

# The Economist

---

What Putin wants

---

India and Pakistan flirt with war—again

---

Chip smuggling out of control

---

Gen X: the loser generation

---

MAY 10TH–16TH 2025

---

## ALL GROWN UP

**Saudi Arabia's  
surprising  
transformation**



# Opportunity starts with access to food.



## Cartons deliver safe food where it's needed

Access to food is the foundation for health, education, and opportunity. Yet ensuring food reaches people everywhere remains a challenge. Aseptic cartons protect perishable food for up to 12 months without the need for refrigeration or preservatives, keeping it safe while preserving its flavour, colour, and texture. By extending shelf life, cartons help reduce food waste and enable food to reach more people in more places.

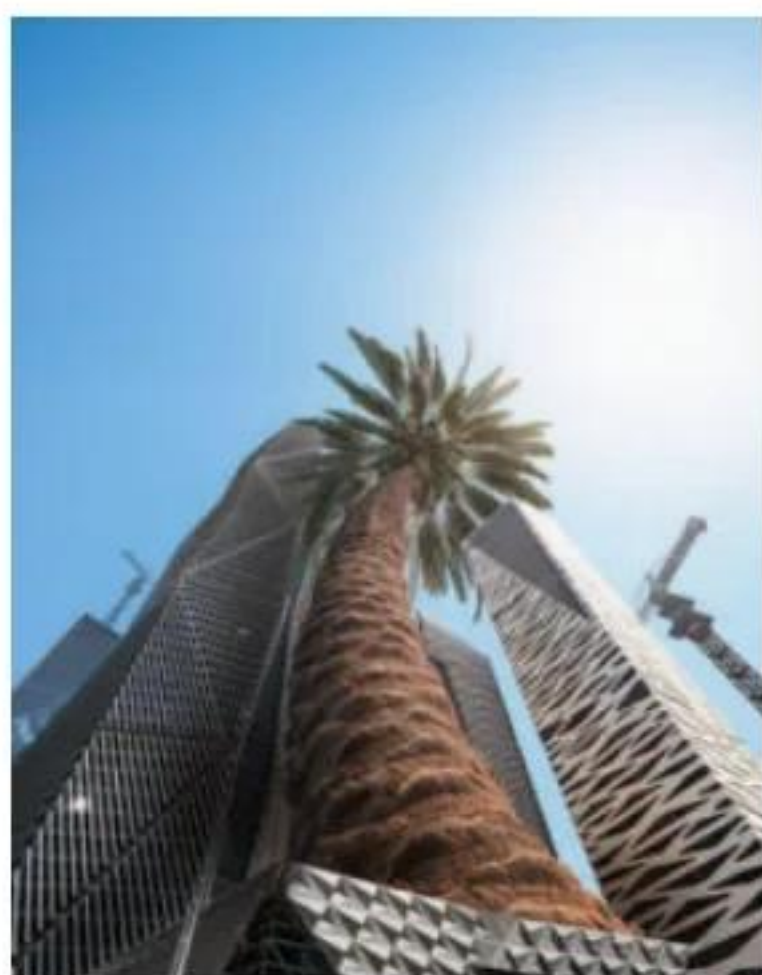
**Go with carton – the pack that protects.**



Discover how aseptic cartons contribute to global food security at [tetrapak.com](https://www.tetrapak.com)

**Tetra Pak®**  
PROTECTS WHAT'S GOOD

# Contents



## On the cover

Muhammad bin Salman is transforming Saudi Arabia: leader, page 7. Society has changed drastically. Can the economy change, too? Briefing, page 55. Donald Trump and the Saudis get along famously in person, but not on policy, page 36

**What Putin wants** What Europe should do to thwart him: leader, page 8. How long does Russia need to prepare for another war? Page 13. Mobile signals plot the Kremlin's relentless build-up, page 16. New drones on Ukraine's front lines, page 42

**India and Pakistan flirt with war—again** How South Asia's nuclear powers can avoid catastrophe: leader, page 9, and analysis, page 27

**Chip smuggling out of control** Inside a shadowy business, page 47. America looks as if it is about to abandon byzantine new export rules. Good: leader, page 10. Chinese chip makers are catching up fast, page 48

**Gen X: the loser generation** Don't cry for millennials or Gen Z. Save your pity for the lot with an X to bear, page 58

→ The digital element of your subscription means that you can search our archive, read all of our daily journalism, listen to podcasts and watch videos on our **app** or **website**.

## The world this week

- 5 A summary of political and business news

## Leaders

- 7 **The Saudi transformation...**  
...and its limits  
8 **What Putin wants**  
How to thwart him  
9 **India v Pakistan**  
Riskier than ever  
9 **Israel and Gaza**  
Stop the war  
10 **Artificial intelligence**  
Out of control

## Letters

- 11 On plastics, birthright citizenship, company lunches, protest songs, Donald Trump's economics, tweed

## By Invitation

- 12 Kenneth Rogoff on the dollar

## Briefing

- 13 **Russia's next war**  
Is NATO next?  
16 **Putin's arms empire**  
Feverish activity



**Schumpeter** To American bosses, the tariff shock looks a lot like covid-19. It is worse, page 54



## United States

- 17 Criminalising street homelessness  
18 Pete Hegseth's purge  
19 Social history  
20 Birthrights and SCOTUS  
20 Trans medicine  
21 Disparate impact  
22 **Lexington** Antisemitism on campus



## The Americas

- 23 China's southern ties  
24 The Mexican chemist  
26 Despair in Haiti



## Asia

- 27 India strikes Pakistan  
28 Albo the Dutton-slayer  
29 A flight to safety in Singapore  
29 Lizards in Taiwan  
30 **Banyan** Tongue-tied in India



## China

- 31 The gig economy  
32 Youthful cynicism  
33 Hong Kong's exiled dissidents  
33 Winning at snooker



## Middle East & Africa

- 34 Who will feed Gaza?  
35 Gaza's death toll  
36 MAGA meets MBS  
37 A deal with the Houthis  
37 Sudan's drone war  
38 Powerless Nigeria



» Contents continues overleaf

# Contents

## Europe

- 39 Germany's new chancellor
- 40 German culture funding
- 41 MAGA in Romania
- 41 Portugal votes, again
- 42 Fibre-optic drones
- 43 **Charlemagne** The parable of the owl



## Britain

- 44 The C of E's decline
- 45 Young men and Catholicism
- 46 **Bagehot** The interesting Kemi Badenoch



## Business

- 47 Semiconductor smuggling
- 48 Chinese chip breakthroughs
- 49 Drama at OpenAI
- 50 The battle over weight-loss drugs
- 51 Palantir's ascent
- 52 **Bartleby** IT horrors
- 54 **Schumpeter** Pandemic parallels



## Briefing

- 55 Reinventing Saudi Arabia



## Finance & economics

- 58 Gen X struggles
- 59 Saudi Arabia and OPEC
- 60 Taiwan's ructions
- 61 Currency trading
- 61 Buy the dip
- 62 Buffett exits
- 63 **Free exchange** When a hegemon falls



## Science & technology

- 64 Magnets without rare earths
- 65 Compressed music
- 66 Kawasaki's robot horse
- 66 Dogs and owners
- 67 **Well informed** Hay fever



## Culture

- 68 Tinseltown's troubles
- 69 Proto-Indo-European
- 70 Walter Rauff and Augusto Pinochet
- 70 Agatha Christie's writing tips
- 71 **Back Story** The morals of "Sinners"
- 72 The rise of webtoons



## Economic & financial indicators

- 73 Statistics on 42 economies

## Obituary

- 74 Alice Tan Ridley, busker turned star

### Volume 455 Number 9447

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

### Editorial offices in London and also:

Amsterdam, Beijing, Berlin, Brussels, Cape Town, Chicago, Dubai, Lagos, Madrid, Mexico City, Montevideo, Mumbai, Nairobi, New Delhi, New York, Paris, San Francisco, São Paulo, Shanghai, Singapore, Taipei, Tokyo, Washington DC

### Subscription service

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

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

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

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



### PEFC certified

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

## The world this week Politics



Friedrich Merz visited Paris and Warsaw, a day after the German Bundestag officially voted to approve him as **Germany's** new chancellor. It took two rounds of votes among MPs to confirm Mr Merz in the job, a setback that may dent his authority. He is the first person in the country's modern era not to attain the support needed to become chancellor in the first round, underlining the tensions in his coalition of Christian Democrats and Social Democrats.

### Raining on his parade

**Ukraine** launched a big drone attack on **Russia**, which caused Moscow's four airports to close temporarily. The attack came shortly before a smattering of world leaders arrived in Russia to attend Vladimir Putin's **military parade** to mark 80 years since the end of the second world war in Europe. Xi Jinping was "guest of honour". China's leader was starting a four-day visit to Russia, which includes talks with Mr Putin.

The European Commission laid out a road map to remove all imports of **Russian oil**, gas and nuclear energy from EU markets. The plan envisages stopping all imports of Russian gas by the end of 2027, with new contracts halted by the end of this year. Legislation will be introduced next month.

George Simion, a hard-right Eurosceptic, took 41% of the vote in the first round of **Romania's** presidential election, well ahead of Nicusor Dan, the liberal mayor of Bucharest. They will contest a run-off on May 18th. Following the result Marcel Ciolacu resigned as

prime minister and pulled his Social Democrats from the coalition, saying the government was no longer legitimate. The election is being held five months after December's ballot was cancelled amid claims of Russian interference.

**Israel's** cabinet announced that it would expand military operations in **Gaza** (some ministers demand that the entire strip be occupied). It also said that it would put in place a new way of distributing aid to the civilian population. Israel has kept Gaza under a total blockade since March 2nd and Israeli officials admit that food will run out in a matter of weeks. Israel plans to set up aid hubs with security provided by both Israeli troops and American mercenaries. Palestinians would travel to the hubs to collect food and basic items.

A missile fired by the **Houthis**, a rebel group in Yemen backed by Iran, struck close to the main airport in Tel Aviv. In response, Israel hit Houthi targets in Yemen that included the airport in Sana'a, the capital, and a port. But soon after, Donald Trump announced a deal with the Houthis in which America would stop bombing the group in return for a cessation of the rebels' attacks on shipping in the Red Sea. The rebels have said that Israel is not covered by the ceasefire.

Members of **Venezuela's** political opposition managed to leave the country after spending more than a year holed up in the Argentine embassy in Caracas. America's secretary of state, Marco Rubio, said that a "precise operation" had brought all of the five to United States' soil. He condemned the regime of Nicolás Maduro, saying it had "violated human rights, and endangered our regional security".

Fresh from his turnaround election victory, **Canada's** prime minister, Mark Carney, visited Donald Trump in the White House. The president

spoke warmly about Mr Carney in front of the press assembled in the Oval Office. Mr Carney reiterated his well-worn campaign message, telling Mr Trump that Canada "won't be for sale, ever", to which Mr Trump shrugged, "Never say never." No new policies or agreements were announced. The pair are due to meet at the G7 summit in Alberta in June.

Mr Trump said that Stephen Miller, his deputy chief of staff, was a front-runner to be **national security adviser**. The president has sacked Mike Waltz, who accidentally added a journalist to a policy chat group, from the job and nominated him as ambassador to the UN. Marco Rubio, the secretary of state, is the national security adviser on an interim basis, the first person to hold both positions simultaneously since Henry Kissinger. Meanwhile, Pete Hegseth, the defence secretary, announced a streamlining of the military's most **senior officers**, which may involve the merging of some operational commands.

**Sudan's** government cut diplomatic ties with the United Arab Emirates. It said the country was a "state of aggression" that supplied strategic weapons to the Rapid Support Forces, the Sudanese army's adversary in the civil war. This followed several days of drone strikes against Port Sudan, a city on the Red Sea that has become Sudan's de facto capital since the war began.



**India** struck back at **Pakistan** in retaliation for a terrorist attack in Indian-administered Kashmir that India claims had

cross-border involvement from Pakistan. India carried out air strikes in Pakistan-administered Kashmir and deep inside Pakistan that it said targeted terrorist camps. Pakistan claimed that civilian areas had been hit and that it shot down five Indian military aircraft. It vowed to hit back at India. Other countries in the region appealed for calm.

Labor was re-elected to power with an increased majority in **Australia's** general election, a stunning comeback for a party that was trailing in the opinion polls earlier this year. As with Canada there was a Trump effect; voters listed the turmoil of Donald Trump's trade policies as a big concern. And again like Canada, the leader of the conservative opposition lost his seat in Parliament. After his victory Anthony Albanese, the prime minister, said he had a "warm and positive conversation" with the American president.

Ahead of a trade agreement with America over tariffs, Britain and India struck a **trade deal** that will slash export duties between the two countries. It is Britain's biggest such pact since leaving the European Union. Bilateral trade with India is expected eventually to rise by £25.5bn (\$34bn), or roughly 40% from 2024, but will add just £4.8bn to British GDP, or 0.1%, by 2040, according to the government.

### End of the two-party system?

In **Britain** politicians from the governing Labour Party and the main opposition Conservative Party spent the week pondering just how they would tackle the rise of Reform UK. The populist party led by Nigel Farage came first in local elections held in mostly non-urban areas of England, taking control of ten councils and winning two mayoral contests. Reform also won a by-election for Parliament in Runcorn, hitherto one of Labour's safest seats. It now leads national opinion polls.

## The world this week Business

The **Federal Reserve** kept interest rates on hold for its third consecutive meeting, maintaining its benchmark rate at a range of between 4.25% and 4.5%. The risks from inflation and unemployment have risen, it said, amid uncertainty about the economic effects of Donald Trump's tariffs, even though jobs figures for April also showed that the labour market was strong. Mr Trump is pressing Jerome Powell, the Fed's chairman, to cut rates. Before the bank's meeting the president said he would not sack Mr Powell, but did call him a "total stiff".

**China's** central bank shaved 0.1 percentage points off its main interest rate, taking it to 1.4%. The People's Bank of China also reduced other loan rates and cut the amount of money that banks need to keep in reserve, all part of an effort to boost liquidity in the financial system. The announcements came just ahead of the start of trade talks between America and China.

America's **trade deficit** hit a record monthly high in March, of \$140.5bn. The dash to get ahead of Mr Trump's tariffs resulted in imports from some countries, such as France, India, Mexico and Vietnam, reaching all-time highs. However, imports from China were the lowest since March 2020.

**Oil prices** dropped to near four-year lows after OPEC+ said it would increase output, which raises the prospect of an over-supply of oil amid a slowing world economy. At one point Brent crude traded just below \$60 a barrel. In mid-January Brent was at \$82 a barrel.

Lower oil prices in the first quarter of 2025 were a factor behind the reduced profits reported by big energy companies. **Chevron's** net profit of \$3.5bn was \$2bn below the profit it made in the same quarter last year. **ExxonMobil's** \$7.7bn was down from \$8.2bn. **Shell's** adjusted profit fell by

28% to \$5.6bn. Shell has dismissed rumours that it is interested in taking over **BP**, which is struggling to convince investors of its turnaround plan. BP's headline profit fell by half in the quarter, to \$1.4bn.

Overcoming the recent tensions between the two countries, including over energy imports, **Sunoco**, an American oil company, struck a \$9bn deal to buy **Parkland**, a Canadian rival. If it survives any potential pushback from Mr Trump, the deal will create the biggest fuel distributor in the Americas.

### A Musky odour

Sales of **Tesla** cars again fell heavily in Europe in April. In Germany they were down by 46%, year on year, and in France by over 50%. And in Britain, which had hitherto resisted the continent's rejection of Tesla and Elon Musk, sales plunged by 62%.

Normally associated with assembling the iPhone, **Foxconn** made a big push into the electric-vehicle market by striking a deal with **Mitsubishi**. The cars will be developed by Foxtron, Foxconn's EV subsidiary, and made in Taiwan for sale in Australia and New

Zealand. Foxconn is eager to co-operate with Japanese carmakers. Earlier this year it considered buying a stake in Nissan in return for co-operation on technology.

**OpenAI** abandoned its attempt to turn into a for-profit company and will remain under the control of a non-profit board. It is instead rejigging its for-profit subsidiary, which helps fund its R&D in artificial intelligence, to make it more investor friendly. The startup's ambition to become a regular company has been criticised by Elon Musk, one of OpenAI's founders, and others as a betrayal of its roots. A judge had recently ruled that Mr Musk's attempt to block the conversion to a for-profit could proceed to court next year.

Orsted, the world's biggest developer of **offshore-wind power**, halted work on a project in the North Sea that is meant to supply energy to 1m homes in Britain. It blamed rising costs and the risks from delays, which means the Hornsea 4 farm off the Yorkshire coast is not viable "in its current form". The news is a blow to the ambitious (some say over-ambitious) desire of

the Labour government for Britain to reach net-zero emissions by 2030.

### The Sage of Omaha



**Warren Buffett** announced his retirement as chief executive of Berkshire Hathaway, a conglomerate and investment company that he has led since the 1960s. The board approved Gregory Abel to replace Mr Buffett on January 1st 2026. Mr Abel was chosen as the heir in 2021 and oversees Berkshire's businesses other than insurance. Once famous for his blockbuster acquisitions, Mr Buffett has said there are few such takeovers for Berkshire these days and has instead accrued a cash pile of \$348bn. Berkshire's stock has risen by 5.5m per cent since Mr Buffett took charge in 1965, vastly outperforming the S&P 500. He will be 95 when he steps down.



# Saudi Arabia grows up

**Muhammad bin Salman is going from troublemaker to peacemaker. Good**

WHEN DONALD TRUMP lands in Saudi Arabia on May 13th for the opening state visit of his second term in office—a reprise of his very first state visit eight years ago—you should pause for a moment to take in just how unexpectedly the situation has changed. Mr Trump has become wilder and more autocratic. By contrast, his host, the crown prince and de facto Saudi ruler, Muhammad bin Salman (MBS), has transformed his country into a force for order.

The familiar image Saudi Arabia conjures up is not just of fabulous riches but also of political repression and the subjugation of women. The kingdom has exported religious extremism, and thereby shares responsibility for the terrorism and violence that this has fomented. Today the country is still an autocracy. Its crown prince does not tolerate dissent. However, the Saudi Arabia you used to know no longer exists.

The kingdom is now a stabilising influence in the Middle East. At home it has undergone a stunning social revolution that has few parallels. The pressing question is over the third part of Saudi Arabia's transformation, from a petrostate into a globalised, 21st-century economy. Here change has begun, but it is not fast enough—with potentially grave consequences for MBS's entire project of reform.

The most surprising attribute of the new Saudi Arabia is its constructive role in world politics (see Middle East & Africa section). The kingdom has both oil wealth and a hefty population. That clout once made it a menace. It was a financier and exporter of jihadism. In 2015, after his father, King Salman, ascended the throne, MBS began a disastrous war in Yemen against the Houthis. In 2018 came the shocking murder of Jamal Khashoggi, a journalist and dissident, on the orders of the Saudi regime.

The stain of those disgraces remains, but Saudi Arabia's recent actions count for something, too. It no longer sponsors terrorism. It now counsels other countries to wind down their conflict with the Houthis. It has helped Syria's new government by paying some of its debts to the World Bank, and promising to invest in the country if American sanctions are lifted.

Saudi Arabia's influence in the region and with Mr Trump means that MBS could yet do more. His country has already hosted talks aimed at bringing a ceasefire to Ukraine. He advises dealmaking with Iran and an end to the war in Gaza. America's president might just listen (see Leader).

One reason for believing in Saudi Arabia's foreign-policy rethink is that it furthers MBS's central concern, which is to bring about bold social and economic change at home. He needs those changes because oil revenues cannot be counted on to sustain Saudi Arabia for ever. If young Saudis, who are two-thirds of the native population, are to thrive and, in the long run, to sustain the House of Saud in power, they need jobs. An unstable neighbourhood is a headache, because it inflames Saudis at home and raises the risk premium foreign investors attach to the country. A flourishing Middle East, by contrast, would mean more customers for the products Saudi

Arabia hopes to make, and for its glittering new tourist resorts.

Social change is the second component of MBS's new contract with his people, and it has been nothing short of extraordinary. Less than a decade ago half the country's population—its women—were shut out of public life and much of the labour market (see back Briefing). Cinemas and concerts were banned. Any fun was had indoors, in the desert or abroad, away from the eyes of the religious police. Today women are free to travel, work and live where they like. The vice squad has been disbanded. Like the rest of the world, Saudis can now watch rock stars on stage and superheroes on the silver screen. Even in conservative parts of the country crowds of young people are out and about, revelling in their new freedoms.

The area where Saudi Arabia's reinvention remains incomplete is the economy. Since 2016 the government has spent heavily in order to diversify away from oil. The main targets have been gaudy “giga-projects”—such as the futuristic city of NEOM and a giant cube the size of 20 Empire State buildings—which by 2030 were projected to gobble up nearly \$900bn. To cultivate new industries, the sovereign-wealth fund has backed more than 100 firms in areas from electric vehicles and e-sports to coffee-making and chip manufacturing.

Despite this, the economy remains stubbornly oily. About 60% of the government's revenues still comes from selling crude. Although the hospitality and leisure industry is thriving, the flood of money being channelled into public spending is raising costs and crowding out private enterprise. Foreign investors are not yet excited about Saudi Arabia.

Worse, the fiscal strain is growing. Oil prices are at \$61 a barrel, well below the \$92 that the IMF reckons the kingdom needs to balance the books. The country's debt stock, though low, has doubled as a share of GDP since 2016. Although Saudi Arabia has got off with a so-called “reciprocal” tariff of just 10%, Mr Trump's trade war will only worsen the strain. If the world economy slows, then oil prices and foreign investment could sink further.

## No more white camels

To truly transform the economy, MBS must seize the chance to curb vanity projects that offer scant hope of a return. The government could retrench from areas such as tech, where private firms may invest. Improving areas where they will not, such as education and enhancing the business environment, would do more for long-term growth. A new investment law is welcome, but businesses remain unsure that their rights will be upheld, especially if they clash with the government.

The stakes for MBS and his country are high. Social liberalisation has bought him time among a youthful population. However, if economic change stalls and Saudis' livelihoods suffer, their goodwill could easily dissipate. Unrest at home could lead the government to crack down, undoing the progress the kingdom has made. Saudi Arabia has come a long way in just a few years. It still has far to go. ■



Russia

# What Putin wants

And what Europe should do to thwart him

IN RED SQUARE on May 9th Vladimir Putin is due to celebrate Victory Day, marking the defeat of Nazi Germany. The parade used to include Russia's second-world-war allies. Today, as Mr Putin targets what he absurdly claims is another "Nazi" government in Ukraine, it signals how Russia stands resolutely against the West. That should worry all of Europe.

As the death toll in Ukraine has grown, Mr Putin's war aims have swollen to justify Russian losses. What began as a special military operation next door has become Russia's existential struggle against distant enemies. This is a profound shift. It means Ukraine's future depends on Mr Putin's ambitions more than President Donald Trump's theatrical diplomacy. It also means that many Europeans are complacent about the threat Russia poses—and that they misunderstand how to deter him.

Russia may not be about to invade other parts of Europe. But it will try to gain sway by redoubling its cyber-attacks, influence operations, assassinations and sabotage. If Mr Putin senses weakness, he could seek to split apart NATO by seizing a small piece of territory and daring the allies to respond. He could be ready for that in two to five years. This may sound a long time. In military planning it is the blink of an eye.

Many people in America and southern Europe will find these claims hysterical. Some, like America's envoy Steve Witkoff, say that Mr Putin can be trusted; or that he would not dare violate Mr Trump's putative peace deal. Others, though wise enough not to trust a man who has gone to war five times in 25 years, argue that Russia is too weak to pose much threat. In Ukraine it has suffered almost 1m dead and wounded and, since its gains in the first weeks after the invasion, it has taken less than 1% more of Ukraine's territory.

Many in the Baltic states, Poland and the Nordic countries go to the other extreme, warning that the threat is bigger than Mr Putin, because Russian imperialism has deep roots. That fear is understandable given their history of being mauled, but it is the wrong way to approach Russia. Not only does it affirm Mr Putin's message that NATO is incurably anti-Russian, but it makes Europe more likely to miss chances for detente.

Mr Putin is indeed an aggressor who needs to be deterred. A bad peace imposed on Ukraine could become a springboard for his next war (see Briefing). At the same time, however, even if Mr Putin is implacable, he is 72 years old. Now is the moment to influence what comes after him.

Deterrence depends on understanding the threat Mr Putin poses. After three years of fighting, war has become an ideology. In the past, 60% of Russians said that the government's priority should be to raise living standards. Today, that share has fallen to 41%; instead, 55% now say they want Russia to be respected as a world power. Mr Putin has put the whole of Russian society onto a war footing. The arms industry creates employment. Generous payments to soldiers and their families amount to 1.5% of GDP. Mr Putin also uses war as his excuse for ever-harsher repression and isolation from the West.

It is wrong to think that Russia's forces are spent or incapa-

ble. The navy and air force are largely intact. NATO's top commander says Mr Putin is restocking men, arms and munitions at an "unprecedented" pace. Russia plans to have 1.5m active troops, up from 1.3m in September; eventually, it could boost forces and kit on the western front by 30-50%. Thanks to the war, it has deepened its ties to China, Iran and North Korea.

Russian tactics are crude and costly, but a sudden small incursion into a NATO member would force NATO to choose whether to take back lost ground and risk nuclear war. If it did not fight, NATO would be broken. In a longer conflict NATO could surely repel a first Russian offensive, but would it have the resources for a fifth or sixth? Mr Putin might count it a strategic victory if Mr Trump declined to turn up, even if Russia were pushed back. That is because America's absence on the battlefield would entrench Russia's influence over Europe.

Defence against Russia begins in Ukraine. The more Mr Putin is denied success there, the less likely he is to attack NATO. As *The Economist* has argued, that means supplying Ukraine with arms, as well as giving it more money to pay for those it can build cheaply itself. Ukraine could produce \$35bn-worth of kit a year, but has orders for less than half as much. Mr Trump should see that financing Ukraine is in America's interests, if only because China is watching Russia's progress.

However, backing Ukraine is not enough to make the entire continent safe and Mr Trump is unlikely to offer much help, so Europe must do more. That means working harder to defend itself, shoring up its unity and laying the foundations for a post-Putin Russia.

Europe is buying more arms. New figures from SIPRI, a Swedish think-tank, show that NATO, excluding America, increased spending by \$68bn, or 19%, in 2022-23. More is needed, but European leaders have still not prepared voters for the sacrifices ahead. They are squabbling over arms contracts. For example, Britain may not be allowed to join a European Union scheme unless it lets EU boats fish in its waters.

Work is needed to enhance NATO's unity, especially if America no longer binds it together. It is naive to think that countries like Spain and Portugal will ever fear Russia as Estonia and Poland do. But they face threats to their infrastructure and politics. They also have a vital interest in the EU being spared the dysfunction that would result from greater Russian influence over its eastern members.

Last, Europe needs a Russia policy that looks beyond Ukraine. In the cold war the West persuaded ordinary Russians that it was on their side, and that what kept them from freedom and prosperity was the Soviet regime. It cultivated dissidents and encouraged contacts. Today, too many Europeans are hostile to all Russians, rather than just the warmongers.

Europe has the wealth and industrial power to withstand Mr Putin. It has the potential to find an accommodation with his successor. As Russian soldiers strut through Red Square, the question is whether Europe can overcome its divisions in order to save Ukraine and protect itself. ■



## India and Pakistan

## On the brink

Why the conflict between South Asia's nuclear powers is getting more dangerous

THE SPECTACLE of India and Pakistan teetering on the threshold of war and then backing off is both alarming and familiar. This time the odds remain in favour of de-escalation. Yet the past two weeks show that relations between the two nuclear powers, which have flared into open conflict four times since partition in 1947, are becoming more unstable.

On May 7th Indian missiles struck Pakistan and the Pakistani-ruled part of Kashmir, a territory both sides claim. These were in retaliation for a terrorist attack on April 22nd in the Indian-controlled part of Kashmir, which killed 26 civilians. India says intercepts show that militants from Pakistan were to blame. Pakistan denies this and says it has shot down several Indian warplanes. Artillery duels along the de facto border in Kashmir are intensifying. The world has urged both sides to step back.

Similar stand-offs have occurred several times since 2000. Yet look closer and much is changing. Pakistan is decaying. Its economy is in crisis; its democracy is rigged by its army. Remarkably, the state tolerates militant groups on its soil, including Lashkar-e-Taiba (LeT), which has a history of atrocities against Indians. Other terrorists, including those operating from Afghanistan, killed 1,612 Pakistanis last year, the worst toll for a decade. As Pakistan sinks, India is rising: its GDP is now ten times larger than its neighbour's, having been five times larger in 2000.

New weapons are changing the conflict, too. India has bought French warplanes and boosted its drone arsenal. Pakistan has acquired new fighters and missiles from China, from which it now imports 81% of its arms. Following the wind-down of the war on terror and the fall of Kabul to the Taliban in 2021, America and Europe pay less heed to Pakistan. Once Western leaders humoured, bribed and threatened Pakistan to

ensure its half-co-operation. Now they tend to ignore it.

The combination of an unstable Pakistan, an arms race and outside indifference is dangerous. Fortunately, the military exchanges since April 22nd have so far been measured. India's missiles struck deeper into Pakistan than ever, but appear to have targeted militant camps. Its aircraft remained in Indian airspace. During skirmishes in 2019 India's government foolishly stoked jingoism at home. This time its rhetoric has been more restrained. Pakistan has fired artillery, but so far only in Kashmir. It reserves the right to take further action. Still, there is an off-ramp from Armageddon (see Asia section).

Unfortunately, unless the conflict's underlying causes are tackled, it will surely erupt again. India must stop oppressing Muslims in the part of Kashmir it controls. But the bigger problem is Pakistan's tolerance of violent militants. Although its involvement in the atrocity of April 22nd is not proven, a group linked to LeT initially claimed responsibility. It then issued a denial, saying that its social media had been hacked.

The Trump administration should urge Pakistan to shut down terrorist camps and prosecute militant leaders. International organisations that still have influence, including the IMF and the global anti-terrorist-financing watchdog, should demand it does more.

Other countries should pull their weight, too. China has become Pakistan's most powerful patron, but its citizens have been victims of terrorism there. The Gulf states, including Saudi Arabia, the United Arab Emirates and Qatar, should put pressure on Pakistan. They have long been friendly with it, but their economic interests are now aligned with giant India. With luck the latest outbreak of violence will die down. But only fools expect luck to last for ever. ■



## Israel's forever conflict

## The war in Gaza must end

America should press Binyamin Netanyahu to accept a ceasefire, then press Hamas to disarm

THIS TIME, Israeli officials insist, things will be different. On May 5th the cabinet approved a new plan for Gaza. It aims to mobilise tens of thousands of reservists. The army will reoccupy a part of the enclave, razing some buildings as it goes. Palestinians will be displaced to a sliver of land in southern Gaza. In parallel, Israel will let some aid into the strip, which it has blockaded since March 2nd. It will be stockpiled at hubs guarded by American mercenaries. Families will come once a fortnight to collect food and some essentials.

Supporters of this plan claim it will be decisive: destroying what remains of Hamas by denying it space to regroup or oppress Gazans and depriving it of food to feed its fighters. Binyamin Netanyahu, Israel's prime minister, has spent 18 months

promising "total victory". The plan's backers argue they need just a few more months to achieve it.

There is no reason to believe that they are right (see Middle East & Africa section). For a start, the operation is unlikely to free the hostages who remain imprisoned in Gaza. Israel's army has morale problems: in some units only 50% of reservists report for duty. Polls show that more than 60% of Israelis oppose an offensive to reoccupy Gaza. Israel has already smashed Hamas's leadership, its rocket arsenal and its ability to mount complex attacks. What remains is a ragtag guerrilla force, which Israel will struggle to destroy because fresh recruits are plentiful. Given that rump Hamas cannot muster much firepower, it may not be worth destroying. ►►

► The new plan will bring further agony for Gazans. More than 2,000 have died since Israel resumed fighting in March, bringing the cumulative toll to a grim 52,000. Civilians are going hungry because of the blockade. Israel's scheme for supplying aid will offer scant relief. It makes no provision for people who are sick or unable to trek to a distribution centre.

The only people who benefit from continuing the war are Mr Netanyahu, who keeps his coalition intact, and his far-right allies, who dream of emptying Gaza and rebuilding Jewish settlements there. If they were to get their way, 2m people would be crammed into 25% of Gaza's territory with subsistence rations. Some ministers already gloat that such conditions would drive Gazans into exile. That would count as ethnic cleansing.

Food should not be used as a weapon. Israel must allow aid into Gaza and let charities distribute it. Some will be stolen by Hamas, which cares little for the plight of Gazans. That is bad, but the alternative would be starvation. Beyond that, it is past time for a lasting ceasefire. Donald Trump should demand that Mr Netanyahu agrees to one, in exchange for the release of all hostages. No other leader can compel him. The president

is eager for a foreign-policy win. When he visits the Gulf next week, Arab leaders should urge him to pursue this one.

Then America should apply pressure to Hamas, using the strongest remaining tool at its disposal: reconstruction. The UN estimates this will cost \$53bn over the next decade. Mr Trump should issue an ultimatum: donors will not pledge a dollar until Hamas agrees to cede power and disarm. America's allies will need little convincing. Most want Hamas gone.

The odds are that Hamas will try to cling to power. But it will have to answer to its own people. Thousands of Gazans have already joined protests demanding its ousting. Perhaps their ranks will swell. And if Hamas ever posed a serious threat to Israel, then Israel would be entitled to strike again.

That outcome would be bleak, but the present course is bleaker. More Gazans will die from shelling and starvation. Hostages will perish in captivity. An endless war will deepen the rifts in Israel and further damage its standing in the world. Israel has achieved a string of victories over its foes. If it ends up depopulating and reoccupying Gaza it will commit a strategic blunder and a moral outrage. ■

## Artificial intelligence Illusion of control

Donald Trump is right to scrap Joe Biden's chip restrictions. What should come next?

FOR YEARS now America has grappled with how best to protect its lead in the artificial-intelligence race. Its weapon of choice has been export controls on the sale of AI chips to China. But, as we report this week, controls so far have been leaky (see Business section). A burgeoning grey market exists for the wares of Nvidia, America's chip champion. Chinese firms lease access to offshore data centres or buy chips through intermediaries. Export controls have conspicuously failed to stop Chinese tech from surprising the world.

The Biden administration thought the answer was to cast a wider net. In its final days it announced a sweeping plan for a licensing regime that would have spanned much of the globe. Unfortunately, this would have been a bureaucratic nightmare, and on May 7th the Trump administration rightly said it would ditch the rules and replace them with something simpler. As it rethinks its approach, it should proceed with care. Chip restrictions may offer the illusion of control. But they bring with them a range of unwanted consequences.

The problem with the Biden rules was that they were unworkably complicated. Close allies would have faced few restrictions; China and Russia would have been barred outright. But some 120 middle countries, such as India, Singapore and the United Arab Emirates, would have become subject to a labyrinthine licensing regime. Tracking the use of chips around the world would have been impossible. The Bureau of Industry and Security (BIS), which was supposed to enforce it, is short-staffed and poorly equipped.

As the Trump administration mulls new rules, it needs to be realistic. Chip controls are always going to be leaky. Export controls can work if they are narrowly applied. Banning China from importing extreme-ultraviolet (EUV) lithography ma-

chines has successfully delayed its efforts to make the most advanced chips, for instance. But EUV tools are easy to track: they are made only by ASML, a Dutch firm, and only around 50 of them are sold a year, each weighing more than 100 tonnes. Controlling the sale of AI chips is a different story. They are smaller, more versatile and far more numerous. Nvidia alone expects to sell more than 6m of them this year.

Moreover, chip controls on China will have a half-life. For more than a decade China's government has poured billions of dollars into its semiconductor sector, in the hope of achieving self-sufficiency. But the breakthroughs came in earnest only after America began tightening its export controls, giving businesses a reason to look for alternatives. Huawei, China's tech champion, recently unveiled an AI system that is said to match Nvidia on some measures. China still relies on foreign tools, and lags behind on chips at the cutting edge. But it is closing the gap.

This means that widening the net to others will bring few benefits, but big costs. A wide-ranging system of licences would do little to stymie China. But it would push middle countries towards Chinese suppliers—not because they prefer them, but because their chips are easier to obtain. Mr Trump's administration is reportedly considering using access to AI chips as a bargaining chip in trade talks. But if a rules-based system descends into wheeling and dealing, many countries may see American suppliers as unreliable. This could shrink American firms' market share and diminish their technological leadership.

Chip controls alone cannot be America's way of staying ahead. At best they might buy some time; at worst they do not work at all. If America is to win the AI race then it will need all the ingenuity, talent—and friends—it can get. ■



## Letters: *plastics, birthright citizenship, protest songs, Donald Trump's economics, company lunches, tweed*

### The problem with plastics

The claim that "Plastics are greener than they seem" (April 19th) oversimplifies the reality that plastics vary widely in their composition and impact and many are significantly more harmful than they appear. Some plastics may be lightweight, reusable or recyclable. Many others, including polyvinyl chloride, polystyrene and certain types of polyethylene, contain toxic monomers and additives that leach out of products and waste, posing serious risks to both human and environmental health. In addition, not all plastics are created equal and a number of factors hinder their "circularity" of use in an economy, for example.

We know a lot about plastics and their harms. Environmental pressures from plastics are high and increasing with production. Humans are exposed to microplastics and nanoplastics through ingestion and inhalation. Mortality and harm to wildlife from plastics is demonstrated in the wild as well as in the laboratory. And emerging evidence points to some specific and severe health effects in humans from microplastic particles.

We must dramatically alter our relationship with plastic polymers and their additives to keep them out of our environment and our bodies.

MARGARET SPRING  
Chair of the ISC Expert Group on Plastic Pollution  
Monterey Bay Aquarium  
Monterey, California  
PATRICK SCHRÖDER  
Member of the ISC group  
Chatham House  
London

### Must you be born in the USA?

You severely overstated the notion that the 14th Amendment to America's constitution guarantees citizenship to anyone and everyone born on

American soil ("Why make all babies citizens?", May 3rd). No court has ever held that it applies to those who are in the United States temporarily or illegally. Many scholarly treatises, including an entire book on the issue by two law professors at Yale, have concluded that it does not.

In *Oforji v Ashcroft*, the then 7th Circuit judge, Richard Posner, wrote *in dicta* that "A constitutional amendment may be required to change the rule whereby birth in this country automatically confers US citizenship, but I doubt it... Congress would not be flouting the constitution if it amended the Immigration and Nationality Act to put an end to the nonsense."

Many European nations previously had birthright citizenship, reviewed it, and then rescinded it. In 2004 Ireland abolished it with a constitutional amendment passed by almost 80% of the voters.

There may have been good policy arguments for *jus soli*, the right of the soil, in the 1860s when most nations were an ocean and a month's sail away.

### It's time for lunch

Bartleby extolled the virtues of office lunches (April 19th). I have often found that working lunches, where selected staff are offered free sandwiches (or perhaps something more substantial) are an ideal way to get the creative juices flowing. They encourage input on projects from employees who have no formal role in the assignment. More important, lunch can help when making deals. In negotiations, trust is a key factor and nothing helps foster trust more than having an opportunity to relax and get to know each other over a quiet meal, one's likes and dislikes, comparing different

But these no longer apply in 2025 when an airline flight makes birth tourism accessible and simple.

RIC OBERLINK  
Berkeley, California

### Top of the protest pops

Your article on the connection between the Vietnam war and American culture claimed that no protest song topped the Billboard charts in the 1960s ("The times, they did a-change", April 26th). I protest. Barry McGuire's "Eve of Destruction" hit number one in September 1965.

WOUT ULTEE  
Amsterdam

### Updating economics

The column by Paul Dans arguing that there's method in Donald Trump's madness raises a deeper question than is perhaps intended (By Invitation, May 3rd). That is, does Mr Trump break economic theory, or prove it right when systems are pushed to their limits? He is not rewriting economics but stress testing it to its limits. The dysfunctions that Mr Dans highlighted of persistent trade deficits, industrial erosion and fiscal imbalance have long been visible through classical and Keynesian lenses.

Ricardo's logic survives, but in a world of geopolitical rivalry and systemic risk the definition of "advantage" has shifted from efficiency to

control. Keynes, similarly, saw deficits not as aberrations but as symptoms of internal misalignments between production, spending and investment. His insights remain essential.

Classical theories do not need demolition. They need updating to reflect new constraints such as ecological limits, fractured labour markets, the weaponisation of trade and the disruptive concentration of technological power. Mr Trump's ascent challenges economists to refine and extend the canon, not to abandon it.

DR ROLANDO FUENTES  
Professor  
EGADE Business School  
Tecnológico de Monterrey  
Monterrey, Mexico

I'm sure you will get many letters criticising the essay by Mr Dans. I was particularly struck by his complaints about "unelected, revolving-door bureaucrats". In a single breath he then heaped praise on Elon Musk, who is both unelected and an incompetent bureaucrat. Mr Dans has a powerful facility for hypocrisy.

CLIVE MCCARTHY  
San Francisco

### The need for tweed

I enjoyed your article on Nigel Farage, "The scarier sequel" (April 26th). However, I also noted your theme of associating the tweed worn by Mr Farage with less-than-favourable connotations. Historically, tweed may have had its negative stereotypes, but this versatile fabric is now produced in a variety of contemporary designs, weights and technical properties. When well-cut, it can result in clothing that is both stylish and complementary to modern tastes.

Is it too late to reconsider this sartorial stereotype?

JAMES CRETNEY  
Fownhope, Herefordshire

national obsessions and so on (a glass of wine can help, too). Such opportunities allow individuals to see each other as people rather than job titles.

DAVID SCOTT  
Port St Mary, Isle of Man



→ 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

### Kenneth Rogoff

*This time really is different for the dollar, writes the economics professor*



when managing their own currency's exchange rates—a gradual splintering was already under way. Europe, too, chafes at the tentacles of control that dollar dominance gives America; the European Central Bank's moves to establish a central-bank digital currency should be viewed in part as an effort to compete more effectively with the dollar.

The biggest challenges to dollar dominance come from within, including America's unsustainable debt trajectory. It is already under strain from the inevitable ending of a period of very low long-term real interest rates. If Mr Trump's chaos keeps undermining the dollar's "exorbitant privilege"—the borrowing discount America's government enjoys thanks to the greenback's dominance—rates will rise even more.

A related source of concern is the increasing willingness of both Democrats and Republicans to challenge the Fed's independence. Mr Trump's extraordinary attacks on the Fed, which he wants to blame for the recession his tariffs might cause, has taken Fed-bashing to another level. Don't think, though, that Fed independence would have been entirely secure under progressives, who want the Fed to focus more on the environment, inequality and social justice, and ultimately to create a central-bank digital currency to suck money out of the private banking system and re-direct credit towards government-favoured sectors.

Mr Trump did not start the dollar's decline, but he is likely to prove a powerful accelerant. Aside from upending a global trade regime in which America was a big winner, he is working hard to undermine almost every other pillar of dollar dominance. He has rightly cut back illegal immigration—but he does not seem to care much for legal immigration either. He seems hell-bent on crushing research at the nation's top universities, which have long been a major source of innovation and growth.

Above all, Mr Trump's broad challenge to the rule of law weakens the case for dollar exceptionalism. Until now, trust in the fairness of America's legal system has helped convince investors that American assets are among the safest in the world. This includes not just Treasuries, but stocks, corporate bonds, property and more. The prices may go up and down, but at least you own what you own. Now, if Mr Trump's efforts to vastly extend presidential power succeed, foreign holders of US assets will feel less secure.

The great Danish chess player Bent Larsen, when asked if he preferred to be lucky or good, replied "Both." Americans tend to emphasise how good the American system has been, as the dollar has beaten back one challenger after another, from the Soviet Union to Japan to Europe, and now perhaps China and cryptocurrencies. But they forget how many turns of luck America has had along the way. These include, among others, the collapse of mid-1960s Soviet economic reforms that might have turned the country into something more like latter-day China; Japan's mistake in allowing itself to be browbeaten in the Plaza accord of 1985 when its monetary-policy framework and financial regulators were not yet ready for prime time; and the euro zone's decision to prematurely include Greece.

This time, unfortunately, is different. Unless Mr Trump reins in his chaotic trade policy—he could start by firing his Rasputin—America's luck looks likely to run out. ■

*Kenneth Rogoff is a professor at Harvard University and the author of "Our Dollar, Your Problem: An Insider's View of Seven Turbulent Decades of Global Finance and the Road Ahead".*

**T**O PARAPHRASE A common saying: it ain't what you don't know that kills you. It's what you think you know that ain't so. Nothing could better describe the numb-skulled thinking behind the havoc that President Donald Trump and his trade Rasputin, Peter Navarro, have wreaked on the global economy. Among the probable casualties will be the supreme status of the dollar. Although the greenback will almost certainly remain the world's dominant currency for at least a couple more decades, it will probably fall several notches. Expect the yuan and the euro to encroach on the dollar in the legal economy. Cryptocurrencies will do the same in the underground economy, which is roughly a fifth of global GDP. Reduced market share will mean higher interest rates on long-term dollar debt, and a weakening of the effectiveness of American financial sanctions, among other problems.

Even before Mr Trump, dollar dominance had been in slow decline. There are many measures of the dollar's footprint on the global economy, including central-bank reserve holdings, the currency used in trade invoicing and the denomination of international borrowing. A particularly useful one is which currency central banks focus on as their exchange-rate anchor or reference currency. Given that national central banks have intricate knowledge of their economies' inner workings and how exchange-rate movements affect them, anchor or reference currency choices may be thought of as a portmanteau measure of dominance.

By this measure, dollar dominance peaked around 2015, after which China gradually began to make its currency more flexible. This was a change long in the making, since a large economy like China's can experience very different business cycles from America's, and there is no reason to make its central bank dance to the Federal Reserve's tune. American sanctions on Russia, including the freezing of over \$300bn-worth of central-bank reserves, have also lit a fire under China's efforts to decouple, given the likelihood of an eventual reckoning over Taiwan.

As China's exchange-rate regime has evolved, so too have those of its neighbours, given that China is at least as important a trading partner as America for most. With Asia constituting roughly half of the dollar bloc—ie, economies that focus on the dollar

## Briefing Russia's next war



### Would Vladimir Putin attack NATO?

NARVA

**Russia is building up its forces, frightening its neighbours**

**E**GERT BELITSEV, the head of Estonia's border force, calls it the edge of the free world. A bridge stretches between the outer walls of the Hermann Castle in Narva, on the Estonian side, and those of the Ivan-gorod Fortress, in Russia. Swollen by the melting snows, the Narva river seethes underneath. Two giant screens recently erected on the Russian side facing Estonia were expected to stream video of the parade in Red Square on May 9th commemorating victory in the second world war. The sounds of drums and the images of goose-stepping Russian soldiers are bound to induce anxiety in Estonia, which was annexed in 1940 by Stalin and was occupied by the Soviet Union from 1944 until 1991.

Provocations are routine. Russia has been jamming GPS signals throughout the region, disrupting air traffic and search-and-rescue operations. Last year Russian border guards removed buoys on the Narva, which mark the border. Surveillance blimps are a regular sight in the skies. More

concerning is what can be seen on satellite images. Although Russia's bases near the Estonian and Finnish borders are nearly empty, with troops and equipment sent to Ukraine, new construction is under way.

On paper, Russia has big plans. It aims to expand its armed forces to 1.5m active troops, up from about 1.3m in September. In 2023 it announced the creation of a new formation, the 44th Army Corps, in Karelia, along the Finnish border. The 44th's first units were bloodied in Ukraine last year. Russia is also expanding several brigades into larger divisions. All this will take years to accomplish. But if Russia succeeds, notes Lithuania's intelligence agency, it will increase troops, equipment and weapons on its western front by 30-50%. "During 2024", noted a recent Danish in-

telligence assessment, Russian rearmament "changed character from reconstruction to an intensified military build-up". The goal is to be able "to fight on an equal footing with NATO forces".

Some argue that Russia is bound to attack. "It's a question of when they will start the next war," argued Kaja Kallas last year, when she was Estonia's prime minister (she is now the EU's foreign-policy chief). Emmanuel Macron, France's president, in March pointed to Russia's breakneck rearmament. "How believable is it, then," he asked, "that today's Russia will stop at Ukraine?" Others are sceptical that Russian ambitions range much beyond the Dnieper river. Pedro Sánchez, Spain's prime minister, scoffs at the notion of a big war: "Our threat is not Russia bringing its troops across the Pyrenees." Steve Witkoff, Donald Trump's envoy for peace talks with Russia, when asked whether Russia intended to "march across Europe", responded simply: "100% not."

→ ALSO IN THIS SECTION

16 Putin's arms empire



Intelligence analysts frame threats in terms of two variables: intent and capability. There is no specific intelligence at present that suggests Russia intends to attack NATO. But intentions are fluid. In his public speeches, Vladimir Putin has justified his war to conquer Ukraine in several ways: the need to defend Russian-speakers in Donbas; the imperative of “demilitarising” and “de-Nazifying” Ukraine; and the need to keep a supposedly hostile NATO at bay. In February 2022, on the eve of war, Mr Putin blamed Lenin for tearing apart the Russian empire, implicitly casting doubt on the sovereignty not only of ex-Soviet states like Ukraine, but also of those once part of that empire, such as Finland.

Yet for Mr Putin, war may be less about external threats than about prolonging and trying to legitimise his reign. In his 25 years in power, he has waged five wars. Each began with his popularity sagging; each ended with his authority enhanced. At the start of the war few Russians believed the Kremlin's line that Russia was threatened by the West. It has since become more widely accepted—not least because Mr Putin's propaganda was reinforced by some Western rhetoric that blamed all Russians for the war. This has alienated those who were initially sympathetic towards Ukraine and the West.

### Rallying round the flag

Though a majority of Russians would prefer the war to end, most also credit the war with boosting the country's international clout, according to a joint survey conducted by the Chicago Council on Global Affairs and the Levada Centre in Moscow. In the past, 60% of Russians prioritised high living standards over great-power status. Today 55% of Russians favour power projection over high living standards. They may be getting part of their wish. After three years of war, Russia's economy is sliding towards stagnation. Inflation remained stubbornly above 10% in the year to March despite the central bank holding its benchmark interest rate at 21%.

Sometimes it is capability that shapes intentions. In a recent interview, Mr Putin said that the war in Ukraine is the culmination of a long-standing confrontation with the West. After he grabbed Crimea from Ukraine in 2014 he stopped, not because he lacked the will to grab more, but because he lacked the means. “In 2014 the country wasn't prepared for a head-on confrontation with the entire collective West, which is what we're seeing now.”

Yet Mr Putin's zest for war and his ability to wage it are two different things. In Ukraine his troops have spent nine months unsuccessfully assaulting Pokrovsk, with a pre-war population of 70,000 people, while suffering more than 1,000 dead and wounded every day. Russia's army is inca-

pable of complex manoeuvres and a generation of officers has been lost. Its air force rarely ventures into Ukraine, preferring to hurl glide bombs from a safe distance. As long as the war in Ukraine grinds on, Russia will have no spare ground forces to mount a serious threat to NATO. But even if a ceasefire is signed, Russia might struggle to divert large numbers of troops, notes Konrad Muzyka, an analyst, because that might allow Ukraine to recapture territory.

Russia, therefore, would have to build new forces. Western intelligence agencies have scrutinised how long that might take. Their conclusions vary considerably. America talks of Russia reconstituting its army “during the next decade”. Norwegian intelligence reckons five to ten years “at the earliest”. Ukraine's estimates suggest five to seven; Germany's are five to eight. Estonian spooks appear to be the least sanguine, offering a three-to-five year timeline for Russia to build new formations, depending on the course of the war, Russia's economy and whether sanctions remain.

These timelines hinge on a variety of factors. Russia is churning out munitions at extraordinary speed—more than 1,400 Iskander ballistic missiles per year, as well as 500 Kh-101 cruise missiles, according to Ukrainian estimates and a recent report by the Royal United Services Institute (RUSI), a think-tank in London. But in other areas, current production rates are unsustainable. Just 10-15% of the 1,500-2,000 tanks and 3,000 other armoured fighting vehicles being produced annually are new, notes RUSI. The rest are refurbished from old Soviet stockpiles. These could run dry by 2026 if present loss rates continue, notes Dara Massicot of the Carnegie Endowment. Russian armour production might have peaked this year, says Mr Muzyka.

Manpower is also a serious constraint. In the short term, Russia is recruiting some

### Race to the top

Estimated defence spending, \$bn at military PPP\*, 2023 prices



\*Purchasing-power parity, adjusted for wage and cost differences, indexed to America †Excluding Turkey  
Sources: SIPRI; Peter Robertson; The Economist

30,000 men a month, but over the longer run it faces challenges from a declining and ageing population.

More important is the quality of these forces. “Materiel recovery will be much faster and easier than the actual ability to employ the force,” argues Michael Kofman, also of the Carnegie Endowment. Russia's armed forces have improved dramatically in some areas, he says, such as finding and striking targets using drones, but their ability to scale this up is limited by the quality of troops, officers and staff work.

### The men in the foxholes

The quality of Russia's forces has been hurt by grievous losses. Western officials reckon since late 2024, Russian military hospitals have been operating at maximum capacity. General Chris Cavoli, NATO's Supreme Allied Commander Europe, said in April that Russia had suffered an estimated 790,000 casualties. Many of those who have been killed or wounded are the junior officers needed to lead units in an expanded force. Public funeral notices suggest that between 2022 and 2024 Russia lost about as many lieutenants as would normally be needed to staff ten divisions or brigades, writes Ms Massicot.

A recent study by the RAND Corporation, an American think-tank, explores the different ways Russia could rebuild its armed forces. For many years before the invasion of Ukraine, Russian leaders sought to build a leaner, more professional force that relied on technology and agility. That model is now in the dustbin. Russia is reverting to an older, cruder way of war: “The centrepiece of these reforms is not innovation and technological adaptation. Rather, it is a return to mass and firepower.”

Russia's ability to sustain a military build-up is also constrained by its struggling economy. Last year it spent 6.7% of GDP on defence, according to official figures, with spending forecast to rise this year. Yet not all of this money will be used to buy new equipment, since the figure in-



- cludes payments to injured soldiers and the families of those who have been killed, as well as large salaries to entice people to sign up as contract soldiers.

### The slog of war

One camp therefore argues that the threat from Russia, though real, is more manageable than commonly thought. The new formations, such as the 44th Army Corps destined for the Finnish border, are "Potemkin units", says John Foreman, who served as Britain's defence attaché in Kyiv and Moscow. In the latter post, he recalls, Russia claimed that it had 1m men under arms; the true figure at the time was 880,000.

Moreover, the accession of Sweden and Finland to NATO has drastically worsened Russia's position in NATO's north. The idea that Russia could extricate itself from Ukraine, reform its army and "march on Warsaw" is "an absolute fantasy", concludes Mr Foreman. He doubts that Russia has any intention to attack, in any case.

Another school of thought retorts that Russia's ability to wage war depends very much on the sort of war being waged. "In the medium term, Russia is unlikely to be able to build up the capabilities needed for a large-scale conventional war against NATO," acknowledges Lithuania's defence intelligence agency. "However, Russia may develop military capabilities sufficient to launch a limited military action against one or several NATO countries." Danish intelligence sounds a similar warning: it would take five years for Russia to be ready for a big war (not involving America). But it would take only two years to prepare for a "regional war" against several countries in the Baltic-sea area, and a paltry six months to be able to fight a "local war" against a single neighbouring country.

Russia could shift 50,000 troops from Ukraine to its Leningrad military district with a minimal impact on the current war,

argues Hanno Pevkur, Estonia's defence minister. "But this would significantly change the force posture of the Russian army close to Estonia," he warns. "To have a localised small conflict, they don't need to have all the troops available from Ukraine."

There are big caveats to these scenarios. The Danes assume that NATO would not rearm "at the same pace", a premise that looks shakier today as European NATO allies, spooked by Mr Trump's assault on them, pour money into their armed forces. The more important assumption is that Russia could keep a war localised in the first place. NATO currently deploys a string of "forward" battlegroups in eight countries, from Estonia down to Bulgaria, involving troops from 28 separate countries. American troops are present in at least three of them. Increasingly NATO is also "shadowing" Russian exercises, ensuring that it monitors and matches surges of Russian troops near the border; the "Zapad" exercise in Russia and Belarus later this year will be watched closely.

In order to fight a limited conflict, Russia would have to assume either that these forces would stand by or pull back—or, at least, that America would not step in (an assumption that would be strengthened were America to be distracted elsewhere, for instance by a Chinese attempt to invade or blockade Taiwan). That would certainly even up the odds.

Our calculations suggest that, even after adjusting for Russia's lower wages and costs and its increased budgets, Mr Putin's defence spending does not match that of NATO's European members. Yet fragmentation and duplication mean that at least some of Europe's spending is wasted. More importantly, although European forces are well armed on paper, they would struggle to target their long-range weapons, organise complex air operations, command big formations and defeat Russian

air defences without American involvement. Poland, for instance, has oodles of long-range rocket launchers. But it does not have the means to find targets for them far behind the front lines. For now, most European countries are operating on the assumption that America, even under Mr Trump, will keep up that support for long enough for Europe to fill in the gaps over time—a managed transition rather than a disorderly withdrawal.

### Looking for a soft flank

If that assumption holds, and if European rearmament gains pace—both big ifs—Russia is likely to remain deterred from taking any acts of war that would trigger NATO's Article 5 mutual-defence clause. But its appetite for risk could nonetheless grow, not least if it judges that Mr Trump might overlook smaller transgressions. "Russia will gradually become more willing to use military force in the coming years to put pressure on or challenge NATO as a whole or individual NATO countries," argues Danish intelligence.

That could involve relatively minor incidents, such as the reckless decision to interfere with American, British and French surveillance aircraft in recent years. But it could also entail more ambitious efforts to destabilise what Russia views as peripheral territory, such as the Norwegian island of Svalbard, where it might be harder to gain a consensus among NATO allies on a timely response. Non-NATO states would also be easier prey still. "If you saw Russian troops from Transnistria moving into some part of Moldova," says one intelligence insider, "I think that would be a very, very difficult contingency to deal with, and it would split NATO."

Predicting future wars is always fraught. During the cold war, America and the Soviet Union habitually misunderstood both the intentions and capability of the other. In "Watching the Bear", a collection of essays published by the CIA in 1991, Raymond Garthoff, a former CIA analyst, reflected on the tendency, in the 1950s and 1960s, and again in the 1970s and 1980s, "to impute offensive intentions to increasing Soviet strategic offensive capabilities". Soviet thinking, in turn, he notes, was marked by "considerable exaggerations of Western bellicosity and capabilities, including planning for initiation of war".

But understating the risks is also dangerous. The chances of a big war near Sweden remain low, says the country's spy agency. However, a "limited armed attack" against a Baltic state or NATO ships is entirely possible, it warns. "Such action could seem disadvantageous from a Swedish perspective," explain the spies, "but it is important to emphasise that the Russian leadership makes decisions based on its own logic and assessment." ■



## Russia's military-industrial complex

## Putin's secret arms empire

*The Economist* tracks mobile signals to plot the Kremlin's build-up

GENERAL CHRIS CAVOLI, NATO's top commander, recently told the Senate Armed Services Committee that Russia was replacing troops, tanks and munitions "at an unprecedented pace". Its factories would roll out 1,500 tanks this year, compared with America's 135, and it would produce 3,000 armoured vehicles. America, by contrast, makes no new infantry fighting vehicles. Russia would produce 250,000 shells per month, putting it "on track to build a stockpile three times greater than the United States and Europe combined".

To understand the scale of Russia's defence-industrial expansion, *The Economist* consulted a Western company that uses artificial intelligence to sift through data from a variety of mostly commercially available sources. This shows how the number of electronic devices, such as mobile phones, present at an industrial site has changed. The data capture only a fraction of total devices—perhaps 2% to 10% of the total number—but they serve as a proxy for the level of activity over time. The firm asked to remain anonymous owing to the sensitivity of the topic.

Consider Omsktransmash, or the Omsk tank plant, one of the largest tank factories in Russia. The facility takes old T-80 tanks, which were produced decades ago, and upgrades them, working around the clock. Since the invasion, the number of people at the factory has climbed dramatically. The level of activity has remained particularly high since the middle of 2023, when the Kremlin realised that it would need to mobilise for a long war (see chart 1).

The same story can be seen across Russia's defence-industrial facilities. Uralvagonzavod, Russia's largest tank facility, saw higher activity in 2024 than in 2023 (2). There was also strong growth at Volgograd Titan-Barrikady, where Iskander launch systems are built (3).

The Iranian-designed Shahed-136 suicide-drone is an increasingly familiar sight in Ukraine's skies. There were almost 140 daily attacks in February, far above levels seen in 2024. That is consistent with rising activity at the Alabuga factory in Tatarstan, where the drones are made (4).

Filling 3m shells per year requires prodigious amounts of explosives. The Sverdlov plant in Dzerzhinsk is Russia's largest explosives plant, producing chemicals for shells and glide bombs. The number of monthly devices there has shot up (5).

The Yekaterinburg Factory No.9 produces the barrels for howitzers and tanks (6). Artillery pieces and cannons can be seen in the open on satellite images.

These are not the only signs of Russia's hyperactive defence industry. *The Economist* has also seen a range of other indicators. In Biysk, for instance, home to an important plant that produces oleum, which is used in explosives, and a centre of military research, average daily traffic between dormitory areas and districts with chemical plants rose 19% in 2023. "Dwell time"—how long people remain in one place—rose by 32% during periods associated with sec-

ond and third working shifts.

There are still constraints on Russian industry. Last year the country relied on North Korea to provide a significant proportion of artillery ammunition used in Ukraine; those stocks are not limitless. Key inputs to the artillery supply chain—chromite for barrels and cotton cellulose for propellant—still have to be imported, according to research by the Open Source Centre and the Royal United Services Institute (RUSI) in London. But Russia is now able to produce some important components at home.

"In principle, there would seem to be no reason why this mobilised defence effort cannot be maintained for quite a long period of time," writes Julian Cooper of the University of Birmingham, in a recent study for the RUSI Journal which surveys many of the facilities discussed above. "It is not without irony," concludes Mr Cooper, "that advanced Western economies may now find the need to look closely at Russia to understand how to adapt." ■

## Industrial mobilisation

Russia, number of mobile phones and other connected devices detected per month, selected locations

1 Omsktransmash tank factory



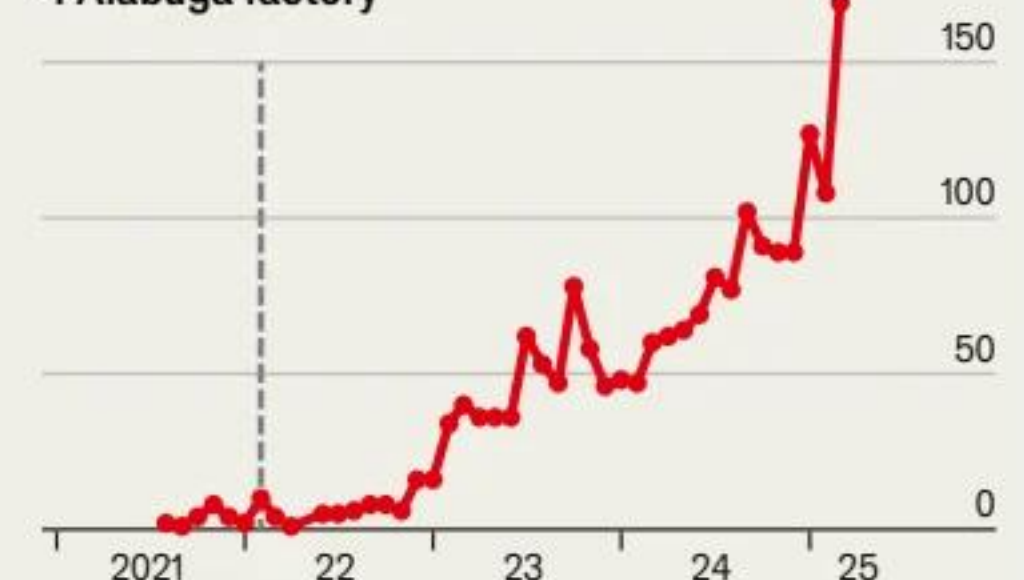
2 Uralvagonzavod tank facility



3 Volgograd Titan-Barrikady



4 Alabuga factory



5 Sverdlov plant



6 Yekaterinburg Factory No.9



Source: Withheld at data provider's request

➔ More online

More charts and detail on other factories at: [economist.com/RussianDefenceBoom](https://economist.com/RussianDefenceBoom)

# United States



**Sleeping rough**

## After Grants Pass

FRESNO

**American cities are cracking down on homeless camps**

**D**AVINA VALENZUELA watches as sanitation workers heave most of her belongings into a garbage truck. The 33-year-old has been homeless for more than a year, and was sleeping in a dusty alley in central Fresno, the biggest city in California's Central Valley. The truck devours bags of clothes, a pushchair (stroller), a pile of hypodermic needles and around \$120—much of it in change. Police officers arrest her and a friend and sit them in the back of a truck. They are given tickets for camping in a public place, which became a misdemeanour in September in an attempt to shrink the city's homeless encampments. "That's all I have right there," she says, once her handcuffs are taken off. "I don't know how I ended up here."

Roughly 771,000 Americans were homeless last year, more than any other year on record and an 18% increase from 2023. A national housing shortage is by far the biggest culprit, but the end of pandem-

ic rental assistance, an increase in migration and natural disasters that displaced people also contributed to the surge. Only about 35% of homeless people in America sleep outdoors rather than in shelters or in temporary housing, but that is a higher proportion than in most other places tracked by the OECD, a club of mostly rich countries. Rough sleepers are more likely than their sheltered peers to be homeless for long stretches of time. Many of them

struggle openly with drug addiction and mental-health problems, which can make tent camps look and feel unsafe.

The entrenchment of homeless encampments has frustrated both voters, who wonder where the billions of dollars poured into fixing homelessness have gone, and politicians whose careers may ride on fixing the problem. A backlash is well under way. Last June the Supreme Court ruled in *Grants Pass v Johnson* that punishing homeless people for sleeping outside when they have nowhere else to go was not a cruel and unusual punishment, which is banned by the Eighth Amendment. At least 163 municipalities have passed camping restrictions since then, according to the National Homelessness Law Centre, an advocacy group. Almost a third of those bans are in California, which has both more homeless people than any other state and the highest proportion of rough sleepers (see map). The result is a country that, city by city, is trying to end outdoor homelessness by force.

To understand how these bans are being implemented, consider Fresno, where there are more homeless people in the region than there are beds. Residents report encampments they want cleaned up to the city via an app. A special team of police officers and sanitation workers investigate these spots and make arrests. Sergeant Ste-

### → ALSO IN THIS SECTION

**18 Pete Hegseth's purge**

**19 Social history**

**20 Birthrights and SCOTUS**

**20 Trans medicine**

**21 Disparate impact**

**22 Lexington: Antisemitism on campus**

► ven Jaquez, who runs the team, argues that the camping ban gives his officers leverage. Violators can face up to \$1,000 in fines—an astronomical amount for someone living on the street—or one year in jail. But in lieu of punishment they can ask police to take them to a shelter where they can inquire about housing or treatment. If they complete a rehab programme, their citation goes away. But if, like Ms Valenzuela, they refuse the offer, tickets can accrue. As of April 25th the city attorney's office had filed charges in 266 cases. Only 33 of them were resolved because the person charged had accepted services. How harshly people will be punished is still unknown: the first case to make it to trial was dismissed by the judge for taking too long.

### Move on

Fresno's leaders consider the camping ban a success, and insist that outdoor homelessness is declining. But the most recent official statistics are two years old. Dez Martinez was once homeless and now advocates for her "street family" in Fresno. She reckons people are just hiding from the cops by moving under highway overpasses and tying their belongings to trees. Jerry Dyer, Fresno's Republican mayor and its former police chief, doesn't mind if that is true. "I'm sure there are people that have now chosen places that are less visible publicly, which is not a bad thing" for businesses, he offers, though he would prefer people to seek help. Yet if homeless people go into hiding it becomes hard to know how many of them there are. The city can claim success, but the problem may persist in the shadows.

Mr Dyer contends that it is more compassionate to coerce homeless Fresnoans to accept housing or treatment than to allow them to suffer on the streets. Despite their different political parties, he sounds remarkably like Gavin Newsom, California's Democratic governor, who argued that lower court rulings previously limiting enforcement against camps had "tied the hands" of officials. The Cicero Institute, a conservative think-tank in Austin, Texas, started by Joe Lonsdale, a tech billionaire, pushes a similar argument as it works to pass state camping bans. "We have a deep discomfort with forcing people to do things," admits Devon Kurtz, who studies homelessness at Cicero. But, he asks fairly, "Is it OK to let them die out there?"

The fact that so many Republicans and Democrats are on the same side illustrates how frustration with the status quo has scrambled the politics of homelessness. Many on the left were once wary of clearing encampments for fear that breaking up communities and trashing people's belongings could be traumatic for them. That argument is little-heard these days. The risk is that these camping bans prove to be

too big a stick, and eventually follow the same pattern as anti-vagrancy laws passed during the 19th century, filling jails and hospitals with people whose crime is having nowhere to live. "There's a very sordid history of moving from criminalising people who are destitute, to then institutionalising them," says Dennis Culhane of the University of Pennsylvania.

Not every city has taken a punitive approach. Los Angeles is clearing encampments without the threat of citation or jail and the number of rough sleepers there dropped by 10% between 2023 and 2024. But it is far too soon to celebrate: the number of unsheltered homeless people in LA, adjusted for the city's population, remains among the highest in the country.

While cities experiment with camping bans, housing wonks warn that new federal policies could worsen homelessness. In President Donald Trump's budget request, which is mostly a wish-list, funding for the Department of Housing and Urban Development would be slashed by 44%, jeopardising rental-assistance programmes that help keep poor Americans housed. "We'll all be at Donald Trump's house" if big cuts are implemented, jokes Ms Martinez, "camping on the White House lawn". ■

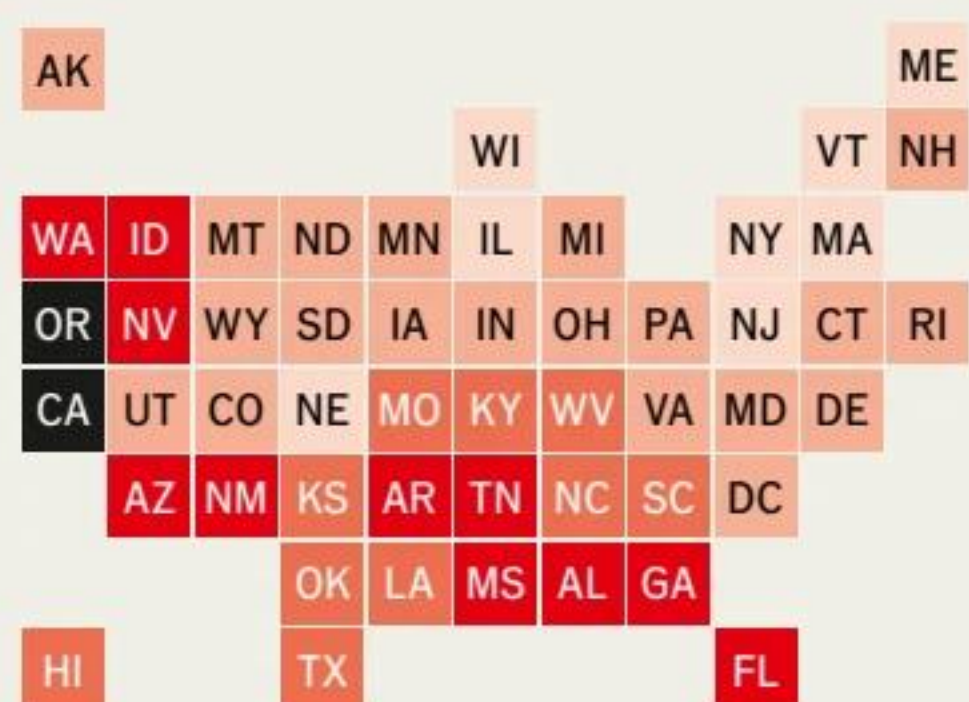
### Down and out

United States, homelessness, 2024

Rate per 10,000 people



Unsheltered homeless as % of total



Source: Annual Homelessness Assessment Report, Dec 2024

### The army

## Pete's purge

The defence secretary wants to get rid of both weapons and generals

THE PENTAGON is in chaos. Pete Hegseth, the secretary of defence, is accused of mishandling classified information. Many of his aides have been fired over alleged leaks (accusations they deny). Top generals have been dismissed for no discernible reason beyond their colour or sex. The department is in "a full-blown meltdown", says John Ulyot, a Hegseth loyalist who served as chief spokesman until April. Yet Mr Hegseth is pressing ahead with reforms that will change the size, shape and purpose of America's armed forces.

The first step came on April 30th when Mr Hegseth issued a memo to the army. The force had two simple priorities, he wrote: defend the homeland and deter China in Asia. The army was told to expand its stockpiles, deployments and exercises in the region, which tends to be dominated by the air force and navy. No mention was made of Europe, where America still has more than 80,000 troops, a fact that is likely to raise eyebrows among European allies a month ahead of a NATO leaders' summit in June.

The memo gave the army a number of new tasks. The most important was the exhortation to "achieve electromagnetic and air-littoral dominance" by 2027, a convoluted phrase that translates into out-jamming and out-droning the enemy. By the end of next year every division in the army has been told to field sizeable numbers of drones (perhaps 1,000 per division); every "manoeuvre" platoon (a unit of three dozen soldiers) should have better and cheaper anti-drone systems. Divisions and larger formations are to have "AI-driven command and control" to manage battles.

To free up money for all this, Mr Hegseth has also told the army to stop doing various things. Some of this is bureaucratic tinkering. The streamlining of five major commands into two, including the merger of the army's Forces Command, which produces soldiers for commands around the world, with two others which cover North and South America, is the biggest institutional shake-up in years. A thousand staff positions are being cut from the army's headquarters. But Mr Hegseth is also proposing a bonfire of equipment. The memo orders an end to "obsolete" weapons, such as crewed planes and outdated drones.

The army singles out the Humvee, a hulking truck that served America well during its Middle Eastern wars but would

► be dangerously vulnerable in a high-intensity conflict, and the Joint Light Tactical Vehicle, its replacement. The M10 light tank, which has only just come into service, is also set for the chopping block because it has been deemed too big and heavy.

The army itself has long been keen to get rid of much of this equipment, which it says would be of minimal use in a serious scrap with China or Russia. In a podcast with *War on the Rocks*, a website, Dan Driscoll, the secretary of the army, lamented lawmakers' "parochial" insistence that services must keep unwanted weapons: "a welfare system for...certain congressional districts". The army wants to use the money and manpower that is freed up to focus on newer programmes. Crewed attack helicopters—which have fared badly in Ukraine—are to be supplemented with cheaper drone swarms, for instance.

Critics retort that the reforms are knee-jerk and muddled. Patrick Donahoe, who served as an army major-general until 2022, argues that M10s, for example, were a crucial part of ensuring that the army's future brigade combat teams had enough firepower. "Killing the platforms without replacing the capability isn't reform," he argues. "It's regression." Mr Donahoe suggests that the Pentagon has been dazzled by a vision of war which puts too much emphasis on technology. "We're cutting armour and firepower for concepts that collapse under contact." The army denies this. It says that adding drones and technology has made units "300% more lethal" than their predecessors in recent exercises in Europe. "When you look at the outcomes of going leaner and lighter," says Mr Driscoll, "it is leading to incredible results."

Hardware is not the only thing becoming leaner and lighter. On May 5th Mr Hegseth issued another memo ordering the army and other services to cut the number of four-star generals and admirals by at least 20%, and the total number of general officers and flag officers (GOFOs, or brigadier-generals and higher) by 10%. It is true that America has a top-heavy military. It has 817 generals and admirals serving today, including 38 four-star officers. The ratio of generals to troops has risen steadily.

The Trump administration is not the first to take aim at their ranks. In 2010 the secretary of defence at the time, Robert Gates, was alarmed by the post-9/11 surge in GOFO numbers and tried something similar. Mr Hegseth's pruning is a continuation of that. The difference is that his cuts may be informed as much by culture wars as real ones. In a podcast last summer, he complained that a third of officers were "actively complicit" in allowing diversity initiatives, such as the inclusion of women, to undermine combat standards. Mr Hegseth will now have the opportunity to mould a top brass more to his liking. ■

## Broken china

# Replacement rate

GREENSBORO, NORTH CAROLINA

## A social history of America in a warehouse

REPLACEMENTS IS a one-of-a-kind business. Walk into the 500,000 square-foot tableware emporium near Greensboro, North Carolina, and you will find a display of America's 500 most popular dinner plates from the past two centuries. Some are decorated with a classic lace trim; others with garish peacocks and florals. This is just a small selection of their stock. Smashed one of the crystal goblets your mum gave you in the 1980s? They can sell you a replacement. Always coveted your great-grandmother's teacups but a greedy aunt snatched them after she died? They can probably send you an exact set.

The store has 11m pieces of inventory—300,000 unique patterns—and ships 2,000 packages a day. An army of 455 independent buyers scavenge the country's estate sales, antique stores and flea markets to find them. Florida has the best goods. "It's a retirement Mecca, and when people downsize they bring their china," says Keith Winkler, the shop's head marketer. Consumer taste is less regional. Replacements' top selling line, an English pattern with ornate animal portraits, does as well in Texas as it does in California and New York.

The store's inventory is more than merchandise; it traces the social history of china in America. During the depres-

sion consumers bought basics, but by mid-century the industry got playful. In 1946 Libbey Glass started selling "hostess sets" that included tumblers with carnival and merry-go-round motifs. The post-war designs "promised the good life to a population tired of rations," writes Regina Lee Blaszczyk, a historian. In 11 years Libbey sold 30m. But when foreign trade deals introduced Americans to cheap ceramics from Europe and Asia, domestic manufacturing slumped. Between 1947 and 1961 the industry contracted by 50%. Potters begged Congress to raise tariffs, to no avail.

During the cold war cultural conservatism caught on. Marriage rates rose from 60% in 1940 to 68% in 1960. More weddings meant more demand for place settings, and American firms pounced. Lenox China, a company that devised the wedding registry in the 1930s, advertised to wannabe-brides in *Seventeen* magazine with the slogan "You get the licence, I'll get the Lenox". To newlyweds who moved into suburban homes with money from the GI bill, functionality mattered too. Corning Glass started selling Pyrex casserole dishes that could go from fridge-to-oven-to-table. By the mid-1960s most of America's fine china was sold on the bridal market.

Today couples marry later and often want espresso machines and KitchenAids rather than tea sets. According to the Knot, a wedding website, last year just 11% registered for fine china. During the pandemic Libbey and Lenox closed their only remaining American factories.

Despite the dwindling market for new stuff, Replacements hopes for a resurgence of the old. Their typical customer is a woman in her 60s, but they are pitching to youngsters: use those inherited dishes and don't fret if you break them. They now stock Anthropologie patterns and point to a Taylor Swift video that features 1970s Corelle "Butterfly Gold" dinner plates to prove that vintage is in. On a thread about dusty china, one Reddit user urged others not to drop their finest at the thrift shop. She recently started using her grandparents' brown Pfaltzgraff bowls, which go for \$15.99 at Replacements. "I am enjoying the hell out of them now on a daily basis," she wrote, "even for Fruity Pebbles."



It was a theme she had

## The Supreme Court

## Born in the USA

NEW YORK

## What to listen for in the oral arguments over birthright citizenship

SWIFT ACTION is not a hallmark of America's Supreme Court. Typically, more than a year passes before parties bringing their cases to the justices get a decision. But the Supreme Court has an "emergency docket", too, and Donald Trump has it humming. Thirteen cases involving his administration's moves have rocketed to the justices' inboxes so far in his second term. By contrast, the George W. Bush and Barack Obama administrations made a total of eight emergency pleas to the justices over a span of 16 years.

*Trump v CASA* challenges Mr Trump's executive order on January 20th denying citizenship to babies born to undocumented migrants and temporary visa-holders. Federal courts in Maryland, Massachusetts and Washington quickly blocked the policy, noting the 14th Amendment's command that "all persons born or naturalised" in America, "and subject to the jurisdiction thereof, are citizens". The judge in Washington, an appointee of Ronald Reagan, said he couldn't remember having such an open-and-shut case over his four decades on the bench. Mr Trump's move, he fumed, is "blatantly unconstitutional". On March 13th, after striking out in three appellate courts, the Trump administration asked the Supreme Court to weigh in.

The court has not hastened to Mr Trump's rescue. It set a leisurely briefing calendar and took the unusual step (for the emergency docket) of scheduling a special oral argument session, on May 15th. The solicitor general did not ask the justices to reverse the lower courts' rulings against Mr Trump's order outright. Instead, he asked the justices to narrow the injunctions to cover only the litigants in the cases—not the "hundreds of thousands" of people who may be affected by his directive. For Mila Sohoni, of Stanford University, such lack of uniformity would undermine justice and corrode the rule of law. It could mean that a baby born to non-citizen parents in New Jersey would be American while one born in Tennessee would not.

Even so, this gambit may prove shrewd. A majority of the justices are not likely to reject a fundamental principle of America's constitutional order. Since 1898, when the Supreme Court confirmed in *United States v Wong Kim Ark* that a child of Chinese nationals born in San Francisco was a citizen, birthright citizenship has been understood as universal—with exceptions

only for offspring of diplomats, invading soldiers and (until 1924) Native Americans. But nationwide or universal injunctions—the remedies put in place by the lower courts—alarm several of the justices.

Justices Neil Gorsuch and Clarence Thomas have been most vocal, calling universal injunctions "patently unworkable" and "legally and historically dubious". Citing these and other justices' comments, the Department of Justice lawyers contend that broad injunctions "stop the executive branch from performing its constitutional functions". The "intolerable" situation "tars the entire judiciary with the appearance of political activism".

Universal injunctions have become much more common since 2015, says Samuel Bray of Notre Dame University, when a judge stopped one of Barack Obama's signature immigration orders. Since then, he says, judges have been overreaching to thwart "almost every major executive initiative" of Democratic and Republican presidents alike. Mr Bray thinks Mr Trump's withdrawal of birthright citizenship is wrong and would sow "chaos and harmful legal uncertainty". But he argues there are better ways to address it, including so-called "declaratory judgments" and class-action lawsuits. He predicts the court will dial back on nationwide injunctions, even as it makes clear its disdain for rewriting the 14th Amendment.

The justices may have another motive for curtailing judges' power to stymie presidential orders: reducing the flood of emergency appeals to their tribunal. But Steve Vladeck, of Georgetown University, reckons there would be unintended consequences from such a move. The emergencies will only multiply, he says, when more and more plaintiffs have to bring their own cases against the president's policies. ■



Stars and possible bars

## Trans medicine

## Science-ology

## A sort-of Cass Review for America

BACK IN JANUARY Donald Trump signed executive order 14187, entitled "Protecting Children from Chemical and Surgical Mutilation". He instructed federally run insurance programmes to exclude coverage of treatment related to gender transition for minors. He also commissioned the Department of Health and Human Services (HHS) to publish a review of literature on best practices regarding "identity-based confusion" among children. The ban on federal funding was later blocked by a judge, but the review was published on May 1st.

A controversial president commissioning a department headed by a controversial health secretary, Robert F. Kennedy junior, amid a big reduction in government funding for science, sounded like a recipe for more culture warring. Yet what the commission has served up is unexpectedly rigorous. The HHS report is more than 400 pages long, with a 173-page appendix full of charts. Chapters were subject to peer review, and contributors included doctors and medical ethicists, but the HHS has not named the authors, pending a post-publication review process. The report largely avoids culture-war battles or terminology.

The summary cuts to the chase. "The evidence for benefit of paediatric medical transition is very uncertain, while the evidence for harm is less uncertain." When medical interventions pose unnecessary, disproportionate risks of harm, "health-care providers should refuse to offer them even when they are preferred, requested, or demanded by patients". Claims that distressed children who do not transition face greater risk of suicide "are not supported by the evidence". The report includes a review of 17 previous systematic reviews on the subject, many conducted in Europe.

In Britain, the left-of-centre Labour government has pledged to implement the findings of the Cass Review, which drew similar conclusions. In America, by contrast, many on the centre-left have dug themselves into a position that is not well-supported by research. They should try to ignore the messenger and just read the document.



## Race and discrimination

# Mr Equal Protection

WASHINGTON, DC

**The president deletes a key tenet of civil-rights law—perhaps justifiably**

**I**N THE DELUGE of 145 executive orders issued by President Donald Trump (on subjects as disparate as “Restoring American Seafood Competitiveness” and “Maintaining Acceptable Water Pressure in Showerheads”) it can be difficult to discern which are truly consequential. But one of them, signed on April 23rd under the bland headline “Restoring Equality of Opportunity and Meritocracy”, aims to remake civil-rights law. Those primed to distrust Mr Trump on such matters may be surprised to learn that the president’s target is not just important but also well-chosen.

The White House order aims to defang the legal concept of “disparate impact”—the idea that policies without discriminatory intent can still violate civil rights if they produce disparate outcomes along racial and gender lines. After landmark legislation like the Civil Rights Act of 1964 was passed, disparate-impact theory accreted steadily in American jurisprudence. The idea received its greatest endorsement in the Supreme Court case *Griggs v Duke Power Co.*, decided in 1971, which ruled that a power plant in North Carolina had violated the act by requiring job applicants without degrees to take IQ exams—which white candidates passed at nearly ten times the rates of black ones.

In their unanimous opinion, the justices wrote that this was directly traceable to race, particularly the poor education given in segregated schools, and therefore violat-

ed the Civil Rights Act which “proscribes not only over-discrimination, but also practices that are fair in form, but discriminatory in operation”.

This idea that discrimination could occur without deliberate intent was revolutionary. The federal government abolished its main civil-service exam because of discrimination lawsuits. The Equal Employment Opportunity Commission, the agency set up to police discrimination, promulgated a “four-fifths” rule, saying that procedures resulting in “a selection rate for any race, sex, or ethnic group” less than the 80% of the highest-performing group would be regarded as “adverse impact”. Because the rules required private monitoring and enforcement, they encouraged the rise of professional HR departments.

## Don’t mind the gap

Disparate impact has constrained federal policy in several domains. Barack Obama pushed schools to remake their discipline policies because black pupils were suspended and expelled at greater rates than white pupils. Providers of public housing have been discouraged from asking for criminal records of potential tenants. Under Joe Biden, the Federal Communications Commission defined digital discrimination to include actions “that differentially impact consumers’ access to broadband internet access service based on their income level, race, ethnicity, colour”.

What Mr Trump aims to do is to extirpate this kind of reasoning “in all contexts to the maximum degree possible”. Some left-leaning commentators have argued that this is segregationist in intent, but critics of disparate impact do not dispute the bans on overt and direct discrimination on the basis of race. The problem is that “virtually every practice you can name has a disparate impact on some group or other, which means that agencies can go after almost anything they want to,” says Alison Somin of the Pacific Legal Foundation, a libertarian-minded law firm.

Although Mr Trump’s order could be rescinded by an incoming Democratic president, his action—in addition to downsizing the civil-rights divisions in the Departments of Justice and Homeland Security—may well lead to the demise of the idea. Federal agencies will go years without bringing disparate-impact cases. Reviving the concept may be hard because disparate-impact lawsuits and the racial balancing they encourage are not particularly popular with voters, says Richard Hanania, a conservative commentator.

Although disparate impact is written into law on some statutes and the Supreme Court opinion in *Griggs* remains in effect, a new Supreme Court case might strike down the whole concept as unconstitutional. In an opinion given in 2009 (on a case about exams administered by a fire department), the late Supreme Court Justice Antonin Scalia wrote that their resolution, ducking the core constitutional questions, “merely postpones the evil day on which the court will have to confront the question: whether, or to what extent, are the disparate-impact provisions of Title VII of the Civil Rights Act of 1964 consistent with the constitution’s guarantee of equal protection?” That day might come—and if it does, given the court’s conservative supermajority, it is not expected to go the way that progressives hope.

Disparate impact has been something of an American export. In 1985 the Canadian Supreme Court ruled in favour of a Seventh-Day Adventist who had been sacked from working at Sears because the company required all its employees to work on the Sabbath, calling it a case of “adverse effect discrimination”. European law recognises the analogous idea of “indirect discrimination”. It was codified into British law through the Equality Act of 2010—though similar ideas of indirect discrimination existed in the Sex Discrimination Act of 1975 and the Race Relations Act of 1976. In 2017 the British Supreme Court upheld indirect discrimination claims (one case involved a standardised test taken by immigration officers seeking promotion). The concept may be in its waning days in America, but it remains safely ensconced in other legal systems. ■

## LEXINGTON

### *Illiberal arts*

*Donald Trump is right that elite universities have problems, but he is making them harder to fix*



A PROGRAMME at Harvard Divinity School aspired to “deZionize Jewish consciousness”. During “privilege trainings”, working-class Harvard students were instructed that, by being Jewish, they were oppressing wealthier, better prepared classmates. A course in Harvard’s graduate school of public health, “The Settler Colonial Determinants of Health”, sought to “interrogate the relationships between settler colonialism, Zionism, antisemitism, and other forms of racism”: Will these findings by Harvard’s task-force on antisemitism and anti-Israel bias, released on April 29th, shock anyone? Maybe not. Americans may be numb by now to bulletins about the excesses, not to say inanities, of some leftist academics.

If so, one might hope that as Americans consider whether antisemitism is a problem at Harvard, they would imagine how it might feel to be a certain sophomore encountering this social-media post about herself, by a peer: “She looks just as dumb as her nose is crooked.” The report, a door-stopping 311 pages, describes a campus culture so toxic that another undergraduate confided to members of the task-force, “I feel lucky I don’t look Jewish.”

No doubt a task-force on racism or sexism on any Ivy League campus would find evidence of both. And, in fact, a separate Harvard task-force found that Muslim, Arab and Palestinian students have felt “abandoned” and even “actively suppressed and repressed”. None of that diminishes the seriousness of the problem of antisemitism on elite campuses as documented by Harvard’s task-force and by one at Columbia University, or the particular, institutionalised quality this bigotry has acquired. “We are not aware of any other group on campus,” the Harvard report on antisemitism reads, “that is subject to social exclusion as part of an intentional campaign by political organisers.”

The Harvard task-force was formed following the campus convulsions after Hamas attacked Israel in 2023 and the war in Gaza began. But it tells the long story of Jews’ relationship with the school, from grudging admission, constrained by quotas, to “a golden age” of inclusion from the 1960s to about 2010. After that, according to the report, the pro-Palestine movement hardened, increasingly regarding Israel as a pariah and at times ascribing “a form of hereditary and collective guilt” to American Jews over its

actions, even its existence. “The slippage between ‘Israel’ and ‘Jews’ is widespread,” the report notes. On campus and beyond, out of ignorance or malice, a trope is catching hold on the left that equates racism with Zionism, and thence with Judaism.

Donald Trump has cancelled billions in combined grants to Harvard, Columbia and other universities. His pressure campaign is ostensibly rooted in alarm about antisemitism, but other concerns keep sprouting. On May 5th Linda McMahon, the education secretary, told Harvard it was barred from future grants, in a letter in the signature smashmouth style of this administration and the professional-wrestling league she ran. In more than two pages of insults and criticism about everything from plagiarism to hiring former New York Mayor Bill de Blasio, Ms McMahon referred only elliptically to antisemitism. Mr Trump’s indignation about campus antisemitism was always hard to take at face value. He has contributed to the “slippage” by condemning Jews who vote Democratic as “very disloyal to Israel”. He has failed to deplore antisemitism among his supporters. Those he pardoned for attacking the Capitol on January 6th included Nazi sympathisers, one of whom sported a “Camp Auschwitz” hoodie that day.

Mr Trump’s approach is a poor match for the schools’ troubles. Some Jewish officials, on campus and beyond, fear that Jews will bear the brunt of blame for Mr Trump’s campus crusade, and that faculty and administrators will minimise the problem of antisemitism in reaction. His pressure will probably also make it harder for universities to make even common-sense changes. Columbia’s trustees insisted that measures put in place after demands from Mr Trump were steps the school wanted to take, but the appearance of capitulation intensified the backlash.

What is saddest, or maybe most laughable, is the implication that America’s national politics (let alone the guiding light of Trump University himself) has anything to teach its undergraduates about grappling with complexity, nuance or the views of an adversary. Ms McMahon’s letter, a model of hyperbole and animosity, is a masterclass in turning problems into political opportunities rather than helping solve them. In early May, a bill to define antisemitism for purposes of combating it on campus stalled in committee, as senators bickered over language they feared would make it a cudgel for one party or the other.

#### Muddle East

By contrast, the self-scrutiny on campus is substantive. The task-forces at Harvard and Columbia have been thorough, and their recommendations are specific and far-reaching. Finding a need for “profound repair”, Harvard’s task-force made dozens of proposals, for everything from governance to discipline, to strengthen a “culture of pluralism”. Students, it reported, “too often feel they are carrying the weight of their identities, since they say that is how they sold themselves to Harvard in the application process”. Instead, applicants should be told to expect a “genuine community with people with whom one may disagree”. When it came to the Middle East, the report acidly noted a “shortage” of courses “meeting Harvard’s standard for intellectual excellence”.

It is ridiculous that Harvard has to relearn lessons about the value of rigour in the classroom and the folly of reducing individuals to group identities. But at least the university is showing signs of buckling down. Mr Trump would be wise to do what he does well, and claim credit for this happy development, rather than try to teach the lessons himself. ■

# The Americas



## Geopolitics and South America

### China rising

MONTEVIDEO

**Opinion polls suggest that South Americans are warming to a new global power**

ON MAY 12TH Xi Jinping, China's president, will welcome South American bigwigs to Beijing for China's biggest diplomatic jamboree since Donald Trump took office. Among them will be Luiz Inácio Lula da Silva (known as Lula), Brazil's president, Gustavo Petro of Colombia and Gabriel Boric of Chile. American officials disapprove. Pete Hegseth, the secretary of defence, has said China's activity in the Western Hemisphere is "for military advantage and unfair economic gain".

To date, most of the Trump administration's attention has been focused on what it sees as problematic Chinese ties close to home. It worries that Mexico offers a route for Chinese products to bypass tariffs and enter the United States, and that it allows chemicals from China to be made into deadly fentanyl that is smuggled over the border; it fears that the Hong Kong-based firm which runs the ports at either end of the Panama canal influences its operation.

Much less attention is paid to the dramatic expansion of Chinese ties that has taken place over the past decade just slightly farther away, in South America.

Opinion polling commissioned by *The Economist* shows that although the United States retains an edge in popularity, public opinion of China in South America is improving fast. China is seen as the more respectful superpower. In most places surveyed, China is seen as the more reliable trading partner. As Mr Trump rails against America's trade deficits, China happily expands deficits with South America, gobbling up copper, lithium and soybeans.

Trade forms China's strongest link with the region. In 2013 the United States was

South America's biggest trading partner, with \$280bn in total goods trade in today's dollars. By 2023 that was down 25%, while China's trade jumped 43% to \$304bn. Only Colombia and Ecuador, American allies, still trade more with the United States than with China. And even there China is drawing closer.

Chinese demand for commodities has been driving this change. Chile's copper exports to China almost tripled over the decade. Brazil's soybean exports nearly doubled. The purchases buy China political influence while the raw materials are used to churn out exports. Most South American countries also now import more from China than from the United States. Increasingly, those are imports of more complex products, from electric vehicles to solar panels.

Chinese firms also invest a vast amount of money in South America. Since 2000 they have poured more than \$168bn into the region, chiefly into Brazil. Favourites like mining and agriculture are now complemented by deals in telecoms, renewables and electricity utilities. Though investment has declined recently, the value of newly announced projects ticked back up in 2023. Still, Chinese investment trails that from Europe and the United States.

State-backed loans are another tie. Since 2005 China has lent some \$111bn to

#### → ALSO IN THIS SECTION

**24 Mexico's marvellous chemist**

**26 Despair in Haiti**

► Venezuela, Brazil, Ecuador and Argentina. New loans have declined sharply since 2017 but the debt remains. Venezuela still owes perhaps \$10bn. Brazil owes billions, too. Even Mr Trump's allies are constrained. Ecuador owes China \$3bn, a counterweight to President Daniel Noboa's pro-Trump instincts. President Javier Milei of Argentina, a Trump super-fan, recently renewed a \$5bn swap line from China despite Mr Trump's special envoy calling it "extortionate" and saying that the United States wants it to end.

China's strength is also evident in our new polling in Brazil, Colombia and Venezuela, carried out by Premise, a research firm based in Washington. The surveys, conducted through a mobile app, use samples balanced by age and sex to reflect national populations. Overall opinion of the United States is only slightly more favourable than of China and nearly 70% of Brazilians and Colombians, and 60% of Venezuelans, say China's popularity is growing in their country. Strikingly, in every country—as well as in a separate survey of Argentina—respondents think China respects them more than the United States does (see chart).

### The fairer friend

All this influences responses to the trade war. Mr Trump seems to want to pressure trading partners to distance themselves from China in exchange for a reduction in tariffs with the United States. But this is going down poorly. "I don't want to choose between the United States and China. I want to have a relationship with both," said Lula, echoing Mr Boric at a joint press conference held in April. The gathering in Beijing may even produce a joint statement condemning high tariffs, claims Yue Yunxia of the Chinese Academy of Social Sciences, a state think-tank. That would play fine back home. Brazilians, Colombians and Venezuelans think China has fairer and more transparent trade practices than the United States does.

The United States also sees a military threat. "China's military has too large of a presence in the Western Hemisphere," Mr Hegseth has said. There are no Chinese military bases in the hemisphere, so instead Mr Hegseth and colleagues worry that Chinese-built commercial ports, including a new mega-port at Chancay in Peru, could be used by the navy.

Ground stations for relaying radio signals to space are another preoccupation. China already has one in southern Argentina. Like the rest of China's space programme, it is run by an arm of the army. Mr Milei, ever softening on China, has largely ignored the issue. A proposed new space observatory in northern Chile, a joint venture by a private Chilean university and China's state astronomical institute, was

recently frozen for review by the Chilean government after American complaints. Wary, perhaps, of this sort of hectoring, and concerned about Mr Trump's erraticism, one South American army is considering ways to diversify its intelligence sources and weapons systems away from the United States.

Some welcome this shift. "Trump is also seen as an opportunity," says Oliver Stuenkel of the Fundação Getulio Vargas, a Brazilian university. "He's seen as the midwife of a multipolar order." The enthusiasm stems partly from the fact that the era of American dominance came with plenty of meddling from Uncle Sam.

Any efforts to persuade South Americans to push China back are hampered by the Trump administration's all-stick-no-carrot approach. Deportations, tariffs and threats dominate headlines. Stronger trade and economic ties would make it much easier for Mr Trump's team to persuade South Americans to distance themselves from China. Yet the administration has shown little interest in those. Gutting USAID does not help.

Even the most pro-American of leaders, Mr Milei, knows that he needs China. In November he told *The Economist* that "the well-being of Argentines requires that I deepen my commercial ties with China". Premise's data suggest Argentines agree: 56% say he should maintain strong economic ties with China. Only 15% disagree.

Charming South America should not be so hard. While China says its firms just want to make money in the region, their methods can leave a sour taste. "Our relationship with China is love-hate, and it gets more hateful as time goes by," says Alfredo Thorne, a former Peruvian finance minister, highlighting China's goods-dumping. American culture and values still win out over Chinese ones, according to Premise's surveys. Yet South America is often taken for granted. Evan Medeiros, an architect of the pivot to Asia by a former president, Barack Obama, says a new pivot is now needed, to focus American attention further south. Whatever its merits, that looks unlikely. ■

### Find out what it means to me

"Do you believe China/US respects Latin American countries?", % responding "yes"\*  
April 24th-May 6th 2025



### Farmacias Similares

## Prescription for success

MEXICO CITY

Mexico's pharmacy revolution is coming to the United States

FARMACIAS SIMILARES can seem an un-serious business. Employees dressed as the company's mascot, the moustachioed "Dr Simi", dance outside its pharmacies. Stuffed-toy Simis, costumed as Jedi knights or musicians in traditional *marachi* style, adorn its headquarters in Mexico City. But behind the cutesy marketing is a firm that has made health care in Mexico dramatically cheaper and more accessible over the past three decades. It is now trying to push into the United States.

In 1997, when Farmacias Similares opened its first shop, prescription drugs cost twice as much in Mexico as they did elsewhere in Latin America. Generic medicines were not available. The firm's founder, Victor González Torres, struggled against powerful pharmaceutical companies to win the freedom to sell generic drugs at prices up to 75% lower than his rivals' patented products. Today his firm's slogan—"the same but cheaper"—is emblazoned on nearly 10,000 branches across Mexico. Farmacias Similares does not publish financial results, but claims to sell 45% of all prescription drugs in Mexico by volume, and that its sales are growing by more than 9% a year. Medicines in Mexico are now among Latin America's cheapest.

Farmacias Similares has also used its pharmacies to expand access to health care. From the start, each one has had a doctor's office attached. An appointment costs 60 pesos (\$3). In March alone there were more than 15m consultations.

Demand has grown thanks to former president Andrés Manuel López Obrador. Health care in Mexico is linked to payments for social security, made only by workers in formal employment. The majority, who work in the informal sector, used to rely on Seguro Popular, an insurance scheme run by the government. Promising to give Mexico a universal, "Nordic" health-care system, Mr López Obrador got rid of Seguro Popular in 2020. But his creation was poorly run and underfunded. He soon scrapped it, leaving no coverage in its place. As a result, affordable private health care like that offered through Farmacias Similares is now essential. Other Mexican pharmacists have copied the model.

Claudia Sheinbaum, Mexico's president, has promised to improve health care for Mexico's poorest by hiring more doctors for the patchy network of government-run clinics, and by providing medication ►►

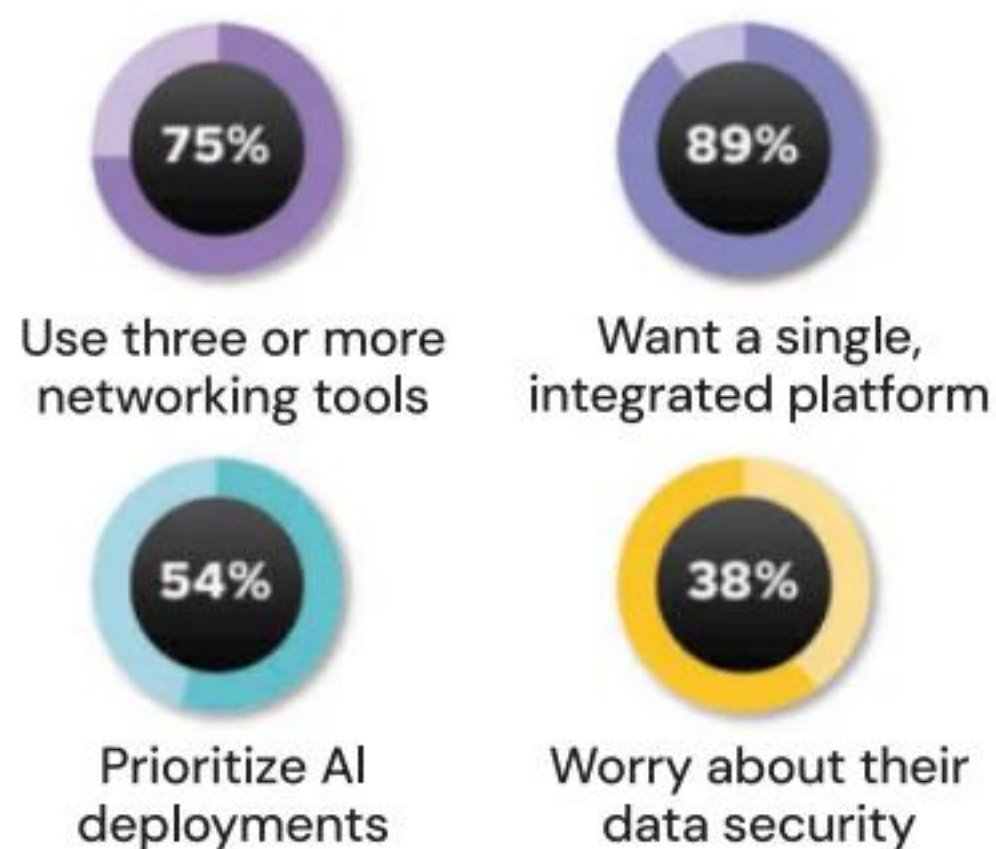


## Platformization: A Game-Changer for Addressing Modern IT Complexity and Enterprise Connectivity

Modern technology environments are encumbered by ever-increasing complexity, posing significant challenges for IT and business leaders. Fragmented tools and systems often lead to inefficiencies, security risks, and increased operational costs.

According to the "State of Cloud Networking 2025 Report" from Dynata, sponsored by Extreme Networks\*, 65% of executives are overwhelmed by the complexity of their IT operations, as they believe too many resources are being spent on integrating applications and managing the network. This focus on managing complexity diverts attention from more strategic and innovative initiatives.

### Our report revealed the following insights about IT leaders



“Complexity is slowing businesses down, creating roadblocks to progress and stifling innovation. To overcome these challenges, organizations are increasingly seeking a streamlined approach that integrates cloud networking, security, and AI to enhance productivity. This shift toward platformization empowers businesses to operate more strategically, accelerate innovation, and drive transformation at every level.”

**Monica Kumar**

Executive Vice President and Chief Marketing Officer at  
Extreme Networks

### What is platformization?

Platformization is the unification of various components—applications, data, and services—into a cohesive solution. This approach is built on core principles of integration, automation, and scalability. By bringing together disparate elements, platformization simplifies management, enhances user experience, and supports scalable growth.

### Integration drives IT networking efficiency

A significant majority of IT leaders and C-Suite executives—89%—are looking for a single, integrated application to streamline operations and increase efficiency. Platformization achieves this by creating a unified ecosystem where applications, features, and data are seamlessly integrated, simplifying management and improving user experience.

### Built-in AI boosts productivity

Platformization unlocks the real value of AI by embedding it at every layer, ensuring deeper automation capabilities and accelerating productivity and workflows across the board. Unlike siloed AI implementations—standalone chatbots or secondary tools that operate in isolation—platform-native AI seamlessly integrates with both internal structures and external experiences. In fact, a resounding 59% of IT leaders cite AI integration as a platform imperative.

This unified approach drives continuous intelligence, optimizing operations holistically rather than in fragmented increments.

By leveraging AI within an integrated platform, organizations can also more easily transition from basic automation tools to more advanced, interactive and conversational AI models. Over time, this evolution paves the way for autonomous and agentic systems that deliver not only efficiency and cost savings but also strategic impact. When AI is deeply embedded into the core of a platform, its adoption becomes more practical, ROI-driven, and a true enabler of agentic workflows.

### One powerful experience drives the future

“Enterprise connectivity platforms represent a next-generation approach to more integrated, AI-powered management of cloud-managed network and security domains.”

*The Era of Connectivity Platforms: Reimagining Networking Across the Enterprise, IDC, December 2024*

The optimized experience and centralized view that an integrated platform delivers can help improve operational visibility, simplify management, and empower teams to make informed decisions faster. The most successful and innovative leaders will drive the future of IT by combining connectivity, automation, security, data, and analytics with AI into one powerful experience, paving the way for a more efficient and innovative enterprise environment.



### LEARN MORE

Download the State of Cloud Networking 2025 report.

► free. But with money tight and an economy threatened by tariffs, it is a promise she will find hard to keep.

In any case, says Victor González Herrera, who succeeded his father as the firm's boss in 2022, it would be stupid for the government to compete with providers of affordable private health care rather than working with them. He suggests chemists could provide on-site general practitioners while the government focuses on health-care specialists.

The United States is not Farmacias Similares's first international foray. The firm already runs 550 branches in Chile. Attempts to enter the Argentine and Colom-

bian markets have not gone so well. Mr González blames a highly regulated and closed industry that wants to prevent newcomers and keep its high prices.

That sounds rather like the pharmaceutical industry in the United States. Even as he inaugurates a new headquarters in Texas and opens "Similandia", a shop on Hollywood Boulevard in Los Angeles, regulatory hurdles mean that Mr González will at first sell only vitamins and non-prescription drugs in the United States. Tariffs will make sourcing more challenging. Still, millions of Hispanics in California and Texas recognise Dr Simi. Perhaps Mr González will find a way to look after them, too. ■

## Misery in Haiti

# Breaking point

MIAMI

## The gangs have proved to be unstoppable

THE COLLAPSE of Haiti's government in April last year was a challenge but also an opportunity. An interim government called the Transitional Presidential Council was installed. A UN-brokered, Kenyan-led security mission arrived soon after. But a year later things are worse than ever. "We are approaching a point of no return," María Isabel Salvador, the UN's top official in Haiti, told its Security Council at a meeting on April 21st.

Tasked with preparing for elections that in theory will be held in November, the council is now mired in allegations of corruption. The security force of around 1,000 people (less than half the number originally planned) has not been able to stem the chaos. Its funding runs out in September. The council is a "transitional authority that controls nothing", says Claude Joseph, a former prime minister. "It's an unsustainable catastrophe. We could lose Port-au-Prince at any time."

Port-au-Prince, the capital, now sees daily gun battles in which police and civilian vigilantes face off against a gang coalition called Viv Ansanm ("Living Together"). It has seized control of much of the city. The international airport has been all but shut down; the only way in or out is by helicopter, or by a barge that skirts the coast to bypass gang territory to the south. On May 2nd the United States designated Viv Ansanm and a sister organisation as terrorist groups, opening the door to tougher criminal penalties for those who provide them with money and weapons.

The collapse of public life is accelerating. Most schools are shut. Cholera is spreading. The Marriott, one of the last

functioning hotels, has closed its doors. Gangs have surrounded the offices of Digicel, Haiti's main cellular network, through which most people connect to the internet. "If Digicel goes down, the country goes dark," warns a security expert.

The gangs don't need it. Increasingly sophisticated, they use Elon Musk's Starlink satellite system to communicate, organising themselves to the extent that they have been able to keep control over access to Haiti's ports. They also extort lorry drivers and bus operators moving along many of the country's main roads.

The UN reports that in February and March more than 1,000 people were killed

and 60,000 displaced, adding to the 1m, nearly 10% of the population, who have fled their homes in the past two years. Circulating videos show gang members playing football with severed heads, bragging: "We got the dogs."

Central Haiti, once relatively peaceful, is fragmenting into fiefs. Mirebalais, a city which lies between Port-au-Prince and the border with the Dominican Republic, is now controlled by gangs. "The country has become a criminal enterprise. It's the wild, wild West," says a foreign official.

Patience is running thin at the UN Security Council. The United States has already committed \$600m to the security mission, but is unlikely to offer more. "America cannot continue shouldering such a significant financial burden," said Dorothy Shea, the US ambassador to the UN. Few other countries want to donate.

The council is so desperate that it is exploring deals with private military contractors. It has been talking to Osprey Global Solutions, a firm based in North Carolina. The founder of Blackwater, Erik Prince, visited Haiti in April to negotiate contracts to provide attack drones and training for an anti-gang task force. The council declined to comment.

The Haitian police are overwhelmed; an estimated 12,000 officers police a population that approaches 12m, barely half the UN-recommended ratio. Weak leadership, poor co-ordination with the Kenyan-led force, and calls for the ousting of the police chief point to deep institutional rot.

In Canapé-Vert, one of Port-au-Prince's last gang-free pockets, a former policeman known as "Commander Samuel" leads a vigilante group called Du Sang 9 ("New Blood" in Creole). Gangs have thinned its numbers. It is all that stands between them and the prime minister's office. ■



Can't take much more of this

## Asia



## India strikes Pakistan

## Punishment time

DELHI

Can two bitter enemies control a new cycle of escalation?

**S**HORTLY AFTER midnight on May 7th, two weeks after a terrorist attack in Kashmir, Indian missiles streaked into Pakistan. India said it had hit “terrorist infrastructure” at nine sites in Pakistani-administered Kashmir and in Punjab. Pakistan said that India had struck six locations in those regions. It denied the sites were used by terrorists and said it had shot down five Indian fighter jets, a claim not confirmed by India. It was the largest aerial attack on Pakistan in more than 50 years.

After the strikes, both sides exchanged artillery and small-arms fire across the “line of control” dividing Kashmir, which is claimed wholly and ruled partly by both countries. India said that killed 13 people on its side; Pakistan said 31 of its civilians were killed in the shooting and the Indian air strikes. But this is almost certainly just the start of the nuclear-armed neighbours’ confrontation. Pakistan said India dam-

aged a hydropower dam and called the attack “an act of war”. Pakistan’s army said it would hit back “at a time and place of its own choosing”. It also said that it shot down 12 Indian aerial drones that entered its airspace in the early hours of May 8th and that killed one civilian. India said on May 8th that it had “neutralised” an attempted overnight missile and drone attack by Pakistan on several military targets and had responded “in the same domain with same intensity” by targeting air-defence radars and systems at several loca-

## → ALSO IN THIS SECTION

28 A thumping win in Australia

29 A flight to safety in Singapore

29 Taiwan’s green invasion

30 Banyan: Tongue-tied in India

tions in Pakistan.

India’s government had hinted at military retaliation ever since accusing Pakistan-based militants of being involved in an attack on tourists in Kashmir on April 22nd, which killed 26 civilians. That was the bloodiest assault there since 2019 and the deadliest on Indian civilians since one in Mumbai in 2008.

Before its strikes, India had taken non-military action, exploring new ways of responding to what it sees as persistent Pakistani-backed terrorism. Yet India decided that a military response was essential. That is partly for deterrence: the foreign secretary, Vikram Misri, said that Pakistan-based terrorists planned more attacks. But India is also trying to satisfy a furious public. Mr Modi has been under pressure to go beyond his responses to the last big militant attacks in Kashmir. In 2016 he sent soldiers into the Pakistan-ruled part of the region, and in 2019 he ordered air strikes on Pakistan. Having claimed to have brought peace and prosperity to Kashmir since scrapping its semi-autonomous status in 2019, his policies and security forces are under scrutiny.

The Indian strikes on May 7th were notable for three reasons. One is that India appears to have fired the missiles and guided bombs from its own territory. “This

► cowardly and shameful attack was carried out from within India's airspace," said Pakistan's army. If that is true, India may have been trying not to repeat its experience in 2019, when an Indian fighter was shot down over Pakistan and its pilot captured. Several Indian news outlets reported that India had fired SCALP cruise missiles and dropped Hammer smart-bombs from French-made Rafale fighter jets. The relative success of those tactics may depend on the veracity of Pakistan's claims to have shot down three Rafale jets, one SU-30 and one MiG-29. India has not commented officially on the claim. But Indian and foreign media reports suggest that three aircraft may have crashed in Indian territory. Reuters reported that three Indian pilots involved were in hospital.

As in 2019, India attacked undisputed Pakistani territory as well as Pakistani-held Kashmir. The distinction this time is that it targeted four sites in Punjab: Pakistan's most populous province, and its most politically and economically important one. India said that its target in the city of Muridke, which is 30km from Lahore, Punjab's capital, was a training camp for Lashkar-e-Taiba (LeT), an Islamist militant group that has deep ties to Pakistan's intelligence service and that Indian officials say was behind the latest terrorist attack in Kashmir. India says its target in the Punjab city of Bahawalpur was the headquarters of Jaish-e-Mohammed, another jihadi outfit with ties to Pakistani spooks.

India's decision to strike Punjab is escalatory. But the third feature of the strikes is that everything else appeared designed to minimise the risk of full-scale war. Pakistan said India's attack had targeted civilian areas, damaging mosques and killing innocents including women and children. But India said that its strikes were "focused, measured, and non-escalatory". It said that it had not struck military, economic or civilian targets, but only "known terror camps" from which attacks on India had been directed. Footage played at an Indian news conference showed what appeared to be precision strikes on individual buildings. India seems eager to provide Pakistan with an off-ramp.

Will Pakistan take it? After India attacked in 2019 it carried out a retaliatory air strike. Pakistan could attempt another counter-strike, if India did indeed thwart an overnight missile and drone attack from it. But Pakistan will probably choose its response with care, doing enough to placate its people and to restore a modicum of deterrence. Its defence minister, Khawaja Asif, told broadcaster Geo News that Pakistan would hit only Indian military targets and not civilians. That might involve strikes against symbolic targets which are unlikely to cause mass casualties.

Still, the risk of further escalation re-

mains. India told foreign governments that it would retaliate for any Pakistani counter-strike. India said it briefed Marco Rubio, America's secretary of state, after the attacks. But if American officials might once have used their clout in both countries to defuse the crisis, their appetite and ability to do so this time is less clear. Donald Trump initially responded with insouciance, saying the two sides had been fighting for "centuries". He later urged them both to stand down: "They've gone tit-for-tat, so hopefully they can stop now." ■

## Australia's election

# Not so lucky

SYDNEY

**Caught between America and China, the country needs its mojo back**

THE LANDSLIDE win on May 3rd for the Australian Labor Party, led by Anthony Albanese, the incumbent prime minister, was the party's best election performance since the second world war. It was also the worst faring ever for the main opposition, the (conservative) Liberal-led coalition. By May 8th, ten seats in the 150-seat House of Representatives remained undeclared. But Labor had won at least 90 seats; the coalition had bagged only 40.

A few months ago the coalition was savaging Labor over the cost of living and high immigration. But an anti-Trump bump turned Mr Albanese's fortunes—as it made Mark Carney's in Canada. Both left-leaning politicians faced candidates borrowing from Donald Trump's populist antics.

The Liberal leader, Peter Dutton, stoked anti-woke culture wars and extolled



**Albo the Dutton-slayer**

the American president. It backfired. Dismay has grown among Australians at Mr Trump's trade wars, and they no longer trust America as a security partner. Mr Dutton's campaign was hobbled by unforced errors. The Liberal Party lost votes across every demographic—women, urbanites, migrants—except those over the age of 60. Mr Dutton even lost his own seat.

Australians voted for stability and Mr Albanese's dullness became an asset. They did not vote for stasis, however. Australia's problems are both economic and geopolitical. China's once-insatiable appetite for Australian iron ore, copper, coal, meat and wine has slowed sharply. Australia's economy grew by just 1.3% in 2024, the slowest rate (apart from during the pandemic) since the early 1990s. Now Mr Trump's tariffs of 10% on Australian steel and aluminium may prove the precursor of other trade storms. Australia's priority, says Jim Chalmers, the treasurer, is managing the economic risks arising from tensions between America and China.

The task is made harder by a soggy economic performance. Across social, economic and environmental indicators, Australia has fallen behind its peers in the OECD, a club of mainly rich countries. Over ten years disposable incomes per person have risen by just 1.5%, compared with 22% on average in other wealthy countries.

Mr Chalmers is right to make boosting productivity his priority in the second term. Productivity growth is slower than at any time in the past 60 years. Not counting Australia's mining sector, private business investment is at an all-time low. Meanwhile, the proportion of women who work full-time is among the lowest in the OECD; many women are deterred by high income taxes and the cost of child care. And thanks to onerous regulations and too few workers, it takes twice as long to put up a house as it did three decades ago. Australia must improve productivity, Mr Chalmers says, by investing in people, improving competitiveness and embracing new technologies such as AI.

One big problem stems from tax-relief policies that encourage Australians to put too much of their money into housing. Baby-boomers have built enormous wealth doing this, but home ownership among the young is falling, as house prices climb to all-time highs. Labor is unlikely to abolish tax breaks for housing (fearing baby-boomers' wrath). So building more houses may be Australia's best shot at fixing the housing crisis. Labor promises to work with state governments and private developers to ease zoning rules and build 1.2m homes over five years.

Mr Albanese's government also promises to move Australia's energy mix towards more renewables. Climate policy, especially a carbon tax, has been the most

polarising issue in Australian politics over the past two decades, toppling three prime ministers. Had the coalition, when in office in 2015, not scrapped a carbon price, Australia would be collecting A\$70bn (\$45.2bn) more each year in revenue, says Ross Garnaut, an economist. In its first term Labor legislated to cut emissions to zero by 2050 or earlier. But integrating solar and wind projects into Australia's ageing electricity grid is slow-going.

Given tensions between America, Australia's historical supplier of security, and China, the biggest buyer of its exports, Australia badly needs to make itself more robust, in security as well as in economics. Mr Albanese has promised to raise defence spending from 2.1% to 2.4% of GDP. Key priorities include acquiring nuclear-powered submarines through AUKUS, a defence pact with America and Britain; enhancing long-range strike capabilities; and upgrading military bases located in northern Australia.

During Mr Albanese's first term, Australia steadied its tumultuous relations with China, while also deepening ties with Japan, India, South-East Asia and Pacific islands. The country is more prepared than it was five years ago, argues Rory Medcalf of the Australian National University, but has a long way to go. For Mr Albanese, election-night euphoria has fast given way to the reality of hard slog ahead. ■

### Singapore's election

## The devils you know

SINGAPORE

**Trade tensions help Singapore's prime minister to a big win**

LAWRENCE WONG was not expected to win big in his first general election since becoming Singapore's prime minister. Members of the People's Action Party, which has governed the city-state since before independence in 1965, measure their leader by how well he preserves its share of the popular vote. The last two men to lead Singapore presided over dips in support of 2% and 9% in their first elections after taking over. Many observers thought the country's latest leader might do worse.

In fact Mr Wong bucked this trend at the election held on May 3rd, increasing the PAP's share of the vote from 61% to 66%. In Singapore's unusual electoral system, which is dominated by winner-take-all, multi-member constituencies, that share translates into 90% of elected seats in parliament. The party successfully defended every seat that opposition politicians had been seeking to flip.

Ian Chong of the National University of Singapore calls it a "flight to familiarity". Mr Wong campaigned on the need to maintain stability amid the upheaval of Donald Trump's trade war. The former colonial entrepôt's trade-to-GDP ratio, exceeding 300%, is among the highest in the world. Mr Wong urged Singaporeans to hand him a strong mandate and "the best possible team" to steer the country through the storm. The party sent the head of the task force dealing with the trade war to stand in one of the island's most hotly contested constituencies, daring voters to oust him. The gambit worked; the party kept the constituency's four seats.

The PAP benefited, too, from some long-standing structural advantages. As in past years, a short nine-day campaign limited the opportunities its opponents had to get their message out. The PAP's large party machinery quickly adjusted to a redistricting of constituencies that was completed less than two months before the polls. The new boundaries upended the ground games of opposition parties, which make do with fewer resources.

But the election also strengthened the main opposition, the Workers' Party (WP). It attracts voters who think that there needs to be at least some alternative voices in parliament, though its policies are not radically different from those the government promotes (the party is sometimes considered "PAP-lite"). It contested only 26 of 97 seats. But it successfully defended the ten seats it held before the election, and will receive two more under a scheme that rewards the best-performing losing candidates. Indeed, the WP received more votes overall than the PAP in the constituencies in which it stood.

One question for the Workers' Party is whether it is ready to start going after votes in parts of the city that smaller, chronically unsuccessful opposition parties (derisively labelled "mosquito parties" by one observer) have long thought of as their own. It has been cautious about growing too fast. It fears that Singaporeans would think twice about voting for it, if it ran enough candidates to form a majority government. It also worries about making sure all the candidates it fields are up to scratch.

"Voters returned the government out of caution, not conviction" says Kenneth Paul Tan, an expert on Singapore's politics. The victory will nonetheless enhance Mr Wong's authority within the PAP. His predecessor as prime minister, Lee Hsien Loong, who held office for nearly two decades, remains in the cabinet as senior minister. So, probably, will two former rivals for the top job. But if there were any doubts about Mr Wong's ability to put his own stamp on the government, they have been put to rest. It is Mr Wong's team now, come what may. ■

### Culling reptiles

## A different kind of invasion

CHIAYI

**Big green lizards are taking over Taiwan**

VOYU YASIUNGU is dressed in camouflage and carries a homemade rifle on his back. He treads quietly into undergrowth near a river in Chiayi County in Taiwan. Suddenly, he points his rifle at a tree top. There's a pop like a firecracker—and then a beast that looks like a small dinosaur plops to the ground. It is an iguana with orange spikes along its back, more than a metre long, shot through the throat. Mr Yasiungu scans the canopy a second time. More shots follow; more lizards plop.

Taiwan has a problem with green iguanas. The giant lizards came from Central and South America more than 20 years ago as exotic pets. Many escaped or were released by their owners; they then multiplied rapidly in Taiwan's southern and central regions, where they have no natural predators. Some experts blame global warming for the lizards' fecundity: unusually warm winters may have increased hatching rates, as well as the number of babies who survive into adulthood. Whatever the case, there are probably now about 200,000 of them. They are causing enormous problems for farmers by ravaging valuable crops such as maize, red beans and gourds.

The Taiwanese government pays professionals such as Mr Yasiungu to cull them. They get \$16 for an iguana measuring at least 30 centimetres from snout to anus, and \$8 for smaller ones. But local governments in the south have also been



Collared

► recruiting amateur lizard hunters. Locals have taken classes in how to snare and kill the reptiles, for example using slingshots or long poles with nooses. Factory workers in the city of Kaohsiung were recently filmed using tools fashioned from fishing rods to capture an iguana wiggling on a roof. More than 1,600 Taiwanese have had this kind of training, says Chiu Kuo-hao, an official with Taiwan's Forestry and Nature Conservation Agency. These beginners are also eligible to earn bounties,

though they earn half the rate that is given to professionals.

Some 83,000 iguanas were killed last year. The goal is to cull up to 120,000 this year. But Mr Chiu worries that the work is not going fast enough. Tight control of firearms is probably slowing the hunt (Mr Yasiungu is from one of Taiwan's indigenous tribes, to whom looser rules apply). Last year officials from Taiwan's Ministry of Agriculture suggested that wider use of air guns might make the job more efficient.

One problem is that laws prevent Taiwanese firms from producing guns that would be powerful enough to kill a lizard cleanly. Willi Chang, from the Taiwan Airsoft and Airgun Association, says that if Taiwan decides it wants to go down that route people will probably end up having to source the weapons from Chinese manufacturers. Top marks if you predicted that an invasion of ravenous foreign lizards might one day lead Taiwanese to seek out Chinese-made guns. ■

## BANYAN

### *It's only words*

*India's squabbles about language are heating up*

LAST MONTH in Bangalore, India's tech capital, concertgoers heckled a pop star with demands that he sing in Kannada, the local language. He told them off; the police registered a complaint against him. In New York Diljit Dosanjh, a Punjabi actor and singer, arrived at the Met Gala wearing a cape embroidered with the Punjabi alphabet, seen as an assertion of linguistic pride. In Tamil Nadu the chief minister said parents should give babies Tamil names. Meanwhile, a central-government push to promote the use of Hindi nationally gathers pace. Speakers of other languages are, predictably, pushing back.

Language is a touchy subject in a country with 22 legally recognised ones and hundreds more besides. It is also the *raison d'être* for most Indian states. When internal boundaries were reshaped after independence, it was on linguistic lines: Gujarat for Gujarati speakers, Maharashtra for Marathi. Some activists set themselves on fire rather than be forced to speak a strange language. Southern states, especially, have long bristled at what they see as attempts by the north to "impose" an alien tongue. Attempts at compulsory teaching of Hindi caused agitations in the south even before independence.

And yet governments at both state and national levels persist with language politics. Goings-on in Maharashtra make it clear this is a fruitless pursuit. The state recently obliged young pupils to learn Hindi as a third language, before quickly being forced to U-turn. Maharashtra is run by the Bharatiya Janata Party (BJP), which rules nationally and in most northern Hindi-speaking states. If the party cannot impose its will on a state it controls, what hope in the south?

Nor is the government-promoted

language one that many people speak. Demotic Hindi is a varied and forgiving language, spoken differently in different regions of the country. The Sanskritised version promoted by the BJP would be analogous to Modern Standard Arabic if it were heavily retrofitted with classical vocabulary: a made-up thing with little resonance. Unsatisfied with foisting Hindi upon people, the chief minister of BJP-ruled Delhi last week declared Sanskrit—spoken natively by roughly zero people—as the language of the future.

If the idea is to give Indians a common tongue with which to communicate with each other, it is counterproductive. In the south Hindi is associated with northern dominance. The burden of language policies often falls on schoolchildren; being forced to study something does not inculcate a love for it. And Hindi-promotion anyway seems at odds with other stated priorities, such as a government effort to create an AI translator that will help "transcend language barriers".

It is undeniable that India is divided by its languages. But it is getting less so. A

study by Leena Bhattacharya and S. Chandrasekhar of the Indira Gandhi Institute of Development Research in Mumbai found the chance two random Indians could speak in a common tongue, based on data from the 2011 census, was about one in four, up from one in five in 1971. There has been no census since, but the next one will no doubt reveal that the probability has risen.

One reason is that Hindi has spread without—or despite—ham-fisted government efforts. The influence of Hindi-language pop culture from Mumbai has helped, as has the growing use of the roman alphabet for Hindi words in advertising and online. Migration from poor, northern, Hindi-speaking regions to the prosperous south has contributed, too. Between 2001 and 2011 native speakers of Tamil in Tamil Nadu grew 14.3%, in line with population growth of 15.6%. Native speakers of Hindi in the state more than doubled, mostly in cities.

The second reason is the rise of English. Parents rich and poor send their children to English schools. Streaming services have widened access to English-language entertainment. Social media are mostly in English. And English is the language of economic mobility.

A sensible government would acknowledge that English is, after 200-odd years of British rule and nearly 80 in an "associate official" role, an Indian language, one that gives India an advantage over many other emerging economies, and promote it accordingly. But a truly enlightened one would heed the lyrics of a song from "Sadhu aur Shaitaan", a Hindi comedy film from 1968. "Stop this argument about English, Hindi or Urdu," it goes. "Speak Tamil, speak Bengali. Speak the languages of all nations. Learn the knowledge of all nations."



# China



## The gig economy

# Deliverance

BEIJING AND QUANZHOU

## China's gig economy could help it survive the trade war

AS CHINA'S EXPORT machine sputters under the weight of 145% tariffs, jobs are at risk. Some 16m workers are involved in the production of goods bound for America, says Goldman Sachs, a bank. Nomura, another bank, projects a possible 5.7m job losses in the near term and 15.8m in the long run, as the shock ripples through the economy.

The possibility of at least some easing of the tariffs came with the news that America's treasury secretary, Scott Bessent, will meet He Lifeng, a Chinese vice-premier, in Geneva on May 10th. But Communist Party leaders have already been yanking levers to soften the blow, should the trade war continue. At a Politburo meeting on April 25th, they vowed to increase rebates of unemployment-insurance payments for firms hit by tariffs. And they are also looking to another labour-market saviour: China's vast gig economy. Indeed, Donald Trump's trade war could

complete that sector's metamorphosis from a freewheeling industry viewed with suspicion by the party, into the world's largest state-approved e-market for labour, with a stronger safety net attached.

The party is turning to the gig economy because it is vast: the state's trade-union federation estimates there are 84m people relying on "new forms of employment", including delivery services and ride-hailing. The government cites a broader category of 200m "flexible workers", including the self-employed and part-time workers. Both figures far exceed the 54m jobs at state-owned enterprises in cities, and make up a

big chunk of the 734m-strong workforce. One delivery firm, Meituan, uses 7.5m couriers, who get paid \$11bn a year. Drivers often describe their taxing work as *guodu*, a transitional job "to ferry over a stream".

Mr Wan is typical. The 36-year-old looked for the highest paying job within reach and saw that food-delivery drivers could make 10,000 yuan (\$1,400) a month. He criss-crosses Beijing on his scooter from 6am to 9pm each day. "Every penny matters right now," he says. Couriers loom large in the public mind. "Upstream", a recent film about a middle-aged programmer-turned-delivery-driver, put their ranks on the big screen.

Happily for the party, this huge gig economy is growing, despite trade clashes and years of sluggish consumer confidence. Meituan's workforce, typically employed via third-party contracting firms, is 41% larger than in 2021 (see chart). In March its bosses said they expected healthy growth of both food and shopping delivery. The firm is forecast to increase its sales by 15% annually until 2027. Similarly, the number of ride-hailing licences exploded from 2.9m in 2020 to 7.5m in 2024.

Even more helpfully for the party, an epic struggle for market share between rival firms means a hiring war is being unleashed amid the trade war. On April 21st JD.com, an e-commerce firm that recently

### → ALSO IN THIS SECTION

32 Cynicism among the young

33 Hong Kong's exiled dissidents

33 Storming the snooker halls

► entered the food-delivery business, said it would take on 100,000 new riders by July. The combination of price cuts for consumers and more labour costs has spooked investors who have sent share prices tumbling. But more jobs, and some kind of safety net, is exactly what the party wants.

All of this is leading to the political rehabilitation of the companies that power it. In a broader crackdown that began in 2020, it was denounced as part of a “disorderly expansion of capital”. Leaders viewed the firms as “castles built on sand”, says Tilly Zhang of Gavekal Dragonomics, a consultancy. But the party has realised jobs and consumption matter, too. The pivot began in 2023, when Li Qiang, the prime minister, praised the platform companies for their “increasingly prominent” role in demand and employment. Now the government is openly embracing the gig economy as a cushion for the economy.

That embrace is so fulsome that the government is even encouraging gig-economy companies to play more of a role in providing welfare. In February JD.com offered social-security benefits to its drivers. Meituan says that it will “gradually provide” social security for its couriers, too, starting with a pilot scheme this quarter. Desperate to impress, firms are investing in rest stations, meals and subsidies for drivers, “for the government to see”, says one economist.

What’s not to like? A huge question is who ultimately pays. Pensions and medical insurance sound great to workers, but not if they come directly or indirectly out of their pay cheques. JD.com insists it will pay both the employer and employee’s premiums into a state-run scheme. Scepticism abounds on social media. Several drivers, when asked about the scheme, use the phrase, “the wool still comes from the sheep’s back”—nothing comes for free.

In the southern city of Quanzhou, where Meituan last month launched a pilot scheme to reimburse half of pension premiums for qualifying drivers, 30-year-old Mr Lai says he is not interested. Sitting on

his scooter outside a mall, he says: “When we’re old, the workforce will be even smaller, and the pension contributions they pay will not be able to support my generation.”

If the social burden on the firms grows too great, it may be hard for them to cope financially, hence the share-price collapse. The state should protect the flexibility of gig workers and consider new ways to transfer income to them, warns the economist. Otherwise platform firms could disappear with the drivers’ jobs, just as the trade war has hit manufacturing jobs. Technology could influence job creation, too. Meituan is pioneering the use of delivery by autonomous vehicles and drones, which it says have completed 4.9m and 1.5m customer orders respectively.

Nonetheless, changes in the gig economy show how the trade war is forcing China’s rulers to adapt. They might love their vision of high-tech workers making semi-conductors for the world. What they have instead is a low-tech army of people delivering meals on scooters. It keeps the show on the road. That is true for the drivers, too. After a year of delivery, Mr Lai says he is moving to work in a factory that sells goods on Amazon. He thinks the trade war will end soon. But if he is wrong, he will be back on his bike. ■

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

## Work-life balance

# Toil and struggle

The party praises its model workers. The young are not so sure

EVERY FIVE years China names hundreds of people as “national model workers”. The latest to receive the honour gathered on April 28th at Beijing’s Great Hall of the People where the country’s leader, Xi Jinping, urged them to “struggle, struggle, struggle to the end”. He avoided any mention of tariffs brought in by America’s president, Donald Trump, but his use of the old Communist rallying cry was clearly intended to show how people should respond. Amid a trade war that could threaten millions of jobs in China, the message is clear: keep your noses to the grindstone and blame any pain on America.

Some workers may wince. An increasing number complain about how hard they are expected to toil. The infamous “996” work ethic—9am to 9pm, six days a week—has spawned an online drop-out counter-culture known as *tangping*, or “lying flat” (though some may not practise what they preach). Workers complain of *neijuan*, the idea of spinning your wheels and not getting anywhere. If there is a struggle going on, for some it is just getting out of bed.

Officials have tried to show sympathy with burned-out staff. In July last year the ruling Politburo denounced business approaches which led to *neijuan* and its associated stresses. This year several big companies have introduced measures aimed at limiting time spent at work.

But Chinese media still love a good story of absurdly hard toil. The internet has been flooded recently by one such

tale concerning a bricklayer called He Jilin, who reportedly managed to save 2m yuan (\$275,000) after nine years of work. Several tabloids described how Mr He used this money to build a two-storey mansion for his family in a village in Sichuan province. Since mid-April, when news of Mr He’s story broke, posts with related hashtags on Weibo, a microblog platform, have attracted tens of millions of views and thousands of comments.

While some netizens have attacked Mr Trump’s tariffs, others have heaped scorn on the story of Mr He’s struggles (working 5am to 9pm, with few days off, has left him with a chronic back injury). “Don’t romanticise others’ pain—they suffer not to inspire you, but because they had no choice,” said one user on Weibo, referring to Mr He’s case. “How many future million-yuan hospital bills are waiting for him?” wrote another. “Sounds like a made-up story designed to glorify labour until we drop dead,” a third weighed in. Mr He has responded modestly, telling media he regrets not having studied harder at school.

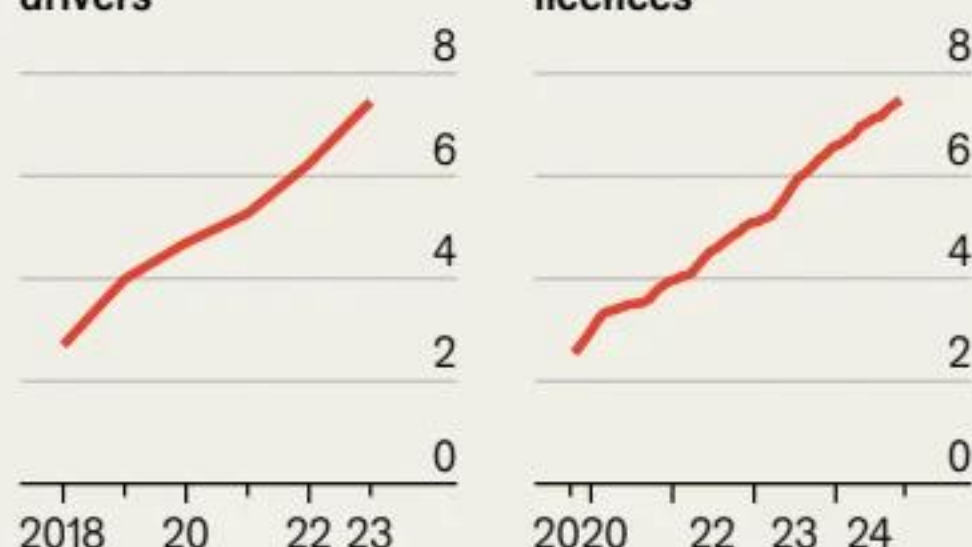
Mr Xi does not want Chinese youngsters to take up bricklaying in order to get rich. Speaking to the model workers, he said the country needed people who were “knowledgeable, skilled and innovative”. But he sticks to old-style rhetoric. Among Chinese “the spirit of hard work, unity and relentless striving will never change,” he said. While fighting America, Mr Xi may struggle to defeat cynicism at home.

## Big gig

China, m

Meituan delivery drivers

Ride-hailing licences



Sources: Ministry of Transport; Meituan; Gavekal Dragonomics; Wind

## Human rights in Hong Kong

## The very long arm

## China intensifies its campaign against exiled Hong Kong dissidents

ON APRIL 30TH Hong Kong police unleashed a new weapon in their attempt to punish those who have fought for freedoms in the former British territory since 2019. The father and brother of one activist who took part in mass protests that year, Anna Kwok (who fled to America in 2020), were detained on suspicion of assisting an “absconder” by “directly or indirectly” handling her funds or assets.

This is an offence under the 2024 legislation known as Article 23, one of the city’s two sweeping national-security laws. (The first was imposed by the government in Beijing in 2020.) Ms Kwok’s brother was freed on bail pending further investigation. But on May 2nd, Kwok Yin-sang, her 68-year-old father, was charged. If found guilty, he faces up to seven years in prison.

The move marks a serious escalation by the Hong Kong authorities, under pressure from Beijing, to enforce complete political control over the territory. Last year they jailed a group of 45 prominent activists who stayed in the city, for between four and ten years. But this is the first time a family member of an exiled activist has been prosecuted. In 2023 the Hong Kong government placed a bounty on several campaigners abroad, including Ms Kwok, who now leads the Hong Kong Democracy Council in Washington, accusing them of colluding with foreign forces. That can carry a sentence of life in prison. There are now 19 “wanted” activists living in exile, who have a bounty on their head. The authorities have revoked the passports of Ms Kwok and 12 others.

Their family members have faced increasing harassment. Since January police have interrogated the families of at least five of the exiled activists, says Human Rights Watch (HRW), an NGO in New York. They raided the office of the Hong Kong Public Opinion Research Institute, an institution associated with Chung Kim-wah, a scholar now based in Britain, and confiscated HK\$800,000 (\$103,000) from the family of Ted Hui, a former lawmaker who lives in Australia, both for allegedly contravening national security.

Many ordinary Hong Kongers have left the city since the crackdown on dissent began in 2020. By May 2024 more than 200,000 had arrived in Britain under a scheme set up to allow people from the territory who met certain conditions to emigrate to the former colonial power.

But fleeing the city does not take them beyond the reach of the Communist Party. The new laws criminalise acts deemed a threat to China’s national security, even if they are committed elsewhere. Some of the exiles say they have experienced campaigns of online intimidation, and have been followed and monitored abroad.

HRW has urged foreign governments to take concrete actions against the intimidation campaign “by imposing targeted sanctions on government officials implicated in these abuses”. Ms Kwok has not commented on her relatives’ arrests, but recently pointed to the Hong Kong authorities’ claims that the city respects human rights. “We are living examples of that not being true,” she said. ■

## Snookered

## Right on cue

BEIJING

## The men’s and women’s world snooker champions are now both Chinese

IT HAS BEEN a long time coming. On May 5th a soft-spoken, left-handed 28-year-old named Zhao Xintong raised the famed trophy in the legendary Crucible Theatre in the northern English city of Sheffield, and was crowned men’s snooker champion of the world. He had defeated a three-time winner, Mark Williams, by 18 frames to 12, thereby pocketing £500,000 (\$660,000) in prize money. “This is going to take snooker to another level,” Jason Ferguson, chairman of the World Professional Billiards and Snooker Association (WPBSA), the sport’s governing body, told the BBC.

He could well be right. Half of those viewing the final on television are thought to have been in China, where, some estimates suggested, 150m people had tuned in. One Chinese media report described it as “a live broadcast of the transition to a new dynasty in the world of snooker”.

China has been rising in the snooker world since an 18-year-old named Ding Junhui defeated Stephen Hendry, a seven-time world champion, at the China Open in 2005. But though Mr Ding reached the world final in 2016, he has never won. Of the world’s 40 top ranked male players, 11 are Chinese, according to WPBSA. (Some of them are based in Sheffield.) Last year a 20-year-old phenomenon named Bai Yulu won the women’s world championship, held in China for the first time.

Mr Zhao has some baggage. He was one of ten Chinese players banned for match-fixing in 2023, in his case for 20 months. He did not fix any matches himself, but he accepted charges of being party to another player doing so, and of betting on matches.

With the ban served, his win could have big implications. Mr Ferguson believes it could help snooker to be included as a new sport at the Olympics in Brisbane, in 2032. “The size of snooker and how important China is to the [International Olympic Committee], someone has to look at this and say ‘this is now snooker’s time’”.

In the basement of the Yundu pool hall in Beijing, most of the 26 tables were in use on a recent afternoon (pool and snooker are often spoken of interchangeably in China, and many casual players stick with pool). Much of the talk was about Sheffield and Mr Zhao. A 40-year-old man named Chen leaned on one of the tables and summed up the mood. “We’re all very proud. How could we not be?” ■



Half a million, corner pocket

## Middle East & Africa



Gaza

### Who will feed the strip?

JERUSALEM

Israel has proposed a deeply flawed plan to fight Hamas and feed Gazans

ON MAY 5TH Israel's cabinet changed course on Gaza in dramatic fashion. It decided to "expand" military operations in the strip again and put in place a new plan to distribute aid to Gaza's population. Israel's hard right sees a path to a permanent reoccupation. Generals in the Israel Defence Forces (IDF) believe the plan will allow a temporary surge to crush what remains of Hamas. Israel's critics think it will guarantee even more civilian misery and death. The pivot comes at a crucial moment. President Donald Trump will visit the Gulf states on May 13th-16th, with Gaza on the agenda. Inside Gaza a shortage of food is at a critical point: some accuse Israel of a policy of starvation.

For over two months Israel has enforced a total blockade of the strip. It has stopped food or medicines from entering and cut off electricity supplies, so that desalination plants and many pumps have been unable to function. Israel has severed aid be-

fore, but this is the longest blockade since the war began after the Hamas massacres of October 7th 2023. Gaza has been stuck in a military limbo since the ceasefire collapsed in late March. The fighting is less intense, with the weekly death toll about half what it was before. In total 52,000 Gazans, including combatants, have probably now been killed (see next article).

The aid cut-off has led Palestinians and aid organisations to warn of starvation and even famine. The charges are especially

loaded because claims of imminent famine in 2024 by international organisations, together with the stated intention of some Israeli politicians to deny Gaza food, bolstered the case for the International Criminal Court to issue arrest warrants against Israel's leaders for alleged war crimes and another case, on genocide, in the International Court of Justice. Those predictions of famine turned out to be badly wrong. Yet the idea that Israel is prepared to use food for leverage is right.

Today Israel insists sufficient supplies of food and medicine surged into the strip in the seven-week ceasefire to sustain its civilians: around 25,000 lorries' worth in total. It claims shortages are manufactured by Hamas, which it says has seized supplies and is manipulating food markets to fill its coffers, pay its members and control the population. Israel accuses aid groups of being naive or complicit.

Yet on the ground there is no doubt of severe suffering. Grocery shops stand empty, bakeries have closed and communal kitchens are overwhelmed by families who might receive one hot meal a day at most. "The main warehouse we use to distribute food in Gaza City is now empty," says Olga Cherevko, a UN spokeswoman. "We recycle water many times," says a former civil servant in the city. Tents are next to piles of solid waste. "People live like ani- ▶▶

#### → ALSO IN THIS SECTION

35 Calculating Gaza's death toll

36 MAGA meets MBS

37 A deal with the Houthis

37 A new front in Sudan's war

38 Why Nigerians live in the dark

► mals,” says Khaled Dawas, a doctor.

Food prices have rocketed. Some items cost 700% more than before the war, says the UN’s World Food Programme (WFP). A sack of flour that once cost 50 shekels (\$14) goes for 1,200 (\$330). The WFP delivered the last food from its warehouses on April 25th. Akram, a teacher displaced from north Gaza, sends his sons to queue with a pot. One day they got bean stew, the next, soup. The family of five supplements this with pasta and cans of tuna stockpiled in the ceasefire. They have not gone a full day without food, one yardstick of famine. But “we go to sleep hungry every night”. Akram’s stash will run out in two weeks. There is a glut of cooking oil but no fuel.

Agricultural land across the south of the strip is under Israeli occupation. Some 78% of greenhouses are damaged or destroyed, along with 72% of the fishing fleet. Only 1% of Gaza’s pre-war chickens remain. Malnutrition, especially among children, is rising. Gaza’s health authority, overseen by Hamas, says 57 people have died of starvation since the start of the war. Sources in international agencies say these deaths were probably caused by pre-existing conditions, but malnutrition may have been a contributing factor.

Even Israeli officials admit that food for the general population will run out in weeks. The IDF’s new chief of staff, Lieutenant General Eyal Zamir, appointed for his toughness, has said the army will not use starvation as a military tactic. Officers have urged Binyamin Netanyahu, the prime minister, to resume supplies. But the IDF also wants to disrupt what remains of Hamas’s economic networks. One idea floated is to withdraw from circulation the 200-shekel note, used in Gaza, in order to annul Hamas’s reserves.

### A terrible idea

For now Israel’s focus is on the new plan. With the backing of America, Israel will establish “distribution hubs” in Gaza. A representative of each family will be allowed to collect a package of food and hygiene products that will last two weeks. Eventually there could be ten hubs, but initially just one or two will be set up in the south as a pilot. The IDF will secure the convoy routes to the hubs and their outer perimeters. Private American “contractors”, a more respectable term for mercenaries, will provide security inside. On May 4th a forum of UN agencies and other NGOs said the plan was “dangerous, driving civilians into militarised zones to collect rations, threatening lives”.

The plan has huge flaws. It leaves the Palestinians reliant on subsistence-level rationing indefinitely. It is unclear how hospitals and refugee shelters will be supplied. A shadowy international foundation has been set up to pay for the contractors,

but no details have been given about its donors (America’s government is involved). Israeli officials expect aid groups will eventually capitulate and join the hubs once they realise this is the only way aid will get into Gaza without Hamas being in tacit control.

The aid plan is meant to complement the IDF’s military operations. The cabinet on May 5th also authorised the “expansion” of ground operations, though the details have yet to be specified. Some ministers want Israel to occupy the entire strip, corralling Gazans around the aid hubs. General Zamir opposes this, warning it would endanger the hostages and that the IDF may not have enough troops.

Occupying most of Gaza’s territory and forcing its population away from their homes towards the distribution hubs will take months, and require the call-up of tens of thousands of reservists. In some reserve units, where soldiers are exhausted

and disillusioned (having already served for hundreds of days), only half are planning to turn up.

Within the IDF some fear the operational plans are unrealistic. Israel’s armed forces, reliant on its reservists, are overextended, they say. Some officers also admit that Hamas will always be able to enlist thousands more youngsters to its ranks. But General Zamir has his orders. Either way, no major manoeuvres are expected for at least two weeks until reserve units are called up and the results of Mr Trump’s visit to the region are clear.

Mr Trump is the only person with any clout when it comes to the Israeli prime minister. Mr Netanyahu worries that the president will be urged by the Arab leaders to press Israel to return to the original ceasefire deal. Israel is unlikely to go ahead with its plans if the Americans withdraw their support. Gaza is becoming Israel’s forever war, and Gazans’ perpetual hell. ■

## Gaza

# How many have died?

## The Palestinian death toll in Gaza may be much higher than current reports

SINCE THE war in Gaza began in October 2023 the death toll has been hotly contested. Counting deaths in any war that is still raging is very hard. But experts are still trying to keep track. And new research suggests the reported numbers are too low.

The precise daily counts from Gaza are unusual. No such tally emerges from Ukraine. But during this war, as in past ones, Gaza’s authorities, run by Hamas, have issued details of how many Palestinians have been killed. Doubts about such figures are reasonable. Hamas, presumably, has an incentive to inflate civilian losses. When previous conflicts ended, however, estimates from Israel and the UN of the numbers

killed have roughly matched those released during the fighting. This war has been far more extensive and lasted longer than any in the past. Many of the institutions that count deaths, such as hospitals, have been destroyed.

As of May 5th, the health ministry said that 52,615 people had died in the war. As in previous wars, its tally does not distinguish between civilians and combatants. In January, Israel estimated that about 20,000 of those killed were militants.

The ministry uses two lists, one based on information from hospitals, the other from an online survey in which people reported deaths, along with other data, presumably of those who have died but have not been identified, to produce its official total. In a recent study in the *Lancet* researchers examined these two lists along with a third, which they collated using details from obituaries on social media (only including deaths from traumatic injuries). All three lists included the names and, usually, the age and sex of the dead. Some also had an ID number. Independent investigators have confirmed that those on the ministry’s two lists have almost certainly died.

The researchers disregarded the ministry’s official total. Instead they examined the overlap between the three lists, using data from the start of the war to June 30th 2024. They used this information to esti- ►►

### Fog of war

Deaths from traumatic injuries in Gaza, 2023-25\*



\*At May 5th †Direct extrapolation by *The Economist* of current casualty counts and study using data to June 2024  
Sources: Gaza Ministry of Health; “Traumatic injury mortality in the Gaza Strip from Oct 7, 2023, to June 30, 2024: a capture-recapture analysis”, by Z. Jamaludine et al., the *Lancet*, 2025

mate how many people had probably died and then compared that with the ministry's official total. So if all 30-year-old men on one list also appeared on the other two, all such deaths may have been counted. But if the three lists had different names, each list might well be very incomplete.

The researchers found that the overlap was so small that the true number of deaths was probably 46-107% higher than the official ministry total. If you assume that the ratio has stayed the same since last June (and not fallen, as systems caught up during the ceasefire, say) and apply them to the current tally, it would suggest that between 77,000 and 109,000 Gazans have been killed, 4-5% of the territory's pre-war population (see chart on previous page).

Huge uncertainty persists. The lists contain errors. Since the beginning of the war 3,952 people have appeared on one of the two lists compiled by the health ministry and subsequently been removed. Hamas fighters, presumably young men, may be disproportionately missing from the lists (if perhaps the group wanted to minimise its own losses) so the death toll could be higher. Unknown numbers, perhaps thousands, have perished because of a lack of medical care. A definitive count of how many have died in this war will be difficult, even after it ends. And that may still be a long way off. ■

## Saudi Arabia and America

# MAGA meets MBS

RIYADH

**Donald Trump and the Saudis get along famously in person but poorly on policy**

MORE THAN a few wags in Riyadh have quipped that Donald Trump is America's first Saudi president. He is certainly the kingdom's most simpatico counterpart in the Oval Office since the dawn of the century. Barack Obama resented the Saudis as "free riders". Joe Biden promised to make them "pariahs". Even George W. Bush, who strolled hand-in-hand with Saudi princes on his ranch in Texas, was prone to giving them irksome lectures about democracy and human rights.

They hear none of that from Mr Trump. His style of court politics, his mixing of family and state business, even his taste in interior decor, all look familiar to Saudi royals. They will give Mr Trump a warm welcome when he arrives in the kingdom on May 13th, his first stop on a three-country Gulf tour—nothing like the chilly fist-bump they offered Mr Biden in 2022. Yet the public bonhomie is a façade. In Mr Trump's second term, as in his first, Amer-



**Eager to return**

ica and Saudi Arabia cannot agree on what they want in the Middle East.

In 2017 that was because the kingdom was an agent of chaos. It had invaded Yemen two years before. Muhammad bin Salman, the crown prince, would go on to blockade neighbouring Qatar, kidnap a Lebanese prime minister, imprison scores of princes and businessmen in a Riyadh hotel and to approve an operation which led to a journalist being dismembered in Istanbul. Mr Trump had to deal with the consequences. The embargo of Qatar caused a schism between America's closest allies in the Middle East.

Now it is Mr Trump rattling the region (and the world). He started bombing Yemen in March. Around the same time, he let Israel abandon a ceasefire and resume its war in Gaza. He has kept sanctions on post-Assad Syria. Then there are the ructions he has caused the global economy: the price of Saudi Arabia's main export has fallen by 22% since Mr Trump took office.

When Mr Trump visited Saudi Arabia in 2017, the kingdom wanted American support for a forthcoming offensive to retake Hodeidah, a port city in Yemen that had been captured by the Houthis, a Shia militia. The president and his allies were hesitant, fearing that a fight for Yemen's biggest port would cause famine in a country that imports 90% of its food. Times have changed. On May 5th, a week before Mr Trump's second visit, America helped Israeli jets bomb Hodeidah. The Saudis stayed silent; it was their turn to worry about the consequences of a conflict.

Those fears have abated, at least for now. On May 6th Mr Trump paused his seven-week bombing campaign against the Houthis. Still, the episode was striking. The Saudis have done an about-turn since 2017: now they are the ones focused on

maintaining stability in the region.

Prince Muhammad has been the kingdom's de facto ruler for eight years. Perhaps with age comes wisdom, or at least caution. He is also getting better advice. His first foreign minister, Adel al-Jubeir, was the first commoner to hold the job since 1962. That meant he was little more than a front man for the crown prince's hawkish impulses. Faisal bin Farhan al-Saud, the foreign minister since 2019, has been a moderating influence. As a prince himself, he has more room to shape policy.

Most of all, Prince Muhammad's priorities have changed. He needs to safeguard Vision 2030, his ambitious plan to overhaul the Saudi economy. That is incompatible with trying to reshape the Middle East by force: it is hard to attract tourists while ballistic missiles whiz overhead.

Saudi foreign policy is now more velvet glove than iron fist. Along with Qatar, it has helped pay off Syria's \$15m debt to the World Bank, a small but symbolic step that will unlock more aid. It should soon lift a years-old ban on its citizens travelling to Lebanon, a sign of confidence in that country's new government. It ended its war in Yemen and its feud with Qatar, and initiated a rapprochement with Iran.

America is still trying to figure out its priorities, a process that begins anew with each change of president. Does it want to end the region's wars, as Mr Trump has promised? Or to keep the boot on Iran and its proxies, as some of his advisers prefer (and the strikes in Yemen were meant to do)? Mr Trump sometimes talks about wanting to forge a prosperous Middle East. His tariffs, aid cuts and sanctions will create the opposite.

## What's the new deal?

Since its inception in 1945, the American-Saudi relationship has been transactional. The Saudis kept their oil flowing to America, which in turn pledged to protect the kingdom. That bargain has run its course. This could be a moment for reinvention. America and Saudi Arabia share common interests in everything from stabilising Syria to promoting regional economic integration. But the chaos of the Trump administration makes pursuing such long-term goals impossible.

Instead, the relationship is likely to remain transactional. Mr Trump hopes to leave Riyadh with a promise of \$1trn in trade and investment, and to conclude an arms deal worth \$100bn. Both are implausible: the former is equal to Saudi Arabia's annual GDP, and the latter dwarfs its \$72bn defence budget. The Saudis, for their part, still hope to conclude a formal defence pact with America. The kingdom has changed much since Mr Trump's first term. But its relationship with America still looks mired in the past. ■

## Yemen

## America deals with the Houthis

**An agreement with the Houthis has boosted America's talks with Iran**

OVER THE course of seven weeks Donald Trump, America's president, bombed the Houthis, Yemeni rebels backed by Iran, over a thousand times. That was twice the number of strikes his predecessor launched in over a year. Then, unexpectedly, the bombing stopped. On May 6th, in a press conference with Canada's prime minister, Mr Trump casually mentioned that he had landed a deal with the Houthis. "We will stop the bombings," he explained, in return for a cessation of Houthi attacks on shipping. "Freedom of navigation for international commercial shipping in the Red Sea," tweeted the Omani foreign minister, Badr Albusaidi, who brokered the agreement, soon after.

Many things explain Mr Trump's change of course. The cost of the campaign, estimated to be \$1bn, was heavy. The attacks had failed to deter the Houthis. And they threatened to fuel conflict just as the president was heading to the Middle East to promote peace. The Iranians had suspended negotiations about their nuclear programme after Pete Hegseth, the American secretary of defence, warned Iran that it would "pay" for its "lethal support" of the Houthis. On May 4th one of the Houthis' missiles pierced Israel's defences and struck the outskirts of its main airport in Tel Aviv. In response Israel destroyed Hodeidah, a Yemeni port, the capital's airport, three civilian aircraft and two big cement plants. The old Middle East, pitting America and Israel against Iran and its proxies, seemed to be back.

The immediate beneficiary of the apparent détente is Iran. Having parked the Houthi problem, Mr Trump looks closer than ever to a deal with the ayatollahs. Iran quickly declared it would resume a fourth round of talks within days. A draft agreement is said to be circulating that could see the Islamic Republic and America restore diplomatic relations after 45 years. If that materialises, technical teams would finalise a deal that lets Iran enrich uranium to low levels in perpetuity. Ahead of his trip to the Gulf on May 13th, Mr Trump has already let slip that "a very, very big announcement" is coming. "Things are moving very fast," says an observer in touch with both the Iranians and the Americans.

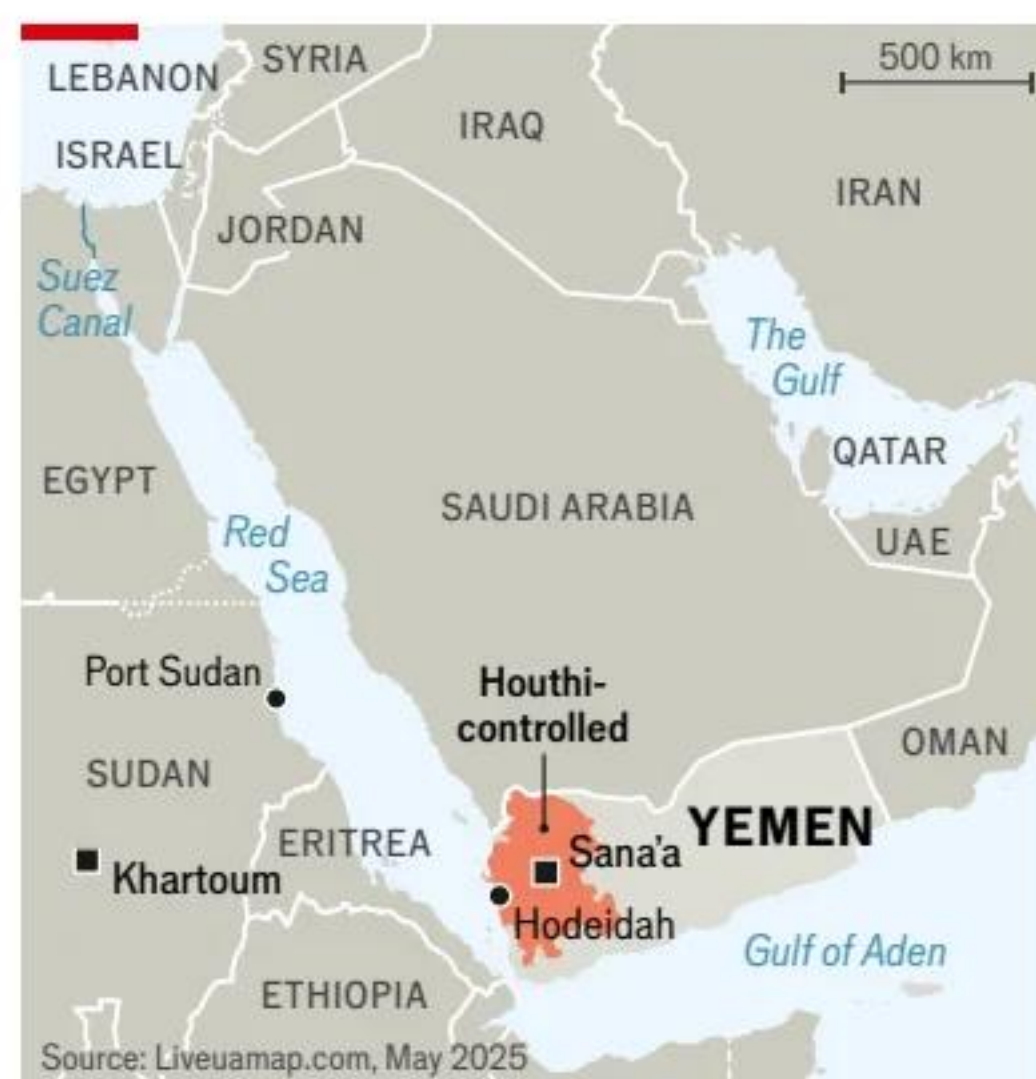
The Houthis are also crowing. Mr Trump said they had capitulated. The rebels insist America beat a retreat. America's strikes have damaged but not eliminat-

ed the Houthis' long-range missile arsenal. They remain Yemen's most powerful force. The leaders of Hamas and Hizbullah, the other members of Iran's "axis of resistance", have fallen; Abdel-Malik al-Houthi is its last man standing. "We didn't expect Trump would surrender to the Houthis and hand them a victory for free," says Abdul-Ghani al-Iryani, a Yemen analyst.

Others are counting their losses. The deal leaves 25m Yemenis under the Houthi's yoke. A decade of air strikes that began with the Saudis has crippled infrastructure. The Houthis tax heavily, but show scant interest in service-delivery. Instead they focus on bolstering their forces, tightening their grip and indoctrinating the population with religious dogma and hate speech. "They're worse than the Taliban," says a Yemeni visitor to Sana'a, the capital.

The Houthis' Yemeni rivals are smarting, too. Some had hoped that under American pressure the group might at last accede to a power-sharing agreement and let the internationally recognised government return to the capital. Others hoped to exploit American mission creep and relaunch a ground assault. Now they fear it could be the Houthis who advance. None of Yemen's other forces can match the rebel group. Their force has grown 12-fold to 350,000 since 2015, according to the UN, a year after they seized Sana'a. And unlike their Yemeni opponents, they are disciplined and battle-ready. Prepare for Houthi attacks on the oilfields near Marib and Shabwa, say Yemen-watchers.

Most surprising is Mr Trump's abandonment of Israel. He launched his campaign in March when the Houthis resumed their attacks on Israel. But the deal does nothing to constrain Houthi strikes against America's ally. The Houthis say they will continue firing at Israel as long as Israel maintains its blockade of Gaza. It might be a sign of Mr Trump's frustration with Israel's prime minister, Binyamin Netanyahu or of his determination to secure a deal with Iran. Either way, Israel seems unusually out of the loop. ■



## Sudan's civil war

## The new fight for the skies

NAIROBI

**A drone attack on the coast heralds more misery for civilians**

FOR NEARLY two years Port Sudan on the Red Sea was a haven in Sudan's civil war. The city became the country's de facto capital after the Sudanese Armed Forces (SAF) fled to the coast. Thanks to its functioning international airport, it was the centre of relief operations for the world's biggest humanitarian crisis.

Now it is a military target. Starting with a drone attack on May 4th, civilian infrastructure (including the airport, a hotel and a power station) has come under fire from the Rapid Support Forces (RSF), the army's main adversary. "No place is safe any more," says Suliman Baldo of the Sudan Transparency and Policy Tracker, a conflict-monitoring group. A war that has forced 12m of Sudan's 50m people from their homes and caused one of the world's worst famines has shifted to the skies.

The SAF was first to use armed drones on Sudan's battlefields. After losing control of Khartoum, the capital, and much else to the RSF in 2023, it focused on acquiring advanced weapons. By 2024 it had bought drones made in Turkey, Iran and China. They may have been decisive in dislodging the RSF from Khartoum in March.

More recently, the RSF has also been acquiring drones with the help of the United Arab Emirates, its key foreign backer. As it abandoned its attempt to advance east by land, it has stepped up their use, targeting civilian infrastructure across SAF-controlled territory from the sky.

The new phase of the war is particularly bad news for humanitarian operations. All flights in and out of the country have been suspended, disrupting the supply of aid and medicine. In Port Sudan fuel is scarce. Electricity, already erratic, is down; a shortage of oxygen in hospitals is expected. Though aid agencies are staying put for now, the UN is preparing evacuation plans. One aid worker in the city warns of a "catastrophe" if the country's telecoms infrastructure is hit next.

The attacks may signal a shift towards asymmetric warfare, in which the RSF focuses on inflicting maximum damage from afar. The SAF has frequently used air power to target villages and marketplaces inside RSF-held territory, killing probably hundreds of civilians. The two sides are now stuck in "tit-for-tat logic of disrupting civilian activities," says Mr Baldo. As with all developments in the war so far, the latest twist spells more misery for Sudanese. ■

## Electricity in Nigeria

## A nation in the dark

LAGOS

Nigeria's chances of providing electricity to 90m people who lack it look slim

BEFORE GEORGE ETOMI went to university in 1972, his home in Lagos, Nigeria's commercial capital, had near-constant power. When he returned from studying abroad a few years later, power cuts had become frequent. By 1984, Mr Etomi needed a fuel-powered generator to open his law firm. Today roaring generators provide the soundtrack to urban Nigerian life. They produce more than twice as much power as Nigerians get from the grid.

Decades of underinvestment in Nigeria's power supply mean it has not kept pace with the country's growth. More than 90m of its 230m people live without access to electricity, the highest number in any country. Deep dysfunction in the sector and a gaping lack of funds mean things are unlikely to improve soon.

Plenty of poor countries struggle with intermittent power. Yet Nigerians are uniquely deprived. Just under half the country has never been connected to the national grid, which has never carried more than 6 gigawatts (GW). South Africa, which has suffered blackouts and load-shedding, manages 48GW of grid power for its 63m people. Even Bangladesh, poorer than Nigeria until recently and home to 170m people in an area a sixth of Nigeria's size, generates around 16GW. In Nigeria, when production reached a high of more than 5GW one day in March, the surge made the grid collapse. When the power comes back, "it's as if a goal has been scored in football," says Mr Etomi.

The lack of grid power is a massive drag on the economy and Nigerians' quality of life. Frequent power cuts in hospitals cost lives. Air-conditioning is a luxury. Tech entrepreneurs are forced to build their own power plants to run their data centres. More than half the country's manufacturers no longer even bother to try to connect to the grid, according to the power minister. In 2023 Nigerians spent 16.5trn naira (\$10.3bn) on generating off-grid power, equivalent to 60% of the entire government budget for the following year. That brings total supply to some 20GW, a quarter of the country's estimated power needs.

Decades of underinvestment have kiboshed the system in so many different places that it is fiendishly hard to fix. The grid, still run by the government, is dilapidated and prone to collapse. That limits the amount of power it will agree to buy from generator companies. These, in turn,

have problems beyond the lack of demand from the grid. Gas plants, which produce most grid power, are badly maintained and often fail to pay their suppliers. What's more, gas prices are capped, which means it can be cheaper for suppliers to burn off gas rather than ship it to plants that may pay them very little or nothing. On average, plants run at less than half their capacity.

Distribution companies, 60% of which are privatised, struggle to cover their costs as people often fail to settle their bills. The government is the worst offender. Last year the distribution company in Abuja, the capital, threatened to disconnect the presidential villa and 86 government agencies over 47.2bn naira (\$29m) of unpaid bills. When one company in Lagos asked the air force to pay for a nine-year backlog, soldiers stormed its headquarters and beat up the staff.

## Powering up

Government initiatives have not got off the ground. A partnership between Nigeria, Germany and Siemens, a German firm, is supposed to add 12GW to the grid's ability to handle throughput. But the project has completed only a pilot phase since it was signed in 2019. Privatisation, which helped improve telecoms and banking in the 1990s, has failed to revamp the power sector. More than half the distribution companies that were privatised in 2011 have gone

bust, dampening investor appetite. "Why would anyone put a dime in the sector?" asks Noelle Okwedy, an energy analyst.

It is politically hard to persuade more people to pay for electricity, given the service's shoddy quality, but the government has been trying. Still, even after prices quadrupled for the richest households last year, today payments cover only around 65% of the cost of providing power.

Most progress is being made off the grid. A consortium involving the World Bank and the African Development Bank wants to spend up to \$55bn to provide electricity to 300m Africans, including many Nigerians, by the decade's end. Concessional financing has helped build off-grid solar projects, such as a 12MW solar hybrid plant powering a university that was recently completed in the northern city of Maiduguri. In March, a group of organisations including Nigeria's sovereign-wealth fund launched a \$500m fund for bigger renewable-energy projects.

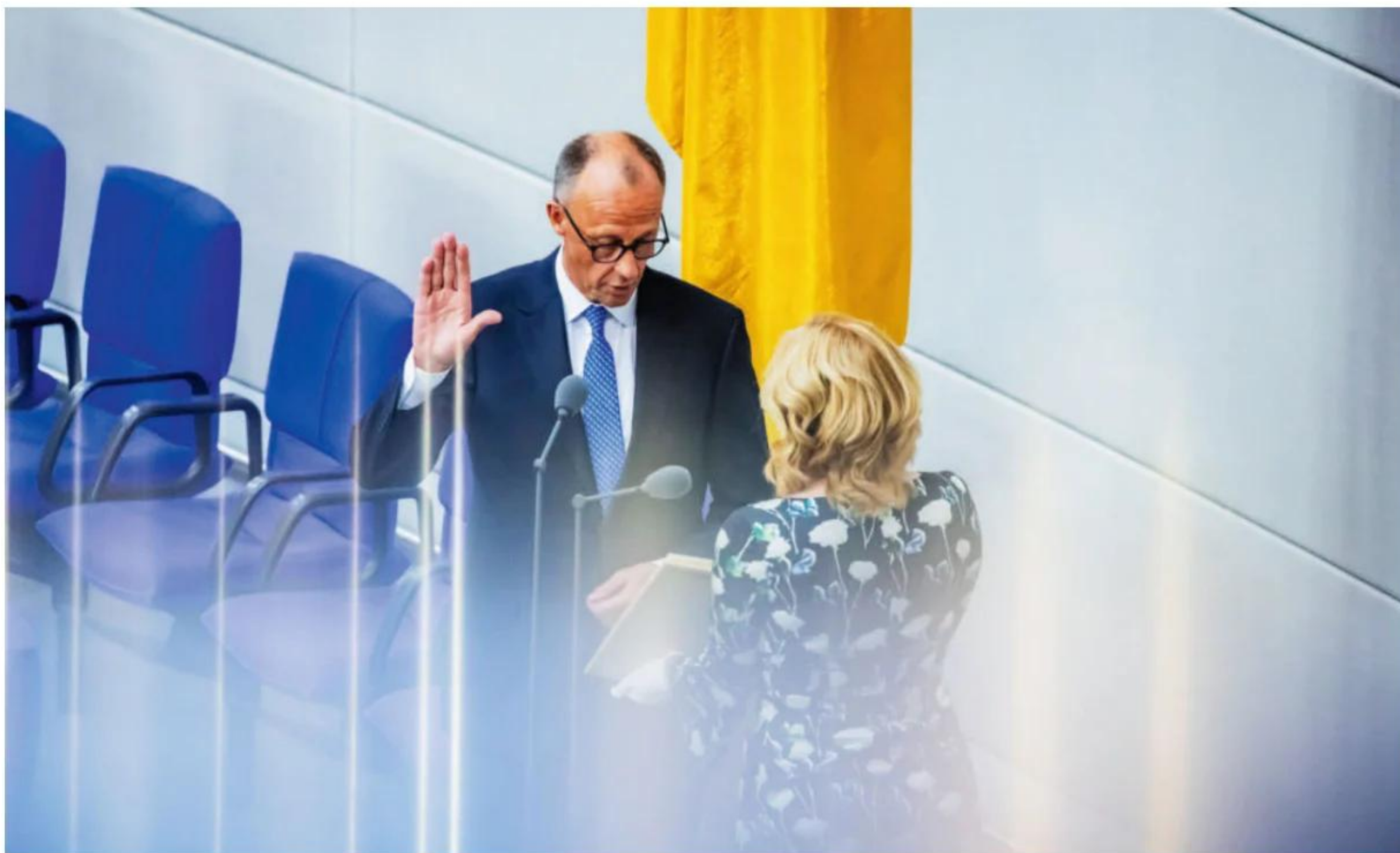
Such projects alone will not cover Nigeria's massive electricity shortfall, so fixing the grid is still vital. Yet successful off-grid options may make it harder. As reliable solar alternatives or private power plants become more widespread, as in South Africa and Pakistan, the cost of maintaining and upgrading the grid will be shouldered by fewer people. As costs go up and service fails to improve or deteriorates, opting out entirely becomes ever more attractive. The government's response looks muddled: it wants to integrate more solar power into the grid, but is also mulling banning the import of solar panels.

If the electricity problem is not fixed, the economy will also continue to operate below capacity. Nigeria cannot be Africa's economic powerhouse until it can power its houses. ■



Noisy but necessary

## Europe



## Germany

## The ides of Merz

BERLIN

**Will the new chancellor's domestic difficulties hamper his international ambitions?**

**“SO HELP ME God,”** said Friedrich Merz, Germany's new chancellor, his right hand aloft as he solemnly recited the oath of office in the Bundestag on May 6th. Earlier in the day Mr Merz, leader of the Christian Democrats (CDU), might well have hoped for a spot of divine intervention, after the Bundestag delivered him an unprecedented rebuke. In what was expected to have been a routine step enabling his ascent to the chancellery, MPs instead left him six votes short of the absolute majority he needed. At least 18 of the 328 lawmakers in Mr Merz's conservative bloc and their junior coalition partner, the Social Democrats (SPD), had balked at backing the man who won Germany's election in February. The ballot was secret; the culprits may never be known. But whoever was to blame, it was a devilish start for a man who had pledged to bring an end to the “chaos” he said marked the tenure of the SPD-led government he was replacing.

A second vote that day, organised after a hasty change to parliamentary procedures, got Mr Merz over the line. The new chancellor now hopes that a flurry of activity will erase the Bundestag bungle from memory. On his first full day in office he embarked on a whistle-stop tour of France and Poland, in a display of comity with Germany's most important neighbours. Trips to Brussels, Kyiv and doubtless other places will follow fast. Mr Merz's commitment to restoring a long-absent German

voice to European and international debates is not in doubt, and he has structured his government to centralise foreign policy in the chancellery (Johann Wadephul, the new foreign minister, is a close party ally). The question is whether his international ambitions may run aground on the shores of domestic politics.

At least initially, the focus will be on Europe. “Merz is convinced that the only guarantee for a free, wealthy and peaceful Europe is for it to build significantly more unity,” says Roland Koch, a CDU grandee and longtime ally. Even before taking office Mr Merz organised a constitutional change to boost defence and infrastructure spending. Hopes run accordingly high in many EU capitals. Emmanuel Macron in particular longs to find the partner in Berlin he missed under Olaf Scholz, the outgoing chancellor; the French president has asked his ministers to study the German coalition agreement to find areas of potential co-operation. When Mr Merz dropped in to the Elysée on May 7th—his first visit as chancellor, but far from his first meeting with Mr Macron—the pair hugged like old pals. They promised joint endeavours on defence, energy and innovation.

As for Poland, Mr Merz hopes to restore a relationship that also atrophied under Mr Scholz. He vests his hopes in the fact that the CDU and Civic Platform, the party of

## → ALSO IN THIS SECTION

**40 German culture funding**

**41 MAGA in Romania**

**41 Portugal votes, again**

**42 Fibre-optic drones**

**43 Charlemagne: The parable of the owl**

► Donald Tusk, the Polish prime minister, both sit in the European People's Party, the centre-right grouping that Mr Merz regards as a crucial vector of power in Europe. There are also ambitions with Britain: the chancellor plans to tap into the Labour government's hope for a post-Brexit reset in relations with Europe. Mr Merz has said that Germany, France, Poland and Britain should form a European "contact group" to back Ukraine—though in Paris he added pointedly that "we still need the Americans". (He is expected to speak to Donald Trump soon.)

None of these relationships is friction-free. For example, France and Poland have been sceptical about an EU trade deal with Mercosur, the Latin American trade bloc, which Germany backs. Nor do old pathologies disappear with a new government: concerns in Germany over France's excessive public debt run as deep as ever. In Poland, there are huge worries over Mr Merz's pledges to turn back irregular migrants at the countries' shared border. Hours before Mr Merz touched down in Warsaw Alexander Dobrindt, his new interior minister, announced yet-tougher border controls. Standing next to Mr Merz later, Mr Tusk wasted no time in making his displeasure clear. (So, separately, did the Swiss.)

Still, these look like the usual spats that pockmark bilateral relations in the EU. It is not news that France and Germany, with its export-dependent economy, have different instincts on trade, and on irregular migration Mr Merz is swimming with the European tide. For most of Germany's EU partners, the simple fact that Mr Merz is not Mr Scholz is cause for cheer.

It is at home that dangers skulk. One early test will be budgets for both this year (belatedly) and next, on which deliberations will start immediately. Tight revenues will limit the fiscal room for manoeuvre. More broadly the government must find ways to revive the long-dormant economy, especially with American tariffs looming. That the coalition agreement is long on aspiration but often short on detail is potentially a worrying omen, says Ursula Münch at the Tutzing Academy for Political Education. The early agreement on big spending packages means some potential battles have been avoided. But there have already been intra-coalition skirmishes on tax and the minimum wage.

Politically, the leaders of the governing parties must manage MPs among whose ranks evidently lurk troublemakers; a potential headache for a coalition with a majority of just 12. Another imminent challenge might be managing calls to ban the hard-right Alternative for Germany (AfD) party, which domestic spooks on May 2nd labelled a "confirmed" case of right-wing extremism. Mr Merz is known to be sceptical of a ban. But many MPs, including some

## Berlin's culture

# Frugal times ahead

BERLIN

Gone are the decades of plenty

"I DON'T REALLY know that much about art," joked Philipp Demandt, director of the Städel Museum, the top fine-arts museum in Frankfurt. "In Frankfurt it's all about money." Mr Demandt was speaking on April 11th at the inauguration of "Dioscuri—the Given Day", a special exhibition of a monumental painting, 65 metres long and consisting of 24 panels, one for each hour of the day. The work, based on the Greek myth of the unequal twins Castor and Pollux and created by Michael Müller, a German-British artist, is now being shown in the vast staircase of the Neues Museum in Berlin.

Mr Müller, who had exhibited "The Given Day" at the Städel in 2022, managed to get the funding for the entire cost of €250,000 (\$283,000) for the seven-month exhibition of his magnum opus in Berlin from corporate and private sources. That is highly unusual in the capital, which is used to munificent state funding of its three opera houses, 175 museums, around 150 theatres and two major concert houses. Without a more commercial approach a lot of art may not happen in Berlin any more.

Berlin's government is cutting its budget by €3bn, or 7.5%, this year. Nearly all departments need to tighten their belts, including culture, which is slashing around €130m, almost 12%, from its plan. Berlin's cultural leaders are up in arms, warning that the city's reputation as a hip and welcoming cultural capital is at stake. On May 2nd Joe Chialo, Berlin's culture minister, resigned after drawing fire for handling the whole affair, especially the communications around it, badly. But his boss, the mayor

of his own, want to clamp down hard.

Much will rest on the abilities of those at the top. The cabinet assembled by Mr Merz and Lars Klingbeil, the SPD co-leader and new vice-chancellor, is notably thin on experience (bar Boris Pistorius, whose term as defence minister has been renewed). Their challenge will be to ensure that the compromises needed to oil the wheels of the coalition do not turn to inaction. "He may need to travel more than many chancellors before him," says Jens Spahn, the new leader of Mr Merz's parliamentary group. "But we all need to ensure



Not just a public good

of Berlin, has had little choice: the city is in debt to the tune of €67bn according to Destatis, the federal statistics agency, thanks to the covid-19 pandemic, poor financial management and the soaring costs of labour, energy and nearly everything else.

Many other German cities are cutting their culture budgets, though Hamburg and Frankfurt are not among them. Those two are both richer than Berlin, and more commercial in their approach to funding. Hamburg is increasing its culture budget by 11% this year, and is even getting a new opera house financed by Klaus-Michael Kühne, the second-richest German (who was born in Hamburg), to the tune of €330m. Berlin should take note.

that everything goes well at home." Worryingly, a large majority of Germans say that they do not trust Mr Merz.

If the Bundestag vote offered a silver lining, it might be to temper the expectations heaped on Mr Merz's shoulders abroad. Hopes that his vigorous pro-EU rhetoric might be parlayed into signing on to a jumbo package of joint debt to fund common defence schemes, for example, may be reined in after this week's demonstration that his power sits on rocky foundations. However global his ambitions, Mr Merz cannot neglect the home front. ■

## Romania's presidential election

## MAGA man

BUCHAREST

A populist, George Simion, faces an anti-corruption mayor, Nicusor Dan

NICOLAE CEAUSESCU, Romania's last communist dictator, was deluded and power-mad, but he left his country's politicians an impressive stage for speeches. On May 4th George Simion, leader of the hard-right Alliance for the Union of Romanians (AUR), stood before the giant parliament Mr Ceausescu built, reputedly the world's heaviest building, and presented himself as Romania's Donald Trump. His party "totally agree[s] with MAGA ideology", Mr Simion said. By midnight it was clear Mr Simion had won the first round of the presidential election, with 41% of the vote. The European Union's club of populist leaders may soon get another member.

It was Romania's second try at electing a new president. The first was annulled by the constitutional court back in December, after it was unexpectedly won by Calin Georgescu, another hard-right populist, allegedly with Russian interference: bot networks had inflated Mr Georgescu's reach on TikTok. Mr Simion denounced this as a "coup" and promised Mr Georgescu a role in government, winning over most of his voters. The runner-up was Nicusor Dan, the corruption-fighting mayor of Bucharest, the capital, who got 21%. The two will face off in a second round on May 18th.

Both Mr Simion and Mr Dan are seen as "anti-system" candidates. The government-backed candidate, Crin Antonescu of the National Liberals (PNL), finished just behind Mr Dan. That threw Romanian politics into greater-than-usual chaos. Since 2021 the country has been run by grand coalitions between the main parties of power, the centre-left Social Democrats (PSD) and the centre-right PNL. Many voters saw the tie-up as denying them a choice, while the government rolled back the anti-corruption campaign Romania had pursued in the 2010s. Mr Antonescu's loss showed the coalition had forfeited its mandate, and on May 5th Marcel Ciolacu, the PSD prime minister, resigned. The country now has an interim prime minister appointed by an interim president.

Mr Simion is tipped to win the second round, which worries the EU. Along with his routine culture-war positions against climate policies and LGBT rights, there are geopolitical concerns. The AUR leader got his start in politics campaigning for Romania to absorb neighbouring Moldova, where most citizens speak Romanian. He is banned from Moldova—and from Uk-

raine, which he attacks for alleged mistreatment of ethnic Romanians. He has called for Romania to cease aid to Ukraine, and says Ursula von der Leyen, the president of the European Commission, is only marginally better than Vladimir Putin.

Yet in office he might prove less disruptive than this suggests. Mr Simion "is a pragmatic guy", says Radu Magdin, a Romanian political consultant. The candidate likens himself to Giorgia Meloni, the Italian prime minister, a hard-right leader who has played a constructive role in the EU. AUR belongs to Ms Meloni's group in the European Parliament. Mr Simion is not pro-Russian: if Mr Putin refuses to end the war, he tells *The Economist*, the EU should confiscate frozen Russian assets; Romania might seize Russian-owned businesses. He says his economic model is Javier Milei, Argentina's libertarian president.

Mr Dan's chances hinge on winning over those who opposed Mr Simion. That may be difficult. The Bucharest mayor is backed by the Union to Save Romania (USR), a pro-European anti-corruption party. It can co-operate with the PNL, which is endorsing Mr Dan for president. But it has a bad relationship with the PSD, the heirs to the country's communists, whose power is based on distributing patronage to local officials throughout the country in exchange for turning out the vote. That is a big force in Romanian politics, though a declining one. According to Cristian Ghinea, a USR senator, mayors nowadays say "we can't control our people: they vote according to what they see on TikTok".

If Mr Dan wins, he can probably appoint a USR prime minister to form a minority government backed by the PNL. Mr Simion would appear to have a harder job: the PSD, PNL and USR have all ruled out a coalition with AUR. But the hard-right leader may have more power than it seems. If parliament rejects two nominees for prime minister, the president can call new parliamentary elections. That could be disastrous for the PSD and PNL, which might prefer to accept a minority government led by an AUR prime minister. Mr Simion could nominate Mr Georgescu, though their personal relations are frosty.

Whoever wins will face a grim fiscal situation. Romania's budget deficit in 2024 topped 9% of GDP, the highest in the EU, as the government fished for support by raising pensions. Its credit rating is hovering above junk status. After the government fell, the Romanian lei dropped to more than five to the euro; the central bank has intervened to stabilise it. To calm the markets, the new president will have to "reassure everybody that Romania will be a stable, loyal EU member state", says Sebastian Burduja, the energy minister and a member of the PNL. Mr Simion is "an unpredictable political actor". ■

## Portugal's election

## When enough is not enough

LISBON

Can a political culture of compromise survive?

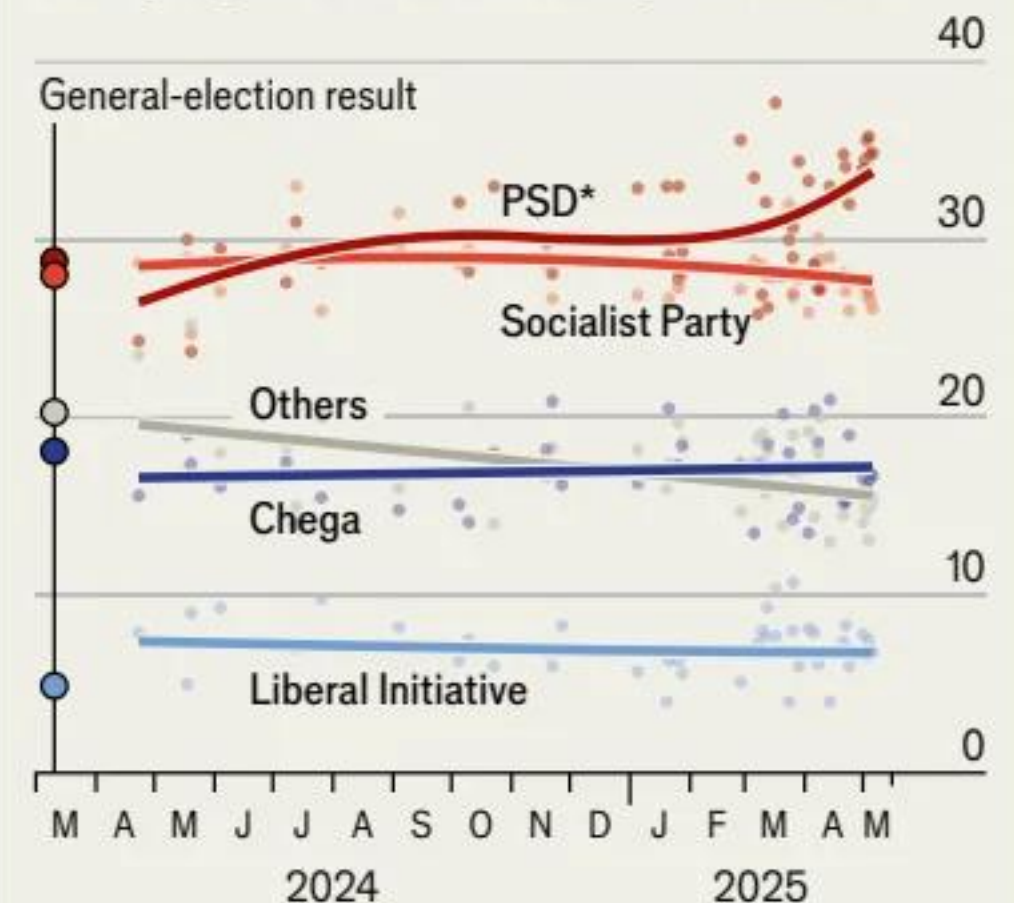
IT IS AN election that almost nobody except the main party leaders wanted. But when the Portuguese vote on May 18th, for the third time in a little over three years, they face some important issues. One is whether they can engineer stable and decisive leadership to deal with the social dislocations accompanying a vigorous economic recovery from the grim years of austerity that followed the financial crisis of 2008. Another, common to many European countries, is whether they can preserve a habit of pragmatic consensus that in Portugal is under threat from Chega ("Enough!"), a fast-growing hard-right party. They will also decide how much importance they give to ethics in public life.

Next week's election came about when Luis Montenegro, the centre-right prime minister for the past year, called and lost a confidence motion in parliament following revelations that Spinumviva, his family's consulting firm, had received a monthly fee from a company seeking to renew a government concession to run some casinos. It has since transpired that the consultancy had six more clients who do business with the government.

"I didn't receive a single euro from a private entity since I became prime minister," Mr Montenegro insisted in a television debate with his Socialist opponent, Pedro Nuno Santos. When he became the leader of the (misleadingly named) Social Democratic Party (PSD) in 2022, he transferred his shares in the firm to his wife and children. He was certainly imprudent in not getting rid of Spinumviva altogether. But ►►

## All rather tricky

Portugal, general-election voting intention, %



Source: National polls

\*Includes CDS

► the affair “looks worse than it was”, concludes a prominent economist.

Mr Montenegro, a lawyer from a small town near Porto, came to power as a result of another scandal. Antonio Costa, the Socialist prime minister, resigned less than two years after winning an election when prosecutors raided his official residence. They found €76,000 in the office of his chief of staff and arrested five people in what they said was an influence-peddling scandal. But no charges have been brought and there is no evidence of wrongdoing by Mr Costa, who was chosen as president of the European Council last year.

These events, and the decision by the president, Marcelo Rebelo de Sousa, to call a snap election in March last year, deprived Portugal of a strong and stable government. The chief beneficiary was Chega, which won 18% of the vote and 50 seats, up from just 1.4% and one seat in 2019. Its leader, André Ventura, a clever, demagogic lawyer and former football pundit, exploited discontent over a swift rise in immigration and the holes that years of austerity had burrowed into the welfare state. Mr Montenegro scraped into office, his coalition winning just 55,000 more votes and two more seats than the Socialist Party (PS). Rather than form a coalition with Mr Ventura, he obtained the abstention of the Socialists to approve a budget.

Mr Montenegro's pitch now is for more time to complete what he started in a country where the main issues are health care, a housing shortage and taxes. He has used growing tax revenues to pay for higher pensions and pay rises for civil servants and the police. But his promise to hire more doctors and cut hospital waiting lists has yet to bear much fruit. He wants to cut corporate and income taxes to boost growth, which dipped in the first quarter of this year. Opinion polls suggest that his coalition will do better in the forthcoming election than it did last year and could even eke out a majority with Liberal Initiative, a small classically liberal party. But few analysts are prepared to say that Chega has peaked, and Mr Montenegro has ruled out any deal with them.

For all its political volatility, Portugal has enjoyed underlying stability. Since 2016, its economy has grown by an annual average of 2.2% per year, thanks to booming exports and a newfound commitment to fiscal responsibility shared by both the PSD and the PS. Its revolution of 1974 overthrew dictatorship and opened the path to integration with Europe. “We’ve built in all this period a democracy based on compromise, on finding common ground,” says Antonio Vitorino, a former European commissioner. “I think we are losing this political culture.” For a relatively small and poor country on Europe's periphery that would indeed be a big setback. ■

## Ukraine

# The tethered threat

KYIV

## How new drones are sneaking past jammers on Ukraine's front lines

**D**RONES HAVE transformed the war in Ukraine. Commanders sit in bunkers scanning banks of screens, as surveillance drones hunt for targets on the ground. Once they are spotted, artillery or mortars may blast them. Or bomb-dropping or kamikaze drones zoom in for the kill. The problem is that well over half the drones in the air are downed by jamming and accidents. But a new addition to the arsenal of both sides is proving more effective. They are fibre-optic drones. With no radio signal to detect or jam, they are proving much harder to stop.

In a factory in Kyiv production of the new drones is being increased from 600 a month to an expected 10,000 by the end of the summer. 3DTech is one of 11 Ukrainian companies in the fibre-optic drone business. It also makes some 3,000 kits to upgrade existing drones each month. Mihailo, commander of the Typhoon drone unit fighting in Ukraine's east, is enthusiastic. Today 20% of his drones are the new variety, but he reckons that by the summer they will be the majority.

Unlike mainstream drones, of which Ukraine produced 2.2m last year, fibre-optic ones are controlled by a fishing-line-style filament redolent of the wire-guided missile systems first deployed in 1945. Not only are they hard to down (at least for now), but the fibre-optic cable means the picture relayed back to the pilot is crystal clear. It is the difference between upgrad-



No jam today

ing from a 1970s fuzzy TV picture to HD quality, says Yuriy Ganusyak, whose company supplies batteries for drone-makers.

The first fibre-optic drones appeared on the front a year ago. Russia began deploying them in large numbers by the end of last year, Ukraine a couple of months later. They played a big part in Russia's successful counteroffensive in its Kursk region in March. Now they are being employed in Russia's assaults in the east. They are particularly suitable for hilly terrain, where radio signals are often lost.

Both sides are racing to source fibre-optic cable. On April 5th Ukraine was reported to have bombed a factory making the stuff in Saransk in Russia. Until now, no suitable fibre had been produced in Ukraine. Oleksiy Zhulinskiy, the chief technical officer of 3DTech, says the Chinese dominate the fibre market and that Ukrainian buyers have bumped into Russian ones in Chinese factories where both are vying to buy; Russia sometimes gazumps them. This month 3DTech is going to begin testing its own cable.

Unlike with a kite, the fibre-optic drone's spool flies too, unwinding as it goes. In Mr Zhulinskiy's factory, banks of 3D printers whirr as they make them. Chinese ones were unreliable, and a reason why many of Ukraine's first-generation fibre-optic drones failed to reach their targets. Now, claims Mr Zhulinskiy, 80% do.

Still, not everyone is convinced by the merits of the new drones. Olha Bihar, who commands an artillery and drone unit on the Orikhiv front in southern Ukraine, says they are heavy and it takes months to train a pilot to fly them. Their cable can get tangled in trees and it glints in sunlight, which can give away the location of the drone and its pilot. The drones also have a relatively short range of 10-15km. This means that the pilot needs to be right at the front in order to hit well inside enemy territory.

New ideas are being tested to counter fibre-optic drones. Both sides are constructing nets over key roads and positions, but these are not proving much of a defence. If the drones are heard above, troops use shotguns to pepper them. 3DTech is testing a drone with a sawn-off shotgun for attacking other drones.

Fibre-optic drones may be the new big thing, but they are a stopgap solution developed to circumvent jamming. In the Ukrainian arms race, the holy grail is a laser weapon capable of blinding or frying the electronic heart of any incoming drone, missile, warplane or helicopter. At a tech fair on April 13th Vadym Sukharevsky, head of Ukraine's Unmanned Systems Forces, showed how Ukraine is testing its own Tryzub laser system to do just this. The effective lifespan of any new military technology seems to be getting ever shorter as the war drags on. ■

# CHARLEMAGNE

## *The parable of the golden owl*

*How a 31-year treasure hunt helps explain Europe's fragmenting societies*



IN THE SPRING of 1993 an obscure French publisher proposed a novel form of entertainment to people as yet unable to squander hours watching TikTok videos. “In Search of the Golden Owl”, a slender illustrated volume, referred to a life-size statue of the nocturnal bird designed by one of the authors, cast using three kilograms of gold, even more silver and encrusted with diamonds. The tome’s other author had devised 11 riddles that would lead successful sleuths to the precise spot where he had buried a bronze replica of the owl. The clues were fiendishly cryptic, requiring knowledge of history, science and other dark arts to unlock. The organisers thought it would take amateur investigators up to two years to crack the code; whoever unearthed the replica prize could exchange it for the real owl, said to be worth 1m francs (over €250,000 in today’s money, or nearly \$300,000), as well as a cellar of fine wine. Not quite, as it turned out. On May 2nd 2025, after armchair adventurers had spent three decades looking for the wretched talisman, the organisers revealed the solution. The continent in which the game had started in 1993 had morphed into something different altogether. The “owlers”—an early manifestation of how shared obsessions can give rise to niche communities—had something to do with it.

The fact that the denouement was revealed in the form of a documentary shown in 400 cinemas shows how the *chouette d’or* had captured the popular imagination. An estimated 200,000 people are said to have tried their luck at unearthing the bird over the years. Many Poirot pretenders were lured into a false sense of confidence by one riddle, which spelled out B-O-U-R-G-E-S, a city in central France. Through further deduction and triangulation, everyone crafted their own pet theory as to where the prize was hidden. Many were after an inside tip, which had helped bring *Masquerade*, a similar treasure hunt launched in 1979 in Britain, to a close after just three years. Failing that, you had to dig. Plenty did, in forests and grasslands, often at night lest a rival *chouetteur* might be on the same track; one had even rooted in the grounds of the Palace of Versailles. Many divined that Dabo, a village near the German border, marked the spot. Since 1993 it has been so continuously burrowed by shovel-wielding visitors that parts of it were

left looking like a first-world-war battlefield.

Some “owlers” were in it for the money—gold is worth its weight in gold, after all—others for the thrill of the chase. Among owlers, schisms worthy of minor academic departments soon formed. For each *Daboïste* digging near Strasbourg you could find an equally fervent *anti-Daboïste*; this being France, one fellow even described himself as a *méta-Daboïste*. Many felt the death in 2009 of the original riddler-in-chief, a marketing consultant whose identity had been a secret while he lived, would mark the end of the game. His erstwhile partner, the maker of the owl, had not been privy to the game’s solution. The new fellow had even put the statue—the sacred prize!—up for auction in 2014, until owlers hooted in collective protest loud enough to stop the sale. In 2021 the late riddler’s wife passed the solution to his co-author. The new gamemaster, in his 70s by then, tweaked the workings of the game in ways that made it easier for the *chouette* to be found. Could it be because he had planned to launch a second treasure hunt, bringing a new generation of players to the game?

And then—finally—someone found the damn thing. In October 2024 it was announced that a duo of diggers had come forward with the magic bird’s replica, and a credible solution to the enigmas. The identity of the winners remains unknown; they were given the golden owl and disappeared overseas. But it was only last week in the documentary that the location of their successful dig was revealed: it had indeed been in Dabo after all. Veteran owlers, some of whom suffered divorce and depression in pursuit of the prize, griped that the super-solution tying together the answers to the 11 riddles lacked the elegance they had chased for so long. Some think they have been strung along. Others believe another replica *chouette* is still out there, waiting to be found.

### Wild goose chase, more like

It is easy to dismiss hordes of wannabe Indiana Joneses turning France into Swiss cheese as a sign of frivolity. Is this something their parents, a generation that had endured war and reconstruction, would have indulged in? Probably not. But the game’s fans in 1993 offered a foretaste of society in 2025. The owlers were among the first online communities anywhere in the world, connected by Minitel, a French precursor of the internet that ran online discussions on the *chouette* from 1993. Using pseudonymous handles—there were Gandalf and Argos, Météor and Neo49—the sleuths queried the gamemaster online (for a fee) years before others had ever heard of such forums. Later, internet groups emerged and rival owlers’ associations met in person to share their theories.

Once Europeans lived in cohesive societies, with institutions such as churches, trade unions or political parties structuring public life. Owlers were in the vanguard of a trend towards something different: people disappearing into their own little clans, with their own rituals and networks. Jérôme Fourquet, a French political analyst, describes the “archipelagisation” of society, a shift in recent decades from a unified national identity bound together by common experience to a collection of distinct and often disconnected groups with their own interests. We live side by side, but not entirely together. From watching the same evening news, we are all consuming our own corner of the web. From all voting for one of two or three political parties, more niche outfits have emerged—including, across Europe, populist ones that have benefited from the fraying of our bonds. We all dwell in bubbles of our own making these days, a wise old owl might conclude. ■

# Britain



Wither the C of E

## Churchgoing, going...gone?

NORTH HILL, CORNWALL

**The Church of England is dying out and selling up**

**P**USH OPEN the heavy door and step inside. The sound as it slams behind you will feel loud, almost rude, in the old, cold silence. For St Torney's Church in Cornwall is very old indeed. The Normans built it. The Tudors enlarged it. The Victorians meddled with it. Daphne du Maurier immortalised it in "Jamaica Inn". It has outlasted the Reformation and the civil war.

It could not outlast apathy. In the 20th century, people stopped coming. By the start of covid-19 it had four worshippers. It closed as the pandemic began and never reopened. Its organ was taken out, its hymn books were removed, its Bible was taken from its lectern and a more silent silence fell. An 800-year history was over.

The Church of England (C of E) is in trouble. This is an odd ecclesiastical moment. The pope is dead, the Archbishop of Canterbury has gone. Not since 1691 have both seats been empty. But those seats will be filled. A far more anxious emptiness is

in the C of E's pews. Adult church attendance in England has fallen by over a third in 15 years; just a little over 1% go to services weekly, according to the C of E's own numbers. A rise in churchgoing among the young is mainly a Catholic phenomenon (see box on next page). The C of E closes 20-odd churches each year.

Critics sense a spiritual vacuum too: in its failure to resolve international squabbles over its stance on gay marriage and in

its cover-up of appalling child abuse. On January 6th, the former archbishop Justin Welby, who many felt failed in his handling of that scandal, laid his curving staff on the altar at Lambeth Palace. The process of selecting a replacement has begun.

Whether or not you believe in God, this matters, to bureaucracy and to Britain. Britons might be a Godless lot—in the 2021 census less than half called themselves Christian, down from almost 60% in 2011—but Britain itself is not. The C of E is not merely a church but an established church. England is one of around 20% of countries (from Tuvalu to Denmark) with a state religion. It is institutionally ecclesiastical.

The C of E has soft power (bishops lead Remembrance Day celebrations) and actual power (26 bishops in black-and-white robes sit in the House of Lords, where they can help shape laws). It has educational power (through 4,600 C of E schools) and sacred ceremonial power (England's king is crowned by England's senior archbishop). And it has money: the C of E has an endowment of £10.4bn (\$13.9bn).

Now it is choosing a new leader. The process is as eccentric as one might expect of an institution that dates back half a millennium and which has had, in its time, not merely bishops but also kings, queens and castles—less a church than a chess set. The election and enthronement of an archbish-

### → ALSO IN THIS SECTION

**45 Growing Catholicism**

**46 Bagehot: The unusual Kemi Badenoch**

→ **Read more at: [Economist.com/Britain](https://www.economist.com/Britain)**

— **The cost of Reform**

— **Trade policy**

— **VE Day**

▷ op lasts for months and involves a king (Charles), a “Clerk of the Closet” (it’s complicated) and laws that date to 1533.

These tend to show scant regard for modern spelling (they refer to the “Arche-bishoppe” and “the Kynges Majestie”) or for modern morals (one law rules that if the prime minister is Jewish or Catholic they cannot take part since this would be a “high misdemeanour”). This process will not, then, involve much DEI. It will involve a special 13th-century stone throne.

The new recruit will have a daunting job. England is not always kind to its archbishops, as Thomas Cranmer found out when he was burnt at the stake. Although the new one will not face that, a full in-tray awaits. He (probably, though unlike the next pope it could be a woman) will have to deal with those who query the C of E’s political power: for a church in which so few regularly worship to have a say over the laws of the land is “ludicrous”, says Andrew Copson, the head of Humanists UK.

The primate will have to deal with the weakening link between church and crown. England’s heir, Prince William, does not go to church every Sunday and was said by a palace insider to feel “not instinctively comfortable” in a “faith environment”—ominously weasel words for someone who will bear the title of “Defender of the Faith”.

Managing the church’s present while preserving its past is a core part of the new archbishop’s job. Christianity changed the shape of England—a spire or tower is the first thing you see when approaching an English village—and the English language itself. Despite the C of E’s fall from grace, the words of the King James Bible of 1611 infused English, putting words in our mouths like “fallen from grace” (Galatians 5:4) and “words in [our] mouth” (Isaiah 51:16). It is “very difficult to understand English history”, says Tom Holland, a historian, unless you understand Christianity, since it is “suffused” by it. The very BC/AD dating system was popularised by a 7th-century English churchman, the Venerable Bede. Time turns on his ecclesiastical axis.

Perhaps the C of E’s most obvious vestiges are architectural: its churches. Some 16,000 remain open; 3,500 have closed in the past decade alone. It is, says Sir Simon Jenkins, an historian, “impossible to overstate” their importance; England is unimaginable without its dreaming spires.

If the churches’ importance is clear, their modern role is not. In the 1950s the poet Philip Larkin walked into a church and wondered “When churches will fall completely out of use/ What we shall turn them into”? Real estate is the short answer. The C of E sells off old churches, surprisingly cheaply. One church “benefits from” mains water and electricity, not to mention a “nave, aisle, organ chamber and tower”;

another from a “spacious” interior. Both are going for under £300,000.

Some, like St Torney’s, are saved by charities such as the Churches Conservation Trust. Others are turned into cafés, offering scones and a little spirituality—a kind of numinous National Trust. Some are too hard to convert into anything, since they also “benefit from” graveyards and quite a lot of dead bodies. Many fall further into ruin. Almost 1,000 are on Historic England’s “at risk” register.

The new archbishop then, will be busy. The C of E has faced crises before. In the Victorian era, the theory of evolution and

the new science of geology shook the stony certainties of faith. The critic John Ruskin heard the “clink” of geologists’ hammers in “every cadence of the Bible verses”. The poet Matthew Arnold stood on Dover Beach and heard the “melancholy, long, withdrawing roar” of the sea of faith.

What is different now is that the retreat is so quiet. Faith is not roaring; it is ebbing, all but unnoticed by most. The C of E should perhaps expect this: there is, as the King James has it, a time for everything: a time to speak and a time to keep silence. In St Torney’s, there is no sound but the birds. A time to be born; and a time to die. ■

## Growing Catholicism

# Altered minds

KENSINGTON

Young men in Britain are turning to Catholicism in surprising numbers

BROMPTON ORATORY is a peculiar place to find people in their 20s. This grand old church in west London smells of old things and incense. At the altar a priest clad in lace delivers mass in a droning tone. But in their Sunday best, the young are there, sitting in the stiff pews, kneeling on hassocks, their chinos scuffed by the cushions.

In November and December last year YouGov, a pollster—commissioned by Bible Society, a non-profit organisation that invites people “to see the Bible through fresh eyes”—asked some 13,000 adults in England and Wales about their religious views and habits. The findings are striking: a 56% rise since 2018 in those claiming to attend church at least once a month. Young people, in particular young men, are leading the charge. In 2018 just 4% of 18- to 24-year-olds claimed they went to church regularly; by 2024 some 16% did so.

But the newly pious aren’t flocking to the Church of England. They’re showing

up at Catholic mass. So much so that, for the first time in five centuries, Catholic worshippers in England and Wales may soon outnumber Protestants. Among the young they already do. Six years ago a third of young churchgoers were in the Anglican pews. Now only a fifth are, and 41% are at Catholic mass (see chart).

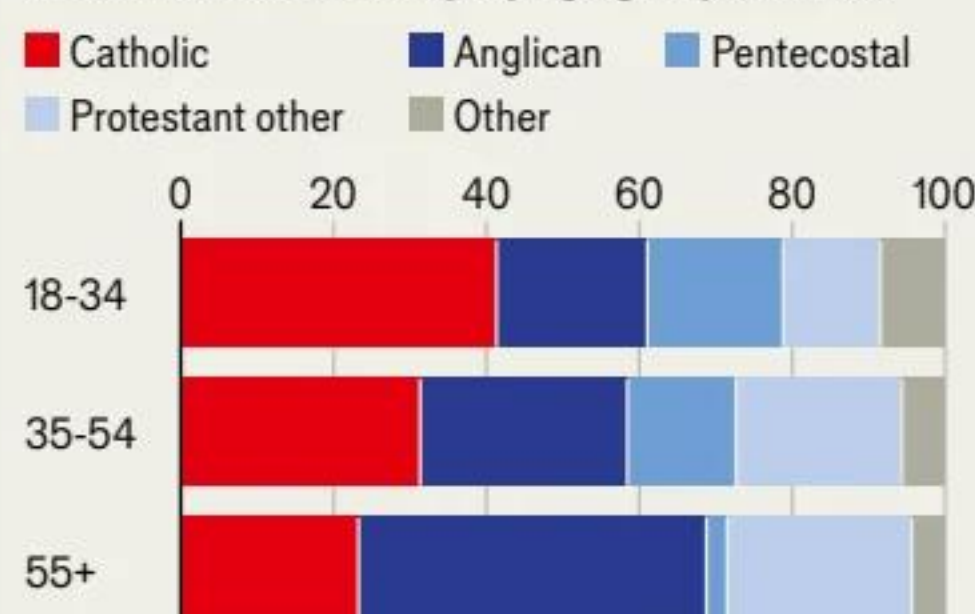
The pandemic may have been a god-send for the Catholic Church. Aidan Geboers, a 29-year-old banker living in Lewisham, in south London, says lockdown prompted his search for a community. He found it in Farm Street Church, a Jesuit temple in Mayfair. Farm Street’s young-adult service regularly attracts around 180 people. “Ten years ago numbers might have been half that,” says Father Kensy Joseph, a leader in its young-adult ministry.

To young people in Britain (and elsewhere), Catholicism seems to appeal for two, opposing, reasons. Partly the practice of contemplation and dedication to ritual appear to be a potent antidote to the online world. But the internet is also a major route to evangelism. Bishop Robert Barron, an American founder of a Catholic media organisation, and Father Mike Schmitz, a podcaster and campus minister, have amassed hundreds of thousands of followers on social media. Bishop Barron celebrates a new “macho Christianity”, where men can be “heroes”.

Graham Greene, a novelist, described his Catholic faith in a way that may reflect its attraction to young churchgoers today. It was “something fine and hard and certain, however uncomfortable, to catch hold of in the general flux”.

## O come, all ye faithful

England and Wales, Christians who say they attend church at least monthly, by age group, 2024, %



Sources: Bible Society; YouGov

## BAGEHOT

### *The interesting Kemi Badenoch*

*The Tory leader has fascinating views on everything but winning*



AMONG THE identikit CVs of MPs, Kemi Badenoch's stands out. She grew up under military rule in Nigeria, and at 16 left alone for England. Such a childhood left her with unusually interesting insights. Some are profound. Liberal societies are fragile, she says; you too would hate social-media pile-ons if you'd seen a mob lynch a person in the street. In London the doctor's daughter took a job at McDonald's; every migrant knows, she says, that social mobility goes down as well as up. And some of her observations, to British ears, are just odd: she has "nothing in common" with northern Nigerians, who "were our ethnic enemies". Bracingly right-wing and rarely dull, Ms Badenoch captivated the Conservative membership, who elected her their leader last November.

Fascination has turned to horror. Local elections on May 1st brought heavy losses for the Labour Party but catastrophe for the Tories. The party lost all 16 councils it was defending, caught in a pincer of Reform UK in poorer regions and the Liberal Democrats in wealthier ones. A party that had faced a struggle to regain office now faces a struggle to survive. Ms Badenoch is part of the problem. She is, if anything, simply too interesting for government.

For a public tired of Westminster, her idiosyncrasies might have been a tonic. Viewers hate a television format which pits obtuse interviewers against robotic politicians. Ms Badenoch shares their contempt. "It is a fictional series. It is not a documentary," she deadpanned when interrogated on a breakfast show as to why she had not watched "Adolescence", an anxiety-stirring Netflix drama about knife crime. Downing Street still obsesses about daily newspapers with dwindling circulations; Ms Badenoch prefers to wax lyrical for hours on podcasts with global audiences, such as Jordan Peterson's show and "Triggernometry" (whose premise of goading liberals is in the name). For a British politician it is an unconventional approach. It is also the future.

And Ms Badenoch is a dream of a guest. On the topics in which she is interested, she is unusually interesting. She recites her favourite thinkers: Daron Acemoglu, Roger Scruton and Thomas Sowell. She was unfashionably early to the transgender debate, and unfashionably hostile to Black Lives Matter. (If you think British police are unfair, she says, meet Nigerian ones.) Her habits are

unorthodox: "Kemi arrived late, sat down noisily, asked a none-too-bright question and left early," recalled Peter Mandelson, Britain's ambassador to America, of one dinner party. A graduate of the *Spectator*, a magazine that has produced a generation of Tories better at describing the country's problems than fixing them, she would make a fine columnist.

Unfortunately, that is not the job she was hired to do. "She's simply not very interested in the electorate," shrugs one Tory. "She skims across her briefings," says another. To would-be intellectuals, the stuff that wins elections can seem pedestrian: pay, GP waiting lists and anti-social behaviour. Her rhetoric has been more interesting than the substance of her policy: in the leadership contest she spoke of redrawing the British state and economy on a scale "not attempted since the days of Keith Joseph". A second Thatcher revolution would be fascinating indeed, but so far she has had little to say on productivity and public services other than when they fortuitously intersect with the culture wars. Perhaps that is no surprise, since in the leadership campaign she hinted at a boredom with policy wonks. "Oooh, let's talk about AI, and let's talk about NHS reform," she sighed. "I want to talk about freedom." For voters, it is possible to be interesting but irrelevant.

The previous time the Tories were kicked out of office, they adopted a mantra: "Concede and move on." Yet Ms Badenoch has an intriguing appetite to refight the last election. A more ruthless new leader might use their first interview to apologise for Party-gate, a pandemic-era scandal. Instead, Ms Badenoch offered a curious defence: lockdown laws introduced by Boris Johnson "ended up creating a trap for Boris Johnson". It was an imaginative argument; as a day-one pitch to lost voters, it was crackers.

Ms Badenoch enjoys politics more in theory than practice. She may riff on conference panels about the battle for the soul of conservatism, but she was oddly absent from the very real battle for conservatism unfolding to devastating effect in the humdrum towns of Lincolnshire and Shropshire. A hungrier Tory leader would tear into Nigel Farage's prospectus of protectionism and fiscal populism as anathema to traditional Conservatives. Yet asked to name a point of difference with Reform on ideology or policy, Ms Badenoch would say only that the Tories had a plan. A woman described by colleagues as happy to cross the road to start a fight is oddly reluctant to have one with Mr Farage.

#### Scrolling while Rome burns

British politics has big prizes for those clever enough to be dull. Even the loquacious Mr Johnson could stick to a three-word script at an election. Or take Sir Keir Starmer, a deeply intelligent man who took over a Labour Party regarded as too eccentric for power and promptly underwent a form of voluntary lobotomy. The sparkling thoughts on the Geneva Convention that once enlivened Kentish Town dinner parties were parked for four monotone years of touring supermarkets, tutting at the price of butter and saying things like: "Our nation's defence must always come first." Try if you can to recall a single Starmer *bon mot* from that era; Sir Keir bit his tongue and reaped the rewards.

Yet Ms Badenoch says there is nothing to learn in Sir Keir's rise to Downing Street. More fascinating still, she has hinted that she isn't sure if she wants to be prime minister. Perhaps Kemi Badenoch is more interested in being Kemi Badenoch. Her colleagues have started the clock on her leadership, for the electorate is not much interested in her. ■

# Business



## Chip wars (1)

# Nvidious

### Inside the shadowy business of smuggling AI chips

LAST MONTH Jensen Huang, the boss of Nvidia, landed in Beijing with a clear message: the maker of the world's leading artificial-intelligence (AI) chips planned to "unswervingly serve the Chinese market". America would rather it didn't. Just a few days before Mr Huang's trip the Trump administration introduced new controls that, in effect, banned the company from selling its H20 processor to China. More rules are coming. Although on May 7th the administration said it would rescind tighter export controls proposed by the Biden administration, it plans to replace them with ones of its own.

Over the past few years America has sought to hobble its main rival in the AI race by restricting its access to advanced semiconductors. The performance of an AI processor depends mostly on two factors: computing power (how fast a chip processes data) and memory bandwidth (how quickly it moves data between processing

and memory). In October 2022 the Biden administration barred sales to China of American chips that exceed a threshold on both fronts. Nvidia responded with the H800, a made-for-China model engineered to stay just under the limits. A year later, America tightened the regulations again, banning any chip with too much computing power, regardless of memory bandwidth. Nvidia's answer was the H20.

The trouble for America is that restrict-

ed Nvidia chips continue to make their way into the hands of Chinese AI developers. A shadowy supply chain has emerged, designed to work around sanctions. Some customers lease access to offshore data centres; others buy chips through murky intermediaries. Further attempts to curb the flow of chips are likely to suffer from many of the same problems.

To see why it is so difficult to restrict access to AI chips, consider Johor, a part of southern Malaysia once better known for its palm-oil plantations. Located just across the border from Singapore, the region has become a hub for data centres. Land and electricity are cheap, and permits easier to obtain than in the city-state. All the big American cloud providers—Amazon, Google, Microsoft and Oracle—have set up shop. According to Knight Frank, a property consultancy, Johor's total data-centre capacity (built, under construction or planned) grew from 10 megawatts in early 2021 to more than 1,500 megawatts by 2024.

Johor also provides a convenient back door into China. Big Chinese firms such as ByteDance, the owner of TikTok, have rented capacity there. Leasing cloud capacity in Malaysia allows companies like it to gain access to chips that cannot be imported into China. SemiAnalysis, a consultancy, estimates that nearly half of

#### → ALSO IN THIS SECTION

48 Chinese chip breakthroughs

49 Drama at OpenAI

50 The battle over weight-loss drugs

51 Palantir's staggering ascent

52 Bartleby: IT horrors

54 Schumpeter: Pandemic parallels

► Johor's projected data-centre capacity in 2027 will incorporate AI processors such as Nvidia's. Malaysian data-centre operators insist that they comply with American export regulations and do not provide capacity to blacklisted entities. Yet finding workarounds is straightforward. A lawyer advising firms in the region says that it is relatively easy for Chinese companies to get hold of restricted AI chips by setting up local subsidiaries.

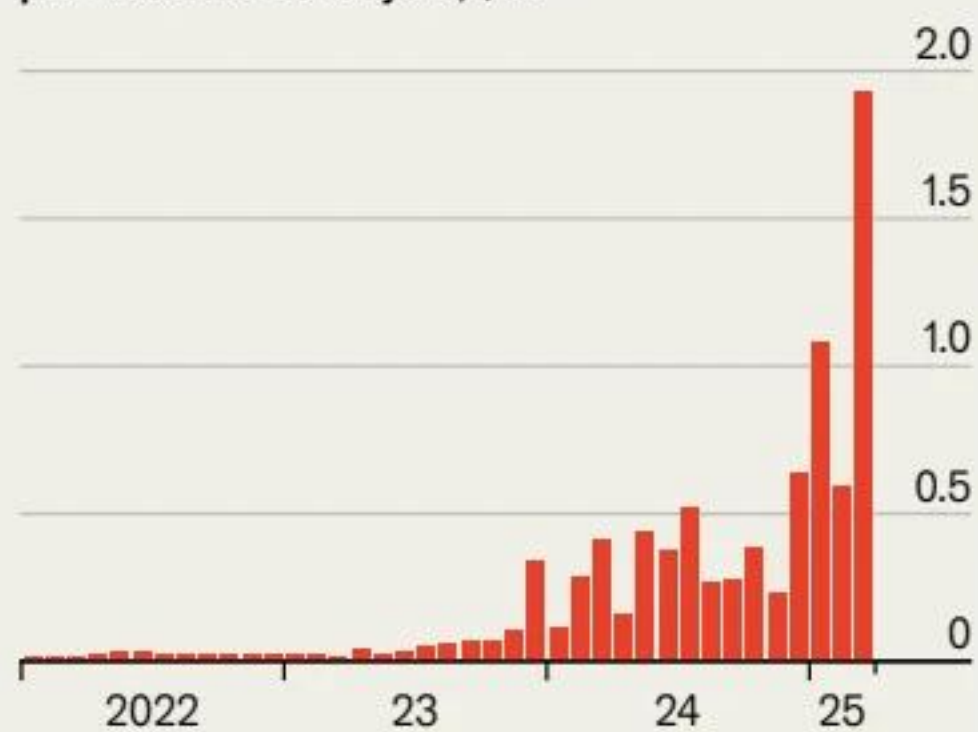
Figures on trade flows support this. Nvidia's high-end chips are produced by TSMC, the world's biggest chipmaker, in its Taiwanese factories. In the first quarter of this year Taiwan exported \$3.6bn-worth of graphics-processing units—the kind used to train AI models—to Malaysia, nearly matching the total for all of 2024 (see chart 1). In March alone shipments more than tripled from the previous month to reach almost \$2bn.

Then there are the smugglers who traffic chips directly into China. These are typically diverted through third countries not covered by American restrictions. A source familiar with the practice says goods often pass through several jurisdictions and front companies to obscure their origin. Export papers are doctored; restricted products are mislabelled to slip past customs. Erich Grunewald of the Institute for AI Policy and Strategy, a think-tank based in San Francisco, estimates that last year smuggled American chips made up between a tenth and a half of China's AI-model-training capacity.

Before the first round of export controls in 2022, China accounted for about 22% of Nvidia's revenue. That share has since fallen to 13%. At the same time, sales to Singapore—a city with few end-users—have more than doubled, and now make up nearly 18% of the total, making it Nvidia's second-largest market after America (see chart 2). The company says the shift is routine: many clients invoice through Singapore but ship to permitted destinations. Fewer than 2% of chips sold there are delivered locally.

### Chips in the night

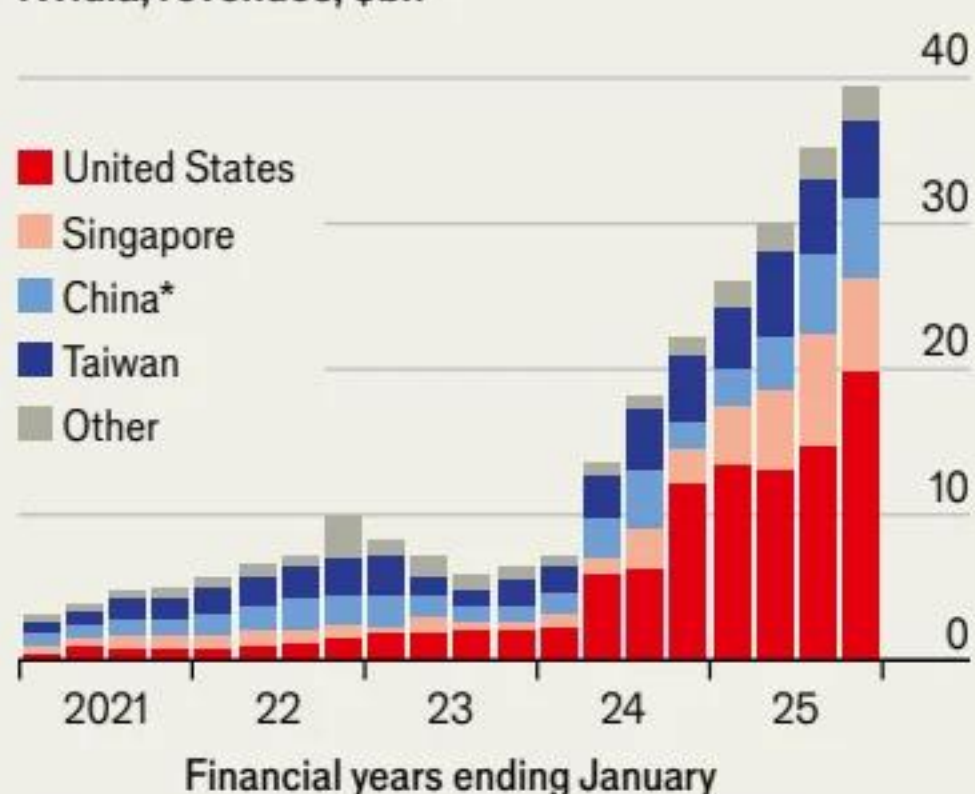
Taiwan, exports of advanced processors to Malaysia, \$bn



Source: Taiwan Customs Administration

### Veering off course

Nvidia, revenues, \$bn



Source: S&P Global

\*Including Hong Kong

In February, however, Singaporean police arrested three men over the sale of \$390m-worth of servers that incorporated Nvidia chips. Prosecutors allege these were first sent to Singaporean firms, then re-exported to Malaysia. Whether that was their final stop remains unknown. What is clearer is the incentive: demand has turned the grey market into a gold mine. According to one industry executive, banned Nvidia chips now sell at a 30-50% mark-up through intermediaries.

China is not the only destination. In October America placed several Indian firms under sanctions for re-exporting restricted chips to Russia. Among them was Shreya Life Sciences, a pharmaceutical firm based in Mumbai. According to figures from The Trade Vision, a data provider, it exported \$322m-worth of tech goods to Russia in 2024, much of it Dell servers containing Nvidia chips.

All this puts Nvidia in a tricky position. The firm insists it complies with American export rules. But its operations are vast: it expects to sell more than 6m AI chips this year and it sits several steps removed from the end user. Nvidia supplies processors to cloud giants such as Google and Microsoft, and to equipment-makers like Dell and Supermicro, which integrate them into servers. From there, responsibility for compliance is diffuse. Cloud providers and hardware firms are expected to vet their customers. Nvidia itself conducts periodic audits. But oversight is uneven, and servers often change hands quietly after passing initial checks. One executive at a server manufacturer says properly verifying all end users is "practically impossible".

The Biden administration had drawn up an elaborate plan that would have restricted access to AI chips for 120-odd countries in a bid to choke off China. Mr Trump's commerce department now promises to introduce "a much simpler rule". That is a relief for Nvidia: the countries that would have faced curbs accounted for about a quarter of its sales. Some now expect the administration to use access to

American chips as leverage in trade talks. It is also said to be considering beefing up restrictions on the flow of AI processors to countries through which China has tended to gain access, such as Malaysia.

### The chip has sailed

Any new controls will encounter familiar problems. The Bureau of Industry and Security (BIS), the agency tasked with enforcing controls on tech exports, is severely understaffed. It has just one export-control officer responsible for all of South-East Asia and Australasia—a region central to the shadow trade in AI chips.

Some pundits have proposed technical solutions, such as disabling chips used in prohibited locations. Nvidia argues that such hardware-level controls would introduce dangerous vulnerabilities and are not workable. Instead, it suggests that software tools could transmit limited telemetry—including information on location and system configuration—back to the company to confirm that the chips are where they are supposed to be.

Even better enforcement has its limits, however. Nvidia cannot trace every chip. BIS cannot inspect every server. Smugglers will continue to find loopholes. If America wants to keep ahead of China in the AI race, it will need to innovate faster, rather than clamp down harder. ■

### Chip wars (2)

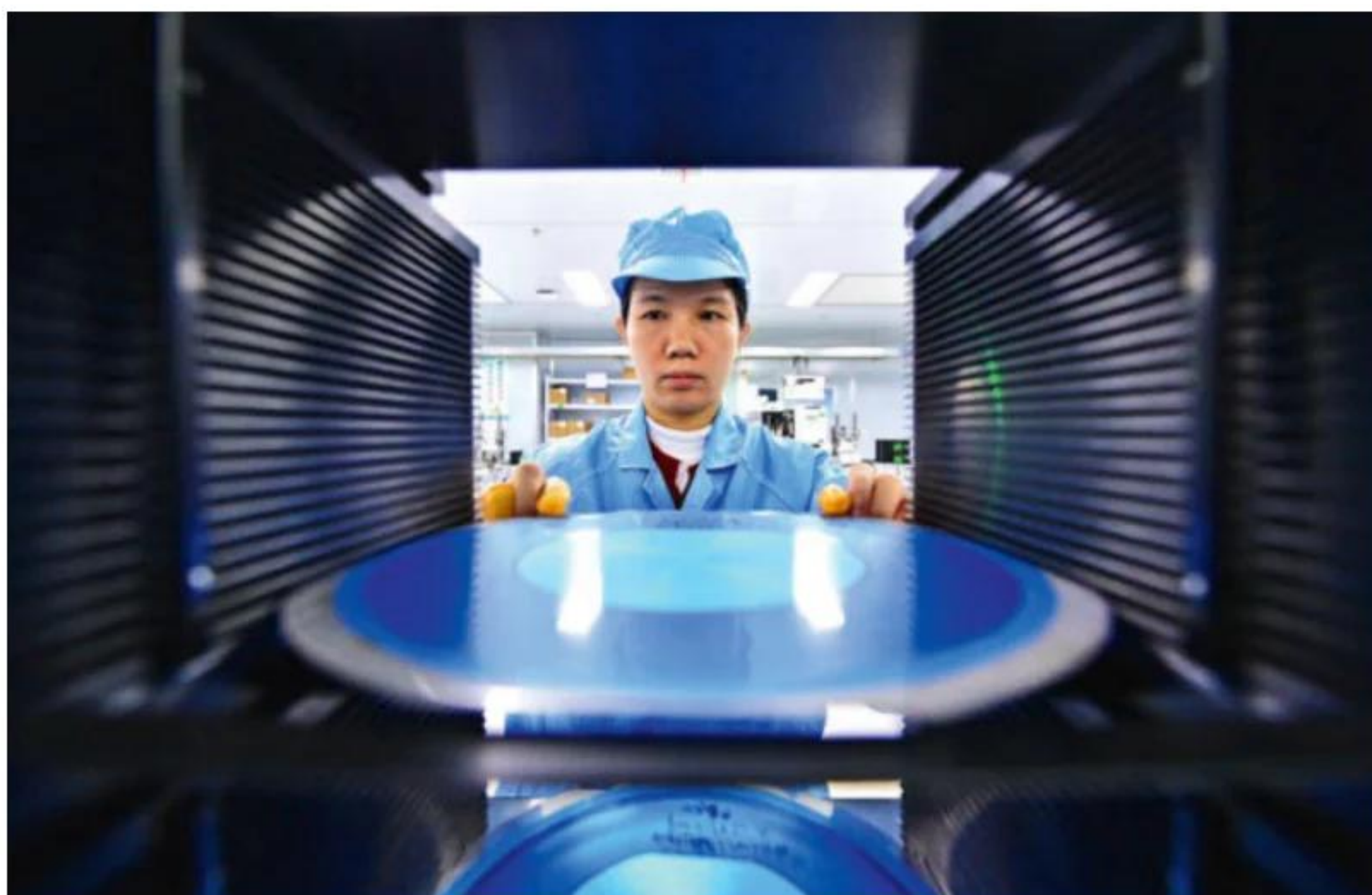
## Silicon surprise

SHANGHAI

### Chinese chip firms are catching up fast

A WAVE OF optimism has lately swept through China's chip industry. Share traders in Shanghai joke that Cambricon, a local firm, not only offers a substitute for Nvidia's processors, but for its stock, too. Although the Chinese semiconductor firm is worth but a fraction of its giant American rival, its share price has rocketed by 350% over the past year, around 15 times as much as Nvidia's.

In recent years America has tried to halt the flow of advanced chips and chipmaking tools to China in the hope of stymieing its progress in artificial intelligence (AI). Last month Nvidia was, in effect, barred from selling its H20 chip there, which it had developed in response to previous rules. The Trump administration plans to rescind a complicated export-licensing regime that was due to come into force on May 15th. But whatever replaces it—most likely a patchwork of bilateral deals and other measures—will not help China. ►►



Processing time

► Despite America's efforts to hold it back, however, Chinese AI continues to power ahead. At least for the time being, the country's AI labs do not appear to be suffering from a shortage of chips. Internet giants such as Alibaba and Tencent are building vast numbers of AI data centres, apparently unimpeded.

This seemingly ample supply is partly the result of breakthroughs earlier this year at DeepSeek, an AI startup, that significantly lowered the computing power needed for the technology, thus allowing firms to get by with fewer advanced chips. And it is partly the result of a shadowy supply chain that allows Chinese customers to continue getting their hands on Nvidia's gear despite American sanctions (see previous article).

Yet China's own chipmakers are also accomplishing feats that seemed out of reach just a few years ago. Huawei, a Chinese tech giant, has impressed analysts with the new CloudMatrix chip cluster it began delivering last month. By stitching together 384 of its Ascend AI chips using advanced networking technology, it is reportedly able to outperform Nvidia's popular NVL72 cluster, though it consumes more power, too. Could China in time shake off its dependence on foreign semiconductor technology altogether?

Huawei is not the only Chinese chip firm turning heads. A handful of other local companies that design semiconductors have emerged over the past year with chips meant to replace Nvidia's A100, the AI workhorse that America barred sales of to China in late 2022. Cambricon is said to be delivering one of these substitutes to customers already. Hygon, another local chipmaker, has just finished testing an Nvidia alternative and is expected to start delivery in the next few months.

China is also making progress in the high-bandwidth memory (HBM) units that are incorporated into AI processors like Nvidia's. At present that market is dominated by SK Hynix of South Korea; other big producers include Samsung, another South Korean firm, and Micron, an American one. In December America began restricting HBM sales to China. But CXMT, a company based in the city of Hefei, is thought to be quickly catching up in the technology.

Firms that produce chipmaking equipment are achieving breakthroughs, too. AMEC, one such company, recently unveiled an etching tool for NAND memory chips. Lam Research, an American firm, had previously held a monopoly for that kit, notes Lin Qingyuan of Bernstein, a broker. Naura, another Chinese firm, has developed a technique for layering silicon-germanium onto chip wafers—a business long dominated by Applied Materials, an American competitor. "These types of developments may come faster than most imagined," says Mr Lin.

#### Semi-independent

China's chip industry still has some way to go. Most of the companies buying locally made chips are believed to be state-owned enterprises. Huawei's latest AI processor, called the Ascend 910C, still contains many components supplied by foreign firms, according to SemiAnalysis, a consultancy. China lacks a domestic alternative to the cutting-edge lithography tools produced by ASML, a Dutch company. And it is still unable to manufacture the most advanced chips. TSMC, a Taiwanese firm miles ahead in that business, has been banned by America from making these for China. That leaves the country's chip designers reliant on SMIC, a state-owned foundry—

though SemiAnalysis has reported that Huawei continues to dodge sanctions by purchasing wafers made by TSMC via a third company. (Huawei and TSMC deny the claim.)

Another problem for China is the software used by coders to program chips. Nvidia's platform, called CUDA, is still by far the best in the world. Nearly all AI developers learn how to use it. And it works only with Nvidia's chips. Switching to an alternative is costly, because it pulls developers out of an enormous network of fellow users that can help solve problems. Huawei has created a substitute for CUDA, called CANN, which coders can use for its Ascend chips. But the software is years behind Nvidia's, and it is riddled with bugs. It has reportedly been met with apathy by local techies.

Huawei has beaten the odds before, and it may well do the same again with CANN. Before American sanctions, the Chinese government's efforts to compel local companies to use homegrown semiconductor technology were met with grumbling, owing to the higher costs and lower reliability of domestic alternatives. Now, however, a growing number of Chinese firms see the local chip industry as crucial to their own survival. That is making them all the more willing to take a chance on their countrymen. ■

#### OpenAI

## Board games

LOS ANGELES

**Sam Altman's screeching U-turn will not get Elon Musk off his back**

IT WAS A timely win for Elon Musk. The world's richest man, whose business empire has recently been dragged down by his penchant for far-right politics, has long pursued a vendetta against Sam Altman, boss of OpenAI. In recent months Mr Musk, who helped establish the artificial-intelligence (AI) lab but left in 2018, has sought to block its proposed conversion into a for-profit company, deploying various methods including an unsolicited (and unsuccessful) \$97bn bid for the assets of the non-profit entity that controls it.

Mr Musk was thus surely grinning when, on May 5th, Mr Altman announced that OpenAI had abandoned the planned conversion. The U-turn means a company valued at \$300bn in its latest funding round will stay controlled by a non-profit board with a fuzzy mission to help "benefit all of humanity". That could present big problems for Mr Altman.

OpenAI's structure will remain baffling. ►►

► The company is made up of a for-profit entity—in which outside parties can invest, entitling them to a return up to a maximum value—nestled inside a non-profit entity. As previously planned, the for-profit entity will become a public-benefit corporation that seeks to serve both its shareholders and society at large; outside investors will receive stakes in the new company. But plans to unshackle it from the control of the non-profit and its board have been dropped.

Of most concern for OpenAI is how this affects its ability to raise money. It is burning through significant amounts of cash as it invests to develop ever smarter models, and seems unlikely to turn a profit in the near future. When the company announced its previous plan to restructure in December, it cited its vast funding needs. “Investors want to back us but, at this scale of capital, need conventional equity and less structural bespokeness,” it said at the time.

OpenAI’s non-profit board, which temporarily ousted Mr Altman in November 2023, is a particular concern for some investors. It has since been expanded and packed with people sympathetic to Mr Altman’s ambitions. But it remains unclear how the board will balance his desire to rapidly develop AI models as clever as humans with concerns over the safety of the technology.

Mr Altman has argued that, despite the U-turn, OpenAI will still be able to secure the funding it needs. In particular, he has said that the \$30bn promised by Softbank, a Japanese tech conglomerate, is still on the table. Microsoft, the biggest investor in OpenAI’s for-profit entity, remains sanguine. But new investors may balk at pouring money into a company whose controlling board does not need to take their interests into account.

Meanwhile, ditching its previous plan will not spare OpenAI from prying regulators. The company said that its about-face followed talks with civic leaders and the attorneys-general of Delaware, where OpenAI is incorporated, and California, where it is based. The California Department of Justice said it was reviewing the new plan. Delaware found it encouraging. But as a non-profit entity, OpenAI will continue to fall under their regulatory aegis. It can expect ongoing scrutiny.

Nor has Mr Altman succeeded in getting Mr Musk off his back. Shortly after the announcement of OpenAI’s reversal, Marc Toberoff, Mr Musk’s lawyer, declared that it “changes nothing”, as the company’s founding mission to develop AI that benefits all of humanity “remains betrayed”. Mr Musk, who runs a rival lab, xAI, intends to proceed with a lawsuit to block OpenAI’s restructuring. He will continue to be a thorn in Mr Altman’s side. ■

## Obesity drugs

# Battle of the bulge

## Eli Lilly looks set to steal Novo Nordisk’s weight-loss crown

BEING FIRST to market with a drug can be crucial. Eli Lilly is proving that being second but better can also pay. Zepbound, the American firm’s weight-loss jab, was approved in its home country in November 2023, more than two years after Wegovy, made by Novo Nordisk, a Danish rival. Over the following year it yielded \$4.9bn in revenue, more than half Wegovy’s \$8.2bn. On May 7th Novo cut its sales forecast for 2025, citing “lower-than-planned” growth in weight-loss drugs. Its share price has fallen by a third since the start of 2024; Lilly’s has risen by about as much (see chart 1).

The momentum is now with Lilly. Visible Alpha, a data firm, expects its sales of obesity drugs to overtake Novo’s by 2027 (see chart 2). Lilly’s edge rests on a more effective drug, better execution, keener pricing and a stronger pipeline.

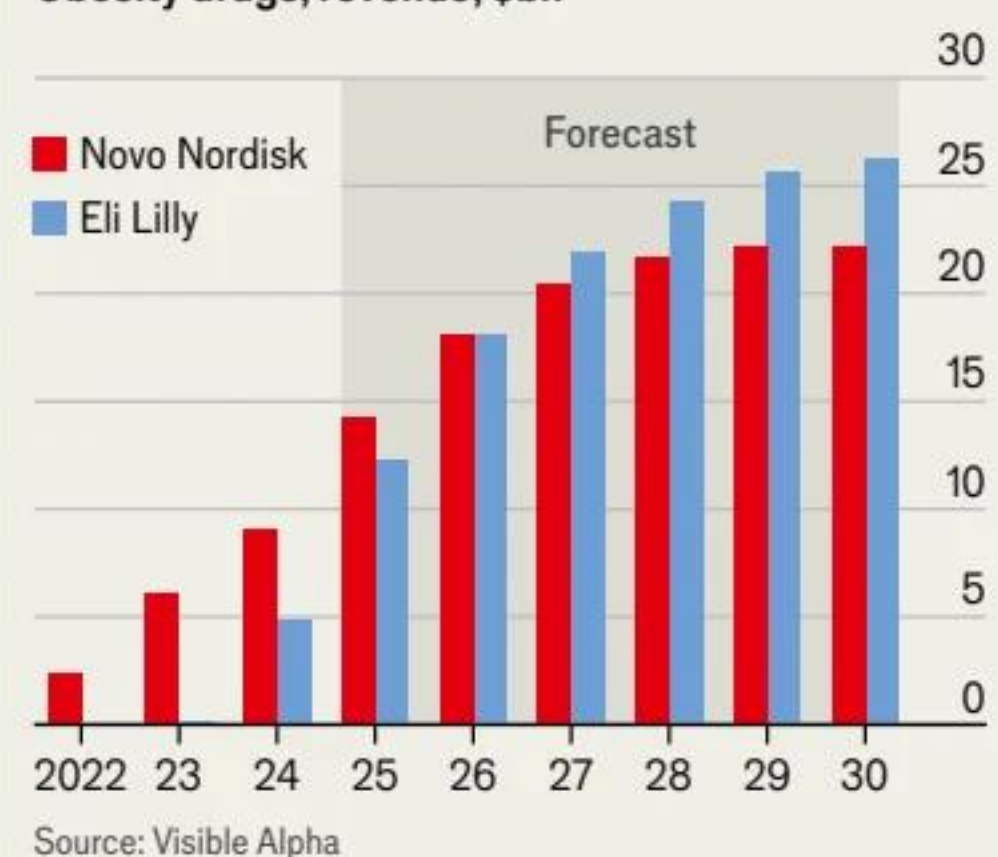
Zepbound and Wegovy belong to a class of treatments known as GLP-1 agonists. First developed for diabetes, they suppress appetite by slowing digestion. Wegovy mimics the GLP-1 hormone; Zepbound targets an additional hormone, GIP, thought to enhance weight loss.

That dual action matters. In a head-to-head trial conducted by Lilly, patients on Wegovy lost 14% of their body weight; those on Zepbound, 20%. A third of Zepbound users shed at least 25%, twice the share for Wegovy. Prescribing has shifted: in the first quarter of 2025 Zepbound made up 60% of total weight-loss prescriptions in America, and 75% of new ones.

Lilly has also been quicker to expand production in response to soaring demand. Wegovy was on America’s official shortage

## Slim pickings

Obesity drugs, revenue, \$bn



list until February; Lilly had sorted out its supply issues by last October. That left Novo more exposed to “compounding” pharmacies, which may copy branded drugs during shortages—at much lower prices. Novo expects revenue to rise now that the Wegovy shortage is resolved and sales of copycats must stop.

Lilly has been faster to find new sales channels, too. In August it began selling low-dose Zepbound vials directly to patients online for \$399 (users supply their own syringes). In April it partnered with Hims & Hers, an online pharmacy, to expand sales. Novo followed after.

Price has mattered as well. Many insurers, including Medicare, America’s public-health scheme for the old, do not cover obesity drugs unless tied to another condition. IQVIA, a health-data firm, says that more than half of obesity prescriptions in America are paid for out of pocket. Wegovy is listed at around \$1,350 a month, Zepbound at about \$1,000.

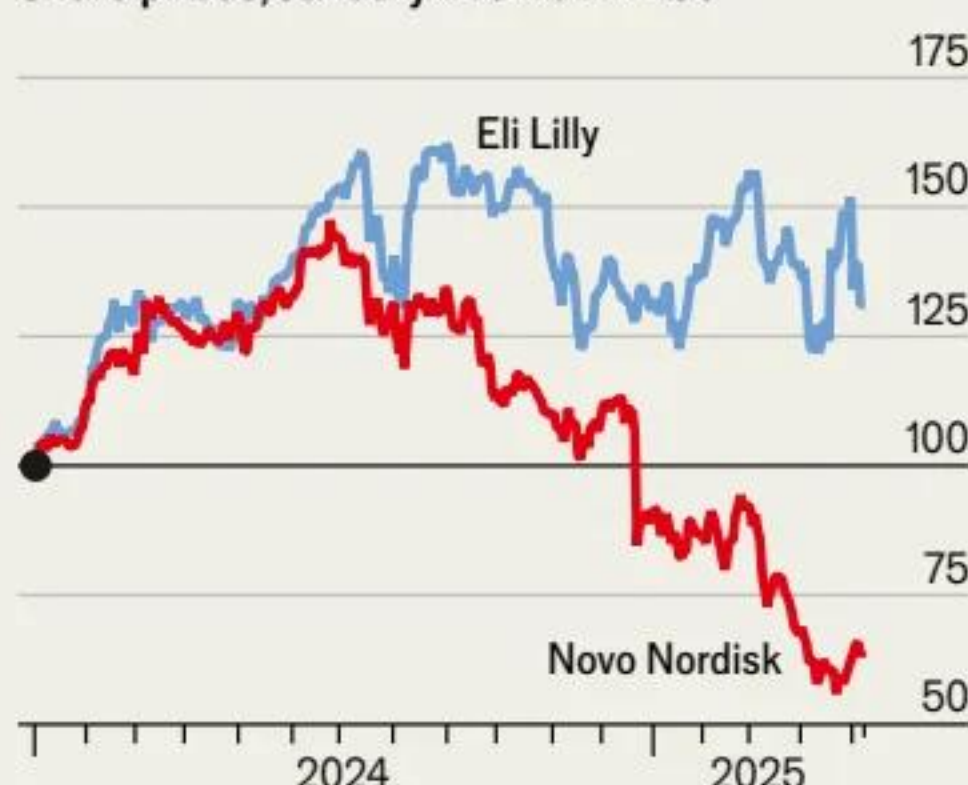
And the pipelines? CagriSema, Novo’s prospective Zepbound rival, tied with it in recent trials; few doctors will bother encouraging patients on Lilly’s drug to make the switch. The results wiped 20% off Novo’s share price in a day.

On the next front, oral drugs, Novo has a pill awaiting approval in America. But it is costly to make, with the same active ingredient as Wegovy. Patients must also take it first thing in the morning with minimal water and wait 30 minutes before eating. David Risinger of Leerink Partners, an investment bank, doubts Novo will launch it globally. Lilly’s pill, orforglipron, is cheaper to make and can be taken without fasting. Patrik Jonsson, head of Lilly’s weight-loss division, says it has “millions of tablets” available, ahead of its approval, which is expected next year. Analysts reckon orforglipron will provide \$16bn in annual sales by 2030.

Both firms face trouble ahead. Donald Trump’s tariffs, though on hold for now, could hurt. Neither makes its entire American supply locally. Last year Novo’s parent

## The biggest loser

Share prices, January 2nd 2024=100



► agreed to pay \$16.5bn for Catalent, an American manufacturer, to boost its output in the country. In February Lilly pledged to invest \$27bn in production at home. Still, Mr Jonsson points out that “reshoring takes time”. A factory takes at least three to four years to build.

Battles over price regulation in America, the largest market, are another concern. Mr Trump wants to match prices abroad, which are typically lower. Medicare, which covers 66m Americans, has also dropped a plan to reimburse obesity drugs.

Even so, both firms can look forward to fat profits. More than 100 companies are developing weight-loss drugs, but for now it is a duopoly. Analysts expect that by 2030 Lilly will have 47% of a \$90bn-plus market, to Novo’s 40%. And Denmark’s former star still has time to shape up. ■

## Palantir

# Us against the world

PALO ALTO

**An unorthodox firm is profiting from the AI and Trumpian revolutions**

ALEX KARP acts like everyone hates him. As the boss of Palantir strutted the stage at a recent gathering of clients, he got a kick out of sounding perverse, in his tousle-haired, punk-professor way. He used words like “masturbation” and “self-pleasuring”. He berated Silicon Valley, though he was speaking in Palo Alto, its heartland. At the last minute, he cancelled an interview with *The Economist*, though he used to sit on its parent company’s board; he did not like our review of a book he

co-authored. The man we named the best CEO of 2024 can be thin-skinned.

And yet the software company he heads, worth \$250bn and imbued with his us-against-the-world bolshiness, is going from strength to strength. On May 5th it reported that its revenue in the first three months of 2025 increased by 39% year on year, the seventh quarter in a row of blistering growth. Besides some weakness in Europe, the only dark cloud was a 12% slump in the share price the following day—perhaps reflecting concern that Palantir’s growth, however fast, might not justify the quintupling of its market value over the past year (see chart). Even so, as Mr Karp put it, “Palantir is on fire.”

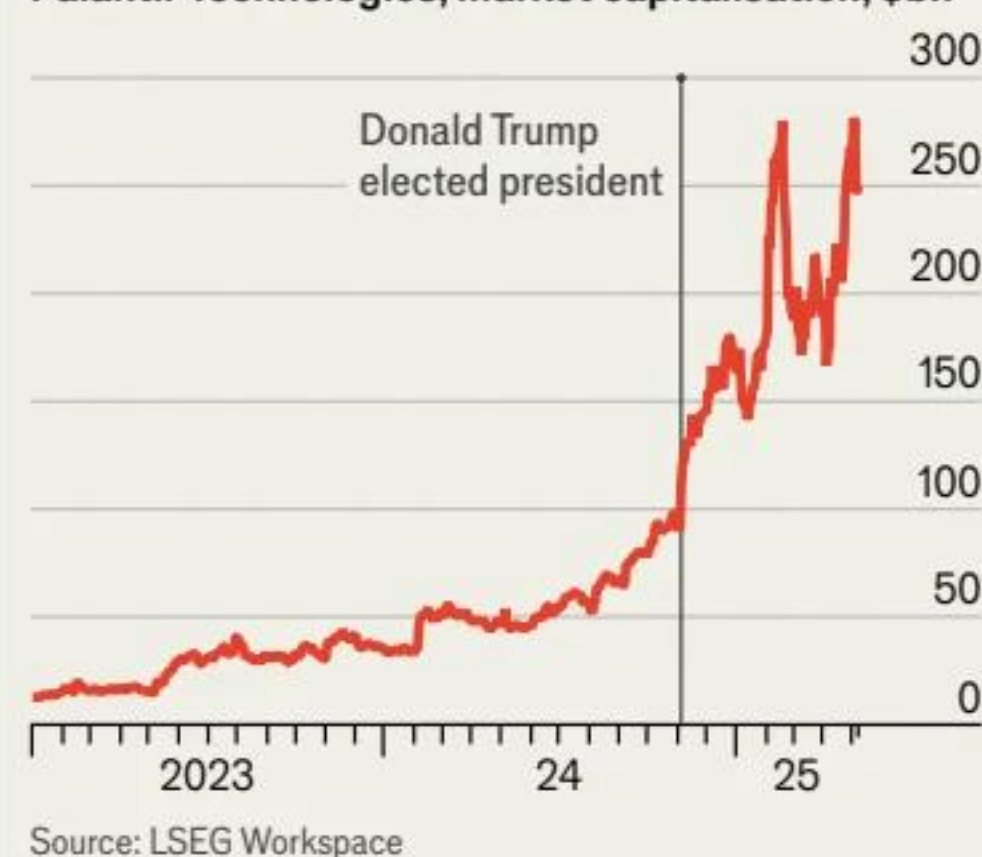
Its success is emblematic of two trends. The first is generative artificial intelligence (AI); Palantir helps firms adopt it. Second is the growing demand for intelligence and defence technology in a world of border closures and superpower rivalry, where Palantir (more controversially) excels. In both fields, its edge comes from a unique approach to profits, growth and culture.

For about 20 years after it was founded in 2003, Palantir did not make a profit. It had the strange business model of embedding lots of highly paid engineers with its customers, hand-crafting software to solve bespoke problems. Mr Karp conceived of these so-called forward deployed engineers (FDEs) as being like bossy French waiters in high-class restaurants who know what customers want better than they do. They had to be pushy and persuasive.

But as their on-the-ground knowledge was incorporated into software products, the number of FDEs per customer shrank and the business began to scale profitably. In the past two years, Palantir’s revenues have surged while its employees, who number 4,000, have barely increased. That

## Soft power

Palantir Technologies, market capitalisation, \$bn



has enabled the firm to maintain gross margins of 80%-plus. Its new AI platform, AIP, which maps and organises its customers’ data to help them run large language models, is following a similar path.

The company’s approach to growth is just as unorthodox. A former employee describes Mr Karp as Palantir’s salesman-in-chief, but the firm spurns traditional marketing efforts, such as steak dinners and golf. Instead it invites customers to “boot camps”, where they experiment with its products.

Palantir starts off with small projects for its customers and, if they are successful, expands across the organisation. Pete Seurken, who runs supply chains for Wendy’s, a fast-food chain, says Palantir’s AIP software enables his team to do in five minutes what used to take 15 people a day. The rest of Wendy’s is interested. “That’s [Palantir’s] mechanism. They come in and generate such value...the rest of the organisation takes notice,” he says.

Palantir needs relentless growth to justify a valuation that makes some on Wall Street queasy. Before its latest sell-off, Palantir’s valuation multiple of 56 times next year’s forecast revenue implied that its annual sales growth would have to rise to 50% for the next four years to be realistic, says Brent Thill of Jefferies, an investment bank. The hype is partly the result of meme-stock investors. These days, people can buy “Palantir to the moon” T-shirts at Walmart, notes Mr Thill.

That loyalty is fuelled by Palantir’s provocative culture, its most idiosyncratic trait. Employees describe it as a firm with few job titles and an embrace of “constant disagreement”. The defiance partly stems from its work on Western military and spy contracts, which used to make it a leper within Silicon Valley. Even today, with more venture capitalists adopting a pro-American approach to defence technology, Mr Karp suggests they are fair-weather friends, uncommitted to arming America.

The company vocally supports Elon Musk’s work under President Donald



To the moon

► Trump at the Department of Government Efficiency (DOGE). Shyam Sankar, its chief technology officer, told Wall Street analysts this week that overspending had started to make the American government look like “finely marbled Wagyu.” Employees hope that as the government shrinks, Palantir will pick up DOGE-related work from the Trump administration.

Mr Karp said it also expects to do lucrative work providing the software for military gear. It is leading a partnership with

Anduril, an upstart maker of drones, to help the army improve battlefield targeting. And it is reportedly part of a consortium, alongside Anduril and SpaceX, Mr Musk’s rocketry firm, that is bidding for a contract to help build Mr Trump’s “Golden Dome” missile-defence shield.

Palantir’s government work is contentious. Paul Graham, a venture capitalist, recently described the company as building “the infrastructure of the police state” after it emerged that the firm had won a

\$30m contract to support the federal government’s immigration crackdown.

Palantir was unapologetic; it sought to use Mr Graham’s post as a recruiting tool. Mr Seuken of Wendy’s says such contrarianism makes Palantir tick. Mr Karp’s “us-against-the-world mentality...feeds the culture of the organisation.” He adds: “Silently, from behind, we may be cheering him on, because quite frankly we enjoy the fact that someone is standing up and saying ‘this is what we believe.’” ■

## BARTLEBY

### *Why so many IT projects go so horribly wrong*

*And how to do them better*

LET’S PLAY a word-association game. Champions (Liverpool). Cyclists (smug). IT project (failure). Ask people what they know about tech projects, and they will probably say that they take longer than expected, cost more than budgeted and deliver less than they are meant to. Is that perception accurate? And if so, what can be done about it? A forthcoming paper, by Bent Flyvbjerg of Oxford University and his co-authors, sheds light on these questions.

Mr Flyvbjerg has made a career out of studying the ways in which megaprojects go wrong. These disappoint with amazing regularity (Tottenham Hotspur). Less than 10% of them meet their initial estimates for both cost and time.

Many of the projects he studies are grand infrastructure schemes: dams, railways, nuclear-storage facilities and the like. If you don’t work in one of the relevant industries, your experience of such projects is likely to be limited to complaining about traffic jams and wasted money (Chelsea). But tech projects are ubiquitous. They affect every industry: Gartner, a research firm, estimates that \$5.6trn will be spent on IT in 2025. And they can affect every part of an organisation.

In their new paper Mr Flyvbjerg and his colleagues claim to have confirmed for the first time that IT does have a particular problem. They compare actual and budgeted costs for IT projects with 22 other categories, and find good news and bad. The good news is that lots of IT projects stick to their budgets (Brighton & Hove Albion): only 40% of them overrun on costs, compared with 100% of Olympic games, 97% of nuclear-power plants and 75% of hydroelectric dams.

The bad news is that when bills do start to mount up, they can go complete-

ly bananas. Just under a fifth of IT projects have a cost overrun of more than 50% of their budget, which again isn’t too bad. But among these budget-busting projects, the mean cost overrun is above 450%, the worst of all the project types that the researchers looked at. The only thing that comes close is nuclear-waste storage. In the jargon of risk, something about IT projects means they have very fat tails.

Theories abound as to what that something is. One explanation is that IT is a relatively young discipline. If people have been building roads for millennia and still regularly screw up new projects, it should not be a surprise when software does worse. Another relates to standards. You wouldn’t be let loose on a new bridge unless you had formal training as an engineer; the barriers for IT are not as high.

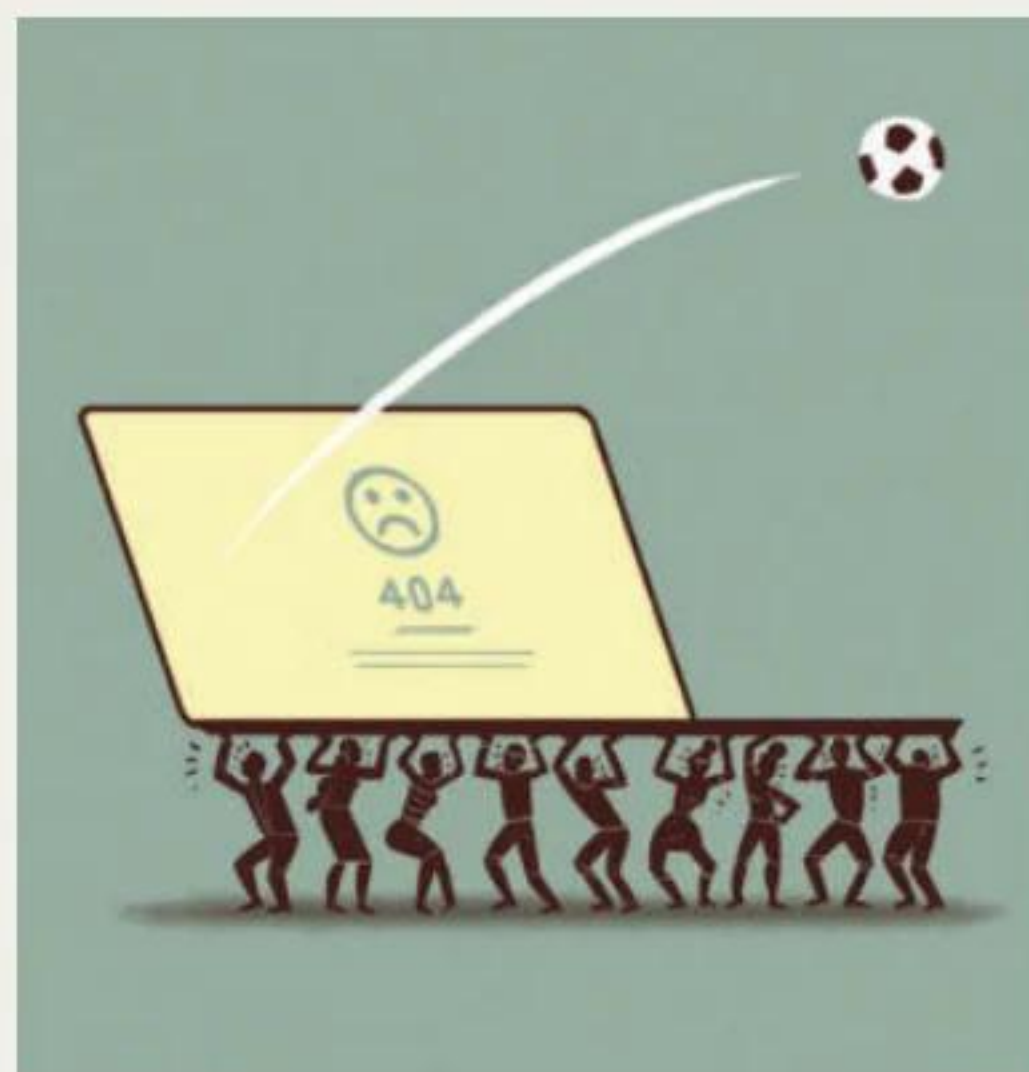
Intangibility provides a third explanation for why things might spiral out of control. You can set milestones for a high-speed rail line and physically inspect a building site; it’s much harder to visit, or even visualise, a software development. Abstraction exacerbates the risk that

managers will start adding in new requests rather than sticking to limited goals (Southampton).

That touches on another point: IT projects reach deep inside organisations, which means tech neophytes often call the shots. It also means these projects bring lots of change. A new road does not require motorists to drive differently, but digitisation usually requires employees to alter how they work, increasing the likelihood of office politics and internal resistance.

Mitigating these risks isn’t easy, but Mr Flyvbjerg and his co-authors have some useful ideas. The first, familiar bit of advice is to avoid making software projects too bespoke; the paper lauds Apple’s app store for imposing clear constraints on app designers and developers. Their second (Arsenal) suggestion is to take more time in the planning phase of a project. Big IT initiatives have a mean duration of 3.2 years in the sample used by the researchers, compared with 6.9 years for the other project categories. The researchers speculate that the preparatory work for many IT projects gets rushed, leading to trouble later on.

That worry is especially resonant given excitement among businesses over artificial intelligence. Efforts to deploy AI are likely to face all the same problems that beset conventional IT projects, with bells on. AI is novel. It could change the jobs of everyone in the organisation. And belief in its potential is sky-high: bosses who do not understand the technology are demanding that it be rolled out quickly. AI may well be game-changing (Manchester City). But being thoughtful about its deployment will reduce the chances of miserable failure (Manchester United).





**ECONOMIST  
IMPACT**

# Tomorrow's cities **can't wait** for change

**Urban Futures, an initiative from Economist Impact, explores routes to sustainable metropolitan growth**

By 2050, two-thirds of people will live in urban spaces. Our research, analysis and events explore what's needed to transform cities, so they can be resilient and prosperous for all.



**Scan to find out more**  
**[impact.economist.com/urban-futures](https://impact.economist.com/urban-futures)**

Urban Futures is supported by the following organisations



Economist Impact, a commercial arm of The Economist Group, works with organisations globally to further their mission and catalyse progress. Economist Impact operates independently of *The Economist*.

# SCHUMPETER

## *Cold comfort*

*To American bosses, the tariff shock looks a lot like covid-19. It is worse*



PEER INTO a Bloomberg screen and the parallels between the past month and the spring of 2020 draw themselves. Then as now the VIX index, which tracks share-price volatility, spiked above 40, a level reached only a handful of times in American stockmarket history. Uncannily, both in 2020 and 2025 the S&P 500 index of America's biggest companies peaked on the same day, February 19th, before declining and then collapsing by more than 10% in a matter of days. The oil price plunged. Sentiment among American consumers was and is down the tubes.

Five years ago the cause of the commotion was covid-19, which infected vast numbers of people and put the world economy in intensive care. Today it is another force of nature, Donald Trump. Unlike the virus, the president's trade policy is non-lethal to humans. But it might be to American firms, especially those which rely on China. The world's two biggest economies have quarantined each other with tariffs in excess of 100% on most goods.

Worse, companies contend with pandemic-like uncertainty as tariffs are raised and lowered, imposed and removed—all in ways no less stochastic than the evolution of covid variants. On May 4th Mr Trump suggested that he would charge levies on films made abroad. The next day the share prices of Disney and Netflix slid, before rebounding when the White House altered its script. The tariff shock is "covid plus plus", sums up a Wall Street banker.

No wonder bosses are tempted to view it as akin to the pandemic. If only. In fact, the consequences for American big business of Mr Trump's trade-war-mongering are likely to be far more profound—and enduring.

In 2020 and now the tumult hit just as CEOs were preparing to report first-quarter results. Those were and are mostly healthy, in stark contrast to updated forecasts for revenues and profits. As in the pandemic's early weeks, analysts are revising down their projections for the sales, capital expenditures and profits of many S&P 500 companies. Since January the consensus for the index's combined earnings per share in the second, third and fourth quarter of this year have declined by 5%, 4% and 2%, respectively.

More worrying still, many bosses are once again pulling guidance altogether. On April 29th UPS, a parcel-delivery giant,

withdrew its full-year forecasts, just as it had five years earlier almost to the day. So have carmakers (Ford, General Motors) and airlines (American, Delta, Southwest). On May 5th Mattel paused its annual forecast for toy sales, days after Mr Trump mused that no American girl needs more than two Barbies, really.

Only 17% of big businesses have opted to give investors a sense of what profits to expect in the second quarter, compared with 20% or so typically. That is the lowest share since, you guessed it, 2020. It does not include cop-outs like AbbVie, a drugmaker, and 3M, a glues-to-gaskets conglomerate, which noted that their guidance does not reflect the impact from tariffs. One in four S&P 500 companies have mentioned "recession" in their latest earnings calls, reckons Goldman Sachs (the bank being among them). This is not a world away from the one in three that first pandemic spring. The previous quarter's figure was one in 50.

Bankers and advisers report that businesses worried about supply-chain disruption are beginning to stockpile products, increase working capital and defer payments to suppliers. Executives echo pandemic-era watchwords like "resilience". Some companies are talking up investments in domestic supply chains. On April 30th Pratt Industries, a privately held packaging giant, answered Mr Trump's call to reindustrialise America by pledging to spend \$5bn in the country. A day later Kimberly-Clark announced it would spend \$2bn over five years to avert any future shortages of Kleenex tissues and Huggies nappies.

For all this hand-wringing, deep down many American bosses cling to the hope that the tariff turmoil will also end just as the covid chaos did—which is to say, with a swift return to business as usual, barring a few more empty desks. The second quarter of 2020 was painful, to be sure. More than 300 companies in the S&P 500 reported a year-on-year fall in sales; over 100 suffered a net loss. Some 260 collectively booked nearly \$90bn in one-off charges such as asset write-downs.

By the autumn of 2020 CEOs still preached the virtues of resilience. But they were privately conceding that those much-maligned "just-in-time" supply chains held up fine, all things considered. Just as well, for reconfiguring them would cost billions. Demand for many things ballooned as Uncle Sam posted covid cheques to citizens. In the second quarter of 2021 some three-quarters of firms in the S&P 500 saw their profits rise year on year. The typical bottom line swelled by 44%. By late summer 2020 the index had recouped all its losses. It then went on an epic tear.

### No-plan-demic

Investors have concluded that America Inc is reliving the covid shock on fast-forward. Within a month of Mr Trump's surprise announcement of "reciprocal" tariffs on most countries, the index was back where it had been beforehand. A 90-day pause on those levies and news of upcoming trade talks between America and China have calmed equity markets.

Yet business is not back to usual. Even if the tariffs stay paused and prohibitive ones on China come down, trade barriers and uncertainty will remain. Those risk being to America Inc what Brexit was to UK plc—a persistent drag on growth. In a new working paper Nicholas Bloom of Stanford University and colleagues find that by 2024 Britain's exit from the EU had cut productivity by 3%, business investment by 12-20% and GDP by 6-9%. American CEOs should put away their pandemic diaries and chat to their British counterparts instead. They won't like what they hear. ■

## Briefing Reinventing Saudi Arabia



### Not your father's kingdom

BURAIDAH

**Saudi society has changed drastically. Can the economy change, too?**

**T**WENTY YEARS ago Buraidah was a showcase of Saudi Arabia's problems. Religious police roamed the city's streets, making sure that shops stayed closed for the five daily prayers, that women only left their homes accompanied by a male relative and that the sexes did not mingle anywhere. There were no cinemas or concerts; most restaurants catered only to men. Two decades of relatively low oil prices had called into question the assumption that Saudis could simply swan into well-paid government jobs. Dissatisfaction at the disintegrating social contract helped propel another Saudi export: Islamic fundamentalism. In 2005 a local militant cell battled the security forces for nearly 48 hours.

Today Buraidah is scarcely recognisable. On a warm Friday evening the high street bustles, with women wandering as freely as men. Couples stroll along together or sit side-by-side in restaurants. A cinema screens Arabic and Hollywood blockbusters. A women's driving school on the

edge of town does a brisk trade. The religious police are nowhere to be seen and terrorism is a dim memory.

But Buraidah is still emblematic of one enduring blight: a lack of economic diversification. It has a few new jobs in services, including the cinema and the driving school, and still lots in the bureaucracy. Buraidah's only other notable industry is date-farming, which is sustained chiefly by migrant labour.

#### A royal warrant

Muhammad bin Salman, the crown prince and de facto ruler, often known as MBS, has been trying for a decade to ease Saudi Arabia's stultifying social strictures and to reduce the economy's dependence on oil and the state. The first half of this formula has proceeded with astonishing speed. But the second is making little headway. And the pressures that made Saudi Arabia's old system of generous state handouts, enforced piety and commodity dependence seem

unstable and unsustainable—volatile oil prices, lurching fiscal deficits and inadequate job creation for a youthful population—have not gone away. MBS's social reforms have won him lots of goodwill, but only the economic elements of his "Vision 2030" can bring lasting stability.

The crown prince's plans stretch from the grandiose to the granular. Most attention-grabbing are the "giga-projects", into which officials planned to plough nearly \$900bn by 2030: a vast, futuristic "linear city"; a ski village overlooking baking desert; 50 luxury hotels strung along the Red Sea; the world's biggest building in Riyadh. Less spectacular but perhaps more important are the government's efforts to foster new industries, from tourism to carmaking. Civil servants, once dozy in their sinecures, are hastily rewriting rules on everything from divorce to foreign investment. All told, more than 600 packages of reforms have been initiated.

MBS's social revolution has not only ex- ►►

► panded personal freedoms, it has also boosted economic activity. Since 2018 women have had far more freedom to move around, to work and to start businesses. Discriminating against them in hiring or pay is now illegal. Women's participation in the workforce has shot up from 20% to 36%. It has risen fastest among those with only high-school diplomas, many of whom have joined the private sector, notes Jennifer Peck of Swarthmore College. The number of dual-income families has grown, pushing up household incomes.

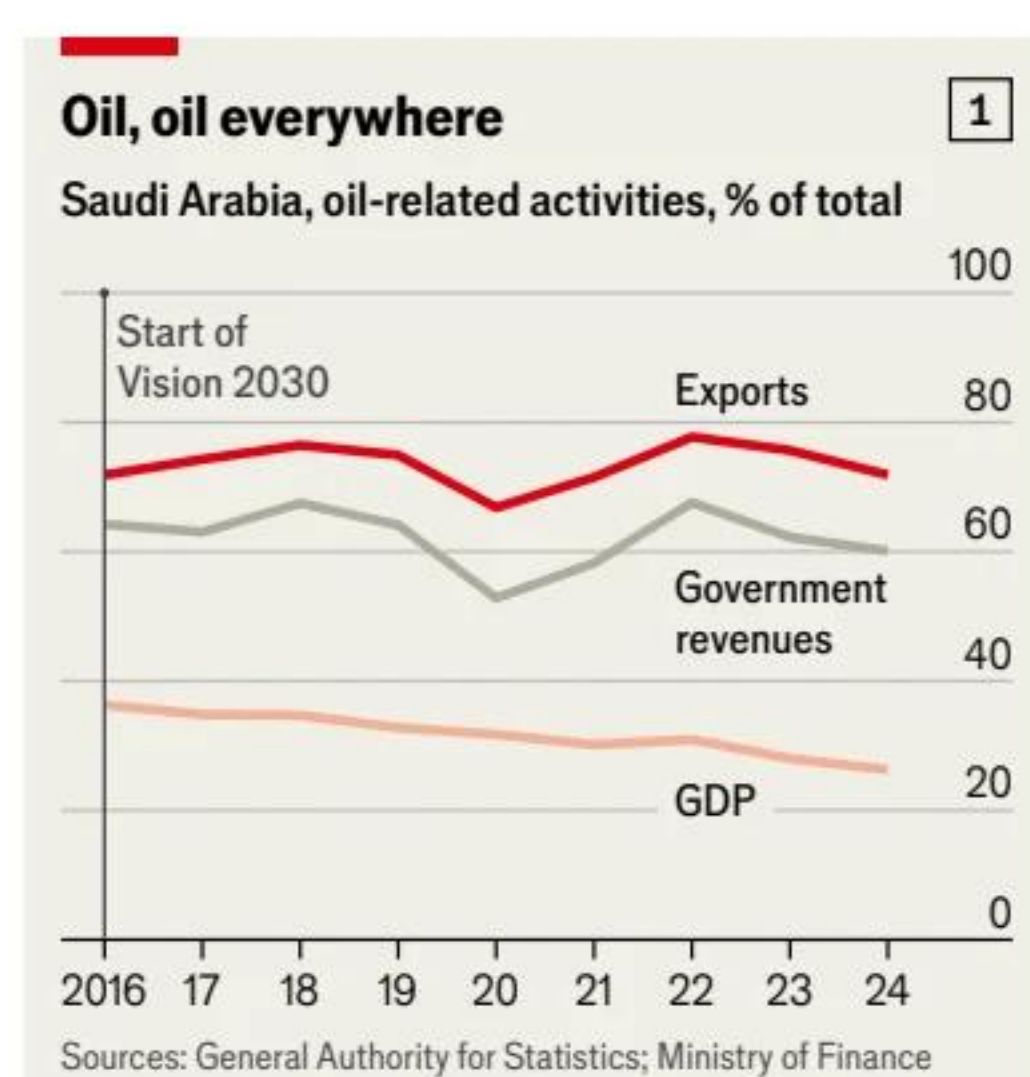
Whether through luck or foresight, these changes came just as society was ready for them. When MBS sidelined the religious police there was some fear of a conservative backlash. In practice, as research by Leonardo Bursztyn of the University of Chicago and colleagues has shown, married men tended in private to support the idea of allowing women to work, but wrongly assumed that society as a whole was too conservative to accept it.

Latifah Altamimi, an entrepreneur who went to university in America, explains that Vision 2030 encouraged her to return to the kingdom. She was surprised to discover that her elderly, conservative father had reconciled himself to the social changes. "I experienced culture-shock twice: once when I got to America and again when I returned," she says.

The state has also played an active role in promoting the sports and entertainment industries. A catsuit-clad Jennifer Lopez performed before the Formula 1 Grand Prix in Jeddah earlier this year. More mundanely, at Boulevard City, an open-air mall in Riyadh, the capital, a DJ presides over a crowd of young dancers—a scene that was unimaginable 20 years ago. The parts of the non-oil economy that have grown fastest in recent years include retail and hospitality. According to the central bank, the share of household spending devoted to eating out, recreation and culture rose from 12% in 2017 to nearly 20% in 2024.

Officials are also proud of the growth in tourism, which has risen from around 60m overnight stays in 2016 to more than 100m in 2023. The bulk of these are stay-cating Saudis. In 2017 Ms Altamimi founded Gathern, Saudi Arabia's version of Airbnb. The company, now one of the kingdom's biggest startups, helps large families find holiday accommodation. Foreigners, meanwhile, account for only a tiny fraction of the increase, despite heavy investment in flashy resorts and attractions.

Overall, however, the economic transformation has been slow to arrive, to officials' chagrin. Oil still accounts for the lion's share of exports and government revenue. Its share of economic activity remains high, too, although it has fallen from 36% of GDP in 2016 to 26% last year (see chart 1). A liberalisation of mortgage-lend-



ing means that construction is booming, alongside retailing and hospitality. But the growth of other industries championed by the authorities has been lacklustre.

Why the slow progress? One answer is that, whereas social change can happen overnight, economic restructuring takes longer. Some industries do show promise. The kingdom has a competitive advantage in mining, thanks both to geology and to the many similarities between extracting hydrocarbons and digging up minerals. Ma'aden, a company owned by the PIF, Saudi Arabia's sovereign-wealth fund, hopes to start exploiting bauxite reserves soon; it is already extracting gold. Vedanta, an Indian firm, plans to invest \$2bn in copper-processing facilities.

Renewable energy may, in time, become another industry that takes root, given the scope for solar installation and hydrogen production. The PIF has entered into joint ventures with Chinese firms such as LONGi to develop solar projects. Hotels along the Red Sea could eventually attract more foreign tourists: rumours swirl endlessly that the kingdom may try to boost international arrivals by lifting its ban on alcohol in such places. Some basic industries have been spurred by new local-content requirements in public procurement. Bullets for the army are now being home-

made, for example, as they have long been in most industrialised countries.

But there are other industries in which Saudi Arabia simply lacks the know-how to make progress. Carmaking is one. The PIF has a goal to produce 500,000 electric vehicles a year by 2030. By the end of 2023 the kingdom's sole car factory had reassembled just 800 vehicles in total using kits imported from America, according to Reuters. A push into semiconductors faces similar challenges, says Farouk Soussa of Goldman Sachs, a bank. In some areas the kingdom is competing with other oil-rich places, such as the United Arab Emirates, which have a head start.

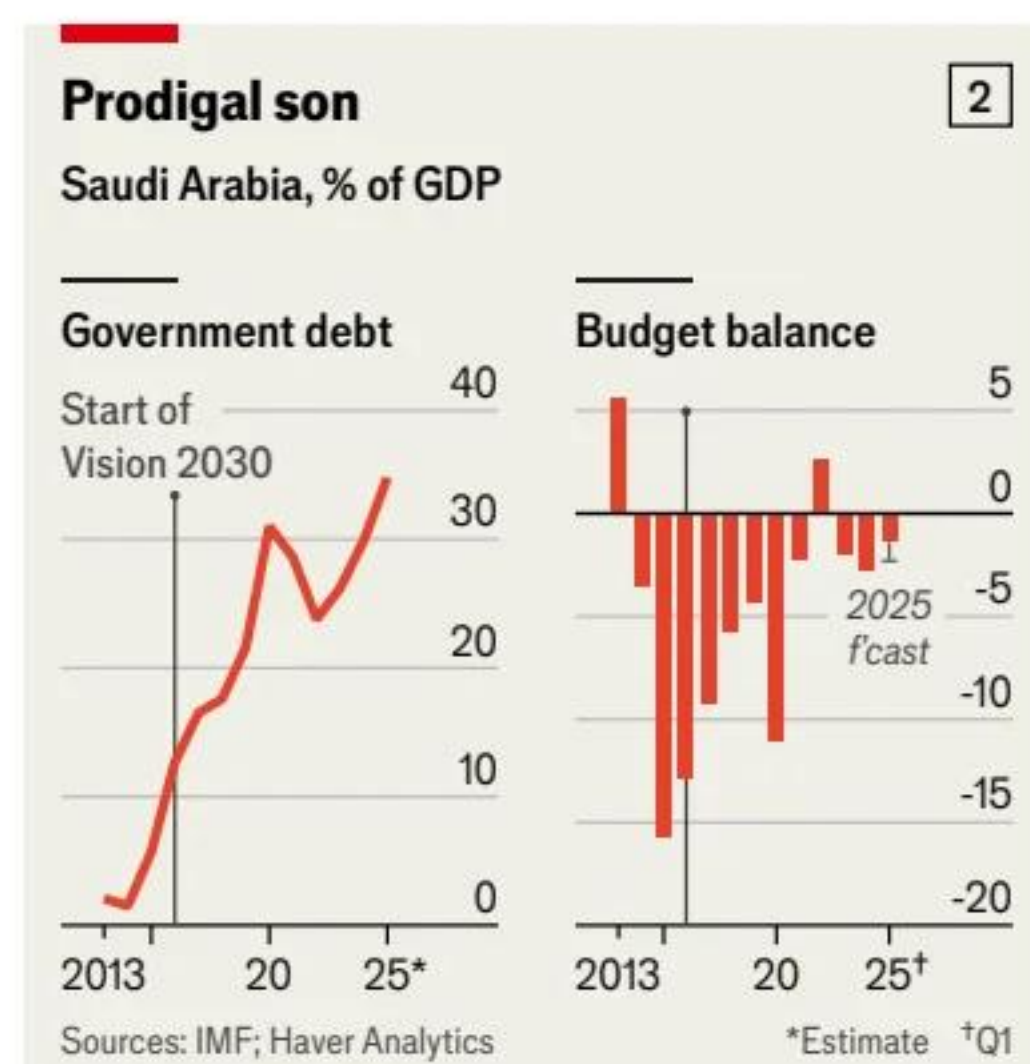
Progress in advanced manufacturing requires skilled labour and corporate expertise. Yet despite a charm offensive, foreign investors are not flooding in. Inflows of foreign direct investment actually fell in 2024 compared with the year before. As a share of GDP, they will need more than to double to reach the target for 2030.

### A princely ransom

Foreign investors are wary for a number of reasons. The memory lingers of MBS holding held many rich Saudis hostage in a luxury hotel in Riyadh in 2017-18 until they handed over huge sums to the government. So too does a worry about the reputational risk of doing business with a government that had a prominent critic killed and dismembered in 2018. Political connections remain vital to doing business in Saudi Arabia, say analysts at Capital Economics, a consultancy. More prosaically, payment disputes and delays are not uncommon with government contracts.

Donald Trump's trade war will hamper the foreign-investment push, too. Assuming that the overall effect of America's new tariffs is to chill the world economy, global trade and capital flows will fall. Mr Trump is due to visit the kingdom on May 13th. During his stay he and MBS are expected to announce hundreds of billions of dollars in American investments in Saudi Arabia and Saudi investments in America. But both sides are keener for the money to be spent in their own country: Mr Trump has talked about attracting \$1trn from Saudi friends.

The realignment of trade brought by Mr Trump's tariffs could lead to some benefit to Saudi Arabia. He has imposed only the minimum, 10% levy on Saudi goods, far below the levels threatened for most countries and already visited on China. The kingdom's petrochemicals industry might find itself replacing American firms as supplier of certain products to China, for instance. Yet Saudi Arabia will not have a cost advantage in many goods, even after accounting for tariffs. And it will not be considered as stable a place to set up new manufacturing facilities as its neighbour the United Arab Emirates.



▶ Another constraint is human capital. Half of Saudi men work as bureaucrats. Women's participation rates remain low despite the recent growth. Schoolchildren across the Middle East score well below the OECD average in maths, reading and science. Saudi pupils, in turn, perform worse than their Emirati or Qatari counterparts, despite hefty investment in education. The heavy past emphasis on religious instruction may be partly responsible. And the security of cushy public-sector jobs may have blunted incentives to study hard.

To its credit, the government acknowledges that change is needed. Education has been modernised, with the number of hours of religious education in middle school cut by 60%. A new law on investment, which seeks to define contractual rights, has recently come into force, although it has not yet been put to the test.

In other ways, however, the government is becoming a bigger hindrance to private enterprise. Businesspeople talk approvingly of the capable and committed cadre of senior technocrats and ministers. But the sheer scope of what they are trying to do can turn them into bottlenecks. Micro-management means that even simple decisions can take a long time. The crown prince himself is rumoured to be overseeing the design of models at a state-backed car firm. Further down the chain of command, meanwhile, bureaucrats are too risk-averse to move things forward. The result is stultifying sluggishness.

Moreover, Saudi Arabia has become a textbook example of crowding out. MBS's giga-projects are sucking up capital, attention and construction materials. These were originally expected to gobble up \$879bn by 2030, assuming they came in on budget (which is unlikely). That is impeding other projects that will probably make

more difference to the economy in the long run. The opening of mines is being delayed not by the difficulty of obtaining the necessary permits—the usual constraint in the rest of the world—but by a shortage of the right digging equipment. As the economy has overheated, prices and rents have risen across the board.

Borrowing costs have gone up, too. As oil revenues sag, the government has turned to banks and bond markets for funding, pushing up interest rates for everyone, says Mr Soussa of Goldman. A fifth of local banks' loans are now made to the public sector, up from less than a tenth in 2015. With loan-to-deposit ratios rising, banks are having to borrow commercially themselves in order to meet regulatory requirements, pushing up the rates at which they can lend.

In its eagerness to find worthy domestic initiatives to bankroll, the PIF is elbowing private investors out of the way. Its annual spending is due to rise next year, from \$40bn to \$70bn (nearly 7% of GDP). So determined has it been to push money out the door that it is funding projects that do not need public support. That, in turn, is driving up valuations and so diminishing the government's returns. Financiers say they have raised the matter with officials, to no avail.

What may force a reckoning is the rapidly deteriorating fiscal picture. As the government has splurged, the oil price needed to balance the budget has risen from \$82 a barrel in 2021 to \$96 last year. On average last year the actual price was about \$80 a barrel. The consequence has been steady growth in public debt. In 2016 this stood at 13% of GDP. Last year it was 30% and it is projected to swell yet further this year (see chart 2 on previous page). Last year Saudi Arabia overtook China as the biggest

emerging-market issuer of dollar-denominated bonds.

The fiscal outlook is set to become bleaker still, since the oil price has been moving in the wrong direction. The trade war has raised the prospect of a global recession in recent months, sending it lower. It has also fallen in recent years because some members of the OPEC cartel have produced more than their quotas, even as Saudi Arabia has sought to raise the price by trimming production. On May 3rd Saudi Arabia told OPEC it would no longer underwrite such cheating, and would instead open the taps to regain its market share. The price of Brent crude duly slumped to around \$60 a barrel.

### A royal pain

Even before the latest drop in oil prices, the budget deficit in the first quarter of 2025 was already more than half of the predicted annual shortfall. Declining export revenues and surging construction-related imports drove the current account into deficit last year—an unusual occurrence for a big commodity exporter.

Naturally, spending cuts loom. Officials talk euphemistically of a "reprioritisation". Some of the flashiest giga-projects are quietly being scaled back; some speculate that a few may even be put on ice. Increasingly the idea is to focus instead on the things that are more likely to provide a return on investment, such as tourism projects. The official line is that no one ever really meant the linear city at NEOM to stretch across the desert for 170km. It was always going to be a much smaller "proof of concept". The PIF, too, is reported to be considering spending cuts.

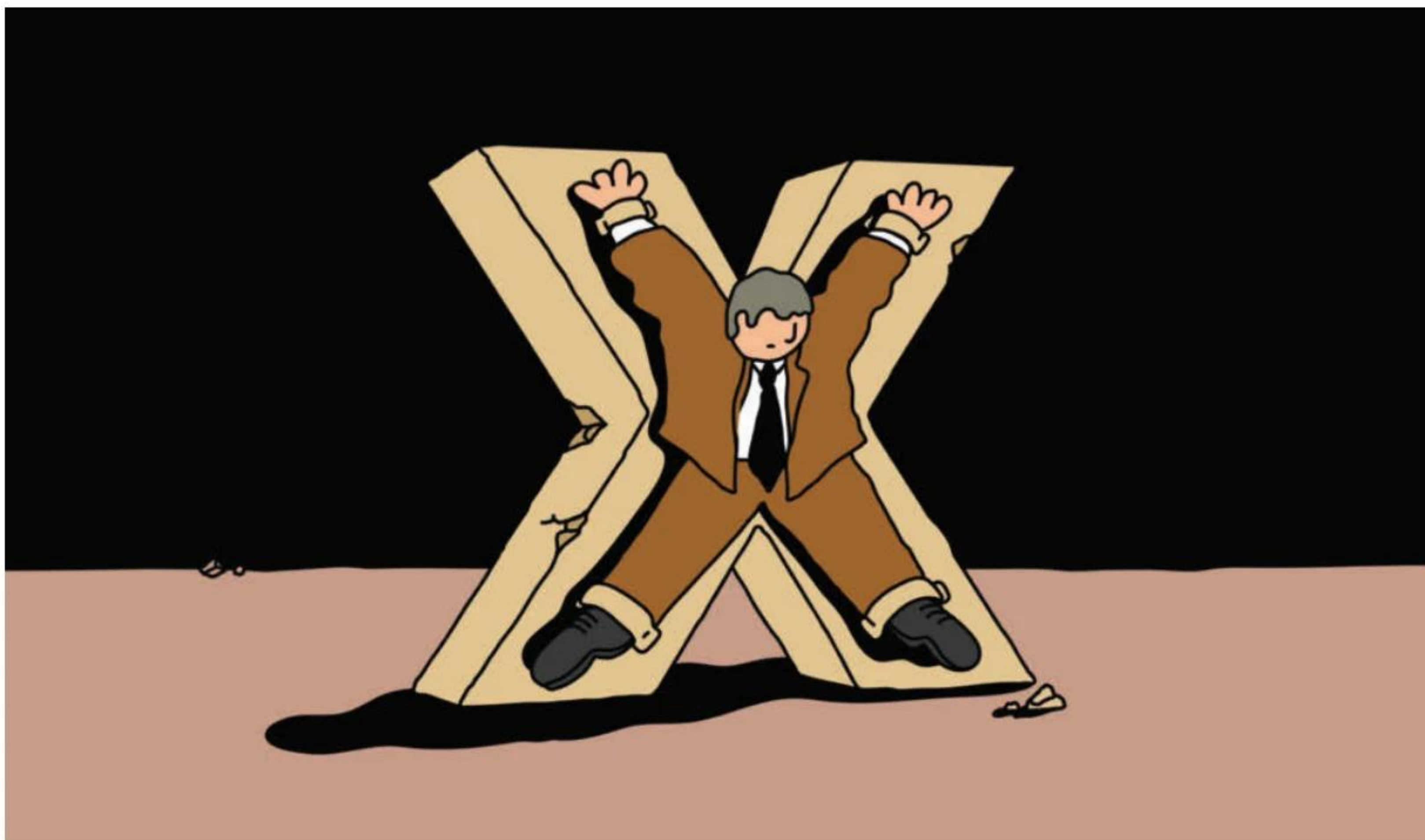
If the oil price forces Saudi Arabia's rulers to scale back their vanity projects, that may have the added benefit of easing the crowding out. But Saudi economists and businesspeople would like to see a bolder shift: a government withdrawal from certain industries; the faster privatisation of the successful firms in the PIF's portfolio; more radical changes to education and, perhaps most important of all, a more considered, discriminating and hard-nosed approach to economic reinvention. At the very least, the division of labour between the private and public sectors needs to be made clearer.

Saudi Arabia's wholesale social transformation has bought the government time and goodwill to reshape the economy. Its youthful population is still revelling in newfound freedoms. But as the novelty wears off, its expectations will grow. Through the will of one man, the kingdom has come further than many would have predicted. A vast state-funded machine is working hammer and tongs to re-engineer the country's future. The question is whether it can restrain itself. ■



Still front and centre

## Finance & economics



### Demography

## Reality bites

SAN FRANCISCO

### Don't cry for millennials or Gen Z. Save your pity for Generation X

**“WE SUFFER,”** SAID Seneca, “more often in imagination than in reality.” The Stoic philosopher could have been talking about the generations. Members of Gen Z, born between 1997 and 2012, say that social media ruined their childhood. Millennials, between 1981 and 1996, complain that they cannot buy a house. Baby-boomers, between 1946 and 1964, grouse that they face an uncertain retirement.

Many forget about Generation X, which is made up of those born between 1965 and 1980. Proxied by Google searches the world is less than half as interested in Gen X as it is in millennials, Gen Zers or baby-boomers. There are few podcasts or memes about Gen X. Aside from Douglas Coupland's “Generation X: Tales for an Accelerated Culture”, a novel published in 1991 which popularised the moniker, there are few books discussing the cohort. In Britain Gen Xers are less likely than members of any other age group to know the generation to which they belong.

Gen Xers may have no place in the popular imagination but, contrary to Seneca, they really do suffer. This is true both because Gen Xers are at a tricky age, and also because the cohort itself is cursed.

A recent 30-country poll by Ipsos finds that 31% of Gen Xers say they are “not very happy” or “not happy at all”, the most of any generation. David Blanchflower of Dartmouth College finds all sorts of nasty

things, from unhappiness to anxiety to despair, top out around the age of 50. This is consistent with the “U-bend of life” theory, which suggests that people are happy when young and old, but miserable in middle age. Baby-boomers went through it; before long millennials will, too.

The U-bend exists in part because chronic health issues start to emerge in middle age. People also come to realise they will not achieve everything they had hoped in their careers. On top of this, Gen Xers often have to look after both their children and their parents. In America they devote 5% of their spending to caring for people under 18 or over 65, against just 2% for boomers. In Italy the share of 18-to-34-year-olds living with their parents has increased from 61% to 68% over the past two decades. In Spain the rise is even more dramatic. To which generation do many of these parents belong? Gen X.

Nowhere is life more U-shaped than in San Francisco. The city's idealistic youngsters believe that they will start the next big artificial-intelligence company, and are willing to put up with high costs and crime. Successful boomers live in enormous houses in Pacific Heights and sit on company boards. Gen Xers, in the middle, have neither the idealism nor the sinecures. Only 37% are happy with life in San Francisco, compared with 63% of Gen Zers, according to a poll in 2022 by the *San Francis-* ▶▶

#### → ALSO IN THIS SECTION

59 Saudi Arabia punishes OPEC

60 Taiwan's financial ructions

61 A boom in currency trading

61 How to stop stocks crashing

62 Warren Buffett's departure

63 Free exchange: The hegemon spiral

— Buttonwood is away

► *co Standard*, a local paper. Many have little option but to live in Oakland—the horror!—if they want a big house.

Although Gen Xers will in time escape the U-bend, they will remain losers in other ways. Consider their incomes. Gen Xers do earn more after inflation than earlier generations—the continuation of a long historical trend, and one from which both millennials and Gen Zers also benefit. But their progress has been slow. A recent paper by Kevin Corinth of the American Enterprise Institute, a think-tank, and Jeff Larrimore of the Federal Reserve assesses American household incomes by generation, after accounting for taxes, government transfers and inflation. From the ages of 36 to 40 Gen Xers' real household incomes were only 16% higher than the previous generation at the same age, the smallest improvement of any cohort (see chart 1).

Perhaps this poor income growth is a consequence of a stereotype that a range of psychological studies have confirmed: Gen Xers are reluctant to be corporate drones, placing more emphasis on work-life balance and autonomy. It is no coincidence that in 1999, when Gen Xers were in the prime of their lives, there were two hugely successful films in which people broke free of life's shackles. In *"The Matrix"* Thomas Anderson, a computer programmer, discovers the world is an illusion simulated by intelligent machines. In *"Fight Club"* an office worker joins a secret society whose members kick lumps out of each other. All very exciting, of course—but hardly conducive to a solid career.

Gen Xers have, to be fair, faced difficult circumstances. People's earnings typically rise fast in their 30s and 40s, as they move into managerial roles. Unfortunately for Gen Xers, when they were in that age range labour markets were weak, following the global financial crisis of 2007-09. In 2011, for instance, the median nominal earnings of British people in their 30s rose by just 1.1%. Earnings growth in Italy, which was

hit hard by the euro crisis, was just as poor. And in Canada from 2011 to 2017 the real median earnings of people aged 35 to 44 years did not grow at all.

Gen Xers have also done a poor job accumulating wealth. During the 1980s, when many boomers were in their 30s, global stockmarkets quadrupled. Millennials, now in their 30s, have so far enjoyed strong market returns. But during the 2000s, when Gen Xers were hoping to make hay, markets fell slightly. That period was a lost decade for American stocks in particular, coming after the dotcom bubble and ending with the financial crisis.

What about home-ownership, the ultimate symbol of intergenerational unfairness? The conventional narrative contrasts perma-renting millennials with boomers who enjoy six spare bedrooms. Yet data on American home-ownership, provided by Victoria Gregory of the St Louis branch of the Fed, overturns this received wisdom. In fact, the big decline in home-ownership rates happened from boomers to Gen Xers. Starting in their late 30s and early 40s, Gen Xers of a given age had a similar chance of owning as millennials do (see chart 2).

Aversion to home-ownership is in some cases a choice. Gen Xers may have imbibed a passage from Mr Coupland's novel: "When someone tells you they've just bought a house, they might as well tell you they no longer have a personality." But, again, circumstances are probably a bigger factor. From their late 30s to their early 40s, the time when many people first get on the housing ladder, Gen Xers suffered from the effects of the financial crisis. It became hard to get a mortgage. Some of those who already had one foreclosed on their house and went back to renting.

Aggregate statistics capture all these trends. Jeremy Horpedahl of the University of Central Arkansas tracks average wealth by generation, using data produced by the Fed. He finds that, at 31, the millennial/Gen Z cohort has about double the

wealth that the average Gen Xer had at the same age. Using survey data from the European Central Bank we find suggestive evidence of similar trends in Europe. From 2010 to 2021, millennials in the euro area tripled their nominal net worth, versus less than a doubling for Gen Xers.

The position of Gen Xers may not improve much in the years ahead. They could be the first to suffer owing to broken pension systems. America's social-security fund is projected to be depleted by 2033—just as Gen Xers start to retire—meaning benefits will be cut by 20-25% unless Congress acts. Next time you see a quinquagenarian, at least give them a smile. ■

## Oil prices

# Over a barrel

## Why Saudi Arabia is cranking up the pressure on its OPEC allies

YOU CANNOT fault the Organisation of the Petroleum Exporting Countries for its communication. On May 3rd it and its allies (OPEC+), which supply 40% of the world's crude oil, announced that they would crank up output by 411,000 barrels a day (b/d) in June—triple what analysts had expected, and equivalent to 0.4% of global demand. Global prices briefly sank below \$60 a barrel, nearing four-year lows; they remain 6% below their level of April 28th, when rumours of a supply boost first emerged. In a statement, the group gave a straightforward reason for its decision: "healthy market fundamentals".

The problem is that nobody believes it. Recent trade tensions have prompted the International Energy Agency (IEA) to reduce its global demand forecast for the rest of 2025 by 400,000 b/d. What growth in appetite survives is expected to be met through higher output by exporters outside the cartel, such as America and Guyana. Even before May 3rd, prices had slid by a quarter since mid-January. What really explains the cartel's kamikaze decision?

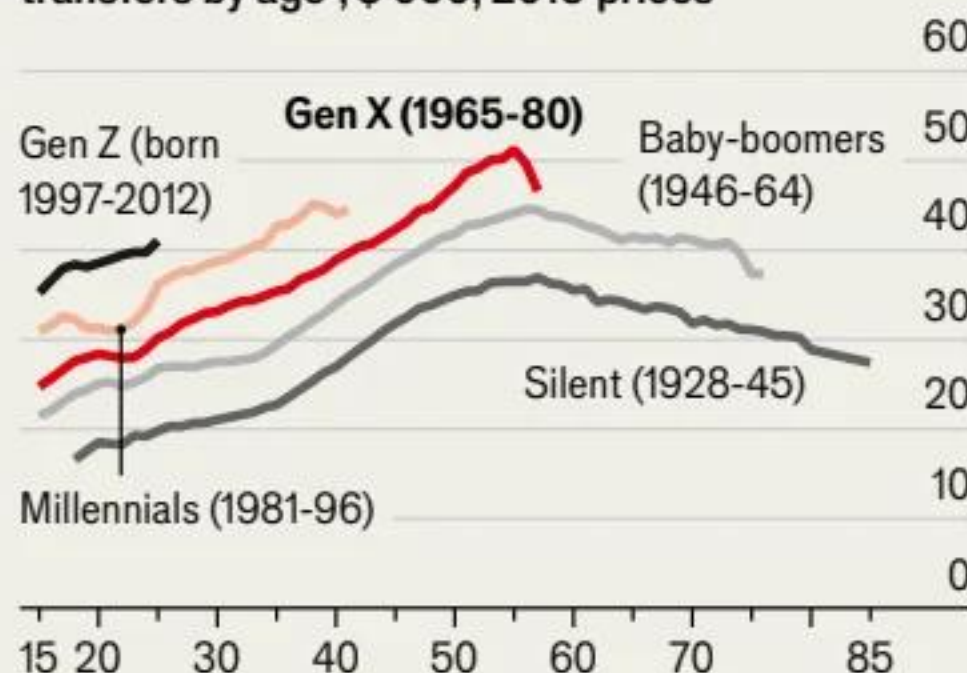
Until recently OPEC+ was showing restraint. Strict quotas, cutting the group's production by nearly 6m b/d, were introduced in an attempt to keep prices high. Then, in December, OPEC+ confirmed its intention to undo some of the cuts by a modest 122,000 b/d each month, starting in April. Last month, however, the cartel snapped, declaring it would instead raise output in May by a huge 411,000 b/d—a decision it repeated this month.

The cartel can tolerate low volumes if prices are high, or high volumes if prices are low. But low volumes at low prices can- ►►

## Leaving at 5pm has consequences

### United States

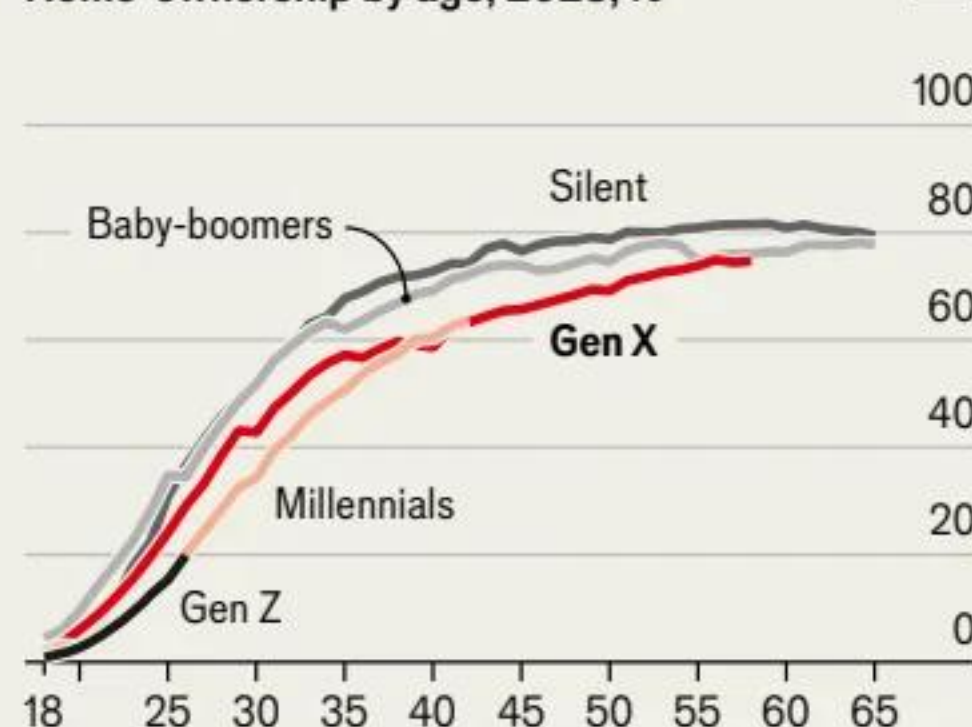
Median income after taxes and transfers by age\*, \$'000, 2019 prices



\*Adjusted by household size, data from 1964-2023

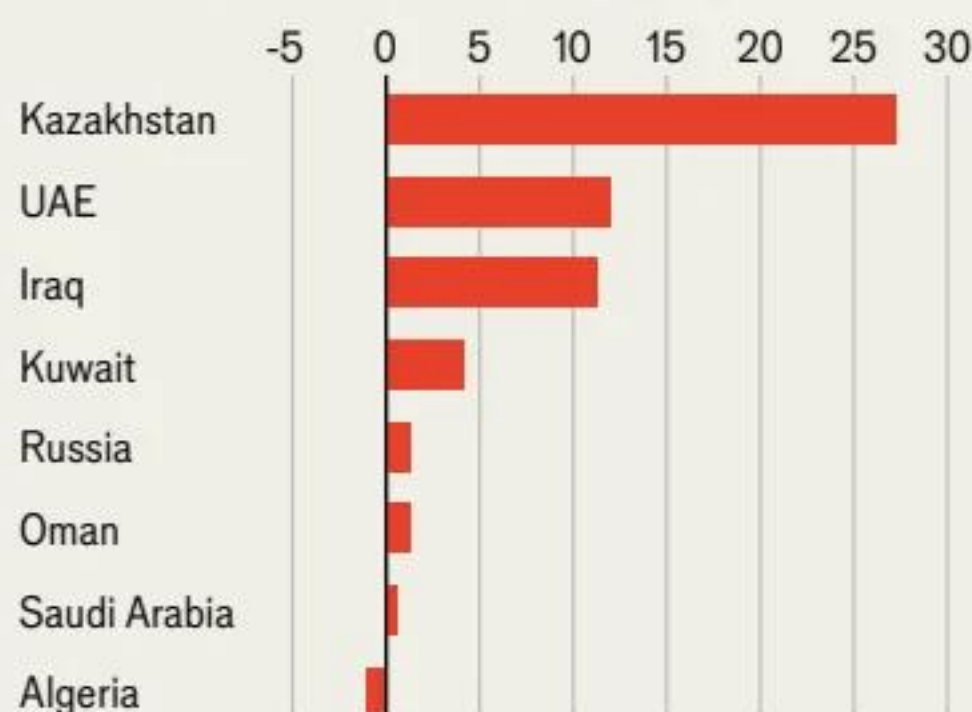
Sources: Federal Reserve working paper, Feb 2024; American Community Survey; Federal Reserve Bank of St Louis

Home-ownership by age, 2023, %



**Black mark**

Crude oil production, deviation from target, %  
March 2025, selected OPEC+ countries



Source: International Energy Agency

**Financial ructions****Taiwan straits**

HONG KONG AND SINGAPORE

**A buoyant currency threatens Asia's giant insurers**

SOME COUNTRIES are rich. Others are cheap. And then there is Taiwan. The miracle economy, home to the world's most advanced chipmaker, has a respectable GDP per person of over \$33,000. Yet the prices of its goods and services are only 42% of America's, when converted into dollars. Its McDonald's burgers, to take one example, are the cheapest of all the countries tracked by our Big Mac Index.

That is one sign the island's currency, the Taiwanese dollar, is out of whack. If its exchange rate were stronger, burgers and everything else would be more expensive in dollar terms. Another sign Taiwan's currency is cheap is the country's current-account surplus, which is equivalent to more than 14% of GDP, or "ungodly big" in the words of Brad Setser of the Council on Foreign Relations, a think-tank. Taiwan's exports of integrated circuits have more than doubled over the past decade. Yet the exchange rate of the Taiwanese dollar has remained remarkably stable. It was around NT\$31 to the American dollar at the end of April 2015. And it was around NT\$32 at the end of last month.

Then, at the start of May, something unusual happened. Taiwan's currency became abruptly less cheap. It strengthened by as much as 5% during trading on May 5th, adding to a big gain on the previous trading day. These were the largest moves in the sleepy currency since the 1980s.



Where's the fire?

not be seen as a success. At the same time, the group believes demand is less elastic to price: although a 1m b/d cut in OPEC+ supply triggered global price jumps of \$20 a barrel in 2022 and \$10 in 2023, JPMorgan Chase, a bank, estimates such a reduction would lift prices by just \$4 today. As such, the cartel thinks it can raise production without whacking prices.

The less obvious reason for the switch is that Saudi Arabia, the group's leader, wants to punish other members. Iraq, Kazakhstan and the United Arab Emirates, in particular, have overshot their production quotas for months (see chart). They have promised additional cuts in future but Saudi Arabia is tired of waiting. It is betting it can cope better with price slumps; unlike Iraq and Kazakhstan, it has a huge sovereign fund and easy access to bond markets.

Jorge León, a former OPEC analyst, reckons that the pain will continue until the troublemakers reform their ways. It is a risky gamble for Saudi Arabia, which is part-way through an expensive reform plan. So far prices have not fallen too far, in part because the market expects a summer rise in demand. But it will droop in autumn as refineries enter maintenance season. Another few supply increases, together with a signal that more will follow, and global prices could sink below \$50. That might jeopardise shale-oil production in America, a powerful ally run by a bad-tempered president. It would also worsen fiscal headaches in Russia, making it harder for the OPEC+ member to fund its war.

Will the cheaters yield before then? They are not in a rush. On April 23rd Erlan Akkenzhenov, Kazakhstan's energy minister, announced the country would prioritise its interests over those of the cartel when deciding on production levels. Even if its priorities change, how much Kazakhstan produces is not entirely up to the government, since the country is one of the few OPEC+ members where international oil companies, rather than a state monopoly, dominate production. Saudi Arabia's game of chicken is just getting started. ■

Anyone who had earlier this year predicted a big lurch in the Taiwanese dollar would probably have expected it to weaken. America's new president was threatening a trade war against China and other commercial partners that would lift the dollar and harm Asia's exporters, contributing to falls in their currencies. Instead, it is America's currency that has dropped.

For Asia, that has created a dilemma of a different kind. Taiwan's exporters have accumulated a large stash of dollar earnings. About 16% of deposits held in the country's onshore banks are in foreign currency, one of the highest shares on the continent. As America's dollar has declined, some of these exporters may have decided that now would be a sensible time to convert their earnings into local currency, before they lose any more of their value, which might have triggered the upward movement in Taiwan's currency.

What then amplified it was probably the anxieties of Taiwan's life insurers. Their purchases have helped offset the inflow of dollars from the country's exporters, keeping the currency competitive. But their holdings have created a currency mismatch: the lifers pay out policies in Taiwanese dollars, and own assets denominated primarily in American dollars.

Recent currency moves may have prompted them to rush to hedge their exposure. They might have agreed to sell American dollars for Taiwanese dollars on a future date, at a rate decided today. This sudden demand for Taiwanese currency in the future would also have raised its value today, as the institutions on the other side of the trade buy Taiwanese dollars now for delivery when the transaction matures.

Taiwan's central bank does not usually allow large daily moves in the exchange rate without stepping in. The fact that it did not intervene on May 2nd no doubt contributed to the large moves on May 5th. Many investors began to wonder if the central bank was trying to keep a low profile as the country conducts trade talks with America. Taiwan is one of the countries America's Treasury department is monitoring for currency manipulation.

But the big moves on May 5th forced the central bank's hand. At an emergency press conference, Yang Chin-long, the governor, said the bank had intervened in response to an "abnormal situation". Since then, the currency has weakened a little.

In principle, the central bank can create as many Taiwanese dollars as people want to buy. But by always stabilising the currency, it gives the country's life insurers less incentive to hedge their exposures, ensuring that the mismatch on their balance-sheets persists. And although Mr Yang insisted that Taiwan's currency was not a part of the country's trade talks, he will not want to take chances. The central bank is



► “well aware that there are people in this administration who are very focused on the currency issue”, points out Mr Setser.

Mr Setser himself co-authored a study in 2019 looking into the ways the central bank has guided the currency indirectly, making it easier for life insurers to buy dollar assets so it would not have to. It “did not exactly appreciate the scrutiny”, he says.

Nor is the bank a fan of our Big Mac index: in 2016 it felt obliged to issue a press release pointing out that the burger measurement was “lighthearted”. Yet its policy-makers have a problem. Although they can stop the Taiwanese dollar from becoming more expensive, they cannot stop it becoming more conspicuous—especially if the American dollar keeps falling. ■

### Foreign exchange

## Dollar drama

### Global turmoil has at least one beneficiary: currency traders

TRADERS OFTEN joke that FX stands for “forgotten exchange”. After the global financial crisis of 2007-09, near-zero interest rates in rich economies and tighter currency management in emerging ones kept volatility low—and with it, profits.

Now Donald Trump’s return to the White House has jolted currency markets back to life. In April a measure of the volatility of the DXY index, which compares the dollar with a basket of peer currencies, was almost twice as high as a year earlier.

CME Group, the world’s largest derivatives exchange, says that in the first quarter

of 2025—before Mr Trump’s “Liberation Day” tariff shock—foreign-exchange trading volumes on its platforms were up by 25% year on year, with a record daily average of 1.1m futures and options contracts traded. On April 3rd, the day after Mr Trump’s announcement, trading on EBS, a CME spot foreign-exchange platform, reached \$147bn, the most since 2020.

Other policy surprises have had similar consequences. On March 5th trading between the euro and the dollar hit \$137bn, more than double this year’s daily average, after Germany announced more defence spending. On May 2nd trading in one-month forward contracts on the dollar-Taiwan dollar exchange rate reached over \$6bn on EBS, a record for a single day, after China signalled openness to trade talks with America. Stockmarket jitters have added to the turbulence, with the dollar weakening since mid-January as investors pulled money from American shares.

Currencies are quick to respond to unexpected developments, says Paul Lambert of NCFX, a data provider. The \$7.5trn-a-day market is highly liquid, runs around the clock and settles fast, allowing investors to respond at once to news outside normal trading hours. They then shift exposures in stocks or bonds once markets open. Mr Trump’s announcements late in the American day often land during Asia’s morning, triggering a rush of trading in the region, notes John Rothstein of Optiver. To keep up, his trading firm has had to expand its operations in Singapore.

Much of the pickup in activity comes from companies and investors trying to limit currency risk, says Mr Lambert. Multinationals hedge foreign revenues and costs; investors want to protect overseas holdings. Lauren van Biljon of Allspring Global Investments, an asset manager, says that her clients increasingly view currency moves as a source of returns, too.

Recent results issued by big banks on both sides of the Atlantic suggest that they are also benefiting from the turbulence. UBS announced that revenue from its foreign-exchange, rates and credit division had jumped by 27% year-on-year, driven largely by strong performance in currencies. Goldman Sachs reported a more modest rise of 2% in fixed-income, currency and commodity trading, but also credited higher revenues from currencies.

Strong results are prompting some to rebuild currency desks that were emptied first by the financial crisis and then by algorithms. “When markets turn volatile, clients want to speak to a real person,” says Stephen Jefferies of JPMorgan Chase (even if his firm is keeping headcount steady for now). A return to foreign-exchange trading’s heyday is still a little while off, but in a more fractured world, he predicts, currency volatility is likely to last. ■

### Modern investing

## Buy the dip

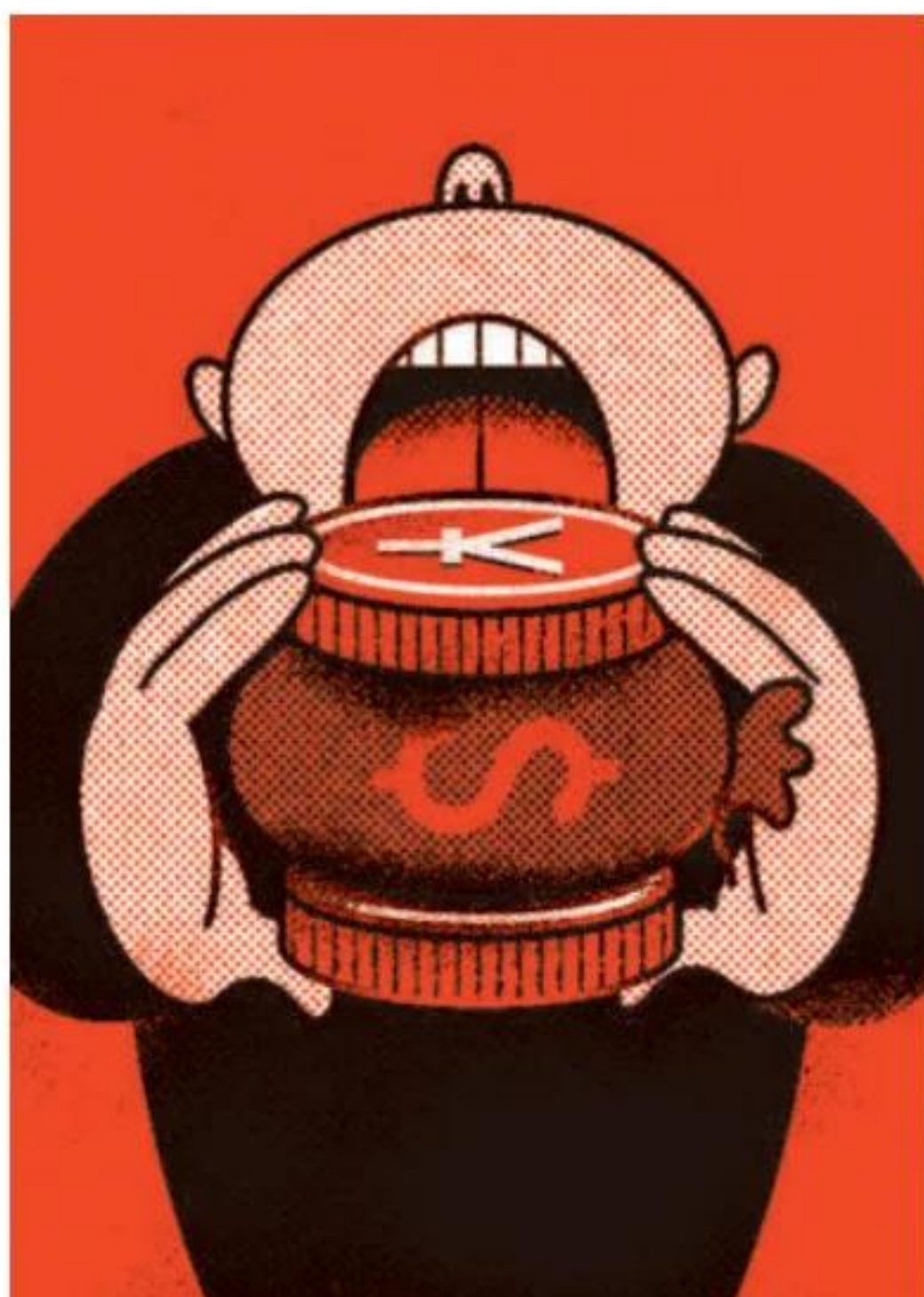
### The trend that stops stocks crashing

STOCKMARKETS APPEAR to have recovered their poise. By May 2nd America’s S&P 500 index had climbed back to its level of a month earlier, just before President Donald Trump’s “Liberation Day” tariff salvo. If the S&P’s plunge was shocking—a fall of 12% in just four trading days—the rebound was, too. Mr Trump’s decision to pause many of his duties certainly helped. So, it seems, did retail investors.

Even as markets dropped by 5% on the day after Mr Trump’s announcement, retail investors refused to pull out their money. Instead, they poured in a net \$5bn. Over the next week, as prices slid still further, they deployed additional billions, snapping up everything from tech giants such as Amazon and Nvidia to exchange-traded funds tracking the whole market. If retail investors were fazed by Mr Trump’s tariffs, they had a funny way of showing it.

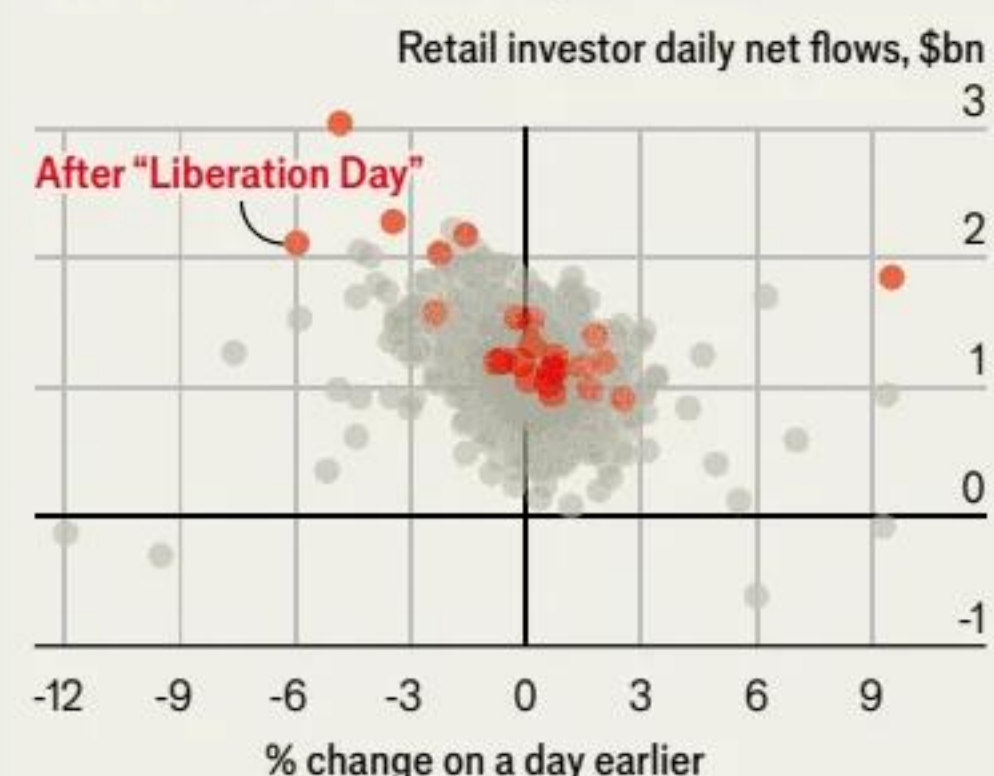
In decades gone by, such investors were often derided as bandwagon-jumpers who extrapolated future trends from past performance. Today they are contrarians. Amateur investors regularly pile into the market on its most difficult days. Investing forums, notably Reddit’s r/WallStreetBets, throb to a drumbeat of encouragement for participants to “buy the dip”. Whereas institutional investors may be forced by risk managers to unwind trades when prices slide, retail investors provide welcome liquidity during sell-offs—a pattern that is changing modern stockmarkets.

The “momentum” stereotype was not without foundation. In 2014 Robin Greenwood and Andrei Shleifer, both of Harvard University, found that falling stock prices did not prompt investors to expect higher ►►



### Holding their nerve

S&P 500, Jan 3rd 2020-May 6th 2025



Source: Vanda Research

► returns—as theory would suggest they should—but lower ones. Indeed, flows into mutual funds still track broader market sentiment, and money heads to the best-performing managers. The logic that what rose yesterday will surely rise tomorrow remains powerful: witness appetite in recent years for bitcoin, GameStop and Cathie Wood's tech-heavy ARK fund.

At the same time, there have long been forces pulling in the opposite direction. First among them is rebalancing. Many savers aim for a 60-40 mixture of, for example, \$600 in equities, \$400 in Treasuries. A slide of 20% in stocks and a bond gain of 2% leaves equities at \$480 and bonds at \$408, a 54-46 split. Restoring the 60-40 divide means buying the asset that has just fallen. Psychology plays a similar balancing role: one of the most widely documented biases is the “disposition effect”, whereby investors sell winners and hold losers. A reluctance to realise losses may appear as contrarian behaviour.

These effects are not sufficient to explain recent rallies, however. The disposition effect concerns selling, not scooping up bargains, and rebalancing is usually a quarterly or annual ritual. Neither much reflects sentiment, let alone the Reddit drumbeat. Instead, retail investors appear to have developed a self-fulfilling belief that there will almost always be a snap-back. This is not entirely unwise. According to theory, when prices plunge, either fundamentals have worsened or investors have become more skittish; in the latter case, those with cash to spare should pocket a premium for providing liquidity and shouldering the risk. Moreover, empirical evidence suggests the theory does hold over long investment horizons.

### Main Street bets

Timing may offer a clue as to how to reconcile the data of Messrs Greenwood and Shleifer with investor behaviour during the stockmarket plunge that followed Mr Trump's tariffs. A “buy the dip” approach is frequently invoked to justify splurging on assets that have fallen in price in recent days or weeks, whereas evidence on surveys and mutual-fund flows tends to capture behaviour in response to performance over months or years. And there may now be more short-term traders than in the past, owing to the explosion of app-based, instant-trading platforms, including EToro and Robinhood. In 2019 the latter had \$14bn of assets under custody; that figure has since climbed to \$180bn. Robinhood's average client is around 15 years younger than that of Vanguard, which provides staid index investing.

Growing numbers of ultra-rich investors may also play a role. Although there are still relatively few in total, they account for a larger share of “household” flows—

and are eager to provide liquidity when the market drops. According to Xavier Gabaix of Harvard and co-authors, affluent investors with less than \$30m typically take money out of stocks when markets fall. Those with over \$30m step in.

Paradoxically, therefore, the ultimate consequence of concentrated wealth, internet mania and contrarian, app-based trading may be a calmer day-to-day market. Bullish retail sentiment may inflate valuations over the long haul, but without billions of dollars of inflows to stabilise the market in April, stocks would surely have fallen further amid even greater volatility. Dip-buyers were stabilisers. With stocks having recovered they also look—for the moment, at least—like sages. ■

### Berkshire Hathaway

## Oracle required

NEW YORK

**Warren Buffett will leave a difficult, \$348bn question for his successor**

**S**URPRISING PEOPLE at the age of 94 is no mean feat. But that is what Warren Buffett did at the end of Berkshire Hathaway's annual shareholder meeting on May 3rd, when he announced that he would be stepping down as the company's chief executive at the end of the year. Mr Buffett gave most of Berkshire's directors no advance notice of his decision. Nor did he tell Greg Abel, his presumptive successor.

Berkshire Hathaway was a textile-maker when Mr Buffett bought it in 1965. In the years that followed he turned it into an immense insurance firm and a sprawling conglomerate with interests in everything from energy to sweets. He employed a value-investing strategy, seeking out companies that appeared cheap relative to their intrinsic value. From 1965 to the end of last year, Berkshire's market value had in-

creased by more than 5,500,000%, with a compounded annual return of almost 20%. The total return of the S&P 500 index over the same period was 39,000%.

Today Berkshire has a market capitalisation of \$1.1trn, having dropped a bit on Mr Buffett's announcement. Mr Abel has been with the company for a quarter of a century. He has run its non-insurance operations—such as its energy, railway and retail businesses—since 2018. His next challenge goes beyond filling Mr Buffett's shoes as an “oracle”. Berkshire's strategy is becoming more difficult to pull off.

Over the past year, Mr Buffett has aggressively sold stocks, including a large chunk of its stake in Apple. Now, for the first time in two decades, Berkshire owns more cash than listed equities. At the end of March it held \$348bn in cash and short-term American government debt, more than twice the amount it held at the close of 2023. The firm's Treasuries account for 5% of the outstanding market. If Berkshire was a country, it would be the tenth-largest holder of American government debt, above India, Switzerland and Taiwan.

Mr Buffett's decision to withdraw from the stockmarket has so far benefited the company. Its stock is up by 14% this year, while the S&P 500 is down by 4%. The problem, for Messrs Buffett and Abel, is working out what to do with the enormous pile of cash. Lately Mr Buffett has griped that there is not much out there to buy at a reasonable price. Even after the recent market tumult, valuations of listed companies are high relative to their historical levels.

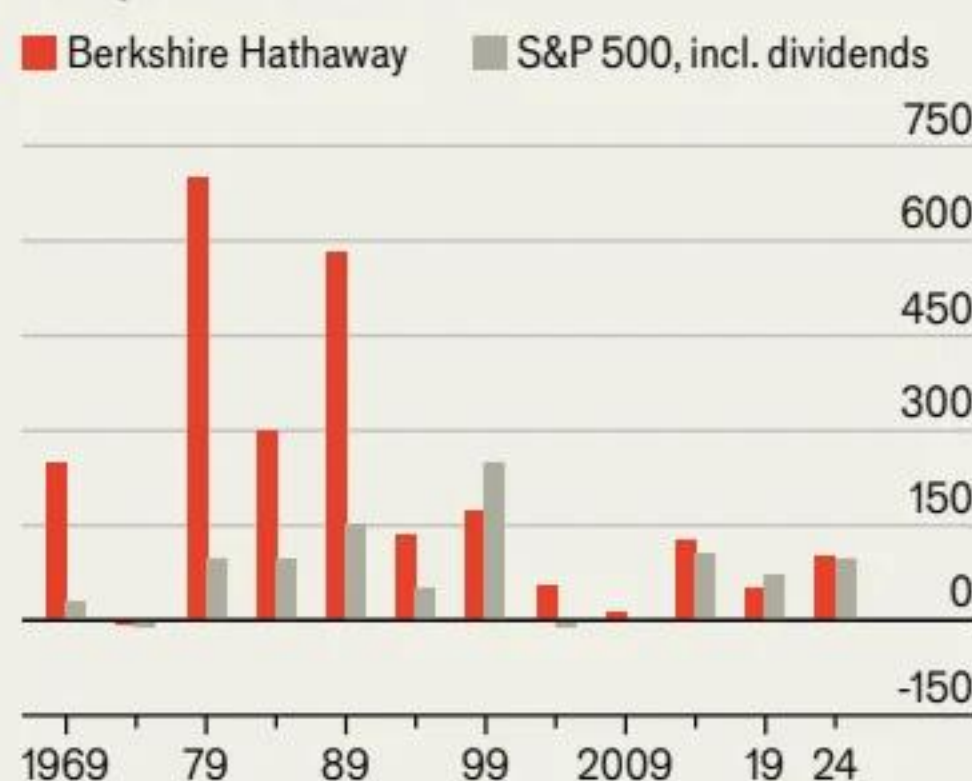
One option would be to expand more aggressively overseas. In recent years Mr Buffett has made successful bets abroad. For example, he has poured billions of dollars into several of Japan's trading conglomerates, such as Mitsubishi and Sumitomo. Mr Abel might note that among companies worth over \$5bn and with price-to-earnings ratios below ten—suggesting they are cheaply valued—80% by value are domiciled outside America.

Another option would be to stray from value investing in the hope of finding firms worthy of capital allocation. That seems unlikely, at least for now. Such a move would transform Berkshire's culture and risk the ire of Mr Buffett's admirers. After 25 years at the firm, Mr Abel is unlikely to pull an immediate handbrake turn.

Absent a change of strategy, Berkshire will have to wait for a market downturn. Mr Buffett has a history of spotting such opportunities. He snapped up a large stake in Wells Fargo, an American bank, during a slump in 1990. He invested in companies including Johnson & Johnson and Kraft Foods (and Wells Fargo again) following the global financial crisis of 2007-09. The list goes on. Berkshire's shareholders must hope that Mr Abel has the same vision. ■

### Building arks

Five-year total return, %



Source: Berkshire Hathaway

## FREE EXCHANGE

### *Caught in a spiral*

*How should other countries manage a falling hegemon? A 50-year-old book offers clues*



THE “KINDLEBERGER SPIRAL”, a graph of world trade between 1929 and 1933, looks like water circling a drain, or a small animal curling up into a ball. It was produced by Charles Kindleberger, an economic historian, in “The World in Depression”, a book published in 1973, and has recently enjoyed a new lease of life as a demonstration of the self-harm that protectionism inflicts. From month to month, Kindleberger charted how the global economy turned in on itself throughout the late-1920s and 1930s, spiralling towards disaster. Another idea from his work—the “Kindleberger gap”, referring to a leadership void—is also proving helpful.

Kindleberger had a front-row seat for the Depression. As a graduate student completing his thesis in the 1930s, he worked at the US Treasury for Harry Dexter White, chief architect of the post-first-world-war system of fixed exchange rates. Graduation led to a job at New York Federal Reserve. After the second world war, during which he worked at the Office of Strategic Services, a precursor to the CIA, he moved to the State Department, where he helped shape the Marshall Plan, America’s programme for the reconstruction of Europe. In time he found his way to academia—he had probably had enough excitement, his biographer speculates—becoming one of the first members of the economics department at the Massachusetts Institute of Technology.

At MIT, Kindleberger was something of a pre-war figure in a post-war world. He was not a mathematical-model builder in the mould of Paul Samuelson and Robert Solow, two supremely talented colleagues. Instead, he followed a methodology he called historical economics, not economic history. “It is better, I believe, to err on the side of an artistic feel for the relationships and the data,” he wrote. Despite this, in 2009, it was his work to which Larry Summers turned as he co-ordinated America’s response to the financial crisis while director of the National Economic Council.

“The World in Depression” answers fundamental questions: “How and where the Depression originated, why it spread so widely and why it went so deep and lasted so long.” The book starts with the venomous diplomacy of first-world-war debts and reparations, travels through the stockmarket crash of 1929, the turn to protectionism, subsequent bank failures and the seeming-

ly never-ending economic slump, until it concludes with German rearmament—stopping short of the second world war.

Kindleberger’s conclusion is that the Depression was such a disaster because the global economy lacked a leading nation to stabilise it. “Britain could not and America would not,” he wrote. Britain, which under the gold standard was the dominant economic as well as military power, was exhausted by the first world war. America was isolationist, protectionist and overrun by hard-money thinking, which insisted on balanced budgets and a gold peg. France was too small to stabilise the world but big enough to destabilise it, he wrote, as when the country attached conditions to bail-outs or dug in its heels over German reparations. The Kindleberger gap refers to this void of economic leadership.

Stability, Kindleberger argued, is a global public good that must be provided. It is not a naturally occurring equilibrium. The leading economy—a “hegemon”, as later thinkers would term it—can capture some of the benefits of this stability for itself, and push the system in a direction favourable to its interests. However, it needs to take on the burden of providing, among other things, an open market for goods, countercyclical finance and the role of lender of last resort. President Donald Trump now appears to reject this thinking altogether. He demands that allies pay for military protection and views a trade deficit as straightforward evidence of being ripped off. Members of his administration have mooted charging countries for the privilege of lending to the American government. All told, he simply does not see the gains that emerge from global stability as being worth their cost.

Hélène Rey of the London Business School identifies a “New Kindleberger Gap”. This time a “self-destructing hegemon” is, she says, uninterested in providing global public goods, while an ascendent one (Ms Rey refers to the European Union, but China is another candidate) lacks the ability. The Fed’s swap lines lie at the heart of her concerns. These offer central banks in allied countries, including the European Central Bank, the Bank of England and the Bank of Japan, access to dollars in exchange for their own currency. They should help forestall any crisis that bids up the price of dollar borrowing, but are just the sort of burden-sharing to which Mr Trump normally objects. In an attempt to bolster their position, sophisticated policymakers are talking in Trumpian terms. “The reason we do it is it’s really good for US consumers,” Jerome Powell, chairman of the Fed, has said.

#### Greenbacked

What are the contingency options? Despite Mr Powell’s assurance that America will continue to offer swap lines, Ms Rey suggests that European central banks should encourage commercial lenders to reduce exposure to dollar assets, build up precautionary dollar reserves and play a part in turning the euro into an international currency. Robert McCauley of Boston University advocates the creation of a “dollar coalition of the willing”, pointing out that the central banks which would normally receive swap lines from America already have \$1.9trn-worth of dollar-reserve assets, which they could agree to pool in advance of a crisis. That amount is far more than they borrowed from the Fed during either the global financial crisis of 2007-09 or the early stages of the covid-19 pandemic. In the short term, such actions may help cement the role of the dollar, as central banks build up reserves. In the longer term, however, it may mean that American monetary hegemony becomes a subject fit only for historical economics. ■

## Science & technology



### Materials science

## State of flux

**China's export restrictions are boosting scientists' efforts to find alternatives to magnets that use rare-earth metals**

THE HUMBLE magnet may not seem to belong alongside steel, microchips and oil as a chess piece in the great diplomatic game. But on April 4th, as part of its retaliation against America's tariffs, China announced export restrictions on a particularly useful kind of magnet—the powerful permanent sort that can be made with “rare-earth” metals.

Assuming the restrictions stay in force, they are likely to have a big impact. Strong and compact, rare-earth magnets have found their way into everything from electric cars and wind turbines to MRI machines and missile-guidance systems. And as with the rare-earth industry in general, Chinese firms dominate the market. America's Department of Energy estimated in 2022 that China produced 92% of the 100,000-odd tonnes of rare-earth magnets made each year.

That China is exploiting its dominance

of rare earths and the things made from them is hardly new: in 2010 it halted exports of rare-earth metals to Japan for months over a fishing dispute. It imposed further restrictions in February, before Donald Trump, America's president, kicked off the latest round of the trade war. But restrictions on magnets themselves came as a surprise, says Jack Howley, an analyst at IDTechEx, a market-analysis firm. “Many firms were focused on the tariffs,” says one industry observer. “But these export restrictions could end up hurting them

more.” And the defence implications, says Dr Howley, are likely to “really scare” governments around the world.

China's restrictions, therefore, seem likely to boost efforts to find new sorts of magnets that do not rely on rare-earth elements. Interest in this subject has increased hugely in recent years, says Nicola Morley, a physicist at the University of Sheffield. Last year, she says, Masato Sagawa, a Japanese scientist who helped commercialise rare-earth magnets in the 1980s, did a lecture tour around Europe. “It was 40 years since he'd created the best magnet going, and he wanted to know why we hadn't done better since then.”

Rare-earth magnets are prized because they pack a lot of magnetic punch into a small space. One commonly used figure of merit is a magnet's “maximum energy product”, known in the literature as its (BH)max. An easy way to think of this, says Laura Lewis, an engineer at Northeastern University in Massachusetts, is as a measure of the effort needed to prise a magnet off a steel filing cabinet. A high-quality rare-earth magnet made of an alloy of iron, neodymium and boron might have a (BH) max of more than 400 kilojoules (kJ) per cubic metre; ten times more than cheap ferrite fridge magnets, or even more.

Rare-earth magnets will also retain ►►

#### → ALSO IN THIS SECTION

**65 The harms of compressed music**

**66 Robot horses giddy up**

**66 Dogs look—and act—like their owners**

**67 Well informed: Is hay fever worsening?**

► their own magnetism even in the presence of strong external magnetic fields—important in motors and generators, which rely on the interaction between two or more magnetic fields to work. With the addition of other rare-earth elements such as dysprosium, they can be made to function at temperatures of more than 200°C.

This combination of properties makes rare-earth magnets hard to beat. One alternative, says Dr Lewis, is to switch rare-earth elements for others that are chemically at least somewhat similar. Platinum is one, she says, although it is rare and expensive. Magnets made from aluminium, nickel and cobalt, meanwhile, use relatively cheap materials and work well at high temperatures, but offer only a fraction of the strength of rare-earth magnets.

Better options are on the horizon. Dr Lewis is working on an exotic rare-earth substitute that is not found naturally on Earth, but which does occasionally fall from the sky. Tetrataenite is a mineral found in some meteorites, composed of atomically thin layers of iron and nickel stacked on top of each other. With a theoretical (BH)max of around 335kJ/m<sup>3</sup>, magnets made from the stuff would be nearly as strong as the best neodymium ones, while being even more heat-resistant. And its ingredients are common.

The difficulty lies in actually making it. Natural tetrataenite is formed as the nickel and iron inside meteorites cool slowly over millions of years. Scientists have been able to make tetrataenite in the lab since the 1960s, but the process—which involves bombarding iron and nickel with beams of neutrons—is too slow for mass production.

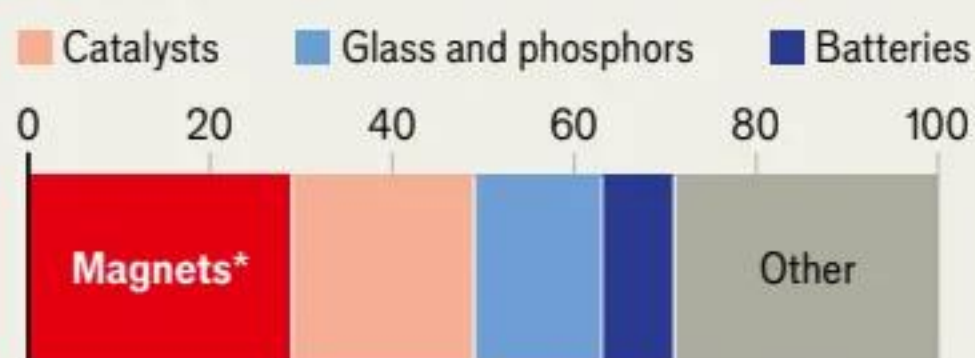
Dr Lewis and her colleagues are looking for a better way. Their method involves heating iron and nickel in a vacuum, in the presence of a magnetic field, while also subjecting the alloy to mechanical strain. The result, according to a paper published in 2024, is that small batches of lab-grown tetrataenite can be produced in about six weeks. That may sound like a long time to an industrialist, but is millions of times faster than natural methods can achieve.

Other researchers claim to have brought a different chemistry to the cusp of commercialisation. Niron Magnetics, a firm based in Minnesota, was founded on the back of work carried out on iron and nitrogen by Jian-Ping Wang, a physicist at the University of Minnesota. In theory, the (BH)max of iron nitrides could reach more than 1,000kJ/m<sup>3</sup>, far higher than even the best rare-earth magnets, though they are more susceptible to being scrambled by other magnetic fields. And nitrogen is common as muck: it can be sieved or distilled straight out of the air with relatively simple equipment. But until recently no one could produce iron nitride at scale.

Niron, though, thinks it has cracked

### Attracting attention

World, rare-earth demand by application, 2023, % of total



\*Common uses: audio equipment, electric cars, medical devices, missile-guidance systems and wind turbines

Source: IDTechEx

that problem. It plans to break ground on a pilot plant later this year with a capacity of around 1,500 tonnes a year, and aspires to build a bigger, 10,000-tonne commercial factory in 2027. For now, the firm's magnets still fall some way short of their theoretical performance. A document published by Niron in 2023 mentions a (BH)max of around 286kJ/m<sup>3</sup>, around half that of a good neodymium magnet. But improve-

ments in manufacturing will raise that further. Niron has managed to attract around \$140m in funding, says Jonathan Rowntree, its boss, with around a third coming from America's government and two-thirds from private investors, including General Motors and Stellantis, a carmaker whose largest shareholder, Exor, part-owns *The Economist's* parent company.

Even if everything goes swimmingly, none of the new magnets will arrive in time to fix the present shortage. Many industrial firms, says Dr Howley, will simply be hoping that diplomacy will prevail; on May 6th America and China said they would begin formal trade talks. Having been repeatedly burned, though, he thinks some governments may take a different tack. "They are probably going to have to make more of a concerted effort to support approaches that don't rely on China," he says. The best time to start looking seriously into alternatives was 20 years ago. But the second-best time is probably today. ■

### Acoustics

## Uneasy listening

### Compressed music might be harmful to muscles in the middle ear

THE FICTIONAL band Spinal Tap could make their instruments louder with the help of amplifiers that went up to 11. Lesser musicians must find other ways to pump up the volume. One well-established trick is compression, which makes music sound fuller by hushing the loudest parts of a track and making quiet parts noisier.

Used since the 1930s, compression is now common in the music industry, streaming, radio and television. Long suspected to have links with hearing damage, there has been little experimental evidence to support concerns. Now research in guinea pigs shows that compressed music can damage the ears in ways that regular music ►►



► does not. The research, though preliminary, suggests that there may be cause to worry about the harmful effects of compression.

The composer Claude Debussy called music the space between the notes. As well as offering structure and distinctive phrasing, these pauses give the listener's brain vital rests that help auditory neurons recover. Compressed music interferes with this recovery because making the quiet parts louder can fill many millisecond-long gaps in the signal with noise. As a result many music aficionados find listening to compressed tunes exhausting.

To test whether compression can negatively affect hearing, scientists turned to Adele's 2015 single "I Miss You", a song whose distinctive frequency spectrum results in all restorative pauses being eliminated after compression. They also turned to guinea pigs, animals that can hear similar sound frequencies to people while also being content to sit placidly for four hours while played the same song on a loop.

The guinea pigs were split into two groups. One group listened to the regular track, while the others were played a compressed version. Importantly, the music was played to both groups at an average volume of 102 decibels—uncomfortably loud but just below Britain's Health and Safety Executive's recommended maximum average for live music.

Tests of the cochlea, damage to which is the leading cause of hearing loss, showed some mild temporary impairment in both groups immediately after the tests, as would be expected. But compression caused more lasting damage to the middle ear's stapedius muscle, which contracts to protect the inner ear from loud noises. At just 1mm long, it is the smallest skeletal muscle in the body.

Both normal and compressed music reduced the strength with which this muscle reflexively contracts to 40% of its pre-Adele state. Though the animals who heard the standard track recovered fully within a day or so, those that endured the compressed version did not. Their stapedius muscle reflexes were still at less than half their strength by the time the experiment ended a week later.

Writing in the journal *Hearing Research* the scientists, led by Paul Avan, an audiologist at the Pasteur Institute in Paris, suggest the constant stimulus of the compressed music overwhelmed nerve cells in the animals' auditory processing pathways, affecting their ability to use the muscle.

Although the study does not address the level at which compression starts to be harmful, nor how long the effects could last (nor, for that matter, whether humans react as guinea pigs do), the results do suggest that average decibel level might not be the only harmful property of music. ■

## Vehicle design

# Mustang uncanny valley

## A robotic horse is in the stables

IN A BREAK from tradition, Kawasaki, a Japanese motorcycle maker, has announced plans to build a new breed of off-road machine shaped like a robotic horse. Corleo, as the machine is called, has a body like a headless steed, complete with four multi-jointed legs powered by electric motors. A pair of handlebars serves as reins and adjustable leg supports, of the kind found on motorbikes, pass for stirrups. Corleo will also not require a farrier: instead of being shod with steel horseshoes, its hooves are clad in rubber. This will help it absorb shocks and improve its grip.

Like a real horse, the rider will control it by moving their hands, arms and legs as well as by shifting their weight about. These movements, which can be very subtle in real equestrians, are detected by a combination of sensors, with the data passed on to an artificial-intelligence system that instructs the motors to respond accordingly and to maintain the robot's balance. Once development is completed, Corleo could carry two people and be able to break into a swift canter.

Helpfully, Corleo is fitted with a GPS navigation system and a projector capable of displaying directions after dark on the ground ahead. Under present plans the robot's electrical power would come from a small internal-combustion engine working as a generator. This uses clean-burning hydrogen as its fuel, thus cutting emissions.



You can lead a bot through water

The hydrogen would be stored in the robot's hindquarters.

Even though Kawasaki admits that it could be a couple of decades before a robotic horse as agile as Corleo could enter mass production, the company is not alone in developing robotic animals. The robotics division of Xpeng, a Chinese electric-vehicle manufacturer, is working on a small robotic pony that can be ridden by children. This, reckons Xpeng, will become a child's "first smart vehicle".

Meanwhile, Boston Dynamics, an American robot maker owned by Hyundai, a South Korean carmaker, has already sold more than 1,500 versions of Spot, its four-legged doglike robot. Although not big enough to ride on, Spots are used in factories, typically for jobs like inspecting hazardous areas. As even a basic Spot costs some \$75,000, robot horses such as Kawasaki's are likely to be a pricey addition to any stable, even though they don't require feeding and mucking out. ■

## Pets

# Friends like these

## Dogs really do look and act just like their owners

FOR ALL the talk of dogs and humans being best friends, sometimes representatives of the two species just don't click. Giving up an unsuitable family pet can be heartbreaking, but, if the animal is an expensive working dog, it can also be financially ruinous. Guide dogs, for example, can cost up to \$50,000 to train, but about a third are returned because they don't bond with their allocated owner.

To cut down on the number of mismatches, researchers in Germany are trying to develop more harmonious pooch-person relationships. Their work towards that goal has now confirmed what many dog-owners already suspect, and what some may be reluctant to admit: dogs really do look like their humans. More relevant to the quest for lasting friendships, they have similar personalities too.

"We are interested in understanding what makes a good dog-owner match and to find out how we can find the right dog for a person," says Yana Bender, a PhD student at the Max Planck Institute of Geanthropology in Jena. "To do that, we first need to establish the status quo: are dogs and their owners generally more similar or more different?"

Writing in the journal *Personality and Individual Differences*, Ms Bender and her colleagues have reviewed the available evi- ►►

► dence to show how the similarities show through. One domain concerns physical appearance. Though it might sound barking, numerous studies in recent decades have shown that people really can match pictures of dogs to their owners more often and more reliably than would be possible with guesswork alone.

Some sources of similarity are clear: women with short hair tend to own dogs with short ears, for example, and those with long hair tend to favour long-eared breeds. People with higher body-mass-indices also tend to have more overweight dogs. Other connections are less obvious, as shown by research revealing dogs and owners can be correctly paired from pictures in which only their eyes are visible.

A similar affinity bias may be at play for invisible characteristics as well, with owners' personality traits mirrored in the way their dogs behave. Introverted owners have dogs that are more nervous around strangers, neurotics are more likely to pair with aggressive pets and conscientious people own dogs that are more motivated and easier to train. Owners of breeds classed as dangerous, such as the notorious XL Bully, rate themselves higher on traits like sensation-seeking and psychopathy.

What is going on? Psychologists have known for decades that humans place more value on relationships with people who look and behave like them, and the same seems to apply to dogs. Women with short hair rate short-eared breeds such as the Siberian Husky and Basenji as friendlier and more intelligent. Long-haired women think the same about Beagles and Springer Spaniels. (What the dogs think is a question for another day.)

The phenomenon of matching personalities appears to be more complex than that of matching looks. Rather than people simply selecting a dog they believe matches their personality, the moods and behaviour of the owner could influence and shape the dog over time—and to a lesser extent, vice versa. Being around less confident people, for example, could make a dog more nervous, while having an anxious dog can exacerbate an owner's worries.

Similar influences have been found in human-human relationships. "Married couples tend to resemble each other more over time," Ms Bender says.

There are other parallels to human relationships, too. In related research, Ms Bender has interviewed guide-dog owners about what works and what doesn't. Among those who felt incompatible with their dog were owners who said they had a better relationship with a former dog. Another said their pooch didn't enjoy the same music as them. One said their dog was too meticulous. For best results, find a dog that looks and thinks like you do. Alternatively, consider a cat. ■

## Well informed

# Is your hay fever getting worse?

Probably. And climate change may be to blame

APRIL WAS the cruellest month. Just as the blossoms arrived, John Bostock found himself struck by "an unusual train of symptoms". First came an "acute itching and smarting" around the eyes. Then came the sneezing.

The "periodical affection" that he described to the London Medico-Chirurgical Society in 1819 is now known as allergic rhinitis or, more commonly, hay fever. It is a condition in which the immune system reacts to airborne allergens, like pollen, by releasing histamine, an inflammatory chemical.

Considered rare a few centuries ago, it is now extremely common—estimated to affect one in five people in most industrialised countries, and up to two in five in some sensitive places, including Japan. Although rates are no longer increasing as fast as they once were, says Adam Fox of King's College London, sufferers now seem to be sneezing for an increasingly long time each year.

Urbanisation may play a role: a study published in 2023 by Ann Gledson of the University of Manchester and colleagues found that seasonal allergy symptoms are significantly worse for city-dwellers. The exact cause is unclear, but poor air quality might either increase the protein content of grains or else heighten people's immune response.

Climate change could also be to

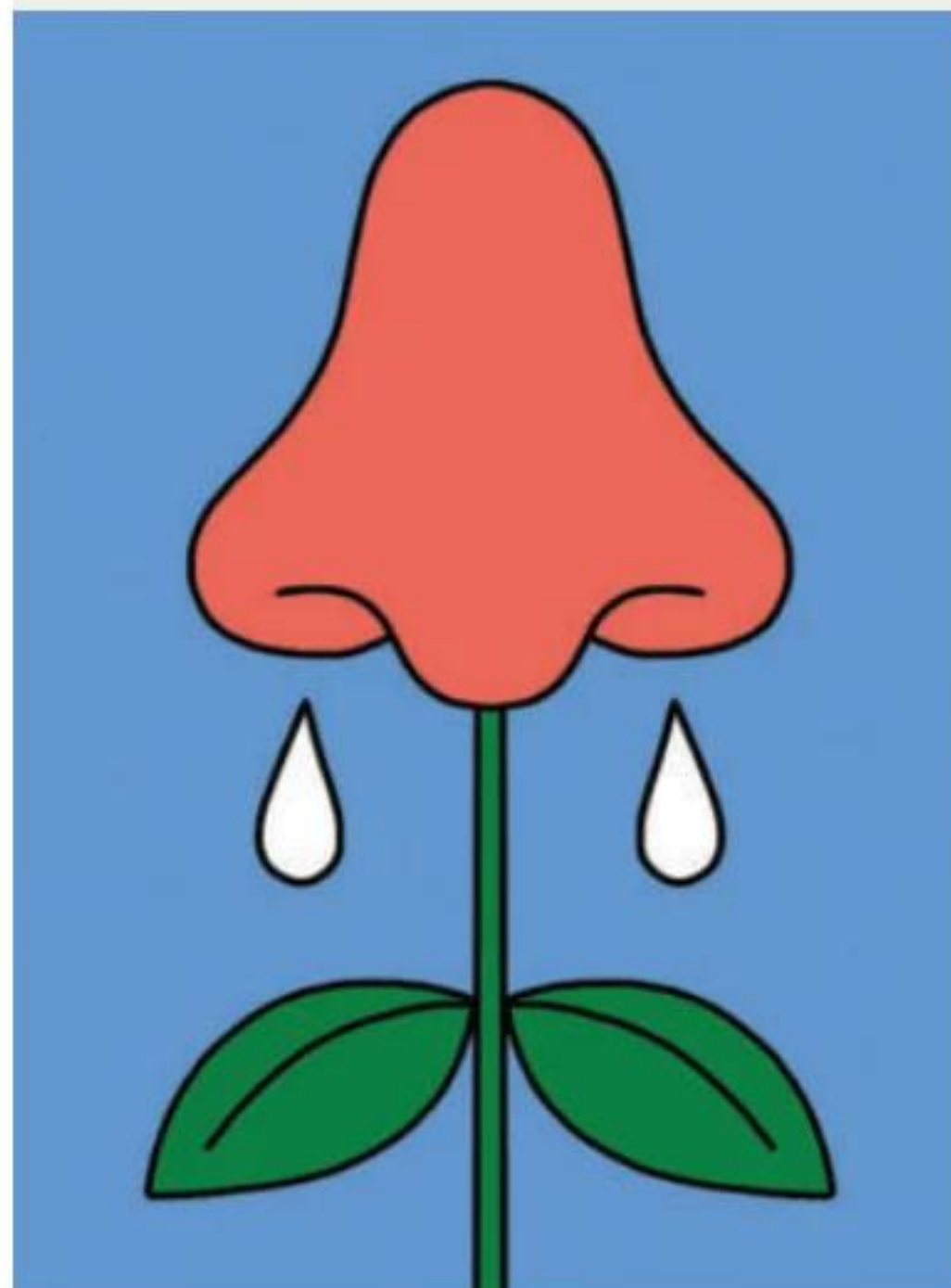
blame. Research conducted by Beverley Adams-Groom of the University of Worcester, who produces pollen forecasts for Britain's national weather service, and others, has shown that warmer springs in Britain prompt the main grass-pollen season (which normally runs from March to May) to begin earlier. Indeed, some tree species are now releasing pollen as early as January.

These trends are expected to continue in the coming decade, even if the extent to which they do will depend on the level of warming, and will vary by species and region. Warmer climates in central Europe and North America, for instance, will contribute to the spread of ragweed, a highly allergenic species that can require just one pollen grain per cubic metre of air to cause a reaction. Most species need more than ten. Extreme weather such as heatwaves and heavy rain can also decrease pollen production and dispersal.

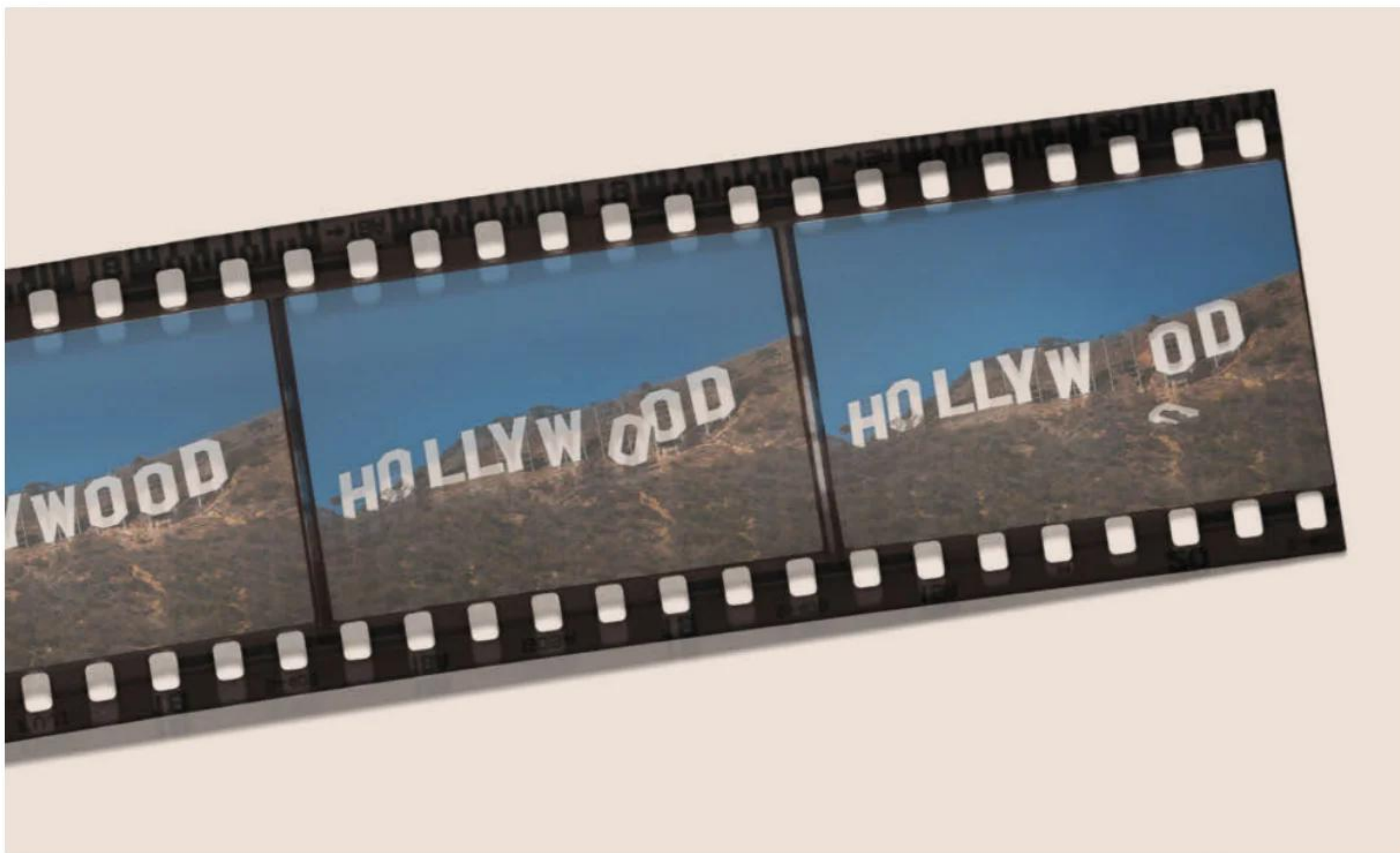
Pity hay-fever sufferers, for it will be difficult to do much about their sneezing. One approach is to remove concentrations of allergenic species in cities, as Japan is doing. Its government plans to replace 20% of the country's human-planted cedars with less allergenic trees over the next decade, roughly equivalent to cutting down 70,000 hectares a year—a drastic solution that has not been adopted elsewhere.

At least antihistamines and nasal sprays are generally able to counter symptoms. A study conducted by HAL Allergy, a Dutch pharmaceutical company, showed that new desensitisation treatments, which require a dose of the allergen to be placed under the tongue each day, can reduce symptoms by 32% relative to a placebo. Any such advance is welcome: a study led by Simon Sobstad Bensnes of the Norwegian University of Science and Technology suggests that the marks of one in ten pupils with hay fever drop by a grade in exams conducted on days with high pollen counts.

Alternatively, consider the original remedy trialled by Dr Bostock. After years of sniffing, the good doctor resorted to relocating periodically to the blustery seaside town of Ramsgate, where he "nearly" managed to escape his affliction. Bless him.



## Culture



### The film industry

## Lights, camera, tariffs?

LOS ANGELES

**Hollywood is in trouble. Politicians should not try to help**

IN “HOME ALONE 2” he made do with a cameo. Now Donald Trump has cast himself in the role of Hollywood’s saviour. “The Movie Industry in America is DYING”, America’s president posted on May 4th on Truth Social, his social-media site. Other countries’ “concerted effort” to lure film production away not only hurts the economy, but also poses a “National Security threat”, he claimed, since foreign films are used as propaganda. To redress these ills, Mr Trump proposed a 100% tariff on films produced abroad.

In Hollywood the presidential post provoked a cacophony of R-rated swearing. The film and television industry is remarkably globalised: a movie might be written in Los Angeles, co-financed by Wall Street and international investors and filmed in several countries. America’s entertainment industry generated \$22.6bn in exports in 2023, according to the Motion Picture Association. If America slapped tariffs on for-

eign films, other countries might retaliate. It is not clear how such tariffs would work, nor whether Mr Trump’s off-the-cuff proposal will ever amount to a real policy, but they could hugely disrupt an industry already reeling from the decline of cinema-going and a rocky transition to streaming.

Cash-strapped studios would have to pass some of the extra costs on to viewers—who have so far benefited most from the internationalisation of film-making. American studios like to shoot abroad be-

cause it is cheaper. It also means they can choose from a wider range of striking scenery and work with local experts, which makes for better films. (Britain, for instance, specialises in visual effects.) Most movie fans won’t care whether the next “Avengers” film or Disney remake is shot in Los Angeles, Vancouver or Budapest, so long as the end product is entertaining.

And, thanks to streamers, viewers now have access to a vast array of storytelling from anywhere in the world: the most popular show on Netflix is “Squid Game”, a South Korean dystopian drama that has accrued more than 3.5bn viewing hours since 2021. In this global marketplace of ideas, American producers can find new collaborators and pick up inspiration.

Hollywood may not have liked Mr Trump’s proposal, but many writers, directors and lawmakers agree that he has identified a real problem. Film and TV production fell globally following the writers’ and actors’ strikes of 2023; production in southern California, however, has fallen off a cliff. (The wildfires earlier this year brought another shock.) According to FilmLA, which tracks filming in Greater Los Angeles, the region hosted fewer days of shooting in 2024 than any year except 2020, when most filming was stopped in the pandemic. California is still home to more film and TV jobs than any other

#### → ALSO IN THIS SECTION

69 Proto-Indo-European

70 Walter Rauff and Augusto Pinochet

70 Agatha Christie’s writing tips

71 Back Story: The morals of “Sinners”

72 The rise of webtoons

► American state, but its share is declining.

Hollywood is a catch-all term for the movie industry but it is also a district, where workers at studios can gaze up at the white-lettered sign in the hills. Angelinos have long worried that they are losing their grip on the city's best-known industry. Production first fled from LA to Canada in the 1990s when the US dollar was very strong, says Kevin Klowden of the Milken Institute, a think-tank in Santa Monica. In the 1990s and early 2000s states such as Louisiana and New Mexico began offering tax incentives to lure production. Mr Klowden notes that "Breaking Bad", which was set and primarily filmed in Albuquerque, New Mexico, was originally meant to take place in Riverside, California. Eventually, in 2009, California began offering tax incentives of its own.

They are less generous, however, than those on offer elsewhere. Britain offers a tax credit on films and high-end TV at a rate of 34%. This is one reason why blockbusters such as "Barbie", "Deadpool & Wolverine" and "Wicked" were filmed there. Last year spending on production in Britain reached £5.6bn (\$7.5bn), an increase of 31% from 2023; much of it came from American companies.

All the while, California has been getting more expensive. Film industry workers make roughly 20% more in the Golden State than the national average. The workforce is heavily unionised and studios have to pay workers enough to live in one of the least-affordable housing markets in America. Rob Lowe, an actor, has explained why his game show shoots overseas: "It's cheaper to bring 100 American people to Ireland than to walk across the lot at Fox."

Some industry workers are leaving LA, slowly eroding the network effects that have helped the city keep other wannabe film capitals at bay. The production decline means spots in writing rooms are scarce. Sean Collins-Smith, a TV writer, lives off his residual payments for his work on episodes of "Chicago PD", a police procedural. As a writer, he says, "If you don't work for two or three years, you got no choice" but to leave.

Mr Trump already seems to have backed away from his tariff pledge, but it is unclear what might replace it. Jon Voight, an actor and one of the president's "special ambassadors" to Hollywood, wants federal tax incentives. The shock that hit Hollywood when Mr Trump's Truth Social post landed has turned to cautious optimism. Movie moguls would love to receive federal handouts, and California's Democratic governor, Gavin Newsom, has their backs. Responding to Mr Trump's tariff proposal, he suggested that Uncle Sam should give the industry \$7.5bn a year instead. "Obviously, the president got excited about tariffs," says Ben Allen, a California state

senator who represents much of LA's west side, "but there are other ways to help."

Why is Mr Trump interested in helping Hollywood at all? Foreign films are hardly a security threat; as propaganda tools, they are far less potent than social media. Lifting Hollywood over its foreign rivals could be seen as an "America First" policy, and movie bigwigs are pressing this button by likening their woes to those of the rust belt. Russell Hollander, the head of the Directors Guild of America, suggests that if enough film production leaves LA, "Hollywood can become the next Detroit."

However, creating a federal handout for moviemakers would require congressional approval. Since the industry is concentrated in liberal states such as California and New York, that may not sit well with Republican lawmakers.

Even if Congress did act, California would still have to contend with other states' incentive schemes. New York is mulling expanding its film tax credit; the Golden State may follow suit. Yet California's Legislative Analyst's Office has found "no compelling evidence" that such incentives boost the state's economy, or eventually pay for themselves. Squeezing taxpayers to cosset the world's most glamorous industry may prove hard to justify, come election time. In politics, as in the movies, there may be tears when the credits roll. ■

## Linguistics

### Proto type

**Proto.** By Laura Spinney. Bloomsbury; 352 pages; \$29.99. William Collins; £22

DANTE DID like a category. Famously, he split sinners into different circles in Hell. Those who committed milder misdemeanours (the violent; tyrants) went in the outer realms; more serious sinners (bankers, naturally) he tortured farther in.

But he also categorised other things. Because Dante—a linguistic Darwin—held a heretical theory. Europe's languages, he thought, had not been made in a single moment, in a biblical Babel, but had evolved. With the care of a Victorian naturalist, he thus split Europe's languages into families by their words for yes: thus those who lived in southern France and said "Oc" spoke a "Langue d'oc".

The truth of Dante's Hell is debatable, but, linguistically, he was spot-on. Four centuries later, a British judge and polyglot called Sir William Jones arrived in Calcutta and was struck by the similarities between



Latin and Sanskrit words for terms such as house (*domus*, *dam*) and god (*deus*, *deva*). Clearly they had "sprung from some common source, which, perhaps, no longer exists". The world's languages were not a babel but a brotherhood.

"Proto", a new book by Laura Spinney, a journalist who has written for this newspaper, offers a biography of that brotherhood—or rather its parent. For Jones's "common source" now has a name: "Proto-Indo-European" (PIE). It was first spoken by as little as a few dozen people around the Black Sea then, roughly 5,000 years ago, spread with rapidity "from Ireland to India". Today, its offshoots include Irish and Hindi—and more or less everything in between. Almost half of the world's population speaks a descendant of it.

PIE is long dead, but traces of it remain caught, like insects in amber, in modern languages, allowing academics to bring it back to life. Scholars know its speakers (perhaps) had the wheel (*\*k<sup>w</sup>ek<sup>w</sup>los*, in PIE's odd transcription, seen in English "circle" and "wheel" itself); and fields (*\*h<sub>2</sub>egros*—"agriculture") and drank mead (*\*medhu*). They know speakers found visitors irritating: the PIE word *\*ghostis* gives English not just "guest" but "ghost", and Latin its word for "host" but also "enemy". (Everyone has had a guest like that.) Its ancient wordscapes are enlightening, if at times puzzling. A hero was "one who urinated standing up"—which feels like a low bar.

This book is at its best on the language: to learn that English "mother", Latin *mater* and Sanskrit *mata* share a root provokes a pleasing etymological "Ah!" Its (lengthy) agricultural sections are drier and contain too many mentions of the word "goat". Topics, like guests, can outstay their welcome. But logophiles will enjoy getting to know a little more about their *\*meh<sub>2</sub>ter* (mother) tongue. ■

Walter Rauff and Augusto Pinochet

## Forged in blood

**38 Londres Street.** By Philippe Sands.  
Knopf; 480 pages; \$35. W&N; £25

THE TWO men had a lot in common. They shared an affinity for German culture and a disdain for communism; they also both committed mass murder, only on different continents, decades apart. One was Augusto Pinochet (pictured), a Chilean dictator from 1973-90 who murdered thousands of people. The other was Walter Rauff, an SS officer who developed the mobile gas chambers that killed some 100,000 people in the second world war.

In “38 Londres Street”, a gripping new book, Philippe Sands shows that the long-rumoured connection between the men was real. After fleeing an Italian prison camp at the end of the war, Rauff ended up in South America. In Quito, Ecuador, in the 1950s, he befriended Pinochet, who encouraged Rauff to move to Chile.

Rauff settled in Punta Arenas, a city in the country’s south, where he carved out a new life as the manager of a king-crab cannery. Years later, when Mr Sands visits, many residents recall fond memories of Rauff (and of Pinochet’s dictatorship). A woman who worked at the factory says Rauff “seemed like a good person”. A magazine feature from the time includes a glowing endorsement from the mayor: Rauff “creates no problems for anyone”.

Was that really true? Mr Sands sets out to verify another rumour: that the former Nazi helped Pinochet’s secret police torture and disappear people. (The book’s title refers to a building in Santiago that became a detention centre.) Mr Sands’s investigative work leads him to survivors and perpetrators, many of whom claim to remember Rauff. The author leaves it up to the reader to decide whether their testimonies are reliable.

“38 Londres Street” is the third book in Mr Sands’s loose trilogy about Nazis, justice and impunity. “East West Street” (2016) chronicled the work of two Jewish lawyers from Lviv, in Ukraine, in defining the legal concepts of crimes against humanity and genocide which were used at the Nuremberg trials. “The Ratline” (2020) retraced the steps of a Nazi fugitive as he tried to flee to South America. As in those books, Mr Sands weaves together travelogue, detective story and legal drama.

The author finds he has a personal connection to the events and characters. Some of his Jewish relatives probably died in

Rauff’s gas vans; during his research he learns that he is related by marriage to one of Pinochet’s victims, a United Nations diplomat tortured and killed in 1976. Yet his response to the material he uncovers is often fascination rather than horror. He is a curious scholar, not a justice warrior.

In 1998 Mr Sands, who is a practising barrister, played a minor role in the efforts to extradite Pinochet from London, where he had been arrested while seeking medical treatment, to Spain, where he had been indicted. Pinochet’s arrest was the first time a former head of state was apprehended abroad under the doctrine of “universal jurisdiction” for large-scale human-rights abuses. A legal battle ensued: the prosecution wanted Pinochet extradited and the defence argued that he had immunity as a former head of state. Mr Sands interviews nearly every lawyer, judge and diplomat involved in the 17-month saga.

In the end, Rauff and Pinochet shared another experience: they never faced justice. Pinochet was spared from extradition on flimsy medical grounds. He returned to Chile in a wheelchair, then abandoned it on the tarmac once he reached home soil. He faced prosecution in Chile in his final years, but died in 2006 without standing trial. Rauff also survived extradition attempts and died in Santiago in 1984.

Mr Sands concedes that “justice has been limited”, but shows that the law works in indirect ways. Pinochet’s case helped persuade Chile’s Supreme Court to exclude human-rights abuses from a sweeping amnesty law that Pinochet himself signed in 1978, allowing hundreds of cases to be brought against officials in the army or secret police. Rauff and Pinochet may have enjoyed impunity, but some of those complicit in their crimes have died, or will die, behind bars. ■



Sitting, not in the dock

Agatha Christie

## Bringing back the Queen of Crime

How to write, according to the bestselling novelist of all time

EVERYONE HAS a book inside them, or so the saying goes. In this day and age, those who want help coaxing the story out can receive instruction online from some of the world’s most popular authors. Lee Child and Harlan Coben, who have sold hundreds of millions of books between them, teach thriller writing; Jojo Moyes offers tips on romance yarns. And now Agatha Christie, the world’s bestselling writer of fiction, with more than 2bn copies sold, is instructing viewers in the art of the whodunnit—even though she died in 1976.

Christie’s course is the result not of recently unearthed archival footage, but artificial intelligence. BBC Maestro, an online education platform, brought the idea to the Christie family, which still controls 36% of Agatha Christie Ltd (AMC Networks, an entertainment giant, owns the rest). They consented to bring the “Queen of Crime” back to life, to teach the mysterious flair of her style.

A team of almost 100—including Christie scholars as well as AI specialists—worked on the project. Vivien Keene, an actor, provided a stand-in for the author; Christie’s face was mapped on top. Crucially, Ms Keene’s eerily credible performance employs only Christie’s words: a tapestry of extracts from her own writings, notebooks and interviews.

In this way, the creator of Hercule Poirot and Miss Marple shares handy writing tips, such as the neatest ways to dispatch fictional victims. Firearms bring ballistic complications. Be wary of poisons, as each works in a unique way. Novice authors can “always rely on a dull blow to the head”.

Many of Christie’s writing rules concern playing fair. She practised misdirection and laid “false clues” alongside true ones, but insisted that her plots do not cheat or hide key evidence: “I never deceive my readers.” In sections devoted to plot and setting, she explains how to plant key clues “in plain sight” and plan events with detailed “maps and diagrams”. She advises viewers to watch and listen to strangers on buses or in shops and to spice up motives for murder with a love triangle.

Some of the most engaging sections come from “An Autobiography”, published posthumously in 1977: Poirot’s origins among the Belgian refugees who reached Devon during the first world war, or fond memories of her charismatic, feckless brother Monty, who had “broken the laws



► of a lot of countries” and provided the inspiration for many of Christie’s “wayward young male figures”.

By relying on Christie’s own words, BBC Maestro hopes to avoid charges of creepy pedagogical deepfakery. At the same time, it is that focus on quotation which limits the course’s value as a creative-writing toolbox. The woman born Agatha Miller in 1890 speaks from her own time and place. She tells wannabe writers to use snowstorms to isolate murder scenes (as they

bring down telephone wires) and cites the clue-generating value of railway timetables, ink stains and cut-up newspapers. These charming details are irrelevant to modern scribblers.

Yet anachronism is not the course’s biggest flaw: it is that it lacks vitality. Christie enjoyed a richer life than learners will glean from this prim phantom: she was a wartime nurse (hence her deep knowledge of toxins), thwarted opera singer, keen surfer and archaeological expert who joined

her second husband on digs in Iraq. Furthermore, her juiciest mysteries smash crime-writing rules. The narrator does it; the detective does it; all the suspects do it. Sometimes there’s no detective: in “The Hollow” (1946) Christie regretted that Poirot appeared at all. With its working-class antihero and gothic darkness, “Endless Night” (1967) shatters every Christie cliché. This high-tech, retrofitted version of the author feels smaller and flatter than the ingenious original. ■

## BACK STORY

### *The morals of “Sinners”*

*A blues-and-vampires smash hit is a riff on the uses and abuses of genre*

GENRE IS a shorthand way to describe a story or a song. But as well as a category, it can be a judgment: a tool to elevate some kinds of art and denigrate others. Often the judgment extends beyond the work to the people who make or appreciate it, typecasting or marginalising them by disposition (science fiction is for nerds) or by sex (romance novels are girly). Or by race.

“Sinners”, a box-office smash that has conquered the internet, is a work of multiplicity. Written and directed by Ryan Coogler, it has several endings—sit through the credits if you want to catch them all—and two lead characters, identical twins known as Smoke and Stack. Both are played by Michael B. Jordan (pictured), who lights his double’s cigarette, fights him and cradles him in his arms. Meanwhile the rollicking film slides between numerous screen genres. Indeed the idea of genre, its uses and abuses, may be its deepest theme.

Mr Coogler’s previous titles include “Creed”, a well-received “Rocky” spin-off, and the hit “Black Panther” films. His latest unfolds over 24 hours in 1932. Having fought in the first world war and hustled for Al Capone in Chicago, Smoke and Stack come home to Clarksdale, in the Mississippi Delta. The pair of dandyish toughs buy an old sawmill and hastily convert it into a juke joint. The headline act on opening night is their cousin Sammie (Miles Caton), an aspiring bluesman nicknamed Preacher Boy on account of his godly father.

So far, so historical drama-ish. The story alludes to the toils and traumas of the segregated South, such as sharecropping, chain gangs and lynching. The landscape is bloodstained, figuratively and, on the barn’s floorboards, literally. (The Ku Klux Klan features as well, in a

sequence in which “Sinners” morphs briefly into an action flick.)

Genre-wise, however, it is only warming up. The setting is a clue to a zany swerve: Clarksdale is where, meeting the devil at a crossroads, the bluesman Robert Johnson is said to have traded his soul for his talent. Here the fiends are vampires, who besiege the juke joint and chomp the necks of its patrons. “Sinners” thus joins recent books and productions—such as “The Trees” by Percival Everett and the TV series “Lovecraft Country”—that use the supernatural to suggest the grotesqueries of America’s racial past. This is a strand of history that some politicians want to scrub from curriculums, museums and ultimately memory. They are failing.

So “Sinners” is part gangsterish period drama, part vampire horror, with a grenade’s-worth of action movie thrown in. But it is a musical too. A bravura medley of cinema genres that are typically kept apart, it is also a riff on the musical sort.

The film is a homage to the Delta blues, a monumental art form forged in grinding adversity. In a bold fantasia in its

middle stretch, Sammie’s performance at the juke joint conjures up the spirits of the antecedents of the blues, and of its progeny, among them west African dancers and a DJ. Sammie’s music is a triumph, yet it is imperilled. His preacher father disapproves of it. Then there are the vampires.

They are musicians themselves; their taste is Irish folk. But they covet the blues. “I want your stories and I want your songs,” their leader growls. The vampires are predatory and appropriative, just as other, predominantly white styles of music, from rock’n’roll to country, preyed on the blues, profiting from its rhythms and chords. “White folks, they like the blues just fine,” a character says. “They just don’t like the people who make it.” Succumbing to the bloodsuckers means compromise and loss.

Still, a bite from the vampires has an upside—a nuance that helps make Mr Coogler’s wild movie a profound one. It isn’t just that you might live for ever. In a film with a keen interest in who pays whom and how much, the vampires have gold. Above all, they offer a seductive musical camaraderie; join their coven, and you slip off the constraints of genre.

Genres are a way to see the world and respond to it. Each has a canon, conventions and dignity—in “Sinners”, especially the blues. But genres are also simplifications. After all, it may take more than one screen formula and mood to evoke a person’s story, let alone a country’s. And they can be divisive, splitting up art forms that are as much alike as distinct, and splitting up people with them.

Stack’s old flame (Hailee Steinfeld) is a mixed-race woman named Mary who passes as white. “What are you?” asks Sammie, trying to pin her down. “I’m a human being,” Mary tells him.



## Digital comics

## Making a splash

If you haven't heard of webtoons, you will soon

IT TAKES ONLY a few minutes and a few swipes. After reading the first episode of “Solo Levelling”, a webtoon (ie, digital comic), you can be confident of where the story is heading: Sung Jinwoo will not remain the lowliest, most pathetic monster-hunter of all time. He will learn to vanquish fearsome beasts. He will earn his peers' respect. He will make enough to pay for his mother's medical care.

Readers do not seem to care that “Solo Levelling” offers a predictable hero's journey. The webtoon—with its dynamic fight scenes and meticulously rendered landscapes—has become an internet sensation, accruing more than 14bn views since its release in 2018. Last year it was adapted into an animated series (pictured) which rocketed to the top of the charts on Crunchyroll, a streaming platform. (A second season was released earlier this year.) A mobile game based on the story, also released in 2024, has made \$150m. That is more than Oscar-winning films such as “Conclave” have taken at the global box office.

Much like “The Masked Singer”, a reality TV show, webtoons originated in South Korea and have gone global. What distinguishes webtoons from other comics is that they are designed for a small screen. (You read one by scrolling down, one frame at a time, rather than scanning multiple frames across a page or spread.) The format dates back to the early 2000s, but

has exploded in popularity of late.

In 2024 the webtoons market was worth \$9bn; it is projected to reach nearly \$100bn by 2033, according to IMARC, a consultancy. That figure is higher than the projected market size of *manga*, Japan's celebrated comic books. Indeed, even Japanese readers are ditching their homegrown comics for the digital alternative. The highest-grossing app in Japan in the first quarter of this year was Line Manga, a confusingly named webtoon app.

The craze marries two phenomena: the popularity of comics as a genre and people's dependence on their smartphones for diversion. Webtoon, one platform, releases more than 120,000 new episodes every day, meaning even the most phone-addicted youngsters can find something to enjoy when they pick up a device.

Webtoons are written to be enjoyed in short bursts—an episode can take as little as five minutes to read—which suits anyone with a short attention span. They are a product of Korean “snack culture”, which promotes the consumption of media in morsels of 15 minutes or less, says Dal Yong Jin of Simon Fraser University. Readers say that the single-panel format makes for an “immersive” reading experience when compared with a traditional comic book, as your eye is not being prematurely drawn to other frames on the page.

Another reason for webtoons' popular-

ity is their pacy. Readers do not have to worry about a slow-burning plot. Characters generally face one moment of crisis after another: no sooner has Jinwoo survived one monster raid than he is off on the next. And, much as soap operas use cliffhangers to encourage viewers to tune in the next week, webtoon episodes rely on suspense to prod readers to tap through to the next instalment.

This holds true for all genres, not just action and fantasy. Romance is among the most popular webtoon categories. Users have been seduced by such titles as “I've Fallen For The Empire's Greatest Villainess”, a smouldering yarn about a noble bachelor who is forced to marry. Despite its obvious tropes, it has a 9.5-star rating and almost 3.5m views on Webtoon.

Even if many webtoons do not offer original conceits, lots offer sumptuous imagery. Artists from across the world upload their work directly to platforms, meaning no one has to hew to a particular aesthetic style. Some webtoons evoke brooding American comics, but others are more experimental. “Lore Olympus”, a retelling of the Greek myth of Hades and Persephone, uses vivid colours and an airbrush effect. It has had 1.4bn views.

Webtoons' large, global followings have made them a valuable source of intellectual property. Since 2020 more than ten stories have been adapted into films and television shows. “Sweet Home” and “Itaewon Class” are available to stream on Netflix, as is “Heartstopper”, a popular LGBT romance based on Alice Oseman's webtoon of the same name.

The truncated nature of webtoon episodes does not make them easy source material, however, for there is often not enough story to fill a script. And relentless twists make for hammy, monotonous viewing; people expect to see introspection as well as action. Asa Suehira, head of content at Crunchyroll, says that the producers of the “Solo Levelling” adaptation had to add material about the characters' psychology to make the story work as TV.

### The short supply

Nevertheless, more adaptations are on the way. Hollywood is snapping up the rights to hit webtoons; 20 shows are in development. LuckyChap, one of the production companies behind “Barbie”, the biggest movie of 2023, is working on a live-action film of “Stagtown”, a webtoon about a town with a dark secret. “Lore Olympus” is being turned into an animated series by the Jim Henson Company (best known for “The Muppets”). Skybound, which made “The Walking Dead”, a zombie franchise, has picked up “Freaking Romance”, a supernatural love story. Having conquered smartphones, webtoons are coming soon to another screen near you. ■



If looks could thrill

# 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*	2025†		latest	2025†		%		% of GDP, 2025†		% of GDP, 2025†		latest, %	year ago, bp	May 7th	on year ago	
United States	2.0	Q1	-0.3	-0.1	2.4	Mar	3.4	4.2	Apr	-2.6		-7.6		4.3		-21.0	-	
China	5.4	Q1	4.9	4.4	-0.1	Mar	0.9	5.2	Mar*§	1.7		-6.4		1.5	\$\$	-58.0	7.23	-0.1
Japan	1.1	Q4	2.2	0.4	3.6	Mar	2.2	2.5	Mar	2.4		-4.8		1.3		44.0	143	7.8
Britain	1.5	Q4	0.4	0.7	2.6	Mar	3.0	4.4	Jan††	-2.9		-3.9		4.5		18.0	0.75	6.7
Canada	2.4	Q4	2.6	-0.6	2.3	Mar	2.3	6.7	Mar	-0.6		-2.0		3.1		-49.0	1.38	-0.7
Euro area	1.2	Q1	1.4	1.0	2.2	Apr	2.2	6.2	Mar	3.1		-3.3		2.5		4.0	0.88	5.7
Austria	-0.5	Q4	-1.4‡	0.3	3.3	Apr	2.6	5.4	Mar	1.6		-4.5		2.9		-1.0	0.88	5.7
Belgium	1.1	Q1	1.6	1.0	3.1	Apr	2.9	5.9	Mar	-0.1		-4.5		3.1		12.0	0.88	5.7
France	0.8	Q1	0.5	0.7	0.8	Apr	1.5	7.3	Mar	-0.2		-5.7		3.2		27.0	0.88	5.7
Germany	-0.2	Q1	0.8	0.3	2.2	Apr	2.3	3.5	Mar	5.8		-2.6		2.5		4.0	0.88	5.7
Greece	2.7	Q4	3.7	2.2	3.1	Mar	2.7	9.0	Mar	-6.0		-0.4		3.4		-12.0	0.88	5.7
Italy	0.6	Q1	1.0	0.5	2.1	Apr	1.9	6.0	Mar	0.8		-3.6		3.6		-20.0	0.88	5.7
Netherlands	2.0	Q1	0.4	0.6	4.1	Apr	3.6	3.9	Mar	8.4		-2.4		2.7		-2.0	0.88	5.7
Spain	2.8	Q1	2.3	2.6	2.2	Apr	2.3	10.9	Mar	2.4		-3.2		3.2		-7.0	0.88	5.7
Czech Republic	1.8	Q4	2.6	1.6	1.8	Apr	2.2	2.7	Mar*	0.3		-2.3		4.1		2.0	21.9	5.9
Denmark	3.9	Q4	7.6	2.6	1.5	Mar	2.0	2.9	Mar	12.3		1.2		2.2		-22.0	6.56	5.5
Norway	-0.3	Q4	-2.5	1.4	2.6	Mar	2.0	4.1	Feb**	16.1		9.8		3.9		24.0	10.3	5.7
Poland	3.4	Q4	5.7	3.0	4.2	Apr	4.3	5.2	Apr§	0.3		-6.1		5.3		-31.0	3.76	6.4
Russia	4.5	Q4	6.3	1.6	10.3	Mar	7.7	2.3	Mar§	2.8		-1.3		15.8		206	81.1	12.7
Sweden	1.6	Q1	nil	1.8	0.5	Mar	2.1	8.5	Mar§	5.8		-1.0		2.4		7.0	9.60	12.7
Switzerland	1.5	Q4	0.8	1.1	nil	Apr	0.3	2.8	Apr	6.5		0.6		0.3		-43.0	0.82	11.0
Turkey	3.0	Q4	6.9	2.9	37.9	Apr	33.0	8.0	Mar§	-1.5		-3.6		32.3		564	38.6	-16.5
Australia	1.3	Q4	2.4	2.1	2.4	Q1	2.1	4.1	Mar	-0.7		-1.7		4.1		-27.0	1.55	-2.6
Hong Kong	2.4	Q4	3.2	2.4	1.4	Mar	2.0	3.2	Mar††	9.1		-2.0		3.1		-76.0	7.76	0.8
India	6.2	Q4	9.3	6.2	3.3	Mar	4.3	7.7	Apr	-0.3		-4.4		6.3		-79.0	84.8	-1.5
Indonesia	4.9	Q1	4.8	4.7	1.9	Apr	1.8	4.8	Feb§	-1.4		-3.2		6.8		-9.0	16,535	-3.0
Malaysia	4.4	Q1	4.6	4.2	1.4	Mar	2.3	3.1	Feb§	1.6		-3.9		3.6		-28.0	4.24	11.8
Pakistan	3.2	2024**	na	3.0	0.3	Apr	6.0	6.3	2021	-1.4		-6.1		12.2	†††	-194	281	-1.1
Philippines	5.4	Q1	4.9	6.1	1.4	Apr	2.0	4.3	Q1§	-3.6		-5.4		6.2		-63.0	55.4	3.3
Singapore	3.8	Q1	-3.0	1.7	0.9	Mar	0.5	2.1	Q1	16.2		-0.2		2.4		-86.0	1.29	4.7
South Korea	-0.3	Q1	-1.0	0.6	2.1	Apr	1.7	3.1	Mar§	3.1		-2.3		2.6		-93.0	1,398	-2.7
Taiwan	5.4	Q1	9.7	3.5	2.0	Apr	1.9	3.4	Mar	13.8		nil		1.5		-20.0	30.2	7.2
Thailand	3.2	Q4	1.5	1.9	-0.2	Apr	0.5	0.9	Mar§	1.8		-5.7		2.1		-48.0	32.7	12.8
Argentina	2.1	Q4	5.7	5.5	55.9	Mar	40.4	6.4	Q4§	-0.8		nil		na		na	1,166	-24.5
Brazil	3.6	Q4	0.7	1.9	5.5	Mar	5.4	7.0	Mar§***	-2.5		-7.1		14.0		250	5.74	-12.0
Chile	4.0	Q4	1.5	1.9	4.9	Mar	4.6	8.7	Mar§***	-2.1		-1.9		5.8		-24.0	944	-0.8
Colombia	2.4	Q4	2.5	2.3	5.1	Mar	5.1	9.6	Mar§	-2.7		-6.0		12.2		186	4,313	-9.9
Mexico	0.8	Q1	0.8	-0.2	3.8	Mar	3.7	2.6	Mar	-0.2		-3.5		9.4		-24.0	19.6	-14.0
Peru	4.2	Q4	2.0	2.9	1.7	Apr	1.7	5.3	Mar§	1.6		-2.9		6.5		-74.0	3.65	1.9
Egypt	4.3	Q4	0.8	3.2	13.6	Mar	13.0	6.4	Q4§	-5.4		-7.3		na		na	50.6	-5.8
Israel	7.2	Q4	2.1	3.2	3.3	Mar	3.0	2.9	Mar	3.8		-4.7		4.4		-25.0	3.59	3.1
Saudi Arabia	1.8	2024	na	3.4	2.3	Mar	2.6	3.5	Q4	-3.5		-4.6		na		na	3.75	nil
South Africa	0.9	Q4	2.3	1.7	2.7	Mar	4.0	31.9	Q4§	-0.8		-5.1		10.6		14.0	18.2	1.1

\*% change on previous quarter, annual rate †The Economist Intelligence Unit estimate/forecast ‡Not seasonally adjusted §New series \*\*Year ending June ††Latest 3 months †††3-month moving average ‡‡5-year yield

†††Dollar-denominated bonds Source: Haver Analytics Note: Euro area consumer prices are harmonised

## Markets

In local currency	Index	% change on:	
		one	Dec 31st
	May 7th	week	2024
United States S&P 500	5,631.3	1.1	-4.3
United States NAS Comp	17,738.2	1.7	-8.1
China Shanghai Comp	3,342.7	1.9	-0.3
China Shenzhen Comp	1,967.8	2.7	0.5
Japan Nikkei 225	36,779.7	2.0	-7.8
Japan Topix	2,696.2	1.1	-3.2
Britain FTSE 100	8,559.3	0.8	4.7
Canada S&P TSX	25,161.2	1.3	1.8
Euro area EURO STOXX 50	5,230.2	1.4	6.8
France CAC 40	7,626.8	0.4	3.3
Germany DAX*	23,116.0	2.8	16.1
Italy FTSE/MIB	38,319.9	1.9	12.1
Netherlands AEX	896.0	2.1	2.0
Spain IBEX 35	13,480.4	1.4	16.3
Poland WIG	100,382.8	1.7	26.1
Russia RTS, \$ terms	1,103.7	-2.2	23.6
Switzerland SMI	12,113.8	nil	4.4
Turkey BIST	9,074.6	nil	-7.7
Australia All Ord.	8,399.8	0.7	-0.2
Hong Kong Hang Seng	22,691.9	2.6	13.1
India BSE	80,746.8	0.6	3.3
Indonesia IDX	6,926.2	2.4	-2.2
Malaysia KLSE	1,549.9	0.6	-5.6

	Index	% change on:	
		one	Dec 31st
	May 7th	week	2024
Pakistan KSE	110,009.0	-1.2	-4.4
Singapore STI	3,865.4	0.9	2.1
South Korea KOSPI	2,573.8	0.7	7.3
Taiwan TWI	20,546.5	1.5	-10.8
Thailand SET	1,220.3	1.9	-12.9
Argentina MERV	2,059,915.0	-1.9	-18.7
Brazil BVSP*	133,397.5	-1.2	10.9
Mexico IPC	57,954.4	3.0	17.0
Egypt EGX 30	31,840.4	-0.9	7.1
Israel TA-125	2,641.7	3.3	8.9
Saudi Arabia Tadawul	11,398.7	-2.3	-5.3
South Africa JSE AS	91,496.6	-0.1	8.8
World, dev'd MSCI	3,697.5	1.1	-0.3
Emerging markets MSCI	1,137.4	2.2	5.8

## US corporate bonds, spread over Treasuries

	Dec 31st	
	latest	2024
Basis points		
Investment grade	120	95
High-yield	419	324

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

## Commodities

The Economist commodity-price index				% change on
2020=100	Apr 29th	May 6th*	month	
<b>Dollar Index</b>				
All items	135.1	134.8	3.1	-2.0
Food	152.9	153.2	4.6	4.7
<b>Industrials</b>				
All	120.3	119.5	1.7	-8.2
Non-food agriculturals	128.5	127.5	-4.1	-4.9
Metals	118.3	117.5	3.4	-9.1
<b>Sterling Index</b>				
All items	129.7	129.5	-1.6	-8.0
<b>Euro Index</b>				
All items	135.6	135.8	-0.8	-6.9
<b>Gold</b>				
\$ per oz	3,311.2	3,395.3	13.1	46.6
<b>Brent</b>				
\$ per barrel	64.3	62.2	-2.0	-25.2

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

For historical indicators data, visit [economist.com/economic-and-financial-indicators](https://www.economist.com/economic-and-financial-indicators)

## OBITUARY

### *Alice Tan Ridley*

*The busker-turned-star of "America's Got Talent" died on March 25th, aged 72*



ORPHEUS WAS surely the first of the underground buskers. Carrying only his lyre he walked through Hades, soothing the lost souls, charming Sisyphus in his rock-shoving and Tantalus in his food-cravings, until even Pluto granted his requests. The acoustic may have been dodgy and the listeners preoccupied, but the sheer power of music worked its wonders all the same.

So it did in the New York City subway system, where for 30 years Alice Tan Ridley sang gospel, R&B and Motown to the lost souls and tormented beings emerging from or racing for the cars at Times Square, Grand Central Station, Herald Square, 34th Street/Sixth Avenue, etc, etc, etc. Seeing their glum, frowning faces, worrying about their jobs or their mortgages or just the day ahead, she wanted to replace them with smiles. She did so well at it that travellers sometimes seemed to forget their destination and stayed listening to her, sweltering in the heat or as cold as the dickens, for hours on end.

She took rather more than a lyre, though. Into the A Train south from Harlem she heaved a blue valise containing a microphone, an amplifier, a set-list of 100 songs, a folding chair, her flyers and a cushion. When emptied out, the valise gratefully accepted quarters and dollar bills. Her Metro card was lodged in her bra, to save fumbling for it in a bag. For most of her career she didn't care about her look too much; she wore her hair in tiny braids that hung down if it rained, no make-up, simple black leggings, light top or jacket. Since she was heavily proportioned, hot weather made her shine with sweat. It all added to the drama of "I Will Survive" or "Proud Mary" as she filled the halls and passageways with song.

Her usual time-slot, arranged through the Transportation Authority with Music Under New York (MUNY) was 4.30pm, and she usually played a three-hour set. That gave her a decent living. She worked most days, and on a good one she could get \$300: enough to pay the bills and feed her two children, which was the main reason she was there. At first she busked for an hour or so after making dinner, to supplement a teaching job. It brought in so much more that she quit the school, for music's sake. People thought that if she was "down there", she must be a beggar; but no, this was absolutely a proper job. She was definitely not begging. Nor was

she homeless. She might be divorced and a single mother, but she kept a roof over them all, for sure. Her husband Ibnou Sidibe might have taken another woman as his wife for six years without her knowing, but she could move up and on from that, even to the point of still considering him a friend.

The simple fact was that she loved both the subway and New York. On her first visit, when she was 12, she was delighted to find it was not a bit like Charles City, Georgia, let alone Lumpkin, Georgia, where she grew up, but full of lights, cars and people. In music terms, it was like a cathedral. By contrast Lumpkin then was a country place, once all cotton, now mostly pine trees. Her father was a lumberjack, and the Ku Klux Klan stalked the woods. But they were a notable family in spite of segregation, all eight trained by their mother to be skilled at music and singing. They were something in the world. Her brother Roger, who played guitar with her early on, started a political party in New York; her sister Dorothy, who also lived there, co-founded *Ms* magazine. And she, little Tan, seventh of the eight, sang Aretha Franklin numbers at the top of her voice. Her mother would tell her to go sing outside, but there she just amped up her voice higher and louder still.

At the back of her mind the dream hovered: could she be a star? She was earning her living by covering "I Will Always Love You" and "Billie Jean" among the screeching trains, but with all those hundreds of people passing by, wasn't there one who might want to be her agent? She had proved herself in 2002, when she won the pilot of "30 Seconds to Fame", earning \$25,000. Yet nothing much changed until in 2009 Dvir Assouline, a young Israeli, heard her and was astounded. He pushed her to do "America's Got Talent"; in 2010 she made the semifinals in Las Vegas. Her rendition of "At Last" floored the jury, drove the audience wild and introduced her to the nation. Sharon Osbourne asked her what everyone was thinking: what on earth was she doing, hiding underground?

Sadly, she didn't win. But fame had arrived, with tours, trips abroad and shows in more than 20 states. Dressers squeezed her into wonderfully vivid robes and draped her with jewellery, in full bloom to face the TV world. Best of all, she had her own seven-piece band to sing with. She headlined at B.B. King's. All this attention was coming just after her daughter Gabourey Sidibe had won an Oscar nomination for her performance in "Precious". They had always been close; now photo after photo showed them together, thrilled to pieces for each other.

Yet after a while fame palled. She had come to it in her late 50s, so travel wore her out. The band needed paying and the tour bus guzzled gas. As time passed, she had fewer engagements, save her regular slots at Harlem's Cotton Club. She went on a crash diet, but it put her in hospital. In 2016 she released a CD of her subway standards; it sold fairly well, though she admitted she couldn't push her sexuality in the modern way. It wasn't her. Besides, by then she was back to busking.

The subway had always been her saving grace. It still was. What she missed up above was the closeness to her audience. She would hug them and sing duets, encouraging the shy ones; she must have hugged hundreds of those weary souls. Having them distant, somewhere beyond the lights, did not feel right. No need for lights in the subway, nor any of that slick packaging (except the great auburn wigs and a touch of that gold eye-shadow). She just opened up her mouth and sang the emotion and meaning of the songs. And to Herald Square, Times Square, 86th Street, 14th Street and New York generally, she brought a loud peal of joy. ■



EuroFinance's 29th annual

## **International Treasury & Cash Management Summit Miami**

May 28th-30th 2025 | InterContinental Miami

## **Navigate market fluctuations and trade risks with confidence**

Join senior treasury leaders from across the Americas as they tackle the impact of shifting economic policies, trade risks and tariffs. Gain expert insights on managing cash flow, liquidity, borrowing and investment—along with strategies for hedging and forecasting—to manage uncertainty.

### **Speakers include:**



**Shannon K. O'Neil**  
Senior vice-president  
and director of studies  
**Council on Foreign Relations**



**Aditi Agarwal**  
Chief of staff and global  
treasury operations leader  
**GE HealthCare**



**Maria Jose Ortiz Fica**  
VP, financial planning  
and treasury  
**LATAM Airlines**



**Lucas Brizuela**  
Corporate treasury director  
**Arcos Dorados**



**Francisco Salinas**  
Treasurer  
**CEMEX**



**Keith Gaub**  
Assistant treasurer  
**Bristol Myers Squibb**



**Register now**

Official sponsors



**BNP PARIBAS**

**J.P.Morgan**



## **FAST IS THE ENEMY**

### **A STORY ABOUT STANDARDS**

"At Patek Philippe, when we make a watch, however hard we work, we can only go at one speed. One that ensures we adhere to the high standards for which we are respected.

We understand that some people express frustration at this. They want us to go faster. But at our family-owned watch company, fast is the enemy. Because to accelerate the time it takes to make a watch we would have to cut corners and lower our quality.

And then the watch might be a very good timepiece. But it would not be a Patek Philippe and would not merit the Patek Philippe Seal."



THIERRY STERN  
PRESIDENT, PATEK PHILIPPE



PATEK PHILIPPE SEAL  
[PATEK.COM/PHILOSOPHIES](http://PATEK.COM/PHILOSOPHIES)

VIEW THE FILM

