact, a perverse moral code devised by intensifying partisanship is the problem for politicians like Mr Tillis. It turns them into outcasts by rendering bipartisanship as betrayal, pragmatism as opportunism and compromise as a dirty word, rather than a

necessary and even noble act. And so, term by term, Congress becomes less able to make law, and less relevant.

Mr Tillis had a meteoric rise in politics, one that supplemented his background in systems management with legislative expertise. He became speaker of the North Carolina General Assembly after just two terms, after engineering a Republican majority in 2010. He is still trying, as he puts it, “to make the Republican Party better and more electable”. Under President Trump he sees Republicans instead making the same mistake he thinks Democrats made under President Barack Obama. “They get drunk with an election,” he says, in a recent interview in his Senate office. “They overreach. They forget that in North Carolina, 40% of our electorate is unaffiliated, and when you start acting crazy or you overreach, they generally don’t show up to re-elect you.”

Mr Tillis is not impressed with the observation that he seems liberated since announcing, after a collision with Mr Trump last year, that he would not run for a third term. “No shit, Sherlock,” he says, rolling his eyes. “I don’t have to go through a cost-benefit analysis any more, right?” Before, if he disagreed with the White House, he would worry about how to speak up but “not alienate my base, not alienate my donors and not alienate the president, right? All three of those factors are irrelevant now.” But, he quickly adds, it also “chaps my ass” to hear suggestions he did not act independently before. Mr Tillis calls himself a “pro-life, pro-Second-Amendment, pro-limited-government conservative”, but he worked with Democrats when they were in the majority to promote gun safety and protect same-sex and interracial marriages, among other matters.

For such heresies, his state party censured him in 2023. But weathering the tantrums of activists is a basic requirement for political success in a purple state like North Carolina, where Democrats and Republicans are roughly in balance. The obstacle Mr Tillis decided he could not overcome was a demand from Mr Trump last summer to support his “One Big Beautiful Bill Act”. Mr Tillis concluded the bill’s cuts to Medicaid would be “devastating” to North Carolina. After he voted no, Mr Trump accused him of grandstanding and said he would recruit a primary challenger. The next day, Mr Tillis announced he would not run again. He still marvels at the folly: the bill was going to pass even without his vote. He faced a tough campaign, but his party has worse odds of holding the seat without him.

### **Martyrdumb?**

Mr Tillis believes politicians need to “make practical decisions”. He has no yearning to wind up a hero to the Democratic Party but a pariah in his own, as Republicans like Liz Cheney have for battling Mr Trump. “You know what all martyrs have in common?” he asks, not pausing for the guess. “They’re dead.” He takes little comfort from Democratic plaudits. He prefers to note that Democrats have hounded their own heretical, deal-making senators, such as Joe Manchin of West Virginia and Kyrsten Sinema of Arizona, both of whom opted not to stand for re-election after opposing some of President Joe Biden’s policies.

Bipartisan acts may earn some praise in the moment, he says, but both parties punish them when primary season rolls around. He fears that, in the Senate, it is becoming “almost a death warrant” to demonstrate independence. The problem for any party hoping to build a durable majority is that, like North Carolina, America is a purple place. ■

# THE ISLAND STATES OCEAN SUMMIT

## Accelerating the adoption of sustainable ocean planning

In June 2026, a new international summit held in Tokyo will forge partnerships and dialogue among the world's island states to advance climate-resilient planning for sustainable ocean management.



Island states' geography puts them on the front line of rising sea levels, ocean warming and extreme weather events. At the same time, their economic fortunes depend on the health of marine ecosystems that underpin industries such as tourism and fisheries.

These commonalities will help forge ties among participants at the Island States Ocean Summit, which will be held in Tokyo on June 3rd-4th 2026. It will be co-hosted by The Nippon Foundation and Japan's Ministry of Foreign Affairs, in partnership with the Intergovernmental Oceanographic Commission of UNESCO (IOC) as co-organiser

### Island states depend on the ocean

All island states are set apart by shared challenges associated with the ocean. Among them, small island developing states (SIDS) have a distinctive mix of significance and vulnerability. For example, they steward around 16% of the world's exclusive economic zones despite accounting for 0.5% of its land. Natural disasters in these states cost on average 18% of GDP versus a global average of 3%, and climate change has been responsible

for \$41.3bn in economic losses to SIDS between 2000 and 2022.

Fiji, for example, has 76% of the population living within 5km of the coast. In 2022, then prime minister Frank Bainimarama expressed concern that island communities were "slipping beneath the rising seas". The Seychelles, another island country, gets around half of its GDP from the ocean-dependent fisheries (27%) and tourism (22.4%) industries, which are threatened by ocean warming and acidification, and by extreme weather events.

As they work to protect their ocean economies and build climate resilience, island states have begun to adopt Sustainable Ocean Plans (SOPs). Australia, Fiji, Indonesia, Japan and the Seychelles are among the first countries to publish an SOP or commit to doing so.

### A timely forum for developing Sustainable Ocean Plans

In December 2020, members of the High Level Panel for a Sustainable Ocean Economy (the Ocean Panel) committed to sustainably manage 100% of their ocean areas by 2025, guided by SOPs.

"Sustainable Ocean Plans are especially important for island states of all sizes," says Claire Jolly, head of the OECD's ocean economy unit and a member of the summit programme committee. "They help safeguard ecosystems, manage activities and growing risks, and contribute to ensuring long-term prosperity from the ocean economy." Yet, as of October 2025, only 8 of the 18 Ocean Panel members had released their SOPs.

This gap between aspiration and achievement points to an opportunity. The summit can support the development of SOPs through dialogue, not only among members of the Ocean Panel, but also among island states that have yet to make much progress towards publishing an SOP. "This summit is intended to give a huge global push that accelerates efforts to develop Sustainable Ocean Plans, with a focus on how they are beneficial to island states," says Vidar Helgesen, executive secretary of the IOC.

That acceleration is a central goal of the summit, which will also provide an opportunity to better connect knowledge generation with ocean management. The summit aims to help countries transition from fragmented ocean governance to a holistic, evidence-driven approach.

“ **The summit is intended to give a huge global push that accelerates efforts to develop Sustainable Ocean Plans, with a focus on how they are beneficial to island states.**

**Vidar Helgesen**, executive secretary, Intergovernmental Oceanographic Commission

The event will gather around 300 invited participants, including heads of state and ministers from island states as well as technical and financial partners who support sustainable ocean planning and management.

A major outcome of the summit will be an action statement that documents island states' intentions for evidence-based, climate-resilient sustainable ocean planning. In addition, an initiative is expected to be announced that will be built on at future ocean and climate events, such as the United Nations conferences of the parties on biological diversity and climate in October and November 2026, meetings of the Preparatory Commission for the BBNJ Agreement on marine conservation in international waters, and the 2027 Ocean Decade Conference in Rio.

### **Setting the agenda for sustainable ocean management**

The Nippon Foundation is convening the summit as part of its long-standing commitment to ocean science and sustainable development. “For islands to achieve sustainable prosperity and genuine self-reliance, it is crucial that they build the capacity, knowledge and tools they need,” says Mitsuyuki Unno, an executive director of the foundation. “To support this journey, The Nippon Foundation has decided to convene a new international conference in Tokyo, where representatives from all island nations will gather to discuss the sustainable future of all islands and our shared ocean.”

The IOC will act as co-organiser of the summit, in a partnership the commission describes as truly collaborative and relatively unique, uniting a leading philanthropic organisation and a UN agency with a global mandate for ocean science and sustainable ocean management.

The summit programme will enable learning between island states at different stages of sustainable ocean planning, from countries that have already published SOPs to those that are just beginning the process. “The focus on generating and sharing scientific knowledge, bolstering capacity and fostering innovation aligns with the OECD’s call for science-based decision-making and improved ocean governance as essential foundations for sustainable ocean economies,” says Ms Jolly.

Early adopters of sustainable ocean planning include larger and smaller island states, showing that neither size nor development is a condition of progress. Through an exchange of insights, and by renewing commitments to sustainable ocean planning, the island states at the summit will strengthen partnerships and align economic sectors towards a sustainable future.



“ **For islands to achieve sustainable prosperity and genuine self-reliance, it is crucial that they build the capacity, knowledge and tools they need.**

**Mitsuyuki Unno**, executive director, The Nippon Foundation

## The Americas



### North America

## Cup half-empty

LOS ANGELES, MEXICO CITY AND OTTAWA

**As the World Cup approaches, North American relations are at a nadir**

WHEN IN 2018 Canada, Mexico and the United States won their bid to host this year's football World Cup jointly, the slogan was "United As One". Aspirational as slogans are, this one was not absurd. North America is home to more than 500m people, accounts for roughly a third of global GDP and enjoys several big advantages: democratic governments, peaceful borders and economies with different strengths that are now deeply integrated.

But with less than two months before kick-off on June 11th, North America's unity is under strain. The discord can be heard most clearly in its leaders' language. President Donald Trump has threatened direct action against drug gangs in Mexico, saying his counterpart Claudia Sheinbaum is "very frightened" of them. He has repeatedly suggested making Canada the 51st state. Mark Carney, Canada's prime

minister, has responded by calling his country's close relationship with its neighbour a "weakness". The rift goes beyond words. One of Mr Trump's first actions on returning to office last year was to impose tariffs on his neighbours' exports to the United States.

Tensions will come to the fore this summer. On July 1st, with the tournament still under way, the trio must decide whether to extend the United States-Mexico-Canada Agreement (USMCA)—the trade deal negotiated by Mr Trump in his first term—beyond its current expiry date of 2036. Since the first North American

free-trade deal came into effect in 1994, commerce has flourished (see chart on next page). Mr Trump's tariffs have disrupted but not stopped the flow of goods. Today trade between the three countries is worth more than \$2trn a year, estimates Diego Marroquín of the Centre for Strategic and International Studies, a think-tank in Washington, DC. Supply chains span the continent. A car may cross an international border during its assembly eight times before it is finished.

An extension was once thought to be all but certain. Yet Jamieson Greer, the US trade representative, who arrived in Mexico for talks on April 20th, is clear that a straightforward continuation is unlikely. Some of Uncle Sam's objections are familiar. It wants tighter rules of origin for cars, chiefly to make it harder for Chinese parts to be used in their manufacture, and hopes to sell more dairy goods to Canada, which protects its farmers. The United States is already negotiating with Mexico, but it reportedly wants upfront concessions from Canada before starting formal talks.

Other demands are new and broader. Tariffs now apply not only to goods outside the agreement but also to steel, aluminium and cars that fall within it. The United States will demand that these stay. Mr

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▶ Trump also wants greater co-operation on migration, security and competition with China. He is using the USMCA as leverage to press his neighbours into complying with his priorities. Given the size of America's economy—its GDP is seven times bigger than Canada and Mexico's combined—he is in a strong position to do so.

Michael Camuñez, who was a commerce official in Barack Obama's administration, says the deal is "on life support". It will probably survive, though weakened. A likely outcome is that the trio will agree to review the deal annually, while the United States uses other tools—tariffs justified on national-security grounds, forced-labour investigations and regulatory pressure—to extract concessions, reckons Mr Marroquin. That will spook industry.

**The ties that bind**

The North American project was faltering before Mr Trump's second term. "I tell people, 'Don't fool yourself thinking if Trump goes, all will be OK,'" says Martha Bárcena, a former Mexican ambassador to the United States. Annual leaders' summits ended during Mr Trump's first term and never resumed. Even a Democratic president would probably be eager to secure the border and fight Mexican gangs.

Mexico and Canada have taken different approaches to Mr Trump. Ms Sheinbaum has done everything possible to keep alive the idea of a more integrated North America. She has conceded to Mr Trump on migration and security. She has no other choice. Some 85% of Mexico's exports go to the United States. The USMCA sustains the formal, relatively well-paid jobs that help fund the social programmes which keep Morena, her party, popular.

Canada's approach is sharply different. Mr Carney describes the moment as a "rupture" and wants to reduce Canada's reliance on a single partner. To that end he wants to increase trade with Europe, Asia and even China, which he visited in January. The pivot is so far symbolic. Louise Blais, a former Canadian diplomat, reckons it will barely "move the needle" on trade. Roughly 70% of Canadian exports go south, though they have fallen slightly. Even where commerce continues unhindered, many Canadians are angry enough they are boycotting American goods and avoiding trips south, which fell by about a quarter last year (see chart).

The World Cup illustrates the discord. National merchandise is far more widespread than any joint material. An American travel ban affects fans from 19 countries, some of whom will be unable to attend matches in the United States. Many fear American agents will use the matches to round up immigrants without papers, many of whom are Mexican. Hospitality workers at a stadium in Los Angeles where

games will be played are threatening to strike unless federal immigration agencies vow to stay away from the competition.

Still, North America is so integrated that much will survive. The United States imports over 15% of its goods from Mexico, a bigger share than it gets from any other country. Despite tariffs, new supply chains are being created, including for high-tech goods such as data-centre equipment. On April 15th Mr Trump granted a permit to a Canadian company to run an oil pipeline to North Dakota. Competition with China has made Mexico and Canada more important as trade partners for the United States, not less.

The strain has also pushed the United States' two neighbours closer together. Canada sent its largest-ever trade mission to Mexico this year; a Mexican delegation is expected in Canada soon. Even if the infrastructure for serious bilateral trade is not there—"Lettuce and broccoli from Mexico to Canada can't happen as it stands," says Mr Marroquin—the two governments are deepening their ties.

Trade and geography still bind North America. But the ideas that once animated its leaders have faded. The World Cup may bring feel-good moments, but it will fall short of what many hoped for in 2018. "The games were proposed and motivated by this dream of this integrated, competitive North America, but the ground shifted," says Mr Camuñez. "I'd like to believe the three *amigos* will ride again some day." ■

**National unity in Canada**

**Waiting for Wexit**

CALGARY

**Alberta's separatists are struggling**

A YEAR AGO Alberta's separatists were riding high. Support for independence rose when Mark Carney, the prime minister, won a fourth term for Canada's Liberal Party. In May 2025 one opinion poll found that 47% of Albertans backed "Wexit", as the western province's independence movement has been dubbed. In an attempt to please the province's aggrieved conservatives, Danielle Smith, Alberta's premier, lowered the number of signatures needed to trigger referendums. Since then, separatists have been busy gathering the 177,732 signatures required to trigger a vote on Albertan independence.

Alberta's oil riches and cowboy culture set it apart in Canada. Its 5m people are among the country's richest. Many resent federal rule by the Liberals, whose strongholds lie in the big eastern cities. "We are a separate group of people here," says Mitch Sylvestre, the leader of the Alberta Prosperity Project, a pro-independence group. "We don't go on unemployment insurance." Some Albertans have a liking for President Donald Trump, especially his "Drill, baby, drill!" mantra.

The independence movement has until May 2nd to collect enough signatures to call a referendum in October. Its leaders have said they already have more than 178,000. But eager to show the depth of their support, they want more. On a cold, windy Saturday, Brittany Warga was running a petition-signing station in the middle of Calgary, Alberta's biggest city. In a little more than an hour, just six people agreed to sign. For each passing driver who honked their horn in support, another yelled accusations of treachery.

Wexiters, despite their success in gathering signatures, are downbeat. Support for independence has waned since last year. Just one poll has put it above 30% since the start of 2026.

One reason is the independence movement's awkward relationship with Mr Trump. Some of its figures have tried to play on the American president's yearning for new territory in a bid to gain his support. Last year Jeffrey Rath, a secessionist activist, suggested on Fox News that Alberta could join an economic union with America or even become the 51st state. These proposals are unpalatable even to ardent Wexiters. "I don't want to move from one cesspool to another cesspool of government," Ms Warga scoffs.



▶ Another reason is Mr Carney. The prime minister has rolled back some of the green policies of his predecessor, Justin Trudeau, which were unpopular in the province. He is rushing to finalise an agreement to boost Alberta's oil and gas output. Ms Smith has said this would end "dark times" between Alberta and the Liberals.

Some Albertans worry that talk of a referendum is adding to economic uncertainty in the province, compounding the effects of Mr Trump's punitive tariffs on Canada. "It's unhelpful," says Jason Kenney, a former premier of Alberta. "It creates a reason not to come here."

If the petition receives enough signatures by May 2nd, the separatists will still face big challenges. The province's indigenous First Nations argue that independence would undermine their treaties with the Crown, signed before Alberta became part of Canada. Turning Alberta's provin-

cial borders into international ones would slice up the indigenous lands covered by these agreements. Last month several chiefs visited Buckingham Palace, wearing full regalia, to enlist King Charles's support. "He was interested in trying to preserve the integrity of the country," reports Chief Darrel Watson.

The Crown's role in the matter is more than symbolic. On April 10th, after a request by the Athabasca Chipewyan First Nation and the Blackfoot Confederacy, a judge in Alberta ordered a one-month pause before provincial authorities can begin certifying the signatures on the petition. If the courts find that independence would violate the First Nations' rights, it could stymie the separatists' hopes altogether. Wexiteers are closer than ever to getting a referendum on Alberta's future. But the challenges they face look stronger than ever, too. ■

## Peruvian polls

# Not so festive

LIMA

## A botched election adds to Peru's democratic dysfunction

LA FIESTA DEMOCRÁTICA, as election day is known in Peru, is usually a well-run operation. But when people went to vote on April 12th, the fiesta became a fiasco. Delays in delivering election materials caused long queues outside polling stations in Lima, the capital.

Peru's election organiser, ONPE, said those unable to cast a ballot would not be fined (voting is compulsory). That added

insult to injury. "Voting is supposed to be a right," says Emilio Rojas, who waited hours to do so. "What happened to 'every vote counts'?" Voting was extended to a second day at nearly 200 stations that failed to open. On April 21st ONPE's head resigned.

Few voters were in a festive mood to begin with. Peru has had nine presidents since 2016. Four former leaders have been imprisoned; another killed himself to

avoid arrest. The churn has wrecked trust in institutions, but has not stopped others from seeking the top job. A record 35 candidates ran for the presidency this year (36 including one who died ahead of the vote). None had widespread support.

Now Peru is in electoral limbo. Keiko Fujimori, the daughter of Alberto Fujimori, the late right-wing strongman, won a big enough lead to secure her place in the second round scheduled for June 7th. The race to be her opponent is still too close to call. Roberto Sánchez, a leftist, is ahead of Rafael López Aliaga, an ultraconservative, by fewer than 20,000 votes. A complete count is unlikely before mid-May.

Supporters of Ms Fujimori and Mr López Aliaga want a tough leader to tackle crime. Mr Sánchez, in contrast, channelled resentment of elites. His slogan—"We're not a poor country, we're a looted country"—resonates with supporters of Pedro Castillo, a left-wing president who attempted a "self-coup" in 2022.

Election observers found no evidence of fraud. But the debacle at the polls in Lima may have harmed Mr López Aliaga, the city's former mayor. Preliminary analysis of absentee rates suggests it could have cost him thousands of votes. An admirer of President Donald Trump, Mr López Aliaga has vowed an "insurgency" unless the election is annulled. He claims he was the victim of a plot and has threatened to stick this alleged conspiracy up the "you-know-where" of the electoral court's president.

Mr Sánchez has summoned his voters to protests, warning an attempted "coup" could be under way. They could clash with Mr López Aliaga's supporters, who have already protested against "fraud".

Tensions with the United States are adding to the turmoil. Last week Peru's interim president tried to back out of a deal to buy F-16 fighter jets, arguing that his successor should decide. The US ambassador responded angrily. The deal went through, but on April 22nd the foreign and defence ministers resigned over the affair.

Mr Trump has not endorsed anyone. But if Mr Sánchez makes it to the run-off, the American president might be tempted to back Ms Fujimori. While Mr Sánchez would probably face the same constitutional constraints and conservative Congress that thwarted Mr Castillo's radical proposals, he would join other leftist leaders in Latin America who reject Mr Trump's efforts to dominate the region.

Whoever wins will have a weak mandate. The three top candidates together won less than half of the vote. "The lack of legitimacy of presidents and politicians in general is one of the biggest problems in Peruvian politics," says Rodrigo Barrenechea of the Pacific University in Lima. Deep distrust and a shambolic election could be "an explosive combination". ■



As if deciding who to vote for wasn't hard enough

## Middle East & Africa



### Israel

## A new way of war

JERUSALEM

**Binyamin Netanyahu has brought about a big shift in Israel's national-security doctrine**

IN THE RUN-UP to Israel's independence day, the motorway between Jerusalem and Tel Aviv is always festooned with flags. But this year, between the blue-and-white Israeli pennants, hangs another kind of star-spangled banner: America's. Israel's government had hoped that Donald Trump would arrive on April 22nd to celebrate the 78th anniversary of its independence. He was to be the first non-Israeli to receive the Israel prize, a state honour.

Mr Trump, however, was a no-show. Instead of a presidential visit, on April 16th Israel received orders from America's president to stop bombing Lebanon (the ceasefire also included Hizbullah, an Iran-backed militia which began firing on Israel on March 2nd, prompting the latest fighting). Mr Trump is now the only person who can end the wars Israel seems incapable of ending itself. Since the attacks of October 7th 2023, it has fought devastating and prolonged campaigns in Gaza, Lebanon and

Iran. It has abandoned a long-standing national-security doctrine favouring short decisive wars. Instead, Israel has blundered, wreaking havoc and inflicting appalling suffering while sapping its own resources and damaging crucial alliances.

This is the fifth ceasefire Mr Trump has imposed on Israel in the past 15 months: two were in Gaza in 2025 and two over Iran. Israel and America launched the current war against Iran together. But it was Mr Trump who paused it, against the wishes of Binyamin Netanyahu, the Israeli prime minister. Israel is not a party to the on-off

talks between America and Iran on a more comprehensive deal; it will have to abide by whatever is agreed in Islamabad.

Nevertheless, Mr Trump has tired of the open-endedness of Israel's wars and the disruption they have caused. Arguably, the American president recognises what Israel—both its government and many of its citizens—refuses to accept: that Israel's current wars are failures. "They dragged on without a clear diplomatic purpose or outcome," says Jeremy Issacharoff, a former Israeli ambassador who has also been in charge of strategic affairs at the foreign ministry. "The ceasefires are a positive development, but having them dictated to us by America harms Israel's deterrence and makes it a client state."

In Gaza and Lebanon Israel launched massive air strikes and ground campaigns in response to attacks by Hamas, militants in Gaza, and Hizbullah. It did huge damage to both groups and killed their leaders. But it also killed tens of thousands of civilians, levelling much of Gaza and destroying entire towns and villages in Lebanon. In both places ceasefires were agreed but then collapsed. Israel captured swathes of territory as "security zones," to be held indefinitely. But Hamas and Hizbullah, though weakened, remained entrenched. Mr Netanyahu promised "total victory" but instead was forced by Mr Trump to end ▶▶

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▶ (or at least pause) Israel's campaigns without removing the threat on its borders.

Likewise, after the end of the war against Iran last June the Israeli prime minister assured his people that the "existential threats" of Iran's nuclear programme and ballistic missiles had been "removed" in "a historic victory which will stand for generations". Instead, eight months later, Israel was at war with Iran again. This time Mr Netanyahu added another war aim, to "crush the regime in Iran" and prepare the ground for an uprising by the Iranian people. Instead, the regime in Tehran endures and Mr Trump is now intent on reaching a deal with it.

This is not how leaders in Israel used to envisage warfare. Its founding prime minister, David Ben-Gurion, argued that the duty of Israel's government was to prolong periods of calm between conflicts, then use that time to build up the new country's economy and society, as well as its military power. In times of war the Israel Defence Forces (IDF) would have to mobilise reserves swiftly, since Israel was too small to maintain a large standing army.

Inspired by Ben-Gurion, Israel's national-security doctrine was formulated around three Hebrew watchwords: *harta'a* (deterrence); *hatra'a* (early warning); and *hachra'a* (decisive action). The doctrine's essence was that a tiny country with a small population in a hostile region could not afford to wage long wars frequently. It needed to wield overwhelming military power to deter its enemies, to be capable of detecting when they were planning an attack and to be able to act quickly, ideally pre-emptively, to secure victory in its enemies' territory. And, importantly, Israel could not rely on its army alone, wrote Ben-Gurion: "a foreign-policy of peace" was, he wrote, a "fundamental component of security". Israel needed alliances and international legitimacy to secure its future.

Israel's current leaders have abandoned many of those principles. Hundreds of thousands of reservists have spent many months fighting in Gaza and Lebanon and enforcing Israel's increasingly brutal occupation of the West Bank. The devastation of Gaza, where Israel has killed over 70,000 people and where the population has been brought close to starvation, has greatly eroded Israel's international legitimacy and support, even among its allies.

And neither Israel's leaders nor its people seem to have learnt anything from Gaza. Israel has resorted to similar tactics in Lebanon, uprooting civilians and destroying villages, despite Israel's generals admitting that their campaign would not be sufficient to disarm Hizbullah or even prevent it from firing missiles. Mr Netanyahu has also allowed soldiers to operate with impunity. Allegations of war crimes have received little scrutiny.



"The Israeli public doesn't want to hear now that you can't just destroy Hamas or Hizbullah, or topple the regime in a massive country like Iran," says Dan Meridor, a former minister from Mr Netanyahu's Likud party who in 2006 had the task of revising Israel's national-security doctrine. "They want to hear that the IDF is omnipotent. But as long as the aims are unrealistic and the only solutions are solely military, we're bound to fail."

The massacres of October 7th traumatised Israelis and their military leaders. Yet Israel's politicians and generals have so far faced no reckoning for failures of deterrence and early warning, largely because of the continuing wars. Mr Netanyahu, anxious to hold together his far-right coalition, which includes ministers who have advocated ethnic cleansing in Gaza and southern Lebanon, has refused to appoint an independent commission of inquiry.

Meanwhile, a new unofficial doctrine has emerged in which the notion of pre-emptive action has been redefined. According to this, if Israel can no longer rely on detecting enemies' intentions, it must act much earlier against their capabilities. That principle guides its wars with Iran and the occupation of "security zones" inside Gaza, Lebanon and even Syria, though the new government in Damascus is trying to reach a security agreement with Israel.

Senior IDF officers grumble about having to fight wars without an overall strategy. But in public they have fallen into line with Mr Netanyahu's open-ended conflict. "The IDF used to be able to restrain the politicians," says Or Rabinowitz, an expert on Israeli strategy at Stanford University. "But the generals are too cowed now by their October 7th failure to oppose the government's worst tendencies. They can't even rein in their own soldiers who are helping settlers in the West Bank attack Palestinians. The only restraint now is Trump's foot on the brakes." ■

## Tanker wars, continued

# No war, but no shipping

The ceasefire between America and Iran has been extended, for now

YET AGAIN, there was a certain sense of *déjà vu*. A ticking clock, a threat of catastrophic war, a behind-the-scenes diplomatic scramble—and then, at the last minute, a reprieve.

On April 21st Donald Trump said that he would extend America's two-week ceasefire with Iran, which had been due to expire within hours (its blockade of Iranian shipping remains in effect, however). This was the second time in two weeks that the American president had retreated from a threat to bomb Iran's power plants.

A delay was necessary, he said, because Iran's "seriously fractured" government had yet to respond to his latest proposal for ending the war. Those divisions are real (see next article). But they do not entirely explain why Iran refused to attend another round of negotiations in Islamabad, the Pakistani capital, planned for this week.

The regime thinks it has the upper hand and is keen to extract concessions—in this case, the removal of America's blockade of its ports—as a condition for simply showing up. But Mr Trump takes the opposing view: he thinks the blockade has given him the advantage, and that a cash-strapped Iran will soon fold. It is hard to end a war that both sides believe they are winning.

The ceasefire announcement capped a bewildering few days of diplomacy. On April 17th Abbas Araghchi, the Iranian foreign minister, said the Strait of Hormuz was now "completely open". Yet the next day the Islamic Revolutionary Guard Corps (IRGC) fired on ships that tried to use the waterway. Meanwhile, Mr Trump seemed unaware of the whereabouts of his lead negotiator. He said J.D. Vance was en route to Islamabad on April 20th, only for the vice-president's motorcade to arrive at the White House hours later.

Mr Trump did not specify how long the truce would remain in effect. In practice, a formal deadline may not matter: it will hold until one side decides to break it. How long that takes will depend on how much they can tolerate the economic pain caused by their mutual blockades.

The Pentagon says it has stopped 29 ships from transiting Hormuz. It has also seized at least two Iranian vessels, one of which was in the Bay of Bengal, 5,000km away from the strait by sea. The barricade is not hermetic: *Lloyd's List*, a shipping journal, believes more than two dozen Iranian ships have dodged it. Still, Iran will ▶▶

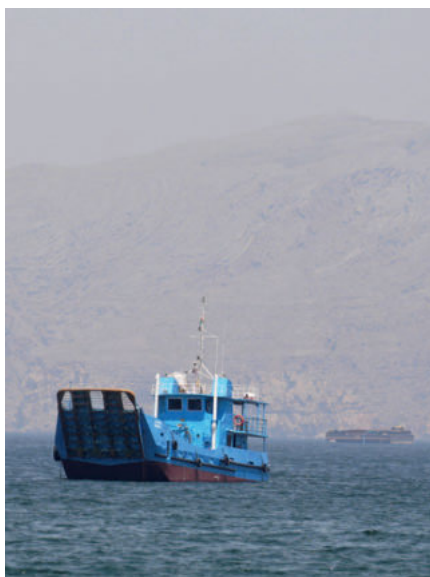
▶ probably have to start cutting oil production within days as storage fills up, and a prolonged closure of its ports will drive up prices of food and other essentials.

Meanwhile, non-Iranian traffic remains at a standstill. Only one ship passed through the strait on April 21st. On April 22nd the IRGC fired at a container ship. It also seized two other vessels trying to exit the Persian Gulf. Oil markets were unimpressed with the extended ceasefire: the price of Brent crude remains around \$100 a barrel. Mr Trump needs the strait open before high petrol prices sink his Republican Party in the midterms.

This is not sustainable. At some point either America or Iran will be tempted to break the deadlock by resuming the war. Yet that will only worsen the economic damage, with America bombing Iran's infrastructure and Iran doing the same to Gulf oil-and-gas facilities. Mediators are still trying to organise another round of talks, but that will require America or Iran to relent on the issue of the blockade.

Even if they do meet, a deal is hardly certain. The first negotiation, on April 11th, ended with no agreement on key issues, such as whether Iran could continue to enrich uranium. America proposed a 20-year moratorium; Iran countered with five years. The latest proposal would start with a ten-year ban, followed by a period in which Iran could refine limited amounts of uranium to a low level of purity. They also disagree on how to dispose of Iran's stockpile of more than 400kg of uranium enriched to near-weapons-grade.

Fearful of the consequences, Mr Trump seems loth to resume the fight. Iran, too, would prefer to avoid more destruction. Logic would suggest they find a face-saving compromise that lets them meet—but in war, logic too rarely wins out. ■



Schrödinger's strait

## Diplomacy with Iran

# A jungle of power

### Which Iran is America dealing with?

**E**VEN BEFORE the first round of talks between America and Iran had begun, Iran-watchers sensed that something was askew. Delegations dispatched for talks with America are usually lean, disciplined and tightly briefed. The one in Islamabad, the Pakistani capital, was anything but. Some 80 Iranians joined the flight on April 10th, among them roughly 30 billed as decision-makers. They included diplomats who had helped write Iran's 2015 nuclear deal and a firebrand MP who denounced any deal with America. Rancour in their hotel was so ferocious that Pakistani mediators spent as much time refereeing the Iranians as engaging with the Americans.

The indecision coming out of Iran signals a power struggle. For only the second time in its 47-year history, it is without a present and absolute supreme leader. One observer likens the situation to "a jungle of power". For any future American delegation in Islamabad, this raises the question of who, exactly, they would be talking to.

The prime cause of the tensions is the vacuum at the top. Seven weeks after an American-Israeli air strike killed Ali Khamenei, the supreme leader for 37 years, his successors have failed to agree on a date for his funeral. His son and designated successor, Mojtaba Khamenei, may either be incapacitated or too weak to impose his authority. Israeli assassinations have thinned the army's top ranks. Their successors lack their sway and experience and may heed the Islamist radicals who take to the streets every night. Most of all, Iran's central command has been dispersed to guard against those assassinations. "Decentralisation is good for the system's survival in war, but bad for its functioning when the fighting stops," says an Iranian cleric who knows Mojtaba.

Since a ceasefire was declared on April 8th, the regime's wartime cohesion has been fraying. Formal authority rests with the Supreme National Security Council (SNSC), comprising the president, parliament's speaker and the security services' chiefs. Mohammad-Bagher Ghalibaf, the speaker, has been designated chief negotiator, with Abbas Araghchi, the foreign minister, as his lieutenant. But their apparent readiness to negotiate has provoked a backlash, particularly from the Islamic Revolutionary Guard Corps (IRGC), the 190,000-strong force at the regime's radical heart. Hence Iran's pronouncements on

the status of the Strait of Hormuz and whether to fight America or try diplomacy have been contradictory.

Pro-regime crowds in Iran have taken to denouncing Mr Ghalibaf and Mr Araghchi. Military communiqués issued by men in fatigues appear to have replaced sermons by clergy. Even puritanical dress codes seem to be slipping: at a recent rally an unveiled woman led chants, breaching the four-decade taboo on women singing solo in front of men. In a further sign of military control, outlets linked to the Guards have floated the idea of delaying municipal elections scheduled for May 1st.

Since toppling the shah in 1979, Iran's leaders have disagreed on whether or not to confront America. But the faultline between nationalists guided by realpolitik and Islamists fired by revolutionary passion has widened. Many zealots now look to the security council's secretary, Mohammad-Bagher Zolghadr. His hatred for America dates back to the 1970s, when he belonged to the Mansouroun, a militant group that kidnapped Americans.

Material interests muddy matters further. Over the years, a class of generals-turned-sanction-busters has emerged, benefiting handsomely from operations to circumvent American sanctions. America's sea blockade may well bolster them as overland trade must expand via Iraq, Russia, Central Asia and China. Networks tied to Mojtaba Khamenei and Mr Ghalibaf are thought to control foreign-property portfolios and have attracted Islamist media scrutiny. With Khamenei senior gone, previously sidelined figures have re-emerged. Each brings different allies, agendas and claims on power.

Each faction has a different view on the key sticking-points in the talks, including the nuclear programme, control of Gulf waters and the role of Iran's regional proxies. Nationalists would trade proxy networks for sanctions relief; ideologues see them as a force multiplier. Yemen's Houthis might yet close a second maritime trade route, the Red Sea. For the nationalists, nuclear brinkmanship risks Iran being attacked, whereas the ideologues prefer North Korea's model: get a bomb to bolster deterrence. Pragmatists see control of Hormuz as leverage for a wider security pact with the Gulf Arabs, while the ideologues see it more as a lucrative toll-booth and chokepoint on the world economy.

On April 15th Asim Munir, Pakistan's army chief, visited Tehran, seeking common ground among Iran's factions (see Asia section). The regime's claims that it needs \$270bn to repair war damage may help concentrate minds. But the depth of divisions among Iran's bigwigs may explain why their regime has yet to say whether or when its representatives will return to Islamabad for more talks. ■



War in Sudan  
**RSF Inc**

BOSASO AND NAIROBI

**How the Rapid Support Forces built a military and economic empire**

**A**FTER DAYS of heavy fighting, in March the Rapid Support Forces (RSF) captured Kurmuk, a town on the border with Ethiopia. Like much of Sudan's civil war, the battle drew little notice abroad. Yet it could rank among the most consequential since the conflict began in April 2023. Besides turning Blue Nile, a state once remote from the fighting, into a pivotal battleground, it showed the effectiveness of the RSF's alliance-building: in seizing the town, the paramilitary group collaborated with local rebels. Most striking was the apparent involvement of Ethiopia. For the first time

the RSF appears to have staged an offensive from deep within the territory of one of Sudan's neighbours.

The battle illustrates the group's transformation from an unusually well-armed and well-connected paramilitary unit into a transnational business-cum-military empire. As the war began the Sudanese Armed Forces (SAF), the national army, believed it would make short work of the fighters led by Muhammad Hamdan Dagaló, a warlord known as Hemedti. Three years later the scale of that miscalculation is clear. More than 33m of Sudan's 50m people require aid; at least 19m face acute hunger (see map, left). Some 14m have fled their homes; perhaps hundreds of thousands have been killed. The economy is in ruins; the state has all but collapsed.

The RSF's military and economic footprint, on the other hand, has grown. The SAF last year reclaimed Khartoum, the capital, and the fertile Nile corridor. But the RSF and its allies still hold roughly half the country. That includes most of Darfur—the group's mineral-rich stronghold where it is accused of committing genocide—and swathes of Kordofan and Blue Nile (see map, right). Moreover, as the evidence of Ethiopian involvement suggests, the RSF's influence, infrastructure and interests now extend beyond Sudan's borders.

Since the early days of the war, the RSF has worked to secure flows of arms and fuel by weaving a web of airfields and lo-

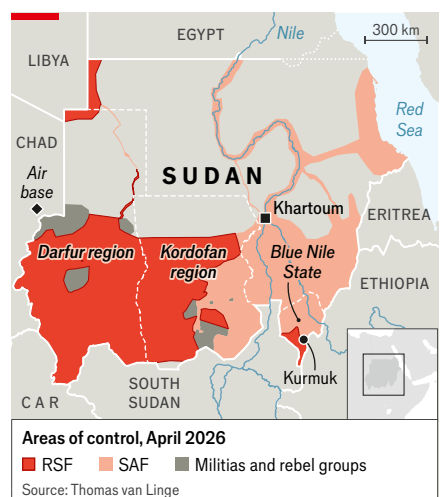
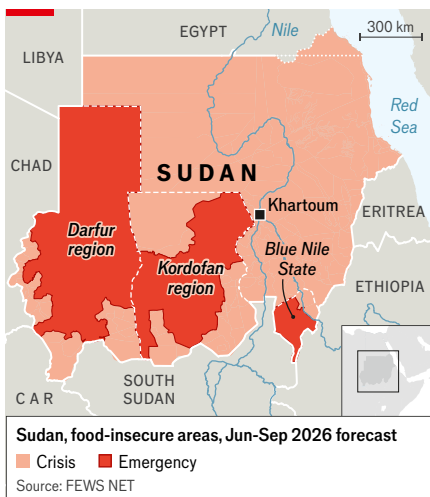
gistics hubs in Sudan's neighbourhood. At first, supplies moved chiefly through Amdjarass, an airbase in Chad that the United Arab Emirates (UAE)—the RSF's chief foreign backer—is said to have used to funnel weapons and medical aid into Darfur. (The UAE acknowledges providing some early support to the RSF, but denies it is still doing so.) In 2025 the centre of gravity shifted to southern Libya, where Khalifa Haftar, a Libyan warlord and ally of Mr Dagaló, facilitated supplies.

More recently, Ethiopia and the Central African Republic have become important conduits. Yet with the exception of Egypt and Eritrea, which are aligned with the SAF, every country bordering Sudan allows the RSF to operate in some way on its territory. Partly, that is because all have strong ties to the UAE. The RSF has also persuaded them it is worthwhile by investing in its own commercial and diplomatic networks across the region.

Ethiopia gives it the most latitude. Since late 2025 the group's military's footprint there, in the far west near Kurmuk, has allegedly included a camp to train thousands of its fighters. Satellite imagery (pictured) analysed by Yale University's Humanitarian Research Lab points to the presence at an Ethiopian army base of, among other things, vehicles resembling those deployed in Kurmuk.

Yale says its findings show "clear visual evidence" that the RSF is launching attacks from inside Ethiopia. The Ethiopian government did not respond to the allegations; the UAE says it "categorically rejects" claims that it has provided "weapons, funding, trainers or logistical support to the RSF". The RSF refuses to comment.

African countries that do not border Sudan also appear to be assisting the RSF. Credible evidence suggests the Ugandan army may have helped move weapons and fuel to the group through South Sudan, says Joshua Craze, a British researcher. Last year an investigation by Bellingcat, an



▶ open-source intelligence collective, identified Kenyan-labelled crates of ammunition inside an alleged RSF weapons depot near Khartoum. RSF officials live and move freely in both Uganda and Kenya.

The group also recruits from far and wide. Abdelnasser Solum Hamed, a Sudanese analyst, says it offers fighters across the Sahel around \$500 per month to serve in its ranks, a good wage by local standards. Some come from farther afield. Since 2024, hundreds of Colombian mercenaries have helped the RSF fight in Darfur. They travel via an air bridge that spans the UAE, Chad, Libya and the semi-autonomous region of Puntland in Somalia. During a visit in 2025 *The Economist* saw a cargo plane at the airport in Bosaso, Puntland's main port. It was registered to Kyrgyzstan but, according to conflict monitors, is controlled by the UAE. On your correspondent's flight were about a dozen burly men speaking Spanish. A new report by the Conflict Insights Group, an analysis firm, shows that support from UAE-backed Colombian mercenaries enabled the RSF to capture el-Fasher, a city in Darfur, in October 2025.

The RSF's military prowess is made possible by its deep pockets. In 2017 Mr Dagalo, who started out as a camel trader and commander in the Janjaweed militias, the RSF's forerunners, notorious for their slaughter of black African ethnic groups in the 2000s, seized control of Darfur's largest gold mine. The exports enabled him and his family to buy up private and public assets. By the time the war erupted in 2023 Mr Dagalo was Sudan's de facto vice-president and one of its richest men.

His business empire straddles the Horn of Africa and the Red Sea. According to a forthcoming report by the Sentry, an American investigative group, members of the Dagalo family and companies linked to the RSF own more than 20 properties in Dubai, worth \$24m in total. The group also says a network of UAE-based companies enables the RSF leadership to turn smuggled gold into hard currency. Nick Donovan of the Sentry reckons the findings are only a small part of a "paramilitary-industrial complex".

According to Mr Donovan, the Dagalo family declined to comment on whether its members still owned specific properties, and said that any private residences or assets had been properly obtained. The family also stressed that members had been engaged in legitimate commercial activity, such as livestock trading, for generations.

The RSF's business interests have proved resilient. In 2025 America put sanctions on seven companies based in the UAE which it said had provided money and weapons to the group. Nonetheless, it has expanded into new mining areas.

The latest Gulf war is strengthening the

RSF's hand. The UAE regards influence and resources in Sudan and the wider Red Sea region as crucial to its security, and considers the RSF an important vehicle for acquiring them. Attacks by Iran against Gulf states reinforce that logic, notes a former American diplomat. Abdel-Fattah al-Burhan, Sudan's army chief, has condemned Iran's strikes. But the SAF buys drones from Iran, and is allied with Islamists who support the Islamic Republic.

The Iran war has also made America even less inclined to put pressure on the UAE. On April 17th it imposed new sanctions on two Colombian companies which, it says, supply mercenaries to the RSF, but

not on the UAE-based security firm that is accused of paying and training them. Even if that changed, the RSF's vast commercial network means that persuading the UAE to cut its support would not swiftly end the war, says Kholood Khair of Confluence Advisory, a Sudanese think-tank.

Increasingly, the RSF seeks to be seen as a legitimate power. Last year it announced a parallel government. The SAF's insistence that the group must withdraw unilaterally from territory it occupies has stalled efforts to secure a truce. Under-terred, in January General Burhan called once again for the RSF to be "eliminated". That seems more remote than ever. ■

### Journalism in Ethiopia

## Missing Million

Abiy Ahmed used to champion free expression. Now he is throttling it

NOT LONG ago Abiy Ahmed, Ethiopia's prime minister, won plaudits as a champion of free expression. He released dozens of journalists jailed by his predecessors, lifted bans on independent outlets and praised pluralism and democracy. Eight years after he first took office, Ethiopia is gearing up for an election in June. Mr Abiy says it will be the most open and democratic poll in the country's history.

In reality, it will be a sham. Many of Mr Abiy's rivals are either in exile or in jail. Opposition parties have been co-opted, cowed or banned. And journalists often disappear mysteriously nowadays, taken by unidentified men to undisclosed places on suspicion of unspecified crimes.

The latest victim is Million Beyene, managing editor of the *Addis Standard*, a prominent newspaper and one of the few local outlets still brave enough to criticise the government. On April 15th masked men in civilian clothes abducted Mr Million from the newspaper's office in Addis Ababa, the capital, saying he was "needed for questioning". No one has heard from him since.

The police deny that Mr Million is in their custody. But in February the government had revoked the *Standard's* licence, accusing it of violating unspecified laws and endangering "the national interest". Last year security forces raided the paper's office and detained its journalists. Many have resigned for fear of government reprisals. Police threaten anyone who asks about Mr Million, says Tsedale Lemma, the

paper's founder, who lives abroad.

Scores of Ethiopian journalists have been arrested, beaten or forced into exile. Many foreign reporters have been expelled. In 2024 one was arrested while meeting an opposition politician and then deported. The politician was assassinated a few weeks later.

The government promises more persecution. In February an official at the media regulator claimed that the *Standard* and others were waging a "co-ordinated information war" against Ethiopia. Fighting them was a matter of "national survival". Ethiopia's "sword remains unsheathed", he added. Bold are the pens that remain unshaken.



A subversive habit

## Asia



## Pakistan

## A moment in the sun

ISLAMABAD AND LAHORE

What do the geopolitical successes of Field Marshal Asim Munir mean for Pakistan?

ON APRIL 21ST, hours before a ceasefire between America and Iran was due to expire, and with the threat of renewed strikes imminent, Donald Trump announced that the truce would be extended indefinitely, at Pakistan's request, to let negotiations continue. Whatever happens next, Pakistanis have some reason for feeling proud. For decades the country has been known mainly for endless IMF bailouts and terrorist insurgencies. Now it has shown itself to be a deft handler of global power politics.

At the centre of all this has been the man whom Mr Trump has feted as his "favourite field marshal". Throughout the crisis Asim Munir, the country's mustachioed army chief, has been on the phone regularly to Mr Trump and his vice-president, J.D. Vance. Diplomats say he is immersed in the details; during the first round of talks last week he was often the only one of the principals seen diligently taking notes.

The former spy chief spent three days in Tehran last week—he was the first high-profile visitor since the bombing stopped—meeting senior political and military leaders there. Soon afterwards the Iranians said they would open the Strait of Hormuz (only to backtrack in protest at Mr Trump's blockade).

Some observers have been surprised by the nimbleness of the military strongman. But those in Pakistan who have watched his rapid rise say that he is sharp, wily, ruthless and ambitious. Appointed army chief in 2022, he has quickly emerged as

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Pakistan's most powerful leader for a generation, first by securing his grip on the armed forces, then by hobbling the opposition and extending his influence over government. Thanks to some constitutional chicanery, he is thought to have secured his position for a decade, perhaps longer. No one in Pakistan doubts that he is the one—not Shehbaz Sharif, the prime minister—calling the shots.

Field Marshal Munir's dream is to elevate the world's fifth-most-populous country and its only Muslim nuclear power to what he sees as its rightful place in the international order, no matter that many millions of Pakistanis still struggle to get by. Can he take advantage of his moment in the sun—or will the dominance of yet another military strongman merely serve to deepen Pakistan's many problems?

It is not the first time that Pakistan has involved itself in high-wire diplomacy. The country's military leaders have long had a "fetish for playing on the global chess board", says a former senior official. Pakistan spent three years running a backchannel between America and China ahead of President Nixon's visit to China in 1972. But often, the official adds, such delicate work has at best provided an ego boost or strengthened the regime against internal challengers, rather than yielding benefits to the population at large. ▶▶

▶ The case that this time will be different starts with Iran. Despite the recent goodwill, the two countries have long had a tricky relationship, aggravated by insurgencies on either side of the border. Pakistan worries about flows of refugees if the war goes on, and its own large Shia population growing restive. But if it succeeds as a peacemaker, diplomats hope it will be well-placed to play a leading role in reconstruction, creating jobs for its crowds of young people. Pakistan's seat at the table could also be used to push for the removal of sanctions that have halted a long-planned Iran-Pakistan gas pipeline.

Field Marshal Munir also hopes to flex Pakistan's military muscle. After the war, Gulf states will feel more threatened and less sure of American protection, says Mushahid Hussain, a former senator. Pakistan's most—many would say only—functional institution is a big, well-drilled army. Defence spending increased by around a fifth this year.

A mutual-defence pact with Saudi Arabia signed last year is seen as a model. Pakistan already has around 13,000 soldiers and 18 jets stationed in the desert kingdom. The deal has not been made public, but insiders say Saudi Arabia has promised investment in return for security guarantees. There is also growing talk of creating some kind of "Islamic NATO"—involving Egypt, Pakistan, Saudi Arabia, Turkey and perhaps others—to boost co-operation on defence and security.

The past few weeks have also been a reality check for India, says Hina Rabbani Khar, a former foreign minister of Pakistan. It has long aimed to isolate Pakistan diplomatically, and made a renewed tilt to do so after the two fought a four-day war last year. Instead it is Pakistan that has strengthened its role in the Middle East, and its relationship with both America and China, while India has found itself watching from the sidelines.

Though the field marshal has played his cards well, geopolitical success may end up doing little to stave off pressing problems at home. The twin spectres of the IMF and terrorist insurgency remain. Living standards have barely risen in a decade. The field marshal's plan for making the economy work better largely involves extending military control over it. An investment council he chairs has yielded little. Anger over soaring fuel prices since the war began has so far been muted, but only because the regime has warned opposition parties not to hold protests. Big cities are experiencing gas shortages and rolling blackouts, and in the coming months food prices are likely to rise.

The worry is that if he is unable to alleviate such problems, Field Marshal Munir will be more likely to turn to repression. Imran Khan, a former prime minister, sits

in solitary confinement. Having governed as a populist, he was ousted by the political and military establishment in 2022, then put away on specious charges. Behind bars his popularity has soared; his position now is "liberty or death," says his sister Aleema. Seasoned observers doubt he will be released as long as the field marshal rules. Hundreds more have been locked up, according to opposition parties. "When we plan a protest, our people get picked up and taken to unknown places," says Ali Zafar, a senator from Mr Khan's party, the PTI, which has been partially dismantled. Fazal-ur-Rehman, a veteran Islamist politician, complains that the 2024 election was

rigged, before adding that the field marshal is a "good man and a brave soldier".

The country still has a nominally democratic constitution; the PTI even runs one of its provinces. But the field marshal has tilted Pakistan's hybrid system even further towards military control. One insider suggests that only a façade of civilian government remains. Increasingly, the army's dominance is openly acknowledged.

In the past, Pakistan's generals have often preferred to wield power from behind the stage, letting politicians face the wrath of voters. One consequence of Field Marshal Munir's ascendancy is that he has put himself front and centre. ■

### Noise pollution

## Sound barrier

Honking is harming India's health—and its economy. Nobody seems to care



THERE IS NOTHING palatial about Diamond Horn Palace. The cluttered shop in Chandni Chowk, an old, crowded part of Delhi, sells horns and other accessories. But its trade is booming. "People buy expensive bikes and cars, but after two or three months the horn no longer matches the presence of the vehicle," says Mustafa Ahmed, its owner. "I restore them for very cheap. Some say I have magic in my hands."

Mr Ahmed's success should sound an alarm for India. Step onto any street and it is easy to hear why. According to UN data compiled in 2022, Indian cities are among the loudest in the world. Noise levels on Delhi's streets average around 75dB—four times louder than the threshold recommended by the UN's World Health Organisation. Much of the racket comes from road traffic, above all from the incessant blare of horns.

Noise is no mere irritant. More than 60m Indians suffer hearing loss, which researchers attribute partly to noise pollution. But the health effects run deeper: a review in 2020 concluded that louder road-traffic noise raises the risk of heart disease. No one has tallied what all this costs India, but estimates from Europe suggest noise could shave around 0.6% off GDP each year.

Poor city planning has made Indian traffic chaotic as trucks, rickshaws, motorcycles and pedestrians jostle for space. In this free-for-all, the horn has morphed into an all-purpose communication device: a way to signal a turn, nudge a dawdler, or simply announce one's presence. Mercedes-Benz, a German carmaker, has adapted its horns in India to withstand heavier use. Data from thousands of scooters found that riders in Kolkata, an eastern metropolis, honk roughly 131 times an hour.

Doctors and public-health officials should flag the dangers of noise as loudly as they do those of air pollution. In China sound barriers, noise-reducing road surfaces, electric vehicles and a state-led push for lower volumes have quietened its cities. In India, change will come only when the public demands it. For now, that call is being drowned out by all the noise.



See Interactive

To see the full version of this story, and to hear just how loud Indian cities are, please visit [economist.com/india-loud-cities](https://economist.com/india-loud-cities)

## China and Central Asia

## Tremble and obey

ALMATY

## An anti-China protest lands a group of Kazakhs in prison

CHINA LIKES to portray itself to Central Asia as a benevolent ally bringing wealth and development to the five former Soviet countries to the west of its province of Xinjiang, where the Chinese government is accused of committing human-rights abuses against Muslim minorities. Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan are all heavily reliant on economic partnerships with their powerful neighbour, which demands little in exchange but loyalty, especially when it comes to keeping a lid on public expressions of solidarity with fellow Muslims.

A group in Kazakhstan have found this out the hard way, after a peaceful anti-China protest cost them their freedom. On April 13th a Kazakh court jailed 11 of them for five years; eight more received non-custodial sentences. The court found them guilty of inciting racial strife against the Chinese people. They had argued that their action was a legitimate political protest directed at Xi Jinping, China's leader, and his government.

They staged their demo last November, near the Sino-Kazakh border. They demanded freedom for Alimnur Turganbay, a Chinese-born Kazakh citizen under arrest in China, whose wife, Guldariya Sherizat, was among the protesters and has now received a prison sentence. They also criticised abuses in Xinjiang, where Kazakhs are among Muslim minorities locked up in re-education camps as restrictions are imposed on their religious practice. China denies these abuses. The protesters were Kazakhs born in Xinjiang (where Kazakhs are the second-largest Muslim group, after Uyghurs) who have moved to Kazakhstan. So is Mr Turganbay, the Kazakh citizen whose case sparked this protest. He was detained on a visit to Xinjiang last year.

The demonstrators yelled "Down with China!", "Down with the Communist Party!" and "Down with Xi Jinping!", before burning and trampling on Chinese flags and a portrait of Mr Xi. That did not go down well in Beijing. China urged Kazakhstan's government to take "appropriate measures". It singled out the involvement in the protest of activists from Nagyz Atajurt, a Kazakhstan-based group which doc-

uments abuses in Xinjiang.

That movement has long been a thorn in China's side, and it has pressed Kazakhstan's government to silence it. In 2019 Kazakh police arrested its leader, Serikzhan Bilash, on charges of inciting racial strife. He escaped prison time with a plea bargain, before fleeing into exile. Bekzat Maksutkan, the group's co-leader, has been jailed over the latest protest.

The trial has cast a spotlight on China's sway over Central Asia, where it is the largest trade partner, investor and creditor. China expects Central Asian leaders to follow the party line over Xinjiang. Kazakhstan's president, Kassym-Jomart Tokayev, a Mandarin speaker who has accused human-rights groups of spreading lies about atrocities in Xinjiang, seems happy to kowtow to that demand. ■

## Japan

## Merchants of necessity

TOKYO

## By lifting export restrictions, Japan hopes to revive its defence industry

JAPAN'S PACIFIST shibboleths are falling one by one. A decades-long taboo against spending more than 1% of GDP on defence was abandoned in 2022; this year spending will reach nearly 2%. After long refraining from possessing weapons that could hit enemy territory, Japan deployed its first long-range "counter-strike" missiles last month. On April 21st Takaichi Sanae, Japan's hawkish new prime minister, announced another historic change, loosening long-standing restrictions on arms

exports and significantly expanding the scope to sell lethal equipment overseas.

The move is vital. Facing growing pressure from an ever more assertive China and less support from an ever more unreliable America, Japan wants to reduce its dependence on foreign supplies and to play a bigger role in providing regional security. Officials hope opening up export opportunities will push the country's defence contractors to boost production, expand capacity and bring down costs. Yet changing the rules will only make all this possible; industry still needs to rise to the challenge.

For decades after the second world war, Japan strictly limited its sales of weapons overseas. Universities and researchers tended to see collaboration on defence technology as taboo. Japan's major defence contractors evolved as relatively small wings of larger industrial and technology conglomerates. Though they developed advanced capabilities, they were constrained to serving a single customer, and a frugal one at that: Japan's own defence ministry. As a result, the industry is in bad shape, one bigwig from the ruling Liberal Democratic Party (LDP) admits.

Japan relies heavily on kit from America. Yet with conflicts raging in Ukraine and the Middle East, defence supply chains have become strained. American officials admit they cannot produce enough for Japan's needs. An audit published in January found 118 orders of military equipment worth some \$7bn remained unfilled five or more years after the contracts were signed. The Iran war has led to delays in promised deliveries of Tomahawk missiles to Japan.

The shackles began to come off Japan's defence industry a decade ago, under the then prime minister, Abe Shinzo. The latest revisions scrap rules that limited exports to five non-lethal categories: rescue, ▶▶



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transport, surveillance, warning and mine-sweeping. Lethal arms will now be allowed to be sold to countries that have defence-technology agreements with Japan (17 countries have them at present, including America, Australia, India and several South-East Asian states). Exports to countries involved in conflict will still be barred, but the government will allow exceptions if it is deemed necessary for Japan's own security interests. America, as well as neighbours who share concerns about China,

such as the Philippines, praised the move; a Chinese spokesman, equally predictably, denounced the "reckless actions of a new Japanese militarism".

The revival of Japan's defence industry hinges on several issues. First is whether Japanese contractors can cope with competition abroad, from established giants like America, but also upstarts in the region, such as South Korea. Japanese firms will probably focus on niches where they have competitive advantages, such as sub-

marines and ships. This month Australia struck a \$6.5bn deal to procure new Mogami-class frigates from Japan's Mitsubishi Heavy Industries.

Another question concerns the capacity to ramp up production at home, especially given severe labour shortages. Finally, the industry will need to adapt to new domains of warfare. That will mean expanding the ecosystem beyond traditional contractors to include more startups focused on areas like drones and AI. ■

## BANYAN

### Argument clinic

*What have the Mughals ever done for us?*

IN SPEECHES TO supporters, to parliament and to the nation, Narendra Modi has repeatedly invoked India's centuries of slavery. Soon after taking power in 2014, he lamented that "the mentality of 1,200 years of slavery continues to haunt us. It is often a challenge for us to hold our heads high when speaking to someone of even slightly elevated stature." The chief target of the grievance is the series of Muslim empires that came before British colonialism.

The Mughals were the longest-lasting of those. April 21st marked exactly 500 years since the Battle of Panipat, when Babur, a Central Asian descendant of Tamerlane and Genghis Khan (hence "Mughal", from "Mongol"), defeated the last sultan of Delhi. The empire he established was, at its height, one of the world's richest and most powerful. Its rulers adopted customs of Indian kingship, married locally and in effect became Indian (unlike the Brits). Their achievements are Indian achievements.

Yet the quincentenary of the empire's founding passed without note. The Mughals, Mr Modi's Bharatiya Janata Party (BJP) insists, destroyed temples (which is true) and humiliated Hindus (which is contested). They took everything India had and what, the ideology asks, did they ever give us in return?

Language, for one thing. Mr Modi's speech in 2014 was delivered in Hindi, India's most spoken tongue. Of the 28 words that made up the original of his quote above, a quarter entered India via Persian, points out Richard Eaton, a historian of Muslim India. The language of the Mughal court infuses the vocabulary of most northern Indian languages. Indeed, "Hindi" and "Hindu" both come from "Hind", the Persian name for the river known in English as the Indus (thus

"India"). But what, apart from putting the "Hindu" in "Hindu nationalism", have the Mughals ever done for us?

The cuisine known globally as "Indian" is in India called "Mughlai". The *tandoor*, a clay oven from which emerge flaky *naans* and charred kebabs, came from the Persiana world, as did samosas, sherbets, various desserts and *biryani*—India's most-ordered dish on delivery apps for ten years straight. The party-pooper wing of the BJP frowns on meat and eggs but even vegetarians enjoy a good *tandoori paneer* (from the Persian *panir*, a kind of cottage cheese that probably came via Afghans).

Granted, *tandoori* anything is irresistible. But what, apart from language and food, have the Mughals ever done for us? Four of India's ten most popular ticketed historical sites for local tourists, and six among foreigners, were built by Mughals. The Taj Mahal tops both lists. Every year the prime minister delivers an Independence Day speech from the Red Fort, a Mughal monument in Delhi so central to India's self-image it features on the back of the most common banknote.



The *sitar*, made famous by George Harrison, is a product of the Mughal era. The *sherwani*, worn by grooms Hindu and Muslim, evolved from Mughal court dress. "The popular religions of medieval India, Sufism, the Urdu language, and Indo-Saracen art were the common property of the conquerors and the conquered, and tended to blend them together," wrote Jadunath Sarkar, a revered Indian historian. Persian translations of Hindu epics were commissioned by Akbar, a Mughal emperor fascinated by religious practices (a trait Aurangzeb, his great-grandson and a keen demolisher of temples, did not share).

But what, apart from language, food, architecture, music, art and syncretism have the Mughals ever done for us?

They brought the BJP to power. In 1990, when the party held just 16% of seats in parliament, it launched a national campaign demanding a temple on the ground said to be the birthplace of Lord Ram, the protagonist of the *Ramayana*. At that site stood a mosque built during the reign of Babur, the first Mughal emperor. In 1992 a mob demolished the mosque under the gaze of BJP officials, sparking a nationwide conflagration that forged the party's base, eventually propelling it to office. By early 2024, when Mr Modi consecrated the promised temple, his party held 56% of seats. It has spent the past decade renaming Mughal cities, rejecting Mughal cuisine, and writing Mughals out of history books.

It is one thing to raze an edifice of brick and mortar. It is harder to eradicate a culture that has over five centuries permeated India's blood and soil. That, then, is the best answer to their question of what the Mughals have ever done for them. They gave political Hinduism its eternal, indispensable villain.

# China



## Offering alternatives

# Views of the Middle East

## How Chinese satellites have boosted Iran's war effort

CHINA HAS proved careful in its support for Iran in recent weeks. On March 2nd its foreign ministry spokesperson said the American-Israeli strikes “violate international law”. In recent days Xi Jinping, the country’s leader, said he wanted the Strait of Hormuz open for vessels in a call with Saudi Arabia’s crown prince. American intelligence is reported to have warned that China is preparing to send shoulder-fired rockets, the sort that could hit helicopters and low-flying planes. Yet China has offered little by way of serious economic, diplomatic or military aid. Its more indirect, and perhaps more important, contribution comes from space.

Social media are awash with images of the Middle East taken by Chinese satellites and released by Chinese firms. This comes just as American firms have clamped down under pressure from the Trump adminis-

tration, cutting off journalists, researchers and activists from a vital supply of open-source intelligence. The proliferation of Chinese images reflects progress in the scope and sophistication of the country’s Earth-observation capabilities. It marks the end of a Western monopoly on the most advanced images from space. But for open-source analysts, Chinese images are a warning as much as a rescue.

The war with Iran has offered a golden advertising opportunity to Chinese satellite firms. Bill Greer, a geospatial analyst who co-founded Commonsense, a non-profit satellite service, believes the Trump

administration’s clampdown needlessly hands America’s competitors an advantage. “The US is just shooting our own commercial people in the foot to limit their access,” he argues, “when our adversaries can still get data through other systems.”

Evidence of collaboration between Chinese satellite firms and Iran has mounted in recent weeks. China Siwei, part of the state-owned China Aerospace Science and Technology Corporation, is known to have taken high-resolution photos of American and allied military sites, according to logs published by resellers of those images. The *Financial Times* has reported that Iran’s Revolutionary Guards, the country’s most powerful military force, have also purchased a Chinese satellite; that may be the source of some of the images published by Iranian state media showing the charred results of their strikes.

The profusion of Chinese images is a function of the country’s rapidly growing constellations. China launched more than 120 remote-sensing satellites in 2025 alone—a category that includes those that use radar and radio waves, as well as those that use cameras—bringing the total number in orbit to more than 640, second only to America. In America, almost all commercial satellite firms rely on selling imag- ▶▶

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es to the armed forces and intelligence agencies; in China, the line between private firms and the state is even blurrier. The single-largest constellation—Jilin-1, comprising over a hundred satellites—is operated by the Chang Guang Satellite Technology (CGST) company, which has close connections to the People's Liberation Army. Its plan is to be capable of imaging any spot on Earth every ten minutes.

In the race for Earth-observation superiority, Chinese and American commercial satellites are neck-and-neck. Siwei's Super-view Neo-1 satellite offers images every bit as sharp as Vantor, a leading American firm. Aravind Ravichandran, the boss of TerraWatch Space, a market-intelligence firm, says that Chinese commercial satellites "score pretty high" on the most important capabilities. Jilin-1 appears to be ahead of American commercial peers on cadence—the number of times a satellite can revisit an area—largely due to the growing size of its fleet. They are also on par in "forward-looking" technologies, Mr Ravichandran says, like edge computing, which allows data to be processed in space before being beamed back. Things could yet improve further. China is currently leading the world in research impact in several remote-sensing technology areas, according to a commission appointed by Congress to track Chinese activity.

Some companies stress the advantages of working with Chinese firms that sit beyond Western "shutter control", regulation which restricts what can and cannot be released. "We are not bound by the same export-licence restrictions and bureaucratic delays that can often slow down data acquisition from other vendors," boasts XRTECH Group, a Dubai-based data analytics firm which partners with Siwei.

But Chinese providers have restrictions of their own. "I can say with some confidence that [Chinese firms] are not doing anything that the Communist Party does not want them to do," says Mike Dahm, who served as senior naval intelligence officer for China at America's Office of Naval Intelligence. In some cases, the result is greater transparency. Chinese images have helped reveal damage to American military platforms and Gulf energy sites that governments would rather keep under wraps. MizarVision, a company based in Hangzhou, has published numerous AI-annotated images of American planes and Patriot missile-defence batteries lined up across the Middle East.

MizarVision's releases also reflect how Chinese firms use AI to squeeze more out of low-resolution images, where it can be harder to make out small objects. It is unclear whether the startup uses images from Chinese satellites or Western ones, although a congressional select committee believes the images were likely to have

been taken by Airbus, a European firm. Some of its supposedly AI-generated labels are questionable. But AI can perform two useful tasks, says Mr Dahm. One is the use of computer vision to identify a blurry object, such as a plane, by its shape and size. The other is to track changes over time. One high-resolution photo can show where planes are. Then cheaper and more plentiful low-resolution images can reveal what is going on. "You may not be able to tell what the dots are," says Mr Dahm, "but each is presumably an aircraft."

The public release of labelled images by MizarVision may have another benefit, beyond the advertising it provides. As researchers comment on the images, including errors of analysis, that can be used to refine the firm's models. "They're providing the training feedback in real time to the algorithms to refine them and make them better," says Mr Dahm. "Now the engineers can go back and say: 'That wasn't a THAAD [air-defence] radar. The THAAD radar actually looks like this, right?'"

This is not the first time Chinese satellite images have helped America's adversaries. In 2023 America put sanctions on CGST for providing images of Ukraine to the Wagner Group, a Russian mercenary outfit. In April last year the State Department said that CGST had supplied Houthi rebels in Yemen with images that could help target American warships and other vessels in the Red Sea. But sanctions appear to have had limited effects on China's satellite industry. Spacety, another Chinese firm, just raised \$190m from state-linked funds and venture capital, although it too was put under American sanctions three years ago for aiding Wagner.

New capabilities are fast approaching. China has two known commercial constellations which can record video, Jilin-1 and Zhuhai-1; Planet is the only American company with video capability publicly documented. Jilin-1 uses satellite-to-ground laser communications to transfer video from orbit. But Chinese competitiveness does not mean researchers and journalists can easily substitute for the loss of Western images in the Middle East. Some Western researchers told *The Economist* that they are wary of Chinese providers with potential ties to their country's armed forces. Others say that Chinese providers ignore them.

Fans of open-source intelligence once hoped that the explosion of satellite imaging would result in greater transparency. It has—for some. "Everyone is building their own Earth-observation systems," says Mr Greer, pointing to countries in Asia, South America and elsewhere. "But almost all of them are specifically for defence and intelligence," he laments, "just getting more people spying on each other and less available as a public good." ■

## Exports

# Defying expectations

China's bumper trade surplus could continue to rise

DING LEI, a purchasing manager at a chip-trading company in Shenzhen, is having a good year. Among other kinds of semiconductors, his company is selling IGBTs, a type of transistor used to regulate electrical power. Customers include motorbike-makers in Spain, manufacturers in Romania and clients across South-East Asia. His optimism about sales prospects is understandable. In the first three months of 2026, China's exports of transistors jumped by 26% in dollar terms compared with the same period of 2025.

This time last year, after Donald Trump introduced "liberation day" tariffs on friends and foes, the levy on Chinese goods leapt for a time to 145%. (After a ruling by America's Supreme Court in February, tariffs have fallen back to 10% across the board, at least for now.) Many assumed that China's trade would slump. But by the end of 2025 it had defied all expectations. China racked up a record \$1.2trn trade surplus and its exports rose to \$3.8trn. In the first three months of 2026 exports continued their stellar streak, increasing by 14.7% compared with the same period last year.

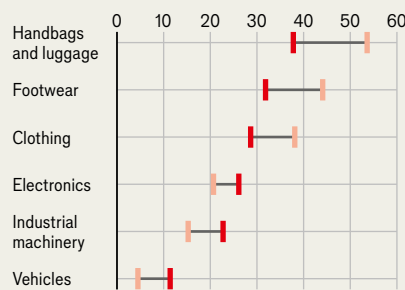
To understand China's standout performance, *The Economist* has scraped and analysed millions of lines of trade data, each describing exports of a particular product to a specific country in an individual month. Our findings help to explain how the country's exports stayed resilient in the face of an escalating trade war. They also shed light on the future trajectory of its trade surplus, which, despite trade wars and real wars, could rise yet further.

Even before the tariff shocks of Mr Trump's second term, China's exports were ▶▶

### On the shopping list

China, share of global exports, %

■ 2014 ■ 2024



Sources: BACI; World Bank WITS; *The Economist*

undergoing fundamental changes. America's importance as a market had already dwindled. It took 17% of Chinese exports in 2014 but 14.7% a decade later, partly as a result of trade salvos fired during Mr Trump's first term. More importantly, exports were steadily moving up the value chain. Though China still makes up a big chunk of global exports for goods such as footwear and clothing, its dominance has waned (see chart 1, previous page). But it is gaining ground in car production and bolstering its advantage in electronics.

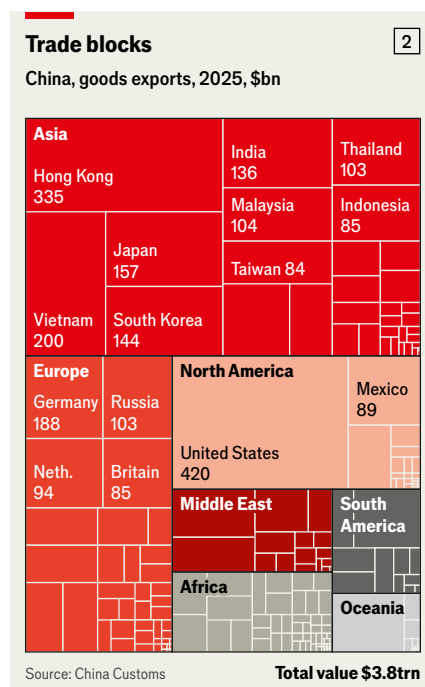
The Atlas of Economic Complexity, a research project run by Harvard University, scores goods based on how hard they are to make. In the decade from 2014, our calculations using these scores show that the average "complexity" of China's exports edged up from 0.29 to 0.36—intriguingly, America's fell from 0.06 to -0.15. (Zero is the average complexity of all goods.)

As a result of the Trumpian turmoil, China's exports to America decreased by over \$100bn in 2025 (a 20% decline from 2024). But exports to other countries increased by around \$300bn, more than enough to offset that loss (see chart 2). And many of the countries that imported much more from China last year also exported a lot more to America (see chart 3). Vietnam is the most striking example, having imported \$36bn more goods from the one and exported \$57bn more to the other.

One question is how much of this new trade pattern is simply a rerouting of more familiar corridors: exports that would once have flowed directly from China to America may now be passing through third countries, such as Vietnam. To produce an estimate, *The Economist* has matched what countries imported from China with what they exported to America using detailed product codes. Our methodology cannot show that these are actually the same goods, merely that they are of the same kind. It therefore conflates transshipment, namely the illegal changing of export origins in order to skirt tariffs, with trade diversion, where countries sell one set of goods to America and replace them with similar Chinese imports.

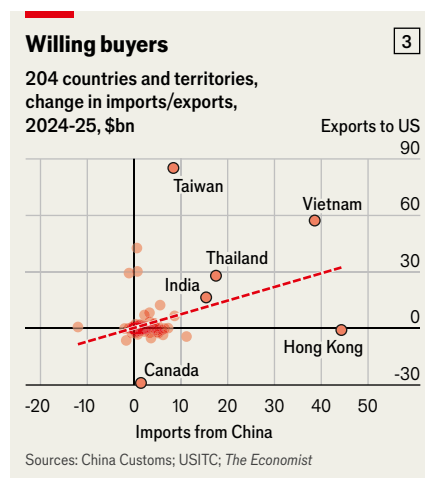
Our calculations show that Chinese exports are finding genuine new markets, not just new routes to America. The numbers suggest that perhaps \$33bn of additional Chinese exports arrived in America through third countries between April and December of 2025. That explains only 11% of the \$300bn increase in exports to countries other than America. But clearly the rest of the world wanted more Chinese items, too. American demand cannot explain away the bulk of China's export boom over the past year.

What can account for it? Once the world's factory, China is now becoming a "factory to the factories", concludes the



McKinsey Global Institute, a think-tank linked to the consultancy. Exports of intermediate goods (used in the making of other goods) and capital goods (tools and machinery) grew by 10.2% in 2025, compared with export growth of 5.5% overall and a sharp 4.6% decline in exports of consumption goods. China sold electronic components—chips, batteries and smartphone parts—to the likes of Vietnam, India and Thailand.

Some of the forces driving China's exports should remain strong. The artificial-intelligence boom "supercharged" exports at the start of this year, believes Yuxiao Zhang of Macquarie, a bank. From January to March China sold \$46bn-worth of memory chips abroad, an increase of 174% year on year, which made them its biggest export item. The global build-out of data centres used to train AI models has driven up demand for these semiconductors, as



well as other electronic parts that China makes in abundance. Power generation (which is tied to the AI boom) may be another area to watch, says Mr Ding.

Chinese exports remain fiercely competitive on price. Though the yuan has appreciated by about 6% against the dollar over the past 12 months, it remains cheap when adjusted for inflation and weighted by trade. China's "real" exchange rate has weakened by about 15% since the beginning of 2022, according to the IMF, partly because factory-gate prices fell for 41 months in a row (a decline that finally ended in March). The competitiveness bestowed by deflation is at the core of China's export boom, says Andrew Batson of Gavekal Dragonomics, a consultancy.

New difficulties face China's exporters. For one, the countries that have been absorbing Chinese goods may not be happy to continue doing so. In 2025 China ran a \$291bn trade surplus with the European Union, a 120% increase from 2020 (not adjusted for inflation). So far, resistance has been limited: the EU imposed tariffs on Chinese electric cars in 2024; a few South-East Asian countries have put levies on Chinese steel. More measures may follow.

Then there is the war in Iran. China's exports to Gulf countries plummeted by 52% year on year in March (though the region is a relatively small market, accounting for just 3.8% of China's exports in 2025). High oil prices will hurt many countries, depressing their demand for foreign goods. The conflict has also forced China to restrict exports of refined fuel to try to ease any shortages at home.

But China's export machine is better placed to weather these problems than rival manufacturers in Asia. The bulk of the country's power generation comes from coal, mined at home. As a result, Chinese firms face less of a cost squeeze from energy than companies elsewhere. The war also seems to have started a boom in electric-vehicle sales in countries like Japan, South Korea and India. That could be good news for China's dominant EV-makers.

The other enduring source of strength for China's exports is the country's stubborn domestic weaknesses. Chinese goods are competitive abroad because there is inadequate demand for them at home, which makes them cheap. That same weak demand depresses imports, contributing to a large trade surplus. This unbalanced trade will probably help China to hit its growth target of 4.5-5% for 2026 (last year net exports of goods and services accounted for 1.6 percentage points of its 5% growth). The risk is that the government may then no longer feel the need for much fiscal stimulus this year. The chronic weakness of China's domestic demand has made its export boom possible, but it is also what makes it necessary. ■

# CHAGUAN

## *The world wants Chinese tech*

*China's rivals are learning how to get what China won't share*



THEY USED to gripe about too much technology transfer in China. But in the past year or so, foreign business and political leaders have started to fret that too little is happening. No longer do they worry so much about Western tech landing in Chinese hands; rather, they fear that China is now too effective at preventing its best stuff from passing to foreigners. A former Chinese trade official reacts to the pivot with empathy rather than mockery. “It is a bit hypocritical but it’s understandable,” he says.

It might be tempting to craft a morality play out of this, as if countries outside China are getting their comeuppance. But at its heart this is a practical problem, a question of whether China will be able to dig a moat around its world-leading technologies, from electric vehicles to artificial-intelligence-powered robots. Chaguan is inclined to take the other side of the bet—namely, that knowledge will flow as it normally does, from those who have it to those who want it. A reverse tech transfer will, over time, occur.

In principle, the mechanism is straightforward. Countries can offer Chinese firms market access as long as they set up local manufacturing. In practice, none of this is automatic—and all of it is fraught. The European Union is now at the forefront, recently proposing procurement rules that would require things such as battery-storage systems for Europe to be made there. Chinese companies wanting to be let in to European markets would have to invest in factories there. Developing countries also see promise. From Brazil to Vietnam, governments are opening their doors to Chinese EV companies and urging them to use local content. Yet it is early days. “We have been talking about tech transfer for just the past year and it’s still not really clear how it will work,” says one diplomat with refreshing candour.

One obstacle will be China itself. Over the past five years it has built an export-control regime, mimicking America’s. The stated goal is to protect national security but many controls are aimed at shoring up Chinese industry. Last year, for example, the commerce ministry said it would require companies to obtain licences before exporting technologies used in EV batteries. A Western trade official sees little prospect of Chinese officials letting out anything genuinely valuable. They have already reacted angrily to

the made-in-Europe legislation, viewing it as a ploy to weaken Chinese industry. The saga of Manus, an AI startup, also highlights Chinese leaders’ paranoia. Founded in China, Manus shifted its business registration to Singapore last year, facilitating a sale to Meta, Facebook’s parent company. Chinese regulators are now attempting to unwind that deal and have barred Manus’s two co-founders from leaving the country.

But China’s own record in digesting foreign tech offers some guidance for the rest of the world. Persistence will be essential. China took three decades to hone its methods: incentives for investors; requirements for local joint ventures; content rules; partnerships with foreign universities; and, yes, theft of intellectual property. One critical need is more attention to Chinese scientific research: much of it, at least in pre-commercial phases, is in journals, says Tai Ming Cheung, an analyst of Chinese tech policy. “It’s something we didn’t think about that now we have to,” he says.

Moreover, it is a mistake to think tech transfer involves discrete bits of technology, such as a blueprint for photovoltaic cells. Instead, what matters is the whole process, including workforce training—a lesson that India is slowly absorbing. Apple, whose investments helped build up China’s supply chains, now produces a quarter of its iPhones in India. Even if most components are sourced from China, many are made in Chinese factories owned by foreign companies, according to analysis by Chris Miller and Vishnu Venugopalan for the American Enterprise Institute, a think-tank. The implication is that the Chinese supply chain may ultimately prove more mobile than it currently seems.

At the same time the rest of the world will have to follow a different formula from China’s. Instead of relying on the government’s top-down strategy, other countries will have to depend on companies themselves. The auto sector offers an early indication. Almost all global carmakers—General Motors, Hyundai and Volkswagen, to name a few—are now developing EVs in China, learning from local firms. Many ideas are also seeping out through research-and-development partnerships. “The biggest companies are off limits but there are thousands of suppliers to work with,” says one Chinese executive with a foreign carmaker.

China’s tech controls may also have the opposite of their intended effect. For young innovators in AI, the crackdown on Manus is chilling. If they are unable to sell to foreigners, they will never get full value. That will only give them more incentive to take ideas abroad early on. The ultra-competitive Chinese business environment pushes in the same direction. The Chinese auto executive says many local suppliers are starved for profits, which makes foreign partnerships yet more tempting.

### Transfer portal

For all its manufacturing prowess, China still wants what the West has to offer, notably in the semiconductor industry. In that sense the current wrangling over tech transfers has an air of negotiation to it. As the former Chinese trade official puts it, China will not fully benefit from its inventiveness unless it can export its own technology. The point, he says, is to extract a price from others, including access to their latest innovations.

This is not a winning proposition for now, especially as American officials want to keep China away from cutting-edge chips. But it points to a possible, even a likely, future in which tech flows both ways across China’s borders. That may worry leaders in both Beijing and Washington. They will, however, struggle to stop it. ■

## International



### The arms industry

## Shooting to prominence

LOS ANGELES

**Anduril, Palantir and SpaceX are changing how America wages war**

THE IRAN war may end up teaching America many lessons. One that it has learned the hard way is the woeful economics of using conventional weaponry against cheap Iranian drones. “The dynamics of the world have changed,” says Emil Michael, a former Silicon Valley executive who is now a senior official at the Pentagon. “You don’t want to spend a \$1m missile to take out a \$50,000 drone.”

That is one reason why the Pentagon is turning to a new clique of defence upstarts that are reimagining how to wage war. They are led by Palantir, a software giant providing intelligence systems; SpaceX, whose Starshield satellite network provides reconnaissance and communications; and Anduril, which makes air and sea drones alongside anti-drone weaponry. This trio of so-called “neo-primes” has close ties with gung-ho figures in the administration of Donald Trump. They are making the “primes”—the established

giants of America’s military-industrial complex—increasingly nervous.

Big Pentagon contractors have, in their critics’ telling, grown stodgy, overpriced and risk-averse as a result of their lucrative sinecures. “If the [newcomers] are good and they get their sea legs, they’re going to win some of that business that otherwise would have gone through a traditional prime,” Mr Michael says.

### Faster, smarter, deadlier

This year the challengers have won some big endorsements. In January Pete Hegseth, America’s secretary of war, used

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SpaceX’s base in Texas as the backdrop to release a new artificial-intelligence strategy, promising that the Department of War (DoW) would draw inspiration from Elon Musk’s management approach and “accelerate like hell”. In March it said Palantir’s AI-infused command-and-control system, called Maven, would become a “programme of record”, locking in funding for years ahead (albeit with a good deal of red tape). In the same month America’s army streamlined multiple contracts with Anduril into a single one worth up to \$20bn over ten years.

Such commitments may look puny compared with, say, the F-35 stealth-jet programme, led by Lockheed Martin. The F-35 may end up costing the government more than \$2trn over several decades. Last year America’s three biggest primes—Lockheed Martin, RTX and Northrop Grumman—between them generated around eight times the combined sales of the three newcomers (and SpaceX and Palantir make much of their money from customers other than the Pentagon).

Even so, investors are bullish. The upstart trio are worth more than three times the three biggest legacy contractors, a sign of widespread optimism about their ability to shake up the arms industry (see chart 1 on next page). In the coming months SpaceX is expected to list its shares in the ►►

▶ largest initial public offering of all time. Anduril, which makes nearly all its income from defence contracts, is said to be raising money at a valuation of \$60bn, despite generating only \$2bn of revenue last year and making a loss.

This price tag in part reflects the record amounts of venture capital pouring into defence startups in America (see chart 2). Big cheques have also been written in recent months for a second-tier of startups hoping for a shot at the big leagues, including Shield AI, which develops autonomous pilots for air combat, and Saronic, which makes maritime drones.

The buzz is helped by Mr Trump's quest to persuade Congress to boost next year's defence budget by more than 40%, to \$1.5trn or almost 5% of GDP. That includes increased outlays on, among other things, drones, counter-drones and AI. Although the legacy primes will still receive the vast bulk of spending on procurement, Mr Michael hopes that the 1-2% allotted to innovative challengers will rise by "percentage points" annually over the coming years in order to generate more competition.

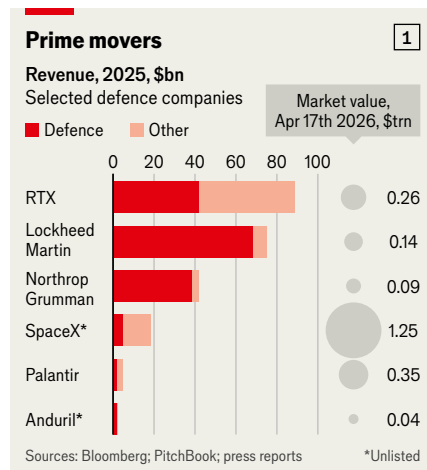
**Cheaper, nimbler, timelier**

From the point of view of the Pentagon, one of the biggest selling-points of the newcomers is that, unlike the legacy primes, they mostly shun "cost-plus" contracts, through which the government reimburses all expenses and adds a profit margin on top. That model may be suitable for big, complex programmes for which it is difficult to estimate the cost upfront, but it is a recipe for sloth. Instead, the challengers often prefer fixed-price deals in which they cover the initial cost of research and development and earn fat margins if they deliver on time and within budget.

The contract structure helps to keep them lean, and gives them an incentive to upgrade their products frequently, rather than building new weapons or systems from scratch each time. Anduril, for instance, wants to use a common rocket motor in an assortment of munitions to keep costs down. As for speed, eight months after SpektreWorks, an Arizona startup, unveiled the prototype of a suicide-drone called LUCAS, American forces deployed it in Iran. (The LUCAS is, ironically, a reverse-engineered copy of Iran's Shahed drones.)

Excitement about the Pentagon's shifting approach is palpable. "It's huge," says Matthew Steckman, who oversees a big share of Anduril's business. "Every day I come in and you're kind of reacting to the next version of how the DoW wants to move fast." The bureaucracy around defence procurement is being slashed. "They're cutting out paperwork like there is no tomorrow," says Steve Blank of Stanford University.

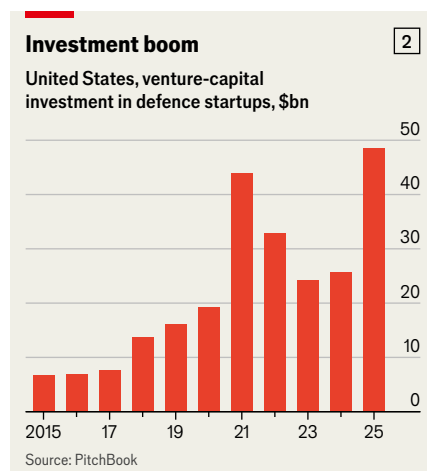
Yet there are concerns that too much



haste could backfire in various ways. For the challengers, the risk is that they take on too much too quickly and are unable to cope as contracts grow. That is more of a problem for Anduril than it is for SpaceX and Palantir, both of which have large contracts with commercial customers and other government departments, giving them greater scale. Palantir's focus on software also means it can expand its business relatively quickly. But for Anduril, along with many would-be neo-primes, scaling up manufacturing could be a challenge. Anduril has only just started building large production facilities (it recently opened a factory in Ohio on which it spent \$1bn).

There are dangers for the government, too. The Pentagon wants to move towards interoperable weapons systems, rather than the stand-alone platforms typically offered by the legacy primes. Yet some worry that it could become locked into SpaceX's launch and satellite services or the battlefield-management systems provided by Palantir and Anduril.

Indeed, although the Pentagon says that it wants to encourage more competition in the defence industry, there are signs that it is as hard as ever to get a foot in the door. Anduril, for instance, is a serial actor



quirer of smaller firms, including Blue Force Technologies, maker of the Fury unmanned combat aircraft, which it bought in 2023. Scott Bledsoe, inventor of the Fury, says that he sold his startup after realising it was too small to "bro its way" to a big defence contract. But he wishes it were otherwise. "There is a danger that all we are doing is creating a new breed of legacy primes," worries Mr Bledsoe. An insider at one of the neo-primes, when asked whether his firm might develop an elaborate lobbying infrastructure similar to the legacy primes, exclaims, "Hell yeah."

A further risk is that, in becoming too starry-eyed about the merits of drones and the like, the DoW could neglect conventional weapons that would be vital in a future conflict with China, owing to their ability to travel long distances and penetrate advanced defences.

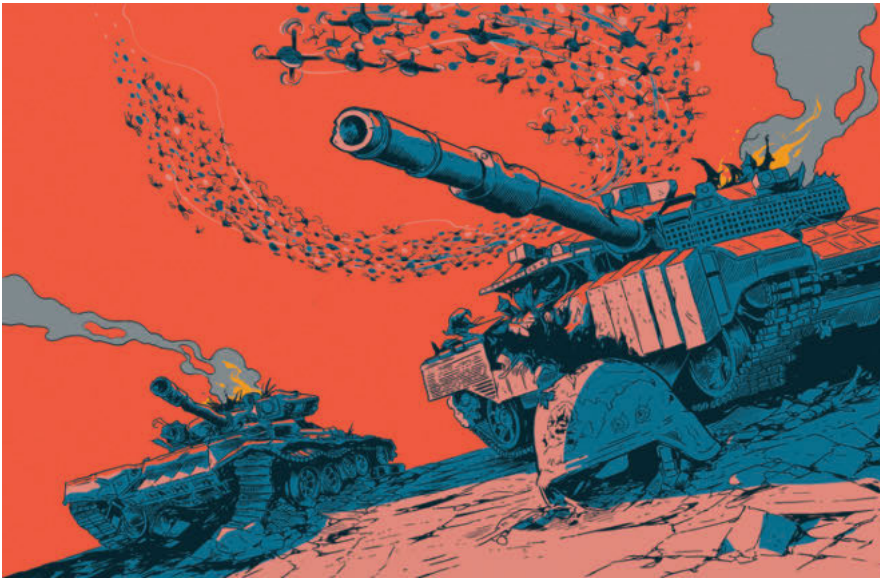
For society at large, cosy relations between the Trump family and the neo-primes are also a cause for concern. When Palantir suffered a short-seller's attack this month, the president, whose first election campaign received a big donation from its founder, leapt to its defence, using its ticker symbol: "Palantir Technologies (PLTR) has proven to have great war-fighting capabilities and equipment. Just ask our enemies!!!" Donald Trump junior, his son, is a partner at 1789 Capital, a VC firm that has invested in Anduril.

"Every investor on the planet is an investor in Anduril," Mr Steckman retorts. Still, any perception of partisanship could jeopardise the otherwise strong support among many Democratic politicians for defence startups, potentially putting the companies in danger if Republicans lose their grip over the federal government.

Another concern is the use of artificial intelligence to build autonomous weapons. All neo-primes are advocates of using AI for military purposes. Palantir has used Anthropic's Claude models for classified military activity in the war against Iran. Anduril uses AI for autonomous weapons. SpaceX's xAI, maker of the Grok chatbot, has reportedly agreed to do classified work for the Pentagon.

AI is used for target identification and data processing on the battlefield, Mr Steckman says. But there is always a human involved. "At the end of the day, a person is making a choice about the employment of any sort of lethality." It is fiercely controversial, though. When Anthropic recently insisted on prohibiting any use of its models for autonomous weaponry or mass surveillance, Mr Hegseth's DoW blacklisted it as a supply-chain risk.

It is a reminder of how fraught the new era of defence tech remains. The shake-up under way in America's military-industrial complex is long overdue. It would be a shame for it to misfire. ■



### Defence tech in Ukraine

## Battlefield formation

KYIV

**There is no better spur to military innovation than war**

THE RATEL H is no speedster—and no looker, either. The clunky six-wheeled vehicle, in essence an electric motor and batteries topped with a cargo tray, can pootle along no faster than 8km an hour. It resembles an oversize dolly. But it can perform small wonders. It rumbles undaunted over uneven ground, then brakes, having spotted danger overhead. It launches a net in the air, bringing an enemy drone crashing down.

The device's maker, Ratel Robotics, produced street lighting before Russia invaded Ukraine in 2022, but has since reinvented itself as one of Ukraine's top producers of unmanned ground vehicles (UGVs). Typically a new model sketched out on paper today will reach the front in six months, says Taras Ostapchuk, the company's founder, at an assembly plant on the outskirts of Kyiv. Mr Ostapchuk recently finished working on a UGV that doubles as a launching pad for drones. Next up is one armed with a machinegun. Over the summer, he plans to begin work on amphibious models.

UGVs like Ratel's are increasingly helping power Ukraine's army, delivering weapons and supplies to front-line positions, laying mines and evacuating the wounded. They are also being used in offensive missions. On April 13th Ukraine's president, Volodymyr Zelensky, said the army had passed a milestone by capturing a Russian position using only UGVs and

drones, without any human troops.

The war in Ukraine is still fought chiefly by soldiers. But the use of unmanned systems, many of them powered by artificial intelligence, is growing exponentially, and helping Ukraine resist Russia's relentless onslaught. Over the first three months of the year Ukrainian drones and robots conducted more than 22,000 missions, Mr Zelensky said. Russia is believed to have suffered roughly 35,000 casualties in March, a grisly record. According to Ukraine's defence ministry, 96% of them were caused by drone strikes. For the first time since the invasion began, Ukraine is killing and wounding Russian soldiers faster than the Russian authorities can replace them.

### No way forward

That is forcing Russia to change tactics. Its forces have largely abandoned mechanised assaults in favour of attacks by small numbers of infantry, using spring foliage for cover to probe for gaps in Ukraine's sparse defences. But these tactics, too, have not produced big gains. Russian troops have been capturing an average of less than 5.5 square kilometres a day since the start of the year, roughly half the pace of advance they managed last year. Unable to make much headway on the front lines, Russia is instead intensifying its bombing campaign, targeting Ukraine's cities. Officials and analysts expect missile and drone bar-

rages, like the one that killed 18 people around the country on the night of April 15th, to become even more routine.

Defence-tech innovation in Ukraine has become a form of industrial Darwinism. While Russia depends largely on state-run programmes, such as the Sirius drone project, Ukraine has created a dynamic, competitive, but also fragmented market involving some 2,300 companies. The contest between the two countries, says Oleksiy Honcharuk, co-founder of UFORCE, a Ukrainian defence company, comes down to a clash between a closed system, better at scaling up and standardisation, and an open one, which rewards fast and frequent innovation. Centralisation and large state contractors allowed Russia to outproduce Ukraine for a time in certain types of weaponry, such as First Person View (FPV) drones. But Ukraine has overcome early inefficiencies, says Mr Honcharuk: "Because of competition, prices are going down, and quality, scale and standards are going up."

Indeed, Ukraine appears to have caught up with, and in some instances leapfrogged, Russia. Drone production has surged from 800,000 three years ago to a planned 7m this year. Ukraine currently enjoys a 1.3 to 1 advantage over Russia in FPVs, a Ukrainian official claimed earlier this month. It has also extended the range of its fixed-wing drones to as much as 1,500km, enabling strikes against energy infrastructure and air-defence systems deep inside Russia. Production of interceptor drones, a cheaper alternative to costly and increasingly scarce air-defence missiles, has increased to well over 1,000 a day. Russia, however, retains a clear advantage in ballistic missiles. Ukraine also lacks protection against Russia's destructive glide bombs, made by fitting Soviet-era bombs with navigation systems and wings.

Given the pace of change in defence tech, Ukraine avoids imposing rigid technical standards. Instead, it has taken a more hands-on approach through programmes like Brave1, which offers defence startups small grants, as well as access to military units and introductions to potential investors. Another scheme allows army units to earn "points" for combat achievements and to use these to buy drones and other weapons from producers. Because every strike needs to be verified using video footage, the system generates valuable data. The army can see what tactics work best, and Ukrainian defence companies can track how their equipment is used and to what effect.

But not all is well. Procurement, where state bureaucracy is most entrenched, remains flawed. Although longer-term contracts are becoming more common, defence firms say many still last only a few months, making it tough for them to plan

▶ and expand. Payments can be slow, and certification and quality controls often lag behind battlefield needs. To compensate, Ukraine recently allowed the defence ministry to fast-track procurement of cutting-edge weapons and software. Units can now receive such products directly for combat testing. To boost margins for dronemakers, the government has also increased the cap on profits for some defence contracts, to 25%.

Corruption and favouritism, although decreasing, remain a problem. Ukraine's anti-corruption watchdog, NABU, has uncovered several instances of rigged tenders and inflated contracts, implicating defence firms, MPs, civil servants and military officials. Artem Kolesnik, chief technical officer at Reactive Drone, another Ukrainian defence firm, asserts that officials in the defence ministry and the president's office regularly steer contracts towards favoured firms. "Most agencies work well and do their best to deliver the best technology to the front line," he says. "But some of the top guys make the rules better for one company and [worse] for another."

### Weathering the storm

There is also only so much innovation can do. When the weather is good, robots and drones dominate the fighting, says "Botanik", a Ukrainian officer with the 128th brigade, deployed near Zaporizhia, on the southern front. But as soon as it turns, the infantry must take over. UGVs are also not suited for wooded terrain. "In the end," he says, "you need men to hold positions."

Nonetheless, he says, drones have transformed the battlefield. The deadly threat posed by Russian ones made it impossible for him to rotate out of his front-line position for months. Ukrainian ones, delivering food and supplies, helped him and his men endure this sequestration. Eventually spring rains and fog made it possible for him to escape to his rear base, after 343 days in the trenches. ■



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## Defence tech in Europe

# Slow and unsteady

### Europe's defence startups face even bigger hurdles than America's

"THE TIME for unmanned systems is now," says Sven Kruck, co-CEO of Quantum Systems, a German firm which makes military drones. His is a view shared with growing certainty by defence planners around the world, as they watch waves of Iranian drones grind down Middle Eastern air defences and Russian and Ukrainian ones pin down troops in trenches. Although Europe is making strides in developing the technology, it lacks the capacity to build these weapons at scale. The future of warfare is approaching fast, and may catch the continent's armies exposed on the battlefield.

Europe's largest defence-tech firms make relatively cheap unmanned weapons, which are given their edge by software honed using vast quantities of battlefield data and kept fresh with regular updates. In addition to its aerial drones, Quantum Systems recently unveiled its first unmanned ground vehicle or UGV. Helsing, a fellow German dronemaker, last year acquired Blue Ocean, which makes autonomous submarines. Stark Defence, yet another German dronemaker, also offers battlefield software and nautical drones.

Unlike American defence-tech firms, which can win giant contracts from a single customer, the Pentagon, European ones face a fragmented market of 30-odd potential buyers. In theory, NATO imposes common standards for weapons and munitions. In practice, says Ricardo Mendes, the boss of Tekever, a Portuguese dronemaker, firms like his need to have engineering and product-development teams in any country where they hope to do business. Otherwise, he says, they will not understand the specific needs of the armed forces they are selling to, or be able to work securely on sensitive projects. Having a base in one country, with foreign divisions for sales and business development dotted around the continent, would not cut it. "It's a very different thing, and it's difficult to do," he says.

Weapons like AI-enabled drones also present a unique procurement problem. Defence planners may be reluctant to stockpile them, for fear that they would quickly become obsolete, given the rapid development of the technology. Chris-

toph Petroll, who leads the drones programme at an innovation centre for Germany's armed forces, says a possible solution could be to devise a new type of contract that focuses more on production capabilities than on volumes delivered. Under these terms, a dronemaker could be paid for a small number of units, but also for demonstrating the capacity to ramp up production within a certain period if required. This would keep suppliers in business and allow soldiers to practise using new weapons, without building up big stockpiles, but it would probably require amendments to procurement laws.

Another hindrance is the continuing debate about the appropriate balance between conventional arms such as fighter jets, tanks and artillery and cheaper, software-heavy weapons. Although drones are ubiquitous on the battlefield in Ukraine, Sir Nick Carter, a former head of Britain's armed forces, recently cautioned that this does not prove they will fundamentally reshape how all wars will be fought. In a post for War on the Rocks, a defence-focused media site, he wrote that Ukraine's battlefield innovations "function mainly as substitutions for missing capabilities and have produced stalemate rather than decisive manoeuvre". European armies, with better-equipped forces, may not be as enthusiastic about drones as the defence-tech firms' bosses hope.

All this helps explain why European defence-tech firms are relative minnows compared with their American counterparts. Helsing is valued at around \$14bn; Quantum Systems and Stark are both worth less than \$5bn. But there are encouraging signs. The German government, which has bankrolled past orders from them itself. Quantum Systems is due to deliver €210m (\$246m) of equipment to the German armed forces this year. In February Germany agreed to buy attack drones worth €269m from both Helsing and Stark. The EU's SAFE scheme, under which it will lend €150bn to member states for defence procurement, favours European suppliers. And European governments are both spending more on defence and leery of relying too much on American technology.

## THE TELEGRAM

# *The dangerous mistake in Donald Trump's Iran strategy*

*America sets too little store by foreigners' beliefs and values. It's a costly mistake, each time*



THE AMERICAN president's tone was harsh, and the cause was not hard to identify. A war meant to last a few days had just passed the six-week mark. Addressing American troops, the president told them they were battling an "evil" foe whose "mad schemes" must be defeated. Though regime leaders are proving stubborn, "we are hitting them hard where it hurts," he said. The president added a blast of cultural chauvinism. America's armed forces can do things that "no one else can", he told assembled soldiers. You are in action far from home, to help remake a region that has never been united in peace. As you fight, you should "thank God" that you come from a society whose unity makes it strong.

To reassure doubters back home, the Pentagon deployed stirring facts. In briefings, beribboned generals enumerated bombs dropped and targets destroyed. Bridges and oil refineries are legitimate targets, too, growled the generals as the war dragged on, for roads and fuel help hostile forces to remain on the move. Yet as days of war turned to weeks, blizzards of statistics could not obscure a stubborn reality: America had misjudged what it would take to break its adversary's will.

So far, so familiar, especially to critics of President Donald Trump's bungled war in Iran. They see a distinctly Trumpian disaster unfolding in the Middle East, reflecting all the president's worst traits. These include hubris, impatience, an over-reliance on threats to resolve complex problems, a tendency to respond with overwhelming force to signs of intransigence, and a damaging lack of curiosity about how foreigners really think.

In fact the war in those opening paragraphs took place in 1999. The president quoted is Bill Clinton. American military planners estimated that it might take three days for America and its NATO allies to break the will of Serbia's leader, Slobodan Milosevic, using air power to pound his armed forces until he halted a murderous campaign of ethnic cleansing against Albanians in the former Yugoslav region of Kosovo. In the end, it took 79 days of escalating air strikes before Serbia's nationalist regime capitulated, backed by credible threats of a land invasion by NATO forces.

The Kosovo conflict is worth recalling today. An honest assessment of Mr Trump's war-making must reckon with a dispiriting

truth. Some flaws are distinctively his, such as his love of making cruel threats, impetuosity and intolerance of being told unwelcome truths, so that with each passing month he acts less like a modern commander-in-chief, and more like an angry old king.

But Trump-level mistakes have been made by earlier, very different presidents. It is not just Mr Clinton. His fellow Democrats, John F. Kennedy and Lyndon B. Johnson, thought that the Vietnamese would welcome America as an ally against communism. Instead, many saw Americans as just their latest colonial invaders.

The notion that America keeps making the same mistakes is not mere snark from a British columnist. Within the American intelligence community, a whole school of analysis has sprung up in the past decade or two, focused on the country's cultural blind spots. The Kosovo war in 1999 is used as a case study. A much-cited paper on "Cultural Topography", published in 2011 by two CIA veterans, Jeannie Johnson and Matthew Berrett, notes how American planners ignored underplayed differences in Serbia, a Balkan country whose national day celebrates not a victory in war, but a glorious defeat at the hands of the Ottoman Turks in 1389. If analysts had put enough weight on Serbian views of honour, the paper concludes, they might have warned policymakers and generals to expect that: "Serbia would find victory by standing up to an overpowering military force when the world expected it to fold."

Later, American impatience with cultural differences caused terrible harms in Afghanistan and Iraq. American commanders and leaders have a tendency to see foreign difficulties as problems to be solved or targets to be struck, "rather than terrain to be navigated", as Professor Johnson puts it. With Mr Berrett she co-founded the Centre for Anticipatory Intelligence at Utah State University, training American spooks and other professionals to map cultural traits and use them to spot threats and openings.

Mr Berrett, a former CIA assistant director, would like policymakers to ask whether a desired foreign-policy outcome would require another country to alter something fundamental about its culture or worldview. If that is the case, he would have Americans ask a sobering question: "Over what period and with what resources is such cultural change achievable?" Alas, the question is too rarely posed. One reason is that America is so strong, militarily, that strategy can be an afterthought (indeed, when Britain was a great power, it could be just as clumsy). Americans are also too quick to recall turning Germany and Japan into democratic allies after 1945, and to assume the same can be done again, forgetting that it took total war and two atomic bombs.

### Not the Quiet American this time

Mr Trump scorns his predecessors for seeking to transform Middle Eastern countries into liberal democracies. He claims, falsely, to have already pulled off regime change in Iran, by joining Israel in the killing of many top leaders there and encouraging "reasonable" leaders to step forward. But his administration is seeking cultural change in Iran, to be sure. His vice-president, J.D. Vance, says that Mr Trump wants Iran to behave "like a normal country". That means a place which puts economic and commercial interests ahead of ideology: a big shift from Islamist nationalism.

Put pessimistically, the Trump way of war involves making all America's old cultural mistakes, with the sole exception of excessive idealism. Not so long ago, foreign governments grumbled about American presidents with good intentions. Mr Trump has solved that problem for them, but possibly only that one. ■

1843



**T**homas Massie is “weak and pathetic”, a “lowlife”, a “loser”, a “moron”; a “RINO” (Republican in name only) who has been captured by his “radical left flamethrower” wife. You don’t have to read between the lines of Donald Trump’s Truth Social posts to know he takes a dim view of the Kentucky congressman, one of a handful of Republican politicians willing to defy him. On a rainy day in March, Trump travelled to Massie’s district to tell voters to reject their congressman in a primary. In front of thousands in a packed warehouse, the president denounced Massie as a “complete and total disaster as a congressman and, frankly, as a human being”. “Shameful!” someone shouted. Trump raised his voice: Massie was “disloyal to the Republican Party, the people of Kentucky and, most importantly...the United States of America.”

Massie has crossed Trump on numerous occasions, especially in the past year. He voted against the shut-down deal in November, and against the One Big Beautiful Bill Act, Trump’s tax-and-spending plan—one of just two Republicans to do so in each instance. He has tried to revoke Trump’s tariffs on Canada and to block America from attacking Venezuela and Iran without congressional approval.

## THE OUTSIDE GAME

*Most Republicans in Congress have been cowed by Donald Trump. Thomas Massie tells Charlie McCann why he won’t play ball*

**Sitting candidate**  
Kentucky congressman Thomas Massie in his office in Washington, DC

Massie sees the war with Iran as unconstitutional and an attempt to distract from the fallout from the Jeffrey Epstein scandal (“Bombing a country on the other side of the globe won’t make the Epstein files go away”, he posted on X in March). His greatest political triumph came last autumn, when he co-authored legislation compelling the Justice Department to release files related to the paedophile financier. Until then, Trump’s grip over the Republican Party had seemed absolute. The Epstein Files Transparency Act, which was backed by every Republican bar one, was a colossal act of defiance from a party defined, until that point, by its submissiveness.

The vast majority of Republican politicians have deferred to Trump, including those who crossed the president during his first term; former senators J.D. Vance and Marco Rubio were both anti-tariff before becoming essential members of the administration. Others, such as congresswoman Marjorie Taylor Greene, have taken early retirement from politics. Massie’s refusal to play ball has won him a national following and powerful supporters. “He won’t be controlled,” Tucker Carlson told a podcaster last December. “And if he doesn’t think something, he’s not going to say it, period. He may be wrong but he’s sincere.”

Last summer Trump tasked two advisers with finding a candidate to oppose Massie in the primary, which will be held on May 19th ahead of this autumn’s midterms. At the rally Trump described Ed Gallrein, the Kentucky farmer and retired Navy SEAL chosen to take on Massie, as “a tremendous war hero”. “This guy is unbelievable,” Trump said, patting him on the back as the crowd cheered. “He is central casting.” (This is the president’s highest form of compliment.)

Yet Massie, 55, also has star power. A small-town boy from Kentucky, he left the state to build a successful technology company before returning to live off the land (he attributes his recent glow-up, which led one colleague to dub him “the sexiest man in Congress”, to a diet of raw milk, red meat and fresh vegetables). Massie, a libertarian-leaning conservative, is in favour of cutting red tape for farmers and dismantling both the education department and the Environmental Protection Agency. He is an isolationist who wants to pull America out of NATO. He is firmly anti-gun control: he once posted a Christmas photo of himself and his family posing cheerily with military-style rifles, just days after a school shooting.

Gallrein, widely seen as a proxy for Trump, has a tough job on his hands. Massie is popular in his district: since being elected to Congress in 2012, he has won every primary in which he has been challenged by more than 75%. Many constituents see him as a “folk hero” for his unyielding libertarianism, said Al Cross, a journalist and veteran observer of Kentucky politics. But Trump is also popular in the district, and several local Republican officials I spoke to said that voters had tired of Massie’s feud with the president.

Last month the *Wall Street Journal* reported that each side had spent more than \$3m on advertising. Donors to Massie’s campaign include Jeff Yass, a libertarian businessman, while Gallrein’s is backed by hedge-fund managers Paul Singer and John Paulson, and the casino magnate Miriam Adelson. Most small donations to both campaigns have come from outside Kentucky, showing how important the Trump *v* Massie contest is on the national stage. “[Massie is] facing the biggest challenge of his life,” according to Cross.



**Battle cry**  
Donald Trump is backing Ed Gallrein, a former US Navy SEAL who is challenging Massie in an upcoming primary

Massie’s stand has come at a personal cost. He and his wife have been vilified online and he has received death threats. He may well lose his job. It needn’t have been this way: Massie could have glossed over his disputes with Trump; he could have shut up about the Epstein files after the bill went through. Instead he has continued to attack Trump’s cabinet secretaries for their links to Epstein, and at rallies makes a virtue of his beef with the president. “He’s not pulling any punches,” said Ro Khanna, a Democratic congressman who wrote the Epstein act with Massie. “If he says he’s going to do something, he follows through.”

Can a Republican defy Trump and live to tell the tale? Massie has decided to find out—staking his political career on a gamble none of his peers has been brave enough to make.

**I**n March, a few weeks before Trump’s rally, Massie gave me a tour of his “holler”, the narrow valley in the Appalachian foothills where he has lived since the early 2000s. A snow-covered forest gave way to a clearing, where two rows of pecan trees stood in front of a barn housing shaggy black cattle. An excitable dog named Possum charged around, neglecting the ducks he was supposed to be protecting from coyotes. On a hill overlooking the farm stood a four-storey timber-frame house with a turret.

“I built it from scratch,” said Massie. His first wife Rhonda had grown up on the 1,500-acre parcel of land, and when they moved there with their children they decided to build their own place. Massie quarried sandstone from the land and harvested oak and hickory from the forest. Before he embarked on the project he had never built anything bigger than a treehouse (and even then he hadn’t finished it). Nonetheless, “I convinced myself that if farmers a hundred years ago could [build a timber-frame house] without a calculator, I could do it with a computer.”

Massie is resolutely off-grid. He pointed to the turret, the roof of which was covered with solar panels. They power the house, in tandem with a battery that he salvaged from a busted Tesla. He gets his water from a nearby pond and a well that he dug. “The electric wire that connects you to the electrical grid is like an umbilical, like in [the film] ‘The Matrix,’” Massie has said. “Government has a lot of control over your life with that one little wire.”

**“Bombing a country on the other side of the globe won’t make the Epstein files go away”**

He is proud to hail from an outlier state, pointing out that although Kentucky is below the Mason-Dixon line, it declared itself neutral at the start of the civil war. He describes Lewis County, where he grew up and lives now, as an anomaly in its own right. The area was a Union stronghold: Massie likes to boast that an ancestor—“my mammaw’s grandfather”—was a Union soldier. Lewis County’s forbidding topography condemned many of its inhabitants to poverty—the hills made it difficult to farm and build roads. But Massie believes it also fostered a culture of self-reliance, giving settlers the freedom to think differently.

A few miles from Massie’s farm is the small town of Vanceburg, where his family has lived for generations. When he was a boy, Vanceburg’s branch of Dairy Queen was the only fast-food restaurant in the county. Massie once told J.D. Vance, the vice-president, who grew up in Ohio but has written about the summers he spent visiting relatives in north-eastern Kentucky, “[You] appropriated my culture. Those hillbilly cousins—that was me all year.” Vance, apparently, laughed. (He was once a fan, telling the *New York Times* in 2023, “I absolutely love Massie.”)

Massie was tour-guiding from the passenger seat of my car; in the back was his second wife Carolyn, who used to work for Kentucky senator Rand Paul, a close associate of Massie’s. (The couple married last October; Rhonda died in 2024.) We drove past Massie’s childhood home, a modest two-storey brick house. It was built by his grandfather, a “serial entrepreneur” who appeared to be the embodiment of Lewis County resourcefulness. A beer distributor and truck salesman, he also built the local post office and hauled the stone used to build the courthouse from a local quarry.

It was clear from an early age that Massie had inherited his grandfather’s passion for making things. As a child he loved to tinker with anything electronic. His bedroom became a junkyard for all the components

**Massie is popular in his district: since being elected to Congress in 2012, he has won every primary in which he has been challenged by more than 75%**

he’d scavenged from household appliances —magnets, motors, capacitors. If he needed a part he would dig through the “layers and strata” until he found it.

When he was in seventh grade, after watching “Star Wars”, Massie built a robot arm, which he figured out how to make “just by taking stuff apart and seeing how things worked and looking at my own arm”. Over the next few years he tinkered with the design until it was ready to enter into competitions. Massie was delighted when something he’d built “from junk” won him prizes and “round-trip tickets” to science fairs in California and Texas. “That’s kind of when I decided that engineering could be lucrative,” he said.

He excelled at high school. Diane Johnson, who taught him chemistry, described him as a “genius” without arrogance. When he found errors in her thinking he would gently point them out after class so as not to embarrass her. “He wasn’t trying to show off how bright he was.” He shone on the school’s quiz team: according to one of his teammates, “his quick recall in math was astounding. The moderator could start reading this super-complex math question and ... Thomas would buzz in and have the answer before the moderator could even finish.”

In 1989 Massie enrolled at MIT to study engineering. Two years later he was joined by Rhonda, his high-school sweetheart who was also studying the subject. At the time, said Massie, it was “pretty much unheard of” for kids from his school to go to university out of state. Jackie Claxon, his maths teacher, said most of Massie’s peers didn’t have “the drive to go ahead and step out like he did. He’s fearless. He would try anything and do anything if it interested him.”

Moving to New England was an adjustment for someone from one of the poorest counties in Kentucky. Shortly after he arrived, if you Need Free Papers and Mags Go For sastatus.com a car honked at him as he crossed the road. “I thought, ‘I have been here less than a day and already run into somebody who knows me.’” In Vanceburg honking was a form of greeting, so he waved at the driver. “It took me a month to quit waving at cars,” he said.

Massie thrived at MIT, which he called “nerd paradise”. He began working as a lab assistant for Kenneth Salisbury, an expert in haptics, technology that simulates the sensation of touch. Salisbury was impressed by Massie’s speedy problem-solving and described him as an “interesting, kind of exciting mind to work with”. When Massie was wondering what to do for his senior thesis, Salisbury suggested he build a device that would enable him to “feel” the things he saw on a computer screen. Six weeks later, Massie came back with a prototype for the Phantom, a stylus connected to a mechanical arm which gave the illusion that the user was touching 3D objects. Tiny motors applied pressure to the user’s hand to mimic the sensation of slicing through clay, for instance, or manipulating a rubber ball. The Phantom is widely regarded as a milestone in the development of computer haptics.

In 1993 Massie and Rhonda got married. That year they also launched a company, SensAble Technologies, to manufacture and sell the Phantom. The device had many applications: toy designers could use it to digitise production, nano-engineers to test new materials. The company quickly grew from a two-person operation to one employing 70 people, and soon boasted clients including Boeing, Walt Disney and the Mayo Clinic. It raised over \$32m in venture capital and its revenue grew 25 times between 1994 and 1999, ac-



**Local hero**  
Massie is popular in Kentucky, where supporters admire his pugnacious streak

cording to Kevin Bullis, a former editor at MIT *Technology Review*, in an academic paper on the Phantom.

Despite their success, Massie and his wife never felt at home in Massachusetts and soon moved to neighbouring New Hampshire, which they felt had more in common with Kentucky. New Hampshire is famously libertarian: the licence plates are emblazoned with the revolutionary rallying cry, “Live free or die”. The people there are into their “guns and old cars”, Massie said. They “looked a lot more like the rednecks that my wife and I associated ourselves with”.

But he couldn't shake the feeling of being “the nail sticking up”. Bullis recounts that by the early 2000s Massie had fallen out with his colleagues, who objected to his plan for a mass-market version of the Phantom. In 2003 Massie and Rhonda quit SensAble, sold their shares and moved the family to Kentucky: they wanted to raise their four children the same way they had been raised. Massie has also said that, after spending so long in the virtual world, “getting back to the earth was important” to them. They bought the farm and Massie started work on the house, following his grandfather's example. But it wasn't the only way he wanted to leave his mark on Lewis County.

**M**assie had always been wary of government—a wariness he said ran deep in the culture of Appalachia. His concerns were “hardened” in 1993 when federal agents laid siege to the compound of the Branch Davidian cult in Waco, Texas, resulting in the deaths of around 80 people. When Massie returned to Kentucky he was taken aback by the power that even local government wields. “The water board or the sewer board or the school board has the power to take your property, either through taxation or outright condemnation, and that's a very powerful thing,” he has said. “So you either need to run for that office or be very concerned about who takes that position.”

When Lewis County proposed a new property tax, Massie drummed up enough opposition to scupper it, and later forced the county to abandon planned zoning laws. “That's when I realised you can be an activist and you could change government,” he has said. In 2010 he ran to be judge executive of Lewis County, presenting himself as a champion of small government. He dialled up his Kentucky credentials, playing the banjo at shops and barbecue joints. It did the trick—he won (“I guess part of what endeared me to them is that I wasn't that good [but] they were like ‘Hey, this guy is willing to try,’” Massie has said).

The county was in the red so he set about finding savings. He renegotiated contracts, axed jobs in county government and privatised rubbish collection. Rather than pay a plumber to install a new water heater in the local prison, he and some inmates fitted it themselves. “I was able to cover my entire salary with the waste that I found,” he told me.

At the time the Tea Party was at the pinnacle of its influence. Supporters of this grassroots movement argued that the federal government had exceeded constitutional limits on its power. It was popular in north-eastern Kentucky, where Republicans tend to be better educated and more ideological than voters elsewhere in the state, according to Steve Voss, a political scientist at the University of Kentucky. In 2012 Massie ran for Congress, styling himself a tribune of the Tea Party. He won the primary in a seven-way race with 45% of the vote.

**Massie developed a reputation for holding his ground, voting against legislation so often he acquired the nickname Mr No**

On Capitol Hill Massie joined forces with Rand Paul, son of Tea Party eminence grise Ron. Rand had been elected as a senator for Kentucky in 2010. The pair formed a “fuck you caucus”, said Cross, the Kentucky journalist: “They wanted to tell people to ‘Get the hell off my land and out of my life and leave me the hell alone.’” Massie developed a reputation for holding his ground, voting against legislation so often he acquired the nickname Mr No. Sometimes Massie's views aligned with the Republican mainstream: he is anti-abortion, pro-gun and campaigned to repeal the Affordable Care Act. But he remained firmly committed to his libertarian principles. He introduced legislation to reduce some federal prison sentences and tried to repeal the Patriot Act, which expanded government surveillance after 9/11 and was overwhelmingly supported by Republicans.

Massie has been prepared to alienate his colleagues. In spring 2020 the House of Representatives was poised to pass a \$2.2trn covid-relief bill through unanimous consent. This procedure, which is designed to speed up the passing of uncontroversial legislation, means laws can be passed without a recorded vote, so long as no member present objects. The idea was that representatives hunkering down in their districts wouldn't have to travel to Washington and risk getting covid. But Massie, who didn't want to add to the national debt or stoke inflation, objected to the bill. This forced his colleagues to cast their vote in person, leading CNN to brand him “the most hated person in Washington, DC” (an epithet Massie recalled with pride at a recent rally).

Massie feared that by opposing the bill he was “committing political suicide”—he was up for re-election in a few months' time and 70% of Americans supported the bill. But it was more important to him that the vote of every representative be recorded for posterity (ultimately the bill was passed by a huge majority). In spite of his unpopular position on covid relief, Mas-



**Hats off**  
While some of Massie's views align with the Republican mainstream, he is firmly committed to his libertarian principles



sie won the primary by 81 points. Voters admired his courage, said Cross, adding that the state had originally been settled by migrants from Scotland and Ireland, whose forefathers had spent centuries battling the English. Massie was seen to share their “pugnacious, independent, self-reliant streak”, Cross said.

Massie wasn’t afraid to unleash his inner Braveheart. When former senator John Kerry was testifying about the risks of climate change at a committee hearing in 2019, Massie mocked him for having studied political science, remarking that it was “appropriate that someone with a pseudoscience degree is here pushing pseudoscience”. Massie’s comments were pilloried in the press but didn’t harm his popularity in Kentucky, which is still a big coal producer. (Not everyone back home was impressed: “Sometimes he makes comments about science things,” said Johnson, his chemistry teacher, citing Massie’s support for raw milk. “And I’m like, Thomas, I taught you better...I’m surprised he’s taken some of those opposing views because...he understands science.”)

Whatever his true beliefs on the science of climate change, Massie cultivated his reputation as a conviction politician. I asked Robin Webb, a Kentucky state senator whose district encompasses Lewis County, why Massie is so popular. “His values are his values, he doesn’t waver,” said Webb, who has known him for years. “Even if you don’t agree with him all of the time, you’ve got to respect that.”

**A**t the start of every Congress, representatives are issued with small badges called congressional pins. When Massie first moved to Washington, he noticed that he was treated differently when he wore his. Police officers stepped out of his way; people held the door open for him and stopped talking when he stepped into a lift. There was always a table for him at the capital’s most exclusive restaurants.

This kind of deference made Massie uneasy. To explain why, he drew an analogy with “The Lord of the Rings”, J.R.R. Tolkien’s epic fantasy novel. His farm is the Shire, the bucolic land where the saga’s heroes, small people with hairy toes known as hobbits, farm, drink and make merry. Washington, DC, is Mordor, the fount of all evil. The congressional pin is the Precious, a magic ring which confers such irresistible power on those who wear it that they become its slaves.

#### Truth to power

Massie fields questions from reporters ahead of the vote on releasing the Epstein files

**During his 14 years in Congress, Massie has preferred to play what he calls the “outside game”**

Massie expands on the metaphor in “Off the Grid with Thomas Massie”, a short documentary film about his life and career, made in 2019. “The hobbits who wear Precious feel powerful,” he says. “And I can feel it myself, and it’s a scary feeling, because I know if I wear this for too long, it’s gonna affect me and not in good ways...Here’s the thing about the hobbits that go to Mordor: most of them succumb to the intoxication of power.” Massie told me he stopped wearing his congressional pin four years ago.

His belief that power corrupts has shaped his approach to politics, he explained. The conventional way to gain political influence is through obtaining office within party leadership. To do so a legislator has to raise money, “give it to the party, and show that you are willing to do things for the lobbyists”, he said. “Maybe they aren’t things you campaigned on, maybe these are things that your constituents don’t even care about.” By and large, lobbyists want the government to spend money on their priorities; they are by definition in favour of big government. To curry favour with them he would have to “betray” his commitment to libertarian principles. In other words, he said, the “inside game keeps you from being virtuous”.

During his 14 years in Congress, Massie has preferred to play what he calls the “outside game”. Describing his strategy, he compared himself to Alexandria Ocasio-Cortez, the media-savvy New York congresswoman. Rather than climb the rungs of power in a traditional sense, she has taken her “message directly to the people” and used her popularity to gain sway in Congress. (“If you use this analogy, make sure people don’t take it the wrong way,” said Massie, seemingly nervous about casting a leftwinger in a positive light.)

Last autumn the outside game finally reaped rewards with the Epstein act, the only one of Massie’s rebellions to have made a real difference. It all began in April 2025 when Pam Bondi, then the attorney-general, invited the House Judiciary Committee, on which Massie sits, to dinner at the Justice Department. Massie later told a reporter from the *Atlantic* that he had said to Bondi: “I saw you release ‘Phase 1’ of the Epstein files. When do you think we might get ‘Phase 2?’”

According to Massie, Bondi replied that the only material that had yet to be released was what she considered “child pornography—and nobody would want to look at that”. He didn’t pursue the subject “because she made it sound as if you’d be a pervert if you wanted to see the Epstein files”. Massie left the dinner thinking “that unless something changes, we’re never going to see any more Epstein files”. He resolved to bring about that change himself.

Massie has framed his interest in the files as a matter of accountability. It is also rooted in a profound mistrust of federal power and a sense that politicians and elites are colluding to cover up their sinister deeds. Over the course of our four encounters, I was struck by Massie’s warmth, humour and gift for storytelling. Yet I got the sense that beneath the surface of the affable engineer there lurks someone more conspiratorial: a man who appears to suspect that “The Matrix” is not a bad metaphor for reality.

In July the Justice Department announced it would not release any more records. Massie decided to take matters into his own hands. He and Khanna drafted a bill compelling the department to release the files. He knew every Democrat would vote for it, and reckoned he could bring a few Republicans on board too.



When the White House got wind of Massie's plan, it embarked on a campaign to thwart him. Two of his staffers were offered other jobs, which he suspected was an attempt to slow him down. He had received death threats from people on the left before, but now he started getting them from people on the right. "I've never really seriously been worried about my safety until the Epstein files got released," he told me. "Because now I've pissed off a bunch of billionaires who are clearly morally corrupt."

Republican leaders tried to prevent the bill from going to a vote. Massie knew he could force it to the floor if he got 218 representatives to sign a discharge petition. This meant he would need the backing of at least three Republicans. Three Republican congresswomen declared their support—Marjorie Taylor Greene, Nancy Mace and Lauren Boebert. Greene has said that Trump phoned her and warned her to stop, yelling: "My friends will get hurt." Boebert was summoned to the White House situation room for a meeting with Bondi and Kash Patel, the FBI director. Massie named a group text with the trio "Bravehearts".

All the while, Massie and Khanna made their case to the public in media interviews. In September they convened a press conference, which featured a speech from Greene and emotional testimony from some of Epstein's victims. Later that month a poll showed that 67% of Republican voters supported the release of the files. A Republican strategist was quoted as saying that pressure from "furious" MAGA voters was "forcing even the most loyal Trump allies to break ranks".

By November Massie had the signatures he needed. Trump dropped his opposition and the legislation was passed with an overwhelming majority in the House of Representatives. "Even if you don't control what bill comes to the floor, you can move the narrative by playing the outside game," Massie told me. "We won the argument in the American conscience and then that translated into action in Congress."

**O**n a blustery day in northern Kentucky, two bluegrass musicians strummed their instruments as some 150 Massie supporters gathered for his campaign launch. Pete Hendrickson had travelled from Michigan to see the congressman, whom he described as "a man of principle who understands the constitution and abides by it". For Cathy Beil, a retired

### Hillbilly symphony

Massie enjoys playing bluegrass music on his farm in Kentucky

postal worker with a neatly curled fringe, "he's the most honest congressman we have." Others admired what they saw as his dogged and lonely pursuit of the Epstein files: "Massie is standing up, going against the grain—a true Kentuckian," said Craig Pennington, who owns a shop selling Western boots.

Massie took to the stage in a blue blazer, jeans and cowboy boots. Pinned to his blazer was a digital badge that he had designed and made himself: its screen displayed the size of the ever-ballooning federal debt. "I'm sure none of you in here agree with me all the time," he said, "but it's about doing what you think is right in the moment all the time." Referring to critics such as Gallrein who have branded him a Democrat, he said: "I vote with the [Republican] Party 91% of the time but in the 9% of the time, they're covering up for paedophiles, starting a new war or bankrupting our country. I am not on the bandwagon," he said, pausing after each word for emphasis. "And I never will be."

He described how Trump had tried to change his vote on the covid-relief package in 2020. Massie got a call from the president, who vowed to back his primary opponent if Massie voted against the bill. As Massie recounted the anecdote, he tilted his head and puckered his lips, mimicking the president, who apparently told him: "I will come at you...and you're gonna lose." The audience cackled. "Well, I survived that [election]," said Massie. He joked that he had "Trump antibodies", adding, "Hopefully I survive this one."

If he does lose the primary he would be happy to return to farming full-time, he told me. Most weekends he jumps in his car and drives the eight hours from Washington to Kentucky to tend to his animals. (Not long after Massie married Carolyn, he posted on X that she "helped me butcher meat chickens the day we said our vows".) The farm, he said, was "the ultimate insurance policy". It inoculated him against the urge to defend his political career at any cost. "We're self-sufficient to a high degree," he said. "We're not rich but we don't need a lot of money to keep going. It gives you a sense of security."

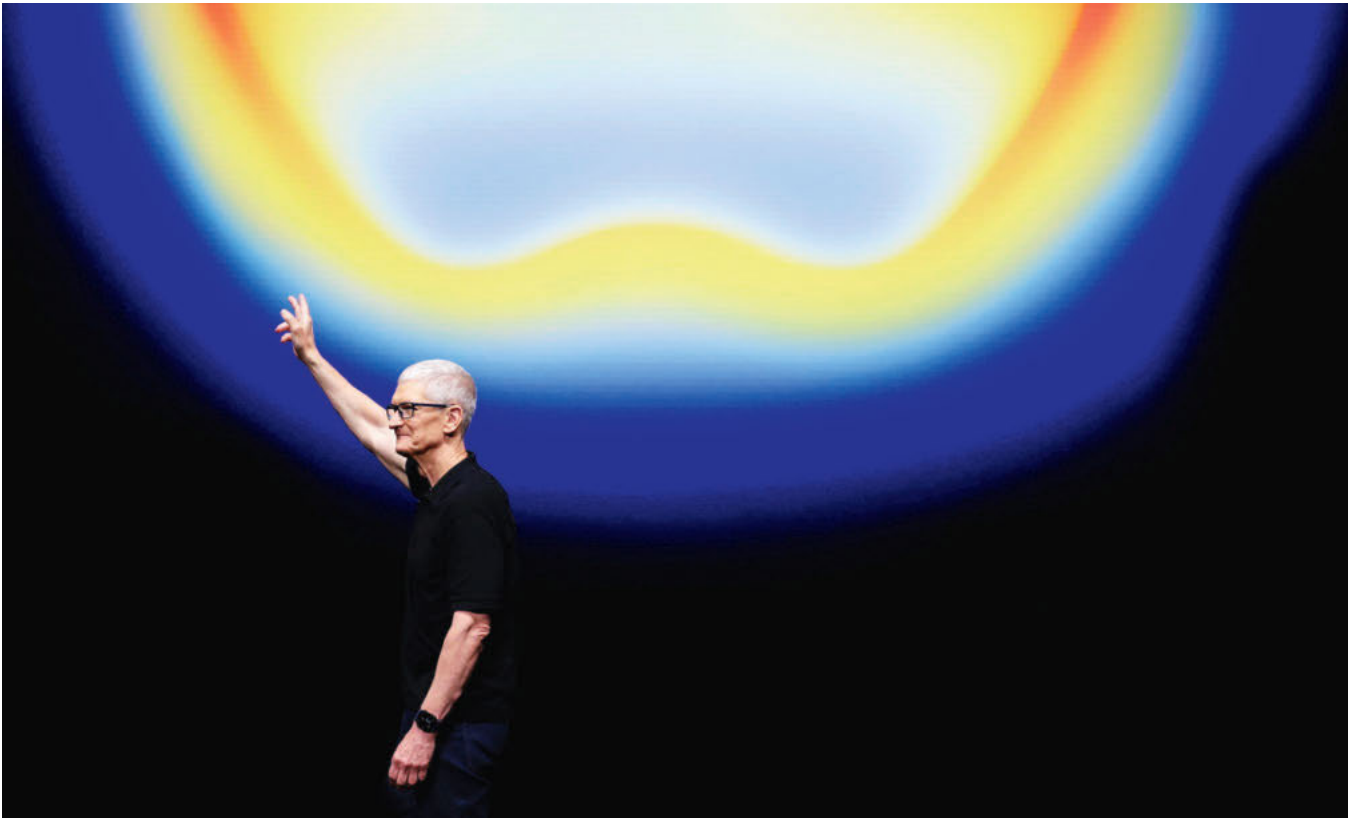
This security, which is plainly psychological as much as financial, lets Massie stand apart. "For many of my colleagues, their sense of importance is wrapped up in the job," he said. They had calculated that fealty to the president was necessary for their political survival. Massie, however, has more in common with Thomas Jefferson's ideal of the yeoman farmer. Like many Founding Fathers Jefferson worried that the fledgling republic would succumb to those who sought power for power's sake. He saw self-sufficient smallholders as the model of virtuous citizenship, as their independence made them harder to corrupt.

It's not that Massie lacks political ambition. He told me he wouldn't rule out a run for governor, a role he believes would allow him actually to get stuff done ("In Congress, you have no executive authority so you can't directly do anything"). But he is not defined by his political job. In "Off the Grid" he said, "My dream is not to be a politician, my dream is not to lord over people from a central government somewhere." Instead he aspired to raise a family on a farm that he built with his own hands, and be reliant on no one. An aspiring king in Washington would struggle to bend such a man to his will. ■

Charlie McCann is a feature writer for 1843. Portraits by Jared Soares

**"I am not on the bandwagon," he said, pausing after each word for emphasis. "And I never will be"**

# Business



Apple

## Too many Cooks, not enough Jobs?

LOS ANGELES

**John Ternus, Apple's new boss, needs to restore its magic for the AI era**

**J**OHN TERNUS, named by Apple on April 20th as its new chief executive, is known to share many of the defining characteristics of Tim Cook, the man he is replacing: likeable, unflappable, a company man to the core. But in the midst of what could be one of the biggest technological upheavals in history, that may not be enough. The question is, can he also invoke the mercurial magic of Mr Cook's even more illustrious forebear, Steve Jobs?

Mr Ternus, Apple's 50-year-old hardware chief, will take over in September, at which point the 65-year-old Mr Cook will become executive chairman after a remarkable tenure as Apple's boss. Since he replaced Jobs in 2011, the company's sales have quadrupled, to \$416bn, and its shares have outperformed the S&P 500 by a wide margin (see chart on next page). On his watch, Apple's market value has soared from \$350bn to \$4trn (roughly \$700m for every day of his tenure). Sales of iPhones

are breaking records. Its services business, which includes app-store revenues, continues to grow by double digits annually. As chief executive, Mr Ternus's first product launch later this year is likely to be a foldable phone, which Apple's devotees have been eagerly awaiting. The transition is set to look picture-perfect.

Yet under Mr Cook, Apple's success

was more thanks to steady operational improvements, especially to its supply chain in China, rather than revolutionary products. The foundation stones of his tenure were innovations that date back to the Jobs era, such as the Mac, iPhone and App Store. These served Apple brilliantly in the internet age. But since the start of the artificial-intelligence era, with the launch of OpenAI's ChatGPT in 2022, Apple's response has been half-hearted. Mr Ternus will have to do better.

Nobody expects him to take Apple on the big-spending path of its big-tech rivals, which are splurging hundreds of billions of dollars apiece on data centres. But its early attempts to integrate AI into its products were an embarrassment. Its over-hyped "Apple Intelligence", aimed at serving AI to users of Apple devices, was a flop when it was unveiled almost two years ago. Having suspended its own efforts to make foundation models, the company is now relying on the Gemini family from Google, a rival, to dig it out of its AI hole.

A first feather in Mr Ternus's cap, even before he takes office, will be showing that a Gemini-powered Siri can behave less like a clunky automaton and more like a smooth-talking AI assistant when it is shown off at Apple's marquee developers' conference in June. In a sign that Apple is aware it has a problem, it has substantially

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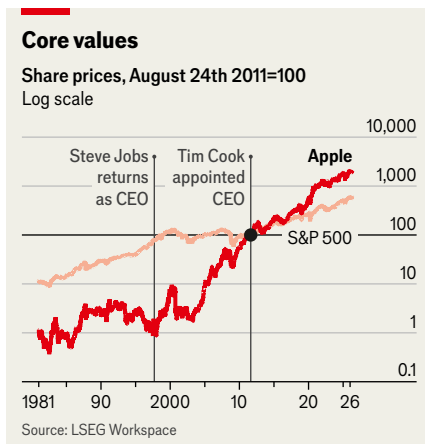
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reckons Horace Dediu, a veteran Apple analyst. That would be a huge platform on which to run—and monetise—AI apps. As users subscribe to ChatGPT or other AI apps, “Apple will just take a cut,” Mr Dediu adds. By one estimate, Apple is close to generating \$1bn in AI revenues so far this year via the App Store, despite having no flagship AI product.

Azeem Azhar, author of *Exponential View*, another newsletter, adds that to overcome bottlenecks in cloud-based AI, routine queries may be shifted to “edge” devices, creating a big opportunity for Apple. In Mr Azhar’s telling, the future will involve “a combination of the highly portable phone with the persistent desktop or server. Both play to Apple’s strengths.”

There is, however, a more radical path available to Mr Ternus, which is to develop a new “form factor” beyond the iPhone that is more suitable for the interactive nature of AI than doomscrolling on a touchscreen. Competitors are already trying to turn the smartphone into yesterday’s technology. Meta, the social-media giant run by Mark Zuckerberg, is selling millions of AI-powered smartglasses. Sir Jony Ive, the design guru who helped Jobs create the iPhone, has teamed up with OpenAI to develop a brand new gadget of unknown form. To keep up, Mr Ternus may have to reinvent Apple’s product line-up with a determination that eluded Mr Cook.

Apple’s Vision Pro virtual-reality headset, though an over-priced flop, may help the new boss develop Apple smartglasses. The company is also reportedly working on a wearable AI pin. Mr Dediu says that one of Mr Ternus’s main strengths may be his devoted following among Apple’s engineers, who have been pivotal to the firm’s success. “Ternus will come out as an engineer’s engineer,” he says. “He is hard-core.



Not far from the tree

- ▶ reshuffled its AI leadership team in the past year.

Yet Mr Ternus’s elevation, and a powerful new role for Johny Srouji, who has helped lead Apple’s chip strategy, suggests the company is betting primarily on hardware rather than software to carry it forward, on the assumption that AI models will eventually become commoditised. “It seems like if I’m promoting the hardware guy to be CEO, I want innovation to come from the hardware side,” surmises Gil Luria, an analyst at D.A. Davidson, an investment bank.

### Hard problems

When it comes to hardware, there are two courses of action Apple’s new boss could take. One is to make the company’s existing products so ubiquitous that they will almost inevitably become the biggest consumer interface for AI. The recent accomplishments of Mr Ternus, who took over as hardware chief in 2021, suggest he could lean in this direction. Consider the enthusiastic response to the iPhone 17, launched last September with Apple’s latest in-house chips, which has led to one of the biggest upgrade cycles in years. Or consider the roll out in March of the \$599 MacBook Neo aimed at luring low-budget shoppers away from Microsoft-based PCs. Reportedly the Neo has sold out this month. The Mac mini, launched in 2024 as an ultra-compact PC without a screen, has also flown off the shelves in recent weeks because users find it ideal for running always-on AI agents such as OpenClaw.

Apple’s advantage in hardware is supported by its custom silicon. Its performance-enhancing chips make the Mac the computer of choice for the high end of the market, and the use of its iPhone chips in the Neo is now helping it to reach the low end as well, according to Ben Thompson of *Stratechery*, a newsletter.

If Mr Ternus does “nothing but keep the ship on course”, Apple could almost double its number of devices from 2.5bn globally to 4.5bn over the next 15 years,

That might energise the teams.”

Even if Apple’s new boss revives its innovation mojo, he will have other problems on his plate. The company is in the process of reducing its reliance on Chinese manufacturing, but is not yet fully embedded into alternative production zones such as India and South-East Asia. At least Mr Cook, a veteran at navigating geopolitical tensions, is expected to continue doing so as head of Apple’s board.

But that means Mr Ternus will also have his predecessor looking over his shoulder. In the case of some transitions—such as Bob Iger’s brooding presence at Disney, after he first stepped down as the entertainment giant’s boss—that can be a liability. With luck, Mr Cook will be a more helpful force. Nonetheless, he leaves big shoes to fill. The old adage is that you don’t want to be the chief executive who follows a legend. In Mr Ternus’s case, he will have to follow two of them. ■

### The space business

## Star wars

### Can Amazon and Blue Origin compete with SpaceX?

IT LOOKED LIKE a stunning success—until it didn’t. On April 19th Blue Origin, a rocket firm owned by Jeff Bezos, the founder of Amazon, launched its New Glenn rocket into the heavens for the third time. Ten minutes later, the rocket’s first stage came roaring back, landing on an ocean-going barge, ready to go again.

The mission marked the second time that the booster—called “Never Tell me the Odds”—had flown, after it powered New Glenn’s second launch in November. Reusing rockets is vital to bringing down the cost of spaceflight. It is also very hard to do. Blue Origin is the second company to have managed to reuse part of an orbital rocket, after SpaceX, run by Elon Musk, first proved it was possible in 2017.

But having aced the hard bit, Blue Origin stumbled on the easier part. Shortly after launch it said that New Glenn had placed its payload—a communications satellite owned by AST SpaceMobile, an American startup—into the wrong orbit. The satellite was flying “too low to sustain operations”, said AST; shortly afterwards it burned up in the atmosphere. The Federal Aviation Administration, which regulates American rocket launches, is investigating, leaving New Glenn grounded.

Getting it flying again will add another item to Blue Origin’s already lengthy to-do list. For years the firm had a reputation as a ▶▶

► laggard. Founded in 2000, it took 25 years to reach orbit. (SpaceX, despite being founded two years later, got there in 2008.) In 2023, in an effort to speed things up, Mr Bezos replaced Bob Smith, Blue Origin's boss, with Dave Limp, a trusted lieutenant from Amazon.

These days his plate is piled high. Besides developing New Glenn, Blue Origin is working on a space-going tug called Blue Ring and a space station called Orbital Reef. It is also developing Blue Moon, which is designed to ferry commercial payloads to the lunar surface—and, under NASA's Artemis programme, astronauts, too. In January Blue Origin announced it would create a satellite-internet service aimed at big corporate customers, called TeraWave. The first satellites are supposed to fly next year.

Financial information is scant: Blue Origin is privately held and has been financed mostly from Mr Bezos's personal fortune. But one big customer is Amazon, where Mr Bezos remains executive chairman and the biggest shareholder. It bought \$1.8bn of rocket launches from Blue Origin in its most recent fiscal year. The e-emporium and cloud provider is working on a satellite-internet constellation of its own, originally known as "Kuiper" and rebranded to "Leo" in November. It will compete with SpaceX's Starlink service, providing connectivity in out-of-the-way places.

Amazon is investing heavily in the initiative. On April 14th it bought Globalstar, another satellite operator, for \$11.6bn. Globalstar's satellites already provide connectivity to Apple's iPhones when they are out of range of terrestrial phone networks. Such "direct-to-device" connectivity is "the hottest area of investment in the satellite business right now," says Caleb Henry of Quilty Space, a firm of analysts. Crucially, the deal also gives Amazon access to Globalstar's precious radio spectrum.

But the grounding of New Glenn may slow Leo's deployment—a problem, given that Amazon is already certain to miss a regulatory deadline in July, by which point it was supposed to have half of its proposed 3,200 satellites in orbit, up from around 250 at present. (It has requested an extension to 2028.) Amazon remains far behind SpaceX, which has more than 10,000 Starlink satellites in orbit and more than 10m customers.

One big difference between the companies, says Mr Henry, is that SpaceX is vertically integrated: besides manufacturing Starlink's satellites and running the network, it also makes the rockets that launch them. (Indeed, SpaceX has launched many of the Leo satellites that are currently in orbit.) "You could certainly make an argument that Amazon should buy a launch provider," he says. Perhaps Mr Bezos might know of one for sale? ■

## Artificial intelligence

# The salesman in the machine

## Chatbot ads are changing the way digital marketing works

CHATBOTS ARE employed every day as teachers, counsellors, coders and escorts. Now they are taking on another role: salesmen. Advertisements are popping up ever more frequently in users' conversations with large language models, punctuating chats with promotions. Consumers' search queries, editing sessions and even intimate moments are increasingly at risk of interruption by sponsored messages.

As chatbots become adbots, the future of two industries is at stake. For the artificial-intelligence business, ads represent a way to monetise a wildly expensive invention that most people currently use free of charge. For the ad industry, adbots are a possible answer to the existential question of how advertising will work if users move away from conventional search engines. Although it is early days, the outlines of a new kind of marketing are emerging.

Many of the AI giants are piling in. In February OpenAI said it would begin testing ads in ChatGPT, the most widely used chatbot. Google has been trialling them in its search engine's "AI Mode" since last year, and Microsoft has woven them into its Copilot. Amazon's shopping assistant, Rufus, allows brands to sponsor its replies. Meta's chatbot does not yet show ads, but since December it has been passing on insights from chats to its sister companies, Facebook and Instagram, to help them serve better-targeted plugs.

For OpenAI, which reportedly expects to burn \$25bn of cash this year and twice as much in 2027, the need for more revenue is acute. Although it sells subscriptions, most of ChatGPT's more than 900m weekly users are on its free tier. Ads are a way to make money from them. And they may let the company make its best models available to users who do not pay, deepening their engagement, says Benedict Evans, a tech analyst. Even Google, with no immediate cashflow worries, has reason to bring ads to AI chats if these interactions are to replace search for some users. Already it is set to lose its crown as the biggest seller of digital ads: this year Meta will overtake it with ad revenue of \$243bn, according to eMarketer, a research firm.

So far the experiments are modest. Similarweb, a data provider, estimates that ChatGPT is showing ads in only about 1% of conversations, and Google in an even smaller share of AI Mode queries. But they are due to rise fast. OpenAI is said to have told investors that it expects ChatGPT to generate \$2.5bn in ad revenue this year and \$1bn in 2027, with a goal of hitting \$100bn by 2030.

The early evidence suggests that OpenAI and Google have different approaches to how a chatbot should sell. According to Similarweb, 98.5% of the ads in Google's AI Mode appear in response to the user's first query, rather like a conventional search ►►



▶ engine. ChatGPT, by contrast, bides its time. Less than half its ads come in the chatbot's first response, and nearly a third come after the tenth turn in the conversation—like a shop assistant waiting for the customer's intent to become clear before they make their pitch. "This is not search. This is a new category of advertising," argues Harel Amir of Similarweb.

So far the results are mixed. ChatGPT's targeting sometimes seems sophisticated: for instance, advertising job-interview coaching to a user drafting a professional email. At other times it is comically literal. One user asking about cryptographic "private keys" was served an ad for metal safety-boxes from Bed Bath & Beyond. OpenAI's fledgling ad service so far offers advertisers little in the way of performance data or the ability to target specific demographic groups, says Caelean Barnes of Gauge, which helps brands track how chatbots talk about them.

OpenAI and Google also seem to be going after different kinds of advertisers. Google's Direct Offers allow companies to promote a discount code for a product the user is researching in AI Mode. OpenAI, meanwhile, is focused on brand-building ads designed to burnish a firm's image rather than trigger a click. So far 81% of its ads fall into that category, by Similarweb's analysis. OpenAI may reckon that users deep in a coding or editing session are unlikely to break off to pursue an offer.

The good news for chatbot-makers is that users do not seem to be repelled by ads. Some competitors have steered clear of sponsored replies, fearing these will hurt trust: in February Perplexity stopped showing ads and Anthropic skewered its ad-toting rivals with a series of skits showing therapists and professors suddenly launching into sales pitches. Yet Similarweb finds that 72% of ads shown on ChatGPT are not on the final turn of the conversation—in other words, users keep chatting. Conversations incorporating ads last an average of about 20 turns, the same as those without.

For advertisers, AI ads present two challenges. The first is measurement. If users keep chatting rather than clicking through, "post-view attribution"—the murky science of determining whether a user eventually buys the product elsewhere—will become the main way to assess a campaign's effectiveness. The second challenge is brand safety. Mark Zuckerberg has painted a picture of a future where advertisers simply tell Meta their objective and let the AI handle the rest. But letting a chatbot write its own creative copy is a gamble. Personalised ads have proved to be more effective than generic ones. Companies may nevertheless be wary of a silicon salesman who could hallucinate a deal too good to be true. ■



### Consumer goods

## Mid-life crisis

### How millennial brands lost their mojo

THOSE STILL doubting that investors' exuberance for artificial intelligence is straying into the irrational received further evidence on April 15th when Allbirds, a wool-sneaker brand that took off among Silicon Valley millennials a decade or so ago, announced a plan to remake itself as a provider of AI computing infrastructure. The share price of the company—which will be renamed NewBird AI—briefly soared by more than 800%, and has since settled at roughly four times its pre-announcement level.

The reaction was also a striking indictment of the prospects facing the business before its metamorphosis. Since its peak in November 2021, shortly after it went public, Allbirds had lost 99% of its market value. It is not the only brand that soared in the 2010s on the back of enthusiasm from young shoppers only to come crashing back down in the past few years. Firms such as Glossier, a beauty label, Warby Parker, a spectacle merchant, and Dollar Shave Club, a seller of razors, built thriving businesses by advertising and selling products directly over the internet to millennials. At their peak, several commanded valuations in the billions of dollars. But they have not aged well.

These once-buzzy millennial brands were built on two ideas. The first was that many products widely thought to require consumers to see them in person before

making a purchase could in fact be sold online, saving on the cost of running a physical store. Warby Parker lent customers glasses frames to test at home; Casper, a mattress brand, guessed that consumers did not actually need to jump up and down on their product before buying it. The second idea was that mastery of social media would allow these brands to drum up interest in their products without requiring the costly ad campaigns of yore. Glossier, for example, packaged its wares in colourful bubble wrap, spurring customers to post "unboxing" videos on Instagram that provided free publicity.

At first, the business model led to rapid growth. But success has been more difficult to sustain. These brands had a "free lunch" during their infancy because interest rates were low and the cost of acquiring customers on social media was cheap, argues Daniel Corsten of IE Business School in Spain. Neither remains true. The tide of venture-capital funding has receded as interest rates have risen and investors have shifted their attention to AI. At the same time, online advertising has become saturated, forcing companies to pay more to reach shoppers. The cost to brands of acquiring new customers online rose by 40-60% between 2023 and 2025, depending on the channel, notes Mr Corsten. Partly as a response, many millennial brands have built a physical retail presence in the past few years.

Competition has also stiffened. Large incumbents have raised their game online by learning from the millennial brands, points out Camille Moore, who runs a branding consultancy. What is more, a new generation of upstarts has emerged, often led by celebrities hoping to cash in on their legions of followers on social media. Rhode, a lip-gloss brand founded in 2022 by Hailey Bieber, wife of Justin, was sold last year to e.l.f. Beauty, a cosmetics business, for as much as \$1bn.

Allbirds is unique among its peers in abandoning consumer goods altogether. But other millennial brands have suffered existential crises of their own. Casper, which went public in February 2020, was taken private in November 2021 after losing around 70% of its value over the period. Glossier has reportedly tried to sell itself, but been unable to find a buyer. Unilever, a consumer-products conglomerate, bought Dollar Shave Club in 2016 for \$1bn, but sold a majority stake to a private-equity firm in 2023, reportedly at a much lower valuation. "We lost our edge, we lost our vibe," the brand's boss moped last year.

Gone are the days of rapid growth for millennial brands. Now they must learn from older incumbents how to keep customers they have won, argues Ms Moore. The next generation of young upstarts is hot on their heels. ■

## Drugmaking

## Altered state

## Donald Trump is giving psychedelic medicines a big boost

IT BEGAN with a text message from a podcaster to the president. Joe Rogan extolled the benefits of ibogaine, a psychedelic drug, for treating opioid addiction. “Sounds great,” Donald Trump replied. “Do you want FDA approval? Let’s do it.” Within a week, on April 18th, Mr Trump signed an executive order that sent the share prices of psychedelics-makers soaring. Among other things, it promised new funding for research into the field and instructed the Food and Drug Administration (FDA) to issue “priority vouchers” that will speed up the review of selected drugs.

It is a watershed moment for a field that has struggled for years. From the 1940s to the 1960s work on psychedelics as medicines flourished. Tens of thousands of people used them as adjuncts to psychotherapy, with promising signs in alcoholism, addiction, PTSD and mood disorders. But the field floundered amid the moral panic over the 1960s counterculture and stricter rules on research and use that made further study difficult.

Mr Trump’s decision, then, is welcome news for the millions of people suffering with conditions that might be eased by psychedelic medicines. His approach, however, also lays bare how the administration is remaking drug policy: by putting relationships, rather than scientific merit, at the core of determining which treatments get to patients most quickly.

At the signing of Mr Trump’s executive order in the Oval Office, Marty Makary, head of the FDA, said that three applications for psychedelic drugs “are imminent”, and that he expected decisions “later this summer”. That seems optimistic.

The firm closest to filing an application is Compass Pathways, whose share price initially leapt by 53% after the executive order. Its synthetic version of psilocybin (found in magic mushrooms) has completed key late-stage trials for treatment-resistant depression. Also close to filing an application is Definium, a firm which is testing a proprietary version of LSD for treating anxiety and depression. But Compass has said it aims to submit its final data to the FDA in the third quarter, and Definium has yet to release results from late-stage trials. Some think the FDA may revive a previously rejected MDMA drug (its maker, Lykos, was told it needed better data) or, unusually, accelerate a generic drug that is a form of ketamine.

Psychedelic medicines are certainly a deserving category for attention. But the evidence has to be considered carefully—for the sake of all involved. Consider the case of ibogaine, the drug championed by Mr Rogan. Popular among veterans, for whom opioid addiction is common, it carries serious cardiac risks. In January a clinic in Mexico reported that a patient had died after taking it. Equally, it may reflect badly on drugs if their approval appears political—and after companies such as Compass have worked hard to get near the original finish line. Insurers may look unfavourably on drugs advanced by presidential decree. So may some patients.

The episode adds to the evidence that the administration is politicising drug development. On April 1st Eli Lilly’s new weight-loss pill was approved only 50 days after filing, having been granted a priority voucher. The pharmaceuticals giant has gained favour with the president: in February it pledged to invest \$27bn to expand its manufacturing in America, and in November it agreed to lower prices for its weight-loss medicines in the country. Drugmakers, which already spend lavishly on lobbying, may soon divert even more of their resources to buttering up politicians. America’s drug-approval process should be made faster. But not like this. ■

## Booze

## Against the grain

ERYUAN

## In China’s dispirited alcohol market, one drink stands out

THE TASTING room at YunTuo Distillery is nearly 30 metres tall and lined with 1,000 whisky barrels. Diageo, a British spirits-maker, spent \$120m building the facility in Eryuan, a quiet village in south-west China. Before long it is expected to start selling a Chinese single malt. It is not alone.

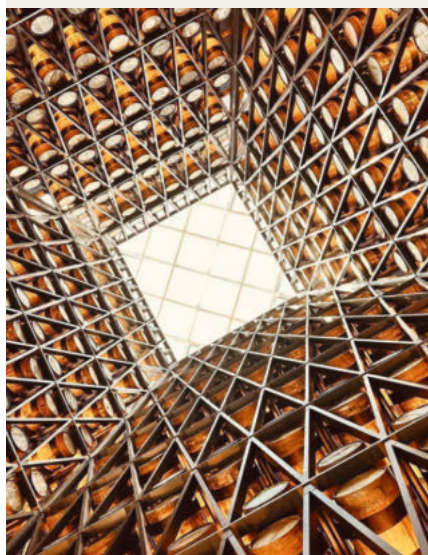
Chinese whisky is soaring in popularity. More than 50 distilleries have been built in the past few years, and more are under construction. It is not just local enthusiasts pouring in, but also some of the world’s biggest booze companies, including Diageo and Pernod Ricard, a French rival. Even as these projects boost local supply, China has never shipped in

more whisky. Imports hit a record 36m litres last year, more than double the amount a decade earlier.

The rise of Chinese whisky comes at a curious moment. On the whole, alcohol sales in China are in the gutter. The beer business is legless. Interest in wine peaked in around 2017 and has since been in decline. Even sales of baijiu, a translucent firewater that is by far the country’s most popular libation, fell by about 15% last year. Young Chinese are drinking less. And sluggish consumer spending more generally has not helped.

Why the buzz around whisky, then? One explanation local producers offer is that they have been strikingly successful marketing Chinese whisky overseas. Last year they sold \$585m-worth in foreign countries, up from \$5m a decade earlier. More important, though, has been whisky’s rising status as a luxury product within China. There are still plenty of rich people in the country, says Edison Chiao of Diageo. Although they have become fewer and more cost-conscious of late, they remain willing to splurge on premium spirits.

In February China introduced its first national standards for single malt, based on Scottish regulations. Products bearing the description must be distilled in copper pots and aged for at least three years in barrels no larger than 700 litres. The rules have irked baijiu-makers looking for shortcuts into the growing whisky market. But those willing to make the investments—and wait for their tipple to mature—may have their temperance richly rewarded.



Barrelling along

# SCHUMPETER

## *Paper Leviathan*

*America's descent into state capitalism is exaggerated, mostly by the state*



AMERICA UNDER President Donald Trump sometimes looks like a command economy. Its elite talks effusively about doing business with the state: the great-power struggle will be lost to China unless America intervenes in commerce like its rival, runs the argument. Mr Trump routinely declares war on the prices of things, from mortgages to petrol to stocks. Yet for a system which is now often described as veering into state capitalism, the state has proved surprisingly ineffective at bending markets to its will. Mortgage rates are stubbornly high. So are petrol prices. The stockmarket has the whip hand over the White House, rather than the other way round.

The Trump administration has repeatedly overestimated its ability to control business. In February Mr Trump tried to destroy the “left-wing nut jobs” at Anthropic after they refused to give the Pentagon unrestricted access to their artificial-intelligence models. The AI lab was declared a supply-chain risk, a severe sanction typically reserved for firms connected to hostile states. Yet when a few weeks later Anthropic released a model which it says (and the administration seems to believe) allows it to hack almost any computer in the world, the tone in Washington transformed overnight. America’s National Security Agency is now said to be using the model. The power that Silicon Valley executives wield over the bureaucracy these days is much more striking than the bureaucracy’s hold on Silicon Valley.

Mr Trump’s thunderous interventions in the marketplace are often met with a shrug from investors doubting the legality of his actions, the permanence of his interest or the soundness of his money. Credit-card interest rates should henceforth be capped at 10%, Mr Trump declared in January. Some bankers protested. Others simply ignored him. A few mumbled about possibly offering special “Trump cards”, as the president’s staff hastened to call them, with lower interest rates (none appeared). Mr Trump likewise promised to squeeze the profits of health insurers; shareholders now expect only a tickle. The president’s ban on share buybacks and dividends by defence companies has been disregarded by the industry. (So has the \$1.5trn Mr Trump says his government will spend on defence next year.)

On the most pressing matters of business and state, Mr Trump’s authoritarian bluster often exaggerates the magnitude of his meddling. Whether America should ship advanced chips to China while China plays short-form videos to America is an existential question to which Mr Trump offered the answer of a gangster rather than a central planner: if we get a cut, who cares? Nvidia is permitted to power China’s AI industry by selling its H200 chips in the country, so long as it gives the government a 25% share of the proceeds. The sale of TikTok to a consortium of American and Emirati investors took majority ownership of the video platform out of Chinese hands, but has allowed its creator ByteDance to remain heavily involved in the company. Not to worry, for America’s government will pocket a “tremendous fee” for arranging the deal, said to be around \$10bn.

True, parts of the federal bureaucracy now operate more like a Wall Street outfit. The Pentagon has invested in a rare-earths mine in California, a gallium producer in Louisiana and a zinc facility in Tennessee. It is hiring investment bankers bored of funnelling petrodollars into enterprise-software firms to instead spend tax dollars on mines and missiles. Similarly, the Commerce Department has assembled interests in companies including Intel, a chipmaker, and Westinghouse, a manufacturer of nuclear reactors, along with the impeccably named “USA Rare Earth”. Just a hint of interest from the day-trader-in-chief can send share prices soaring: this week those of Spirit increased more than five-fold (though only to a market capitalisation of around \$50m) when Mr Trump suggested the state might rescue the bankrupt airline.

This growing portfolio, however, is easy to overstate. Most of Uncle Sam’s cheques involve tens or hundreds of millions of dollars. The largest position, in Intel, is worth less than \$20bn. This pales in comparison with other sources of politically motivated capital sloshing around global markets. The French government owns shares worth around \$250bn in its national champions. Both are dwarfed by sovereign-wealth funds from the Gulf. Moreover, the difference between Mr Trump’s intrusions into business and those of his predecessor is often one of style rather than category. By the time he quasi-nationalised Intel, the chipmaker had received heaps of subsidies. Before Mr Trump took a “golden share” in US Steel, Joe Biden tried to block the sale of the steelmaker to win votes from union members in Pennsylvania.

### One man Gosplan

A state capitalist without the full weight of the state behind him is a loud and ineffective one. Confronted with the limits of his formal power, Mr Trump has found bullying to be among his more effective tools, partly because it comes so naturally to the man. The careful tone bosses adopt when talking even about Mr Trump’s worst policies hints at the business decisions being shaped partly by fear of incurring the president’s ire. Yet bullying is most effective when submission is cheap. Law firms caved quickly to Mr Trump because there was little cost to doing so; but oil bosses paraded on TV after America’s military operation in Venezuela hardly jumped at the opportunity to rebuild its oil infrastructure.

Therein lies the main difference between the economic nationalism taking shape in Europe and America. On the old continent, bureaucracies bubble-wrap their national champions—which resemble them as a dog does its owner—in a thousand protective directives. In America, capitalism is being remade by individuals, often in public. Even its state capitalism is more dynamic. ■

## Finance & economics



### The yuan

## China's comfort currency

HONG KONG

**How global can the yuan get? The anxiety of war has aided China's ambitions**

**I**N A SCARY world, comfort food can be a source of solace. Tasty Congee & Noodle Wantun Shop, a restaurant in Hong Kong, offers soothing rice porridge topped with scallions to locals, visitors from mainland China and any foreigners who have acquired the taste. The bill can be paid in Hong Kong dollars or the mainland's currency, the yuan. The congee shop will even take the e-CNY, a digital currency issued by China's central bank (although the maître d' had never seen anyone use it before). Over 5,000 merchants in the city accept this novel form of money.

China's leaders seem newly optimistic about the yuan's prospects beyond the mainland. They have long been keen to ease their dependence on the American dollar for international transactions. Yet progress has been uneven. In recent years they have built their own conventional and digital payment rails, bypassing the main dollar-centric financial infrastructure. And

thanks to a shortage of borrowers at home, China can offer soothing interest rates to those abroad. Xi Jinping, China's leader, has said the country must have a "powerful" currency. The yuan is still far from that. But it is becoming something else: a source of comfort for countries and firms disconcerted by America's haphazard stewardship of the truly powerful dollar.

In pursuing its ambitions for the yuan, China has sometimes let its rhetoric run

ahead of reality, points out Josh Lipsky of the Atlantic Council, a think-tank in Washington. But the numbers are beginning to match the words. Some of the global yuan's "best data points have come in the last six or seven weeks". Look, he says, at China's alternative payment rail, the Cross-Border Interbank Payment System (CIPS). In March it handled about 920bn yuan (\$134bn) a day in transactions; last year's daily average was only 680bn (see chart on next page, left panel). On April 2nd the tally topped 1.2trn yuan.

Why this leap? Nobody knows for sure. New rules came into effect in February that made the system more flexible. But the timing suggests the Iran war was a factor. The eye-catching data "aligns exactly with the crisis", says Mr Lipsky. "It can't just be coincidental." Iran has long been happy to be paid in yuan for its oil, much of which supplies independent "teapot" refiners in China. And although its crude exports have fallen in volume, each barrel has shot up in value. Iran may also be taking yuan in exchange for granting vessels passage through the Strait of Hormuz. Among the financial boffins and bigwigs at this month's IMF meetings in Washington, the consensus was that most of the money brought in by Tehran's "toll booth" is in yuan not crypto, Mr Lipsky says.

But the jump in CIPS activity is so large ►►

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▶ that oil and toll payments cannot account for all of it. The transactions may include capital, some of it Chinese, fleeing the Gulf. And they may capture some of the broader financial hurly-burly stirred up by the crisis. According to China's banks, cross-border sales and purchases of bonds, stocks and other "portfolio" investments reached \$712bn in March, 40% more than the monthly average for last year. Not all of these investments and divestments were settled in China's currency. But the yuan's share of China's overall international transactions, including trade in goods, services and assets, rose to more than 56% in March, after plateauing for much of 2025 (see chart, right panel).

CIPS is not the only payment rail carrying more traffic. Project mBridge, a more experimental platform for cross-border payments in digital currencies, is also getting busier. It has gone beyond the conceptual stage to become a viable commercial proposition, says Karen Ng of Standard Chartered, a bank. In November the deputy head of China's central bank said that the equivalent of \$55.5bn, spread over 4,047 transactions, had passed through the network. Although the central banks of Saudi Arabia, Thailand and the United Arab Emirates are also part of the project, over 95% of transactions are in e-CNY. They can be completed very quickly, Ms Ng points out. "Some people say ten seconds, [or] seven seconds."

### Small CIPS, supersized CHIPS

Both CIPS and mBridge are still dwarfed by standard dollar-dominated payment platforms. The CHIPS network, headquartered in America, handled over \$2trn a day in 2025. SWIFT, a bank messaging network, spans over 11,500 institutions compared with 1,791 in CIPS. But since Russian banks were ejected from SWIFT in 2022 as punishment for the invasion of Ukraine, many countries have been forced to imagine something similar happening to them. Companies have decided "I need to diversify. I cannot rely on a single platform,"

says one banker. Some of them had already taken preparatory steps to use the yuan before this year. The Iran crisis may have galvanised them to finally "press the button".

The yuan's other source of comfort to the world is low interest rates. Weak borrowing and spending in China has obliged the central bank to cut its policy rate to just 1.4%, more than two percentage points below the equivalent rate in America. The stubborn threat of deflation has also lowered longer-term yields on Chinese government bonds.

Foreign companies and governments have been keen to take advantage. Some have issued yuan-denominated "Panda" bonds in mainland China. Others (including Chinese multinationals) have instead been selling "dim sum" bonds in Hong Kong. Indonesia's government, for example, raised over 9bn yuan in Hong Kong in February. This month Portugal became the first government in the euro area to sell a dim sum bond, raising almost 2bn yuan.

It is not just governments. Hedge funds in London and elsewhere need new funding currencies, says Alicia Garcia Herrero of Natixis, a French bank, now that Japan's yen is beginning to look uncharacteristically dear at longer maturities. And manufacturers stitched into Chinese supply chains are also asking themselves whether they should borrow in the currency used by many of their customers and suppliers.

The Hong Kong Monetary Authority, which manages the city's peg to the dollar and regulates its banks, now has a 200bn-yuan facility to help foreign companies borrow China's currency, at low, benchmark rates, for trade finance or working capital for up to a year. Banks like Standard Chartered can "radiate" this liquidity to their branches far beyond Hong Kong, says Ms Ng. Such initiatives have boosted the yuan's role in greasing the wheels of global commerce. Last month China's currency accounted for over 8% of global trade finance, according to SWIFT, second (but a distant second) to the dollar, on over 80%.

Zhou Xiaochuan, a former governor of

China's central bank, who fretted about the dominance of the dollar as long ago as 2009, thinks China now has a "golden window of opportunity" to promote the yuan's use beyond its shores, thanks to America's tariffs, sanctions and geopolitical conflicts. China Merchants Securities, an investment firm, also sees a "historic opportunity" for the currency, thanks to the government's renewed commitment, better infrastructure and low borrowing costs.

The reality, as Mr Lipsky warns, could fall some way short of the rhetoric. But the yuan does not have to eclipse or even rival the dollar to provide a hedge against it. And by providing an alternative, it can blunt the dollar's edge as an economic weapon. For anyone who finds the dollar's dominance hard to stomach, the yuan could provide an alternative. ■

### Chinamaxxing

## Imported enthusiasm

SHANGHAI

**A foreign fad is a boon for China's tourist trade**

RONGCHANG BRAISED GOOSE has been popular in a rural corner of south-west China since the Qing dynasty, but a year ago a Westerner turned it into a national sensation. In clips shared widely on both Chinese and foreign social media, a visiting American influencer is seen taking a large bite of the crispy, caramel-coloured dish. Suddenly Rongchang's goose restaurants were overwhelmed by local tourists. Economists in the region were shocked by the power of a foreign endorsement.

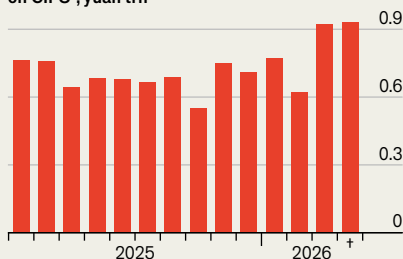
Western social media's fascination with all things Chinese has since been tagged "Chinamaxxing". Among American Gen-Zers the tongue-in-cheek internet meme often simply means taking up common Chinese habits, such as drinking hot water or wearing house slippers. Some influencers have gone a step further and are seen online using Chinese herbal medicine, drinking Chinese beer or even puffing Zhongnanhai, a popular brand of cigarettes. Others have toured the country posting videos of its futuristic skylines.

What Chinamaxxing means for China is harder to say. On Chinese social media it is often translated as "Sinicisation", or becoming Chinese. The *People's Daily*, a Communist Party mouthpiece, has embraced the idea as the foreign adoption of Chinese lifestyles, dubbing it "a new wave of global cultural engagement". As some goose farmers discovered last year, it may also bring tangible economic benefits.

One could be through tourism. Local ▶▶

### From CIPS to gulps

China, average daily transactions on CIPS\*, yuan trn



Yuan share of China's cross-border transactions\*, %



\*Cross-border interbank payment system †Average of seven available daily observations \*Excludes interbank transactions  
Sources: Atlantic Council GeoEconomics Centre; CIPS; State Administration of Foreign Exchange

▶ travellers may be heading for some places featured in foreign social media, but foreign tourism is booming. Inward travel collapsed during the global pandemic, but is recovering fast. More than 35m foreigners visited last year, a record. Visitors are also spending more than they used to. How far can this be chalked up to Chinamaxxing?

A new visa-free entry programme for 55 countries seems to be a leading factor. But Xu Ziyang, a researcher at the Shanghai Academy of Social Sciences, argues that the social-media buzz abroad is changing how foreigners view China and drawing some to visit. In Shanghai foreigners can now be spotted in hour-long queues at tea shops that have popped up on social media—a welcome novelty for the owners.

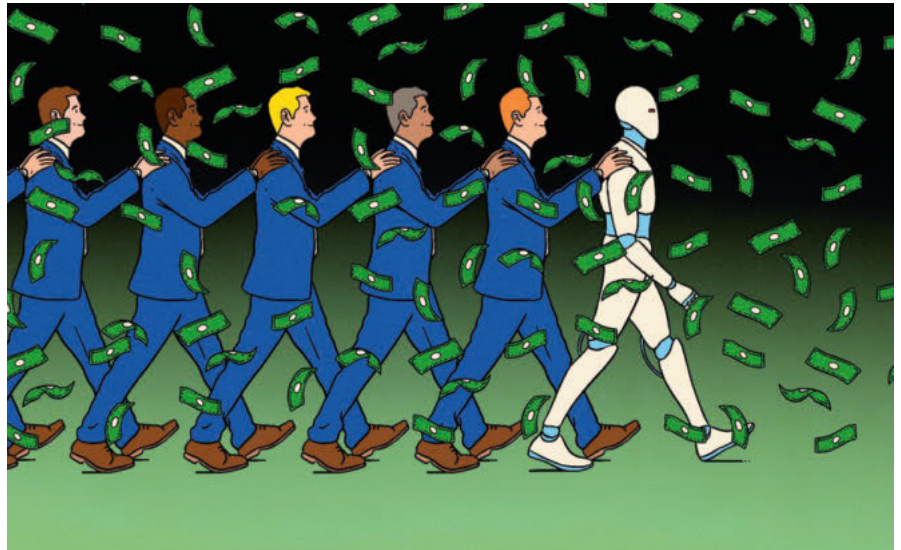
Officials around the country are also taking note. The government of Huangshan, a mountainous area popular with hikers, said late last year that the attention on Instagram and Facebook helped to double the amount foreign tourists spent in the first nine months of 2025 from a year earlier. (Both platforms are blocked in China.)

Exposure on Instagram has also fuelled foreign demand for Chinese goods. Many influencers are demonstrating *guasha* tools, used to scrape the skin to the point of bruising (for some ostensible health benefit). *Guasha* has been a popular medical treatment for centuries, but firms that make the tools now say foreign markets are starting to matter. Orders are growing for hot-water bottles, cigarettes and more.

The excitement may max out at some point. Interest in Rongchang goose stayed high for months after the dish went viral, says a local researcher. The restaurateur who served it was even promoted to a local political advisory body. But the hubbub has died out, the researcher reports. Now things are largely back to normal. ■



Frame-mogging Mao



American exceptionalism

## What war?

NEW YORK

### American corporate profits continue to be bomb-proof

**I**N MARKETS, NARRATIVES can matter as much as hard data. Investors make decisions based on the stories they tell one another. Over the past seven weeks the tales being swapped have been of war in Iran, its effect on global energy markets and presidential social-media activity. The S&P 500, America’s benchmark index of stocks, has moved up and down with Donald Trump’s estimates of the odds of an end to the conflict. It surged to an all-time high on April 17th as America and Iran agreed to let traffic resume in the Strait of Hormuz (see chart 1). It dipped on April 20th after the deal collapsed.

Sometimes, though, hard data trumps any narrative. And for American stocks, the relevant numbers have been remarkably strong—despite the shock of Mr Trump’s reckless year-long trade war and now a real one in the Gulf.

Estimates from FactSet, which blends actual quarterly results from companies that have already reported these with analysts’ forecasts for firms yet to report, suggest that aggregate earnings for the S&P 500 rose by 19% in the first quarter, year on year. And the forecasters expect the ink to get blacker still. Their predictions of earnings in the next 12 months are 24% higher than a year ago.

Such bullishness about profit growth is rare and usually reserved for recoveries after deep recessions, from which America has been mercifully spared since the covid-19 pandemic in 2020. In the past two

decades analysts have been more optimistic only twice, during the economic rebound from that virus-induced downturn and during an earlier one after the global financial heart attack of 2007-09. Earnings growth over the next year is now expected to beat even the profit bonanza that followed the Tax Cuts and Jobs Act passed in late 2017, a law that included the landmark corporate-tax cut of the first Trump administration (see chart 2 on next page).

Some of the windfall comes courtesy of artificial intelligence. Four of the five biggest contributors to overall American earnings growth in the first quarter are winners from the AI boom. And analysts are betting that all four will keep going strong. Nvidia, ▶▶

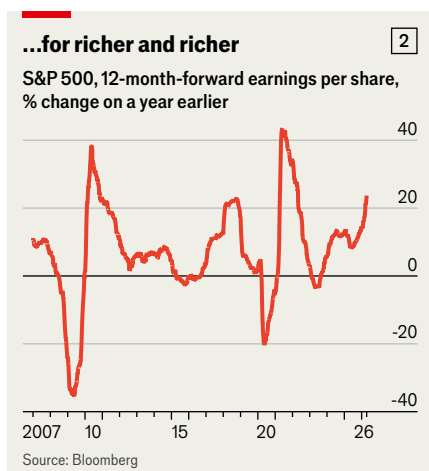


▶ the world's most valuable company and model-builders' chipmaker of choice, is expected to increase its already high earnings in 2026 by nearly 80%. Broadcom, a rival chip-designer, should do nearly as well. Micron and Sandisk, which make memory chips that are handy for AI and increasingly in short supply, are forecast to increase their earnings seven-fold and 16-fold, respectively.

If you exclude big tech, American profit growth looks a bit less impressive. But it is still enviable. FactSet expects earnings at the 493 companies in the S&P 500 that are not the "magnificent seven" technology stocks (Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla) to increase by 16% in 2026. Exclude all information-technology firms and index-wide profits may rise by 17%. That is, roughly, as much as Japan's TOPIX is expected to generate including its tech stars, twice the figure for Europe's STOXX 600 and five times that for Hong Kong's Hang Seng index.

In the first three months of 2026 the financial industry, reflective of the broader health of America's economy, increased its revenues by more than 10% and its profits by nearly 20%, year on year. For the dull business of materials the figures are 5% and over 20%, respectively. Mining and metals firms, in particular, look anything but boring: their profits are reckoned to have grown by nearly 90%. Even in areas that look less sparkly, such as health care and consumer goods, firms like PepsiCo and Johnson & Johnson managed to beat expectations. Expected blowout results for Eli Lilly, which reports on April 30th, would make it the third-biggest single contributor to overall S&P 500 earnings last quarter, behind only Nvidia and Micron.

The main reason American big business has held up so well in the face of Trumpian disruption is that it came into it in great shape. American innovation in AI, pharmaceuticals and other areas remains the envy of the world. Companies had built buffers to absorb some of the tariff shock,



and pricing power to pass the worst of the costs on to consumers. Shoppers are in a sour mood according to consumer surveys, mainly owing to those price rises, but still happy and, critically, able to spend.

Things could yet go awry. If the war in the Gulf drags on, higher energy prices could dampen growth and fuel inflation (see next article). If Mr Trump fires more tariff salvos in his trade war, tries to sack Jerome Powell as chairman of the Federal Reserve (which he once again threatened in recent days), or meddles with the mid-term elections in November, he could undermine confidence in America's institutions and its role in the world. But for now businesses and investors are concluding that, in the contest between American decline and American dynamism, dynamism is still the hands-down winner. ■

## War and oil

# Time's up

LAUSANNE

## Global energy markets are on the verge of a disaster

TRADERS OF OIL futures are a sunny bunch. On April 17th, after Iran's foreign minister declared the Strait of Hormuz "completely open", the price of Brent crude fell by 10%, to \$90 a barrel. Within hours Iran reversed course and attacked an Indian tanker. The next trading day the global benchmark rose by just 5%. It has gone back up above \$100 since but remains around \$15 below its high in late March, even though an American blockade has trapped even more oil in the Gulf.

Fifty days into the Iran war the world has lost 550m barrels of Gulf crude—nearly 2% of last year's global output. Every month Hormuz stays closed, the world misses out on 7m tonnes of liquefied natural gas (LNG), worth 2% of its annual supply. Yet in Western countries, which host the largest futures markets, pain remains limited. Petrol is a bit pricier, but most households can still afford to drive. Trucks keep trucking. Planes continue to fly. Fuel stocks remain close to pre-war levels.

This comforting picture is deeply misleading. By April 20th the last few oil tankers to cross Hormuz before the war began reached their destinations, in Malaysia and California. There is no buffer left to protect the world from the supply shock, at a time of the year when demand from holiday drivers starts to pick up.

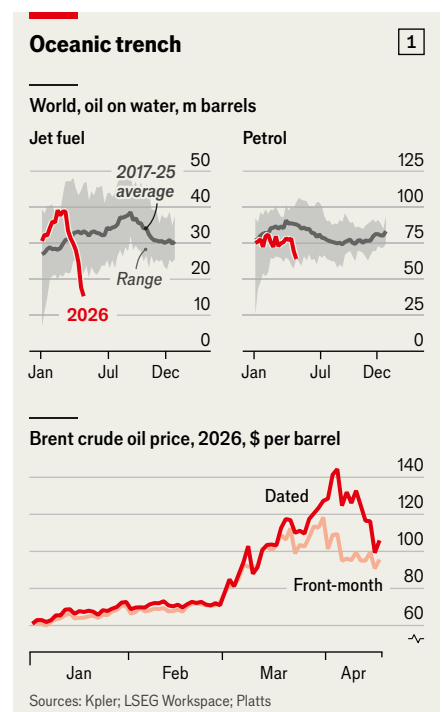
To gauge how close the world is to energy catastrophe, *The Economist* has collected a dashboard of indicators. It shows grave harm has already been done. Worse,

without a reopening costs could soar, triggering events that cause the fuel system to seize up. A reopening of the strait now would—just—avoid calamity. But some additional pain is already inevitable.

Three factors are pushing the world towards the cliff edge. Oil cargoes available to buy are drying up. Refineries are slashing output of fuel. And demand remains artificially high, especially in Europe. Something big must give somewhere large for energy markets to balance.

Take trade first. One reason the largest supply shock in petroleum history has not triggered global panic is that a near-record amount of oil was already at sea when the war started. As American warships set sail for the Gulf in February, countries there cranked up exports. After the latest deliveries, those excess seaborne stocks are now exhausted. So are most cargoes of Iranian and Russian oil, which were loitering at sea but found buyers after America eased sanctions on the two countries. Total volumes on water have fallen at record speed. For jet fuel and petrol they are well below historical norms, and possibly close to the minimum required for seaborne trade to function (see chart 1, top panel).

This leaves Asia, which used to receive four-fifths of Gulf exports, in a particular bind. Commercial inventories in a few other Asian countries are running out. South Korea is due to taper releases from its strategic reserves in the coming days. Japan's will be exhausted in May. Crude stocks in Asia excluding China fell by 67m barrels, or 11%, in the month to April 19th, according to Kayrros, a firm that estimates inventories using satellite imaging. ▶▶



Renewable energy

# Vitamin-D therapy

NEW YORK

**Renewables are shining. The Iran war amplifies their appeal**

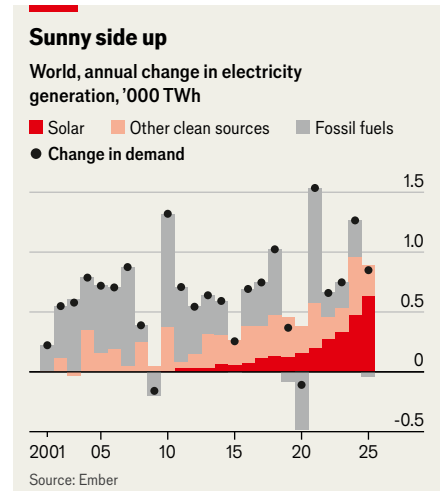
IT IS FASHIONABLE to proclaim that the big winner in energy markets from the new Gulf war will be coal. The sooty stuff is certainly getting a leg-up, especially in countries like India which sit on lots of it and also import lots of liquefied natural gas (LNG). Yet the closure of the Strait of Hormuz may offer an even bigger lift to clean energy, and especially solar power.

Even before America and Israel started bombing Iran at the end of February, the tumbling costs of clean energy were undercutting fossil fuels in many parts of the world. Two new reports show just how much. They are likely to be read carefully in energy-insecure capitals the world over.

On April 20th the International Energy Agency, a club of large oil-consuming countries, published its annual “Global Energy Review”. Solar photovoltaics, the IEA reckons, last year met more than 25% of the world’s new demand for energy (including in power generation and transport), ahead of natural gas at 17%.

The second report, published a day later by Ember, a research firm, focuses on electricity markets. It, too, highlights some record-breaking feats. In 2025, for the first time ever, new renewables generation exceeded the rise in global electricity demand (see chart). And for the first time in over a century, renewables managed to produce more electricity (34%) worldwide than coal did (33%).

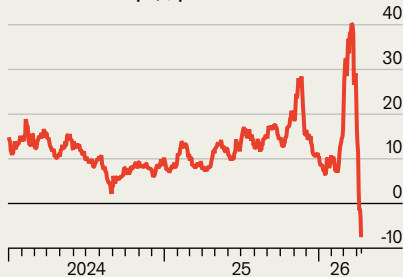
Most of that growth came from a surge in annual solar generation, which shot up by 30%, from 2,143 to 2,778 terawatt-hours (TWh). Newly installed capacity account-



Source: Ember

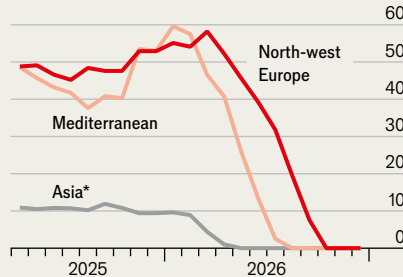
## Unscheduled landing

Gross-profit margin of refineries in north-west Europe, \$ per barrel



Sources: Argus Media; Kpler

Aviation jet fuel, days of cover



\*Excluding China, India, Japan, South Korea, Australia and New Zealand

A shortfall of raw materials has forced Asian refiners to cut throughput by over 3m barrels a day (b/d), or 10% of their combined capacity. That could accelerate to 5m b/d in May and, if the strait stays shut, 10m b/d in July, says Neil Crosby of Sparta Commodities, a data firm. China could help by releasing some of the 1.3bn barrels of crude it holds in reserve. Instead it has suspended exports of refined products. A trader familiar with its energy strategy reckons it will not open the taps before a lasting truce. All this compounds shortages created by the loss of Gulf exports of finished fuel, on which Asia also relies.

Refined-fuel prices are already high. In Asian spot markets, petrol nears \$120 a barrel, diesel \$175 and jet fuel \$200, up from \$80, \$93 and \$94, respectively, before the war. Demand is adjusting, partly by government decree. Seven countries have imposed work-from-home mandates and at least five are rationing vehicle fuel. High prices are doing their bit, too. Small miners, fisheries and other firms without adequate diesel stocks are working part-time. Unable to afford naphtha, another oil product, some plastic-makers have shut units. The combination of state and self-imposed rationing may cause Asian crude demand to shrink by nearly 3m b/d in April, compared with February.

Europe has so far avoided demand destruction, as governments try to preserve citizens’ purchasing power. Of the 27 European Union countries, 16 are using taxpayer money or cutting fuel taxes to shield consumers from higher prices. European refiners have thus barely slashed production. But, like their Asian counterparts, they, too, must buy crude at a much higher cost than Brent futures suggest.

A better gauge is Dated Brent, the price for real cargoes delivered in the next few weeks. The spread between the two—usually \$1-2—widened greatly in April, reflecting fears of near-term shortages, according to Flatts, which produces the benchmark (see chart 1 on previous page, bottom panel). It has narrowed since but remains big-

ger than usual (and does not include eye-watering freight rates and other costs).

Raw material at \$130-150 a barrel has pushed European refiners’ margins into the red, reckons Benedict George of Argus Media, a price-reporting agency (see chart 2, left panel). Extreme backwardation—when commodity spot prices are much higher than those for futures—crush their profits: they must pay up for crude now but sell their products at lower futures prices. Before long they will need to cut output.

If Europe keeps subsidising consumption, markets will get more out of whack. For one thing, prices for products will keep rising. America, where demand tends to jump in a period of summer road trips, will push them further. Competition for LNG, shortage of which was mostly absorbed by Asian consumers’ self-deprivation and a switch to coal, will also increase when Europe starts restocking gas for the winter.

Fast-depleting stocks make matters worse. Europe’s reserves of jet fuel cover some 50 days of consumption, their typical level. But modelling by Michelle Brouhard of Kpler, a data firm, for *The Economist* shows that European stocks will fall precipitously if Hormuz flows do not normalise by June. Those in other importing regions may disappear even faster (see chart 2, right panel). The outlook could worsen if America, seeking to tame domestic prices, emulates China and bans exports of refined products, which have risen by nearly half since the start of the war.

Futures markets are in denial about all this. Even if Hormuz reopened today, it would take months for Gulf crude output, shipping and refining to resume in full. Saad Rahim of Trafigura, a trader, thinks a cumulative loss of 1.5bn Gulf barrels, or 5% of annual global output, is almost unavoidable. If the strait stays closed, it could easily reach double that. The last time oil demand fell by 10% in short order was during the covid-19 lockdowns of 2020, a shock that also brought about a fall in world GDP of more than 3%. The time to avoid a similar tumble is running out. ■

▶ ed for nearly all of the increase. Wind power jumped from 2,510TWh to 2,715TWh. Together with hydropower, geothermal and a few other technologies, renewables generated nearly 11,000TWh of electricity, or 34% of last year's worldwide total. For only the fourth time this century, fossil fuels produced less power than the year before.

Solar prices are tumbling. The "levelised" cost of solar power, which combines capital and operating cost (though does not account for the "system costs" im-

posed by renewables' intermittency) has plunged by around 90% since 2010. It is now below that for coal generation in India even if you add battery storage. Onshore wind power is cheaper still.

If low cost and low carbon were not enough of a selling point, energy crises like the one currently unfolding provide another. In a fragmenting world, clean power offers some energy security. Once installed, solar panels and wind turbines work regardless of geopolitical turmoil, albeit not

regardless of the weather.

After Russia invaded Ukraine in 2022, Germany's earlier clean-energy investments spared it €25bn (\$26bn) in gas imports, roughly equivalent to its annual import bill for the fuel in previous years. More striking, the amount of solar generation added last year surpassed that of electricity produced by burning all the LNG the Gulf exported in 2025. Countries currently suffering gas shortages, especially in Asia, will take that statistic to heart. ■

## BUTTONWOOD

### *Too-stablecoins*

*Why the stablecoin market is fizzling*

STABLECOINS ARE, to proponents, the respectable face of crypto. In contrast to volatile bitcoin, let alone speculative meme coins, they should be backed by holdings of Treasury bills or other dollar-denominated assets. On paper, this makes them a safer store of value than many fiat currencies and a more viable means of payment than other crypto monies, whose price can swing wildly day to day. They should also fuel demand for Treasuries, making it easier for America to finance its budget deficits.

President Donald Trump, whose family has extensive crypto interests and who has issued meme coins himself, is a fan. So are lawmakers. Last July Congress passed the Genius Act, regulating stablecoins in America. In November Scott Bessent, the treasury secretary, predicted the stablecoin market, then worth some \$300bn, could grow ten-fold by 2030. In February Standard Chartered, a sober bank, forecast that it could be worth \$2trn by the end of 2028.

This prospect spooked America's banks. That is because a loophole in the law lets stablecoins offer a deposit-like yield without bank-like regulatory burden. The American Bankers Association, an industry group, warned that a \$2trn market for stablecoins, virtually all of it dollar-pegged, could lead to a 10% decline in bank deposits. This would raise the average funding cost for lenders by about a quarter of a percentage point, they said, crimping their profits and driving up interest rates on all manner of loans for everyone else.

Bankers and stablecoin issuers have since been locked in a fight over the final shape of a follow-up bill, the Clarity Act. The House of Representatives passed its more restrictive version last July. The Senate is preparing to vote on its (slight-

ly more permissive) text in the next few weeks. Yet as the battle comes to a head, the bankers and their crypto rivals suddenly have much less to fight over.

After growing by 30% in the six months to late October, total stablecoin assets have barely budged. That is better than bitcoin, whose market value has plunged from \$2.3trn to \$1.6trn. Still, it is hardly the stuff of a financial revolution.

Announcements of new stablecoin experiments and products have not been explosive, either. In October ten big banks from America, Britain, Canada, Europe and Japan formed a group "to explore" if stablecoins have merit. The exploration has yet to lead to discoveries. Rumoured stablecoins from retailers such as Walmart and Amazon have remained rumours.

One explanation for stablecoins' excessive stability concerns regulation. The Genius Act offered some certainty in that regard but also, as the yield loophole shows, left many things hazy. Even before the Clarity Act clears it all up, financial rule-makers are tightening the screws. Mr Bessent's bullishness notwithstanding,

this month his department released a proposal that would treat stablecoin issuers as financial institutions for the purposes of anti-money-laundering and know-your-customer laws. This means adopting the same onerous monitoring and compliance procedures as banks, adding to the cost of launching and managing a new coin.

Besides regulatory constraints on supply, stablecoins have been beset by a more serious problem: soft demand. In particular, their vaunted usefulness as a means of payment has failed to impress. Some businesses rely on them to enable payments outside office hours. So do some individuals in places where dollar banking is out of reach. But the lion's share of transactions concerns trading and transfers associated with the crypto industry, not the real world.

New research by Franklin Noll of the Federal Reserve Bank of Kansas City finds that nearly half of all stablecoins play the role of crypto-trading assets. Less than 1% of stablecoins in circulation are used for payments. Boston Consulting Group and Allium, a blockchain-data firm, arrive at a similar figure looking at annual transaction values using stablecoins. As crypto enters one of its periodic winters amid a broader risk-off mood provoked by Mr Trump's war-mongering on trade, Iran and the Fed (which he wants to lower interest rates), stablecoins feel the chill.

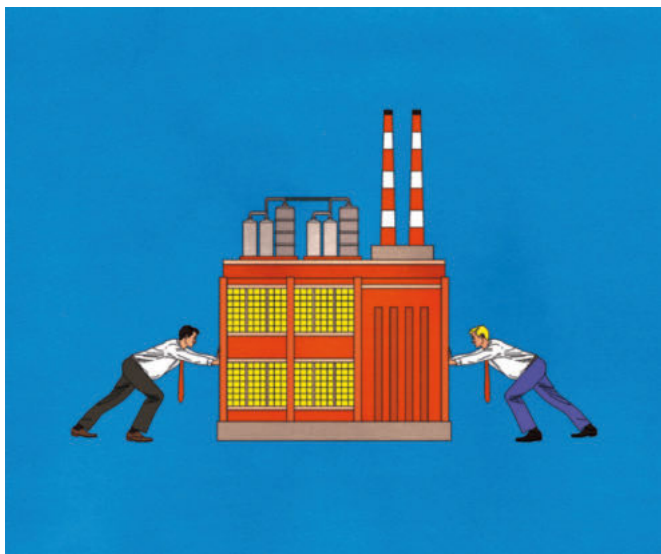
If investors embrace blockchain-based "tokenised" assets, which require something like stablecoins to trade, demand for dollar-pegged digital currencies may rise. But tokenised finance, worth \$30bn today, is in its infancy. So long as stablecoins are tied at the hip to their unstable crypto cousins, bankers need not lose sleep.



## FREE EXCHANGE

### *Interventionism, revisited*

*Has the World Bank performed a U-turn on industrial policy?*



SINCE 1980 the World Bank and the IMF have stuck to a plan. When countries on the brink of financial collapse come to them, the institutions extend fresh loans and coax creditors to take haircuts in return for liberal reforms. In 1993 a report from the bank titled “East Asian Miracle” grudgingly admitted that the growth of Japan and South Korea in preceding decades may have been aided by governments’ illiberal picking of industrial winners. But that was largely a matter of luck. For other countries, the report declared, “The promotion of specific industries holds little promise.” The “Washington Consensus” of free markets, sober fiscal policies and private enterprise would carry the day.

This makes the bank’s latest research come all the more arresting. “Industrial Policy for Development”, released in March, is a guide for governments determined to intervene in the economy. Ana Margarida Fernandes, who leads a group researching development, and Tristan Reed, one of her economists, cover whether, when and how poor countries might use tools from public spending to tariffs and exchange-rate management to boost industry.

Long-time critics of the Washington Consensus have greeted the volume as a 275-page surrender. Jake Sullivan, architect of Joe Biden’s hands-on industrial policy, crowed that its significance was “hard to overstate”. Yet on a close read, many ideas buried in the dense text look familiar. What has changed most is the tone.

The label “industrial policy” was once reserved for big ideas such as import substitution, where states ban trade with foreign countries to nurture domestic industries until they are strong enough to compete on an equal footing. Over the past decade, however, the list of policies counted as intervention has lengthened. The bank distinguishes two main categories.

One concerns “market incentives”. Ms Fernandes and Mr Reed treat these cautiously. India and Brazil may get some benefits from offering startups subsidies that offset the lower quality of home-grown knowledge and universities. But these are likely to be expensive. Given the high chance of startup failure, they also need a large market with lots of candidate firms if they are to have any effect. Other tools are even less useful. Restricting imports and paying firms to produce components locally excludes countries

from global value chains. Offering consumers subsidies does little to make firms more competitive. Tariffs promote some industries at the expense of others, which must pay more for their inputs.

The report is less averse to the second category, “public inputs”. It encourages policymakers to increase public spending on things like electricity, water supply and transport, for instance lauding Ethiopia for increasing the cargo capacity of its national airline to encourage horticulture exports. It supports the creation of industrial parks where such infrastructure is readily available, as Morocco and Costa Rica have done. And it backs training initiatives such as a government scheme in Romania which produced workers that eventually attracted firms. All sensible. None of it particularly statist.

Or novel. The report from 1993 offered similar advice. It warned that import substitution was too risky, as cosseted domestic firms tend to fail when exposed to international competition and that warping the economy to benefit handpicked industries risked starving the rest. Instead, countries could try to boost exports by attracting foreign investment and increasing infrastructure spending. Indeed, in the past three decades much of the bank’s loans have financed bridges, roads and railways.

Ms Fernandes and Mr Reed acknowledge that poor countries have changed since 1993 in ways that make them less vulnerable to industrial-policy disaster, notably keeping inflation and budget deficits under control. The authors are also less reflexively dismissive of statist tools, and give them serious consideration. But apart from public inputs, few get an explicit thumbs-up.

Instead, the report’s most important innovation, besides going easy on finger-wagging, is to acknowledge reality. “We begin”, say the authors, “with a government that has already decided to expand a particular business activity.” Of the economists covering the bank’s 189 member countries, four in five have been asked by governments to advise on industrial policies. And of the 183 countries assessed by the report, each had at least one industrial policy in place. Kenya hopes to nurture a tech industry behind a wall of subsidies. Indonesia has banned the export of many raw commodities. This makes attempts to talk policymakers out of such ideas fruitless, says one bank official. More are likely to listen if offered minimally distortive advice on how to intervene.

#### **Bossy states, courteous technocrats**

The trouble with this approach is that humouring today’s policymakers risks emboldening them further. Few are likely to be content with public inputs. Many risks forgetting the lessons of past failures of market incentives. In the 1960s and 1970s many African countries undertook similar industrial experiments to East Asia’s policies. For a time they grew at a similar pace. Yet from the mid-1970s it became apparent that policymakers in Africa had placed the wrong bets. When these blew up, this kicked off the crisis-ridden decade that eventually led the World Bank and IMF to codify the Washington Consensus.

All industrial policy favours one area of the economy over another. That is true even of public inputs: building a road helps manufacturers more than it does tech startups. No bureaucrat or economist can change that. Nor can they tell if pumping an industry full of cheap labour and investment creates efficiency or bloat. The authors acknowledge that the world has changed. But their implicit warning to policymakers remains the same: interventionism leads nowhere good. ■

## Science & technology



Chernobyl, 40 years on

### A laboratory like no other

CHERNOBYL NUCLEAR POWER PLANT AND KYIV

The site of the world's worst nuclear disaster is still keeping scientists busy

AS A BLUE coach pulls up outside Chernobyl nuclear power plant, friendly stray dogs approach it. It has passed through multiple Ukrainian military checkpoints—necessary since Russian troops briefly occupied the plant on the first day of the invasion in 2022. Out spills the next shift of workers, ready for 14-day stints on site. Just above the main entrance, employees tuck into a subsidised lunch of Ukrainian staples. The cafeteria is abuzz, even though the last of the plant's four reactors shut down for good in 2000.

Staff clad in three layers of white cotton dart into and out of the “Golden Corridor”, nearly a kilometre of narrow hallway that runs the length of the plant, its walls a distinctively Soviet gold-painted aluminium and its floors a staggering expanse of clacking broken tiles. Along its length there are pans with sodden rugs to step into, to collect any potentially radioactive dust on the bottom of shoes, and antiquat-

ed whole-body radiation-scanner gates: only the clean shall pass. Some of those traversing the corridor are involved in radiation monitoring. Many more carry out the excruciatingly slow business of decommissioning and dismantling. And some are still making new scientific discoveries.

The accident that began unfolding here on April 26th 1986 was disastrous, and not only for the people who lost their lives during and soon after. But some good has come from it. It has provided a unique laboratory: an unnatural experiment that four decades on continues to produce valuable lessons on the biology, ecology

and sociology of nuclear accidents.

When reactor number four exploded during a safety test, its core was exposed to the air. Out streamed a jumble of more than 100 radioactive elements. Inert gases such as xenon and krypton were swept quickly and harmlessly away. But those radioactive atoms that settled onto the region and its people—from iodine (which loses half its volume to decay every eight days) to technetium (which needs 200,000 years)—continued to move around the environment. It is the relentless tracking of these radionuclides, particularly strontium and caesium, the ones most worrisome for human health, that has preoccupied many researchers since.

Gennady Laptev and Oleg Voitsekho-vych were roped in after the accident to assist as newly minted graduates. They were joined by Soviet scientists of every stripe to take environmental stock of what had been wreaked. Dr Laptev soon found himself on helicopter missions, dangling detectors over the destroyed reactor to quantify the radiation pouring out.

Today they are both senior researchers at the Ukrainian Hydrometeorology Institute's Department of Environment Radiation Monitoring, and are still at it. In a chilly office in Kyiv—heating and electricity come and go in wartime Ukraine—they finish each other's sentences as they de- ▶▶

→ ALSO IN THIS SECTION

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79 Well Informed: Bone broth's benefits

► scribe what they have learned about radionuclides' journeys through lakes, rivers and groundwater.

Some of their most crucial work was determining the radiation risk from drinking water. After the accident, local people feared what came out of the tap. But Drs Laptev and Voitsekhovych showed it provided no more than 10% of their total long-term internal radiation dose, and probably closer to 1%. The rest came from food and, in particular, milk.

### Truth and consequences

The example that Chernobyl has provided of how the landscape, water dynamics and human behaviour affect radiation risk will be important when dealing with future disasters. Scientists never stop studying it, because radioactive isotopes can move in surprising new ways.

Mostly, when levels of radiation rise at Chernobyl, they are still within acceptable thresholds. But sometimes those thresholds are breached. Drs Laptev and Voitsekhovych speak animatedly about the natural draining of Chernobyl's cooling ponds, which had been topped up with water from the Pripyat river until 2014. The relatively clean groundwater beneath the ponds had acted as a barrier, hemming in the much more contaminated groundwater closer to the ruined reactor. As the cooling ponds have slowly drained, strontium levels in local waterways have begun to exceed those set by the World Health Organisation.

Valery Kashparov of the Ukrainian Institute of Agricultural Radiology may be the world's foremost expert on how a shower of radioactive particles affects land and the foods that come from it. The magnitude of the shower in any one place is not a definitive factor. The soil probably matters most: peaty and sandy earth gives up

its contaminants to growing plants far more readily than black, humus-rich soils. And different foodstuffs, he has found, soak up radionuclides differently. Oats disproportionately draw in strontium; peas, caesium. Wheat and potatoes, however, leave more radionuclides in the earth.

Dr Kashparov has compiled a considerable list of agricultural countermeasures to reduce risk. Feed livestock and fish with a chemical called Prussian Blue that binds to caesium and that helps it to be excreted; turn iffy milk into a form (such as butter or cheese) that can outlive dangerous radioactivity; add lime or mineral fertilisers to soil to impede uptake.

Yet human behaviour complicates matters. Early on, when radioactive iodine was still abundant, milk contributed to much of the spread in radiation because it was a means of barter for smallholders. For any post-disaster agricultural plan to be effective, it must take into account local economies, dietary habits and risk tolerances, and encourage a focus on public awareness, stresses Dr Kashparov.

Another factor in how radionuclides pass from soil to food is the variety of bacteria nearby. Few have given that more thought than Olena Pareniuk of the Institute for Safety Problems of Nuclear Power Plants. Her work has shown that different bacteria can impede or enhance the transfer. Two preventive measures follow: inoculate the soil with the impeding kind and your crop comes up cleaner. Introduce the enhancing kind and the plant becomes a disposable contaminant sponge which helps clean up the soil. Results from laboratory tests of both techniques are modest but encouraging.

Dr Pareniuk has also studied the bacteria that live inside Chernobyl's ruined reactor. They survive—thrive, even—in an in-

hospitably alkaline environment in which there are virtually no nutrients. Still more astonishing, they are breaking down the wildly radioactive mixture of melted uranium fuel, concrete and metal known as corium. "Whatever material human beings create, nature will find its bugs to decompose it," says Dr Pareniuk.

Even more hopeful stories have emerged further up the food chain. Jim Smith of Portsmouth University began studying Chernobyl in 1990 as a physicist. But he has since become an expert on the region's wildlife. The evacuation of the exclusion zone is by now a well-documented experiment in rewilding. It is not just that animals took over when people left. Larger beasts particularly flourished; wolf and deer populations bounced back and long-gone species such as the lynx returned. There is still some debate about, among other things, the long-run effects on smaller creatures such as barn swallows and butterflies, but in general the accident left little legacy in animal populations or in their DNA. The zone has no three-eyed fish (though perch in the most contaminated areas seem slower to develop sexually).

### Something in the air

A more harmful consequence of the accident, Dr Smith says, has been a misunderstanding of radiation risk among public and policymakers alike. Apart from an early spike in (mostly non-lethal) thyroid cancer, an exact count of human deaths caused by the ensuing radiation exposure is all but impossible. Other factors, not least natural radiation from the earth itself, add up to lifetime cancer risks that the disaster did not discernibly raise. Yet that is not the perception. Chernobyl gave the world a multigenerational case of the heebie-jeebies, widespread imaginings of mutant creatures and an inchoate fear that has ultimately influenced energy policy.

The sodden-rug pans and security doors multiply as the Golden Corridor reaches what remains of reactor number four, now beneath an aircraft-hangar-size arch known as the New Safe Confinement (NSC). It was slid into place in 2016 to supplement the hastily built concrete "sarcophagus" built over the reactor in 1986. It cost \$1.6bn and was intended to contain the growing radiation leaks for 100 years.

On Valentine's Day in 2025, that timeline was curtailed. A Russian drone pierced the NSC, starting a fire that consumed more than half of an inner protective layer. At the back of the NSC is a modern control room that stands in sharp contrast to the Soviet design of the plant's other nerve centres. Brows furrow as engineers grapple with how the damage will affect the NSC's capacity to keep the remains of the core contained. Forty years on it is yet more research that misfortune has necessitated. ■



Born to rewild

## Ecology

## Last resorts

## Why grouse collide with chairlifts

NATURE HAS evolved an extensive range of visual codes to allow individuals of one species to pass important messages to those of another. Brightly coloured skin? Potentially poisonous—do not eat. Thorny leaves? Not worth the effort—stay away. The message “Do not collide with this chair lift” has, however, proven harder to communicate.

This state of affairs is especially unfortunate for black grouse, which have for decades been flying into chair-lift cables at Alpine ski resorts, often dying as a result. Twenty years of warning signs have failed to keep the birds away. New research published in *Experimental Biology* is revealing that most of these signs are in a colour the birds cannot easily see.

The black grouse is a bird with red patches of skin above its eyes that is abundant in Russia and Scandinavia. It also has a small subpopulation in the Alps, but it is getting smaller. An analysis from 2008 revealed that grouse numbers were 15% lower in the vicinity of ski lifts. This reinforced observations made at ski resorts that these birds frequently smacked into their cables.

To make these cables more visible, resorts adorned them with coloured markers 3.5 to 15 centimetres wide. Since the black grouse made up 70% of bird-cable collisions, and the assumption was that a bird with red on its head would be able to see that colour on its nearest and dearest, most

markers were made red too. Collisions nonetheless continued. Puzzled by this, Marjorie Liénard at the University of Liège and independent sensory biologist Simon Potier decided to study the vision of captive-bred black grouse. They did this by placing them inside a black box with one clear wall, beyond which lay a screen on which different patterns were projected.

As birds cannot move their eyes nearly as much as mammals, they must move their heads to track moving objects. Dr Potier and his colleagues used this fact to remotely monitor the grouses' head movements as various stripe patterns were moved across the screen. If the grouse turned their heads to track the stripes, he knew that the birds could see them. Separately, Dr Liénard and her team studied light-sensitive receptor proteins collected from the eye of a dead grouse to determine what colours it might be sensitive to.

The research revealed that the black

grouse has poor vision. It can see contrast, but not as well as people can. And although it can see yellow, green, blue, purple and part of the ultraviolet spectrum, it does not see red well. Hence the collisions. The researchers' findings at last provide the solution that ski resorts have been looking for. Warning markers ought to present strongly contrasting pairs of colour, like purple and yellow or black and white, rather than being monochrome. The contrast markers must also be made larger (no less than 14 centimetres across) and more widespread (at least one every 16 metres) if they are to deter the animals.

As for why a bird that struggles to see red nonetheless bears the colour, Dr Liénard has an answer. She explains that in addition to reflecting red light, those patches also reflect ultraviolet light that people cannot see but grouse can. The collisions are a case of inter-species communication gone wrong. ■

## Cyber-security

## Whose mine is it anyway?

## Cryptocurrencies are increasingly made on hijacked computers

MINING A CRYPTOCURRENCY can be an expensive business. Producing new coins, also known as tokens, can require computers to solve cryptographic puzzles, which takes large amounts of power. One way to keep costs down is to relocate mines to wherever electricity is cheapest. Cheaper still is having others foot the bill. An unsuspecting organisation's power can be hijacked by stacking computers in a crawlspace or storage room, for example. Such operations, however, are regularly discovered, and culprits risk penalties and confiscated kit.

A less risky and more scalable approach is to steal power by remotely sneaking crypto-mining software onto other people's computers. Crypto-jacking, as this trick is known, is booming. Over the course of 2025, instances jumped by about 20%, according to a note in November from GreyNoise, an American security firm. Victims take quite a hit. A study published in 2022 by Sysdig, a security company based in San Francisco, estimates that every dollar in crypto thus generated costs victims an average of \$53 in computing expenses.

Part of the surge is due to the high value of cryptocurrencies in recent years (although there has been a drop in 2026). The barriers to crypto-jacking are also relatively low. The requisite software is readily obtained from underground web forums,

says a specialist with Interpol's cybercrime unit in Singapore who required anonymity to comment on operations. And installing such software on computers is less challenging than stealing data, or, in the case of ransomware, holding it hostage. The upshot is that crypto-jacking shows no sign of going away.

Among the most useful tools in crypto-jackers' arsenal are web-crawling bots. These packets of codes sniff out computers with security settings that are weak or which have not been changed since purchase. Many such bots are now roaming cyberspace, tipping off their masters when opportunities are spotted. Advanced artificial-intelligence models could, in theory, help identify additional targets, but Michael Clark, head of threat research at Sysdig, believes their edge over existing bots is not large enough to justify the expense.

When vulnerabilities are found, crypto-jackers are often among the first to exploit them. Corporate computers rendered vulnerable by a configuration error are often commandeered within an hour, says Mr Clark. Servers are particularly attractive targets. They are always on, and surges in traffic are common. Also, because servers act as data-processing hubs for other computers, crypto-jacking software can often replicate itself on the network's spokes.

Another way crypto-jackers can access ►►



Anyone for a red run?

computers is by finding login credentials unwittingly posted online. GitHub, a massive online repository of code, is a good place to look. And if a bot cannot find a server password, it might be able to guess it. In January 2025 it emerged that one such “password-spray attack” allowed crypto-jacking software to be run on servers rented by USAID, an American government agency, at a cost of nearly \$500,000.

Even bigger scams have come to light. In 2024 Ukrainian police, helped by Euro-pol, arrested a man in Mykolaiv alleged to have used password-cracking software to mine cryptocurrency worth nearly \$2m over the course of two years. On August 15th 2025 America’s Department of Justice announced that a Nebraska man had crypto-jacked nearly \$1m in tokens while simultaneously running up more than \$3.5m in cloud-computing fees for his victims. He was sentenced to a year in prison.

In recent years personal laptops and mobile phones have replaced corporate servers as prime targets, says Alex Delamotte of SentinelOne, a security firm in Mountain View, California. She attributes this to the rising value of Monero, one of the relatively few cryptocurrencies that can be mined on personal devices.

Individuals are also likely to be softer targets than outfits with a dedicated cybersecurity team. Scripts used for crypto-jacking—a list that includes Crypto-Loot, Minr and XMRig—can be illicitly embedded in email attachments, free apps, online “malvertisements” and even web browsers. When unsuspecting users click or visit, parasitic code invisibly deploys, often bypassing antivirus protection. In July c/side, a security firm in San Francisco, said it had discovered more than 3,500 websites infected with a stealthy crypto-jacking script it described as a “digital vampire”.

These problems continue to get worse, says the expert from Interpol. Crypto-jacking scripts are increasingly packaged as “fileless” code, which is much harder to spot when uploaded to a given device. Google tacitly acknowledged its inability to stamp out crypto-jacking on its cloud service when it introduced, in 2023, a programme to provide certain victims credits worth up to \$1m for losses incurred over any 12-month period.

Security firms, however, aim to adapt. New forensic software packages analyse processing loads, data traffic and electricity usage, flagging spikes and other suspicious patterns. And heavyweights, Google and Microsoft included, are increasingly folding advanced AI models into such offerings. Some hope that these models will become experts at spotting crypto-jackers’ tricks as well as—eventually—automatically deleting malicious code. Until the cryptocurrency bubble bursts, though, expect the arms race to continue. ■

## Well Informed

# Is bone broth good for you?

The drink is wholesome, but its purported health benefits are unproved

**B**OIL AN ANIMAL’S stripped carcass until the connective tissue disintegrates and the bones, leached to exhaustion, may crumble under light pressure. The result is bone broth, a pricey wellness drink. Yet the stuff is becoming increasingly popular, thanks in part to praise from celebrities. Enthusiasts claim it curbs overeating and is good for the skin, bones and gut. What, though, does the research say?

Start with weight loss. Bone broth contains protein, which can promote the release of appetite-suppressing “satiety hormones” such as cholecystokinin, peptide YY and glucagon-like peptide-1 (GLP-1). Studies have also shown protein reduces the stomach’s production of ghrelin, a hormone that stimulates hunger. Evidence that bone broth actually provides enough of any of these for weight loss, however, is almost as thin as the drink itself.

In one trial, published in June 2025 in *Clinical Nutrition Open Science*, 64 obese adults shed an average of 7.4kg after two three-week stints on a bone-broth-rich diet, while also gaining muscle mass. But as the participants took regular light exercise throughout the trial, and no control group was included, it is possible a similar regimen without bone broth might produce comparable results.

Swigging bone broth may, as many

devotees contend, trim appetite by creating a sensation of fullness. A paper in *Appetite* in 2007 found that “preloading” with soups before a lunch main course did cut total caloric intake by a fifth. That trial, however, did not test bone broth, which suggests that any watery food can be used for this hack.

What about skin and bones? Bone broth, boosters note, contains collagen, the main structural protein in those tissues. Some clinical trials have found collagen supplements can boost bone density in post-menopausal women. But bone broth’s collagen content is typically well below the doses used in supplement studies. Bone broth is not a great source of calcium, iron or magnesium, either. In an analysis of 30 preparations of bone broth, published in 2024 in *European Food Research and Technology*, the authors wrote that their findings “generally contradicted the popular narrative” around its supposed benefits.

Bone broth does beat collagen supplements on nutritional breadth. Compounds released during simmering, for example, include glucosamine and chondroitin sulphate. Some research suggests these may lessen joint pain in people with osteoarthritis, a condition in which cartilage breaks down. Results, though, have been inconsistent.

The amino acids in bone broth may also have benefits. Consider a small trial reported in *Medicina* in 2021. Researchers in Mexico fed six mice bovine bone broth for ten days. Another six were given water instead. Acids (of the non-amino kind) were then rectally administered to cause colonic lesions. The control group’s colons became highly inflamed and suffered “severe architectural distortion”. In the mice given bone broth, inflammation and damage were moderate. Perhaps, say the researchers, because its amino acids curbed inflammation enough to limit the mice’s injuries. Whether a similar process is at play in humans will take time to investigate.

In short, although some of bone broth’s purported benefits are plausible, evidence remains sparse. Much clearer is that the stuff is wholesome and, for many, comforting. So feel free to indulge: the only harm bone broth will do is to your wallet.



## Culture



### Oratory

## Uncivil war

### The rhetoric of war has changed. Not for the better

IT IS JUNE 6TH 1944. The second world war is in its fifth year. Millions are dead. Much of Europe lies in ruins. The fate of the war now hangs on a single stretch of water. In the English Channel 150,000 troops mass. The American president addresses his people. But despite the bloodshed, his mood is not bloodthirsty. Americans fight, he says, “not for the lust of conquest. They fight to end conquest.” His ally Winston Churchill will match this tone in his history, which he opens with a “moral”. “IN WAR: RESOLUTION. IN DEFEAT: DE-

FIANCE. IN VICTORY: MAGNANIMITY”.

It is now April 2026. America is embroiled in another war. This war, too, hangs on a stretch of water, this time the Strait of Hormuz. The American president addresses his people. The tone is belligerent. He says: “Open the Fuckin’ Strait, you crazy bastards, or you’ll be living in Hell—JUST WATCH!” His secretary of war, Pete Hegseth, says the Iranians are “toast and they know it”. This is not a “fair fight”: “We are punching them while they’re down, which is exactly how it should be.”

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War in the West has changed. Militarily, of course—stealth bombers have replaced Spitfires—but it has changed oratorically too. To talk about oratory in modern politics feels anachronistic: budget speeches do not abound in alliteration and assonance. But the words of war are different. Hitherto, when the West has waged war, it has almost always done so with modern weapons but antique words.

Thus while countries fought on the beaches and on the landing grounds with guns and bombs and bullets they also—and with equal strategy—fought on the page and on the podium and on the wireless. There were Shakespearean allusions and nods to Abraham Lincoln and rolling repetitions of the word “fight”. Oratory mattered. “Of all the talents bestowed upon men,” Churchill wrote, few are “so powerful” and “none is so precious.”

Its power seems to have been forgotten. A recent White House video titled “Justice the American Way” is an almost wordless montage of images from “Gladiator”, “Top Gun” and “Transformers”, interspersed with footage of actual Iranian targets being hit. Instead of quoting the Bible, Mr Hegseth misquoted it. On April 15th he led people in a prayer that “reflected” Ezekiel 25:17—but which was actually taken almost verbatim from “Pulp Fiction”, a less celebrated spiritual work. (The actual Ezekiel verse is about God smiting the Philistines.)

An obvious counter-argument is to say: so what? Death does not distinguish between a leader who can produce a Periclean flourish and one who can’t. Moreover, winged words—as poets during the first world war pointed out—can be deceptive, luring men to a mechanised slaughter that is neither “dulce” nor decorous. When Rudyard Kipling’s only son was killed in the Battle of Loos, he wrote the bitter, un-Kiplingish epigram: “If any question why we died,/Tell them, because our fathers lied.” Butchery can be ill-served by oratory.

Yet it is hard not to feel that something is lost when a Western leader channels “Transformers” rather than Churchill. Allusion was once essential to oratory. Sensibly so: all men may be created equal, but all men’s words are not. Just ask the poor chap who gave a (now largely forgotten) two- ▶▶

▶ hour, 13,607-word address at Gettysburg before Lincoln gave his 271-word zinger.

All great orators have thus borrowed, invoked, alluded. When Colonel Tim Collins sent British soldiers into Iraq he told them to “tread lightly” as they trod on the site of the Garden of Eden. The “few” of Churchill’s Battle of Britain speech stood shoulder to shoulder in the imagination with the “happy few” of Shakespeare’s “Henry V”. The atomic bomb was ushered in by a flash and by the Bhagavad Gita. “I am become death,” J. Robert Oppenheimer would later say, “the destroyer of worlds.”

This isn’t merely oratorical fireworks. The right quotation conscripts the dead along with the living; marshal the right quotation and you marshal not merely words, but a battalion of ideas. Invoke the Bible and, tacitly, you invoke the better angels of our nature. Call upon Shakespeare’s “Henry V” and, implicitly, you also call upon God, Harry, England and St George. A tenth of all Churchill’s speeches, says Andrew Roberts, his biographer, referred to history to encourage listeners to see the war “in its historical context, of threats that had been posed to Britain in the past” that the country had defeated.

Cultural allusions offer sinew-stiffening encouragement. They also enable a speaker to “elevate the tone”, says Barry Strauss, a professor of military history at Cornell University. Pericles’s funeral oration does not merely tell Athenians to fight. He tells them they are “fighting for something...for democracy”. In 1940 Franklin Roosevelt declared that “Never before since Jamestown and Plymouth Rock has our American civilisation been in such danger as now.” America would support Allied countries; by rearming, it would become “the great arsenal of democracy”.

Leaders must evoke the right cultural allusions, however. William Nicholson, one of the writers of “Gladiator”, finds it “terrifying” that the White House is quoting the film: it “tells you that they actually see war as a Hollywood movie”. In fact, they see it less clearly than one. Mr Nicholson made the gladiator a reluctant fighter. Maximus was not a violent lunk, but a peaceable man forced to fight for his wife, child and the “dream that was Rome”. War is not fun. As Roosevelt once said: “I have seen war on land and sea. I have seen blood running from the wounded...I hate war.”

For as Hollywood knows—but the White House no longer does—the best war oratory is not actually about war. It is about peace. People hear it and think not merely of the lives that might be lost, but of a way of life that might be: they fear for culture, for democracy, for decency. You weep at good oratory because you fear not just a lost war but a lost world. Yet when you watch the White House videos, you weep for a lost world anyway. ■

## Geopolitics and the internet

# Prophets of doomscrolling

WASHINGTON, DC

## Iran is winning the AI propaganda war

**I**N PREVIOUS DECADES, propaganda for murderous Middle Eastern regimes tended to be unpersuasive. As American forces rolled into the Iraqi capital in 2003, Saddam Hussein’s information minister, Muhammad Saeed al-Sahaf, stood on a roof and claimed that “Baghdad is safe...the infidels are committing suicide by the hundreds on the gates.” He added that God was “grilling their stomachs in hell”. Behind him, television audiences could see Iraqi soldiers fleeing for their lives.

In today’s Gulf war, astonishingly, a murderous dictatorship appears to be winning the propaganda battle against the land of the free and the home of Hollywood. Day after day, a team backing Iran’s theocratic regime releases videos, made with artificial intelligence, that ridicule Donald Trump and glorify those who resist him. They swiftly go viral. Joseph Bodner and Krysia Sikora of the Institute for Strategic Dialogue, a pro-democracy NGO, found that two pro-Iran networks had racked up more than a billion views on X in the first month of the war.

The regime is not known for its sense of humour—ask the novelist Sir Salman Rushdie. Yet many of the videos are witty and show great fluency in their enemy’s culture. The soundtrack is often thumping rap and the lyrics are usually in English. The figures are frequently made of Lego. Mr Trump is portrayed as a vain, cowardly

liar; his Pinocchio-nose is soon as long as a golf club. He declares victory even as his pants are, literally, on fire. Pete Hegseth, America’s secretary of war, is shown as a vomiting drunk with crusader tattoos.

Iran’s propagandists have advantages that Saddam’s flack lacked. AI allows expensive-looking videos to be made cheaply and quickly in response to breaking news. Since most AI models are trained on Western content, the technology also makes it easy to generate new slop that riffs on Western cultural tropes. Social-media channels offer multiple ways to circulate Iran’s zingers: handy, since YouTube has blocked them. And an unpopular American president waging an unpopular war gives them a mockable target.

Nonetheless, Iran has played its cards deftly. Rather than chanting “Death to America”, as is traditional, the videos play up criticisms of Mr Trump that resonate with a global audience. Binyamin Netanyahu, Israel’s prime minister, is shown whispering words of strife into his ear. Young Americans line up to be drafted as plutocrats on Epstein island frolic with girls in bikinis. A ticker shows the oil price soaring. A bonfire of banknotes shows American taxpayers’ cash being wasted. American bombs kill Iranian schoolchildren.

The lyrics are not exactly Omar Khayyam, but they are sharper than plenty of popular hip-hop tracks. “Hey Loser, come closer, I’m the exposer/Fake billionaire, your whole empire a poser” is not a bad put-down. Nor is: “You drop ‘Fake News’, sitting high in your tower/Morally bankrupt, just drunk on the power.”

Explosive Media, the group that makes many of the videos, claims to be independent. However, it is operating out of Iran, where the internet is shut down for all except those most deeply favoured by those in power. And a spokesman for Explosive Media admitted to the BBC that the regime was a “customer”.

Look closely, and the propaganda is fairly blatant. Iranian forces are portrayed as heroic (though the regime has massacred thousands of its own people) and ever-victorious, obliterating American bases and Gulf skyscrapers that in fact they only singed. Nods to conspiracy theories popular both in the Middle East and the West abound: that the Illuminati control America and that the death of Princess Diana, a British royal who was dating a Mus-



Can't keep his nose out of it



## BACK STORY

### *I'm bad, you know it*

*In a controversial new biopic, Michael Jackson is an eccentric saint. Yuck*

PART OF MICHAEL JACKSON'S intergalactic appeal was the way he evoked yet dispelled danger. His androgynous looks and high-pitched voice took the edge off songs of lust. A spindly body made his spiky dance moves unthreatening. In music videos he breaks up brawls and rescues damsels in distress; the zombies who stalk the "Thriller" mini-movie are only a bad dream. As an artist, Jackson was a one-man fairy tale, sublimating pain and peril into joy.

"Michael", a biopic out this week, tries to pull off the same trick with his life. It is a triumphant version of a story that, in reality, became a tragedy: for Jackson, who died in 2009, and for the children he allegedly abused. It aims to transport you to his febrile heyday in the 1980s, but its implicit lesson—about money, memory and the malleability of facts—is uncomfortably contemporary.

The villain in this fable is Jackson's tyrannical father, Joseph, played by Colman Domingo. It opens in Gary, Indiana, in 1966 as Joe pitilessly drills his sons into shape as the Jackson 5. Their star is little Michael, played by Juliano Valdi as a child and, as an adult—to the extent that he becomes one—by the singer's nephew, Jaafar Jackson (pictured). The film charts the family's rise and Michael's yen to forge a solo career and escape his father's thrall.

For a movie about an oddball megastar who befriended a chimpanzee, much of "Michael" is surprisingly dull. The hero keeps getting bullied by his father and consoled by his mother (Nia Long), while accumulating exotic pets and staring longingly at pictures of Peter Pan. He develops a taste for leather and epaulettes; everyone tells him how special he is. In stretches, this is the sort of fairy tale that could put you to sleep.

Except, naturally, the main event is the music. Here is Jackson's magical timbre on "I Want You Back", released when he was 11. Later comes a recreation of the wondrous moment in 1983 when he debuted his moonwalk to "Billie Jean". Movie or no movie, these songs have shown the hard practical limit of cancellation: a bit like Picasso, now widely deprecated for misogyny, they have proved too good to abjure. They are all the memorial Jackson needed.

His fame, though, wasn't powered by talent alone. It was the type that shades into sainthood, as if he suffered for his audience as well as entertaining it. The tribulations included not just his warped childhood but racial prejudice, the burdens of celebrity, a quixotic pursuit of eternal youth and all that plastic surgery. "Michael", too, tries to beatify him. He comforts ill children and makes peace between street gangs, sensing his destiny is to "heal" people. "His story continues," reads a note after the plot ends in 1988.

That is one way to put it. In their shared peculiarity, the saint is cousin to the freak; the freak is kin to the creep, who



is brother to the criminal. Jackson allegedly slid to the bottom of this continuum. Since 1993 he has been accused of abusing numerous boys—charges he denied, as does his estate, which is still involved in litigation. He was acquitted at his only criminal trial (another case was settled out of court). But some of the testimony against him is compelling.

"Michael" was reportedly meant to dramatise the earliest accusations, and had to be revised when a prohibitive detail in a legal agreement came to light. As it is, because the film closes when it does, the fictional Jackson never makes it to the notorious Neverland ranch, scene of much of the alleged abuse. The darkest side of the tale doesn't feature. On the one hand, there is his marvellous art. On the other, just his sequined glove.

So viewers who recall his downfall will watch "Michael" with a nauseous feeling of omission. Still, it will delight his devotees, and recruit fans too young to remember the ugliness, or content to dismiss it as fake news. Like the posthumous stage shows and albums, it will doubtless enrich his estate. It will also affirm a lesson of modernity: despite all the information swilling around the internet—or because there is so much of it—with enough brass, drive and cash you can rewrite history.

"It doesn't matter who's wrong or right," Jackson sang in "Beat It". In the end, does it really matter if "Michael" bolsters the official image of the lost boy and martyred prodigy? It does if you believe that no one, not even the King of Pop, should be above accountability. Or if you care about the truth, which is that suffering doesn't always make a man a saint, and sometimes genius can be worse than flawed. But that kind of moral is no use in a fairy tale.

► lim, was no accident. Antisemitic images appear, too. Mr Netanyahu is depicted as a worm in an apple.

Yet all these nasties flit past your eyes so fast they are easy to miss. The videos have "hotwired" the world's brains, says Moustafa Ayad, also of the Institute for Strategic Dialogue. "The Iranians have been able to tap into the zeitgeist in a language that people understand online... through really good use of internet subcultures, memes [and] animations." The

message—don't trust America—comes not from the mouths of Iran's actual leaders, who are "hated or polarising", but from Lego versions of them, "who look like fun", says Mr Ayad.

Iran is also taking pro-Trump AI content and repurposing it. After Mr Trump posted an AI-generated image of himself as Jesus healing the sick (and explained, when Christians were outraged, that he thought it showed him as a doctor), someone added the real Jesus descending from

the sky to cast Mr Trump into the fiery pit. Iranian embassies gleefully circulated it.

America's State Department used to have an office that counteracted enemy propaganda, but the Trump administration closed it last year. So the world's greatest military power is struggling to subdue a regional bully, and the world's cultural superpower is being out-trolled by a regime that whips women for showing their hair. For the man who let this happen, "loser" seems like an understatement. ■

## Fiction

## Radical honesty

**Judy Blume: A Life.** By Mark Oppenheimer.  
*Putnam; 480 pages; \$35. Scribe; £25*

LIKE MANY shy children, Judith Sussman spent a lot of time on her own, reading and inventing stories. It never occurred to her to become a novelist, though. In New Jersey in the 1940s and 1950s, many of her female classmates aspired to be secretaries, typing up other people's words rather than their own.

She did not give literary pursuits any thought until she was in her late 20s. Judith—by then Judy Blume, and a frustrated housewife with two small children—sought a creative outlet. As she cleaned up after dinner, she devised tales and envisioned herself as “the next Dr Seuss”. (Her husband, meanwhile, told friends that writing was a hobby that “keeps her out of Saks”, a department store.)

Mark Oppenheimer, a journalist and academic, chronicles Ms Blume's life in an enjoyable, though rather studious, new biography. He charts how she became a blockbuster author—if not quite of Dr Seuss's stature, then at least known across the world. Ms Blume has sold more than 80m copies of her books to date, more than Joseph Heller or Douglas Adams have.

She grew up in a progressive Jewish family. Even as a youngster, she wanted gritty realism: she imagined her paper dolls had been in terrible accidents and she was the surgeon in charge of their care. Ms Blume's parents demonstrated an unabashed attitude towards sex and the body. The author remembers an awkward yet straightforward conversation with her father about sperm's role in pregnancy.

So it did not take long, once she started writing, for her unsuccessful imitations of Dr Seuss's rhyming style to give way to her own “frank, candid, earthy” voice. “Judy's innovation...was not to describe menstruation, first kisses, or teenagers' orgasms; she had grown up reading about these things,” Mr Oppenheimer observes. “She just thought these topics didn't have to stay sequestered in books for grown-ups.”

In books such as “Are You There God? It's Me, Margaret” and “Deenie” she explored puberty, self-discovery and masturbation. In “Blubber” she examined fat-shaming. “Forever...” described a 17-year-old girl's first sexual experiences. (The well-worn copy in your reviewer's school library would fall open to the page read most often, where Michael formally intro-



She doesn't do things by the book

duces Katherine to “Ralph”, his penis.)

Young readers found Ms Blume's candour electrifying; among adults, it sparked contention. Her sales caught fire. Ms Blume's personal life was turbulent—she has been married three times—yet she became a kind of agony aunt to her fans, receiving thousands of letters a month. Many of them, sadly, came from fans who were depressed or being abused.

“Judy Blume: A Life” is best enjoyed as an overview of a tremendously successful career. Despite having interviewed Ms Blume at length, Mr Oppenheimer concedes he struggled to get the true measure of her as a person. And something about the book seems to have vexed the novelist: having reviewed a draft and offered corrections, Ms Blume then distanced herself from the project. This book illuminates the problem of biography, particularly when it concerns a living person. Writing an account that is honest, perceptive and acceptable to the subject is a tricky feat.

The book also casts a light on the chasm between adolescents and their parents. For as long as children have loved Ms Blume's writing, reproving adults have feared it is leading their offspring astray. Many have tried to have Ms Blume's work censored. In the 1980s a school district in Iowa grouched that “Forever...” describes things “God didn't intend to explore outside of marriage”; in the 1990s one in Illinois fretted that it was “basically a sexual how-to-do book for junior-high students”. In 2025 “Forever...” was still one of the most banned books in America's public schools.

Such efforts are woefully misguided. Adolescence is a confusing time—teens feel curious, embarrassed and misunderstood—and stories that help them make sense of it should be celebrated, not censored. Ms Blume deserves her flowers. ■

## Fitness

## The long run

Marathon organisers are seeing record demand

LANA RANSON hit the ground running in 2023. Her housemates were joggers, so she thought she'd “give it a go” too. By November 2025—a little over two years after she first laced up her trainers—Ms Ranson had completed the Abbott World Marathon Majors (WMM), a series of prestigious races in Berlin, Boston, Chicago, London, New York, Sydney and Tokyo.

Ever more people are going the distance. When gyms were forced to shut during the pandemic, many fitness fanatics turned to running to keep in shape. Plenty have maintained the habit, pushing themselves to go farther and faster. Around 60,000 runners will line up for the London Marathon on April 26th, up from 54,000 in 2024.

A record 1.1m people applied to sweat and suffer through the course in London this year—more than double the number that entered the public ballot in 2024. The New York City Marathon lottery also received its highest-ever number of applications, and only 1% of entrants were given a race bib. (To secure a spot outside the ballot, you have to be very fast or very good at raising money for charity.)

Race organisers are racing to meet demand. Tokyo has added more spaces. London is in consultations to host a two-day event in 2027; the firm behind it has also taken over races in Brighton and Frankfurt. “What we're trying to do is give people more opportunity,” says Hugh Brasher, chief executive of London Marathon Events.

The WMM is hoping to add Cape Town and Shanghai to its list, so the medal given to those who complete all the major marathons will be even harder—and more desirable—to obtain. The European Marathons Classics, a new, eight-race challenge, also comes with a medal (and boasting rights).

The trend is driven by youngsters like Ms Ranson. Gen-Z runners make up a growing share of marathon applicants and finishers; the number who logged a marathon on Strava, a fitness-tracking app, increased by a third from 2024 to 2025. Given their supple joints, they will be able to keep going for some time. Marathon mania shows no signs of slowing down.

## Political theory

## A black-and-white world

Ibram X. Kendi's illiberal views on race have fallen out of favour. Good

**Chain of Ideas.** By Ibram X. Kendi. *One World*; 592 pages; \$35. Bodley Head; £25

ANYONE WHO has regularly talked of “cultural appropriation” or “safe spaces” probably owns a book by Ibram X. Kendi. He became one of the American left’s favourite thinkers on race, having written five number-one bestsellers and won the National Book Award. His best-known title, “How to Be an Antiracist”, claims there is no such thing as “not racist”: at every moment, a person is either being racist (by supporting or failing to challenge policies that sustain racial inequity) or antiracist (when they do the opposite).

His star rose fast. In 2020, in the wake of George Floyd’s murder, Boston University hired Mr Kendi to head up a well-funded “Centre for Antiracist Research”. But in 2023 the centre sacked half its staff. (Mr Kendi denied financial mismanagement.) He now teaches at Howard University.

His new book explores “the origins of our authoritarian age”. It is similarly rigid and hortatory—and accidentally illuminates why early-21st-century progressivism failed. Its focus is the “great replacement theory”, which posits that elites encourage immigration to “replace” the (usually white) natives of a country with (usually non-white) immigrants for cheaper labour and reliable votes. Since it was first promulgated in 2011 by a French writer, Renaud Camus, the theory has “taken over global politics”, Mr Kendi argues.

He is correct that this noxious conspiracy theory is no longer confined to the fringes. Elon Musk and some American Republicans have promoted it, as have right-wing politicians in Europe. It has inspired mass shootings in America, New Zealand and Norway. A book that could help centrist and liberal politicians formulate an effective response would be useful.

This is not that book. Mr Kendi is an asserter, not a persuader. His fondness for baroque taxonomies leads him to argue that ten “interlocking ideas” give the great replacement theory its power. He uses each tenet to assail a particular right-wing politician, seemingly at random: “Racism against peoples of colour is over” and Britain’s Nigel Farage, for instance, or “Racial inequity data should be ignored” and Hungary’s Viktor Orban. How these ideas “interlock” into a chain never becomes clear.

In the absence of clarity, Mr Kendi offers guilt by association. Some great-replacement precepts echo Nazi ideology, such as hostility to multiculturalism, a desire to deport non-natives and a belief that elites (“globalists” rather than “international Jewry”) dominate the world. Therefore “any politician who articulates these renovated ideas,” Mr Kendi says, “should be described as neo-Nazi”.

This is an insult masquerading as a description, and it is more likely to harden opposition than to change minds. This intolerant streak was visible in earlier work. “The heartbeat of racism is denial,” Mr Kendi wrote. To object to his Manichean view of race relations, then, is to out yourself as a bigot.

Solutions are not his strength, either. To counter the great replacement theory, he says “We must accurately define racism ...[shut] off the firehose of disinformation [and] learn history.” It may sound anodyne, but in a liberal democracy, a government should not be able to “shut off” publications. “We must accurately define” really means “Everyone must agree with my definition of a deeply contested term.”

Similarly, his championing of “antiracist” policy sounds laudable at first. But consider an example: rates of homelessness among black and Native American families are four times those of white ones. If achieving equity is the chief goal, then

seizing white families’ homes and forcing them to live on the streets until the rate of white homelessness meets other groups’ is sound “antiracist” policy. That this would be a recipe for communal resentment does not trouble Mr Kendi, who argues that “The only remedy for past discrimination is present discrimination.”

He has also proposed a “Department of Antiracism comprised of formally trained experts” that could block any law and punish any public official deemed racist. He writes that the department’s purpose would be “to fix the original sin of racism”.

That is a telling goal. Mr Kendi is not a serious policy thinker: he is a religious writer for secular lefties. “How to Be an Antiracist” features original sin (racism), public repentance (“the heartbeat of antiracism is confession”) and eternal struggle (“the movement from racist to antiracist is always ongoing”). This sin must be expiated, not accepted or compromised with. The world is divided into the damned, who disagree with him, and the saved, who accept his proposals *in toto*.

That suited progressives when they believed Donald Trump was an aberration, and all they had to do to banish Trumpism was cancel bad people and drag politics leftward. But that had a limit, as the election in 2024 showed. Some progressives have come to realise that they have “annoyed the average American into fascism” as Marc Maron, a comedian, sardonically put it. The lukewarm reception for this book is also telling. Google Trends suggests Mr Kendi has attracted less than one-tenth the attention this year as in 2020.

Compromise and incremental change can be slow and frustrating, especially when it comes to long-standing injustices such as racial inequity. But they are the foundations of liberal democracy. ■



The banner days are over

# Economic & financial indicators

	Gross domestic product				Consumer prices			Unemployment	Current-account	Budget	Interest rates	Currency units				
	% change on year ago				% change on year ago			rate	balance	balance	10-yr gov't bonds	change on	per \$	% change		
	latest	quarter*	2026†		latest	2026†		%	% of GDP, 2026†	% of GDP, 2026†	latest, %	year ago, bp	Apr 23rd	on year ago		
United States	2.0	Q4	0.5	2.1	3.3	Mar	3.8	4.3	Mar	-3.5	-6.6	4.3	-11.0	-		
China	5.0	Q1	5.3	4.6	1.0	Mar	1.3	5.4	Mar <sup>§</sup>	3.5	-5.8	1.5	\$	-4.0	6.83	7.0
Japan	0.4	Q4	1.3	0.5	1.3	Feb	2.1	2.6	Feb	3.3	-1.8	2.4	108	159	-11.2	
Britain	1.0	Q4	0.2	1.0	3.3	Mar	3.2	4.9	Jan <sup>††</sup>	-3.8	-5.1	4.8	27.0	0.74	1.4	
Canada	0.7	Q4	-0.6	1.2	2.4	Mar	2.9	6.7	Mar	-0.5	-2.2	3.5	30.0	1.37	0.7	
Euro area	1.2	Q4	0.8	1.2	2.6	Mar	2.2	6.2	Feb	2.4	-3.3	3.0	57.0	0.85	2.3	
Austria	0.6	Q4	0.1*	0.8	3.1	Mar	2.6	5.8	Feb	0.6	-4.3	3.3	39.0	0.85	2.3	
Belgium	0.9	Q4	0.2	1.0	2.2	Mar	2.8	6.4	Feb	0.9	-4.6	3.5	49.0	0.85	2.3	
France	1.2	Q4	0.9	0.8	2.0	Mar	2.1	7.8	Feb	-0.6	-5.3	3.7	44.0	0.85	2.3	
Germany	0.4	Q4	1.2	0.8	2.8	Mar	2.9	4.0	Feb	4.1	-3.8	3.0	57.0	0.85	2.3	
Greece	2.5	Q4	3.2	2.0	3.4	Mar	3.1	8.5	Feb	-5.1	0.4	3.8	40.0	0.85	2.3	
Italy	0.8	Q4	1.0	0.7	1.6	Mar	1.9	5.3	Feb	1.2	-3.0	3.8	20.0	0.85	2.3	
Netherlands	1.8	Q4	2.2	1.2	2.6	Mar	2.9	4.0	Mar	11.4	-2.1	3.1	38.0	0.85	2.3	
Spain	2.7	Q4	3.3	2.1	3.4	Mar	2.5	9.8	Feb	2.3	-2.6	3.4	21.0	0.85	2.3	
Czech Republic	2.5	Q4	2.9	2.2	1.9	Mar	2.2	3.0	Q4*	0.3	-2.6	4.7	61.0	20.8	5.5	
Denmark	3.3	Q4	1.0	1.8	1.2	Mar	2.0	3.1	Feb	12.4	1.2	2.8	54.0	6.38	2.4	
Norway	2.2	Q4	-1.3	1.5	3.6	Mar	2.9	4.8	Feb <sup>††</sup>	11.8	8.9	4.4	50.0	9.30	11.7	
Poland	4.1	Q4	4.5	3.5	3.0	Mar	3.4	6.1	Feb <sup>§</sup>	-1.3	-6.9	5.5	34.0	3.63	3.6	
Russia	1.0	Q4	2.8	1.5	5.9	Mar	5.7	2.1	Feb <sup>§</sup>	2.6	-2.4	14.3	-127	75.0	8.6	
Sweden	2.0	Q4	2.0	2.3	0.5	Mar	1.7	9.7	Mar <sup>§</sup>	4.3	-2.0	2.8	41.0	9.21	3.9	
Switzerland	0.7	Q4	0.6	1.0	0.3	Mar	0.6	3.0	Mar	1.9	0.2	0.4	1.0	0.78	3.8	
Turkey	3.4	Q4	1.5	2.9	30.9	Mar	30.1	9.0	Feb <sup>§</sup>	-3.1	-3.6	30.4	-134	45.0	-14.9	
Australia	2.6	Q4	3.2	2.1	3.7	Feb	3.7	4.3	Mar	-1.6	-1.6	4.9	60.0	1.40	12.2	
Hong Kong	3.8	Q4	4.0	3.2	1.7	Feb	2.0	3.8	Feb <sup>††</sup>	10.7	-3.4	2.9	-44.0	7.83	-1.0	
India	7.8	Q4	7.1	6.5	3.4	Mar	4.8	6.6	Mar	-1.3	-4.5	6.9	60.0	93.8	-9.1	
Indonesia	5.4	Q4	6.7	5.2	3.5	Mar	3.3	4.9	Aug <sup>§</sup>	-0.5	-3.5	6.6	-40.0	17,220	-2.1	
Malaysia	5.3	Q1	1.6	4.8	1.7	Mar	2.2	2.9	Feb <sup>§</sup>	2.6	-3.6	3.6	-12.0	3.95	11.1	
Pakistan	3.7	2025**	na	3.5	7.3	Mar	5.0	6.9	2025	-0.8	-4.4	12.4	†††	-10.0	279	0.7
Philippines	3.0	Q4	2.4	3.3	4.1	Mar	4.6	5.8	Q1 <sup>§</sup>	-4.0	-6.4	6.7	37.0	60.2	-6.0	
Singapore	4.6	Q1	-1.3	2.4	1.8	Mar	2.3	2.0	Q4	16.5	0.8	2.1	-51.0	1.28	3.1	
South Korea	3.6	Q1	6.9	2.1	2.2	Mar	2.4	3.0	Mar <sup>§</sup>	4.7	-3.0	3.7	108	1,479	-3.3	
Taiwan	12.7	Q4	23.6	8.1	1.2	Mar	1.6	3.3	Feb	28.5	0.8	1.5	-14.0	31.5	3.5	
Thailand	2.5	Q4	7.8	1.6	-0.1	Mar	2.5	1.0	Mar <sup>§</sup>	1.2	-4.7	2.1	25.0	32.2	3.8	
Argentina	2.1	Q4	2.5	3.0	32.6	Mar	31.6	7.5	Q4 <sup>§</sup>	-0.2	0.3	na	na	1,379	-20.0	
Brazil	1.8	Q4	0.6	1.8	4.1	Mar	4.5	5.8	Feb <sup>§††</sup>	-2.6	-7.1	13.6	-97.0	4.99	14.8	
Chile	1.6	Q4	2.3	1.2	2.8	Mar	4.2	8.3	Feb <sup>§††</sup>	-1.7	-2.3	5.3	-24.0	890	7.0	
Colombia	2.2	Q4	0.5	2.7	5.6	Mar	5.5	9.2	Feb <sup>§</sup>	-2.6	-6.5	12.8	108	3,569	20.0	
Mexico	1.8	Q4	3.5	1.5	4.6	Mar	3.9	2.7	Feb	-0.5	-3.8	9.0	-58.0	17.3	13.2	
Peru	3.2	Q4	-0.6	2.5	3.8	Mar	4.0	5.4	Mar <sup>§</sup>	1.8	-2.4	6.0	-60.0	3.44	7.9	
Egypt	5.3	Q4	0.8	4.5	15.2	Mar	13.5	6.2	Q4 <sup>§</sup>	-4.5	-7.5	24.4	-77.0	52.0	-3.0	
Israel	3.3	Q4	3.3	3.0	1.9	Mar	2.5	2.7	Feb	1.9	-5.2	3.9	-46.0	3.00	23.3	
Saudi Arabia	4.5	2025	na	-0.9	1.8	Mar	2.5	3.5	Q4	-2.7	-5.3	na	na	3.75	nil	
South Africa	0.8	Q4	1.5	1.6	3.0	Mar	3.9	31.4	Q4 <sup>§</sup>	-1.4	-4.2	8.6	-238	16.5	13.1	

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 \$95-year yield ††††Dollar-denominated bonds Note: Euro-area consumer prices are harmonised

## Markets

In local currency	Index	% change on:	
		one week	Dec 31st 2025
United States S&P 500	7,137.9	1.6	4.3
United States NAS Comp	24,657.6	2.7	6.1
China Shanghai Comp	4,106.3	2.0	3.5
China Shenzhen Comp	2,789.0	3.9	10.2
Japan Nikkei 225	59,585.9	2.5	18.4
Japan Topix	3,745.0	-0.7	9.9
Britain FTSE 100	10,476.5	-0.8	5.5
Canada S&P TSX	33,955.1	-0.6	7.1
Euro area EURO STOXX 50	5,906.2	-0.6	2.0
France CAC 40	8,156.4	-1.4	0.1
Germany DAX*	24,194.9	0.5	-1.2
Italy FTSE/MIB	47,785.5	-0.8	6.3
Netherlands AEX	1,021.3	0.6	7.4
Spain IBEX 35	18,006.4	-1.0	4.0
Poland WIG	132,735.5	-0.9	13.2
Russia RTS, \$ terms	1,160.0	1.1	4.7
Switzerland SMI	13,067.6	-1.1	-1.5
Turkey BIST	14,335.5	0.6	27.3
Australia All Ord.	9,074.4	-1.2	0.6
Hong Kong Hang Seng	26,163.2	0.8	2.1
India BSE	78,516.5	0.5	-7.9
Indonesia IDX	7,541.6	-1.1	-12.8
Malaysia KLSE	1,710.4	1.6	1.8

## Commodities

The Economist commodity-price index	% change on:				
	2020=100	Apr 14th	Apr 21st*	month	year
<b>Dollar Index</b>					
All items	152.1	152.6	3.6	13.6	
Food	145.1	144.9	-0.1	-5.0	
<b>Industrials</b>					
All	157.9	158.9	6.5	33.2	
Non-food agriculturals	146.1	147.7	4.2	14.2	
Metals	160.9	161.8	7.0	38.6	
<b>Sterling Index</b>					
All items	143.8	145.1	2.6	12.5	
<b>Euro Index</b>					
All items	147.2	148.4	2.0	10.9	
<b>Gold</b>					
\$ per oz	4,795.0	4,748.5	7.6	38.6	
<b>Brent</b>					
\$ per barrel	95.0	98.4	-4.9	45.9	

Sources: CME Group; LME; LSEG Workspace; NOREXCO; NZ Wool Services; S&P Global Commodity Insights; Thompson Lloyd & Ewart; USDA \*Provisional

	Index	% change on:	
		one week	Dec 31st 2025
Pakistan KSE	171,579.3	1.8	-1.4
Singapore STI	5,002.7	-0.4	7.7
South Korea KOSPI	6,417.9	5.4	52.3
Taiwan TWI	37,878.5	3.1	30.8
Thailand SET	1,479.7	-1.8	17.5
Argentina MERV	2,898,692.0	-0.7	-5.0
Brazil BVSP*	192,888.9	-2.5	19.7
Mexico IPC	68,836.9	-1.1	7.0
Egypt EGX 30	51,962.4	2.4	24.2
Israel TA-125	4,327.9	0.4	18.1
Saudi Arabia Tadawul	11,245.0	-3.0	7.2
South Africa JSE AS	118,068.3	-1.1	1.9
World, dev'd MSCI	4,629.6	0.9	4.5
Emerging markets MSCI	1,607.1	1.5	14.4
<b>US corporate bonds, spread over Treasuries</b>			
Basis points			
Investment grade	92	93	
High-yield	393	354	

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

For historical indicators data, visit [economist.com/economic-and-financial-indicators](https://economist.com/economic-and-financial-indicators)

## OBITUARY

### *Mark Mobius*

*The tireless champion of emerging markets died on April 15th, aged 89*



FOR A FUND manager's website, Mark Mobius's was bizarre. No dollar signs, or stock-tickers, or serious men at desks. Instead it was a gallery of globetrotting snaps. There he was at the gateway to a Japanese temple, or wrapped up warm in Greenland, or strolling among the cafés of Buenos Aires and the pyramids of Teotihuacan. Here he was on a terrace in sunny Italy, enjoying a fabulous view while musing on the world economy. Everywhere (except in Greenland, where he preferred fur), he shone out in his white baseball cap and sempiternal tan. Everywhere, too, he wore the same smile, not of a holidaymaker (he never took holidays), but of a keen-eyed hunter on the track of treasure.

It could be found in unlikely places. Almost all other fund managers in the 1980s and 1990s plumped for dependable companies in rich nations. They avoided communist or socialist regimes, disorder, debt-riddenness, corruption, and faraway countries of which they knew nothing. Sensible enough, to them. But he, a determined optimist, took the opposite tack. A "bad" country unloved by investors might still contain enterprising people and companies well worth investing in. And the moment to go into that market was at the peak of chaos. Panic, crashes, blood on the streets, all made a fantastic scenario for him. Revolution was a chance to buy. When Russia hectically privatised in 1997, he visited 36 companies (oil, gas, diamond-mining) in three time zones.

The results of this strategy were striking. When he joined Franklin Templeton in 1987 to head their emerging-markets fund (old, in his 50s, to be starting in that job, though he had run an investment business for 20 years), he was managing \$100m. When he left in 2018 he was managing \$40bn scattered over 70 countries. His returns were not stellar: some stocks out-performed, some under-performed, in the usual way. Average annualised returns on the fund were a respectable 13.4%. For every ten picks, he reckoned, there would be one great success. And almost more important was that he gradually altered the psychology of investors and fund managers. Before him, they barely glanced at emerging markets. After him those markets, including Argentina, Brazil, Poland, Thailand and Vietnam, were in the mainstream asset class.

People called him Indiana Jones for his venturing, and he liked

that. The world belonged to optimists; pessimists were only speculators. He took risks, obviously. In the Philippines, during a coup, bullets zinged around him. In the happy hunting-ground of Argentina's wildly volatile stockmarket he, too, might trip up. But almost always the risks were calculated. Like a sumo wrestler, preparing for hours to seize a moment, he would not buy one share before he had read expert analysis on the country and been there himself. (He set up his first offices in Hong Kong and Singapore, places he already knew well.) Nor would he invest in any company before he had visited the factories, talked to the managers and met the workers.

That was what his travelling, 250 days in a year by one reckoning, was all about. He soaked in the culture as well as the business climate, confident that entrepreneurs could triumph everywhere if the legal system let them breathe. In Mexico, after struggling to the top of the Pyramid of the Sun, he went off to the Kimberly-Clark nappy-and-wet-wipes factory to check how things were going. (Well.) After a colleague's wedding in Romania he called in on a factory where purified lead was processed into sheets. (Not so good; too much competition.) In India he envisaged a lively market in spices, thanks to the mobile phones of farmers and a new commodities exchange. As a foodie, he had to investigate a fish-ball-making plant in Thailand. But he also felt obliged, in Vietnam, to sample (surprisingly nice) scorpions on toast.

Visits like this could avert problems, though not always. In Brazil the Templeton fund invested in Mesbla, a chain of department stores that suddenly, in 1997, went bankrupt. He learned it from the newspapers. Earnings had been growing, the books looked fine. His fund had dealt with it for years. But the family who owned it had been taking assets out until it collapsed. After that he insisted on meeting owners, too.

China was perhaps his greatest frustration. He was one of the first in. Very slowly access got better, and he discounted the usual caveats. A trade war with America seemed distant to him, and Xi Jinping's iron grip made the country stable. He was hobbled mostly by capital controls: money put in could not be got out. Yet he had fun, too, at a humbler level. On bone-jolting rural roads he tested out bicycles, and in the mountains of Fujian he climbed to watch the picking and processing of the best Oolong teas.

Full-time nomadism suited him, because he was a multinational sort. His father was German, his mother Puerto Rican. They barely knew each other's languages, but he grew up, on Long Island, speaking both German and Spanish. At Boston University he saw a chance to study in Japan: he went, and fell in love with the East. Yet the world he had imagined for himself was the stage. As a young man he wanted to be a method actor, getting inside the psychology of a character. The actor bit made him a great TV showman, popping up regularly on CNBC with his blunt views, shaved head and stylish clothes. The psychology bit led on to persuading investors to take the plunge.

Obviously he did persuade them, and not just with the prospect of decent returns. There was a morally worthwhile side to this, which he had absorbed from Sir John Templeton, the fund's founder. To prosper, countries needed a market economy open to foreign investment. With that, their people would thrive. Equal opportunity and the rule of law would spread around the world. All it needed was a keener Western appetite for calculated risk.

He never married, though. Who could possibly calculate the risks of that? ■

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Applicants should have expertise on the EU and Europe more generally, and a good network of contacts in Brussels and the major EU capitals. They should also be familiar with the debates on UK-EU relations. The next director should give intellectual leadership to the CER's researchers, and should have experience of managing a multinational team spread across several locations, speaking to the media, writing policy-focused papers and fundraising. Further details of what the job entails can be found on the CER website, <https://www.cer.eu/job/director>

The CER operates an open and transparent recruitment process. It is strongly committed to non-discrimination on grounds of gender, race, sexuality or age.

Those interested should send a CV, cover letter and links to relevant publications to Sophie Valiant ([sophie@cer.eu](mailto:sophie@cer.eu)) by May 22nd. We plan to interview short-listed candidates in late June. The successful candidate would ideally take up their role in January 2027.

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